Draft Final Intersection Control Evaluation (ICE) Addendum

for

Chuluota Road (CR 419)

From SR 50 to Lake Pickett Road



Prepared for

Orange County Government Florida

Orange County Public Works

Prepared by

JMT

January, 2025

Draft Final
Intersection Control Evaluation (ICE) Addendum

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PREPARED FOR

ORANGE COUNTY GOVERNMENT FLORIDA

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JMT

January, 2025

Orange County Project Number: Y20-830

PROFESSIONAL ENGINEER CERTIFICATION

I hereby certify that I am a registered professional engineer in the State of Florida practicing with JMT, Inc., and that I have supervised the preparation of and approved the analysis, findings, opinions, conclusions, and technical advice reported in:

REPORT: Intersection Control Evaluation (ICE) Analysis Addendum

PROJECT LOCATION: Chuluota Road From SR 50 to Lake Pickett Road

CLIENT: Orange County, Florida

The following duly authorized engineering business performed the engineering work represented by this report:

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This report includes a summary of data collection efforts, corridor analysis, and conceptual design analysis for Chuluota Road from SR 50 to Lake Pickett Road in Orange County, Florida.

I acknowledge that the procedures and references used to develop the results contained in this report are standard to the professional practice of transportation engineering as applied through design standards and criteria set forth by the federal, state, and local regulatory agencies as well as professional judgment and experience.

Signature:

Name: Greg T. Smith, PE
FL PE 39087

Date: _____

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EXECUTIVE SUMMARY

ES.1 Introduction

Orange County prepared the Roadway Conceptual Analysis (RCA) for the Chuluota Road (CR 419) corridor from SR 50 to Lake Pickett Road in northeast Orange County which was presented to the Orange County Board of County Commissioners on March 7, 2023. At this meeting, the Board concluded that additional studies were needed to consider and investigate alternative intersection controls and configurations such as roundabouts and other options. Later in 2023, the Board authorized further investigations to more fully explore various options by conducting an Intersection Control Evaluation (ICE) process using FDOT procedures.

This addendum to the Chuluota Road RCA summarizes the ICE Study which identifies alternative intersection concepts, recommendations, and other findings from the ICE evaluation process. The preferred improvements identified in the RCA and this report will serve as the basis for the subsequent design and construction of these facilities.

ES.2 Purpose and Need for Improvement

The RCA Study established the purpose and need for this project which is based on several factors including addressing forecasted traffic demands, the need for multi-modal improvements to accommodate pedestrians and bicyclists, provisions for safety enhancements, and consistency with the County's long range transportation plans. The conclusion from the RCA was that Chuluota Road should be widened to a divided four-lane, urban roadway with sidewalks and a multi-use path to meet the above factors.

The ICE investigations provided additional evaluations of various intersection options by performing safety, operations, and cost analyses at six intersections along the Chuluota Road corridor (see Figure ES-1).



Figure ES-1 ICE Study Intersections

The conclusions reached by the ICE investigations confirmed that four-lane widening improvements are needed to meet forecasted traffic demands. Also, while the ICE Study indicated that the existing traffic controls (signals and stop signs) along Chuluota Road generally provide better Level of Service and less delay than the use of innovative intersection concepts (roundabouts or bow tie intersection concepts), when other factors are considered such as measures to reduce operating speeds, a roundabout at Long Boat Lane and Cypress Lake Glen Boulevard (North) can be a viable option at this location since it would slow southbound motorists while providing better access opportunities for the side road motorists. Consequently, the combined improvements of the RCA's four-lane widening with a roundabout option at Long Boat Lane from the ICE Study are recommended for design and construction.

ES.3 ICE Alternatives

The ICE investigations were conducted at six intersections listed below:

- Chuluota Road at Lake Pickett Road
- Chuluota Road at Long Boat Lane/Cypress Lake Glen Boulevard (North)
- Chuluota Road at Corner Lake Drive
- Chuluota Road at Cypress Lake Glen Boulevard (South)
- Corner School Drive and Schoolview Way
- Corner School Drive, Relocated Schoolview Way, Cypress Lake Glen Boulevard

These six intersections were also analyzed under two scenarios:

- Chuluota Road as a two-lane roadway which would maintain existing conditions except for the integration of various ICE intersection options.
- Chuluota Road with four-lane widening as described in the RCA with the integration of various ICE intersection options such as roundabouts.

Under the ICE investigations, various intersection concepts were considered using FDOT ICE guidelines which prescribes three stages of analyses (see report Sections 3-5 for details).

- Stage 1 ICE Evaluations were conducted which consisted of using FDOT's CAP-X and SPICE tools to analyze the intersection concepts shown on the next page. The Cap-X tool is an operational analysis tool designed to evaluate various innovative intersection designs, and the SPICE tool examines the safety performance of the intersection options. The Stage 1 analysis started with 15 intersection concepts (see Figure ES-2 on the following page) and at it's conclusion, four intersection alternatives (signals, stop signs, roundabouts, and bow tie intersection options) were advanced to Stage 2 for further study
- Stage 2 ICE Evaluations further differentiates the control strategies from Stage 1, by requiring an in-depth analysis of the proposed control strategies. Prior to conducting additional analyses, a conceptual design was developed for each viable control strategy to better determine impacts to adjacent properties and the need for additional right-of-way. At the conclusion of Stage 2 analyses, it was determined that the four intersection concepts (signals, stop signs, roundabouts, and bow tie intersection options) should receive additional analysis in Stage 3.
- Under Stage 3, further studies were prepared for the four intersection concepts (signals, stop signs, roundabouts, and bow tie intersection options) which included geometric enhancements of the intersection control options, cost analyses (both construction and right-of-way), and a corridor operational analysis which will examine the overall performance of the intersection concepts for the entire corridor. The Stage 3 activities included collection of additional data, developing more detailed designs, conducting more detailed operational analysis, additional cost estimates, and completion of the Stage 3 forms to identify the preferred control strategy.

ALTERNATIVE INTERSECTION CONTROLS CONSIDERED IN STAGE 1 ICE

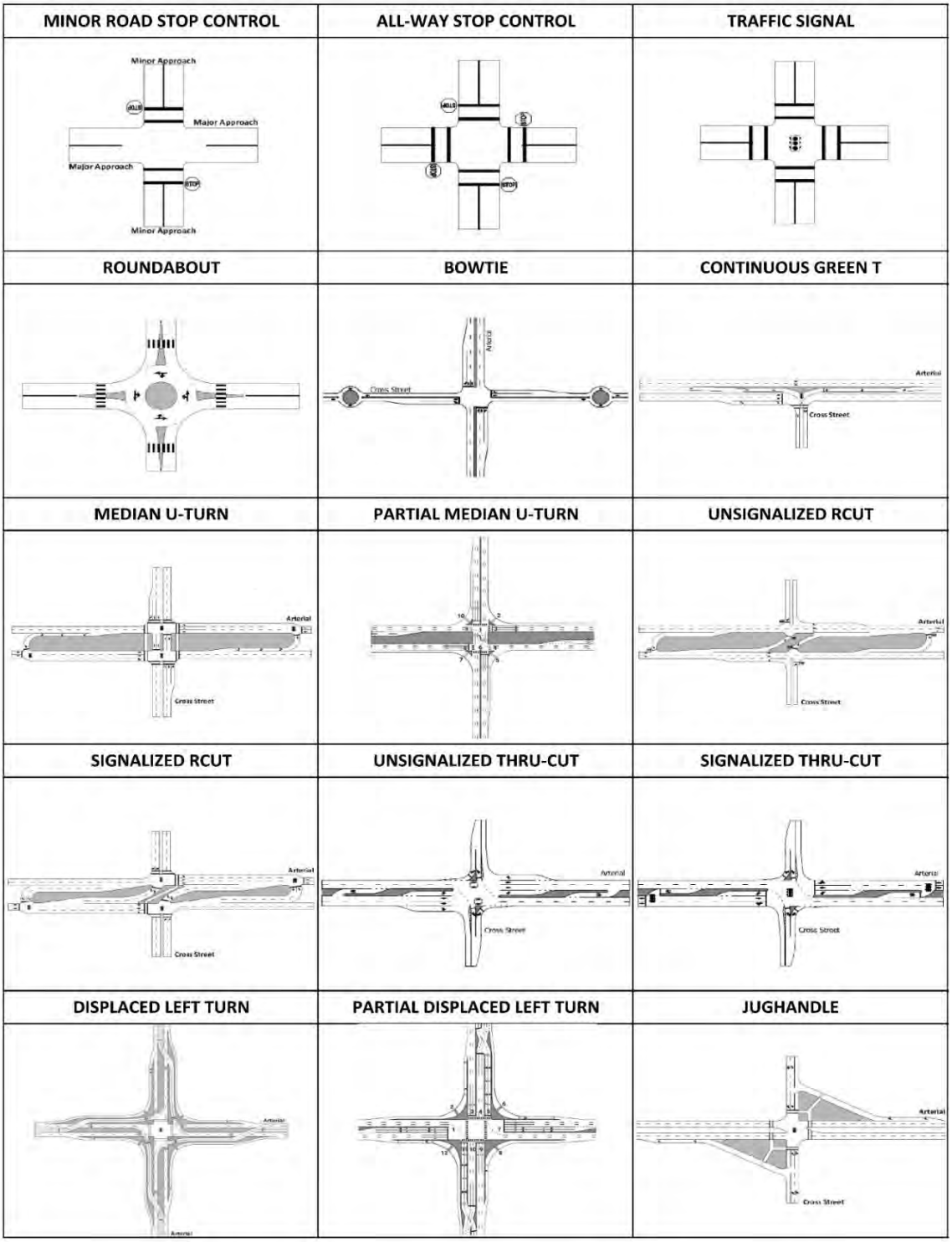


Figure ES-2 ICE Stage 1 Alternatives

ES.4 Traffic Analysis

Additional traffic counts and analyses were conducted to support the ICE investigations. A summary of these analyses is included in Section 2 with detailed traffic results provided in Appendix B, Traffic Addendum.

In addition, the ICE Stages 1, 2, and 3 analyses are summarized in this document in Sections 3, 4 and 5, respectively. The detailed results of these analyses for ICE Stages 1, 2, and 3 are contained in Appendices C-E, respectively.

ES.5 Results from the ICE Analyses

The Stage 1 analysis started with 15 intersection concepts and at it's conclusion, four intersection alternatives (signals, stop signs, roundabouts, and bow tie intersection options) were advanced to Stage 2 for further study.

The results of the Stage 2 analyses were not entirely conclusive, thus the above four intersection concepts were reviewed further in Stage 3. At the end of the Stage 3 investigations, the ICE Study arrived at the following conclusions as well as preferred intersection controls and other recommendations as follows:

- The existing two-lane Chuluota Road cannot accommodate anticipated future traffic demands. Even with the use of innovative intersection concepts such roundabouts or bow tie intersection concepts, the existing two-lane section of Chuluota Road is expected to reach capacity well before the Design Year, and continue to experience high congestion, low levels of service, and delays. Furthermore, the existing two-lane roadway will not meet other goals of the project such as providing multi-modal accommodations for pedestrians and bicyclists through the use of sidewalks and a multi-use path throughout the corridor.

- To meet forecasted traffic demands, Chuluota Road is recommended to be widened to four lanes.

- The ICE Study indicated that the existing traffic controls consisting of signals and stop signs along Chuluota Road generally provide better Level of Service and less delay than the use of innovative intersection concepts such roundabouts or bow tie intersection concepts. However, when other factors are considered such as measures to reduce operating speeds, a roundabout at Long Boat Lane and Cypress Lake Glen Boulevard (North) is a viable option (see Figure ES-3) at this location since it would slow motorists on Chuluota Road while providing improved access opportunities for motorists on the side roads. Attendees at the public meetings frequently mentioned these concerns and

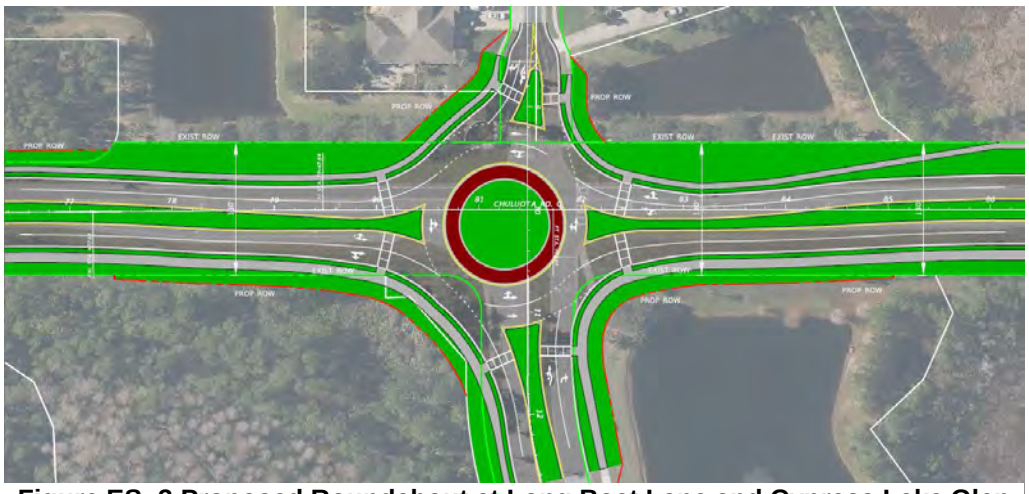


Figure ES- 3 Proposed Roundabout at Long Boat Lane and Cypress Lake Glen Boulevard (North)

those in attendance at the second public meeting voted to provide a roundabout at this location.

- The Alternatives Evaluation Matrix considered four alternatives as shown below on Table ES-1.

EVALUATION CRITERIA	Four-Lane Widening with Existing Intersection Controls (ETC)	Four-Lane Widening with Roundabout at Long Boat Lane, ETC at Other Intersections	Four-Lane Widening with Roundabouts at All Intersections	Recommended Four-Lane Widening with Bow Tie at Lake Pickett Road and Roundabouts at Other Intersections
RELOCATIONS				
Number of Residential Acquisitions	1	1	1	1
Number of Business Acquisitions	None	None	None	None
Number of Parcels Impacted	10	14	39	40
Social, Natural and Physical Impacts				
Social and Neighborhood	Low	Low	Medium	Medium
Archeological/Historic Sites	None	None	None	None
Threatened and Endangered Species	No Adverse Impacts	No Adverse Impacts	No Adverse Impacts	No Adverse Impacts
Wetland Impacts (Acres)	Low	Low	Low	Low
RHPZ Uplands Impacts (Acres)	Low	Low	Low	Low
Floodplain Impacts (Acre-Feet)	1.9	2.16	2.16	2.16
Potential High or Medium Ranked Contamination Sites	None	None	None	None
Estimated Costs (Present Day)				
Estimated Construction Costs	$ 40,968,339	$ 44,102,180	$ 48,811,549	$ 48,977,856
Estimated Design/Adm Costs (12%)	$ 4,916,201	$ 5,292,262	$ 5,857,386	$ 5,877,343
Preliminary Estimated CEI Costs (15%)	$ 6,145,251	$ 6,615,327	$ 7,321,732	$ 7,346,678
Preliminary Estimated Right-of-Way Impacts	11.864	12.453	17.466	19.115
Preliminary Estimated Right-of-Way Costs	$ 2,196,355	$ 2,305,449	$ 3,233,481	$ 3,538,760
Mitigation/RHPZ	$ 103,000	$ 103,000	$ 103,000	$ 103,000
Subtotal	$ 54,329,146	$ 58,418,218	$ 65,327,148	$ 65,843,637
Contingency (20%)	$ 10,865,829	$ 11,683,644	$ 13,065,430	$ 13,168,727
TOTAL PRELIMINARY ESTIMATED PROJECT COSTS	***$ 65,194,975***	***$ 70,101,862***	***$ 78,392,578***	***$ 79,012,364***

Table ES-1 Alternatives Evaluation Matrix

ES.6 Preferred Alternative

The preferred improvements for proposed Chuluota Road are the four-lane urban section as developed during the RCA along with a roundabout at Long Boat Lane and Cypress Lake Glen Boulevard (North). The typical section for these improvements is shown on Figure ES-4 on the next page and contains the following roadway design elements:

- An urban section with four 11-foot travel lanes and a 22-foot median
- Landscaping consisting of trees in the median
- Type E curb and gutter along the inside lanes, Type F curb and gutter along the outside lanes

- A six-foot sidewalk on the east side of Chuluota Road from SR 50 to Cypress Lake Glen Boulevard, and on the west side of Chuluota Road from Cypress Lake Glen Boulevard to Lake Pickett Road.
- A 10-path on the west side of Chuluota Road from SR 50 to Cypress Lake Glen Boulevard (S), and along the east side of Chuluota Road from Cypress Lake Glen Boulevard (S) to north of Cypress Lakes development. To the north of Cypress Lakes, a 14-foot path will be provided.

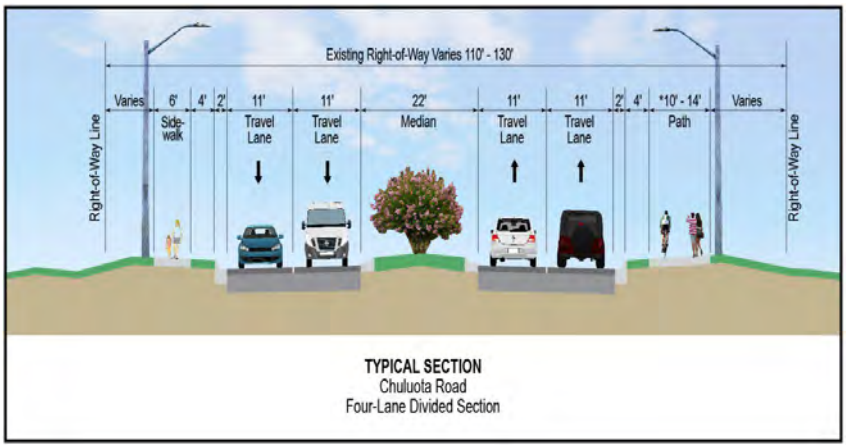


Figure ES- 4 Chuluota Road Proposed Typical Section

- Four-foot utility strips between the Type Of curb and the sidewalk or path
- A proposed right-of-way of 120 feet, most of which is existing and already available on this project.
- A two-lane roundabout at Long Boat Lane and Cypress Lake Glen Boulevard (North).

For more information on the proposed four-lane widening improvements, see the RCA document.

ES.7 Public Involvement

Critical to the success of this project is the feedback received from the local community. Two community meetings were held to present the ICE alternatives and recommendations. In addition, a public hearing will be held before the Board of County Commissioners to formally approve the ICE recommendations. Meeting summaries, along with input received regarding the project have been included with the Public Involvement Documents in Appendix G.

During the course of the ICE Study, a survey questionnaire was distributed to the public after the community meeting in September, 2024 to receive general feedback from respondents regarding safety, congestion, and their preference for improvements (see Section 8 and Appendix G).

The survey indicated that 60% of the respondents supported the proposed widening of Chuluota Road. In addition, 59% of the respondents said relieving congestion and keeping traffic moving were their top priorities. The Long Boat Lane/Cypress Glen Boulevard (North) intersection was ranked highest by 43% of the respondents as having the most urgent need for improvements. Lake Pickett Road came in second with 32% of the respondents indicating the need for improvements.

The Corner School Drive/Schoolview Way was perceived as being highly congested. The RCA proposed elimination of existing Schoolview Way and relocation of this roadway to the existing signalized at Cypress Lake Glen Boulevard (South). This change may help to improve the overall operations along Corner School Drive as well as Chuluota Road by removing the existing Schoolview Way intersections at Corner School Drive as well as at Chuluota Road, and focusing all movements at a single location.

ES.8 Conclusions and Recommendations

The objective of the Chuluota Road ICE Study is to evaluate alternative intersection control options

for Chuluota Road from north of SR 50 to Lake Pickett Road. This process is consistent with FDOT guidelines for ICE investigations and incorporates the insights from planning, engineering, and the public involvement activities to consider various alternatives, develop recommendations, and ultimately, advance a preferred alternative into the design phase.

At the conclusion of the ICE Study, the findings indicate the following:

- The ICE Study indicated that the existing traffic controls consisting of signals and stop signs along Chuluota Road generally provide better Level of Service and less delay than the use of innovative intersection concepts such roundabouts or bow tie intersection concepts. However, when other factors are considered such as measures to reduce operating speeds, a roundabout at Long Boat Lane and Cypress Lake Glen Boulevard (North) can be considered as a viable option at this location since it would slow motorists on Chuluota Road while providing better access opportunities for the side road motorists. Attendees at the public meetings frequently mentioned these concerns and those in attendance at the second public meeting voted to provide a roundabout at this location.
- For the remaining intersections at Lake Pickett Road, Corner Lake Drive, and Cypress Lake Glen Boulevard (South), the ICE Study confirmed that the existing traffic controls at these locations provide better operations and less delays than the other alternatives considered by this study, and should be retained going forward.
- The ICE Study also verified the findings of the RCA Study that there is a strong need for widening Chuluota Road to four lanes to meet future forecasted traffic volumes. These improvements are recommended and discussed further in the RCA and Section 7 of this report.

1 INTRODUCTION

1.1 Introduction and Study Area

Orange County prepared the Roadway Conceptual Analysis (RCA) for the Chuluota Road (CR 419) corridor from SR 50 to Lake Pickett Road in northeast Orange County which was presented to the Orange County Board of County Commissioners on March 7, 2023. At this meeting, the Board concluded that additional studies were needed to consider and investigate alternative intersection controls and configurations such as roundabouts and other options. Later in 2023, the Board authorized further investigations to more fully explore various options by conducting an Intersection Control Evaluation (ICE) process using FDOT procedures.

Existing Chuluota Road is a two-lane, minor arterial roadway located in a suburban area of northeast Orange County Commission District Five. The roadway alignment is generally straight and the corridor is surrounded by a mix of housing developments, wetlands, conservation areas, and some commercial development near the southern end of the project at SR 50.



Figure 1-1 Location Map

1.2 Purpose of Report

This report has been prepared as an addendum to the Chuluota Road RCA and summarizes the ICE Study investigations which identifies and evaluates alternative intersection concepts, recommendations, and other findings resulting from the ICE evaluation process.

The ICE investigations were undertaken to provide additional assessments of various intersection options by performing safety, operations, and cost analyses at six intersections along the Chuluota Road corridor (see Figure 1-2).

The ICE investigations were conducted at six intersections listed below:

- Chuluota Road at Lake Pickett Road
- Chuluota Road at Long Boat Lane/Cypress Lake Glen Boulevard (North)
- Chuluota Road at Corner Lake Drive
- Chuluota Road at Cypress Lake Glen Boulevard (South)
- Corner School Drive and Schoolview Way
- Corner School Drive, Relocated Schoolview Way, Cypress Lake Glen Boulevard

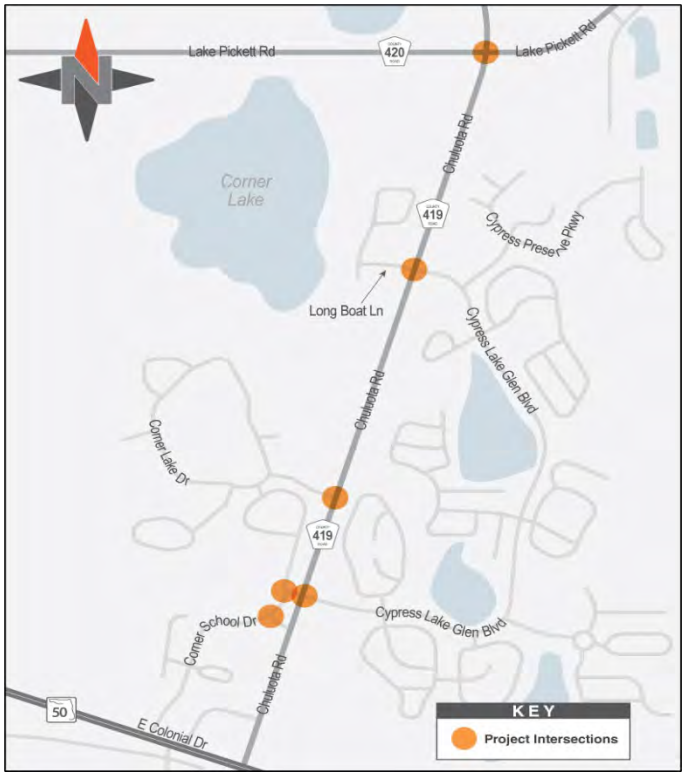


Figure 1-2 ICE Study Intersections

The findings and conclusions from this ICE Study are detailed in the following sections or this report and together with applicable recommendations from the RCA will serve as the basis for the subsequent design and construction of the proposed Chuluota Road improvements.

2 TRAFFIC

As part of the ICE Study, additional traffic analyses were undertaken to provide needed data to support the ICE traffic analyses. This section summarizes the supplemental traffic work including additional traffic counts undertaken for the ICE Study in the areas of Cypress Lake Glen Boulevard (South), Corner School Drive, and Schoolview Way. These scenarios included:

Scenario 1 Chuluota Road Build Alternative (4 Lane Section) – The RCA recommended Scenario 1 which includes the relocation of Schoolview Way to align with Cypress Lake Glen Boulevard (South) signalized intersection with Chuluota Road (assumes closure/elimination of existing Schoolview Way segment). With this relocation, Schoolview Way would serve as the west approach at this intersection and would connect with Corner School Drive.

Since this intersection configuration came about as part of the final recommendations after the traffic work on the RCA had been concluded, it was necessary to conduct additional traffic counts and analyses at this location to support the ICE investigations. The proposed RCA Build Geometrics and lane assignments are shown on Figure 2-1 on the following page.

Scenario 2 Chuluota Road Build Alternative (4 Lane) and Existing Schoolview Way (2 Lane) - Scenario 2 maintains the existing Schoolview Way alignment, intersecting at Chuluota Road with full median opening and unsignalized (minor street STOP) control. The Cypress Lake Glen Boulevard (South) intersection would remain as a T-intersection, though would reflect the four-lane widening of Chuluota Road recommended in the RCA.

Scenario 3: Chuluota Road Build Alternative (4 Lane) with New Connection to Corner School Drive Along with Maintaining Existing Schoolview Way - Scenario 3 includes modifying the Cypress Lake Glen Boulevard (South) intersection by adding a west leg that would connect Corner School Drive to Chuluota Road. In addition, existing Schoolview Way would remain in operation as well, though would only perform as right in/right out at Chuluota Road as a unsignalized (minor street STOP) control. Scenarios 1, 2 and 3 are provided in Figures 2 – 4.

Traffic Data Collection - To provide base conditions for the ICE study area (beyond the RCA study limits) for this supplemental analysis, six (6) hour weekday turning movement counts ([AM peak hour and PM peak period- 2 - 6 pm) at Corner School Drive and at Schoolview Way. These traffic volumes are included in **Appendix B**.

Design Traffic Projections - Using the adopted growth rates from the Chuluota Road RCA DTTR, the design volume forecasts for Scenarios 1, 2 and 3 were prepared and shown on the following exhibits for the Opening Year 2028, Interim Year 2038, and Design Year 2048.

Scenario 1 (RCA Recommended Build Improvements for Chuluota Road Build Alternative/4 Lane)

- **Figure 2-1** on the following page illustrates the recommended RCA Build lane assignments at all intersections along Chuluota Road including the recommended modifications to Cypress Lake Glen Boulevard (South) with the inclusion of Relocated Schoolview Way.

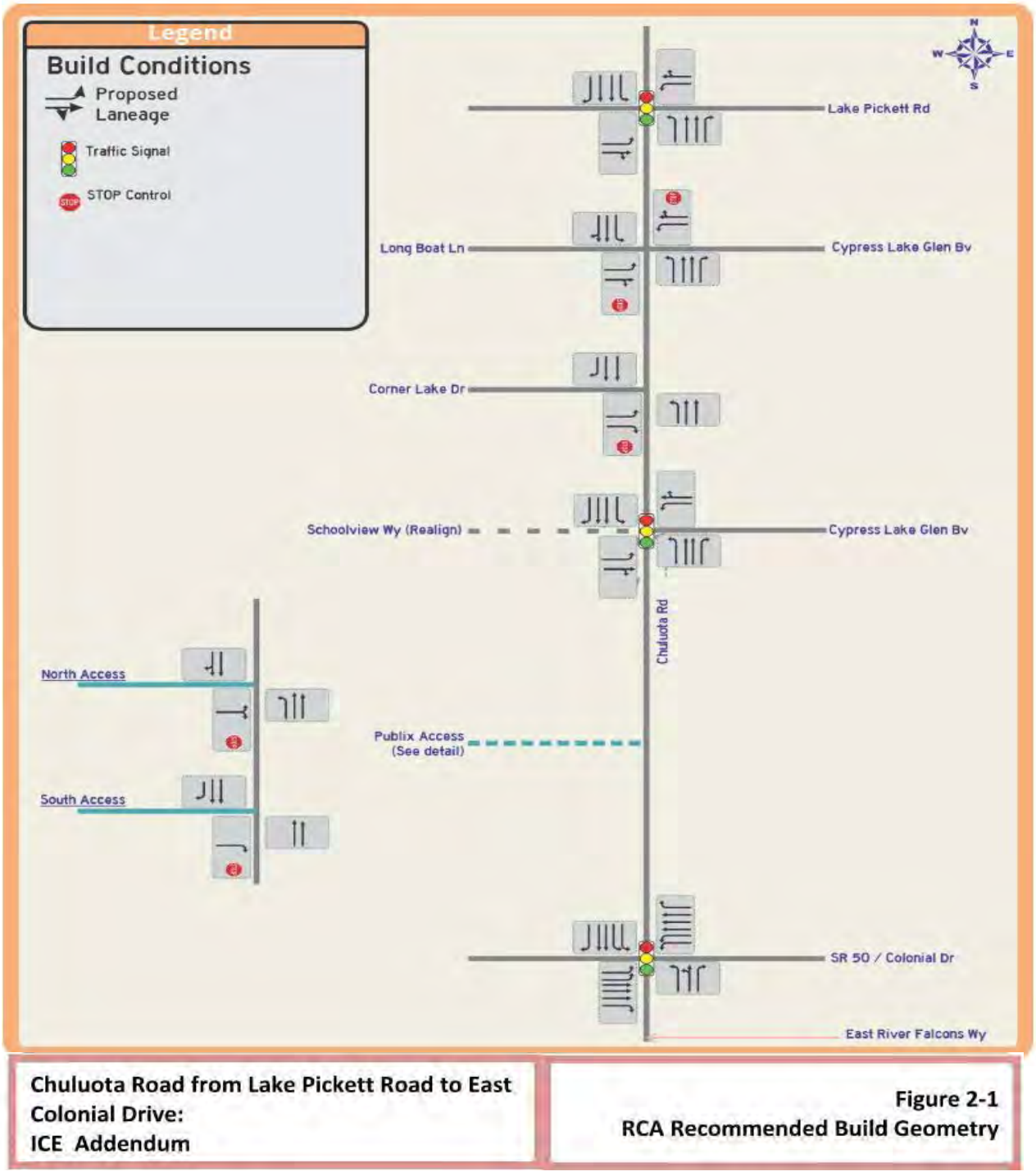


Figure 2-1 RCA Recommended Build Geometry

- **Figures 2-2, 2-3, 2-4** on the following pages, depict the weekday AM peak hour, school dismissal (afternoon) peak hour, and PM peak hour intersection volumes for Build Years 2028, 2038 and 2048 for Scenario 1.

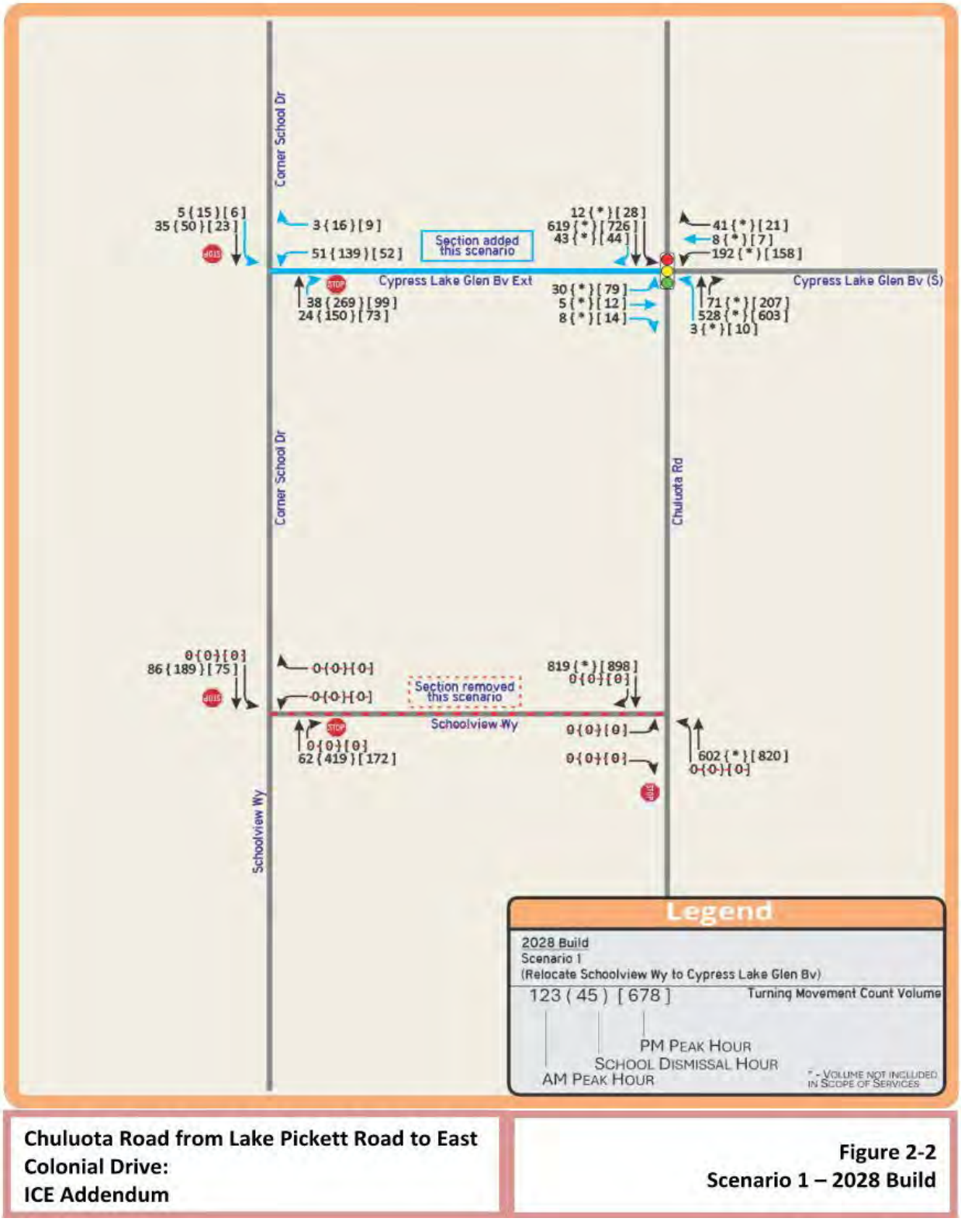


Figure 2- 2 Scenario 1 - 2028 Build

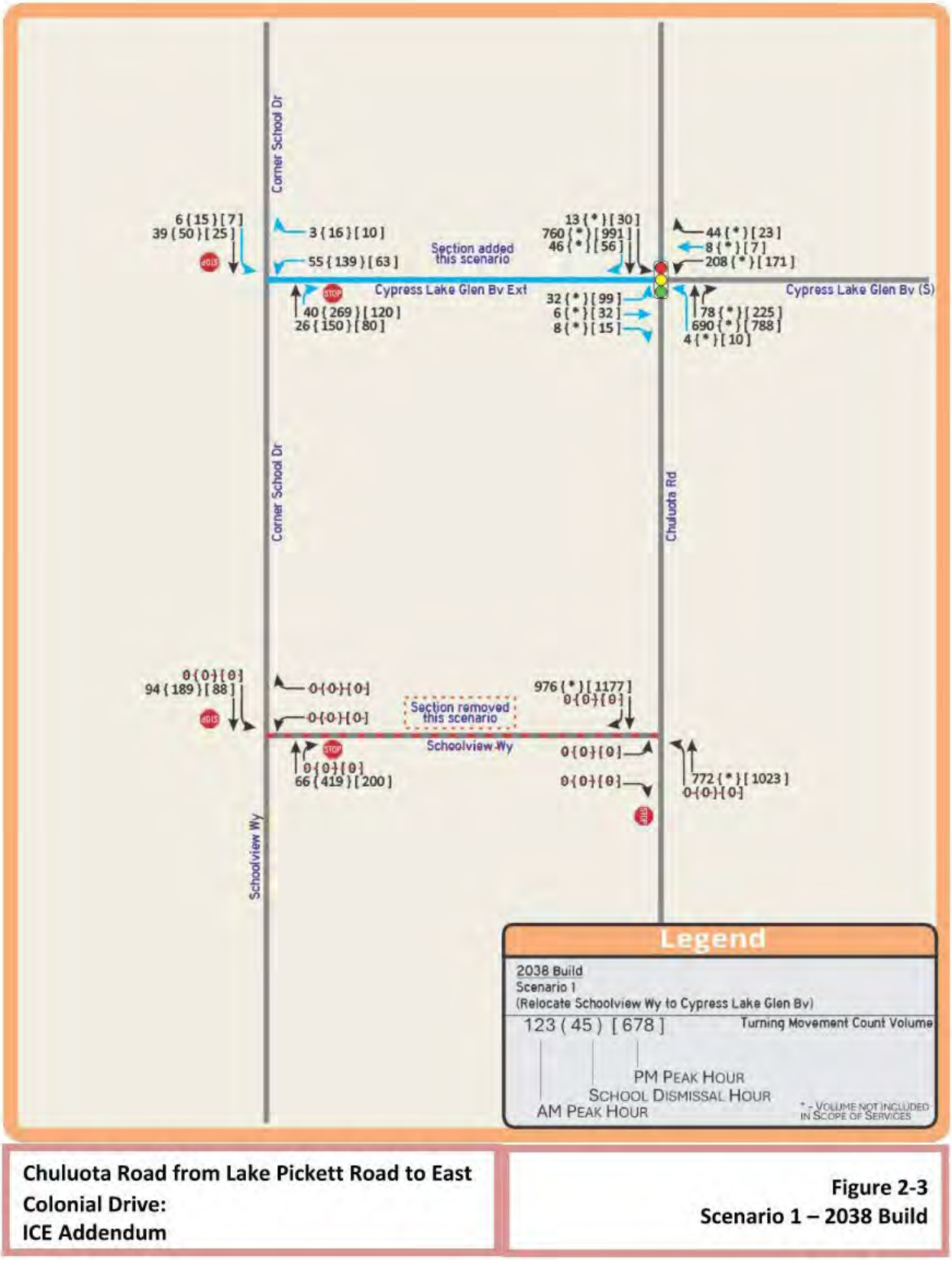


Figure 2- 3 Scenario 1 - 2038 Build

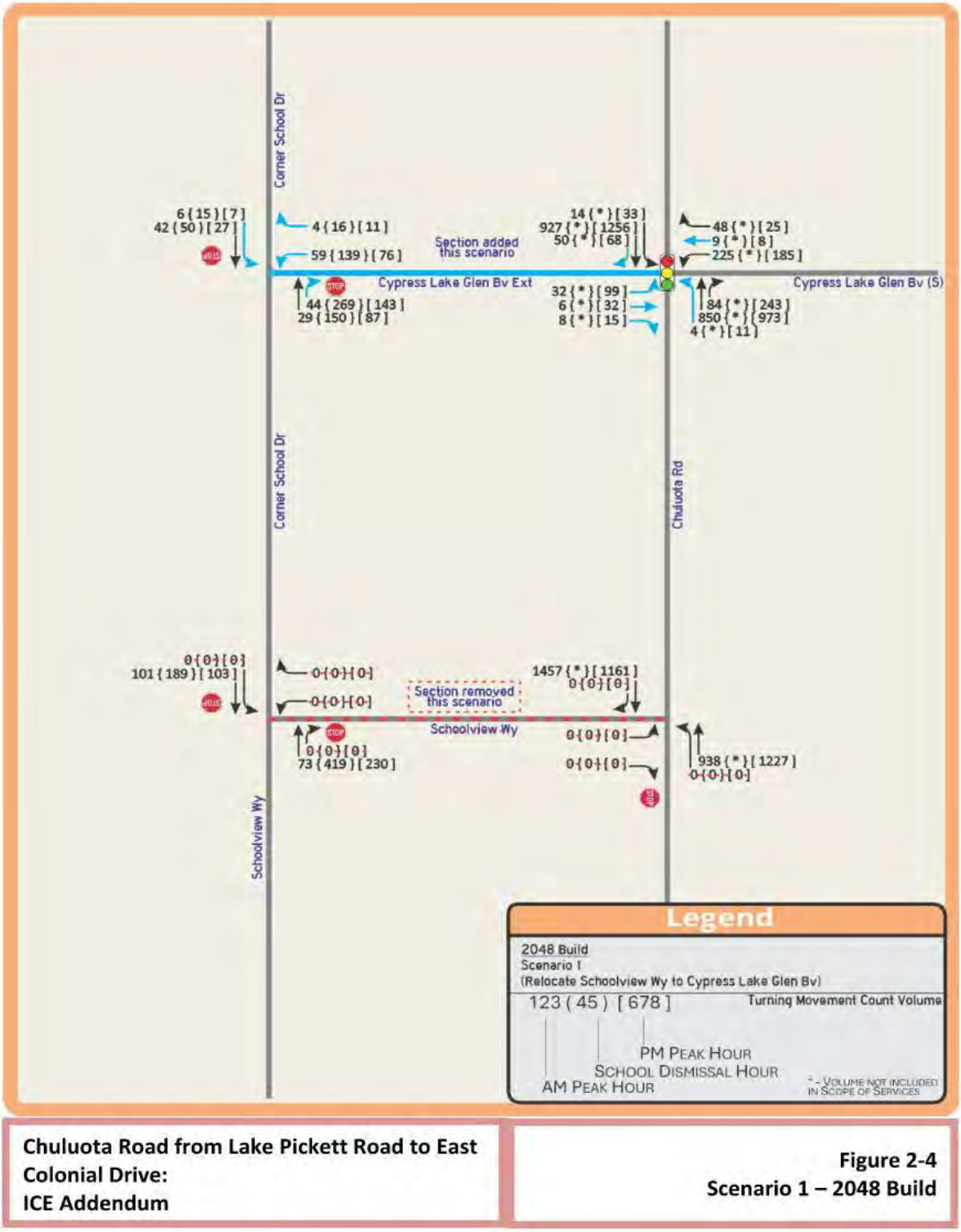


Figure 2- 4 Scenario 1 - 2048 Build

Scenario 2 (Chuluota Road Build Alternative(4 Lane), Existing Schoolview Way (Build Traffic Conditions)

- Design hour traffic volumes for Chuluota Road, Corner School Drive, and existing Schoolview Way for Opening Year 2028, Interim Year 2038, Design Year 2048 based on Build Traffic Conditions. These volumes are provided in **Figures 2-5, 2-6, 2-7**, which depict the weekday AM peak hour and PM peak hour intersection volumes for years 2028, 2038 and 2048.

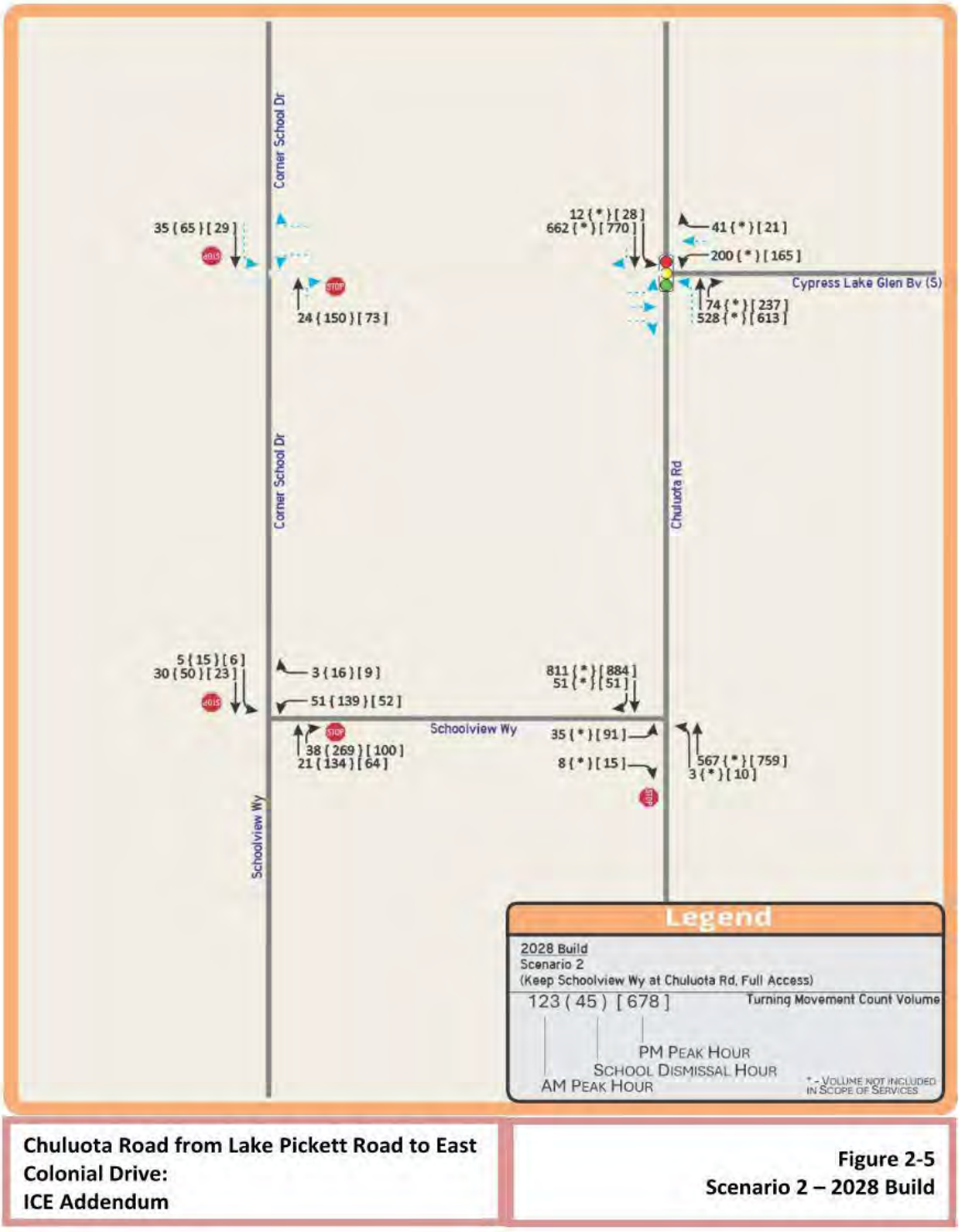


Figure 2- 5 Scenario 2 - 2028 Build

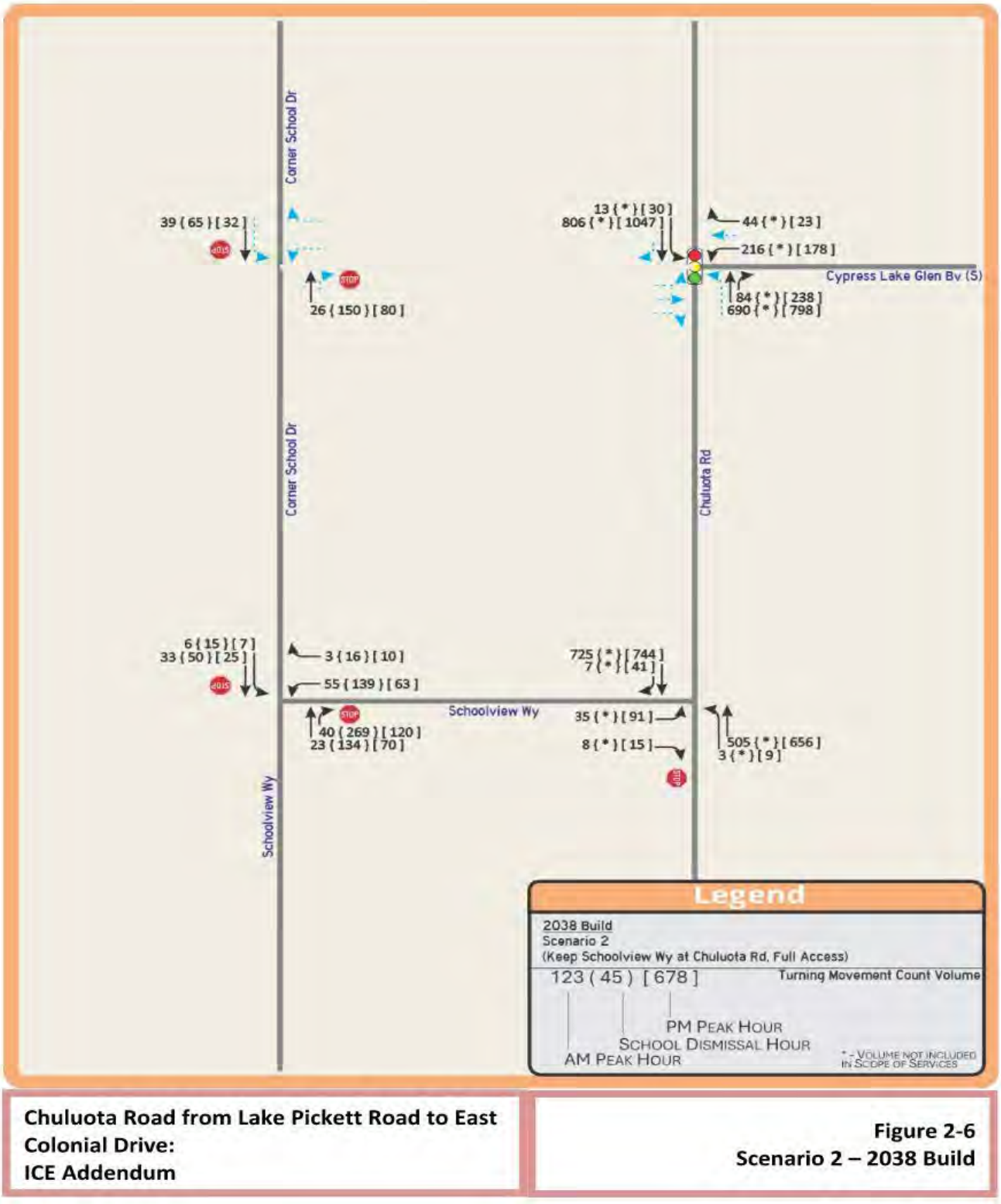


Figure 2- 6 Scenario 2 - 2038 Build

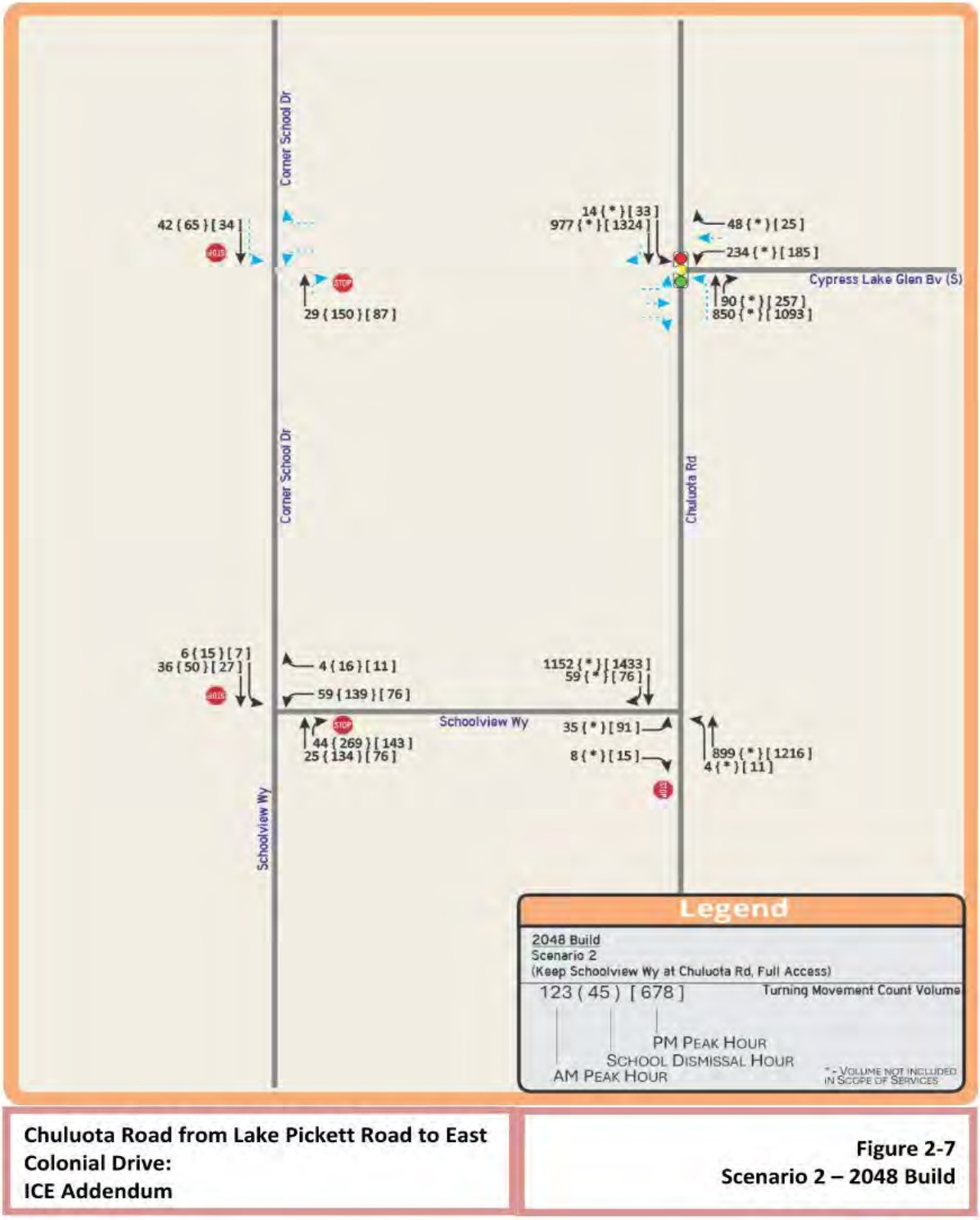


Figure 2- 7 Scenario 2 - 2048 Build

- Design hour traffic volumes were developed for Chuluota Road, Corner School Drive, and existing Schoolview Way for Opening Year 2028, Interim Year 2038, Design Year 2048 based on No Build Traffic Conditions. These volumes are provided in **Figures 2-8, 2-9, 2-10**, which depict the weekday AM peak hour and PM peak hour intersection volumes for years 2028, 2038 and 2048, respectively.

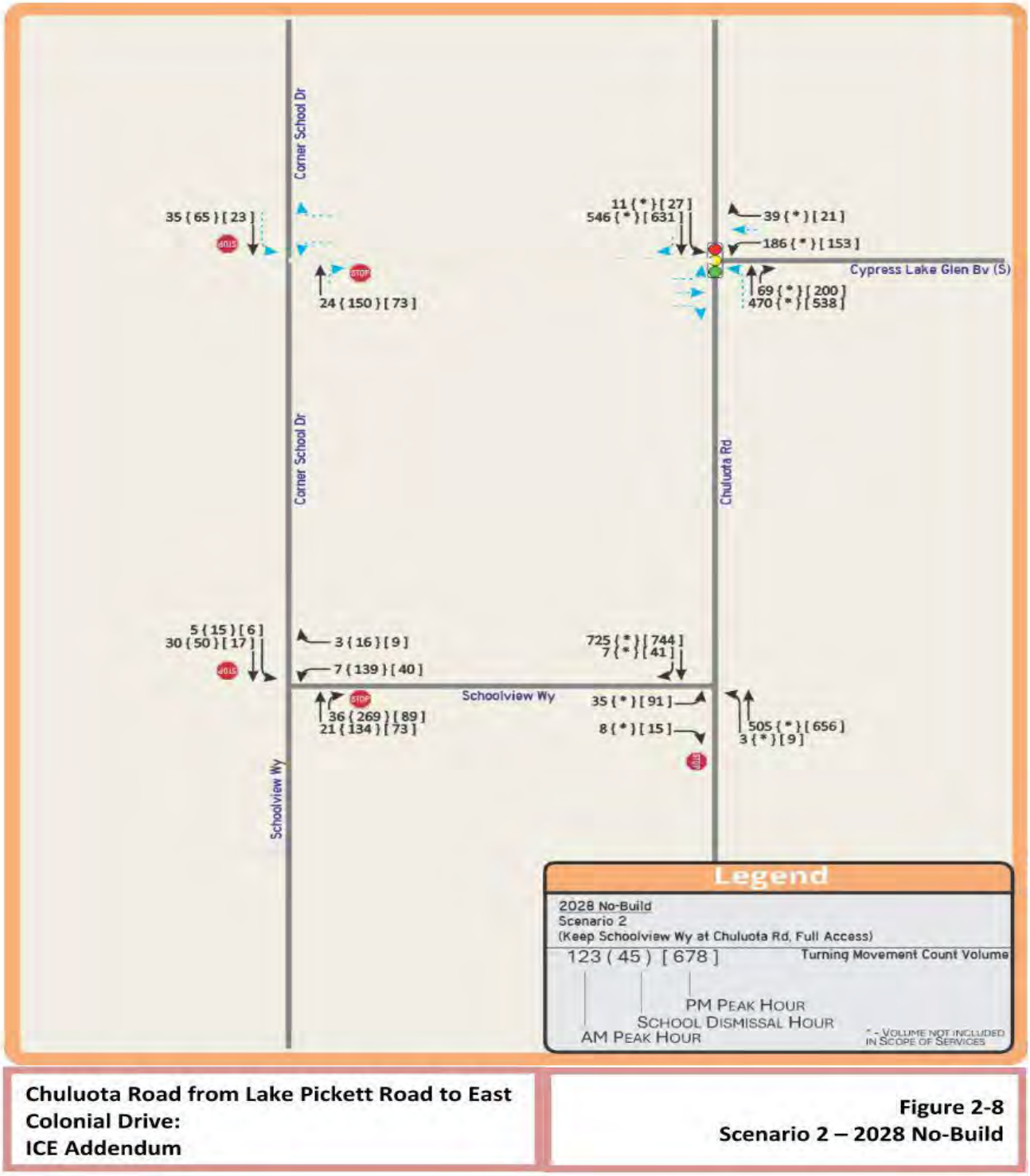


Figure 2- 8 Scenario 2 - 2028 No Build

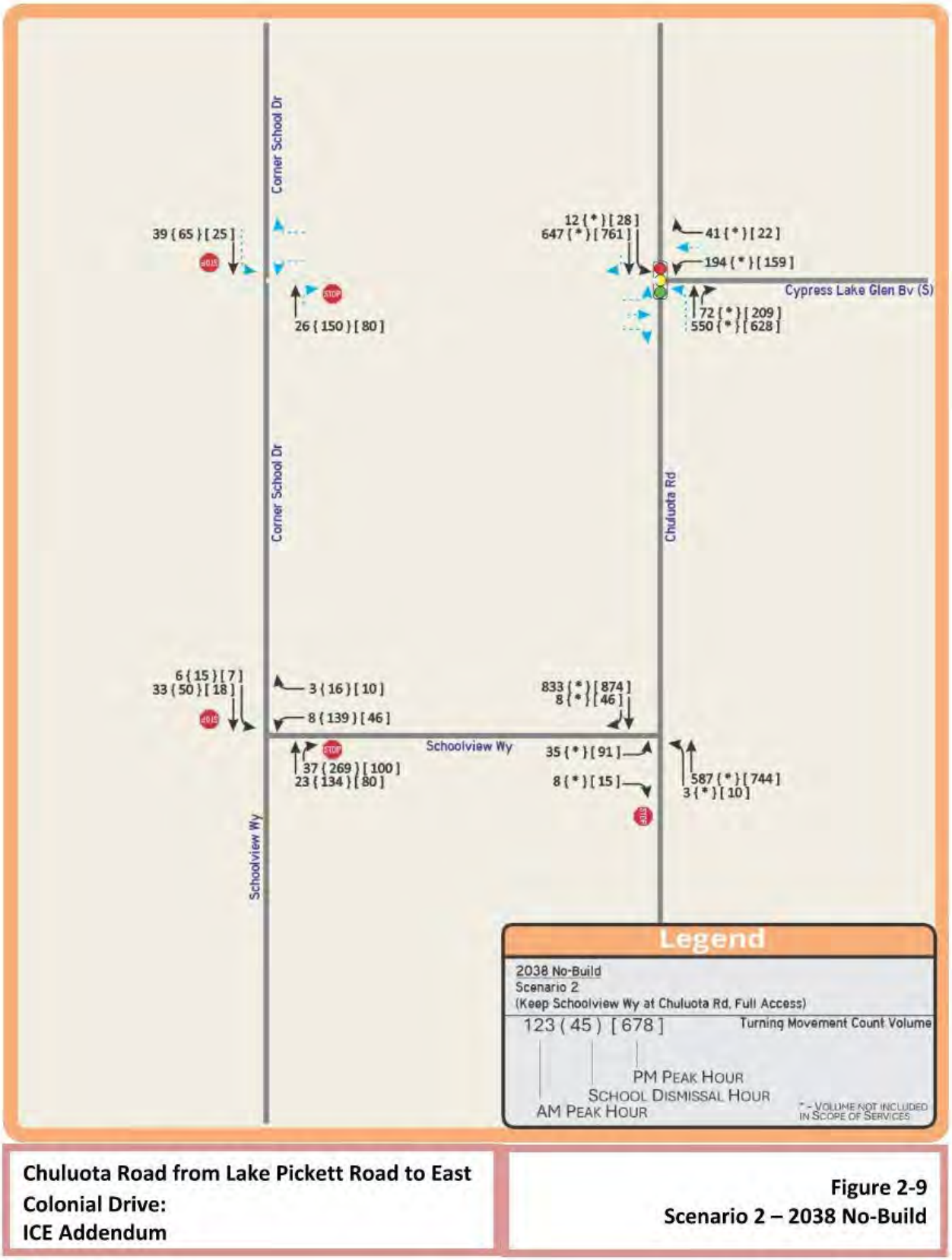


Figure 2- 9 Scenario 2 - 2038 No Build

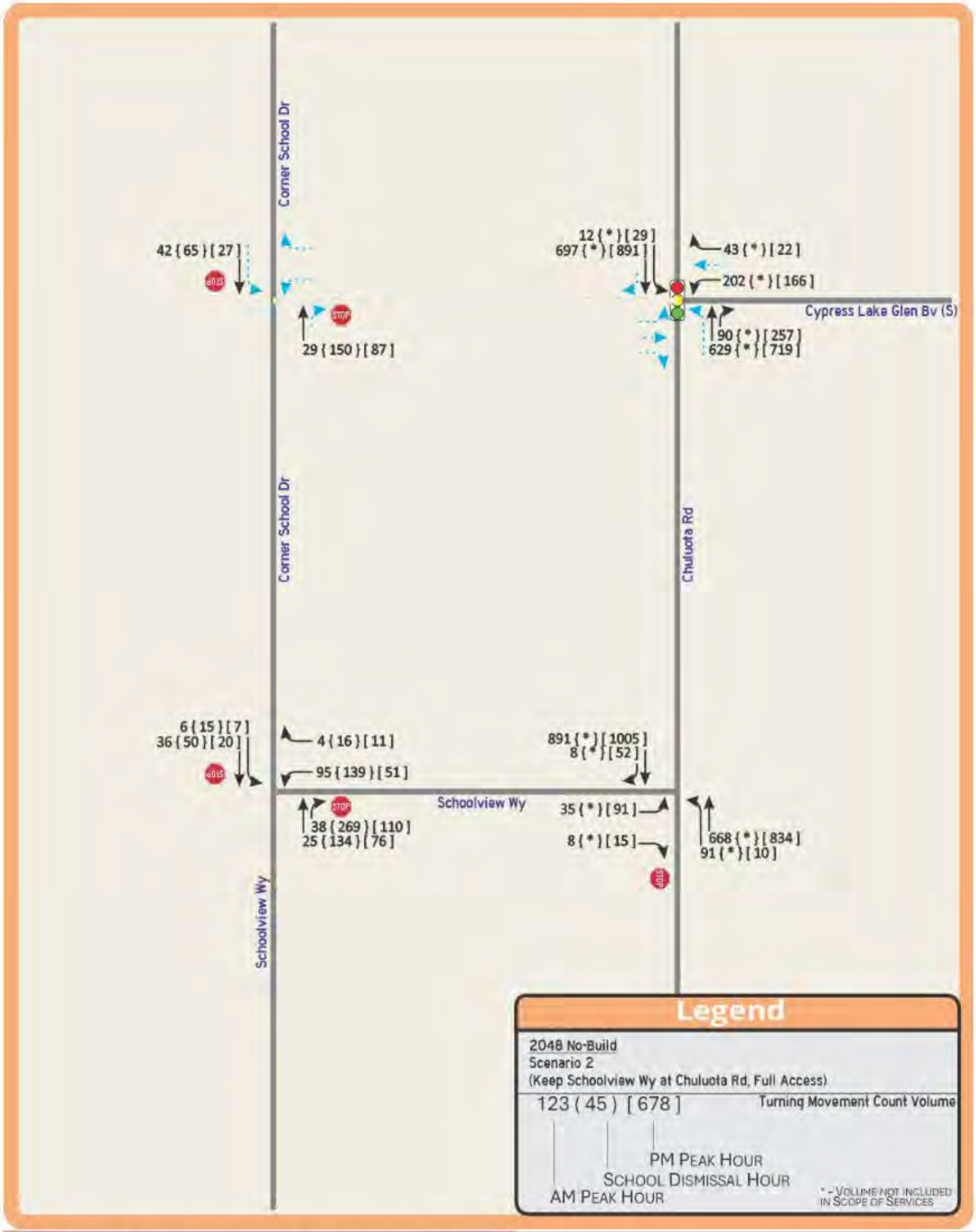


Figure 2- 10 Scenario 2 - 2048 No Build

Scenario 3: Chuluota Road Build Alternative (4 Lane) with Connection to Corner School Drive and Maintaining Existing Schoolview Way

Design hour traffic volumes for Corner School Drive and Cypress Lake Glen Boulevard with west approach connection to Corner School Drive, and existing Corner School Drive and Schoolview Way for Opening Year 2028, Interim Year 2038, Design Year 2048 based on Build Traffic conditions. This traffic is provided in **Figures 2-11, 12, 13**, which depict the weekday AM peak hour and PM peak hour intersection volumes for years 2028, 2038 and 2048.

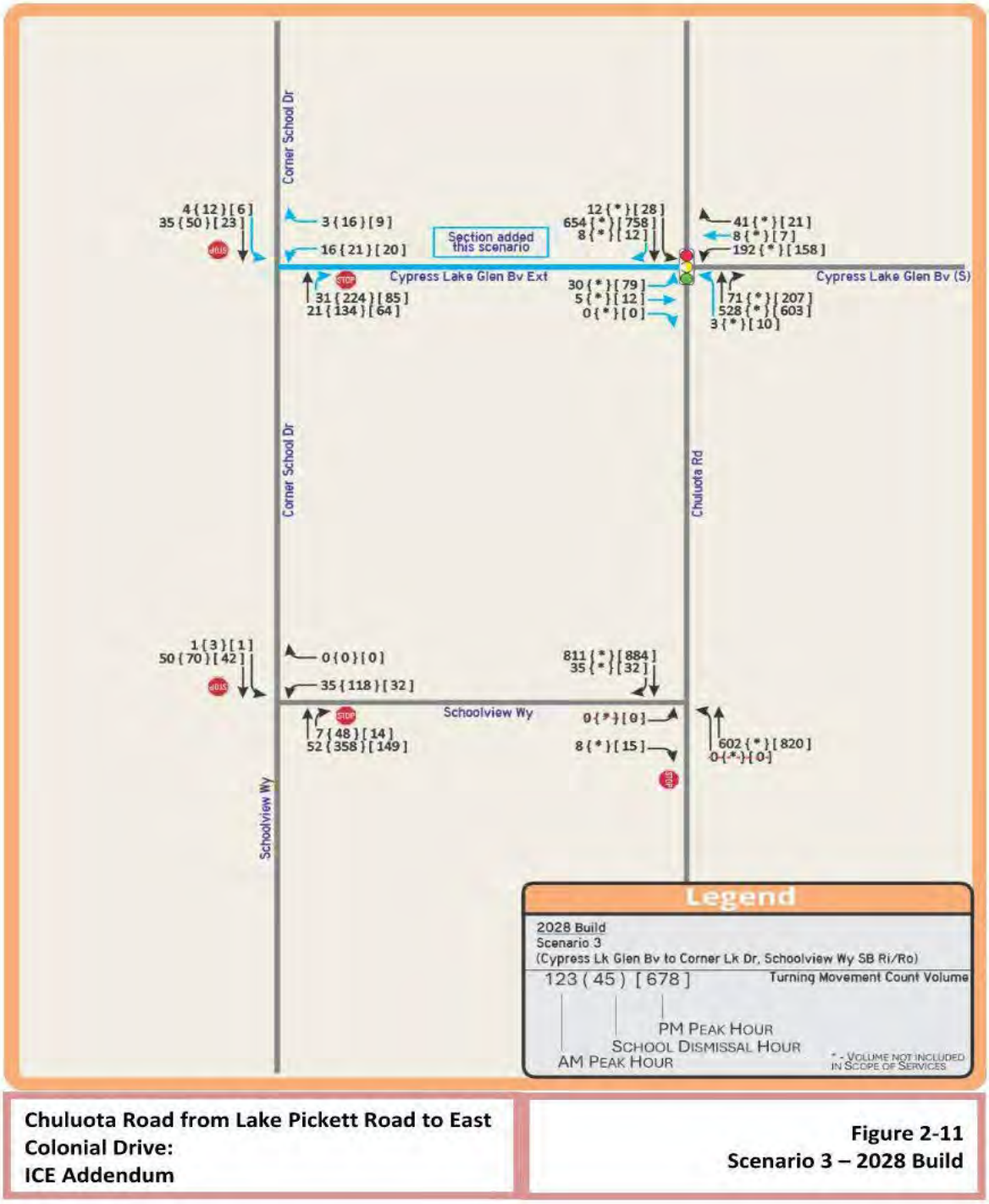


Figure 2- 11 Scenario 3 - 2028 Build

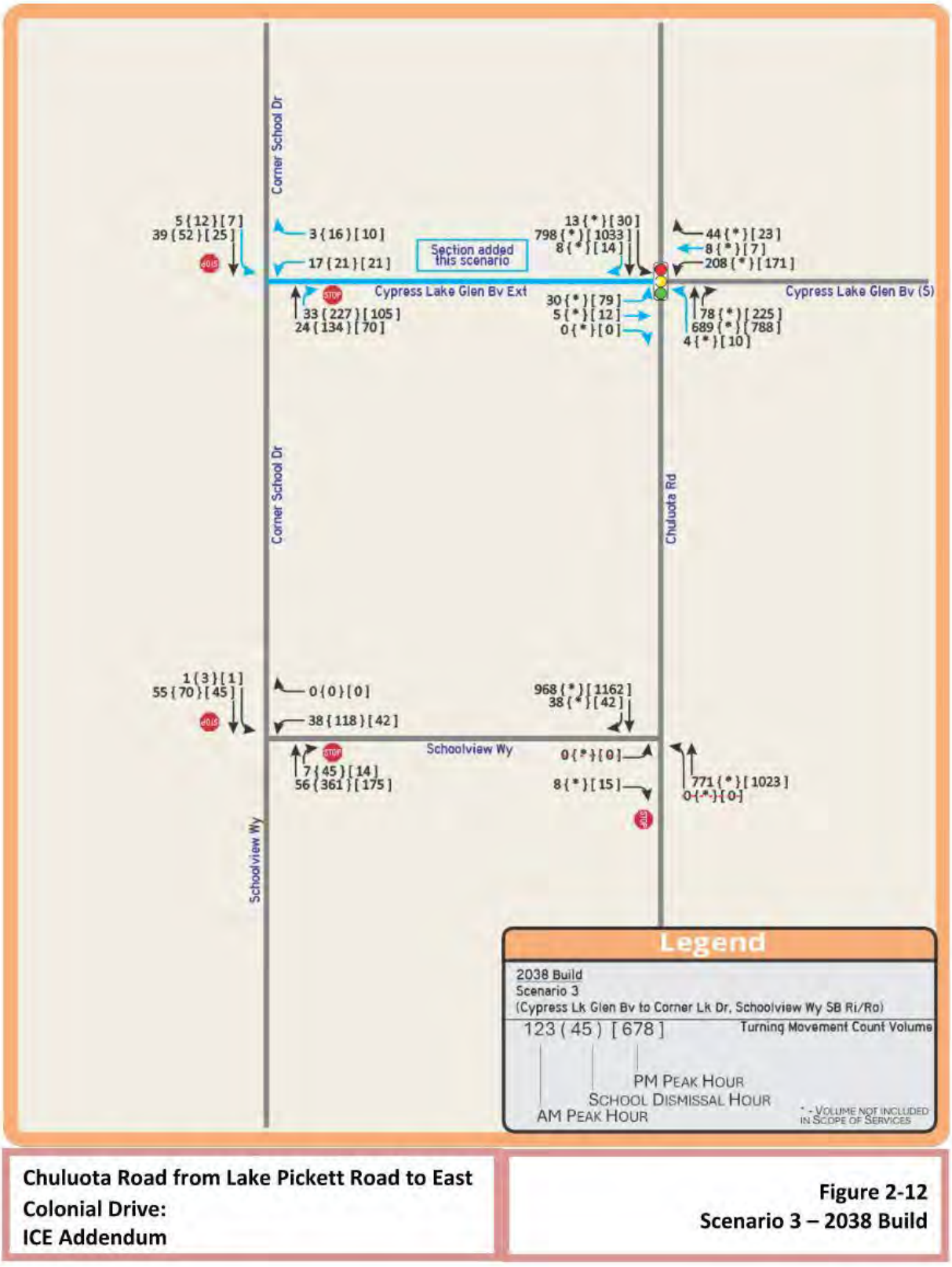


Figure 2- 12 Scenario 3 - 2038 Build

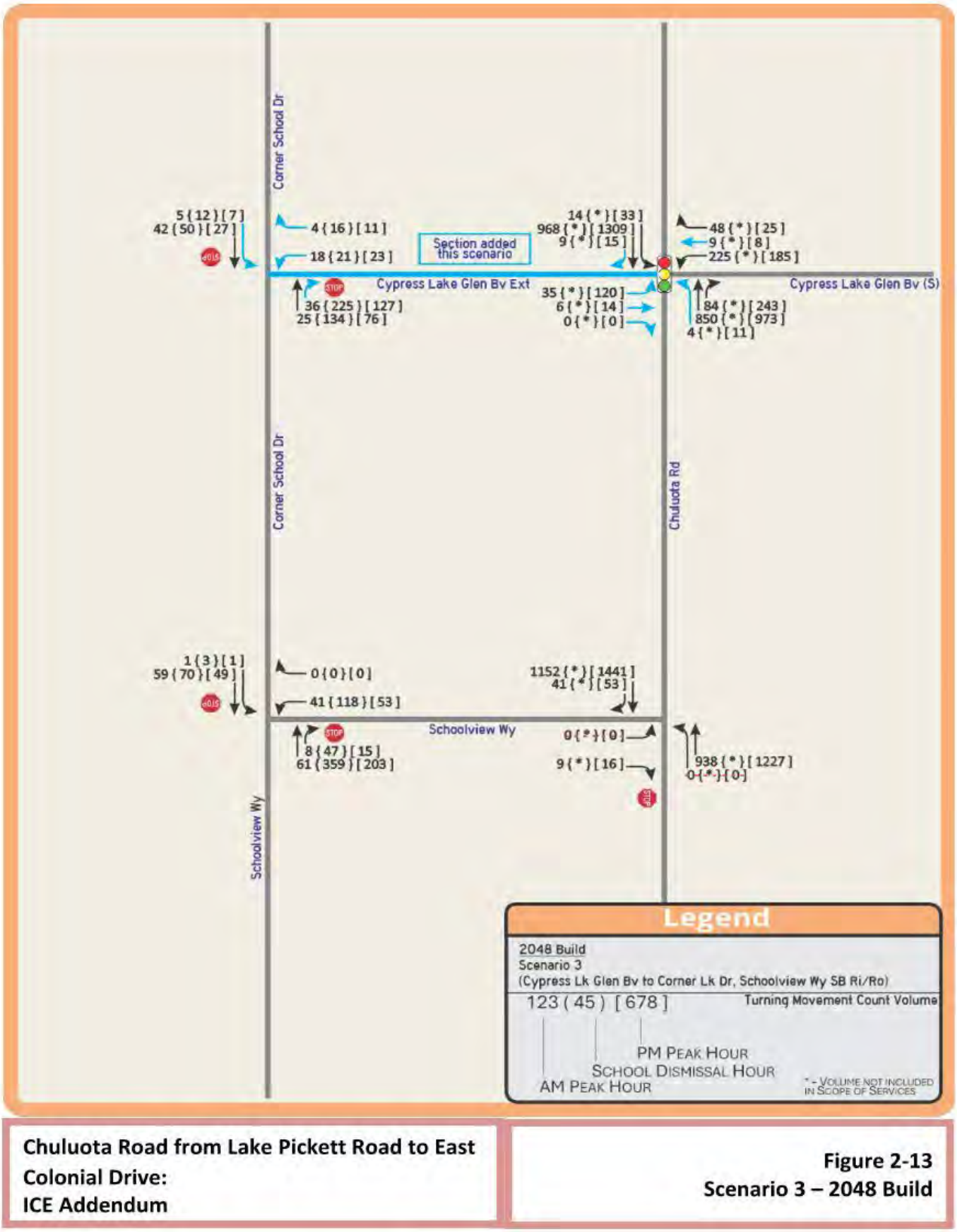


Figure 2- 13 Scenario 2 - 2048 Build

Design hour traffic volumes for Corner School Drive and Cypress Lake Glen Boulevard with west approach connection to Corner School Drive, and existing Corner School Drive and Schoolview Way for Opening Year 2028, Interim Year 2038, Design Year 2048 based on No Build Traffic conditions. This traffic is provided in **Figures 2-14, 2-15, 2-16**, below and on the following pages, which depict the weekday AM peak hour and PM peak hour intersection volumes for years 2028, 2038, and 2048.

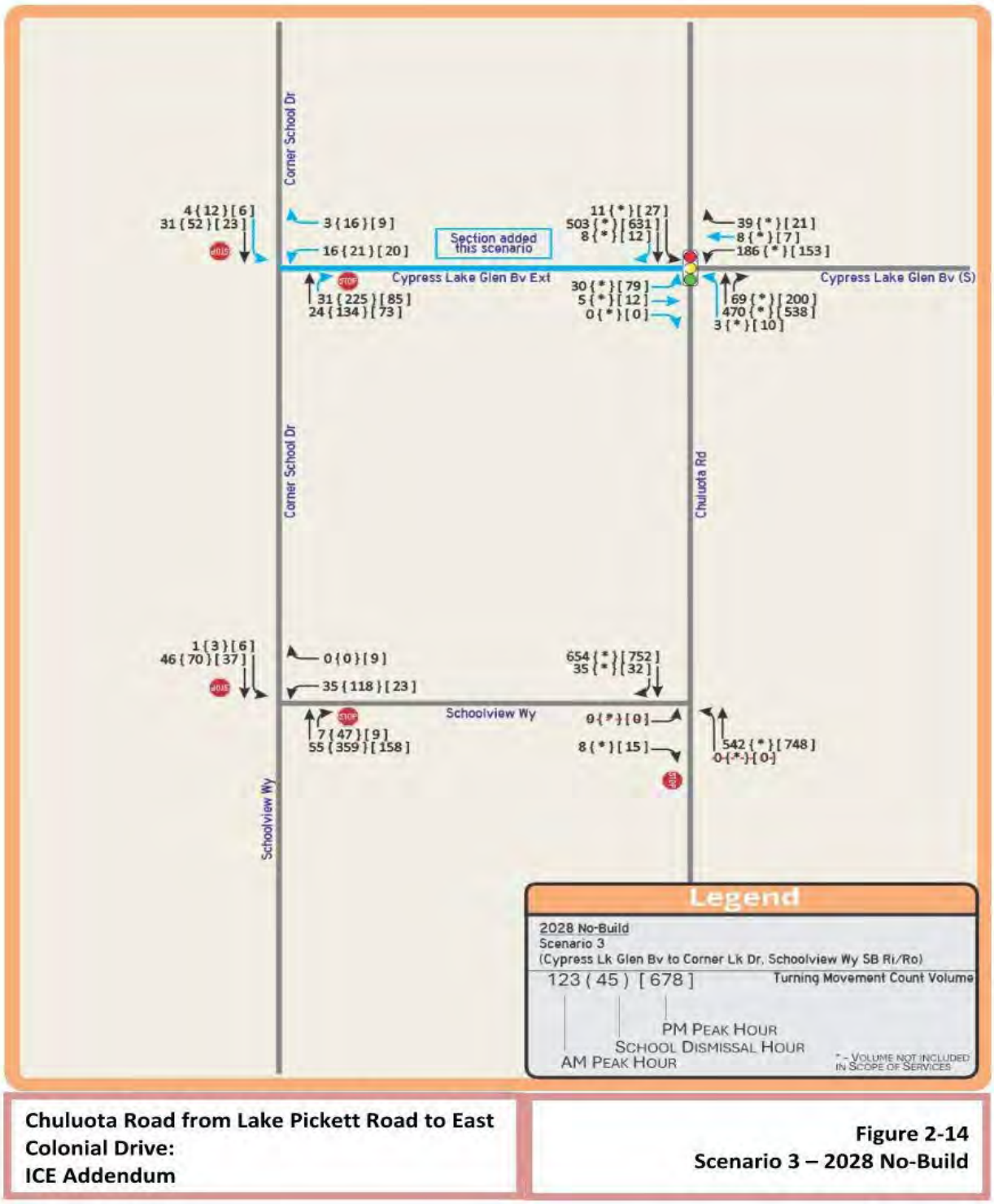


Figure 2- 14 Scenario 3 - 2028 No Build

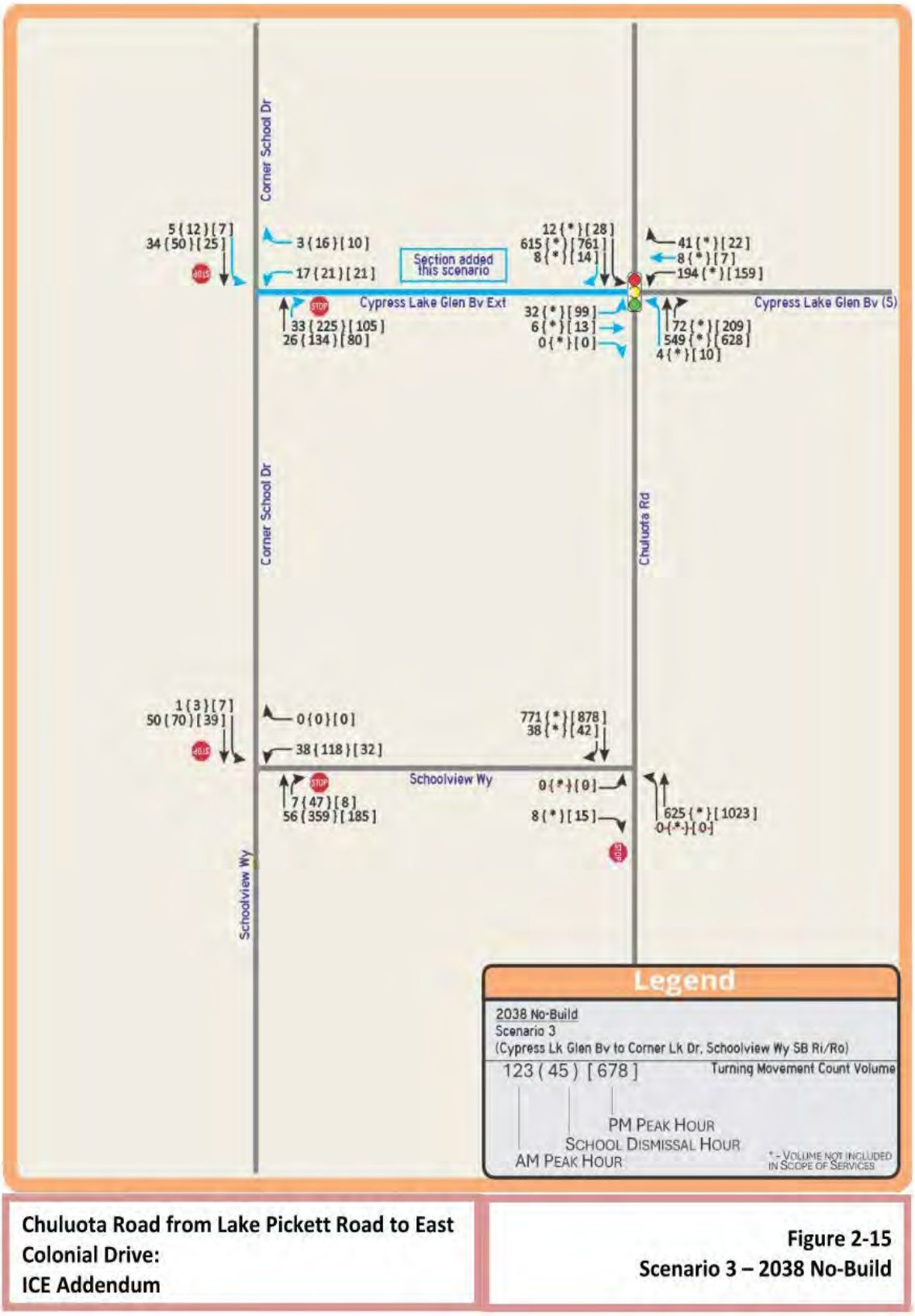


Figure 2- 15 Scenario 3 - 2038 No Build

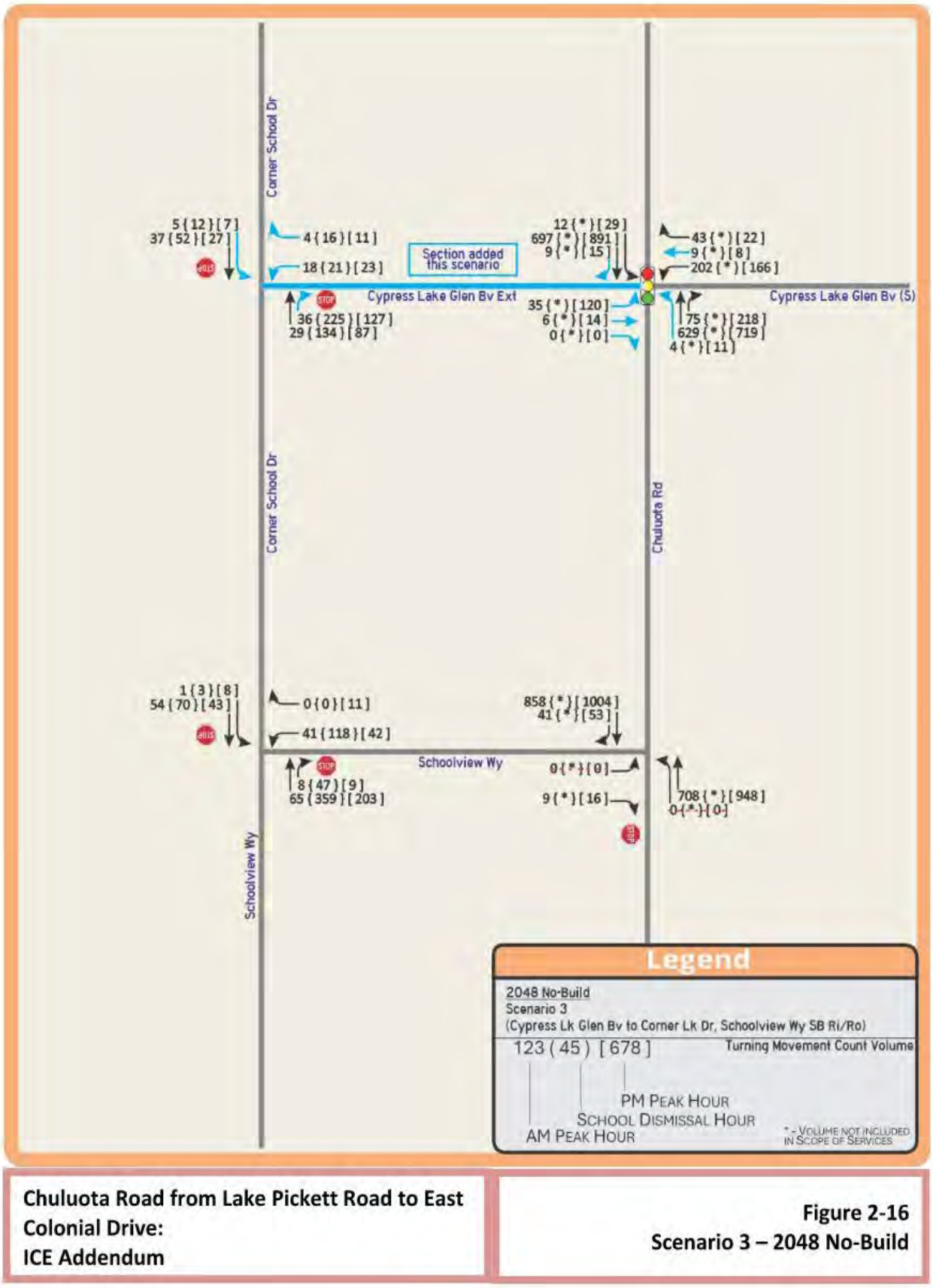


Figure 2- 16 Scenario 3 - 2048 No Build

3 ICE ANALYSIS, STAGE 1

3.1 Stage 1 Methodology

The methods utilized in the Chuluota Road Stage 1 ICE analysis are described in the FDOT Manual on Intersection Control Evaluation (ICE), dated January 2024. Per page 2-6 of the FDOT Manual on ICE:

> "The purpose of Stage 1 is to screen a number of potential control strategies and identify a single preferred control strategy or, if not possible, only a few viable control strategies narrowed down from the initial consideration based on preliminary analysis of traffic operations, safety, and other related factors. However, a single control strategy may not always be found at the end of Stage 1 analysis. In this case, it is expected to narrow down the control strategies to fewer viable alternatives from the initial consideration."

A total of 15 potential intersection control strategies were considered as part of the Chuluota Road Stage 1 ICE analysis, which includes the following:

- Traffic Signal
- Two-Way Stop Control (TWSC)
- All-Way Stop Control (AWSC)
- Roundabout
- Bowtie
- Jughandle
- Continuous Green T
- Signalized Restricted Crossing U-Turn (RCUT)
- Unsignalized Restricted Crossing U-Turn (RCUT)
- Signalized Thru-Cut
- Unsignalized Thru-Cut
- Full Median U-Turn (MUT)
- Partial Median U-Turn (MUT)
- Full Displaced Left Turn (DLT)
- Partial Displaced Left Turn (DLT)

All potential Stage 1 control strategies are shown in Figure 3-1 on the next page.

ALTERNATIVE INTERSECTION CONTROLS CONSIDERED IN STAGE 1 ICE

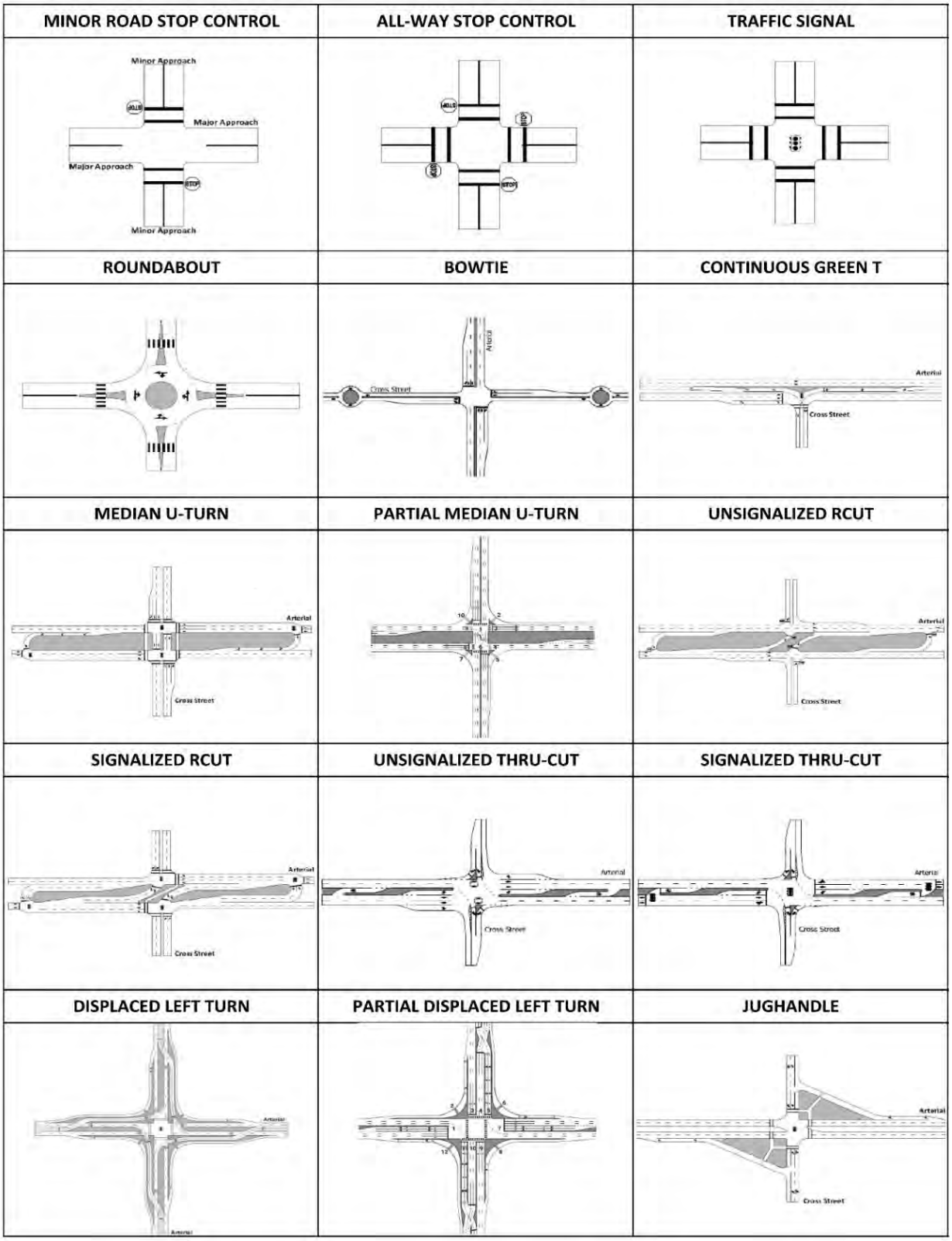


Figure 3- 1 ICE Stage 1 Alternatives

Stage 1 ICE requires the use of two analysis tools, which include the following:

- Capacity Analysis for Planning of Junctions (CAP-X) Tool
- Safety Performance for Intersection Control Evaluation (SPICE) Tool

Per page 2-7 of the FDOT Manual on ICE: "CAP-X is a macro-based Microsoft Excel spreadsheet tool, originally developed by Federal Highway Administration (FHWA), to evaluate the anticipated operational performance of intersection control strategies. The CAP-X tool uses a critical lane volume analysis to determine the volume to capacity ratio for a variety of intersection control strategies using the Highway Capacity Manual (HCM) methodologies.

FDOT has expanded this tool for use in Florida to include an enhanced evaluation for pedestrian and bicycle accommodations at intersections. Based on the input parameters, CAP-X generates a list of intersection strategies, ranked by volume to capacity ratio and given pedestrian and bicycle accommodation score"

The CAP-X analysis was performed for the following six intersections:

- Lake Pickett Road at Chuluota Road
- Long Boat Lane/Cypress Lake Glen Boulevard (N) at Chuluota Road
- Corner Lake Drive at Chuluota Road
- Cypress Lake Glen Boulevard (S) at Chuluota Road
- Corner School Drive at Schoolview Way
- Schoolview Way/Cypress Lake Glen Boulevard (S) at Chuluota Road

Sections 3.2 through 3.7 provide a summary of the results of the CAP-X analyses at each intersection. Table 3-1 shows the parameters used for all CAP-X analyses.

Analysis Years	Opening (2028), Interim (2038), Design (2048)
Peak Hours	AM and PM
Heavy Vehicles	3.48%
Volume Growth	0.00%
Truck to PCE Factor	2.00
Left Turn Adjustment Factor	0.95
Right Turn Adjustment Factor	0.85

Table 3- 1 CAP-X Analysis Parameters

Per page 2-7 of the FDOT Manual on ICE: "SPICE is another macro-based Microsoft Excel spreadsheet tool, originally developed by FHWA, for safety analysis based on crash predictions. The FDOT SPICE tool is an expanded version of the original tool, which includes two complimentary approaches to safety analysis: (1) Crash prediction method, and (2) Safe Systems for Intersections (SSI) method."

Both SPICE methods were utilized to provide a comprehensive safety analysis at each of the following six intersections:

- Lake Pickett Road at Chuluota Road
- Long Boat Lane/Cypress Lake Glen Boulevard (N) at Chuluota Road
- Corner Lake Drive at Chuluota Road
- Cypress Lake Glen Boulevard (S) at Chuluota Road
- Corner School Drive at Schoolview Way
- Schoolview Way/Cypress Lake Glen Boulevard (S) at Chuluota Road

Sections 3.2 through 3.7 provide a discussion and summary of the results of the SPICE analyses at each intersection.

3.2 Lake Pickett Road at Chuluota Road

CAP-X analyses were performed at the intersection of Lake Pickett Road at Chuluota Road for the AM and PM peak hours of the opening year (2038), interim year (2038), and design year (2048) under the no-build scenario (existing two-lane configuration along Chuluota Road) and the build scenario (Four-lane widening configuration along Chuluota Road), amounting to 12 analysis permutations.

A summary of the results of the CAP-X analyses at the intersection of Lake Pickett Road at Chuluota Road are shown in Figure 3-2. The ten highest ranked intersection control strategies by volume to capacity (V/C) ratio are shown for each analysis permutation with the following color coding:

- The grey cells indicate that the intersection control strategy is likely not feasible due to right-of-way impacts, excessive cost, or other factors.
- The green cells indicate that the intersection control strategy results in a V/C ratio less than 0.750.
- The yellow cells indicate that the intersection control strategy results in a V/C ratio between 0.750 and 0.875.
- The orange cells indicate that the intersection control strategy results in a V/C ratio between 0.875 and 1.00.
- The red cells indicate that the intersection control strategy results in a V/C ratio greater than or equal to 1.00.

The summary of the CAP-X analyses results indicate that, for both the no-build and build scenarios, the bowtie configuration is the prevailing feasible intersection control strategy in terms of V/C ratio, followed by the traffic signal, roundabout, and AWSC configurations. The results also indicate that the roundabout configuration is expected to exceed a V/C ratio of 1.00 during the no-build 2048 PM, build 2038 PM, and build 2048 PM analysis permutations.

SPICE analyses using the crash prediction method were performed at the intersection of Lake Pickett Road at Chuluota Road for the opening year (2028), interim year (2038), and design year (2048) under the no-build scenario (existing two-lane configuration along Chuluota Road) and the build scenario (Four-lane widening configuration along Chuluota Road), amounting to 6 analysis permutations.

A summary of the results of the SPICE analyses using the crash prediction method at the intersection of Lake Pickett Road at Chuluota Road are shown in Figure 3-3. The ten highest ranked intersection control strategies by predicted fatal and serious injury crashes are shown for each analysis permutation. The grey cells indicate that the intersection control strategy is likely not feasible due to right-of-way, cost, or other factors.

The summary of the SPICE analyses results using the crash prediction method indicate that, for the no-build scenario, the roundabout configuration is the prevailing feasible intersection control strategy in terms of predicted fatal and serious injury crashes, followed by the AWSC, traffic signal, and TWSC configurations. For the build scenario, the traffic signal configuration is the prevailing feasible intersection control strategy in terms of predicted fatal and serious injury crashes, followed by the AWSC, roundabout, and TWSC configurations.

It should be noted that, due to the absence of adequate safety performance functions (SPFs), the crash prediction method could not be applied to the following intersection control strategies considered in the Stage 1 analysis:

- Bowtie
- Signalized RCUT
- Unsignalized RCUT

SPICE analyses using the SSI method were performed at the intersection of Lake Pickett Road at Chuluota Road for the opening year (2028), interim year (2038), and design year (2048) under the no-build scenario (existing two-lane configuration along Chuluota Road) and the build scenario (four-lane widening configuration along Chuluota Road), amounting to six analysis permutations.

A summary of the results of the SPICE analyses using the SSI method at the intersection of Lake Pickett Road at Chuluota Road are shown in Figure 3-4. The ten highest ranked intersection control strategies by SSI score are shown for each analysis permutation with the following color coding:

- The grey cells indicate that the intersection control strategy is likely not feasible due to excessive right-of-way impacts, cost, or other factors.
- The green cells indicate that the intersection control strategy results in a SSI score between 90 and 100.
- The yellow cells indicate that the intersection control strategy results in a SSI score between 80 and 89.
- The orange cells indicate that the intersection control strategy results in a SSI score between 70 and 79.
- The red cells indicate that the intersection control strategy results in a SSI score less than 70.

The summary of the SPICE analyses results using the SSI method indicate that, for both the no-build and build scenarios, the roundabout configuration is the prevailing feasible intersection control strategy in terms of SSI score, followed by the AWSC, bowtie, and traffic signal configurations.

Build Type	Year	Peak Hour	Intersection Control Rank 1 (V/C Ratio)	Intersection Control Rank 2 (V/C Ratio)	Intersection Control Rank 3 (V/C Ratio)	Intersection Control Rank 4 (V/C Ratio)	Intersection Control Rank 5 (V/C Ratio)	Intersection Control Rank 6 (V/C Ratio)	Intersection Control Rank 7 (V/C Ratio)	Intersection Control Rank 8 (V/C Ratio)	Intersection Control Rank 9 (V/C Ratio)	Intersection Control Rank 10 (V/C Ratio)
No-Build (2-lane)	2028	AM	DLT (0.33)	Unsignalized RCUT N-S (0.37)	Signalized ThruCut N-S (0.37)	Partial DLT N-S (0.40)	Signalized RCUT N-S (0.42)	Bowtie N-S (0.42)	MUT N-S (0.46)	Partial MUT N-S (0.48)	1 X 1 Roundabout (0.54)	Traffic Signal (0.57)
	2038		DLT (0.40)	Signalized ThruCut N-S (0.45)	Partial DLT N-S (0.49)	Unsignalized RCUT N-S (0.49)	Signalized RCUT N-S (0.50)	Bowtie N-S (0.50)	MUT N-S (0.56)	Partial MUT N-S (0.56)	Traffic Signal (0.69)	1 X 1 Roundabout (0.71)
	2048		DLT (0.47)	Signalized ThruCut N-S (0.54)	Bowtie N-S (0.57)	Partial DLT N-S (0.58)	Signalized RCUT N-S (0.60)	Unsignalized RCUT N-S (0.64)	Partial MUT N-S (0.65)	MUT N-S (0.66)	Traffic Signal (0.81)	1 X 1 Roundabout (0.91)
	2028	PM	DLT (0.32)	Bowtie N-S (0.41)	Partial DLT N-S (0.47)	Signalized ThruCut N-S (0.48)	Partial MUT N-S (0.51)	MUT N-S (0.52)	Signalized RCUT N-S (0.59)	Traffic Signal (0.61)	1 X 1 Roundabout (0.62)	Unsignalized RCUT N-S (0.86)
	2038		DLT (0.39)	Bowtie N-S (0.50)	Partial DLT N-S (0.56)	Signalized ThruCut N-S (0.58)	Partial MUT N-S (0.61)	MUT N-S (0.62)	Signalized RCUT N-S (0.71)	Traffic Signal (0.74)	1 X 1 Roundabout (0.80)	AWSC (1.15)
	2048		DLT (0.46)	Bowtie N-S (0.59)	Partial DLT N-S (0.66)	Signalized ThruCut N-S (0.68)	Partial MUT N-S (0.71)	MUT N-S (0.72)	Signalized RCUT N-S (0.83)	Traffic Signal (0.86)	1 X 1 Roundabout (1.03)	AWSC (1.35)
Build (4-lane)	2028	AM	DLT (0.25)	Partial DLT N-S (0.30)	Signalized ThruCut N-S (0.33)	2NS X 1EW Roundabout (0.33)	Signalized RCUT N-S (0.34)	MUT N-S (0.42)	Partial MUT N-S (0.42)	Bowtie N-S (0.43)	Traffic Signal (0.49)	Unsignalized RCUT N-S (0.50)
	2038		DLT (0.34)	Partial DLT N-S (0.40)	Signalized RCUT N-S (0.45)	Signalized ThruCut N-S (0.45)	2NS X 1EW Roundabout (0.52)	MUT N-S (0.55)	Partial MUT N-S (0.56)	Bowtie N-S (0.56)	Traffic Signal (0.66)	Unsignalized RCUT N-S (0.89)
	2048		DLT (0.44)	Partial DLT N-S (0.51)	Signalized RCUT N-S (0.56)	Signalized ThruCut N-S (0.56)	MUT N-S (0.68)	Partial MUT N-S (0.69)	Bowtie N-S (0.69)	2NS X 1EW Roundabout (0.76)	Traffic Signal (0.83)	Unsignalized RCUT N-S (1.51)
	2028	PM	DLT (0.24)	Bowtie N-S (0.37)	Partial DLT N-S (0.40)	Signalized RCUT N-S (0.41)	Partial MUT N-S (0.42)	Signalized ThruCut N-S (0.42)	MUT N-S (0.45)	Traffic Signal (0.53)	2NS X 1EW Roundabout (0.69)	AWSC (1.10)
	2038		DLT (0.32)	Bowtie N-S (0.48)	Partial DLT N-S (0.54)	Signalized RCUT N-S (0.54)	Signalized ThruCut N-S (0.56)	Partial MUT N-S (0.57)	MUT N-S (0.59)	Traffic Signal (0.71)	2NS X 1EW Roundabout (1.10)	AWSC (1.49)
	2048		DLT (0.41)	Bowtie N-S (0.59)	Partial DLT N-S (0.68)	Signalized RCUT N-S (0.68)	Signalized ThruCut N-S (0.70)	Partial MUT N-S (0.71)	MUT N-S (0.74)	Traffic Signal (0.89)	2NS X 1EW Roundabout (1.64)	AWSC (1.88)

*Greyed out cells indicate that the intersection control type may not be viable due to right-of-way, cost, or other factors

V/C Ratio Legend	
	< 0.750
	0.750 - 0.875
	0.875 - 1.00
	≥ 1.00

Table 3- 2 Summary of CAP-X Results at the Intersection of Lake Pickett Road and Chuluota Road

Build Type	Year	Intersection Control Rank 1 (Fatal & Injury Crashes)	Intersection Control Rank 2 (Fatal & Injury Crashes)	Intersection Control Rank 3 (Fatal & Injury Crashes)	Intersection Control Rank 4 (Fatal & Injury Crashes)	Intersection Control Rank 5 (Fatal & Injury Crashes)	Intersection Control Rank 6 (Fatal & Injury Crashes)	Intersection Control Rank 7 (Fatal & Injury Crashes)	Intersection Control Rank 8 (Fatal & Injury Crashes)	Intersection Control Rank 9 (Fatal & Injury Crashes)	Intersection Control Rank 10 (Fatal & Injury Crashes)
No-Build (2-lane)	2028	1 Lane Roundabout (0.35)	Signalized RCUT N-S (0.66)	Unsignalized RCUT N-S (0.71)	Jughandle (0.79)	MUT N-S (0.82)	AWSC (0.91)	DLT (0.94)	Traffic Signal (1.07)	TWSC (1.39)	Bowtie N-S (No SPF)
	2038	1 Lane Roundabout (0.40)	Unsignalized RCUT N-S (0.80)	Signalized RCUT N-S (0.86)	Jughandle (0.87)	MUT N-S (0.89)	DLT (1.04)	AWSC (1.09)	Traffic Signal (1.18)	TWSC (1.69)	Bowtie N-S (No SPF)
	2048	1 Lane Roundabout (0.45)	Unsignalized RCUT N-S (0.89)	Jughandle (0.94)	MUT N-S (0.96)	Signalized RCUT N-S (1.08)	DLT (1.12)	AWSC (1.26)	Traffic Signal (1.27)	TWSC (2.00)	Bowtie N-S (No SPF)
Build (4-lane)	2028	Unsignalized RCUT N-S (0.80)	Signalized RCUT N-S (0.84)	Jughandle (0.87)	MUT N-S (0.89)	DLT (1.03)	AWSC (1.07)	2 Lane Roundabout (1.10)	Traffic Signal (1.17)	TWSC (1.65)	Bowtie N-S (No SPF)
	2038	Unsignalized RCUT N-S (0.98)	Jughandle (1.01)	MUT N-S (1.03)	DLT (1.20)	Signalized RCUT N-S (1.32)	Traffic Signal (1.36)	AWSC (1.46)	2 Lane Roundabout (1.56)	TWSC (2.30)	Bowtie N-S (No SPF)
	2048	Jughandle (1.12)	Unsignalized RCUT N-S (1.15)	MUT N-S (1.15)	DLT (1.33)	Traffic Signal (1.52)	AWSC (1.85)	Signalized RCUT N-S (1.88)	2 Lane Roundabout (2.05)	TWSC (2.97)	Bowtie N-S (No SPF)

*Greyed out cells indicate that the intersection control type may not be viable due to right-of-way, cost, or other factors

Predicted Crashes Legend		
	0.00 - 0.50	Above Average Safety
	0.50 - 1.00	Acceptable Safety
	1.00 - 1.50	Below Average Safety
	≥ 1.50	Poor Safety

Table 3- 3 Summary of SPICE Crash Prediction Method Results at the Intersection of Lake Pickett and Chuluota Road

Build Type	Year	Intersection Control Rank 1 (SSI Score)	Intersection Control Rank 2 (SSI Score)	Intersection Control Rank 3 (SSI Score)	Intersection Control Rank 4 (SSI Score)	Intersection Control Rank 5 (SSI Score)	Intersection Control Rank 6 (SSI Score)	Intersection Control Rank 7 (SSI Score)	Intersection Control Rank 8 (SSI Score)	Intersection Control Rank 9 (SSI Score)	Intersection Control Rank 10 (SSI Score)
No-Build	2028	1 Lane Roundabout (100)	AWSC (99)	MUT N-S (98)	Signalized RCUT N-S (97)	Signalized ThruCut N-S (97)	Unsignalized RCUT N-S (96)	Unsignalized ThruCut N-S (95)	Bowtie N-S (95)	Traffic Signal (94)	DLT (94)
	2038	1 Lane Roundabout (100)	AWSC (98)	MUT N-S (97)	Signalized RCUT N-S (96)	Signalized ThruCut N-S (95)	Unsignalized RCUT N-S (95)	Unsignalized ThruCut N-S (94)	Bowtie N-S (93)	Traffic Signal (92)	DLT (92)
	2048	1 Lane Roundabout (99)	AWSC (98)	MUT N-S (96)	Signalized RCUT N-S (95)	Signalized ThruCut N-S (94)	Unsignalized RCUT N-S (94)	Unsignalized ThruCut N-S (92)	Bowtie N-S (91)	Traffic Signal (90)	DLT (90)
Build	2028	2 Lane Roundabout (99)	AWSC (98)	MUT N-S (95)	Signalized RCUT N-S (94)	Unsignalized RCUT N-S (92)	Signalized ThruCut N-S (92)	Unsignalized ThruCut N-S (89)	Bowtie N-S (88)	DLT (88)	Traffic Signal (87)
	2038	2 Lane Roundabout (99)	AWSC (96)	MUT N-S (91)	Signalized RCUT N-S (91)	Unsignalized RCUT N-S (87)	Signalized ThruCut N-S (87)	Unsignalized ThruCut N-S (82)	Bowtie N-S (80)	DLT (80)	Traffic Signal (80)
	2048	2 Lane Roundabout (98)	AWSC (94)	MUT N-S (87)	Signalized RCUT N-S (86)	Unsignalized RCUT N-S (81)	Signalized ThruCut N-S (81)	Unsignalized ThruCut N-S (74)	DLT (71)	Bowtie N-S (71)	Traffic Signal (70)

*Greyed out cells indicate that the intersection control type may not be viable due to right-of-way, cost, or other factors

SSI Legend	
	90-100
	80-89
	70-79
	< 70

Table 3- 2 Summary of SPICE SSI Method Results at the Intersection of Lake Pickett Road and Chuluota Road

3.3 Long Boat Lane/Cypress Lake Glen Boulevard (N) at Chuluota Road

CAP-X analyses were performed at the intersection of Long Boat Lane/Cypress Lake Glen Boulevard (N) at Chuluota Road for the AM and PM peak hours of the opening year (2038), interim year (2038), and design year (2048) under the no-build scenario (existing two-lane configuration along Chuluota Road) and the build scenario (Four-lane widening configuration along Chuluota Road), amounting to 12 analysis permutations.

A summary of the results of the CAP-X analyses at the intersection of Long Boat Lane/Cypress Lake Glen Boulevard (N) at Chuluota Road are shown in Figure 3-5. The ten highest ranked intersection control strategies by volume to capacity (V/C) ratio are shown for each analysis permutation with the following color coding:

- The grey cells indicate that the intersection control strategy is likely not feasible due to right-of-way, cost, or other factors.
- The green cells indicate that the intersection control strategy results in a V/C ratio less than 0.750.
- The yellow cells indicate that the intersection control strategy results in a V/C ratio between 0.750 and 0.875.
- The orange cells indicate that the intersection control strategy results in a V/C ratio between 0.875 and 1.00.
- The red cells indicate that the intersection control strategy results in a V/C ratio greater than or equal to 1.00.

The summary of the CAP-X analyses indicate that, for both the no-build and build scenarios, the bowtie configuration is the prevailing feasible intersection control strategy in terms of V/C ratio, followed by the traffic signal, roundabout, and TWSC configurations.

SPICE analyses using the crash prediction method were performed at the intersection of Long Boat Lane/Cypress Lake Glen Boulevard (N) at Chuluota Road for the opening year (2028), interim year (2038), and design year (2048) under the no-build scenario (existing two-lane configuration along Chuluota Road) and the build scenario (Four-lane widening configuration along Chuluota Road), amounting to 6 analysis permutations.

A summary of the results of the SPICE analyses using the crash prediction method at the intersection of Long Boat Lane/Cypress Lake Glen Boulevard (N) at Chuluota Road are shown in Figure 3-6. The ten highest ranked intersection control strategies by predicted fatal and serious injury crashes are shown for each analysis permutation. The grey cells indicate that the intersection control strategy is likely not feasible due to right-of-way, cost, or other factors.

The summary of the SPICE analyses results using the crash prediction method indicate that, for the no-build scenario, the roundabout configuration is the prevailing feasible intersection control strategy in terms of predicted fatal and serious injury crashes, followed by the TWSC, AWSC, and traffic signal configurations. For the build scenario, the TWSC configuration is the prevailing feasible intersection control strategy in terms of predicted fatal and serious injury crashes, followed by the AWSC, roundabout, and traffic signal configurations.

It should be noted that, due to the absence of adequate safety performance functions (SPFs), the crash prediction method could not be applied to the following intersection control strategies considered in the Stage 1 analysis:

- Bowtie
- Signalized RCUT
- Unsignalized RCUT

SPICE analyses using the SSI method were performed at the intersection of Long Boat Lane/Cypress Lake Glen Boulevard (N) at Chuluota Road for the opening year (2028), interim year (2038), and design year (2048) under the no-build scenario (existing two-lane configuration along Chuluota Road) and the build scenario (Four-lane widening configuration along Chuluota Road), amounting to 6 analysis permutations.

A summary of the results of the SPICE analyses using the SSI method at the intersection of Long Boat Lane/Cypress Lake Glen Boulevard (N) at Chuluota Road are shown in Figure 3-7. The ten highest ranked intersection control strategies by SSI score are shown for each analysis permutation with the following color coding:

- The grey cells indicate that the intersection control strategy is likely not feasible due to right-of-way, cost, or other factors.
- The green cells indicate that the intersection control strategy results in a SSI score between 90 and 100.
- The yellow cells indicate that the intersection control strategy results in a SSI score between 80 and 89.
- The orange cells indicate that the intersection control strategy results in a SSI score between 70 and 79.
- The red cells indicate that the intersection control strategy results in a SSI score less than 70.

The summary of the SPICE analyses results using the SSI method indicate that, for both the no-build and build scenarios, the roundabout configuration is the prevailing feasible intersection control strategy in terms of SSI score, followed by the AWSC, traffic signal, TWSC, and bowtie configurations.

Build Type	Year	Peak Hour	Intersection Control Rank 1 (V/C Ratio)	Intersection Control Rank 2 (V/C Ratio)	Intersection Control Rank 3 (V/C Ratio)	Intersection Control Rank 4 (V/C Ratio)	Intersection Control Rank 5 (V/C Ratio)	Intersection Control Rank 6 (V/C Ratio)	Intersection Control Rank 7 (V/C Ratio)	Intersection Control Rank 8 (V/C Ratio)	Intersection Control Rank 9 (V/C Ratio)	Intersection Control Rank 10 (V/C Ratio)
No-Build (2-lane)	2028	AM	DLT (0.33)	Partial DLT N-S (0.34)	Bowtie N-S (0.36)	Partial MUT N-S (0.38)	Signalized ThruCut N-S (0.38)	Traffic Signal (0.39)	Unsignalized RCUT N-S (0.41)	Signalized RCUT N-S (0.42)	MUT N-S (0.43)	1 X 1 Roundabout (0.45)
	2038		DLT (0.38)	Partial DLT N-S (0.39)	Bowtie N-S (0.41)	Signalized ThruCut N-S (0.44)	Traffic Signal (0.45)	Partial MUT N-S (0.45)	Unsignalized RCUT N-S (0.48)	Signalized RCUT N-S (0.48)	MUT N-S (0.50)	1 X 1 Roundabout (0.53)
	2048		DLT (0.43)	Partial DLT N-S (0.44)	Bowtie N-S (0.47)	Signalized ThruCut N-S (0.49)	Traffic Signal (0.50)	Partial MUT N-S (0.52)	Signalized RCUT N-S (0.53)	Unsignalized RCUT N-S (0.56)	MUT N-S (0.57)	1 X 1 Roundabout (0.61)
	2028	PM	Unsignalized RCUT N-S (0.24)	DLT (0.37)	Partial DLT N-S (0.38)	Bowtie N-S (0.38)	Signalized ThruCut N-S (0.39)	Traffic Signal (0.40)	Signalized RCUT N-S (0.42)	Partial MUT N-S (0.43)	TWSC (0.44)	MUT N-S (0.46)
	2038		Unsignalized RCUT N-S (0.28)	DLT (0.45)	Bowtie N-S (0.45)	Partial DLT N-S (0.46)	Signalized ThruCut N-S (0.46)	Traffic Signal (0.48)	Signalized RCUT N-S (0.50)	Partial MUT N-S (0.51)	MUT N-S (0.54)	1 X 1 Roundabout (0.64)
	2048		Unsignalized RCUT N-S (0.33)	DLT (0.52)	Partial DLT N-S (0.53)	Bowtie N-S (0.53)	Signalized ThruCut N-S (0.54)	Traffic Signal (0.55)	Signalized RCUT N-S (0.57)	Partial MUT N-S (0.58)	MUT N-S (0.61)	1 X 1 Roundabout (0.74)
Build (4-lane)	2028	AM	DLT (0.21)	Partial DLT N-S (0.22)	Signalized RCUT N-S (0.24)	Bowtie N-S (0.24)	Partial MUT N-S (0.26)	Traffic Signal (0.27)	Signalized ThruCut N-S (0.27)	2NS X 1EW Roundabout (0.29)	MUT N-S (0.32)	Unsignalized RCUT N-S (0.51)
	2038		DLT (0.27)	Partial DLT N-S (0.28)	Signalized RCUT N-S (0.31)	Bowtie N-S (0.31)	Traffic Signal (0.33)	Signalized ThruCut N-S (0.33)	Partial MUT N-S (0.34)	2NS X 1EW Roundabout (0.37)	MUT N-S (0.40)	Unsignalized RCUT N-S (0.73)
	2048		DLT (0.34)	Partial DLT N-S (0.35)	Signalized RCUT N-S (0.38)	Signalized ThruCut N-S (0.38)	Bowtie N-S (0.38)	Traffic Signal (0.39)	Partial MUT N-S (0.41)	2NS X 1EW Roundabout (0.46)	MUT N-S (0.48)	Unsignalized RCUT N-S (1.03)
	2028	PM	DLT (0.23)	Partial DLT N-S (0.24)	Bowtie N-S (0.24)	Signalized ThruCut N-S (0.25)	Traffic Signal (0.26)	Signalized RCUT N-S (0.26)	Partial MUT N-S (0.27)	Unsignalized RCUT N-S (0.30)	MUT N-S (0.30)	2NS X 1EW Roundabout (0.32)
	2038		DLT (0.31)	Partial DLT N-S (0.32)	Signalized ThruCut N-S (0.32)	Bowtie N-S (0.32)	Traffic Signal (0.33)	Signalized RCUT N-S (0.34)	Partial MUT N-S (0.34)	MUT N-S (0.38)	2NS X 1EW Roundabout (0.44)	Unsignalized RCUT N-S (0.44)
	2048		DLT (0.38)	Partial DLT N-S (0.39)	Bowtie N-S (0.39)	Signalized ThruCut N-S (0.40)	Traffic Signal (0.41)	Signalized RCUT N-S (0.42)	Partial MUT N-S (0.42)	MUT N-S (0.46)	2NS X 1EW Roundabout (0.55)	Unsignalized RCUT N-S (0.65)

*Greyed out cells indicate that the intersection control type may not be viable due to right-of-way, cost, or other factors

V/C Ratio Legend	
	< 0.750
	0.750 - 0.875
	0.875 - 1.00
	≥ 1.00

Table 3- 3 Summary of CAP-X Results at the Intersection of Long Boat Lane/Cypress Lake Glen Boulevard (N) and Chuluota Road

Build Type	Year	Intersection Control Rank 1 (Fatal & Injury Crashes)	Intersection Control Rank 2 (Fatal & Injury Crashes)	Intersection Control Rank 3 (Fatal & Injury Crashes)	Intersection Control Rank 4 (Fatal & Injury Crashes)	Intersection Control Rank 5 (Fatal & Injury Crashes)	Intersection Control Rank 6 (Fatal & Injury Crashes)	Intersection Control Rank 7 (Fatal & Injury Crashes)	Intersection Control Rank 8 (Fatal & Injury Crashes)	Intersection Control Rank 9 (Fatal & Injury Crashes)	Intersection Control Rank 10 (Fatal & Injury Crashes)
No-Build (2-lane)	2028	1 Lane Roundabout (0.36)	Signalized RCUT N-S (0.69)	Unsignalized RCUT N-S (0.74)	TWSC (0.86)	AWSC (0.95)	Jughandle (1.03)	MUT N-S (1.06)	DLT (1.22)	Traffic Signal (1.39)	Bowtie N-S (No SPF)
	2038	1 Lane Roundabout (0.41)	Unsignalized RCUT N-S (0.83)	Signalized RCUT N-S (0.87)	TWSC (0.94)	AWSC (1.11)	Jughandle (1.15)	MUT N-S (1.19)	DLT (1.37)	Traffic Signal (1.56)	Bowtie N-S (No SPF)
	2048	1 Lane Roundabout (0.45)	Unsignalized RCUT N-S (0.90)	TWSC (1.00)	Signalized RCUT N-S (1.04)	AWSC (1.26)	Jughandle (1.27)	MUT N-S (1.30)	DLT (1.51)	Traffic Signal (1.71)	Bowtie N-S (No SPF)
Build (4-lane)	2028	Unsignalized RCUT N-S (0.81)	Signalized RCUT N-S (0.82)	TWSC (0.91)	AWSC (1.08)	2 Lane Roundabout (1.11)	Jughandle (1.13)	MUT N-S (1.17)	DLT (1.35)	Traffic Signal (1.53)	Bowtie N-S (No SPF)
	2038	Unsignalized RCUT N-S (0.97)	TWSC (1.02)	Signalized RCUT N-S (1.16)	Jughandle (1.36)	AWSC (1.39)	MUT N-S (1.40)	2 Lane Roundabout (1.49)	DLT (1.62)	Traffic Signal (1.84)	Bowtie N-S (No SPF)
	2048	TWSC (1.10)	Unsignalized RCUT N-S (1.12)	Signalized RCUT N-S (1.51)	Jughandle (1.57)	MUT N-S (1.61)	AWSC (1.71)	DLT (1.86)	2 Lane Roundabout (1.88)	Traffic Signal (2.12)	Bowtie N-S (No SPF)

*Greyed out cells indicate that the intersection control type may not be viable due to right-of-way, cost, or other factors

Predicted Crashes Legend		
	0.00 - 0.50	Above Average Safety
	0.50 - 1.00	Acceptable Safety
	1.00 - 1.50	Below Average Safety
	≥ 1.50	Poor Safety

Table 3- 4 Summary of SPICE Crash Prediction Method Results at the Intersection of Long Boat Lane/Cypress Lake Glen Boulevard (N) and Chuluota Road

Build Type	Year	Intersection Control Rank 1 (SSI Score)	Intersection Control Rank 2 (SSI Score)	Intersection Control Rank 3 (SSI Score)	Intersection Control Rank 4 (SSI Score)	Intersection Control Rank 5 (SSI Score)	Intersection Control Rank 6 (SSI Score)	Intersection Control Rank 7 (SSI Score)	Intersection Control Rank 8 (SSI Score)	Intersection Control Rank 9 (SSI Score)	Intersection Control Rank 10 (SSI Score)
No-Build (2-lane)	2028	1 Lane Roundabout (100)	AWSC (99)	MUT N-S (98)	Signalized RCUT N-S (98)	Unsignalized RCUT N-S (97)	Traffic Signal (96)	Jughandle (96)	Signalized ThruCut N-S (96)	TWSC (95)	Bowtie N-S (94)
	2038	1 Lane Roundabout (100)	AWSC (99)	MUT N-S (97)	Signalized RCUT N-S (97)	Unsignalized RCUT N-S (96)	Traffic Signal (95)	Jughandle (95)	Signalized ThruCut N-S (95)	TWSC (93)	Bowtie N-S (93)
	2048	1 Lane Roundabout (100)	AWSC (99)	MUT N-S (97)	Signalized RCUT N-S (96)	Unsignalized RCUT N-S (95)	Traffic Signal (94)	Jughandle (94)	Signalized ThruCut N-S (94)	TWSC (92)	Bowtie N-S (91)
Build (4-lane)	2028	2 Lane Roundabout (99)	AWSC (98)	MUT N-S (96)	Signalized RCUT N-S (95)	Unsignalized RCUT N-S (93)	Traffic Signal (92)	Signalized ThruCut N-S (92)	Jughandle (91)	TWSC (89)	Unsignalized ThruCut N-S (88)
	2038	2 Lane Roundabout (99)	AWSC (98)	MUT N-S (94)	Signalized RCUT N-S (94)	Unsignalized RCUT N-S (91)	Traffic Signal (89)	Jughandle (88)	Signalized ThruCut N-S (88)	TWSC (85)	Unsignalized ThruCut N-S (83)
	2048	2 Lane Roundabout (99)	AWSC (97)	MUT N-S (93)	Signalized RCUT N-S (92)	Unsignalized RCUT N-S (88)	Traffic Signal (85)	Jughandle (84)	Signalized ThruCut N-S (84)	TWSC (80)	Unsignalized ThruCut N-S (78)

*Greyed out cells indicate that the intersection control type may not be viable due to right-of-way, cost, or other factors

SSI Legend	
	90-100
	80-89
	70-79
	< 70

Table 3- 5 Summary of SPICE SSI Method Results at the Intersection of Long Boat Lane/Cypress Lake Glen Boulevard (N) at Chuluota Road

3.4 Corner Lake Drive at Chuluota Road

CAP-X analyses were performed at the intersection of Corner Lake Drive at Chuluota Road for the AM and PM peak hours of the opening year (2038), interim year (2038), and design year (2048) under the no-build scenario (existing two-lane configuration along Chuluota Road) and the build scenario (Four-lane widening configuration along Chuluota Road), amounting to 12 analysis permutations.

A summary of the results of the CAP-X analyses at the intersection of Corner Lake Drive at Chuluota Road are shown in Figure 3-8. The ten highest ranked intersection control strategies by volume to capacity (V/C) ratio are shown for each analysis permutation with the following color coding:

- The grey cells indicate that the intersection control strategy is likely not feasible due to right-of-way, cost, or other factors.
- The green cells indicate that the intersection control strategy results in a V/C ratio less than 0.750.
- The yellow cells indicate that the intersection control strategy results in a V/C ratio between 0.750 and 0.875.
- The orange cells indicate that the intersection control strategy results in a V/C ratio between 0.875 and 1.00.
- The red cells indicate that the intersection control strategy results in a V/C ratio greater than or equal to 1.00.

The summary of the CAP-X analyses indicate that, for the no-build scenario, the TWSC configuration is the prevailing feasible intersection control strategy in terms of V/C ratio, followed by the bowtie, traffic signal, and roundabout configurations. For the build scenario, the bowtie configuration is the prevailing feasible intersection control strategy in terms of V/C ratio, followed by the TWSC, traffic signal, and roundabout configurations.

SPICE analyses using the crash prediction method were performed at the intersection of Corner Lake Drive at Chuluota Road for the opening year (2028), interim year (2038), and design year (2048) under the no-build scenario (existing two-lane configuration along Chuluota Road) and the build scenario (Four-lane widening configuration along Chuluota Road), amounting to 6 analysis permutations.

A summary of the results of the SPICE analyses using the crash prediction method at the intersection of Corner Lake Drive at Chuluota Road are shown in Figure 3-9. The ten highest ranked intersection control strategies by predicted fatal and serious injury crashes are shown for each analysis permutation. The grey cells indicate that the intersection control strategy is likely not feasible due to right-of-way, cost, or other factors.

The summary of the SPICE analyses results using the crash prediction method indicate that, for the no-build scenario, the roundabout configuration is the prevailing feasible intersection control strategy in terms of predicted fatal and serious injury crashes, followed by the TWSC and traffic signal configurations. For the build scenario, the TWSC configuration is the prevailing feasible intersection control strategy in terms of predicted fatal and serious injury crashes, followed by the traffic signal and roundabout configurations.

It should be noted that, due to the absence of adequate safety performance functions (SPFs), the crash prediction method could not be applied to the following intersection control strategies considered in the

Stage 1 analysis:

- Bowtie
- Signalized RCUT
- Unsignalized RCUT

SPICE analyses using the SSI method were performed at the intersection of Corner Lake Drive at Chuluota Road for the opening year (2028), interim year (2038), and design year (2048) under the no-build scenario (existing two-lane configuration along Chuluota Road) and the build scenario (Four-lane widening configuration along Chuluota Road), amounting to 6 analysis permutations.

A summary of the results of the SPICE analyses using the SSI method at the intersection of Corner Lake Drive at Chuluota Road are shown in Figure 3-10. The ten highest ranked intersection control strategies by SSI score are shown for each analysis permutation with the following color coding:

- The grey cells indicate that the intersection control strategy is likely not feasible due to right-of-way, cost, or other factors.
- The green cells indicate that the intersection control strategy results in a SSI score between 90 and 100.
- The yellow cells indicate that the intersection control strategy results in a SSI score between 80 and 89.
- The orange cells indicate that the intersection control strategy results in a SSI score between 70 and 79.
- The red cells indicate that the intersection control strategy results in a SSI score less than 70.

The summary of the SPICE analyses results using the SSI method indicate that, for both the no-build and build scenarios, the roundabout configuration is the prevailing feasible intersection control strategy in terms of SSI score, followed by the AWSC, traffic signal, TWSC, and bowtie configurations.

Build Type	Year	Peak Hour	Intersection Control Rank 1 (V/C Ratio)	Intersection Control Rank 2 (V/C Ratio)	Intersection Control Rank 3 (V/C Ratio)	Intersection Control Rank 4 (V/C Ratio)	Intersection Control Rank 5 (V/C Ratio)	Intersection Control Rank 6 (V/C Ratio)	Intersection Control Rank 7 (V/C Ratio)	Intersection Control Rank 8 (V/C Ratio)	Intersection Control Rank 9 (V/C Ratio)	Intersection Control Rank 10 (V/C Ratio)
No-Build (2-lane)	2028	AM	Unsignalized RCUT N-S (0.18)	TWSC (0.30)	Unsignalized ThruCut N-S (0.30)	Bowtie N-S (0.33)	Partial MUT N-S (0.34)	Traffic Signal (0.35)	Continuous Green T (0.35)	Signalized ThruCut N-S (0.35)	Signalized RCUT N-S (0.36)	MUT N-S (0.36)
	2038		Unsignalized RCUT N-S (0.22)	TWSC (0.36)	Unsignalized ThruCut N-S (0.36)	Bowtie N-S (0.39)	Partial MUT N-S (0.40)	Traffic Signal (0.41)	Continuous Green T (0.41)	Signalized ThruCut N-S (0.41)	Signalized RCUT N-S (0.43)	MUT N-S (0.43)
	2048		Unsignalized RCUT N-S (0.27)	TWSC (0.43)	Unsignalized ThruCut N-S (0.43)	Bowtie N-S (0.46)	Partial MUT N-S (0.47)	Traffic Signal (0.48)	Continuous Green T (0.48)	Signalized ThruCut N-S (0.48)	Signalized RCUT N-S (0.49)	MUT N-S (0.49)
	2028	PM	Unsignalized RCUT N-S (0.14)	TWSC (0.35)	Unsignalized ThruCut N-S (0.35)	Bowtie N-S (0.38)	Traffic Signal (0.39)	Continuous Green T (0.39)	Signalized RCUT N-S (0.39)	MUT N-S (0.39)	Partial MUT N-S (0.39)	Signalized ThruCut N-S (0.39)
	2038		Unsignalized RCUT N-S (0.17)	TWSC (0.42)	Unsignalized ThruCut N-S (0.42)	Bowtie N-S (0.45)	Traffic Signal (0.46)	Continuous Green T (0.46)	Partial MUT N-S (0.46)	Signalized ThruCut N-S (0.46)	Signalized RCUT N-S (0.47)	MUT N-S (0.47)
	2048		Unsignalized RCUT N-S (0.21)	TWSC (0.49)	Unsignalized ThruCut N-S (0.49)	Bowtie N-S (0.52)	Traffic Signal (0.54)	Continuous Green T (0.54)	Signalized RCUT N-S (0.54)	MUT N-S (0.54)	Partial MUT N-S (0.54)	Signalized ThruCut N-S (0.54)
Build (4-lane)	2028	AM	Bowtie N-S (0.20)	Signalized RCUT N-S (0.21)	TWSC (0.21)	Partial MUT N-S (0.21)	Traffic Signal (0.22)	Continuous Green T (0.22)	Signalized ThruCut N-S (0.22)	Unsignalized RCUT N-S (0.24)	MUT N-S (0.24)	2NS X 1EW Roundabout (0.25)
	2038		Signalized RCUT N-S (0.27)	Bowtie N-S (0.27)	Partial MUT N-S (0.28)	Traffic Signal (0.29)	Continuous Green T (0.29)	Signalized ThruCut N-S (0.29)	MUT N-S (0.31)	2NS X 1EW Roundabout (0.34)	Unsignalized RCUT N-S (0.37)	TWSC (0.38)
	2048		Signalized RCUT N-S (0.34)	Bowtie N-S (0.34)	Continuous Green T (0.35)	Partial MUT N-S (0.35)	Signalized ThruCut N-S (0.35)	Traffic Signal (0.36)	MUT N-S (0.38)	2NS X 1EW Roundabout (0.43)	Unsignalized RCUT N-S (0.56)	TWSC (0.66)
	2028	PM	Unsignalized RCUT N-S (0.19)	TWSC (0.20)	Unsignalized ThruCut N-S (0.20)	Signalized RCUT N-S (0.22)	Bowtie N-S (0.23)	Traffic Signal (0.24)	Continuous Green T (0.24)	Partial MUT N-S (0.24)	Signalized ThruCut N-S (0.24)	MUT N-S (0.25)
	2038		TWSC (0.27)	Signalized RCUT N-S (0.30)	Unsignalized ThruCut N-S (0.30)	Bowtie N-S (0.30)	Traffic Signal (0.31)	Continuous Green T (0.31)	Partial MUT N-S (0.31)	Signalized ThruCut N-S (0.31)	MUT N-S (0.32)	2NS X 1EW Roundabout (0.40)
	2048		Signalized RCUT N-S (0.37)	Bowtie N-S (0.38)	Traffic Signal (0.39)	Continuous Green T (0.39)	Partial MUT N-S (0.39)	Signalized ThruCut N-S (0.39)	MUT N-S (0.40)	TWSC (0.45)	Unsignalized RCUT N-S (0.49)	2NS X 1EW Roundabout (0.51)

*Greyed out cells indicate that the intersection control type may not be viable due to right-of-way, cost, or other factors

V/C Ratio Legend	
	< 0.750
	0.750 - 0.875
	0.875 - 1.00
	≥ 1.00

Table 3- 7 Summary of CAP-X Results at the Intersection of Corner Lake Drive and Chuluota Road

Build Type	Year	Intersection Control Rank 1 (Fatal & Injury Crashes)	Intersection Control Rank 2 (Fatal & Injury Crashes)	Intersection Control Rank 3 (Fatal & Injury Crashes)	Intersection Control Rank 4 (Fatal & Injury Crashes)	Intersection Control Rank 5 (Fatal & Injury Crashes)	Intersection Control Rank 6 (Fatal & Injury Crashes)	Intersection Control Rank 7 (Fatal & Injury Crashes)	Intersection Control Rank 8 (Fatal & Injury Crashes)	Intersection Control Rank 9 (Fatal & Injury Crashes)	Intersection Control Rank 10 (Fatal & Injury Crashes)
No-Build (2-lane)	2028	1 Lane Roundabout (0.19)	Signalized RCUT N-S (0.35)	Jughandle (0.44)	Continuous Green T (0.50)	TWSC (0.53)	Traffic Signal (0.59)	Unsignalized RCUT N-S (0.63)	Bowtie N-S (No SPF)	Signalized ThruCut N-S (No SPF)	Unsignalized ThruCut N-S (No SPF)
	2038	1 Lane Roundabout (0.23)	Signalized RCUT N-S (0.44)	Jughandle (0.49)	Continuous Green T (0.56)	TWSC (0.57)	Traffic Signal (0.66)	Unsignalized RCUT N-S (0.70)	Bowtie N-S (No SPF)	Signalized ThruCut N-S (No SPF)	Unsignalized ThruCut N-S (No SPF)
	2048	1 Lane Roundabout (0.26)	Signalized RCUT N-S (0.52)	Jughandle (0.53)	TWSC (0.60)	Continuous Green T (0.61)	Traffic Signal (0.72)	Unsignalized RCUT N-S (0.77)	Bowtie N-S (No SPF)	Signalized ThruCut N-S (No SPF)	Unsignalized ThruCut N-S (No SPF)
Build (4-lane)	2028	Signalized RCUT N-S (0.40)	Jughandle (0.47)	Continuous Green T (0.54)	TWSC (0.55)	Traffic Signal (0.63)	2 Lane Roundabout (0.66)	Unsignalized RCUT N-S (0.68)	Bowtie N-S (No SPF)	Signalized ThruCut N-S (No SPF)	Unsignalized ThruCut N-S (No SPF)
	2038	Jughandle (0.55)	Signalized RCUT N-S (0.56)	TWSC (0.61)	Continuous Green T (0.63)	Traffic Signal (0.74)	Unsignalized RCUT N-S (0.80)	2 Lane Roundabout (0.92)	Bowtie N-S (No SPF)	Signalized ThruCut N-S (No SPF)	Unsignalized ThruCut N-S (No SPF)
	2048	Jughandle (0.63)	TWSC (0.66)	Continuous Green T (0.72)	Signalized RCUT N-S (0.72)	Traffic Signal (0.85)	Unsignalized RCUT N-S (0.92)	2 Lane Roundabout (1.20)	Bowtie N-S (No SPF)	Signalized ThruCut N-S (No SPF)	Unsignalized ThruCut N-S (No SPF)

*Greyed out cells indicate that the intersection control type may not be viable due to right-of-way, cost, or other factors

Predicted Crashes Legend		
	0.00 - 0.50	Above Average Safety
	0.50 - 1.00	Acceptable Safety
	1.00 - 1.50	Below Average Safety
	≥ 1.50	Poor Safety

Table 3- 6 Summary of SPICE Crash Prediction Method Results at the Intersection of Corner Lake Drive and Chuluota Road

Build Type	Year	Intersection Control Rank 1 (SSI Score)	Intersection Control Rank 2 (SSI Score)	Intersection Control Rank 3 (SSI Score)	Intersection Control Rank 4 (SSI Score)	Intersection Control Rank 5 (SSI Score)	Intersection Control Rank 6 (SSI Score)	Intersection Control Rank 7 (SSI Score)	Intersection Control Rank 8 (SSI Score)	Intersection Control Rank 9 (SSI Score)	Intersection Control Rank 10 (SSI Score)
No-Build (2-lane)	2028	1 Lane Roundabout (100)	AWSC (100)	Signalized RCUT N-S (100)	Continuous Green T (99)	Unsignalized RCUT N-S (99)	Traffic Signal (99)	TWSC (98)	Bowtie N-S (N/A)	Unsignalized ThruCut N-S (N/A)	Jughandle (N/A)
	2038	1 Lane Roundabout (100)	AWSC (100)	Signalized RCUT N-S (99)	Continuous Green T (99)	Unsignalized RCUT N-S (99)	Traffic Signal (99)	TWSC (98)	Bowtie N-S (N/A)	Unsignalized ThruCut N-S (N/A)	Jughandle (N/A)
	2048	1 Lane Roundabout (100)	AWSC (100)	Signalized RCUT N-S (99)	Continuous Green T (99)	Unsignalized RCUT N-S (99)	Traffic Signal (99)	TWSC (97)	Bowtie N-S (N/A)	Unsignalized ThruCut N-S (N/A)	Jughandle (N/A)
Build (4-lane)	2028	2 Lane Roundabout (100)	AWSC (100)	Continuous Green T (99)	Signalized RCUT N-S (99)	Unsignalized RCUT N-S (99)	Traffic Signal (98)	TWSC (96)	Bowtie N-S (N/A)	Unsignalized ThruCut N-S (N/A)	Jughandle (N/A)
	2038	2 Lane Roundabout (100)	AWSC (99)	Continuous Green T (99)	Signalized RCUT N-S (99)	Unsignalized RCUT N-S (98)	Traffic Signal (97)	TWSC (95)	Bowtie N-S (N/A)	Unsignalized ThruCut N-S (N/A)	Jughandle (N/A)
	2048	2 Lane Roundabout (99)	AWSC (99)	Continuous Green T (99)	Signalized RCUT N-S (98)	Unsignalized RCUT N-S (98)	Traffic Signal (97)	TWSC (94)	Bowtie N-S (N/A)	Unsignalized ThruCut N-S (N/A)	Jughandle (N/A)

*Greyed out cells indicate that the intersection control type may not be viable due to right-of-way, cost, or other factors

SSI Legend	
	90-100
	80-89
	70-79
	< 70

Table 3- 8 Summary of SPICE SSI Method Results at the Intersection of Corner Lake and

3.5 Cypress Lake Glen Boulevard (S) at Chuluota Road

CAP-X analyses were performed at the intersection of Cypress Lake Glen Boulevard (S) at Chuluota Road for the AM and PM peak hours of the opening year (2038), interim year (2038), and design year (2048) under the no-build scenario (existing two-lane configuration along Chuluota Road) and the build scenario (Four-lane widening configuration along Chuluota Road), amounting to 12 analysis permutations.

A summary of the results of the CAP-X analyses at the intersection of Cypress Lake Glen Boulevard (S) at Chuluota Road are shown in Figure 3-11. The ten highest ranked intersection control strategies by volume to capacity (V/C) ratio are shown for each analysis permutation with the following color coding:

- The grey cells indicate that the intersection control strategy is likely not feasible due to right-of-way, cost, or other factors.
- The green cells indicate that the intersection control strategy results in a V/C ratio less than 0.750.
- The yellow cells indicate that the intersection control strategy results in a V/C ratio between 0.750 and 0.875.
- The orange cells indicate that the intersection control strategy results in a V/C ratio between 0.875 and 1.00.
- The red cells indicate that the intersection control strategy results in a V/C ratio greater than or equal to 1.00.

The summary of the CAP-X analyses indicate that, for both the no-build and build scenarios, the bowtie configuration is the prevailing feasible intersection control strategy in terms of V/C ratio, followed by the traffic signal, roundabout, and TWSC configurations.

SPICE analyses using the crash prediction method were performed at the intersection of Cypress Lake Glen Boulevard (S) at Chuluota Road for the opening year (2028), interim year (2038), and design year (2048) under the no-build scenario (existing two-lane configuration along Chuluota Road) and the build scenario (Four-lane widening configuration along Chuluota Road), amounting to 6 analysis permutations.

A summary of the results of the SPICE analyses using the crash prediction method at the intersection of Cypress Lake Glen Boulevard (S) at Chuluota Road are shown in Figure 3-12. The ten highest ranked intersection control strategies by predicted fatal and serious injury crashes are shown for each analysis permutation. The grey cells indicate that the intersection control strategy is likely not feasible due to right-of-way, cost, or other factors.

The summary of the SPICE analyses results using the crash prediction method indicate that, for both the no-build and build scenarios, the roundabout configuration is the prevailing feasible intersection control strategy in terms of predicted fatal and serious injury crashes, followed by the traffic signal and TWSC configurations.

It should be noted that, due to the absence of adequate safety performance functions (SPFs), the crash prediction method could not be applied to the following intersection control strategies considered in the

Stage 1 analysis:

- Bowtie
- Signalized RCUT
- Unsignalized RCUT

SPICE analyses using the SSI method were performed at the intersection of Cypress Lake Glen Boulevard (S) at Chuluota Road for the opening year (2028), interim year (2038), and design year (2048) under the no-build scenario (existing two-lane configuration along Chuluota Road) and the build scenario (Four-lane widening configuration along Chuluota Road), amounting to 6 analysis permutations.

A summary of the results of the SPICE analyses using the SSI method at the intersection of Cypress Lake Glen Boulevard (S) at Chuluota Road are shown in Figure 3-13. The ten highest ranked intersection control strategies by SSI score are shown for each analysis permutation with the following color coding:

- The grey cells indicate that the intersection control strategy is likely not feasible due to right-of-way, cost, or other factors.
- The green cells indicate that the intersection control strategy results in a SSI score between 90 and 100.
- The yellow cells indicate that the intersection control strategy results in a SSI score between 80 and 89.
- The orange cells indicate that the intersection control strategy results in a SSI score between 70 and 79.
- The red cells indicate that the intersection control strategy results in a SSI score less than 70.

The summary of the SPICE analyses results using the SSI method indicate that, for both the no-build and build scenarios, the roundabout configuration is the prevailing feasible intersection control strategy in terms of SSI score, followed by the AWSC, traffic signal, TWSC, and bowtie configurations.

Build Type	Year	Peak Hour	Intersection Control Rank 1 (V/C Ratio)	Intersection Control Rank 2 (V/C Ratio)	Intersection Control Rank 3 (V/C Ratio)	Intersection Control Rank 4 (V/C Ratio)	Intersection Control Rank 5 (V/C Ratio)	Intersection Control Rank 6 (V/C Ratio)	Intersection Control Rank 7 (V/C Ratio)	Intersection Control Rank 8 (V/C Ratio)	Intersection Control Rank 9 (V/C Ratio)	Intersection Control Rank 10 (V/C Ratio)
No-Build (2-lane)	2028	AM	Bowtie N-S (0.34)	Continuous Green T (0.40)	Unsignalized RCUT N-S (0.40)	Traffic Signal (0.44)	Partial MUT N-S (0.44)	Signalized ThruCut N-S (0.44)	Signalized RCUT N-S (0.45)	MUT N-S (0.47)	1 X 1 Roundabout (0.51)	75 ICD Mini-Roundabout (0.67)
	2038		Bowtie N-S (0.40)	Continuous Green T (0.45)	Unsignalized RCUT N-S (0.47)	Traffic Signal (0.50)	Signalized ThruCut N-S (0.50)	Partial MUT N-S (0.51)	Signalized RCUT N-S (0.52)	MUT N-S (0.54)	1 X 1 Roundabout (0.61)	75 ICD Mini-Roundabout (0.81)
	2048		Bowtie N-S (0.46)	Continuous Green T (0.50)	Unsignalized RCUT N-S (0.54)	Traffic Signal (0.57)	Partial MUT N-S (0.57)	Signalized ThruCut N-S (0.57)	Signalized RCUT N-S (0.58)	MUT N-S (0.60)	1 X 1 Roundabout (0.71)	75 ICD Mini-Roundabout (0.94)
	2028	PM	Unsignalized RCUT N-S (0.34)	Bowtie N-S (0.38)	Continuous Green T (0.43)	Traffic Signal (0.47)	Signalized ThruCut N-S (0.47)	Partial MUT N-S (0.48)	Signalized RCUT N-S (0.49)	MUT N-S (0.50)	1 X 1 Roundabout (0.59)	75 ICD Mini-Roundabout (0.77)
	2038		Unsignalized RCUT N-S (0.40)	Bowtie N-S (0.45)	Continuous Green T (0.49)	Traffic Signal (0.55)	Signalized ThruCut N-S (0.55)	Signalized RCUT N-S (0.57)	Partial MUT N-S (0.57)	MUT N-S (0.58)	1 X 1 Roundabout (0.71)	75 ICD Mini-Roundabout (0.93)
	2048		Unsignalized RCUT N-S (0.47)	Bowtie N-S (0.53)	Continuous Green T (0.55)	Traffic Signal (0.63)	Signalized ThruCut N-S (0.63)	Signalized RCUT N-S (0.65)	Partial MUT N-S (0.65)	MUT N-S (0.66)	1 X 1 Roundabout (0.83)	75 ICD Mini-Roundabout (1.09)
Build (4-lane)	2028	AM	Bowtie N-S (0.21)	Continuous Green T (0.28)	2NS X 1EW Roundabout (0.30)	Traffic Signal (0.30)	Signalized ThruCut N-S (0.30)	Partial MUT N-S (0.31)	Signalized RCUT N-S (0.32)	MUT N-S (0.34)	Unsignalized RCUT N-S (0.50)	TWSC (0.76)
	2038		Bowtie N-S (0.27)	Continuous Green T (0.34)	Traffic Signal (0.37)	Signalized ThruCut N-S (0.37)	Partial MUT N-S (0.38)	Signalized RCUT N-S (0.39)	2NS X 1EW Roundabout (0.40)	MUT N-S (0.41)	Unsignalized RCUT N-S (0.70)	75 ICD Mini-Roundabout (1.04)
	2048		Bowtie N-S (0.33)	Continuous Green T (0.40)	Traffic Signal (0.44)	Signalized ThruCut N-S (0.44)	Partial MUT N-S (0.45)	Signalized RCUT N-S (0.46)	MUT N-S (0.48)	2NS X 1EW Roundabout (0.51)	Unsignalized RCUT N-S (0.99)	75 ICD Mini-Roundabout (1.32)
	2028	PM	Bowtie N-S (0.22)	Continuous Green T (0.29)	Traffic Signal (0.31)	Signalized ThruCut N-S (0.31)	Partial MUT N-S (0.32)	Signalized RCUT N-S (0.33)	MUT N-S (0.34)	2NS X 1EW Roundabout (0.34)	Unsignalized RCUT N-S (0.44)	75 ICD Mini-Roundabout (0.89)
	2038		Bowtie N-S (0.30)	Continuous Green T (0.36)	Traffic Signal (0.40)	Signalized ThruCut N-S (0.40)	Partial MUT N-S (0.41)	Signalized RCUT N-S (0.42)	MUT N-S (0.42)	2NS X 1EW Roundabout (0.47)	Unsignalized RCUT N-S (0.63)	75 ICD Mini-Roundabout (1.22)
	2048		Bowtie N-S (0.38)	Continuous Green T (0.42)	Traffic Signal (0.49)	Signalized ThruCut N-S (0.49)	Signalized RCUT N-S (0.50)	Partial MUT N-S (0.50)	MUT N-S (0.51)	2NS X 1EW Roundabout (0.60)	Unsignalized RCUT N-S (0.92)	50 ICD Mini-Roundabout (1.60)

**Greyed out cells indicate that the intersection control type may not be viable due to right-of-way, cost, or other factors*

V/C Ratio Legend	
	< 0.750
	0.750 - 0.875
	0.875 - 1.00
	≥ 1.00

Table 3- 11 Summary of CAP-X Results at the Intersection of Cypress Lake Glen Boulevard (S) and Chuluota Road

Build Type	Year	Intersection Control Rank 1 (Fatal & Injury Crashes)	Intersection Control Rank 2 (Fatal & Injury Crashes)	Intersection Control Rank 3 (Fatal & Injury Crashes)	Intersection Control Rank 4 (Fatal & Injury Crashes)	Intersection Control Rank 5 (Fatal & Injury Crashes)	Intersection Control Rank 6 (Fatal & Injury Crashes)	Intersection Control Rank 7 (Fatal & Injury Crashes)	Intersection Control Rank 8 (Fatal & Injury Crashes)	Intersection Control Rank 9 (Fatal & Injury Crashes)	Intersection Control Rank 10 (Fatal & Injury Crashes)
No-Build (2-lane)	2028	1 Lane Roundabout (0.25)	Signalized RCUT N-S (0.66)	Unsignalized RCUT N-S (0.77)	Jughandle (0.84)	MUT N-S (0.86)	Continuous Green T (0.97)	Traffic Signal (1.14)	TWSC (1.37)	Bowtie N-S (No SPF)	Signalized ThruCut N-S (No SPF)
	2038	1 Lane Roundabout (0.29)	Signalized RCUT N-S (0.81)	Unsignalized RCUT N-S (0.86)	Jughandle (0.89)	MUT N-S (0.92)	Continuous Green T (1.03)	Traffic Signal (1.21)	TWSC (1.62)	Bowtie N-S (No SPF)	Signalized ThruCut N-S (No SPF)
	2048	1 Lane Roundabout (0.33)	Unsignalized RCUT N-S (0.94)	Jughandle (0.94)	MUT N-S (0.97)	Signalized RCUT N-S (0.97)	Continuous Green T (1.08)	Traffic Signal (1.27)	TWSC (1.85)	Bowtie N-S (No SPF)	Signalized ThruCut N-S (No SPF)
Build (4-lane)	2028	Signalized RCUT N-S (0.74)	Unsignalized RCUT N-S (0.83)	Jughandle (0.87)	2 Lane Roundabout (0.88)	MUT N-S (0.90)	Continuous Green T (1.00)	Traffic Signal (1.18)	TWSC (1.51)	Bowtie N-S (No SPF)	Signalized ThruCut N-S (No SPF)
	2038	Jughandle (0.96)	Unsignalized RCUT N-S (0.98)	MUT N-S (0.99)	Signalized RCUT N-S (1.04)	Continuous Green T (1.10)	2 Lane Roundabout (1.20)	Traffic Signal (1.30)	TWSC (1.94)	Bowtie N-S (No SPF)	Signalized ThruCut N-S (No SPF)
	2048	Jughandle (1.03)	MUT N-S (1.06)	Unsignalized RCUT N-S (1.13)	Continuous Green T (1.18)	Signalized RCUT N-S (1.35)	Traffic Signal (1.39)	2 Lane Roundabout (1.54)	TWSC (2.36)	Bowtie N-S (No SPF)	Signalized ThruCut N-S (No SPF)

**Greyed out cells indicate that the intersection control type may not be viable due to right-of-way, cost, or other factors*

Predicted Crashes Legend		
	0.00 - 0.50	Above Average Safety
	0.50 - 1.00	Acceptable Safety
	1.00 - 1.50	Below Average Safety
	≥ 1.50	Poor Safety

Table 3- 12 Summary of SPICE Crash Prediction Method Results at the Intersection of Cypress Lake Glen Boulevard (S) and Chuluota Road

Build Type	Year	Intersection Control Rank 1 (SSI Score)	Intersection Control Rank 2 (SSI Score)	Intersection Control Rank 3 (SSI Score)	Intersection Control Rank 4 (SSI Score)	Intersection Control Rank 5 (SSI Score)	Intersection Control Rank 6 (SSI Score)	Intersection Control Rank 7 (SSI Score)	Intersection Control Rank 8 (SSI Score)	Intersection Control Rank 9 (SSI Score)	Intersection Control Rank 10 (SSI Score)
No-Build (2-lane)	2028	1 Lane Roundabout (100)	AWSC (100)	Signalized RCUT N-S (99)	Unsignalized RCUT N-S (99)	Continuous Green T (99)	Traffic Signal (98)	TWSC (95)	Bowtie N-S (N/A)	Unsignalized ThruCut N-S (N/A)	Jughandle (N/A)
	2038	1 Lane Roundabout (100)	AWSC (99)	Signalized RCUT N-S (99)	Unsignalized RCUT N-S (98)	Continuous Green T (98)	Traffic Signal (97)	TWSC (93)	Bowtie N-S (N/A)	Unsignalized ThruCut N-S (N/A)	Jughandle (N/A)
	2048	1 Lane Roundabout (100)	AWSC (99)	Signalized RCUT N-S (99)	Unsignalized RCUT N-S (98)	Continuous Green T (98)	Traffic Signal (97)	TWSC (92)	Bowtie N-S (N/A)	Unsignalized ThruCut N-S (N/A)	Jughandle (N/A)
Build (4-lane)	2028	2 Lane Roundabout (99)	AWSC (99)	Continuous Green T (98)	Signalized RCUT N-S (98)	Unsignalized RCUT N-S (98)	Traffic Signal (96)	TWSC (90)	Bowtie N-S (N/A)	Unsignalized ThruCut N-S (N/A)	Jughandle (N/A)
	2038	2 Lane Roundabout (99)	AWSC (99)	Continuous Green T (98)	Signalized RCUT N-S (97)	Unsignalized RCUT N-S (97)	Traffic Signal (94)	TWSC (85)	Bowtie N-S (N/A)	Unsignalized ThruCut N-S (N/A)	Jughandle (N/A)
	2048	2 Lane Roundabout (99)	AWSC (98)	Continuous Green T (97)	Signalized RCUT N-S (97)	Unsignalized RCUT N-S (96)	Traffic Signal (92)	TWSC (81)	Bowtie N-S (N/A)	Unsignalized ThruCut N-S (N/A)	Jughandle (N/A)

**Greyed out cells indicate that the intersection control type may not be viable due to right-of-way, cost, or other factors*

SSI Legend	
	90-100
	80-89
	70-79
	< 70

Table 3- 9 Summary of SPICE SSI Method Results at the Intersection of Cypress Lake Glen Boulevard (S) and Chuluota Road

3.6 Corner School Drive at Schoolview Way

CAP-X analyses were performed at the intersection of Corner School Drive at Schoolview Way for the AM and PM peak hours of the opening year (2038), interim year (2038), and design year (2048) under the no-build scenario (existing two-lane configuration along Chuluota Road) and the build scenario (Four-lane widening configuration along Chuluota Road), amounting to 12 analysis permutations.

A summary of the results of the CAP-X analyses at the intersection of Corner School Drive at Schoolview Way are shown in Figure 3-14. The ten highest ranked intersection control strategies by volume to capacity (V/C) ratio are shown for each analysis permutation with the following color coding:

- The grey cells indicate that the intersection control strategy is likely not feasible due to right-of-way, cost, or other factors.
- The green cells indicate that the intersection control strategy results in a V/C ratio less than 0.750.
- The yellow cells indicate that the intersection control strategy results in a V/C ratio between 0.750 and 0.875.
- The orange cells indicate that the intersection control strategy results in a V/C ratio between 0.875 and 1.00.
- The red cells indicate that the intersection control strategy results in a V/C ratio greater than or equal to 1.00.

The summary of the CAP-X analyses indicate that, for both the no-build and build scenarios, the TWSC configuration is the prevailing feasible intersection control strategy in terms of V/C ratio, followed by the roundabout and AWSC configurations.

SPICE analyses using the crash prediction method were performed at the intersection of Corner School Drive at Schoolview Way for the opening year (2028), interim year (2038), and design year (2048) under the no-build scenario (existing two-lane configuration along Chuluota Road) and the build scenario (Four-lane widening configuration along Chuluota Road), amounting to 6 analysis permutations.

A summary of the results of the SPICE analyses using the crash prediction method at the intersection of Corner School Drive at Schoolview Way are shown in Figure 3-15. The ten highest ranked intersection control strategies by predicted fatal and serious injury crashes are shown for each analysis permutation. The grey cells indicate that the intersection control strategy is likely not feasible due to right-of-way, cost, or other factors.

The summary of the SPICE analyses results using the crash prediction method indicate that, for both the no-build and build scenarios, the roundabout configuration is the prevailing feasible intersection control strategy in terms of predicted fatal and serious injury crashes, followed by the TWSC and AWSC configurations.

It should be noted that, due to the absence of adequate safety performance functions (SPFs), the crash prediction method could not be applied to the following intersection control strategies considered in the Stage 1 analysis:

- Bowtie

- Signalized RCUT
- Unsignalized RCUT

SPICE analyses using the SSI method were performed at the intersection of Corner School Drive at Schoolview Way for the opening year (2028), interim year (2038), and design year (2048) under the no-build scenario (existing two-lane configuration along Chuluota Road) and the build scenario (Four-lane widening configuration along Chuluota Road), amounting to 6 analysis permutations.

A summary of the results of the SPICE analyses using the SSI method at the intersection of Corner School Drive at Schoolview Way are shown in Figure 3-16. The ten highest ranked intersection control strategies by SSI score are shown for each analysis permutation with the following color coding:

- The grey cells indicate that the intersection control strategy is likely not feasible due to right-of-way, cost, or other factors.
- The green cells indicate that the intersection control strategy results in a SSI score between 90 and 100.
- The yellow cells indicate that the intersection control strategy results in a SSI score between 80 and 89.
- The orange cells indicate that the intersection control strategy results in a SSI score between 70 and 79.
- The red cells indicate that the intersection control strategy results in a SSI score less than 70.

The summary of the SPICE analyses results using the SSI method indicate that, for both the no-build and build scenarios, the AWSC, roundabout, and TWSC configurations all received a SSI score of 100.

Build Type	Year	Peak Hour	Intersection Control Rank 1 (V/C Ratio)	Intersection Control Rank 2 (V/C Ratio)	Intersection Control Rank 3 (V/C Ratio)	Intersection Control Rank 4 (V/C Ratio)	Intersection Control Rank 5 (V/C Ratio)	Intersection Control Rank 6 (V/C Ratio)	Intersection Control Rank 7 (V/C Ratio)	Intersection Control Rank 8 (V/C Ratio)	Intersection Control Rank 9 (V/C Ratio)	Intersection Control Rank 10 (V/C Ratio)
No-Build (2-lane)	2028	AM	Unsignalized RCUT N-S (0.01)	Continuous Green T (0.02)	TWSC (0.03)	Unsignalized ThruCut N-S (0.03)	Traffic Signal (0.04)	Signalized RCUT N-S (0.04)	1 X 1 Roundabout (0.04)	MUT N-S (0.04)	Partial MUT N-S (0.04)	Signalized ThruCut N-S (0.04)
	2038		Unsignalized RCUT N-S (0.01)	Continuous Green T (0.02)	TWSC (0.03)	Unsignalized ThruCut N-S (0.03)	Traffic Signal (0.04)	Signalized RCUT N-S (0.04)	MUT N-S (0.04)	Partial MUT N-S (0.04)	Signalized ThruCut N-S (0.04)	1 X 1 Roundabout (0.05)
	2048		Unsignalized RCUT N-S (0.01)	Continuous Green T (0.02)	TWSC (0.04)	Unsignalized ThruCut N-S (0.04)	Traffic Signal (0.04)	Signalized RCUT N-S (0.04)	Partial MUT N-S (0.04)	1 X 1 Roundabout (0.05)	MUT N-S (0.05)	Signalized ThruCut N-S (0.05)
	2028	PM	Unsignalized RCUT N-S (0.05)	Continuous Green T (0.05)	TWSC (0.09)	Unsignalized ThruCut N-S (0.09)	Traffic Signal (0.12)	Signalized RCUT N-S (0.12)	Partial MUT N-S (0.12)	1 X 1 Roundabout (0.13)	MUT N-S (0.13)	Signalized ThruCut N-S (0.13)
	2038		Continuous Green T (0.05)	Unsignalized RCUT N-S (0.05)	TWSC (0.10)	Unsignalized ThruCut N-S (0.10)	Traffic Signal (0.14)	Signalized RCUT N-S (0.14)	MUT N-S (0.14)	Partial MUT N-S (0.14)	1 X 1 Roundabout (0.14)	Bowtie N-S (0.14)
	2048		Continuous Green T (0.05)	Unsignalized RCUT N-S (0.06)	TWSC (0.11)	Unsignalized ThruCut N-S (0.11)	Traffic Signal (0.14)	Signalized RCUT N-S (0.14)	Partial MUT N-S (0.14)	MUT N-S (0.15)	1 X 1 Roundabout (0.15)	Signalized ThruCut N-S (0.15)
Build (4-lane)	2028	AM	Continuous Green T (0.02)	1 X 1 Roundabout (0.05)	Unsignalized RCUT N-S (0.05)	TWSC (0.06)	Unsignalized ThruCut N-S (0.06)	50 ICD Mini-Roundabout (0.06)	75 ICD Mini-Roundabout (0.07)	Traffic Signal (0.07)	Bowtie N-S (0.07)	Signalized RCUT N-S (0.07)
	2038		Continuous Green T (0.02)	1 X 1 Roundabout (0.05)	Unsignalized RCUT N-S (0.06)	TWSC (0.06)	Unsignalized ThruCut N-S (0.06)	50 ICD Mini-Roundabout (0.07)	Traffic Signal (0.07)	75 ICD Mini-Roundabout (0.07)	Partial MUT N-S (0.07)	Signalized RCUT N-S (0.08)
	2048		Continuous Green T (0.02)	1 X 1 Roundabout (0.06)	Unsignalized RCUT N-S (0.06)	TWSC (0.07)	Unsignalized ThruCut N-S (0.07)	50 ICD Mini-Roundabout (0.07)	75 ICD Mini-Roundabout (0.08)	Traffic Signal (0.08)	Bowtie N-S (0.08)	Signalized RCUT N-S (0.08)
	2028	PM	Continuous Green T (0.04)	Unsignalized RCUT N-S (0.06)	TWSC (0.09)	Unsignalized ThruCut N-S (0.09)	Traffic Signal (0.13)	1 X 1 Roundabout (0.13)	Signalized RCUT N-S (0.13)	Partial MUT N-S (0.13)	MUT N-S (0.14)	Signalized ThruCut N-S (0.14)
	2038		Continuous Green T (0.05)	Unsignalized RCUT N-S (0.07)	TWSC (0.11)	Unsignalized ThruCut N-S (0.11)	Traffic Signal (0.15)	Signalized RCUT N-S (0.15)	Partial MUT N-S (0.15)	1 X 1 Roundabout (0.15)	MUT N-S (0.16)	Signalized ThruCut N-S (0.16)
	2048		Continuous Green T (0.05)	Unsignalized RCUT N-S (0.09)	TWSC (0.13)	Unsignalized ThruCut N-S (0.13)	Traffic Signal (0.18)	1 X 1 Roundabout (0.18)	Signalized RCUT N-S (0.18)	Partial MUT N-S (0.18)	MUT N-S (0.19)	Signalized ThruCut N-S (0.19)

*Greyed out cells indicate that the intersection control type may not be viable due to right-of-way, cost, or other factors

V/C Ratio Legend	
	< 0.750
	0.750 - 0.875
	0.875 - 1.00
	≥ 1.00

Table 3- 14 Summary of CAP-X Results at the Intersection of Corner School Drive and Schoolview Way

Build Type	Year	Intersection Control Rank 1 (Fatal & Injury Crashes)	Intersection Control Rank 2 (Fatal & Injury Crashes)	Intersection Control Rank 3 (Fatal & Injury Crashes)	Intersection Control Rank 4 (Fatal & Injury Crashes)	Intersection Control Rank 5 (Fatal & Injury Crashes)	Intersection Control Rank 6 (Fatal & Injury Crashes)	Intersection Control Rank 7 (Fatal & Injury Crashes)	Intersection Control Rank 8 (Fatal & Injury Crashes)	Intersection Control Rank 9 (Fatal & Injury Crashes)	Intersection Control Rank 10 (Fatal & Injury Crashes)
No-Build (2-lane)	2028	Signalized RCUT N-S (0.02)	1 Lane Roundabout (0.03)	Jughandle (0.15)	MUT N-S (0.15)	Unsignalized RCUT N-S (0.17)	Continuous Green T (0.17)	Traffic Signal (0.20)	TWSC (0.22)	AWSC (No SPF)	Bowtie N-S (No SPF)
	2038	Signalized RCUT N-S (0.03)	1 Lane Roundabout (0.03)	Jughandle (0.16)	MUT N-S (0.17)	Unsignalized RCUT N-S (0.18)	Continuous Green T (0.19)	Traffic Signal (0.22)	TWSC (0.26)	AWSC (No SPF)	Bowtie N-S (No SPF)
	2048	Signalized RCUT N-S (0.03)	1 Lane Roundabout (0.03)	Jughandle (0.17)	MUT N-S (0.18)	Unsignalized RCUT N-S (0.19)	Continuous Green T (0.20)	Traffic Signal (0.23)	TWSC (0.28)	AWSC (No SPF)	Bowtie N-S (No SPF)
Build (4-lane)	2028	Signalized RCUT N-S (0.03)	1 Lane Roundabout (0.03)	Jughandle (0.16)	MUT N-S (0.17)	Unsignalized RCUT N-S (0.18)	Continuous Green T (0.19)	Traffic Signal (0.22)	TWSC (0.26)	AWSC (No SPF)	Bowtie N-S (No SPF)
	2038	1 Lane Roundabout (0.04)	Signalized RCUT N-S (0.04)	Jughandle (0.18)	MUT N-S (0.19)	Unsignalized RCUT N-S (0.20)	Continuous Green T (0.21)	Traffic Signal (0.25)	TWSC (0.32)	AWSC (No SPF)	Bowtie N-S (No SPF)
	2048	1 Lane Roundabout (0.04)	Signalized RCUT N-S (0.05)	Jughandle (0.20)	MUT N-S (0.21)	Unsignalized RCUT N-S (0.22)	Continuous Green T (0.23)	Traffic Signal (0.27)	TWSC (0.38)	AWSC (No SPF)	Bowtie N-S (No SPF)

*Greyed out cells indicate that the intersection control type may not be viable due to right-of-way, cost, or other factors

Predicted Crashes Legend		
	0.00 - 0.50	Above Average Safety
	0.50 - 1.00	Acceptable Safety
	1.00 - 1.50	Below Average Safety
	≥ 1.50	Poor Safety

Table 3- 105 Summary of SPICE Crash Prediction Method Results at the Intersection of Corner School Drive and Schoolview Way

Build Type	Year	Intersection Control Rank 1 (SSI Score)	Intersection Control Rank 2 (SSI Score)	Intersection Control Rank 3 (SSI Score)	Intersection Control Rank 4 (SSI Score)	Intersection Control Rank 5 (SSI Score)	Intersection Control Rank 6 (SSI Score)	Intersection Control Rank 7 (SSI Score)	Intersection Control Rank 8 (SSI Score)	Intersection Control Rank 9 (SSI Score)	Intersection Control Rank 10 (SSI Score)
No-Build (2-lane)	2028	Continuous Green T (100)	Signalized RCUT N-S (100)	Unsignalized RCUT N-S (100)	Traffic Signal (100)	AWSC (100)	1 Lane Roundabout (100)	TWSC (100)	MUT N-S (N/A)	Bowtie N-S (N/A)	Jughandle (N/A)
	2038	Continuous Green T (100)	Signalized RCUT N-S (100)	Unsignalized RCUT N-S (100)	Traffic Signal (100)	AWSC (100)	1 Lane Roundabout (100)	TWSC (100)	MUT N-S (N/A)	Bowtie N-S (N/A)	Jughandle (N/A)
	2048	Continuous Green T (100)	Signalized RCUT N-S (100)	Unsignalized RCUT N-S (100)	Traffic Signal (100)	AWSC (100)	1 Lane Roundabout (100)	TWSC (100)	MUT N-S (N/A)	Bowtie N-S (N/A)	Jughandle (N/A)
Build (4-lane)	2028	Continuous Green T (100)	Signalized RCUT N-S (100)	Unsignalized RCUT N-S (100)	Traffic Signal (100)	AWSC (100)	1 Lane Roundabout (100)	TWSC (100)	MUT N-S (N/A)	Bowtie N-S (N/A)	Jughandle (N/A)
	2038	Continuous Green T (100)	Signalized RCUT N-S (100)	Unsignalized RCUT N-S (100)	Traffic Signal (100)	AWSC (100)	1 Lane Roundabout (100)	TWSC (100)	MUT N-S (N/A)	Bowtie N-S (N/A)	Jughandle (N/A)
	2048	Continuous Green T (100)	Signalized RCUT N-S (100)	Unsignalized RCUT N-S (100)	Traffic Signal (100)	AWSC (100)	1 Lane Roundabout (100)	TWSC (100)	MUT N-S (N/A)	Bowtie N-S (N/A)	Jughandle (N/A)

**Greyed out cells indicate that the intersection control type may not be viable due to right-of-way, cost, or other factors*

SSI Legend	
	90-100
	80-89
	70-79
	< 70

Table 3- 11 Summary of CAP-X Results at the Intersection of Corner School Drive and Schoolview Way

3.7 Relocated Schoolview Way/Cypress Lake Glen Boulevard (S) at Chuluota Road

CAP-X analyses were performed at the intersection of Relocated Schoolview Way/Cypress Lake Glen Boulevard (S) at Chuluota Road for the AM and PM peak hours of the opening year (2038), interim year (2038), and design year (2048) under the build A scenario (Four-lane widening configuration along Chuluota Road and relocated Schoolview Way connection) and the build B scenario (Four-lane widening configuration along Chuluota Road and convert Schoolview Way connection to right-in right-out), amounting to 12 analysis permutations.

A summary of the results of the CAP-X analyses at the intersection of Relocated Schoolview Way/Cypress Lake Glen Boulevard (S) at Chuluota Road are shown in Figure 3-17. The ten highest ranked intersection control strategies by volume to capacity (V/C) ratio are shown for each analysis permutation with the following color coding:

- The grey cells indicate that the intersection control strategy is likely not feasible due to right-of-way, cost, or other factors.
- The green cells indicate that the intersection control strategy results in a V/C ratio less than 0.750.
- The yellow cells indicate that the intersection control strategy results in a V/C ratio between 0.750 and 0.875.
- The orange cells indicate that the intersection control strategy results in a V/C ratio between 0.875 and 1.00.
- The red cells indicate that the intersection control strategy results in a V/C ratio greater than or equal to 1.00.

The summary of the CAP-X analyses results indicate that, for both the build A and build B scenarios, the bowtie configuration is the prevailing feasible intersection control strategy in terms of V/C ratio, followed by the traffic signal and roundabout configurations.

SPICE analyses using the crash prediction method were performed at the intersection of Relocated Schoolview Way/Cypress Lake Glen Boulevard (S) at Chuluota Road for the opening year (2028), interim year (2038), and design year (2048) under the build A scenario (Four-lane widening configuration along Chuluota Road and close Schoolview Way connection) and the build B scenario (Four-lane widening configuration along Chuluota Road and convert Schoolview Way connection to right-in right-out), amounting to 6 analysis permutations.

A summary of the results of the SPICE analyses using the crash prediction method at the intersection of Relocated Schoolview Way/Cypress Lake Glen Boulevard (S) at Chuluota Road are shown in Figure 3-18. The ten highest ranked intersection control strategies by predicted fatal and serious injury crashes are shown for each analysis permutation. The grey cells indicate that the intersection control strategy is likely not feasible due to right-of-way, cost, or other factors.

The summary of the SPICE analyses results using the crash prediction method indicate that, for both the build A and build B scenarios, the TWSC configuration is the prevailing feasible intersection control strategy in terms of predicted fatal and serious injury crashes, followed by the traffic signal, AWSC, and roundabout configurations.

It should be noted that, due to the absence of adequate safety performance functions (SPFs), the crash prediction method could not be applied to the following intersection control strategies considered in the Stage 1 analysis:

- Bowtie
- Signalized RCUT
- Unsignalized RCUT

SPICE analyses using the SSI method were performed at the intersection of Schoolview Way/Cypress Lake Glen Boulevard (S) at Chuluota Road for the opening year (2028), interim year (2038), and design year (2048) under the build A scenario (Four-lane widening configuration along Chuluota Road and close Schoolview Way connection) and the build B scenario (Four-lane widening configuration along Chuluota Road and convert Schoolview Way connection to right-in right-out), amounting to 6 analysis permutations.

A summary of the results of the SPICE analyses using the SSI method at the intersection of Schoolview Way/Cypress Lake Glen Boulevard (S) at Chuluota Road are shown in Figure 3-19. The ten highest ranked intersection control strategies by SSI score are shown for each analysis permutation with the following color coding:

- The grey cells indicate that the intersection control strategy is likely not feasible due to right-of-way, cost, or other factors.
- The green cells indicate that the intersection control strategy results in a SSI score between 90 and 100.
- The yellow cells indicate that the intersection control strategy results in a SSI score between 80 and 89.
- The orange cells indicate that the intersection control strategy results in a SSI score between 70 and 79.
- The red cells indicate that the intersection control strategy results in a SSI score less than 70.

The summary of the SPICE analyses results using the SSI method indicate that, for both the build A and build B scenarios, the roundabout configuration is the prevailing feasible intersection control strategy in terms of SSI score, followed by the AWSC, traffic signal, TWSC, and bowtie configurations.

Build Type	Year	Peak Hour	Intersection Control Rank 1 (V/C Ratio)	Intersection Control Rank 2 (V/C Ratio)	Intersection Control Rank 3 (V/C Ratio)	Intersection Control Rank 4 (V/C Ratio)	Intersection Control Rank 5 (V/C Ratio)	Intersection Control Rank 6 (V/C Ratio)	Intersection Control Rank 7 (V/C Ratio)	Intersection Control Rank 8 (V/C Ratio)	Intersection Control Rank 9 (V/C Ratio)	Intersection Control Rank 10 (V/C Ratio)
Build A (Leg Removal)	2028	AM	Signalized RCUT N-S (0.27)	DLT (0.29)	Partial DLT N-S (0.31)	Partial MUT N-S (0.31)	Signalized ThruCut N-S (0.31)	Bowtie N-S (0.31)	Traffic Signal (0.32)	2NS X 1EW Roundabout (0.33)	MUT N-S (0.34)	Unsignalized RCUT N-S (0.55)
	2038		Signalized RCUT N-S (0.31)	DLT (0.34)	Partial DLT N-S (0.36)	Signalized ThruCut N-S (0.36)	Bowtie N-S (0.36)	Partial MUT N-S (0.37)	Traffic Signal (0.38)	MUT N-S (0.39)	2NS X 1EW Roundabout (0.40)	Unsignalized RCUT N-S (0.76)
	2048		Signalized RCUT N-S (0.37)	DLT (0.40)	Partial DLT N-S (0.42)	Partial MUT N-S (0.43)	Signalized ThruCut N-S (0.43)	Bowtie N-S (0.43)	Traffic Signal (0.44)	MUT N-S (0.46)	2NS X 1EW Roundabout (0.50)	Unsignalized RCUT N-S (1.07)
	2028	PM	Signalized RCUT N-S (0.29)	DLT (0.30)	Bowtie N-S (0.32)	Partial DLT N-S (0.33)	Signalized ThruCut N-S (0.33)	Traffic Signal (0.34)	Partial MUT N-S (0.34)	MUT N-S (0.35)	2NS X 1EW Roundabout (0.38)	Unsignalized RCUT N-S (0.51)
	2038		Signalized RCUT N-S (0.38)	DLT (0.39)	Bowtie N-S (0.41)	Partial DLT N-S (0.42)	Partial MUT N-S (0.42)	Signalized ThruCut N-S (0.42)	Traffic Signal (0.43)	MUT N-S (0.44)	2NS X 1EW Roundabout (0.52)	Unsignalized RCUT N-S (0.77)
	2048		Signalized RCUT N-S (0.46)	DLT (0.47)	Partial DLT N-S (0.50)	Bowtie N-S (0.50)	Partial MUT N-S (0.51)	Signalized ThruCut N-S (0.51)	Traffic Signal (0.53)	MUT N-S (0.53)	2NS X 1EW Roundabout (0.66)	Unsignalized RCUT N-S (1.40)
Build B (Leg RI-RO)	2028	AM	Signalized RCUT N-S (0.27)	DLT (0.30)	Partial DLT N-S (0.32)	Partial MUT N-S (0.32)	Signalized ThruCut N-S (0.32)	Bowtie N-S (0.32)	2NS X 1EW Roundabout (0.33)	Traffic Signal (0.33)	MUT N-S (0.35)	Unsignalized RCUT N-S (0.55)
	2038		Signalized RCUT N-S (0.31)	DLT (0.36)	Partial DLT N-S (0.37)	Partial MUT N-S (0.37)	Signalized ThruCut N-S (0.37)	Bowtie N-S (0.37)	Traffic Signal (0.38)	MUT N-S (0.40)	2NS X 1EW Roundabout (0.40)	Unsignalized RCUT N-S (0.76)
	2048		Signalized RCUT N-S (0.37)	DLT (0.41)	Partial DLT N-S (0.43)	Partial MUT N-S (0.43)	Signalized ThruCut N-S (0.43)	Bowtie N-S (0.43)	Traffic Signal (0.45)	MUT N-S (0.47)	2NS X 1EW Roundabout (0.50)	Unsignalized RCUT N-S (1.07)
	2028	PM	Signalized RCUT N-S (0.29)	DLT (0.31)	Bowtie N-S (0.32)	Partial DLT N-S (0.33)	Signalized ThruCut N-S (0.33)	Partial MUT N-S (0.34)	Traffic Signal (0.35)	MUT N-S (0.35)	2NS X 1EW Roundabout (0.38)	Unsignalized RCUT N-S (0.51)
	2038		Signalized RCUT N-S (0.38)	DLT (0.40)	Bowtie N-S (0.41)	Partial DLT N-S (0.42)	Signalized ThruCut N-S (0.42)	Partial MUT N-S (0.43)	Traffic Signal (0.44)	MUT N-S (0.44)	2NS X 1EW Roundabout (0.52)	Unsignalized RCUT N-S (0.77)
	2048		Signalized RCUT N-S (0.47)	DLT (0.49)	Bowtie N-S (0.50)	Partial DLT N-S (0.51)	Signalized ThruCut N-S (0.51)	Partial MUT N-S (0.52)	Traffic Signal (0.53)	MUT N-S (0.53)	2NS X 1EW Roundabout (0.66)	Unsignalized RCUT N-S (1.36)

*Greyed out cells indicate that the intersection control type may not be viable due to right-of-way, cost, or other factors

V/C Ratio Legend	
	< 0.750
	0.750 - 0.875
	0.875 - 1.00
	≥ 1.00

Table 3- 17 Summary of CAP-X Results at the Intersection of Schoolview Way/Cypress Lake Glen Boulevard (s) and Chuluota Road

Build Type	Year	Intersection Control Rank 1 (Fatal & Injury Crashes)	Intersection Control Rank 2 (Fatal & Injury Crashes)	Intersection Control Rank 3 (Fatal & Injury Crashes)	Intersection Control Rank 4 (Fatal & Injury Crashes)	Intersection Control Rank 5 (Fatal & Injury Crashes)	Intersection Control Rank 6 (Fatal & Injury Crashes)	Intersection Control Rank 7 (Fatal & Injury Crashes)	Intersection Control Rank 8 (Fatal & Injury Crashes)	Intersection Control Rank 9 (Fatal & Injury Crashes)	Intersection Control Rank 10 (Fatal & Injury Crashes)
Build A (Leg Removal)	2028	Signalized RCUT N-S (0.70)	Unsignalized RCUT N-S (0.82)	Jughandle (1.04)	TWSC (1.05)	MUT N-S (1.07)	AWSC (1.09)	2 Lane Roundabout (1.12)	DLT (1.24)	Traffic Signal (1.41)	Bowtie N-S (No SPF)
	2038	Unsignalized RCUT N-S (0.97)	Signalized RCUT N-S (1.00)	Jughandle (1.13)	MUT N-S (1.16)	TWSC (1.33)	DLT (1.34)	AWSC (1.42)	2 Lane Roundabout (1.52)	Traffic Signal (1.52)	Bowtie N-S (No SPF)
	2048	Unsignalized RCUT N-S (1.12)	Jughandle (1.20)	MUT N-S (1.23)	Signalized RCUT N-S (1.33)	DLT (1.42)	TWSC (1.61)	Traffic Signal (1.62)	AWSC (1.77)	2 Lane Roundabout (1.95)	Bowtie N-S (No SPF)
Build B (Leg RI-RO)	2028	Signalized RCUT N-S (0.68)	Unsignalized RCUT N-S (0.81)	TWSC (1.02)	Jughandle (1.04)	MUT N-S (1.06)	AWSC (1.08)	2 Lane Roundabout (1.11)	DLT (1.23)	Traffic Signal (1.40)	Bowtie N-S (No SPF)
	2038	Unsignalized RCUT N-S (0.97)	Signalized RCUT N-S (0.97)	Jughandle (1.12)	MUT N-S (1.15)	TWSC (1.29)	DLT (1.34)	AWSC (1.41)	2 Lane Roundabout (1.51)	Traffic Signal (1.52)	Bowtie N-S (No SPF)
	2048	Unsignalized RCUT N-S (1.11)	Jughandle (1.19)	MUT N-S (1.23)	Signalized RCUT N-S (1.30)	DLT (1.42)	TWSC (1.57)	Traffic Signal (1.61)	AWSC (1.76)	2 Lane Roundabout (1.94)	Bowtie N-S (No SPF)

*Greyed out cells indicate that the intersection control type may not be viable due to right-of-way, cost, or other factors

Predicted Crashes Legend		
	0.00 - 0.50	Above Average Safety
	0.50 - 1.00	Acceptable Safety
	1.00 - 1.50	Below Average Safety
	≥ 1.50	Poor Safety

Table 3- 18 Summary of SPICE Crash Prediction Results at the Intersection of Schoolview Way/Cypress Lake Glen Boulevard (S) and Chuluota Road

Build Type	Year	Intersection Control Rank 1 (SSI Score)	Intersection Control Rank 2 (SSI Score)	Intersection Control Rank 3 (SSI Score)	Intersection Control Rank 4 (SSI Score)	Intersection Control Rank 5 (SSI Score)	Intersection Control Rank 6 (SSI Score)	Intersection Control Rank 7 (SSI Score)	Intersection Control Rank 8 (SSI Score)	Intersection Control Rank 9 (SSI Score)	Intersection Control Rank 10 (SSI Score)
Build A (Leg Removal)	2028	2 Lane Roundabout (99)	AWSC (99)	MUT N-S (99)	Signalized RCUT N-S (97)	Traffic Signal (97)	Jughandle (96)	Unsignalized RCUT N-S (96)	TWSC (95)	Signalized ThruCut N-S (93)	Bowtie N-S (92)
	2038	2 Lane Roundabout (99)	AWSC (99)	MUT N-S (98)	Signalized RCUT N-S (96)	Traffic Signal (95)	Jughandle (95)	Unsignalized RCUT N-S (94)	TWSC (93)	Signalized ThruCut N-S (89)	Bowtie N-S (88)
	2048	2 Lane Roundabout (99)	AWSC (99)	MUT N-S (97)	Signalized RCUT N-S (94)	Traffic Signal (93)	Jughandle (93)	Unsignalized RCUT N-S (92)	TWSC (91)	Signalized ThruCut N-S (85)	Bowtie N-S (84)
Build B (Leg RI-RO)	2028	2 Lane Roundabout (100)	AWSC (99)	MUT N-S (99)	Traffic Signal (98)	Jughandle (97)	Signalized RCUT N-S (97)	TWSC (97)	Unsignalized RCUT N-S (96)	Signalized ThruCut N-S (93)	Bowtie N-S (93)
	2038	2 Lane Roundabout (99)	AWSC (99)	MUT N-S (99)	Traffic Signal (97)	Jughandle (96)	Signalized RCUT N-S (96)	TWSC (95)	Unsignalized RCUT N-S (94)	Signalized ThruCut N-S (89)	Bowtie N-S (89)
	2048	2 Lane Roundabout (99)	AWSC (99)	MUT N-S (99)	Traffic Signal (96)	Jughandle (95)	Signalized RCUT N-S (95)	TWSC (94)	Unsignalized RCUT N-S (93)	Bowtie N-S (86)	Signalized ThruCut N-S (85)

**Greyed out cells indicate that the intersection control type may not be viable due to right-of-way, cost, or other factors*

SSI Legend	
	90-100
	80-89
	70-79
	< 70

Table 3- 12 Summary of SPICE Crash Prediction Method Results at the Intersection of Schoolview Way/Cypress Lake Glen Boulevard (S) and Chuluota Road

3.8 Recommendations

This section of the report documents the recommendations of intersection control strategies to advance to ICE Stage 2 at each intersection.

Lake Pickett Road at Chuluota Road

Based on the results of the CAP-X and SPICE analyses, the following intersection control strategies are recommended to advance to ICE Stage 2 at the intersection of Lake Pickett Road at Chuluota Road:

- Traffic Signal
- Roundabout
- Bowtie

The remaining intersection control strategies are not recommended to advance to ICE Stage 2 due to poor operational performance, poor safety performance, or lack of feasibility based on excessive cost, constructability, and right-of-way acquisition.

Long Boat Lane/Cypress Lake Glen Boulevard (N) at Chuluota Road

Based on the results of the CAP-X and SPICE analyses, the following intersection control strategies are recommended to advance to ICE Stage 2 at the intersection of Long Boat Lane/Cypress Lake Glen Boulevard (N) at Chuluota Road:

- TWSC
- Roundabout

The remaining intersection control strategies are not recommended to advance to ICE Stage 2 due to poor operational performance, poor safety performance, or lack of feasibility based on cost, constructability, and right-of-way acquisition.

Corner Lake Drive at Chuluota Road

Based on the results of the CAP-X and SPICE analyses, the following intersection control strategies were recommended to advance to ICE Stage 2 at the intersection of Corner Lake Drive at Chuluota Road:

- TWSC
- Roundabout

The remaining intersection control strategies were not recommended to advance to ICE Stage 2 due to poor operational performance, poor safety performance, or lack of feasibility based on cost, constructability, and right-of-way acquisition.

Cypress Lake Glen Boulevard (S) at Chuluota Road

Based on the results of the CAP-X and SPICE analyses, the following intersection control strategies are recommended to advance to ICE Stage 2 at the intersection of Cypress Lake Glen Boulevard (S) at Chuluota Road:

- Traffic Signal
- Roundabout

The remaining intersection control strategies are not recommended to advance to ICE Stage 2 due to poor operational performance, poor safety performance, or lack of feasibility based on cost, constructability, and right-of-way acquisition.

Corner School Drive at Schoolview Way

Based on the results of the CAP-X and SPICE analyses, the following intersection control strategies are recommended to advance to ICE Stage 2 at the intersection of Corner School Drive at Schoolview Way:

- AWSC
- TWSC
- Roundabout

The remaining intersection control strategies are not recommended to advance to ICE Stage 2 due to poor operational performance, poor safety performance, or lack of feasibility based on cost, constructability, and right-of-way acquisition.

Schoolview Way/Cypress Lake Glen Boulevard (S) at Chuluota Road

Based on the results of the CAP-X and SPICE analyses, the following intersection control strategies are recommended to advance to ICE Stage 2 at the intersection of Schoolview Way/Cypress Lake Glen Boulevard (S) at Chuluota Road:

- Traffic Signal
- Roundabout

The remaining intersection control strategies are not recommended to advance to ICE Stage 2 due to poor operational performance, poor safety performance, or lack of feasibility based on cost, constructability, and right-of-way acquisition.

Table 3-20 on the following page provides a summary of the intersection control strategies recommended to advance to Stage 2 for each intersection.

Intersection	Recommended Intersection Control Strategies
Lake Pickett Road at Chuluota Road	Traffic Signal Roundabout Bowtie
Long Boat Lane/Cypress Lake Glen Boulevard (S) at Chuluota Road	TWSC Roundabout
Corner Lake Drive at Chuluota Road	TWSC Roundabout
Cypress Lake Glen Boulevard (S) at Chuluota Road	Traffic Signal Roundabout
Corner School Drive at Schoolview Way	AWSC TWSC Roundabout
Relocated Schoolview Way/Cypress Lake Glen Boulevard (S) at Chuluota Road	Traffic Signal Roundabout

Table 3- 13 Chuluota Road Intersection Control Strategies Recommended to Advance to Stage 2

4 ICE ANALYSIS, STAGE 2

4.1 Stage 2 Methodology

The methods utilized in the Chuluota Road Stage 2 ICE analysis are described in the FDOT Manual on ICE, dated January 2024. Per pages 2-13 through 2-15 of the FDOT Manual on ICE, the procedure of Stage 2 involves developing conceptual designs for each intersection control strategy that was advanced from Stage 1, as well as evaluating each intersection control strategy based on design year operations, safety performance, environmental, utility, and right-of-way impacts, multimodal accommodations, public input, and other appropriate factors.

The following traffic simulation software packages were applied to evaluate the design year operations for the intersection control strategies at each intersection:

- SYNCHRO
- SIDRA

During our analysis, we found that SIDRA appeared to understate the delays (lower than expected) for the roundabouts, thus SYNCHRO was used instead to provide a more accurate understanding and conservative picture of the operations. Also, since SYNCHRO was being used for all of the other intersection control analyses, its use for all control options including roundabouts would better facilitate the comparison of results between the options by using the same program.

4.2 Lake Pickett Road at Chuluota Road

SYNCHRO analyses were performed at the intersection of Lake Pickett Road at Chuluota Road for the AM and PM peak hours of the design year (2048) under the no build scenario (existing conditions with two-lane configuration along Chuluota Road) and the build scenario (four-lane widening configuration along Chuluota Road). The intersection control strategies that were evaluated were traffic signal, roundabout, and bowtie configurations. Although SIDRA analyses were performed for the roundabout configuration, SYNCHRO was also used as noted above to better provide for comparative assessments between options.

A summary of the operational analysis results at the intersection of Lake Pickett Road at Chuluota Road are shown in Table 4-1. It lists the delay and the LOS letter grade for each intersection approach as well as the overall intersection. The delay and level of service are color coded to illustrate better operational performance as increasingly green and worse operational performance as increasingly red.

When considering the overall intersection delay, the summary results indicate that all three intersection control strategies perform at LOS D or better for both the no-build and the build scenarios. The summary results also indicate that, when considering the individual approach delays, the following scenarios perform at LOS E: No-build AM traffic signal southbound, no-build PM traffic signal eastbound and southbound, no-build AM roundabout southbound, build PM roundabout eastbound, build AM bowtie northbound, and build PM bowtie northbound.

It should be noted that the ICE Stage 2 operational analysis evaluated the intersection of Lake Pickett Road at Chuluota Road as an isolated intersection. Therefore, the results mentioned in this section must be combined with the corridor-wide analysis that is presented in Section 5 of this report to provide a complete assessment of the intersection's operations.

Chuluota Road at Lake Pickett Road Design Year 2048 Operational Analysis Results														
	Build Configuration	No-Build (2-lane)						Build (4-lane)						
	Peak Time	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	
	Intersection Control Type	Traffic Signal	Traffic Signal	1x1 Roundabout	1x1 Roundabout	Bowtie N-S	Bowtie N-S	Traffic Signal	Traffic Signal	2x1 Roundabout	2x1 Roundabout	Bowtie N-S	Bowtie N-S	
	Measure of Effectiveness	Delay (s/veh) (LOS)	Delay (s/veh) (LOS)	Delay (s/veh) (LOS)	Delay (s/veh) (LOS)	Delay (s/veh) (LOS)	Delay (s/veh) (LOS)	Delay (s/veh) (LOS)	Delay (s/veh) (LOS)	Delay (s/veh) (LOS)	Delay (s/veh) (LOS)	Delay (s/veh) (LOS)	Delay (s/veh) (LOS)	
Approach	Eastbound	32.9 (C)	64.3 (E)	7.9 (A)	15.1 (C)	16.2 (B)	21.9 (C)	18.7 (B)	26.6 (C)	13.2 (B)	50.0 (E)	14.9 (B)	25.3 (C)	
	Westbound	47.7 (D)	48.7 (D)	15.9 (C)	11.3 (B)	25.4 (C)	16.7 (B)	36.1 (D)	33.9 (C)	30.9 (D)	16.8 (C)	35.9 (D)	14.7 (B)	
	Northbound	26.5 (C)	29.3 (C)	11.5 (B)	18.6 (C)	17.6 (B)	18.0 (B)	17.6 (B)	25.0 (C)	9.3 (A)	18.3 (C)	58.5 (E)	69.7 (E)	
	Southbound	60.9 (E)	61.1 (E)	48.4 (E)	19.5 (C)	16.3 (B)	20.7 (C)	26.1 (C)	33.6 (C)	24.0 (C)	12.3 (B)	16.9 (B)	16.7 (B)	
	Intersection	41.7 (D)	50.6 (D)	23.9 (C)	17.4 (C)	18.8 (B)	19.6 (B)	23.0 (C)	28.8 (C)	17.7 (C)	25.2 (D)	34.1 (C)	33.7 (C)	

LOS Legend	
	LOS A
	LOS B
	LOS C
	LOS D
	LOS E
	LOS F

Table 4- 1 Summary of Operational Analysis Results at the Intersection of Lake Pickett Road at Chuluota Road

Renderings of the roundabouts and bow tie configurations for both the no build scenario (two-lane existing section for Chuluota Road) and the build scenarios (four-lane widening section for Chuluota Road) are shown on Figures 4-1 thru 4-4 on the next pages.



Figure 4- 1 Roundabout Control Option at Lake Pickett Road Under No Build Conditions (Two-Lane Existing Section on Chuluota Road)

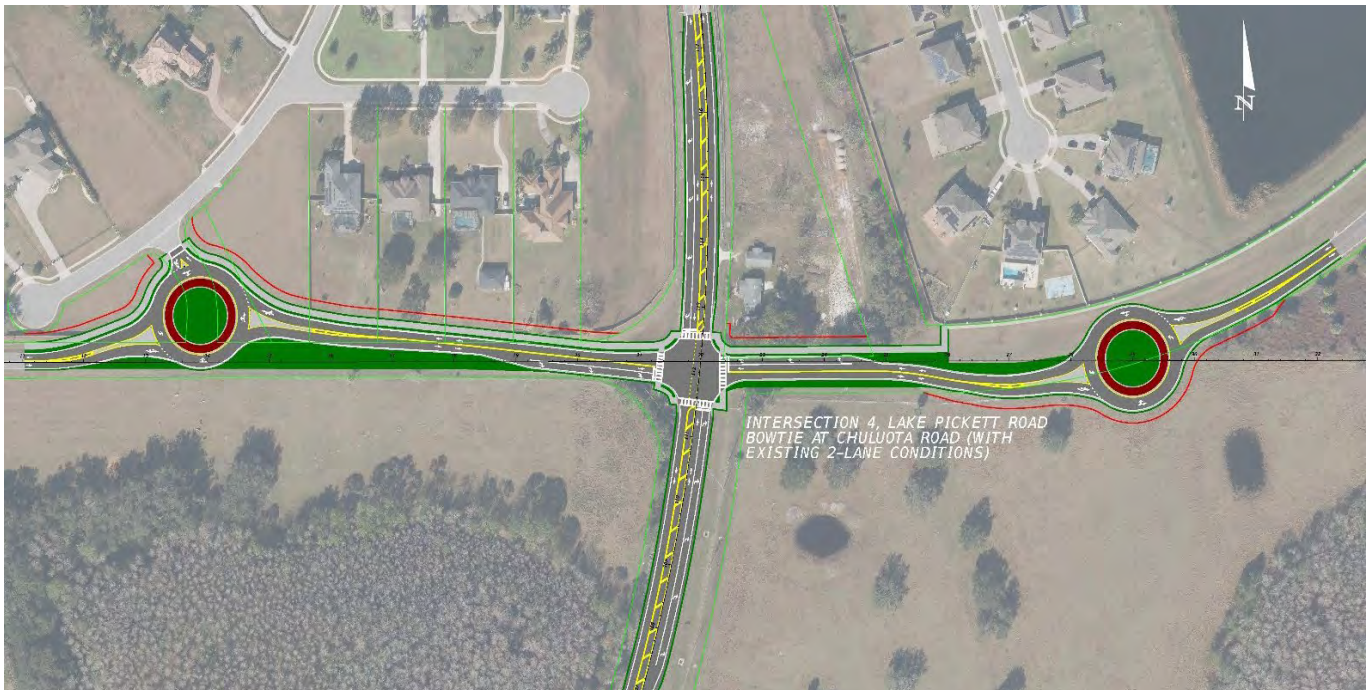


Figure 4- 2 Bow Tie Control Option at Lake Pickett Road Under No Build Conditions (Two-Lane Existing Section on Chuluota Road)

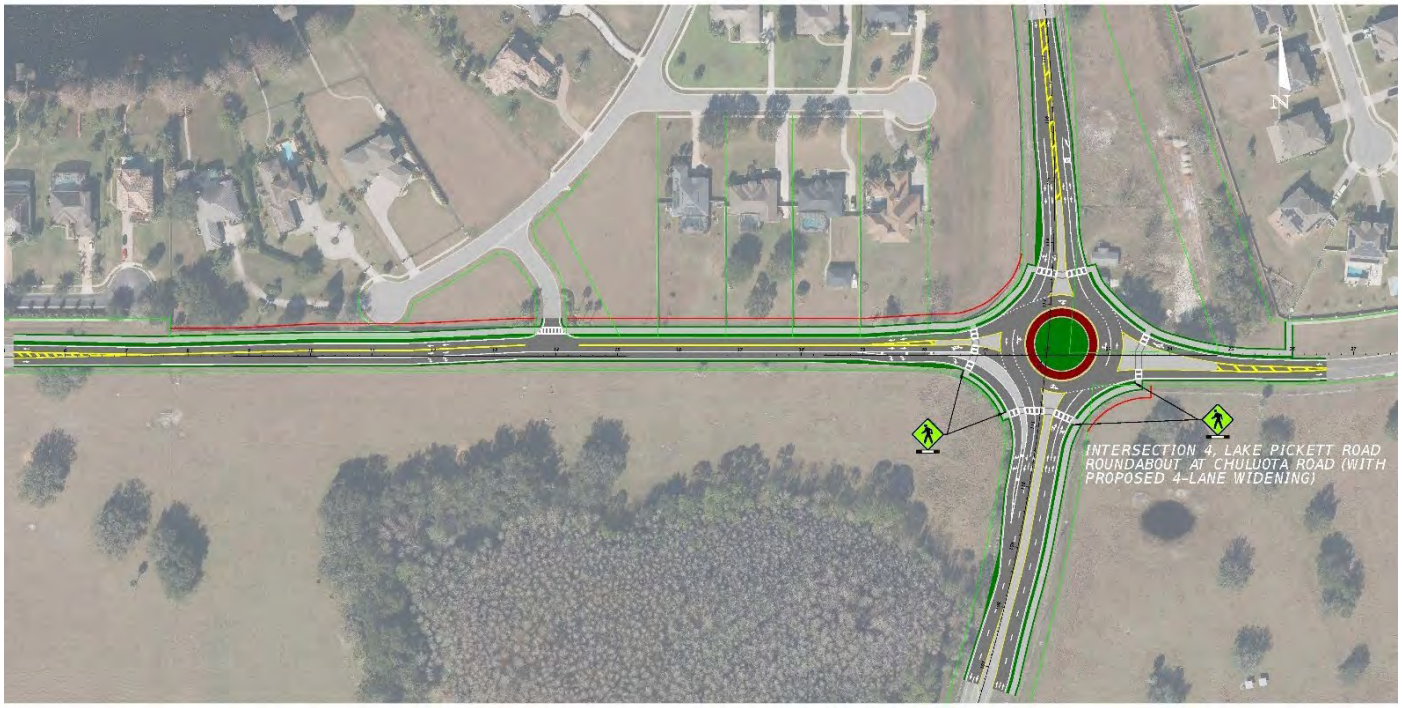


Figure 4- 3 Roundabout Control Option at Lake Pickett Road Under Build Conditions (Four-Lane Widening Section on Chuluota Road)

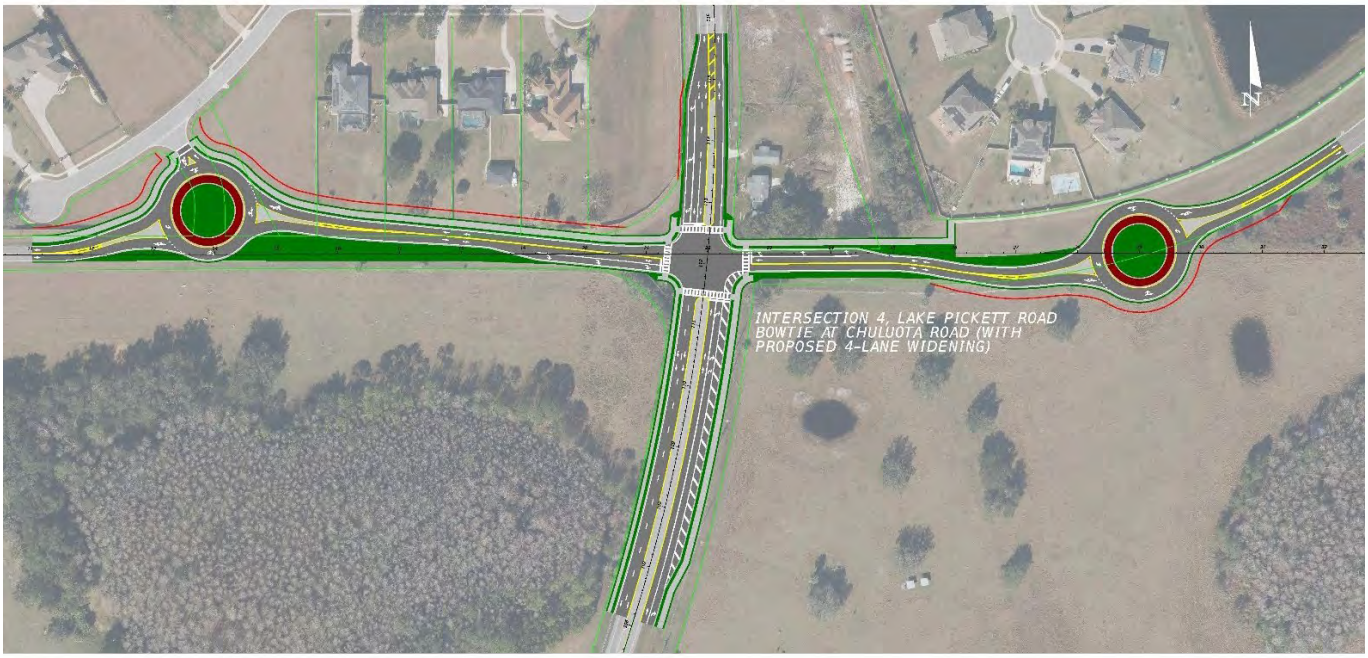


Figure 4- 4 Bow Tie Control Option at Lake Pickett Road Under Build Conditions (Four-Lane Widening Section on Chuluota Road)

4.3 Long Boat Lane/Cypress Lake Glen Boulevard (N) at Chuluota Road

SYNCHRO analyses were performed at the intersection of Long Boat Lane/Cypress Lake Glen Boulevard (N) at Chuluota Road for the AM and PM peak hours of the design year (2048) under the no-build scenario (existing two-lane configuration along Chuluota Road) and the build scenario (Four-lane widening configuration along Chuluota Road), amounting to 4 analysis permutations per intersection control strategy. The intersection control strategies that were evaluated were TWSC and roundabout configurations. Although SIDRA analyses were performed for the roundabout configuration, SYNCHRO was also used as noted above to better provide for comparative assessments between options.

A summary of the operational analysis results at the intersection of Long Boat Lane/Cypress Lake Glen Boulevard (N) at Chuluota Road are shown in Figure 4-2. It lists the delay and the LOS letter grade for each intersection approach as well as the overall intersection. The delay and level of service are color coded to illustrate better operational performance as increasingly green and worse operational performance as increasingly red.

When considering the overall intersection delay, the summary results indicate that both intersection control strategies perform at LOS C or better for both the no-build and the build scenarios, with the single exception being the build AM TWSC scenario performing at LOS E. The summary results also indicate that, when considering the individual approach delays, the following scenarios perform at LOS F: No-build AM TWSC westbound, no-build PM TWSC eastbound and westbound, build AM TWSC eastbound and westbound, and build PM TWSC eastbound and westbound.

It should be noted that the ICE Stage 2 operational analysis evaluated the intersection of Long Boat Lane/Cypress Lake Glen Boulevard (N) at Chuluota Road as an isolated intersection. Therefore, the results mentioned in this section must be combined with the corridor-wide analysis that is presented in Section 5 of this report to provide a complete assessment of the intersection's operations.

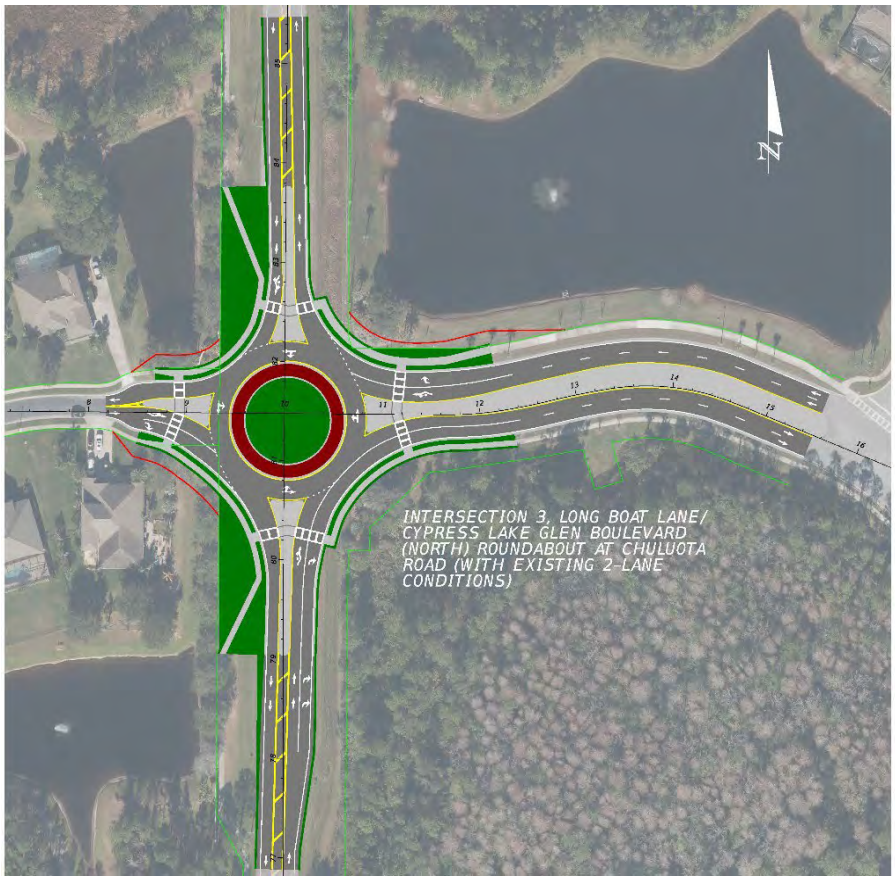
Chuluota Road at Cypress Lake Glen Boulevard N/Long Boat Lane Design Year 2048 Operational Analysis Results									
	Build Configuration	No-Build (2-lane)				Build (4-lane)			
	Peak Time	AM	PM	AM	PM	AM	PM	AM	PM
	Intersection Control Type	Two-Way Stop Control	Two-Way Stop Control	1x1 Roundabout	1x1 Roundabout	Two-Way Stop Control	Two-Way Stop Control	2x1 Roundabout	2x1 Roundabout
	Measure of Effectiveness	Delay (s/veh) (LOS)	Delay (s/veh) (LOS)	Delay (s/veh) (LOS)	Delay (s/veh) (LOS)	Delay (s/veh) (LOS)	Delay (s/veh) (LOS)	Delay (s/veh) (LOS)	Delay (s/veh) (LOS)
Approach	Eastbound	34.8 (D)	59.3 (F)	6.4 (A)	7.6 (A)	52.0 (F)	96.8 (F)	8.4 (A)	9.5 (A)
	Westbound	123.2 (F)	169.6 (F)	7.6 (A)	6.9 (A)	277.8 (F)	346.8 (F)	10.4 (B)	8.9 (A)
	Northbound	0.0 (A)	0.1 (A)	7.8 (A)	8.5 (A)	0.1 (A)	0.1 (A)	7.0 (A)	7.4 (A)
	Southbound	0.9 (A)	0.8 (A)	11.3 (B)	15.8 (C)	0.8 (A)	0.8 (A)	7.7 (A)	8.9 (A)
	Intersection	19.7 (C)	14.7 (B)	9.3 (A)	12.1 (B)	36.1 (E)	24.3 (C)	7.7 (A)	8.2 (A)

LOS Legend	
	LOS A
	LOS B
	LOS C
	LOS D
	LOS E
	LOS F

Table 4- 2 Summary of Operational Analysis Results at the Intersection of Long Boat Lane/Cypress Lake Glen Boulevard (N) at Chuluota Road

Renderings of the roundabout configurations for both the no build scenario (two-lane existing section for Chuluota Road) and the build scenario (four-lane widening section for Chuluota Road) are shown on Figures 4-5 and 4-6.

Figure 4- 5 Roundabout Control Option at Long Boat Lane/Cypress Lake Glen Boulevard (N) Under No Build Conditions (Two- Lane Existing Section on Chuluota Road)



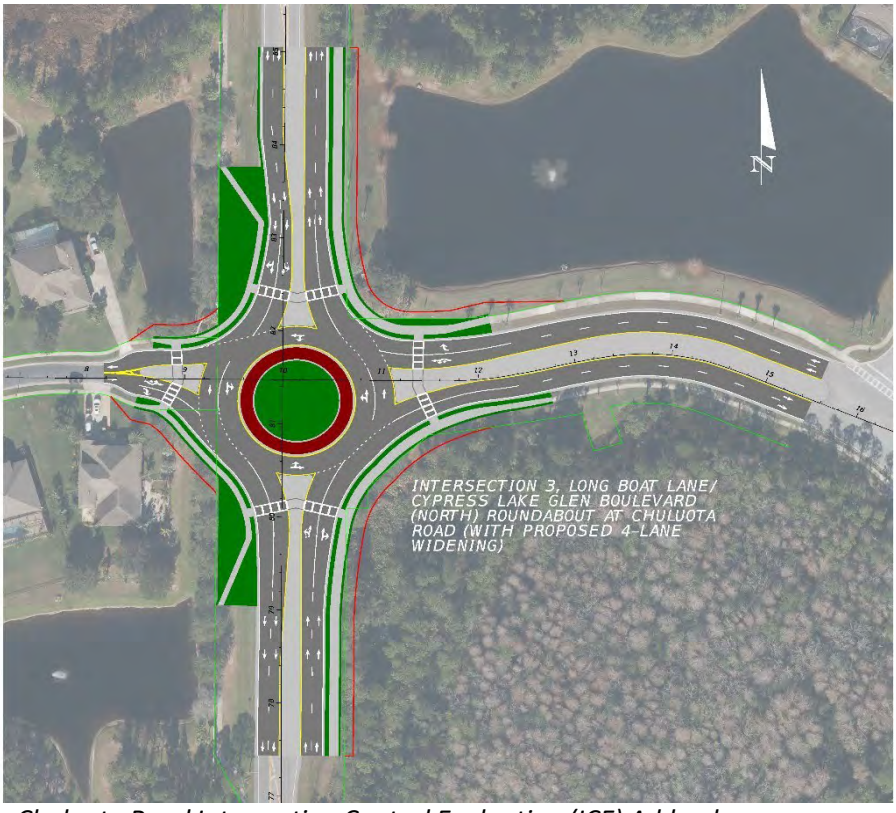


Figure 4- 6 Roundabout Control Option at Long Boat Lane/Cypress Lake Glen Boulevard (N) Under Build Conditions (Four-Lane Widening Section on Chuluota Road)

4.4 Corner Lake Drive at Chuluota Road

SYNCHRO analyses were performed at the intersection of Corner Lake Drive at Chuluota Road for the AM and PM peak hours of the design year (2048) under the no-build scenario (existing two-lane configuration along Chuluota Road) and the build scenario (Four-lane widening configuration along Chuluota Road), amounting to 4 analysis permutations per intersection control strategy. The intersection control strategies that were evaluated were TWSC and roundabout configurations. Although SIDRA analyses were performed for the roundabout configuration, SYNCHRO was also used as noted above to better provide for comparative assessments between options.

A summary of the operational analysis results at the intersection of Corner Lake Drive at Chuluota Road are shown in Table 4-3. It lists the delay and the LOS letter grade for each intersection approach as well as the overall intersection. The delay and level of service are color coded to illustrate better operational performance as increasingly green and worse operational performance as increasingly red.

When considering the overall intersection delay, the summary results indicate that both intersection control strategies perform at LOS B or better for both the no-build and the build scenarios. The summary results also indicate that, when considering the individual approach delays, the following scenarios perform at LOS E: No-build AM TWSC eastbound and build PM TWSC eastbound. Additionally, the build AM TWSC scenario performs at LOS F for the eastbound direction.

It should be noted that the ICE Stage 2 operational analysis evaluated the intersection of Corner Lake Drive at Chuluota Road as an isolated intersection. Therefore, the results mentioned in this section must be combined with the corridor-wide analysis that is presented in Section 5 of this report to provide a complete assessment of the intersection's operations.

Chuluota Road at Corner Lake Drive Design Year 2048 Operational Analysis Results									
	Build Configuration	No-Build (2-lane)				Build (4-lane)			
	Peak Time	AM	PM	AM	PM	AM	PM	AM	PM
	Intersection Control Type	Two-Way Stop Control	Two-Way Stop Control	1x1 Roundabout	1x1 Roundabout	Two-Way Stop Control	Two-Way Stop Control	2x1 Roundabout	2x1 Roundabout
	Measure of Effectiveness	Delay (s/veh) (LOS)	Delay (s/veh) (LOS)	Delay (s/veh) (LOS)	Delay (s/veh) (LOS)	Delay (s/veh) (LOS)	Delay (s/veh) (LOS)	Delay (s/veh) (LOS)	Delay (s/veh) (LOS)
Approach	Eastbound	35.3 (E)	31.5 (D)	7.2 (A)	7.9 (A)	62.1 (F)	47.7 (E)	9.4 (A)	11.2 (B)
	Northbound	0.2 (A)	0.3 (A)	9.5 (A)	9.9 (A)	0.2 (A)	0.3 (A)	6.6 (A)	6.7 (A)
	Southbound	0.0 (A)	0.0 (A)	9.2 (A)	11.6 (B)	0.0 (A)	0.0 (A)	6.8 (A)	7.9 (A)
	Intersection	2.4 (A)	1.4 (A)	9.2 (A)	10.7 (B)	3.4 (A)	1.7 (A)	6.8 (A)	7.5 (A)

LOS Legend	
	LOS A
	LOS B
	LOS C
	LOS D
	LOS E
	LOS F

Table 4- 3 Summary of Operational Analysis Results at the Intersection of Corner Lake Drive at Chuluota Road

Renderings of the roundabout configurations for both the no build scenario (two-lane existing section for Chuluota Road) and the build scenario (four-lane widening section for Chuluota Road) are shown on Figures 4-7 and 4-8 on the next page.

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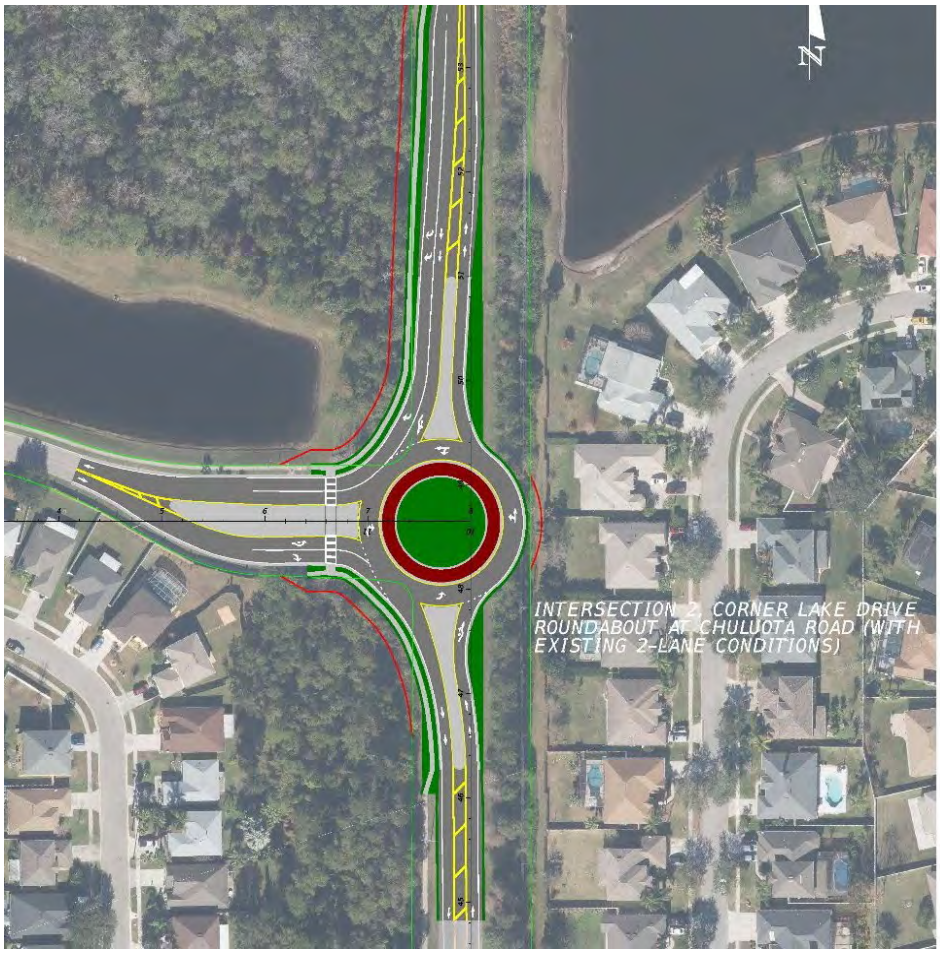


Figure 4- 7 Roundabout Control Option at Corner Lake Drive Under No Build Conditions (Two-Lane Existing Section on Chuluota Road)

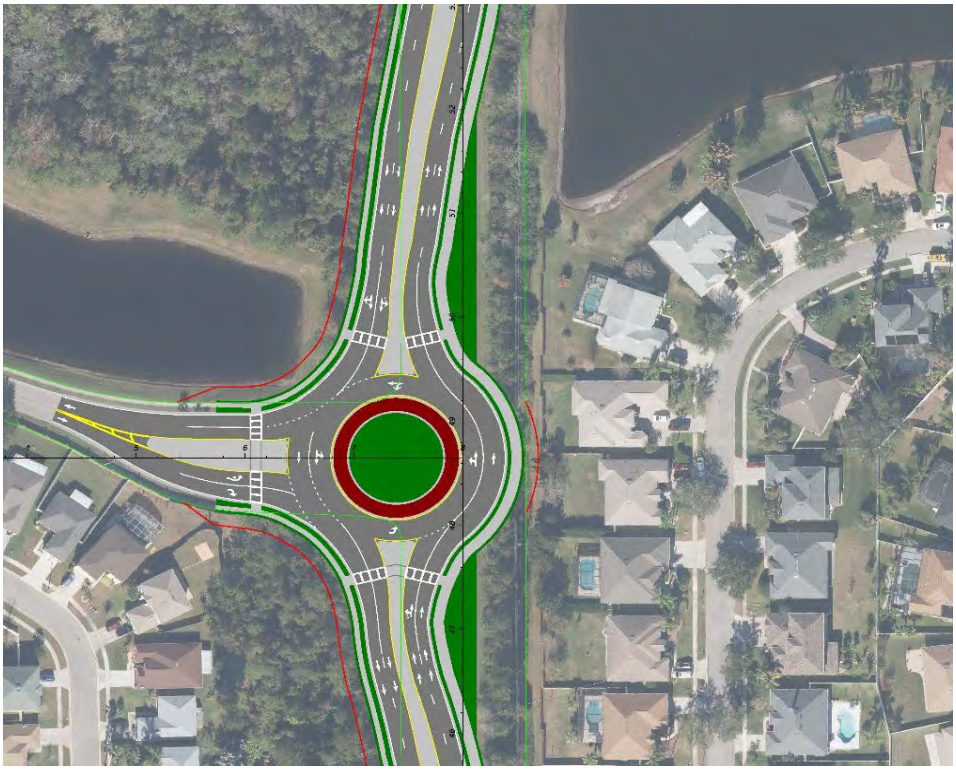


Figure 4- 8 Roundabout Control Option at Corner Lake Drive Under Build Conditions (Four- Lane Widening Section on Chuluota Road)

4.5 Cypress Lake Glen Boulevard (S) at Chuluota Road

SYNCHRO analyses were performed at the intersection of Cypress Lake Glen Boulevard (S) at Chuluota Road for the AM and PM peak hours of the design year (2048) under the no-build scenario (existing two-lane configuration along Chuluota Road) and the build scenario (Four-lane widening configuration along Chuluota Road), amounting to 4 analysis permutations per intersection control strategy. The intersection control strategies that were evaluated were traffic signal and roundabout configurations. Although SIDRA analyses were performed for the roundabout configuration, SYNCHRO was also used as noted above to better provide for comparative assessments between options.

A summary of the operational analysis results at the intersection of Cypress Lake Glen Boulevard (S) at Chuluota Road are shown in Table 4-4. It lists the delay and the LOS letter grade for each intersection approach as well as the overall intersection. The delay and level of service are color coded to illustrate better operational performance as increasingly green and worse operational performance as increasingly red.

The summary results indicate that, when considering the overall intersection delays as well as the individual approach delays, both intersection control strategies perform at LOS C or better for both the no- build and the build scenarios.

It should be noted that the ICE Stage 2 operational analysis evaluated the intersection of Cypress Lake Glen Boulevard (S) at Chuluota Road as an isolated intersection. Therefore, the results mentioned in this section must be combined with the corridor-wide analysis that is presented in Section 5 of this report to provide a complete assessment of the intersection's operations.

Chuluota Road at Cypress Lake Glen Boulevard S Design Year 2048 Operational Analysis Results									
	Build Configuration	No-Build (2-lane)				Build (4-lane)			
	Peak Time	AM	PM	AM	PM	AM	PM	AM	PM
	Intersection Control Type	Traffic Signal	Traffic Signal	1x1 Roundabout	1x1 Roundabout	Traffic Signal	Traffic Signal	2x1 Roundabout	2x1 Roundabout
	Measure of Effectiveness	Delay (s/veh) (LOS)	Delay (s/veh) (LOS)	Delay (s/veh) (LOS)	Delay (s/veh) (LOS)	Delay (s/veh) (LOS)	Delay (s/veh) (LOS)	Delay (s/veh) (LOS)	Delay (s/veh) (LOS)
Approach	Westbound	23.5 (C)	28.8 (C)	8.9 (A)	9.4 (A)	21.0 (C)	25.9 (C)	10.5 (B)	11.2 (B)
	Northbound	17.0 (B)	17.4 (B)	7.1 (A)	7.3 (A)	12.3 (B)	12.4 (B)	6.2 (A)	7.9 (A)
	Southbound	17.3 (B)	17.9 (B)	16.2 (C)	24.3 (C)	11.3 (B)	11.1 (B)	9.2 (A)	10.9 (B)
	Intersection	18.1 (B)	18.7 (B)	11.4 (B)	15.1 (C)	12.9 (B)	12.8 (B)	8.1 (A)	9.6 (A)

LOS Legend	
	LOS A
	LOS B
	LOS C
	LOS D
	LOS E
	LOS F

Table 4- 4 Summary of Operational Analysis Results at the Intersection of Cypress Lake Glen Boulevard (S) at Chuluota Road

The rendering of the roundabout configuration for the no build scenario (two-lane existing section for Chuluota Road) is shown on Figure 4-9.

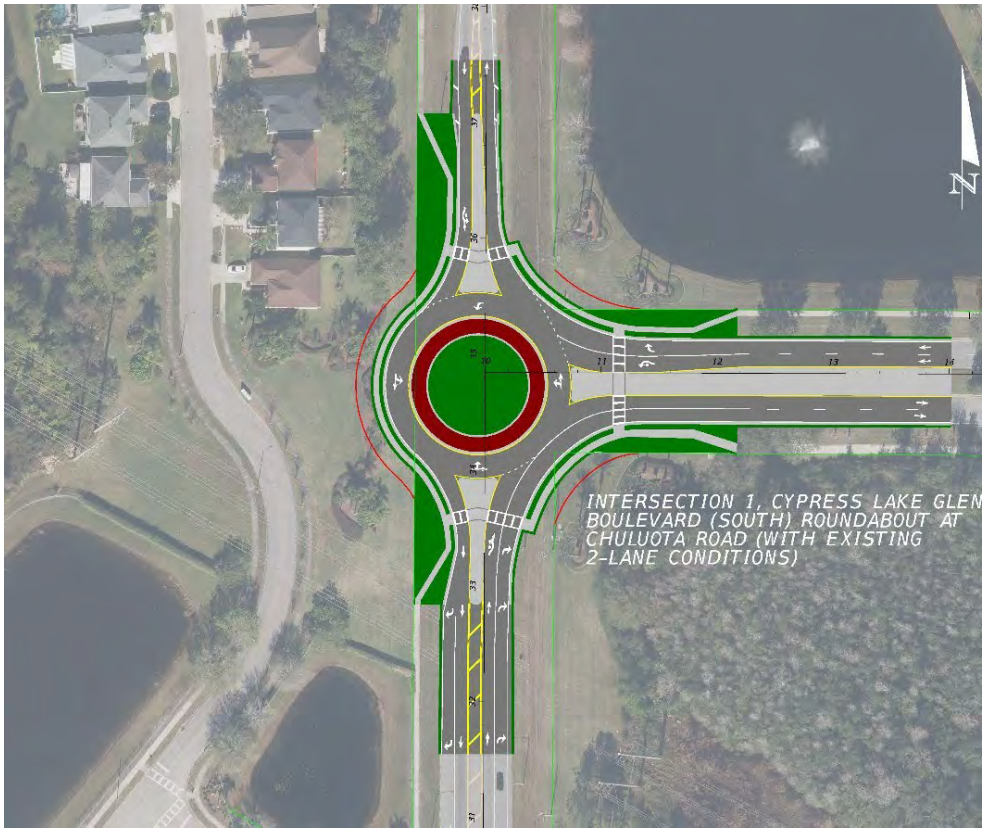


Figure 4- 9 Roundabout Control Option at Cypress Lake Glen Boulevard (S) Under No Build Conditions (Two-Lane Existing Section on Chuluota Road)

4.6 Corner School Drive at Schoolview Way

SYNCHRO analyses were performed at the intersection of Corner School Drive at Schoolview Way for the AM and PM peak hours of the design year (2048) under the no-build scenario (existing two-lane configuration along Chuluota Road) and the build scenario (four-lane widening configuration along Chuluota Road), amounting to four analysis permutations per intersection control strategy. The intersection control strategies that were evaluated were AWSC, TWSC, and roundabout configurations. Although SIDRA analyses were performed for the roundabout configuration, SYNCHRO was also used as noted above to better provide for comparative assessments between options.

A summary of the operational analysis results at the intersection of Corner School Drive at Schoolview Way are shown in Table 4-5. It lists the delay and the LOS letter grade for each intersection approach as well as the overall intersection. The delay and level of service are color coded to illustrate better operational performance as increasingly green and worse operational performance as increasingly red.

The summary results indicate that, when considering the overall intersection delays as well as the individual approach delays, all of the intersection control strategies performed equally well at LOS B or better for both the no-build and the build scenarios. However, based on the RCA Study recommendations, Schoolview Way will be relocated to the Cypress Lake Glen Boulevard intersection which is expected to improve overall operations in the Chuluota Road corridor by eliminating an intersection and associated potential conflicts. Consequently, existing Schoolview Way will be closed.

Corner School Drive at Schoolview Way Design Year 2048 Operational Analysis Results													
	Build Configuration	No-Build (2-lane)						Build (4-lane)					
	Peak Time	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
	Intersection Control Type	All-Way Stop Control	All-Way Stop Control	Two-Way Stop Control	Two-Way Stop Control	1x1 Roundabout	1x1 Roundabout	All-Way Stop Control	All-Way Stop Control	Two-Way Stop Control	Two-Way Stop Control	1x1 Roundabout	1x1 Roundabout
	Measure of Effectiveness	Delay (s/veh) (LOS)	Delay (s/veh) (LOS)	Delay (s/veh) (LOS)	Delay (s/veh) (LOS)	Delay (s/veh) (LOS)	Delay (s/veh) (LOS)	Delay (s/veh) (LOS)	Delay (s/veh) (LOS)	Delay (s/veh) (LOS)	Delay (s/veh) (LOS)	Delay (s/veh) (LOS)	Delay (s/veh) (LOS)
Approach	Westbound	8.8 (A)	8.4 (A)	9.5 (A)	9.6 (A)	3.4 (A)	3.4 (A)	8.4 (A)	8.9 (A)	9.3 (A)	10.0 (B)	3.2 (A)	3.5 (A)
	Northbound	7.2 (A)	7.8 (A)	0.0 (A)	0.0 (A)	3.1 (A)	3.9 (A)	7.1 (A)	8.1 (A)	0.0 (A)	0.0 (A)	3.1 (A)	4.1 (A)
	Southbound	7.6 (A)	7.5 (A)	1.1 (A)	2.0 (A)	3.3 (A)	3.0 (A)	7.5 (A)	7.7 (A)	1.1 (A)	1.6 (A)	3.1 (A)	3.1 (A)
	Intersection	8.1 (A)	7.9 (A)	4.8 (A)	2.4 (A)	3.3 (A)	3.7 (A)	7.7 (A)	8.3 (A)	3.6 (A)	2.7 (A)	3.1 (A)	3.9 (A)

LOS Legend	
	LOS A
	LOS B
	LOS C
	LOS D
	LOS E
	LOS F

Table 4- 5 Summary of Operational Analysis Results at the Intersection of Corner School Drive at Schoolview Way

4.7 Relocated Schoolview Way/Cypress Lake Glen Boulevard (S)

SYNCHRO analyses were performed at the intersection of Cypress Lake Glen Boulevard (S) at Chuluota Road for the AM and PM peak hours of the design year (2048) under two scenarios. Under Build A scenario (four-lane widening configuration along Chuluota Road) Schoolview Way would be relocated to connect with Cypress Lake Glen Boulevard (S) thus allowing existing Schoolview Way to be eliminated. Under Build B scenario (four-lane widening configuration along Chuluota Road), the Build A concept would be retained with existing Schoolview Way being left in place at its current location, though with right-in right-out operations only at Chuluota Road.

The traffic signal and roundabout configurations were further evaluated for the Relocated Schoolview Way/Cypress Lake Glen Boulevard (S) intersection. Although SIDRA analyses were performed for the roundabout configuration, SYNCHRO was also used as noted above to better provide for comparative assessments between options.

A summary of the operational analysis results at the intersection of Relocated Schoolview Way/Cypress Lake Glen Boulevard (S) at Chuluota Road are shown in Table 4-6. It lists the delay and the LOS letter grade for each intersection approach as well as the overall intersection. The delay and level of service are color coded to illustrate better operational performance as increasingly green and worse operational performance as increasingly red.

The summary results indicate that, when considering the overall intersection delays as well as the individual approach delays, both intersection control strategies perform at LOS D or better for both the

Build A and the Build B scenarios. However, the Build A scenario has the advantages of focusing all movements at one intersection, and thus is the recommended treatment.

It should be noted that the ICE Stage 2 operational analysis evaluated the intersection of Relocated Schoolview Way/Cypress Lake Glen Boulevard (S) at Chuluota Road as an isolated intersection. Therefore, the results mentioned in this section must be combined with the corridor-wide analysis that is presented in Section 5 of this report to provide a complete assessment of the intersection's operations.

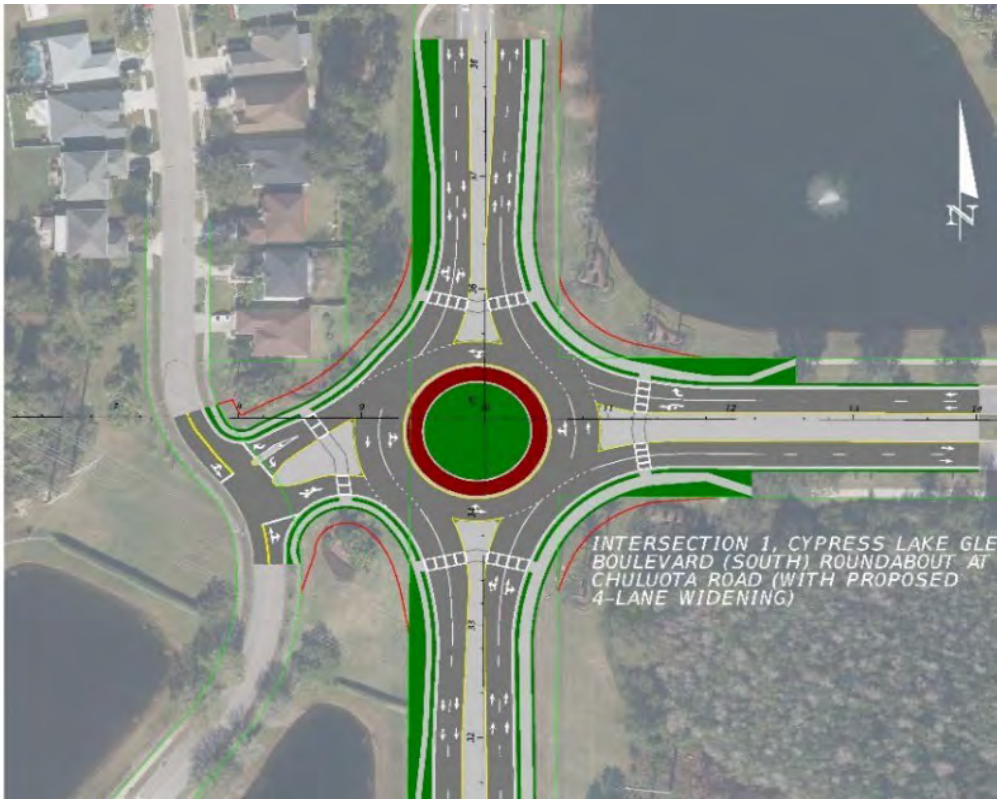
Chuluota Road at Schoolview Way Relocation/Cypress Lake Glen Boulevard S Design Year 2048 Operational Analysis Results									
	Build Configuration	Build A (Close Schoolview)				Build B (Schoolview RI-RO)			
	Peak Time	AM	PM	AM	PM	AM	PM	AM	PM
	Intersection Control Type	Traffic Signal	Traffic Signal	2x1 Roundabout	2x1 Roundabout	Traffic Signal	Traffic Signal	2x1 Roundabout	2x1 Roundabout
	Measure of Effectiveness	Delay (s/veh) (LOS)	Delay (s/veh) (LOS)	Delay (s/veh) (LOS)	Delay (s/veh) (LOS)	Delay (s/veh) (LOS)	Delay (s/veh) (LOS)	Delay (s/veh) (LOS)	Delay (s/veh) (LOS)
Approach	Eastbound	20.3 (C)	24.5 (C)	9.1 (A)	20.4 (C)	21.9 (C)	31.6 (C)	9.2 (A)	20.2 (C)
	Westbound	22.6 (C)	36.0 (D)	11.3 (B)	13.7 (B)	22.9 (C)	34.5 (C)	11.3 (B)	13.7 (B)
	Northbound	11.8 (B)	11.9 (B)	6.5 (A)	10.0 (A)	11.8 (B)	11.4 (B)	6.5 (A)	10.0 (A)
	Southbound	11.7 (B)	12.0 (B)	9.0 (A)	12.3 (B)	12.4 (B)	12.3 (B)	8.9 (A)	12.2 (B)
	Intersection	13.3 (B)	14.4 (B)	8.2 (A)	11.8 (B)	13.6 (B)	14.5 (B)	8.2 (A)	11.8 (B)

LOS Legend	
	LOS A
	LOS B
	LOS C
	LOS D
	LOS E
	LOS F

Table 4- 6 Summary of Operational Analysis Results at the Intersection of Relocated Schoolview Way/Cypress Lake Glen Boulevard (S) at Chuluota Road

The rendering of the roundabout configuration for the build scenario (four- lane widening existing section for Chuluota Road) is shown on Figure 4-10.

Figure 4- 10 Roundabout Control Option at Relocated Schoolview Way/Cypress Lake Glen Boulevard (S) Under Build Conditions (Four-Lane Widening Section on Chuluota Road



4.8 Recommendations

This section of the report documents the recommendation of intersection control strategies to advance to ICE Stage 3 at each intersection.

Lake Pickett Road at Chuluota Road

Based on the results of the operational analyses, conceptual designs, and right-of-way impacts, the following intersection control strategies were recommended to advance to ICE Stage 3 at the intersection of Lake Pickett Road at Chuluota Road:

- Traffic Signal
- Roundabout

According to the SYNCHRO analyses, the bowtie configuration results in the lowest delays in the no-build scenario, and the roundabout configuration results in the lowest delays in the build scenario. However, the roundabout configuration will require significant right-of-way impacts. It is therefore necessary to advance both configurations to ICE Stage 3 to determine the preferred intersection control strategy. The bowtie configuration was not recommended to advance to ICE Stage 3 due to excessive right-of-way acquisition, overall cost, and concerns that drivers may not be familiar with the bow tie operations.

Long Boat Lane/Cypress Lake Glen Boulevard (N) at Chuluota Road

Based on the results of the operational analyses, conceptual designs, and right-of-way impacts, the following intersection control strategies were recommended to advance to ICE Stage 3 at the intersection of Long Boat Lane/Cypress Lake Glen Boulevard (N) at Chuluota Road:

- TWSC
- Roundabout

According to the SYNCHRO analyses, the roundabout configuration results in lower delays than the TWSC configuration. However, the roundabout configuration will require significant right-of-way impacts. It is therefore necessary to advance both configurations to ICE Stage 3 to determine the preferred intersection control strategy.

Corner Lake Drive at Chuluota Road

Based on the results of the operational analyses, conceptual designs, and right-of-way impacts, the following intersection control strategies were recommended to advance to ICE Stage 3 at the intersection of Corner Lake Drive at Chuluota Road:

- TWSC
- Roundabout

According to the SYNCHRO analyses, while the TWSC configuration produces lower intersection delays than the roundabout configuration, the TWSC configuration fails in the eastbound approach. Also, the roundabout configuration will require significant right-of-way impacts. It is therefore necessary to advance both configurations to ICE Stage 3 to determine the preferred intersection control strategy.

Corner School Drive at Schoolview Way

Based on the results of the operational analyses, the AWSC, TWSC, and roundabout configurations all produced comparable operational results. However, the roundabout configuration would necessitate substantial right-of-way impacts that the AWSC and TWSC configurations would not require.

Based on the previous RCA Study recommendations, Schoolview Way will be relocated to the Cypress Lake Glen Boulevard intersection which is expected to improve overall operations along the Chuluota Road corridor by eliminating an intersection and associated potential conflicts. Consequently, existing Schoolview Way will be closed. See the next paragraph for further discussion on relocated Schoolview Way.

Relocated Schoolview Way/Cypress Lake Glen Boulevard (S) at Chuluota Road

Based on the results of the operational analyses, conceptual designs, and right-of-way impacts, the following intersection control strategies are recommended to advance to ICE Stage 3 at the intersection of Schoolview Way/Cypress Lake Glen Boulevard (S) at Chuluota Road:

- Traffic Signal
- Roundabout

According to the SYNCHRO analyses, the roundabout configuration produces lower delays than

the traffic signal configuration. However, the roundabout configuration will require significant right-of-way impacts and a nearby homeowner has expressed concern over the close proximity of the roundabout. It is therefore necessary to advance both configurations to ICE Stage 3 to determine the preferred intersection control strategy. Table 4-7 below provides a summary of the intersection control strategies recommended to advance to ICE Stage 3 for each intersection.

Intersection	Recommended Intersection Control Strategies
Lake Pickett Road at Chuluota Road	Traffic Signal Roundabout
Long Boat Lane/Cypress Lake Glen Boulevard (N) at Chuluota Road	TWSC Roundabout
Corner Lake Drive at Chuluota Road	TWSC Roundabout
Cypress Lake Glen Boulevard (S) at Chuluota Road	Traffic Signal Roundabout
Corner School Drive at Schoolview Way	Schoolview Way Is Recommended to Be Relocated to the Cypress Lake Glen Boulevard (S) In Order to Improve Chuluota Road Operations
Schoolview Way/Cypress Lake Glen Boulevard (S) at Chuluota Road	Traffic Signal Roundabout

Table 4- 7 Chuluota Road Intersection Control Strategies Recommended to Advance to ICE Stage 3

5 ICE ANALYSIS, STAGE 3

5.1 Stage 3 Methodology

The methods utilized in the Chuluota Road Stage 3 ICE analysis are described in the FDOT Manual on ICE, dated January 2024. Per page 2-18 of the FDOT Manual on ICE, the procedure of Stage 3 involves conducting a more detailed analysis of the remaining intersection control strategies in order to determine the preferred intersection control strategy. This process includes additional traffic analysis, public engagement, assessment of right-of-way need, and cost.

SimTraffic, a microsimulation software package within SYNCHRO, was used to model the Chuluota Road corridor from south of Cypress Lake Glen Boulevard (S) to north of Lake Pickett Road for the design year (2048) PM peak hour for the no-build scenario (existing two-lane configuration along Chuluota Road) and the build scenario (Four-lane widening configuration along Chuluota Road). The following three corridor traffic control alternatives were considered in the analysis:

- Existing traffic controls (ETC) at all intersections
    - Traffic signal at Lake Pickett Road, TWSC at Long Boat Lane/Cypress Lake Glen Boulevard (N), TWSC at Corner Lake Drive, and traffic signal at Cypress Lake Glen Boulevard (S)
- Roundabouts at all intersections
- Existing traffic controls (ETC) and roundabouts mixture
    - Traffic signal at Lake Pickett Road, roundabout at Long Boat Lane/Cypress Lake Glen Boulevard (N), roundabout at Corner Lake Drive, and traffic signal at Relocated Schoolview Way and Cypress Lake Glen Boulevard (S)

Due to the significant impact that calibration can have on microsimulation, it is vital to provide a summary of the calibration parameters that were used in the microsimulation analyses, which can be found in Table 5-1 below.

Left Turn Speed	15 MPH
Right Turn Speed	12 MPH
Link Speed	5 MPH above the posted speed
Seeding Duration	15 minutes
Period 1 Duration	15 minutes
Period 2 Duration	45 minutes
PHF Adjustment	Seeding and Period 1
Anti-PHF Adjustment	Period 2
Growth Factor Adjustment	None
Number of Runs per Scenario	10

Table 5- 1 SimTraffic Calibration Parameters

5.2 Existing Two-Lane (No-Build) Section

SimTraffic microsimulation analyses were performed for the existing two-lane (no-build) corridor of Chuluota Road from south of Cypress Lake Glen Boulevard (S) to north of Lake Pickett Road for the PM peak hour of the design year (2048) for the following corridor traffic control alternatives: existing traffic controls (ETC) at all intersections, roundabouts at all intersections, and existing traffic controls (ETC) and roundabouts mixture.

A summary of the SimTraffic corridor analysis results for the existing two-lane (no-build) section is shown in Figure 5-1. It lists the delay in seconds per vehicle, the arterial speed in miles per hour, and the associated arterial level of service (LOS) letter grade for both corridor travel directions and for each corridor traffic control alternative. The delay, arterial speed, and arterial LOS are color coded to illustrate better operational performance as increasingly green and worse operational performance as increasingly red.

The summary results indicate that the existing traffic controls (ETC) at all intersections alternative produces the lowest delay and the highest arterial speed in both the northbound and southbound directions compared to the other two alternatives. The results also indicate that the corridor fails in the northbound direction at a LOS E for the roundabouts at all intersections alternative.

The corridor also fails in the southbound direction at a LOS E for the existing traffic controls (ETC) at all intersections. The corridor also fails in the southbound direction at a LOS F for the roundabouts at all intersections as well as the existing traffic controls (ETC) and roundabouts mixture alternatives. Lastly, the results indicate that the northbound direction has lower delays and higher arterial speeds than the southbound direction, regardless of the corridor traffic control alternative used.

The following is a list of observations made during the no-build SimTraffic runs:

- The 95th percentile queue for the EB direction at the intersection of Lake Pickett Road at Chuluota Road was approximately 2,700 feet for the existing traffic controls (ETC) at all intersections alternative. This was likely caused by significant right turning volumes and a lack of an exclusive eastbound right turn lane.
- The 95th percentile queue for the SB direction at the intersection of Lake Pickett Road at Chuluota Road was approximately 2,100 feet for the existing traffic controls (ETC) at all intersections alternative. This was likely caused by significant through volumes and a lack of an exclusive southbound right turn lane.
- The 95th percentile queue for the SB direction at the intersection of Lake Pickett Road at Chuluota Road was approximately 1,600 feet for the roundabout at all intersections alternative. This was likely caused by significant through volumes and a lack of an exclusive southbound right turn slip lane.
- The 95th percentile queue for the SB direction at the intersection of Cypress Lake Glen Boulevard (S) at Chuluota Road was approximately 1,350 feet for the roundabout at all intersections alternative. Due to the link distance being only 1,200 feet, this caused vehicle spillback into the roundabout upstream at the intersection of Corner Lake Drive at Chuluota Road.

Chuluota Road Existing 2-Lane Section With Alternative Intersection Concepts							
	Corridor Traffic Control Type	Existing Traffic Controls (ETC)		Roundabouts at All Intersections		ETC & Roundabouts Mixture (1)	
	Measure of Effectiveness (MOE)	Delay (s/veh)	Arterial Speed (LOS)	Delay (s/veh)	Arterial Speed (LOS)	Delay (s/veh)	Arterial Speed (LOS)
Corridor Travel Direction	Northbound	66.3	34 (C)	167.9	21 (E)	98.4	27 (D)
	Southbound	239.1	19 (E)	343.8	15 (F)	268.1	16 (F)

(1) TRAFFIC SIGNALS AT LAKE PICKETT ROAD AND CYPRESS LAKE GLEN BLVD (SOUTH), ROUNDABOUTS AT LONG BOAT LANE AND AT CORNER LAKE DRIVE

LOS Legend	
	LOS A
	LOS B
	LOS C
	LOS D
	LOS E
	LOS F

Table 5- 2 Summary of Chuluota Road SimTraffic Corridor Analysis Results for the Existing Two-Lane (No-Build) Section

5.3 Four-Lane Widening (Build) Section

SimTraffic microsimulation analyses were performed for the four-lane widening (build) corridor of Chuluota Road from south of Cypress Lake Glen Boulevard (S) to north of Lake Pickett Road for the PM peak hour of the design year (2048) for the following corridor traffic control alternatives: existing traffic controls (ETC) at all intersections, roundabouts at all intersections, and existing traffic controls (ETC) and roundabouts mixture.

A summary of the SimTraffic corridor analysis results for the four-lane widening (build) section is shown in Figure 5-2. It lists the delay in seconds per vehicle, the arterial speed in miles per hour, and the associated arterial level of service (LOS) letter grade for both corridor travel directions and for each corridor traffic control alternative. The delay, arterial speed, and arterial LOS are color coded to illustrate better operational performance as increasingly green and worse operational performance as increasingly red.

The summary results indicate that the existing traffic controls (ETC) at all intersections alternative produces the lowest delay and the highest arterial speed in the northbound direction compared to the two other alternatives, and the existing traffic controls (ETC) at all intersections alternative produces similar delay and arterial speed when compared to the roundabouts at all intersections alternative. The results also indicate that the corridor performs at LOS C or better in both directions, regardless of the traffic control alternative used. Lastly, the results indicate that the delay and arterial speeds are comparable between the northbound and southbound directions for all alternatives except the roundabouts at all intersections alternative, where the southbound direction produces lower delay and higher arterial speed than the northbound direction.

The following is a list of observations made during the build SimTraffic runs:

- The 95th percentile queue for the EB direction at the intersection of Lake Pickett Road at Chuluota Road was approximately 5,700 feet for the roundabouts at all intersections alternative. This was likely caused by significant eastbound left turning volumes and significant stop delays due to yielding to two circulating lanes of heavy traffic volumes traveling southbound through the roundabout.

Chuluota Road 4-Lane Widening Section With Alternative Intersection Concepts							
	Corridor Traffic Control Type	Existing Traffic Controls (ETC)		Roundabouts at All Intersections		ETC & Roundabouts Mixture (1)	
	Measure of Effectiveness (MOE)	Delay (s/veh)	Arterial Speed (LOS)	Delay (s/veh)	Arterial Speed (LOS)	Delay (s/veh)	Arterial Speed (LOS)
Corridor Travel Direction	Northbound	52.5	35 (B)	86.4	28 (C)	71.9	31 (C)
	Southbound	57.0	35 (B)	50.3	35 (B)	77.3	31 (C)

(1) TRAFFIC SIGNALS AT LAKE PICKETT ROAD AND CYPRESS LAKE GLEN BLVD (SOUTH), ROUNDABOUTS AT LONG BOAT LANE AND AT CORNER LAKE DRIVE

LOS Legend	
	LOS A
	LOS B
	LOS C
	LOS D
	LOS E
	LOS F

Table 5- 3 Summary of Chuluota Road SimTraffic Corridor Analysis Results for the Four-lane Widening (Build) Section

5.4 Recommendations

This section documents the preferred intersection control strategy for each intersection, as well as the preferred typical section for Chuluota Road. Table 5-2 on the following page summarizes the preferred intersection control strategies for each intersection as well as the preferred typical section for Chuluota Road.

Lake Pickett Road at Chuluota Road

Based on the results of the detailed traffic analyses, right-of-way impacts, and public input, it was determined that the preferred intersection control strategy at the intersection of Lake Pickett Road at Chuluota Road is the traffic signal configuration.

Long Boat Lane/Cypress Lake Glen Boulevard (N) at Chuluota Road

While the Stage 3 results indicated that the existing intersection controls provided slightly better operations along with no right-of-way impacts, a roundabout did receive support from attendees at the second public meeting since this option would likely slow travel speeds along Chuluota Road as well as provide for better access opportunities to/from the sideroads. Accordingly, the roundabout is the preferred alternative concept at this location.

Corner Lake Drive at Chuluota Road

Based on the results of the detailed traffic analyses, right-of-way impacts, and public input, it was determined that the preferred intersection control strategy at the intersection of Corner Lake Drive

at Chuluota Road is the TWSC configuration.

Relocated Schoolview Way/Cypress Lake Glen Boulevard (S) at Chuluota Road

Based on the results of the detailed traffic analyses, right-of-way impacts, and public input, it was determined that the preferred intersection control strategy at the intersection of Relocated Schoolview Way/Cypress Lake Glen Boulevard (S) is the traffic signal configuration.

Chuluota Road Typical Section

Based on the results of the detailed traffic analyses, right-of-way impacts, and public input, the preferred typical section for the study corridor of Chuluota Road from south of Cypress Lake Glen Boulevard (S) to north of Lake Pickett Road is the four-lane widening (build) section. Based on the SimTraffic, it is unlikely that the existing two-lane (no-build) section can support the design year (2048) forecasted traffic volumes.

Intersection	Recommended Intersection Control Strategies
Lake Pickett Road at Chuluota Road	Traffic Signal
Long Boat Lane/Cypress Lake Glen Boulevard (S) at Chuluota Road	Roundabout
Corner Lake Drive at Chuluota Road	TWSC
Cypress Lake Glen Boulevard (S) at Chuluota Road	Traffic Signal
Preferred Typical Section on Chuluota Road	Four-Lane Widening (Build) Section

Table 5- 4 Chuluota Road Preferred Intersection Control Strategies and Typical Section

6 DRAINAGE AND COST ANALYSES

This section summarizes the needed drainage improvements required for the ICE alternatives. Also included in this section are cost analyses of the ICE alternatives.

6.1 Drainage Analyses

A supplemental drainage analysis was conducted to determine potential changes to the proposed Chuluota Road drainage system (as described in the RCA Pond Siting Report (PSR)) that would result if the preferred ICE alternatives are implemented (see Appendix A for the ICE Alternatives).

The roadway project limits have been divided into nine drainage sub-basins. The water quality and attenuation for two of the sub-basins will be provided in existing runoff attenuation systems, while seven of the sub-basins will be provided for in proposed pond sites or expansions of existing ponds.

This drainage section evaluated the adequacy of the pond sites to accommodate the ICE alternatives using a volumetric analysis, which accounts for the water quality treatment and water quantity attenuation for runoff. Since the previous drainage analysis relies on preliminary data, pond sizes and configurations may change during the final design as refinements to the roadway design are made, and detailed topographic survey is obtained.

This report is focused only on potential changes to the RCA stormwater ponds and floodplain compensation ponds if the preferred ICE alternatives are authorized and implemented. All other ramifications such as impacts to wetlands, listed species impacts, contamination, or other environmental impacts are outside the scope of this study.

6.1.1 Project Description

The Chuluota Road project area is located within the Big Econlockhatchee River Basin within the jurisdiction of the St. Johns River Water Management District (SJRWMD). The Econlockhatchee River System is considered an Outstanding Florida Waters (OFW). Refer to **Appendix A** for the project location map and USGS quadrangle map.

Orange County is proposing to widen Chuluota Road from East Colonial Drive to Lake Pickett Road to improve roadway capacity. The total project length is approximately 1.93 miles of roadway. The improvements include the widening of Chuluota Road with the construction of four eleven-foot travel lanes, a 10-14 foot multiuse path/trail, and one 6-foot sidewalk. The lengths of existing turn lanes are anticipated to remain. The roadway corridor spans a mix of commercial, residential, institutional, and pastureland uses.

The project vertical datum is the North American Vertical Datum of 1988 (NAVD88), and all elevations contained in this document and the plans reference this datum unless otherwise noted. Conversion from NGVD29 to NAVD88 is -1.1 feet.

In this ICE report, two drainage alternatives have been developed with first option consisting of roundabouts at all intersections as noted below:

- Two-lane roundabout at Cypress Lake Glen Boulevard (South)
- Two-lane roundabout at Corner Lake Drive
- Two-lane roundabout at Long Boat Lane / Cypress Lake Glen Boulevard (North)
- Two-lane roundabout at Lake Pickett Road

The second drainage alternative would include the same two-lane roundabouts at Cypress Lake Glen Boulevard, Corner Lake Drive, and Long Boat Lane / Cypress Lake Glen Boulevard (North). However, instead of a roundabout at Lake Pickett Road, the bow tie configuration for Lake Pickett Road would be considered along with the three roundabouts to the south.

6.1.2 Data Collection, Design Criteria, and Existing/Proposed Conditions

The RCA PSR includes the background data used for this analysis. For the ICE drainage analysis, the ICE Conceptual Plans in Appendix A were used to assess changes in stormwater attenuation, water quality, and floodplain compensation requirements which would result if the ICE alternatives are implemented. The RCA PSR includes the design criteria used for this analysis.

The existing and proposed basins are described in the RCA PCR. For this ICE analysis, it is assumed the proposed pavement associated with intersection improvements adjacent to these basins will drain to each adjacent basin in final design conditions.

6.1.3 Floodplain Information

Based on the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRM's) dated September 25, 2009, portions of the study area are located within Zone A (100 Year) floodplain. There are no Zone AE floodplains within the study area. The Zone A floodplains occur:

- East of Chuluota Road across from Corner Lake Middle School. This Zone A floodplain is isolated.
- North and South of Cypress Lake Glen Boulevard and across Chuluota Road at the intersection. This Zone A floodplain ultimately drains to Lake Pickett.

Appendix F contains depictions of the floodplains in the study area. There are no floodways within the project limits. There will be floodplain impacts within the project corridor that will be mitigated by providing compensatory volume in proposed floodplain compensation ponds.

The Zone A floodplains have no designated elevation, though the floodplain limits within Chuluota Road for the Zone A floodplain north of Corner Lake Drive are associated with elevations varying between 69.8 and 70.8 ft NAVD88 as estimated from LiDAR data. Therefore, potentially raising the road profile to elevation 70.0 ft NAVD88 and widening the road would constitute floodplain fill. Note that no survey is available nor is a proposed roadway profile, so the amount of floodplain compensation required is preliminary.

Under the non-roundabout alternative, there is 0.03 ac-ft of floodplain impact between STA 22+00 and 26+00, and there is 1.87 ac-ft of floodplain impacts between 73+00 and 90+00. With the ICE alternatives, there is an estimated total of 2.13 ac-ft of floodplain impacts between STA 73+00 and 90+00. The same estimated floodplain impact volume (2.13 ac-ft) is anticipated for each ICE alternative.

Net Fill Summary				
Station to Station			Updated PSR Volume (Ac-Ft)	ICE Alternatives Volume (Ac-Ft)
22+00.00	TO	26+00.00	0.03	0.03
73+00.00	TO	90+00.00	1.87	2.13
Total			1.90	2.16

Table 6- 1 Floodplain Compensation Requirements for the ICE Alternatives

Calculations supporting the floodplain compensatory volume required and those provided are included in Appendix C. A floodplain compensatory pond (FC-1) is proposed across from Corner Lake Middle School. No changes to the size of this floodplain compensatory pond will be necessary with roundabouts. A second floodplain compensatory pond (FC-2) is proposed adjacent to wetlands south of Lake Pickett Road and east of Chuluota Road. The footprint of this pond without roundabouts was 1.87 acres. **With the ICE Alternatives, the size of FC-2 will need to be increased to 2.13 acres.**

6.1.4 Stormwater Ponds

In the PCA PSR, dated October 2022, the proposed four-lane widening would be accommodated by recommended Pond 3C to provide attenuation and water quality for Drainage Basins 1, 2, and 3, and for recommended Pond 4C to provide attenuation and water quality for Drainage Basin 4. See Appendix D for the following pond sizing calculations.

Pond 3C - The parcel size for Pond 3C is 40.22 acres and was previously owned by Cross Life Church. The pond footprint with tie-downs is approximately 7.14 acres for the non-roundabout option and 8.17 acres for the ICE alternatives. The proposed pond site is along the west side of Chuluota Road. The outfall from the proposed pond is conveyed west to the existing wetland and eventually to Corner Lake. There are no wetlands within the proposed footprint of this pond site location.

The seasonal high-water table is 67.0 ft NAVD88 based on a combination of LiDAR and wetland delineation. A wet detention pond is proposed at this location due to the high-water table. Preliminary pond sizing calculations indicate that Drainage Basins 1, 2, and 3 require a total of 5.56 ac-ft of treatment and attenuation volume to accommodate the proposed roadway configuration and pond footprint without roundabouts.

With the ICE alternatives, 6.10 ac-ft of treatment and attenuation volume is required. Pond sizing calculations were also completed to provide the required volume at one foot below the inside maintenance berm. The ability to convey runoff from Basin 1 north may require Chuluota Road to be raised in the vicinity of the SR50 intersection. Alternatively, a portion of Basin 1 can continue to drain to the FDOT drainage systems on SR50 such that peak discharges into FDOT right-of-way is maintained or reduced, and the remainder of Basin 1 can be conveyed to Pond 3C.

Pond 3C assumes that the crown of Chuluota Road can be raised to elevation 70 ft NAVD88 in the vicinity of Pond 3C. If the Chuluota Road profile can be raised, then the footprint for Pond 3C can be reduced in size, although the floodplain compensation requirements may need to increase in size.

Pond 4C - The parcel size for Pond 4C is 2.046 acres and is located on the northeast corner of Chuluota Road and Lake Pickett Road, and the estimated pond footprint is approximately 1.22 acres which can accommodate either the roundabout option at Lake Pickett Road or the bowtie option. The pond footprint is approximately the same size without the roundabouts or bowties.

This parcel will require acquisition of a residential parcel to accommodate the future widening of Chuluota Road. This parcel is recommended to be joined with a portion of the adjacent parcel to the east which is owned by the County (old CR 15), to maximize the overall size of Pond 4C, while leaving an adequate remainder for the proposed East Orange Trail.

The outfall from the proposed pond is conveyed south to Lake Picket Road. There are no wetlands in this pond site location. The measured seasonal high-water table is 4.9 feet below existing ground. Pond 4C is proposed as a wet detention pond. Preliminary pond sizing calculations indicate that Basin 4 requires a total of 1.58 ac-ft of treatment and attenuation volume to accommodate the proposed roadway configuration and pond footprint. Pond sizing calculations were also completed to provide the required volume at one foot below the inside maintenance berm.

6.1.5 Drainage Results and Conclusions

Pond 3C and 4C are the recommended stormwater treatment ponds for the Chuluota Road widening improvements, with Drainage Basins 1, 2, and 3 assigned to Pond 3C. This pond site is expected to require a full acquisition of the parcel previously owned by Cross Life Church. The parcel size is listed at 40.22 acres and the proposed pond 3C footprint is approximately 8.17 acres with the remainder of the parcel being mostly wetlands.

Pond 4C has been assigned for Drainage Basin 4 which is located at the northeast corner of Chuluota Road and Lake Pickett Road and will require acquisition to accommodate the future widening of Chuluota Road as well as stormwater and water quality needs for Chuluota Road Basin 4. The parcel size is listed at 2.046 acres, and the proposed Pond 4C footprint is 1.22 acres. This parcel is recommended to be joined with a portion of the adjacent parcel to the east which is owned by the County (old CR 15), to maximize the overall size of Pond 4C, while leaving an adequate remainder for the proposed East Orange Trail.

A floodplain compensatory pond (FC-1) is proposed across from Corner Lake Middle School. No changes to the size of this floodplain compensatory pond will be necessary with roundabouts. A second floodplain compensatory pond (FC-2) is proposed adjacent to wetlands south of Lake Pickett Road and east of Chuluota Road. The footprint of this pond without the ICE alternatives is 1.87 acres. With the ICE alternatives, FC-2 will need to be increased to 2.13 acres. Note that no survey is available nor is a proposed roadway profile, so the amount of floodplain compensation required is preliminary.

For Basins 1, 2, and 3, Pond 3C is recommended due to the lower cost estimation compared to the other options. Additionally, the pond may be sited such that there are no wetland impacts. The pond sizing assumes that Chuluota Road can be raised to at least elevation 70 NAVD88. If it can be raised higher, the Pond 3C footprint can likely be reduced, though the floodplain compensation pond FC-2 will need to increase in size.

For Basin 4, the preferred pond site is Pond 4C due to its low footprint and potential lower cost, which would be sited on a residential parcel in the NE corner of the Chuluota Road/Lake Pickett Road intersection. This parcel is recommended to be joined with a portion of the parcel to the east which is owned by the County (old CR 15), to maximize the overall size of Pond 4C, while leaving an adequate remainder for the proposed East Orange Trail.

A summary of the stormwater and floodplain compensation impacts resulting from the potential implementation of the ICE alternatives is shown on Table 2 on the next page. If all of the ICE alternatives are implemented, an additional 1.04 acres of right-of-way would be needed for the stormwater ponds (Ponds 3C and 4C) and an additional 0.27 acres of floodplain compensation would be needed as well, which would likely be accommodated by FC-2. In addition to the RCA right-of-way requirements, another 1.31 acres would be needed if all ICE alternatives were implemented.

Configuration	Pond 3C		Pond 4C*		FC1**		FC2		Total ROW needed (ac) ***
	Pond ROW (ac)	Pond Capacity (ac-ft)	Pond ROW (ac)	Pond Capacity (ac-ft)	Pond ROW (ac)	Pond Capacity (ac-ft)	Pond ROW (ac)	Pond Capacity (ac-ft)	
PSR Submittal	7.14	5.56	1.22	1.58	0.05	0.03	1.93	1.87	10.34
Full ICE Alternatives	8.18	6.11					2.2	2.13	11.65
ICE Alternative at Cypress Lake Glen Blvd (S)/Relocated Schoolview Way	7.41	5.43					1.93	1.87	10.61
ICE Alternative at Corner Lake Dr	7.9	5.87					1.93	1.87	11.1
ICE Alternative at Long Boat Ln/Cypress Lake Glen Blvd (N)	7.68	5.68					2.2	2.13	11.15
ICE Alternative at Lake Pickett Rd *	7.14	5.56					1.93	1.87	10.34

* All Lake Pickett alternatives; PSR submittal, round-a-bout, and bow-tie configuration result in similar Pond 4C requirements
** FC1 is not impacted by the ICE alternatives
*** ROW is calculated as the estimated pond footprint for an idealized square pond and does not include access or other drainage considerations

Table 6- 2 Stormwater and Floodplain Compensation Requirements for the ICE Alternatives

6.2 Cost Evaluations of the ICE Alternatives

An evaluation of alternatives was developed for four scenarios as illustrated in Table 6-3 below. ***Note, all construction cost estimate updated with current unit cost prices.*** The column labeled as *Recommended Four-Lane Widening with Existing* Controls reflects the proposed four-lane widening improvements as developed by the RCA Study. For this scenario, the existing intersection controls consisting of signals and stop signs have been applied.

The next column labeled as *Four-Lane Widening with Roundabout at Long Boat Lane, ETC at Other Intersections* provides a similar analysis, except a roundabout has been applied at the Long Boat Lane/Cypress Lake Glen Boulevard intersection with existing traffic control measures at the remaining intersections. The next column labeled *Four-Lane Widening with Roundabouts at All Intersections* provides a similar analysis, except roundabouts have been applied at all intersections instead of the current intersection controls. The last scenario labeled as *Four-Lane Widening with a Bow Tie at Lake Picket Road and Roundabouts at Other Intersections* reflects roundabouts at all intersections except Lake Pickett Road where a Bow-Tie configuration has been applied instead of the roundabout option.

EVALUATION CRITERIA	Four-Lane Widening with Existing Intersection Controls (ETC)	Four-Lane Widening with Roundabout at Long Boat Lane, ETC at Other Intersections	Four-Lane Widening with Roundabouts at All Intersections	Recommended Four-Lane Widening with Bow Tie at Lake Pickett Road and Roundabouts at Other Intersections
RELOCATIONS				
Number of Residential Acquisitions	1	1	1	1
Number of Business Acquisitions	None	None	None	None
Number of Parcels Impacted	10	14	39	40
Social, Natural and Physical Impacts				
Social and Neighborhood	Low	Low	Medium	Medium
Archeological/Historic Sites	None	None	None	None
Threatened and Endangered Species	No Adverse Impacts	No Adverse Impacts	No Adverse Impacts	No Adverse Impacts
Wetland Impacts (Acres)	Low	Low	Low	Low
RHPZ Uplands Impacts (Acres)	Low	Low	Low	Low
Floodplain Impacts (Acre-Feet)	1.9	2.16	2.16	2.16
Potential High or Medium Ranked Contamination Sites	None	None	None	None
Estimated Costs (Present Day)				
Estimated Construction Costs	$ 40,968,339	$ 44,102,180	$ 48,811,549	$ 48,977,856
Estimated Design/Adm Costs (12%)	$ 4,916,201	$ 5,292,262	$ 5,857,386	$ 5,877,343
Preliminary Estimated CEI Costs (15%)	$ 6,145,251	$ 6,615,327	$ 7,321,732	$ 7,346,678
Preliminary Estimated Right-of-Way Impacts	11.864	12.453	17.466	19.115
Preliminary Estimated Right-of-Way Costs	$ 2,196,355	$ 2,305,449	$ 3,233,481	$ 3,538,760
Mitigation/RHPZ	$ 103,000	$ 103,000	$ 103,000	$ 103,000
Subtotal	$ 54,329,146	$ 58,418,218	$ 65,327,148	$ 65,843,637
Contingency (20%)	$ 10,865,829	$ 11,683,644	$ 13,065,430	$ 13,168,727
TOTAL PRELIMINARY ESTIMATED PROJECT COSTS	***$ 65,194,975***	***$ 70,101,862***	***$ 78,392,578***	***$ 79,012,364***

Table 6-3 Alternatives Evaluation Matrix

6.3 Recommendations

The above analyses indicate the following conclusions:

- The existing two-lane Chuluota Road cannot accommodate anticipated future traffic demands. Even with the use of innovative intersection concepts such roundabouts or bow tie intersection concepts, the existing two-lane section of Chuluota Road is expected to reach capacity well before the Design Year, and continue to experience high congestion, low levels of service, and lengthy delays. Furthermore, the existing two-lane roadway will not meet other goals of the project such as providing multi-modal accommodations for pedestrians and bicyclists through the use of sidewalks and a multi-use path throughout the corridor.

- To meet forecasted traffic demands, Chuluota Road is recommended to be widened to four lanes.

- The ICE Study indicated that the existing traffic controls consisting of signals and stop signs along Chuluota Road generally provide better Level of Service and less delay than the use of innovative intersection concepts such roundabouts or bow tie intersection concepts. However, when other factors are considered such as measures to reduce operating speeds, a roundabout at Long Boat Lane and Cypress Lake Glen Boulevard (North) may be considered as a viable option at this location since it would slow motorists on Chuluota Road while providing improved access opportunities for motorists on the side roads. Attendees at the public meetings frequently mentioned these concerns and those in attendance at the second public meeting voted to provide a roundabout at this location.

7 PREFERRED ALTERNATIVE

Based on the results of the detailed traffic analyses including an ICE evaluation, right-of-way impacts, and public input, the preferred typical section for the study corridor of Chuluota Road from south of Cypress Lake Glen Boulevard (S) to north of Lake Pickett Road is the four-lane widening (build) section using existing controls consisting of signals and stop signs except at Long Boat Lane and Cypress Lake Glen Boulevard (North) where a roundabout should be considered. It is clear from the SimTraffic results that the existing two-lane (no-build) section cannot support the forecasted design year (2048) traffic volumes.

7.1 Design Traffic Volumes

The Chuluota Road Roadway Conceptual Analysis Design Traffic Technical Memorandum (DTTM) conducted in the RCA Study documents the existing traffic conditions and the analysis of the No-Build and Build scenarios. With the proposed four-lane widening improvements, all roadway segments and intersections will operate at an acceptable level of service in the design year of 2048 except for the SR 50 and also, the Long Boat Lane/Cypress Lake Glen Boulevard intersections, the latter only during certain hours of the day. Without the proposed widening (build scenario), portions of Chuluota Road will reach capacity by opening year, and all of Chuluota Road will be at LOS F by the year 2038.

7.2 Typical Sections

The proposed typical section as developed during the RCA Study is shown on Figure 7-1. The roadway design elements incorporated into the preferred alternative include the following:

- Four 11-foot travel lanes
- A six-foot sidewalk located on one side of the roadway and 10-foot to 14-foot path on the other side
- A 22-foot raised median with Type E curb and gutter to include street trees

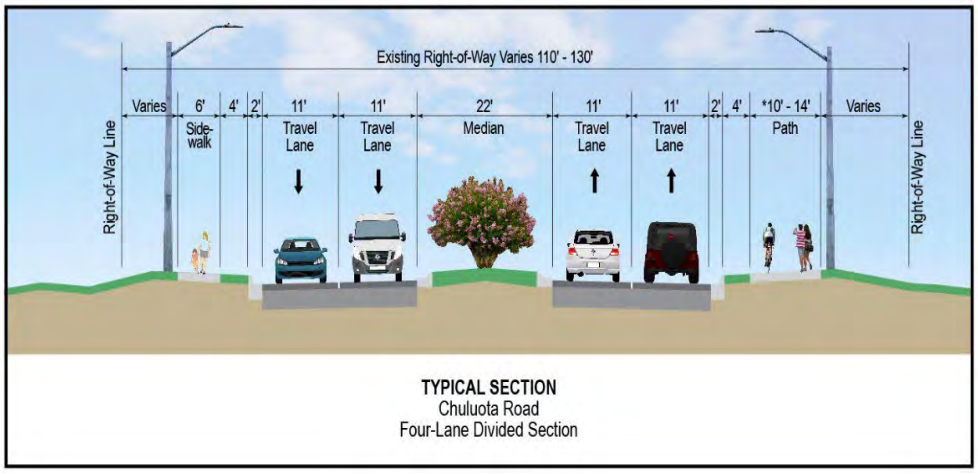


Figure 7- 1 Chuluota Road Typical Section

- Type F curb and gutter along the outside lanes with four-foot utility strips between the back of curb and the sidewalk or path
- A grass strip between the path or sidewalk with the right-of-way line of varying width
- A proposed right-of-way width of 120 feet (note, much of the existing right-of-way is already 120-feet wide thus minimizing the right-of-way impacts for this project
- A roundabout at Long Boat Lane and Cypress Lake Glen Boulevard (North).

8 PUBLIC INVOLVEMENT

8.1 Public Involvement Plan

In 2021, a Public Involvement Plan (PIP) was created for the Chuluota Road public involvement approach and activities. The PIP identifies key local and state agency, elected, and appointed officials; and property owners and tenants for the study area, in addition to outlining public outreach strategies. This PIP also governed the public involvement activities throughout the ICE Study.

Specific strategies established in the PIP included project newsletter mailouts, contacts with the media, community and small group stakeholder meetings, two community public meetings, and presentations to the Orange County Board of County Commissioners.

All public involvement documents conducted thus far for the ICE Study can be found in Appendix G.

8.2 Public Information Distribution

Public information for this project were dispersed through the following methods:

- Newsletters were mailed to property owners, tenants, and other interested persons. Spanish version of the newsletters were also available to the public on request.
- Public meeting advertisements (both in English as well as Spanish) were placed in *The Orlando Sentinel*.
- A project website has been created which contains information such as the project study area map, project schedule, meeting notices, newsletters, and other study documents.
- During the ICE Study, a community survey was undertaken with the following results (see following section).

8.3 Community Survey

In addition to an alternatives workshop held on September 16, 2024, Orange County conducted a survey to better understand the community's priorities and preferences. The survey included seven questions and was mailed to property owners along with the notification for the recommendations meeting. It was also placed on the project website. A total of 45 surveys were returned, mostly online. The results are summarized below.

From the survey, several conclusions can be drawn. More than 60% of the respondents supported the proposed widening of Chuluota Road. In addition, 59% of the respondents said relieving congestion and keeping traffic moving was their top priority.

Traffic signals were the preferred control option at most of the intersections along Chuluota Road, though at Corner Lake Drive, a roundabout did receive more support by respondents rather than the use of traffic signals. Note, the survey also included stop signs as a possible control option, though this option was not as favored as signals or roundabouts.

The Long Boat Lane/Cypress Glen Boulevard (North) was the highest ranked intersection by 43%

of the respondents as having the most urgent need for improvements. Lake Pickett Road came in second with 32% of the respondents indicating the need for improvements.

The Corner School Drive/Schoolview Way was perceived as being highly congested. The RCA has proposed the elimination/closure of existing Schoolview Way and relocating this roadway further north to provide a new, west connection at the signalized Cypress Lake Glen Boulevard (South) intersection. This change is expected to improve the overall operations along both Corner School Drive and also, Chuluota Road, by removing the existing Schoolview Way intersection.

The Long Boat Lane/Cypress Glen Boulevard (North) intersection received the highest concerns by respondents about driving through this intersection as being unsafe (11%) or highly unsafe (32%). The proposed roundabout at this location is expected to slow speeds and thereby improve the safety of this intersection.

The Lake Pickett intersection received also received high concerns by respondents regarding pedestrian and bicycle crossings at this intersection as being unsafe (11%) or highly unsafe (27%). Additional information regarding the survey responses are located in Appendix G.

8.4 Public Meetings

The first ICE community public meeting was held on September 16, 2024 with the second meeting being held on November 20, 2024. The meeting formats consisted of an open house that allowed for informal discussions between the project team and the public, followed by a presentation and an open question and answer forum. Meeting summaries from each event including supporting materials are located in Appendix G.

8.5 Orange County Board of County Commissioners (BCC)

The BCC Public Hearing is currently scheduled for February 25, 2025.

9 CONCLUSIONS AND RECOMMENDATIONS

The objective of the Chuluota Road RCA is to develop and evaluate alternatives for improvements to Chuluota Road from SR 50 to Lake Pickett Road in order to meet current and future transportation, multi-modal, and drainage needs along the corridor. As an addendum to the RCA, an ICE Study was prepared to further investigate various intersection control alternatives to determine if these options could better serve the Chuluota Road corridor under No Build and Build conditions.

The ICE Study confirmed that four-lane widening improvements are needed to address the forecasted traffic volumes. Furthermore, the proposed urban widening of Chuluota Road will also include various multi-modal improvements such as sidewalks and a ped/bike path as well as improving drainage treatment through the use of ponds instead of open ditches.

The ICE Study found that the existing traffic controls consisting of signals and stop signs along Chuluota Road generally provide better Level of Service and less delay than the use of innovative intersection concepts such roundabouts or bow tie intersection concepts. However, when other factors are considered such as measures to reduce operating speeds, a roundabout at Long Boat Lane and Cypress Lake Glen Boulevard (North) can be considered as a viable option at this location since it would slow motorists on Chuluota Road while providing improved access opportunities for motorists on the side roads. Attendees at the public meetings frequently mentioned these concerns and those in attendance at the second public meeting voted to provide a roundabout at this location.

The preferred widening improvements as identified in the RCA Study and confirmed during the course of this ICE Study will serve as the basis for the subsequent design of the roadway improvements. The development of the proposed improvements incorporated the insights from planning, engineering, and the public to refine the alternatives and to ultimately advance a preferred alternative. It is recommended that the alternative as detailed in Section 7 of this report be advanced to the design phase.

APPENDIX A

CHULUOTA ROAD CONCEPT PLANS WITH

RECOMMENDED ICE ALTERNATIVES

DRAFT

50

CORNER LAKES PLAZA

1"=50'

EXIST ROW

200'

CHULUOTA RD. ℄

N17°29'40"E L=354.00'

68.98'

100'

MATCHLINE STA 12+00

87.01'

E. River Falcon Way

FUTURE SR 50 BY FDOT

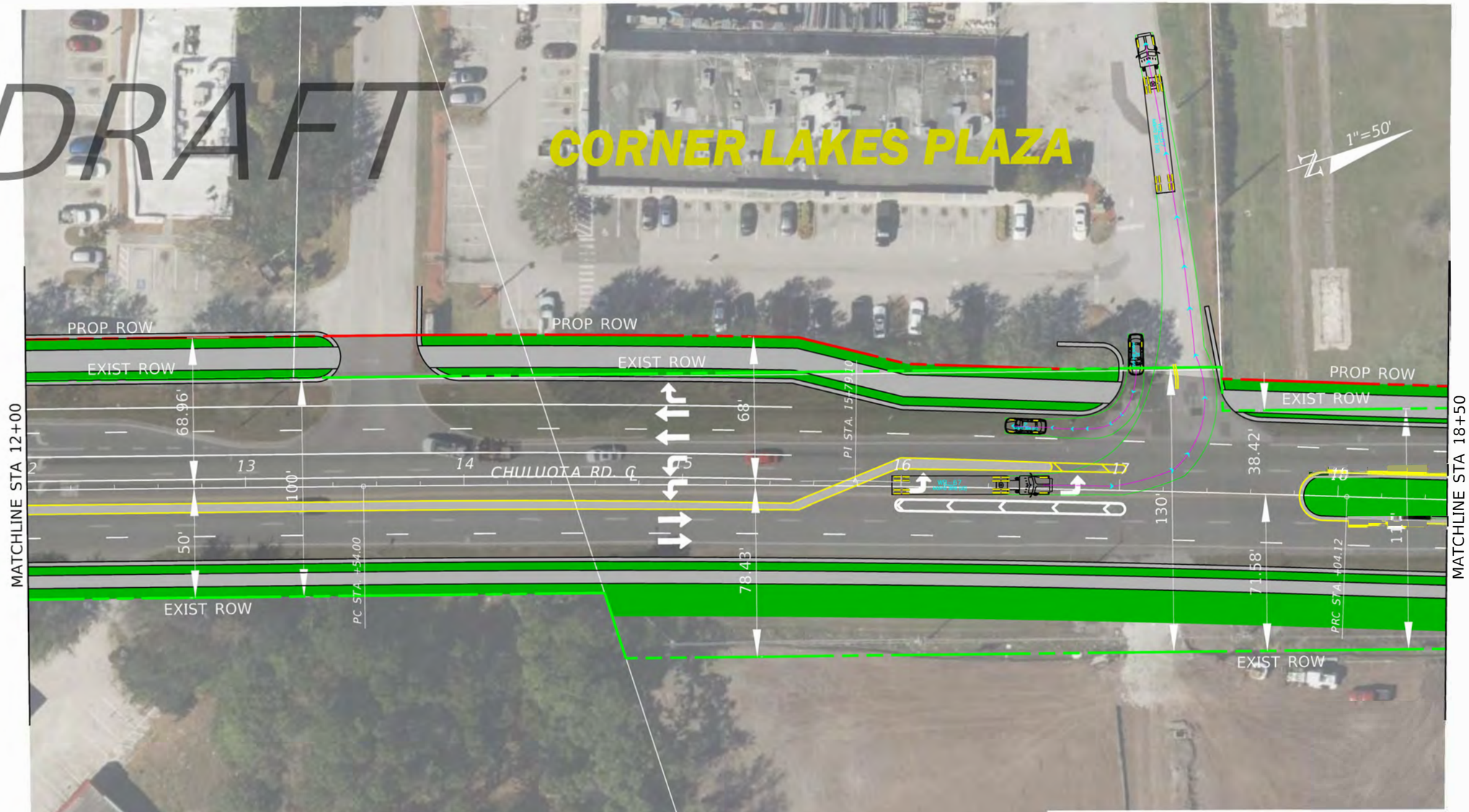
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DRAFT

CORNER LAKES PLAZA



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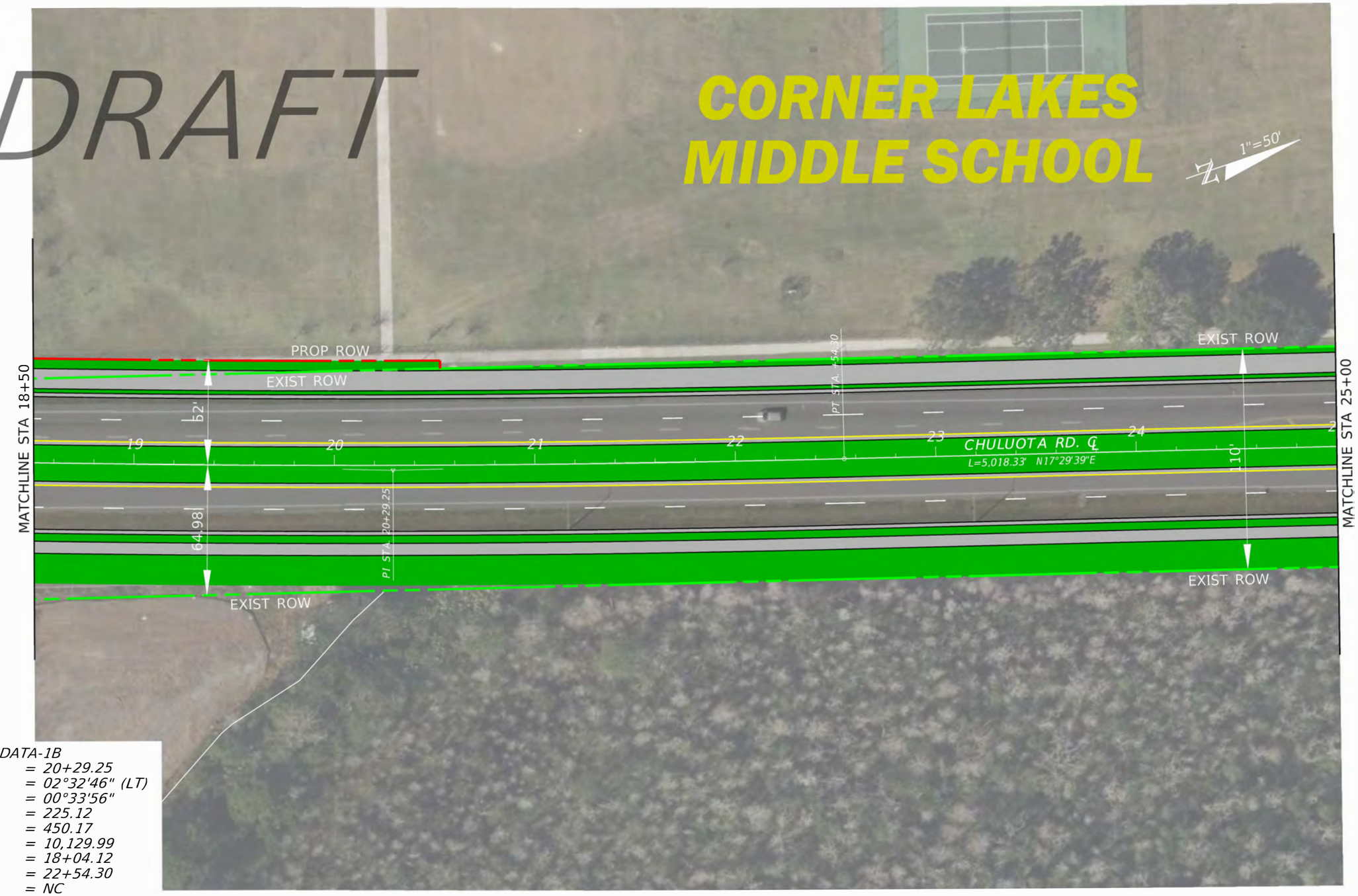
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CORNER LAKES MIDDLE SCHOOL

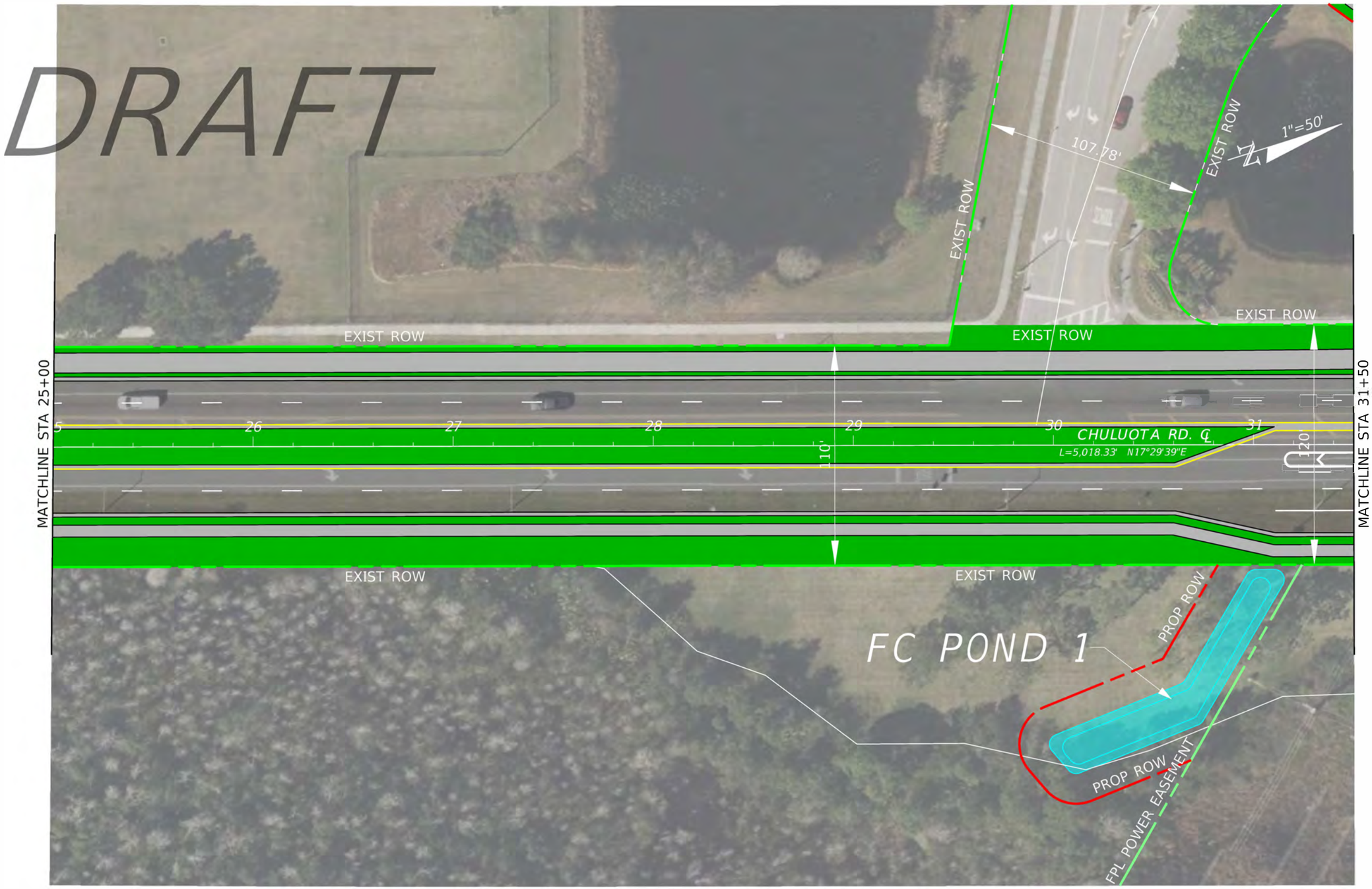


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L = 450.17
R = 10,129.99
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PT STA. = 22+54.30
e = NC
DESIGN SPEED = 40MPH

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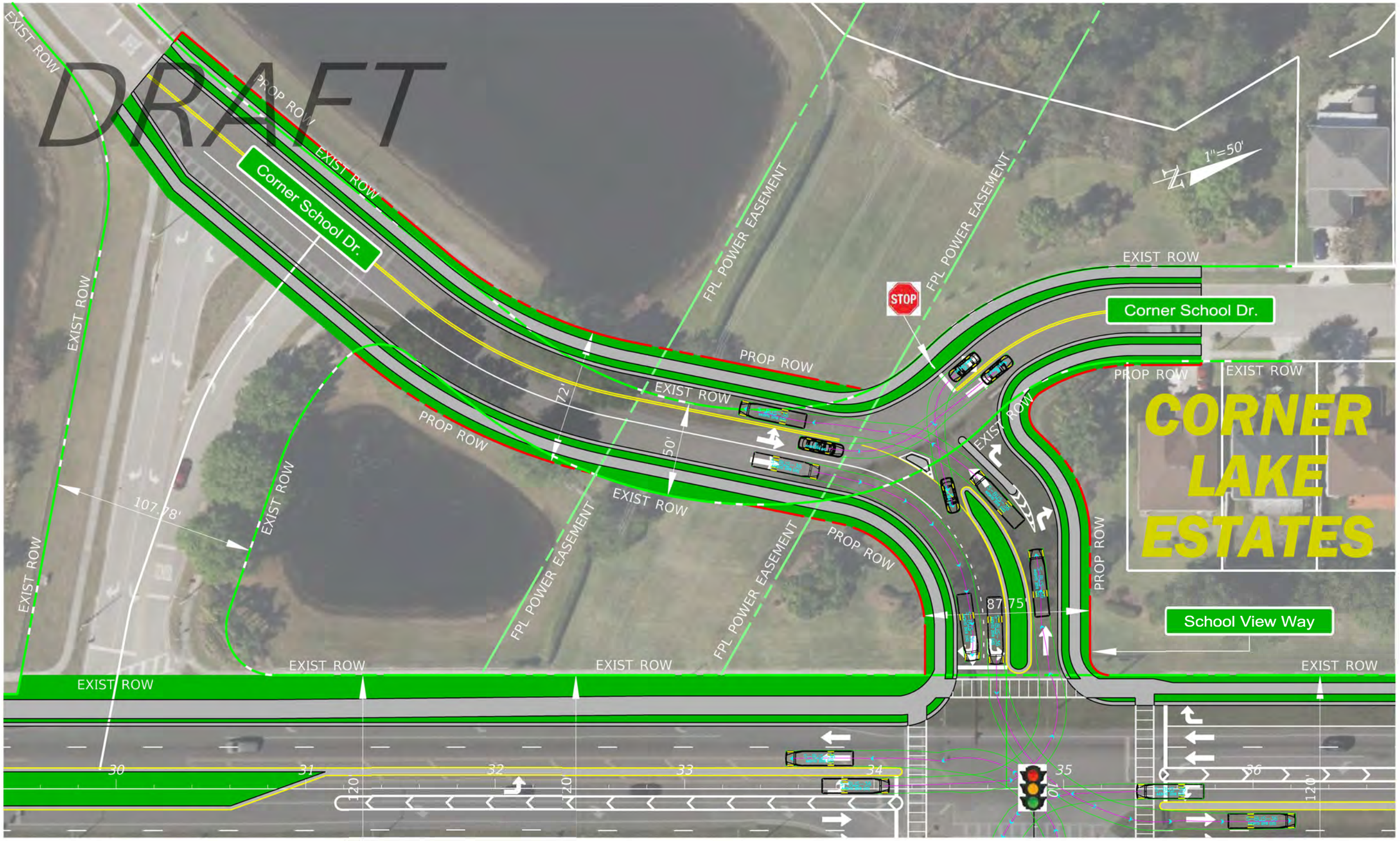
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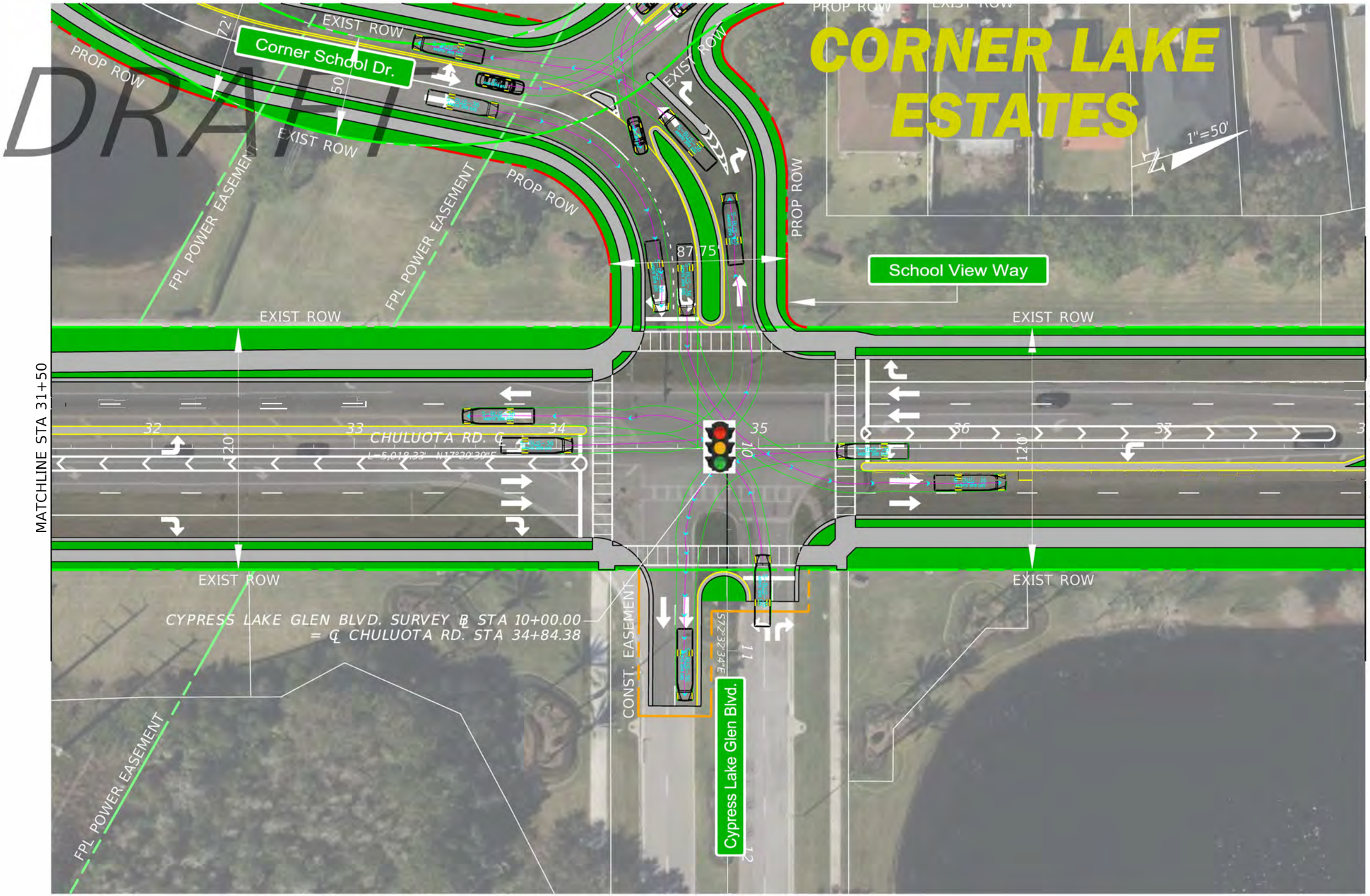
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CORNER LAKE ESTATES

1"=50'

EXIST ROW

MATCHLINE STA 38+00

MATCHLINE STA 44+50

38 39 40 41 42 43 44

120'

CHULUOTA RD. ℄

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EXIST ROW

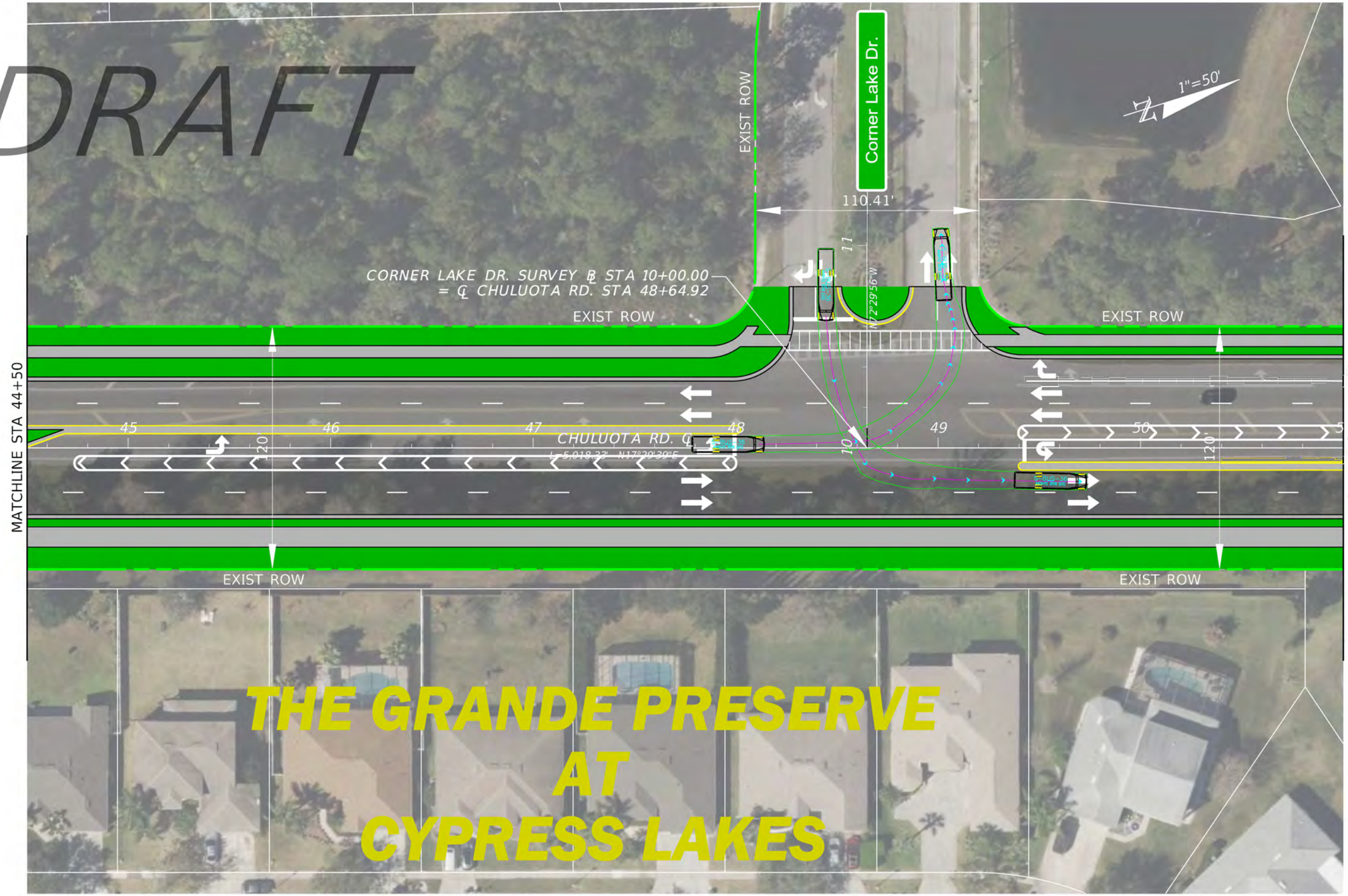
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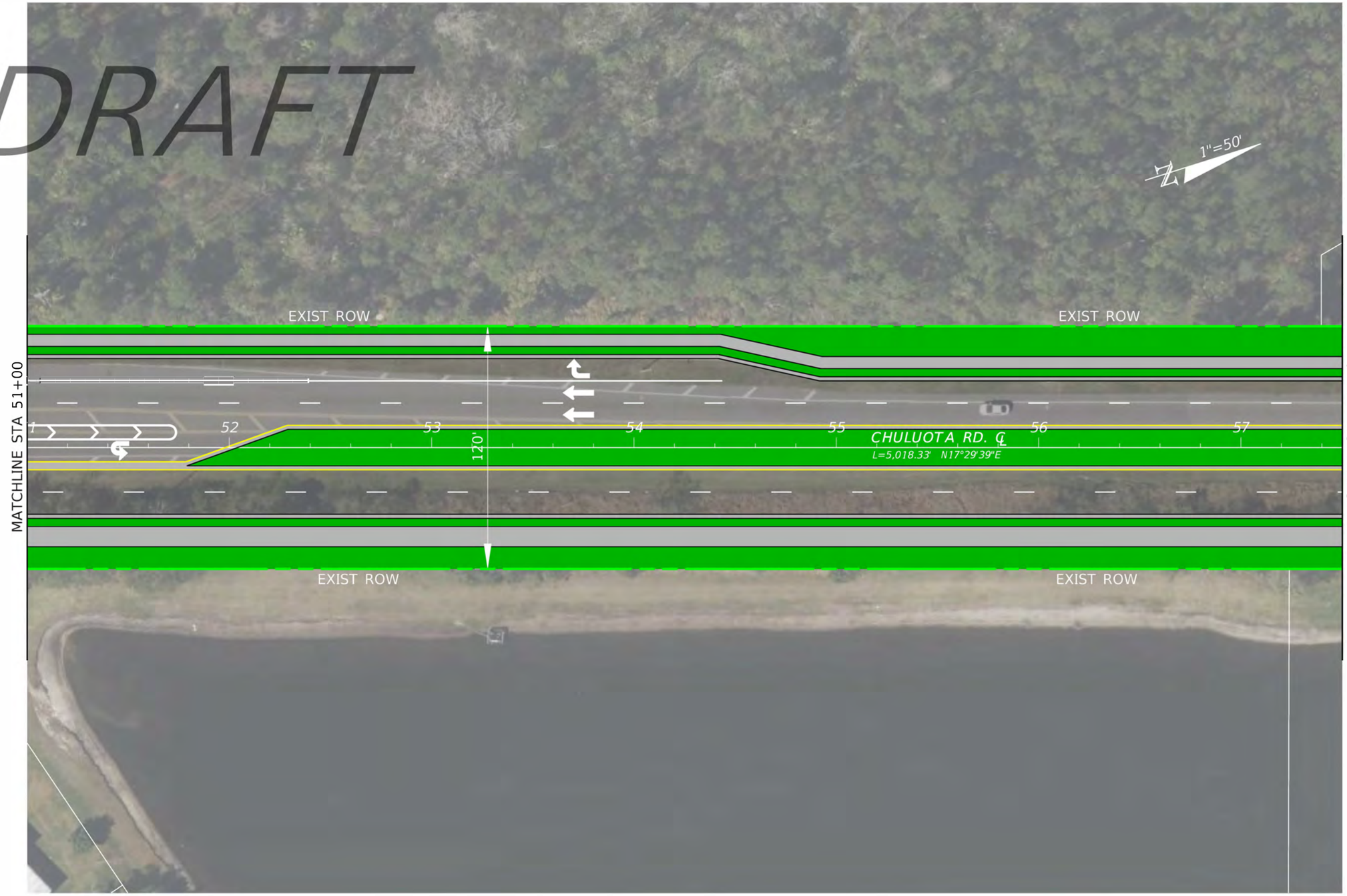


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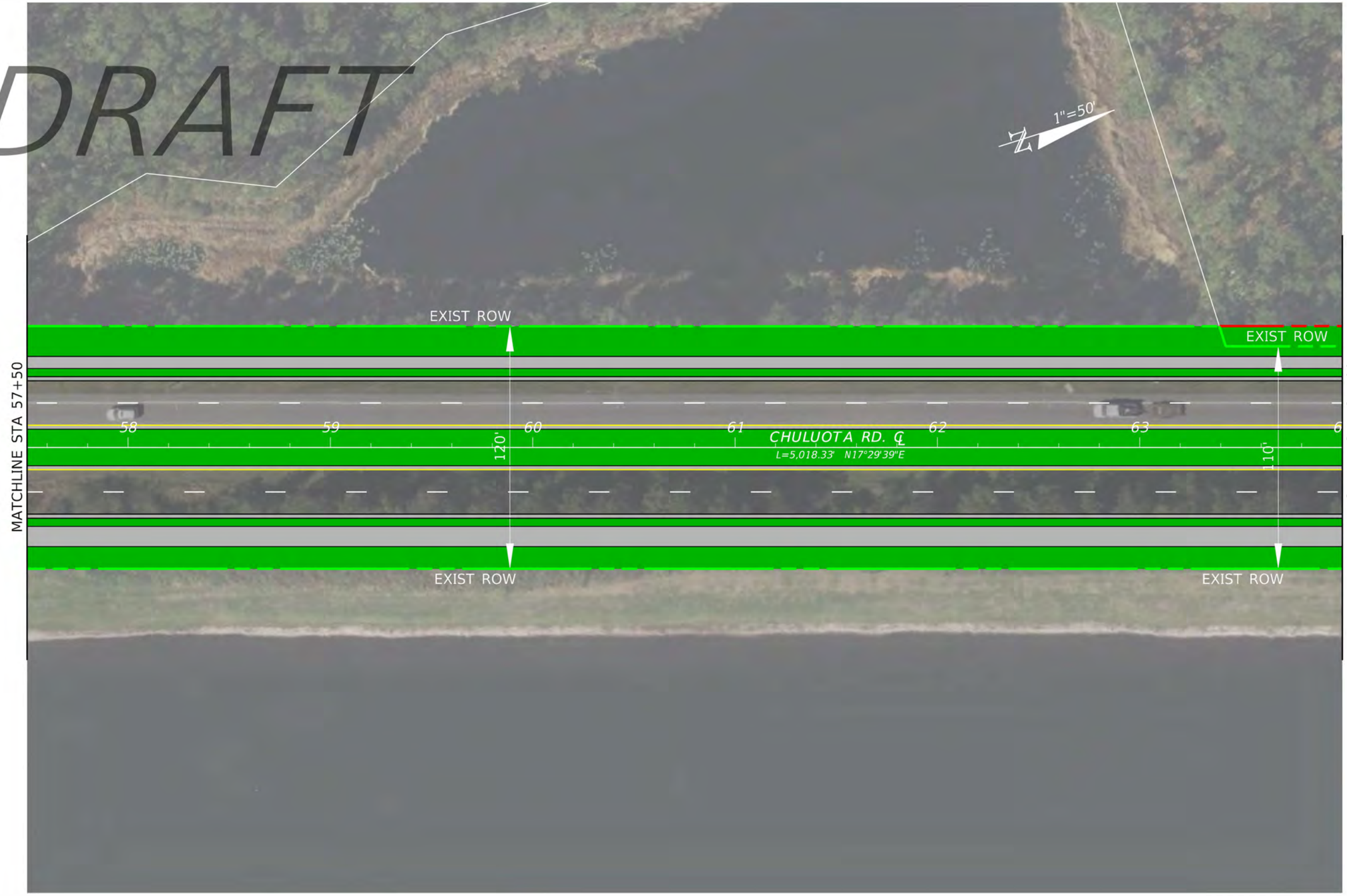


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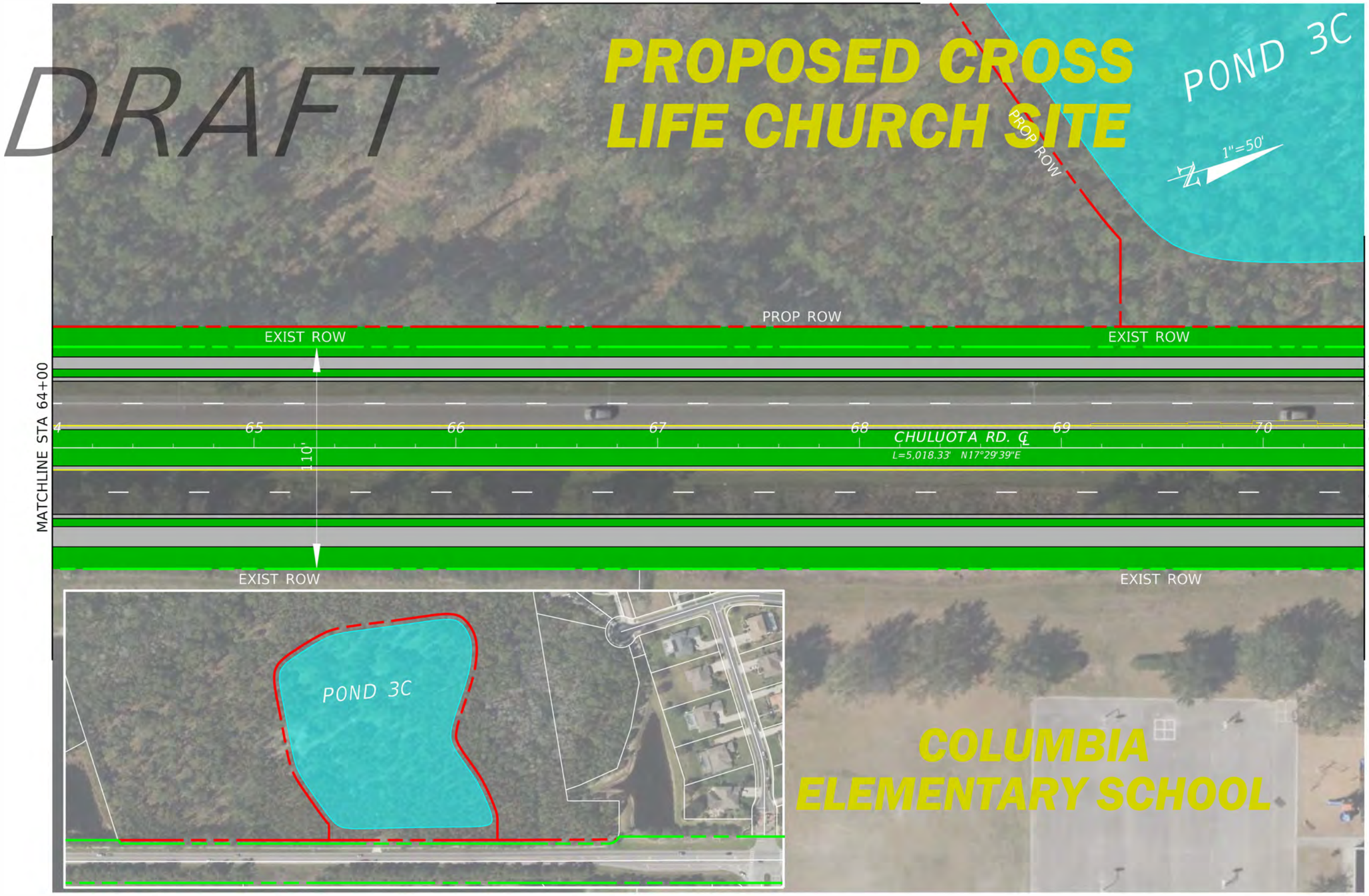


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MATCHLINE TO SHEET 10A



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DRAFT

PROP ROW

PROP ROW

PROP ROW

PROP ROW

PROP ROW

POND 3C

1"=50'

PROPOSED CROSS LIFE CHURCH SITE



MATCHLINE TO SHEET 10 & 11

*ALL TANGENT LENGTHS ARE FROM PT TO PC.

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MATCHLINE TO SHEET 10A

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POND 3C

PROPOSED CROSS LIFE CHURCH SITE

1"=50'

PROP ROW

PROP ROW

EXIST ROW

EXIST ROW

PC STA 72+63

MATCHLINE STA 70+50

71 72 73 74 CHULUOTA RD. ℄ 75 76

110'

PI STA 74+97.63

MATCHLINE STA 77+00

EXIST ROW

EXIST ROW

COLUMBIA ELEMENTARY SCHOOL

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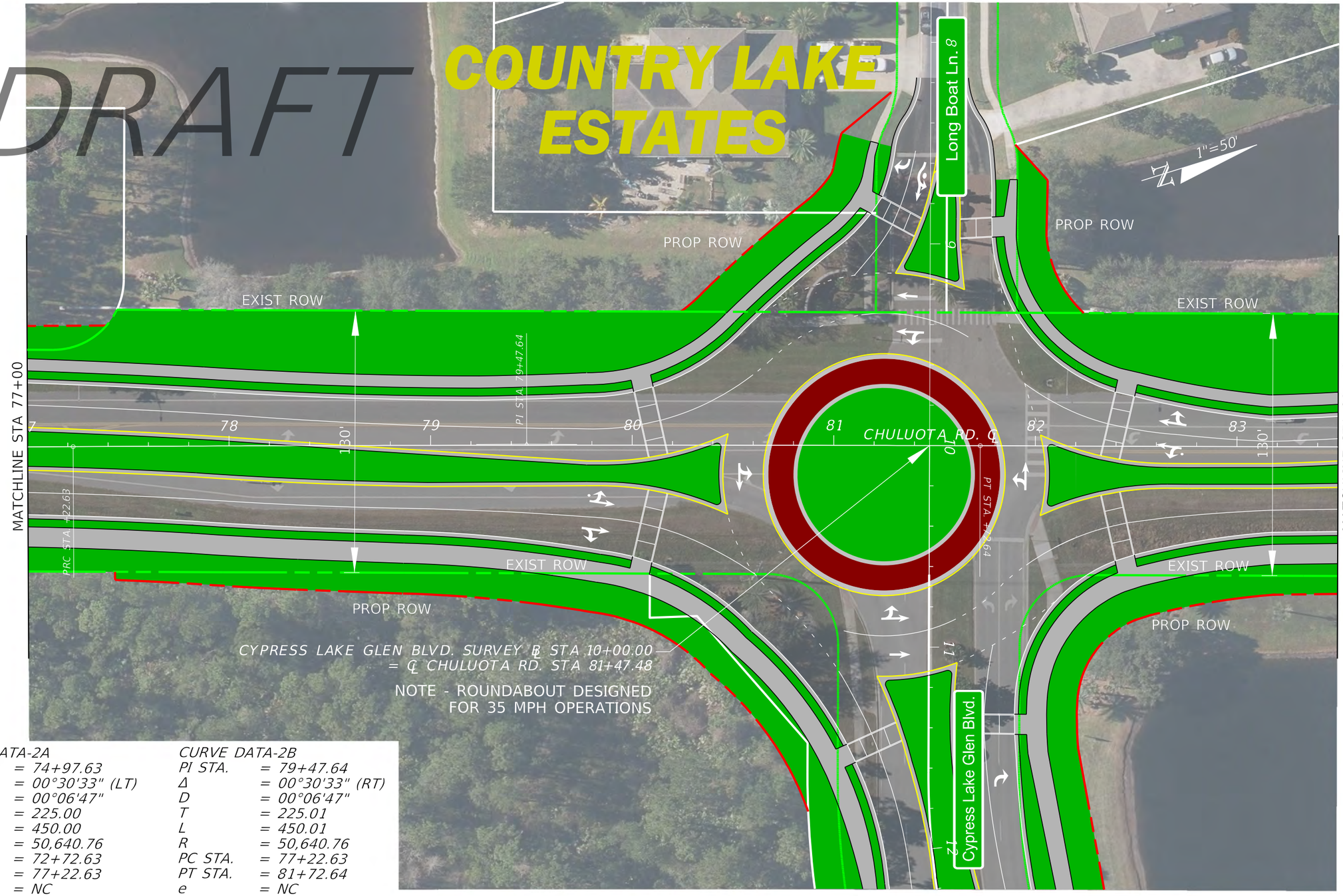
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COUNTRY LAKE ESTATES



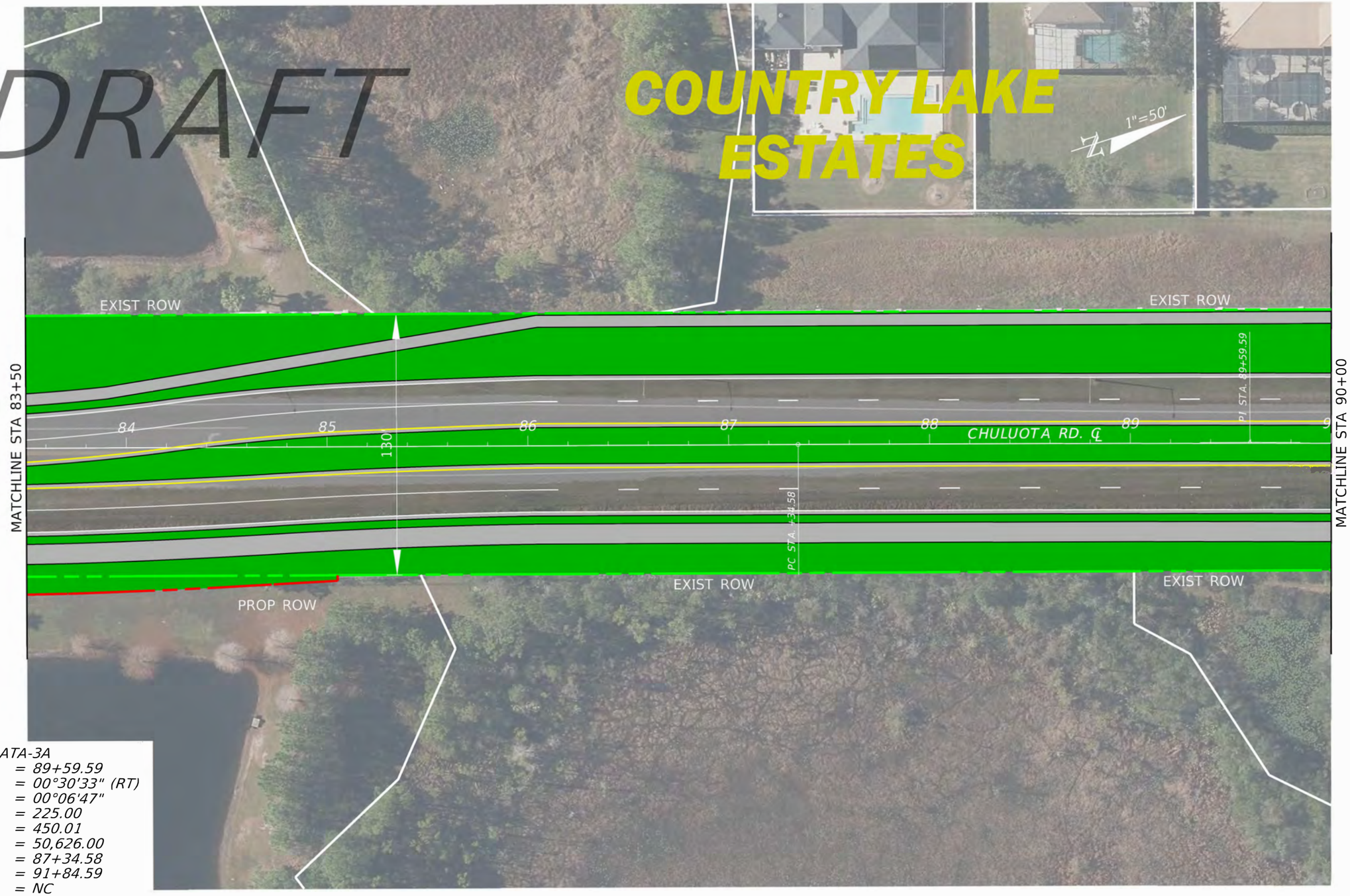
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L	= 450.00	L	= 450.01
R	= 50,640.76	R	= 50,640.76
PC STA.	= 72+72.63	PC STA.	= 77+22.63
PT STA.	= 77+22.63	PT STA.	= 81+72.64
e	= NC	e	= NC
DESIGN SPEED = 45MPH		DESIGN SPEED = 45MPH	

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COUNTRY LAKE ESTATES



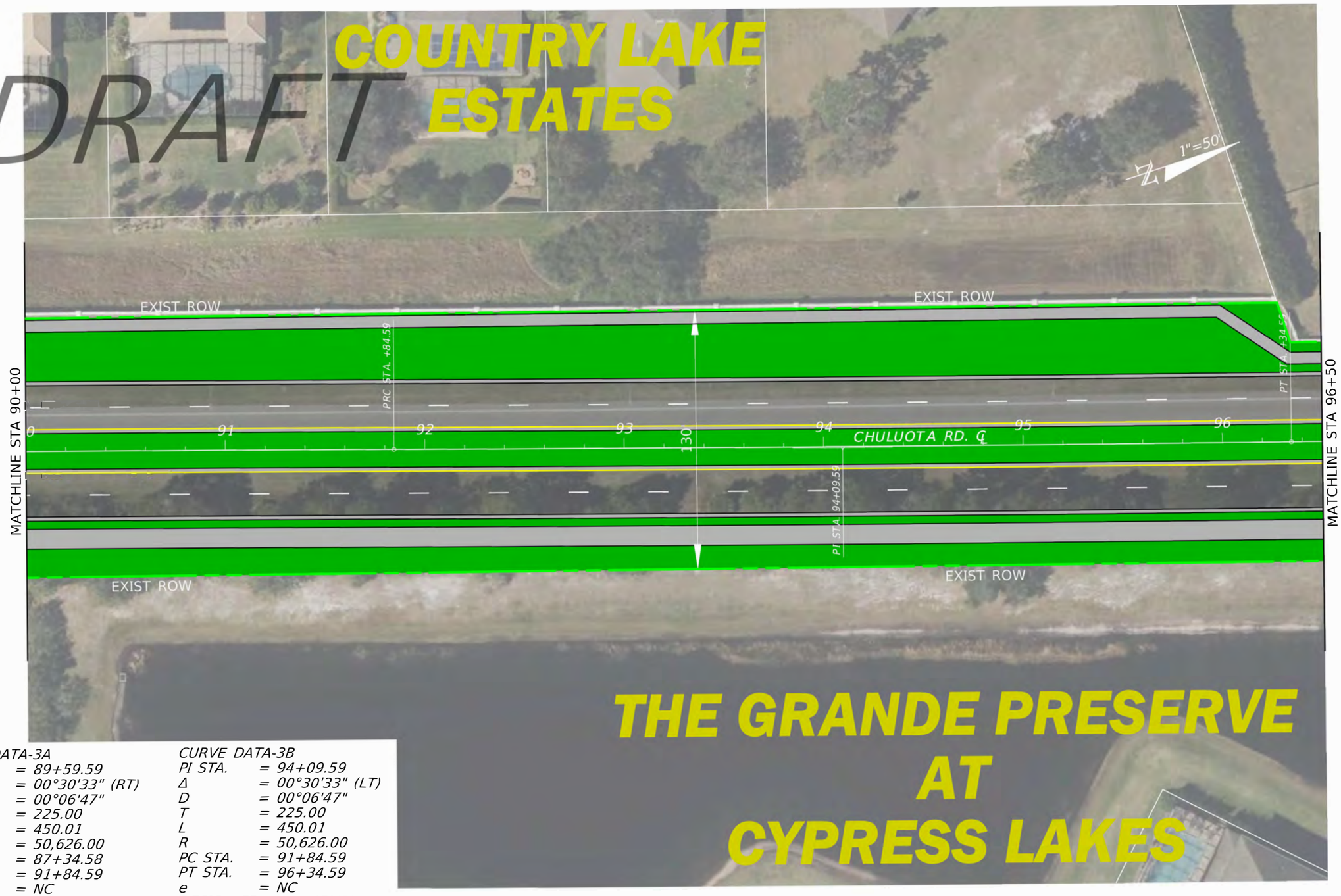
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e = NC
DESIGN SPEED = 45MPH

REVISIONS				12/5/2024	ORANGE COUNTY PUBLIC WORKS			CHULUOTA RD (CR 419) PROPOSED PREFERRED ALIGNMENT	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		13

12/5/2024 5:32:03 PM mknight
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DRAFT

COUNTRY LAKE ESTATES



THE GRANDE PRESERVE AT CYPRESS LAKES

CURVE DATA-3A
PI STA. = 89+59.59
Δ = 00°30'33" (RT)
D = 00°06'47"
T = 225.00
L = 450.01
R = 50,626.00
PC STA. = 87+34.58
PT STA. = 91+84.59
e = NC
DESIGN SPEED = 45MPH

CURVE DATA-3B
PI STA. = 94+09.59
Δ = 00°30'33" (LT)
D = 00°06'47"
T = 225.00
L = 450.01
R = 50,626.00
PC STA. = 91+84.59
PT STA. = 96+34.59
e = NC
DESIGN SPEED = 45MPH

REVISIONS				12/5/2024	ORANGE COUNTY PUBLIC WORKS			CHULUOTA RD (CR 419) PROPOSED PREFERRED ALIGNMENT	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		14

3/13/2024 1:49:03 PM salanis
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DRAFT

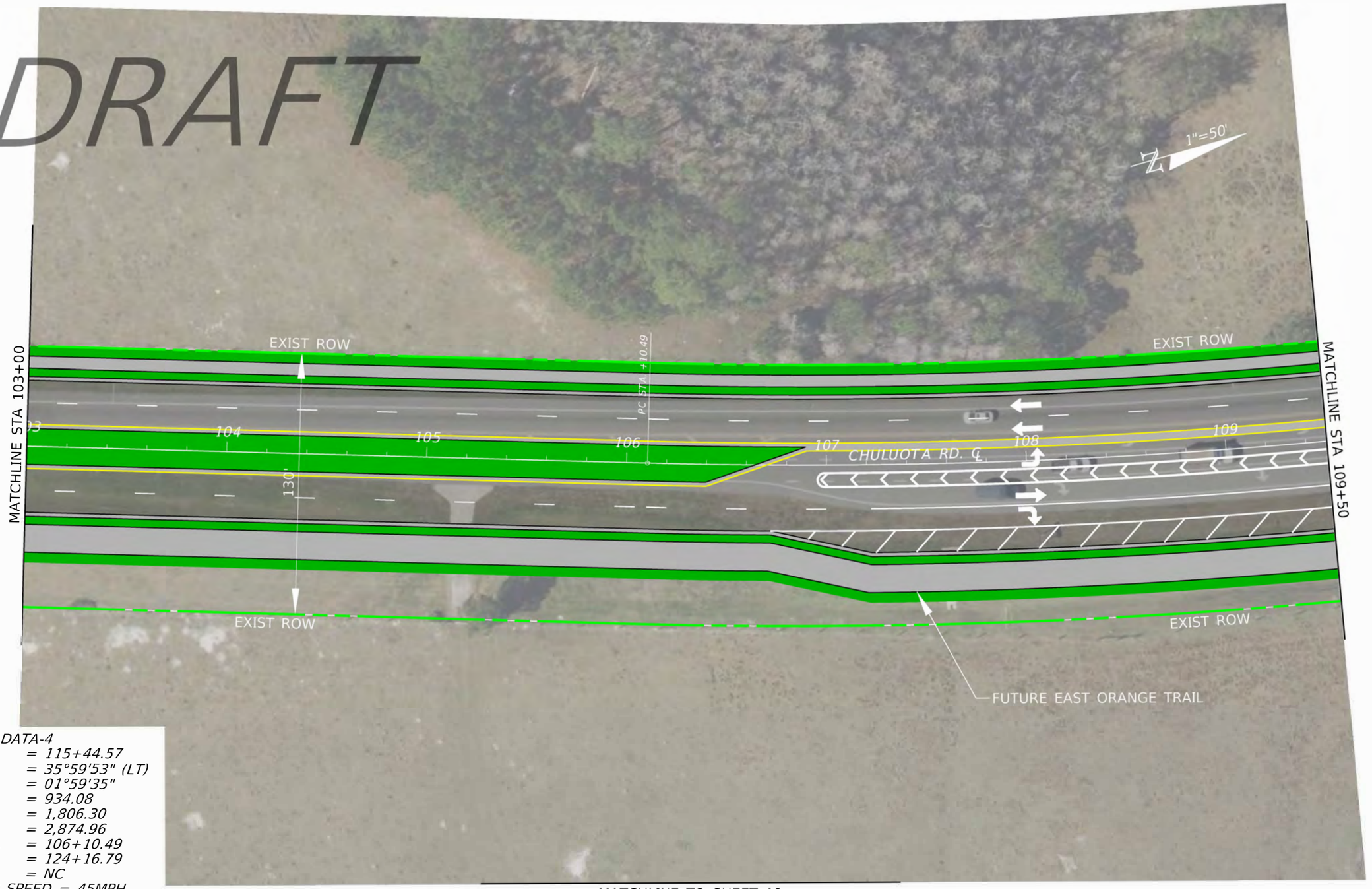


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					ROAD NO. / COUNTY / FINANCIAL PROJECT ID	SHEET NO. 15

3/13/2024 1:49:07 PM salanis
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DRAFT



CURVE DATA-4
PI STA. = 115+44.57
Δ = 35°59'53" (LT)
D = 01°59'35"
T = 934.08
L = 1,806.30
R = 2,874.96
PC STA. = 106+10.49
PT STA. = 124+16.79
e = NC
DESIGN SPEED = 45MPH

MATCHLINE TO SHEET 19

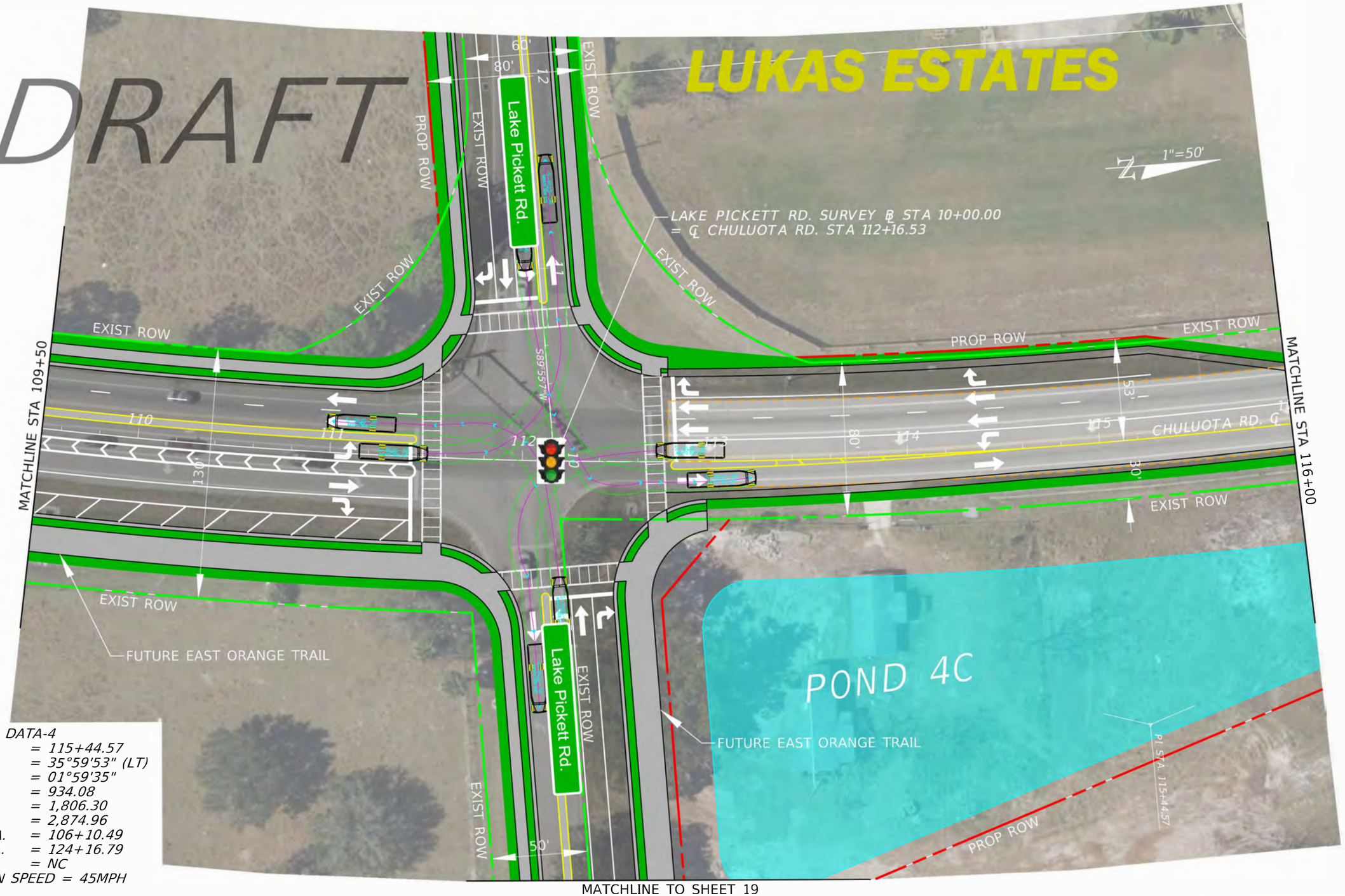
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DATE	DESCRIPTION	DATE	DESCRIPTION	12/5/2024	ROAD NO.	COUNTY	FINANCIAL PROJECT ID	CHULUOTA RD (CR 419) PROPOSED PREFERRED ALIGNMENT	16

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DRAFT

LUKAS ESTATES



CURVE DATA-4
PI STA. = 115+44.57
Δ = 35°59'53" (LT)
D = 01°59'35"
T = 934.08
L = 1,806.30
R = 2,874.96
PC STA. = 106+10.49
PT STA. = 124+16.79
e = NC
DESIGN SPEED = 45MPH

MATCHLINE TO SHEET 19

REVISIONS					
DATE	DESCRIPTION	DATE	DESCRIPTION		

12/5/2024

ORANGE COUNTY
PUBLIC WORKS

ROAD NO.	COUNTY	FINANCIAL PROJECT ID

CHULUOTA RD (CR 419)
PROPOSED PREFERRED ALIGNMENT

SHEET NO. 17

3/13/2024 1:49:16 PM salanis
c:\pwworking\jmt\d0336928\GEOMETRY_pref-ALT-2L.dgn

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DRAFT

LUKAS ESTATES

MANDALAY ESTATES

EXIST ROW

EXIST ROW

MATCHLINE STA 116+00

80'

117

118

119

120

121

122

CHULUOTA RD. ℄

EXIST ROW

PROP ROW

PROP ROW

POND 4C

POND 4C

FC POND 2

1"=50'

CURVE DATA-4
PI STA. = 115+44.57
Δ = 35°59'53" (LT)
D = 01°59'35"
T = 934.08
L = 1,806.30
R = 2,874.96
PC STA. = 106+10.49
PT STA. = 124+16.79
e = NC
DESIGN SPEED = 45MPH

REVISIONS				12/5/2024	ORANGE COUNTY PUBLIC WORKS			CHULUOTA RD (CR 419) PROPOSED PREFERRED ALIGNMENT	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		18

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MATCHLINE TO SHEET 16 & 17

DRAFT

1"=100'

FUTURE EAST ORANGE TRAIL

MANDALAY ESTATES

PROP ROW

PROP ROW

PROP ROW

FC POND 2

PROP ROW

PROP ROW

PROP ROW

Lake Pickett Rd.

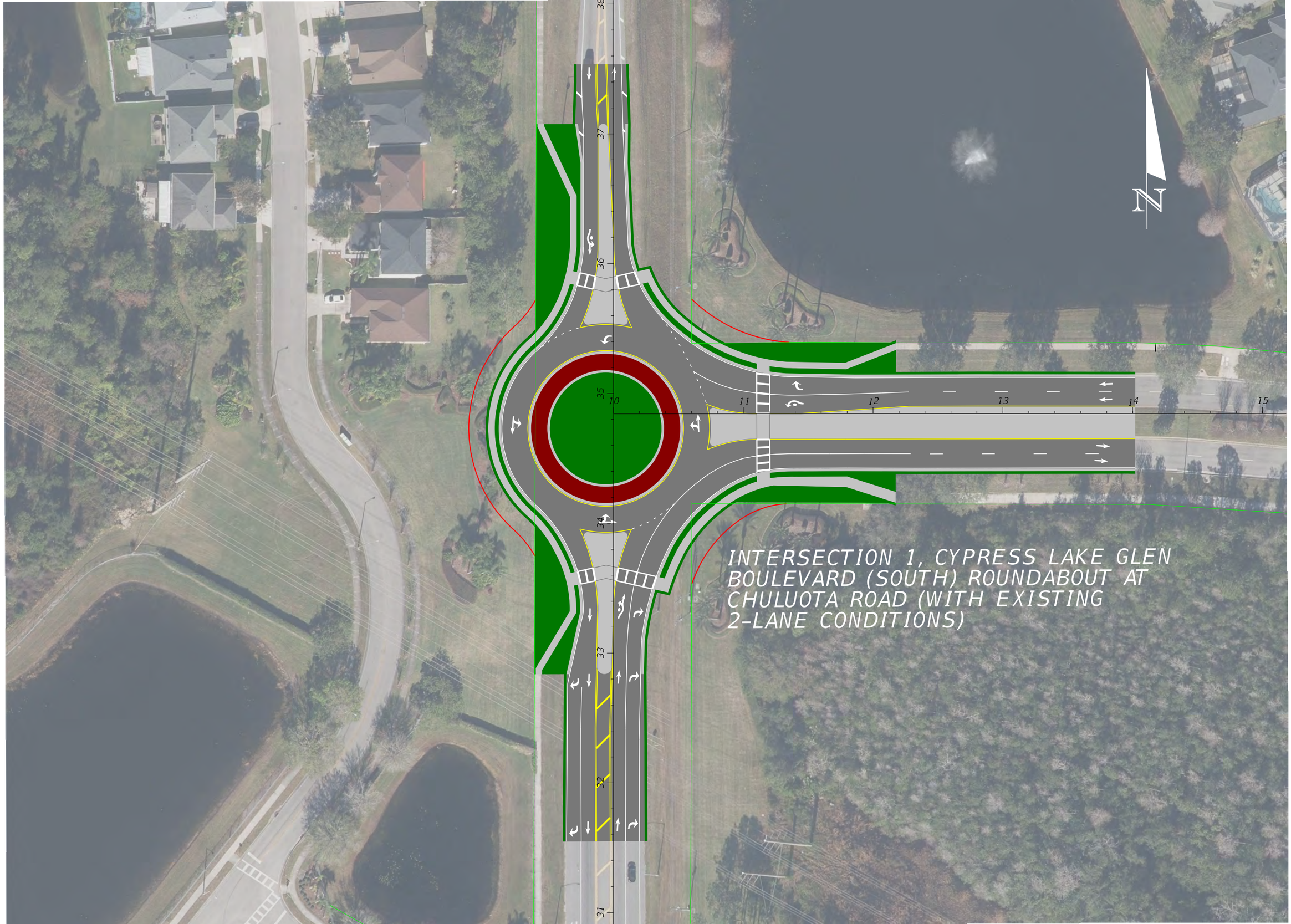
POND 4C

FC POND 2

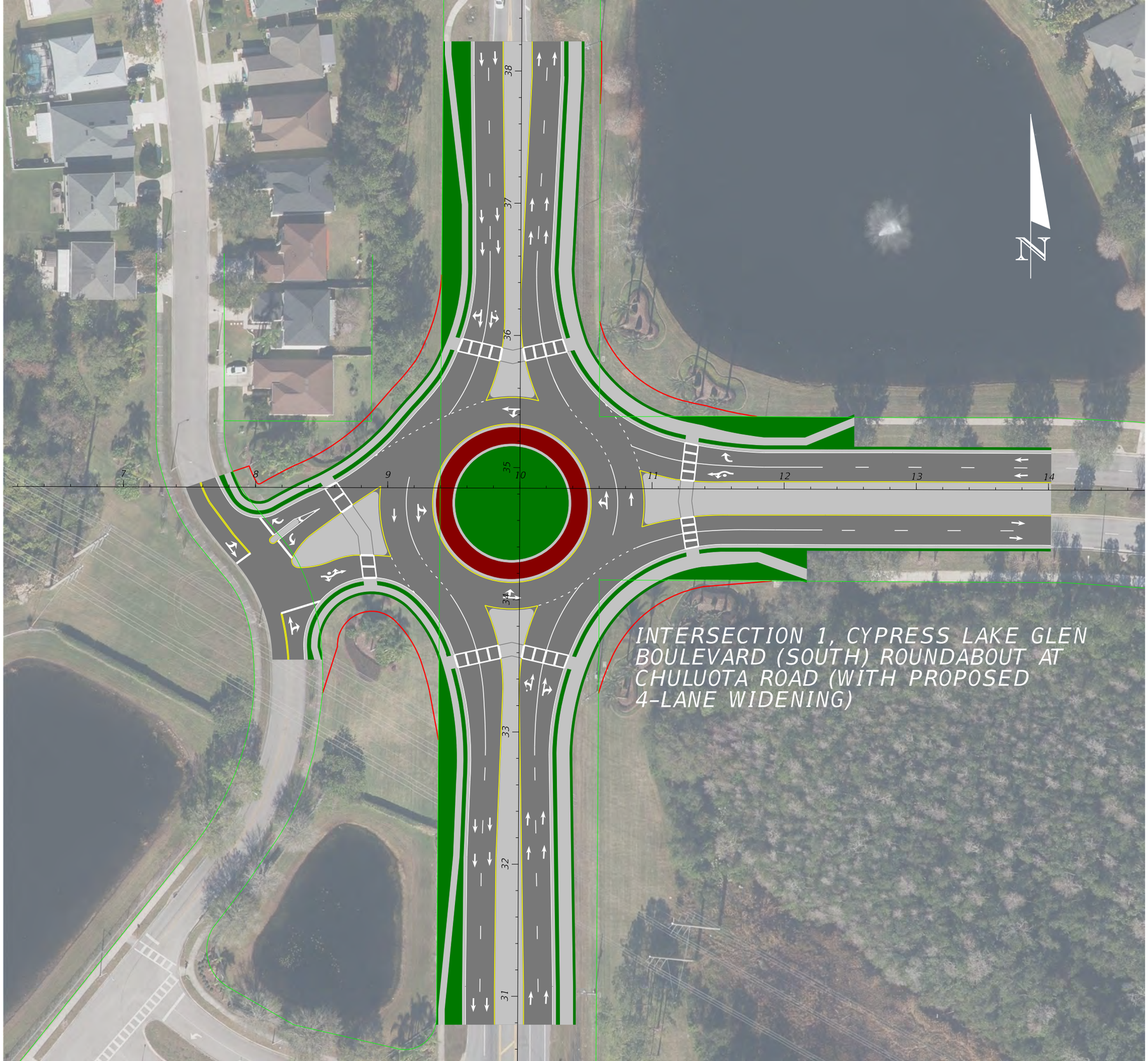
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DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		19

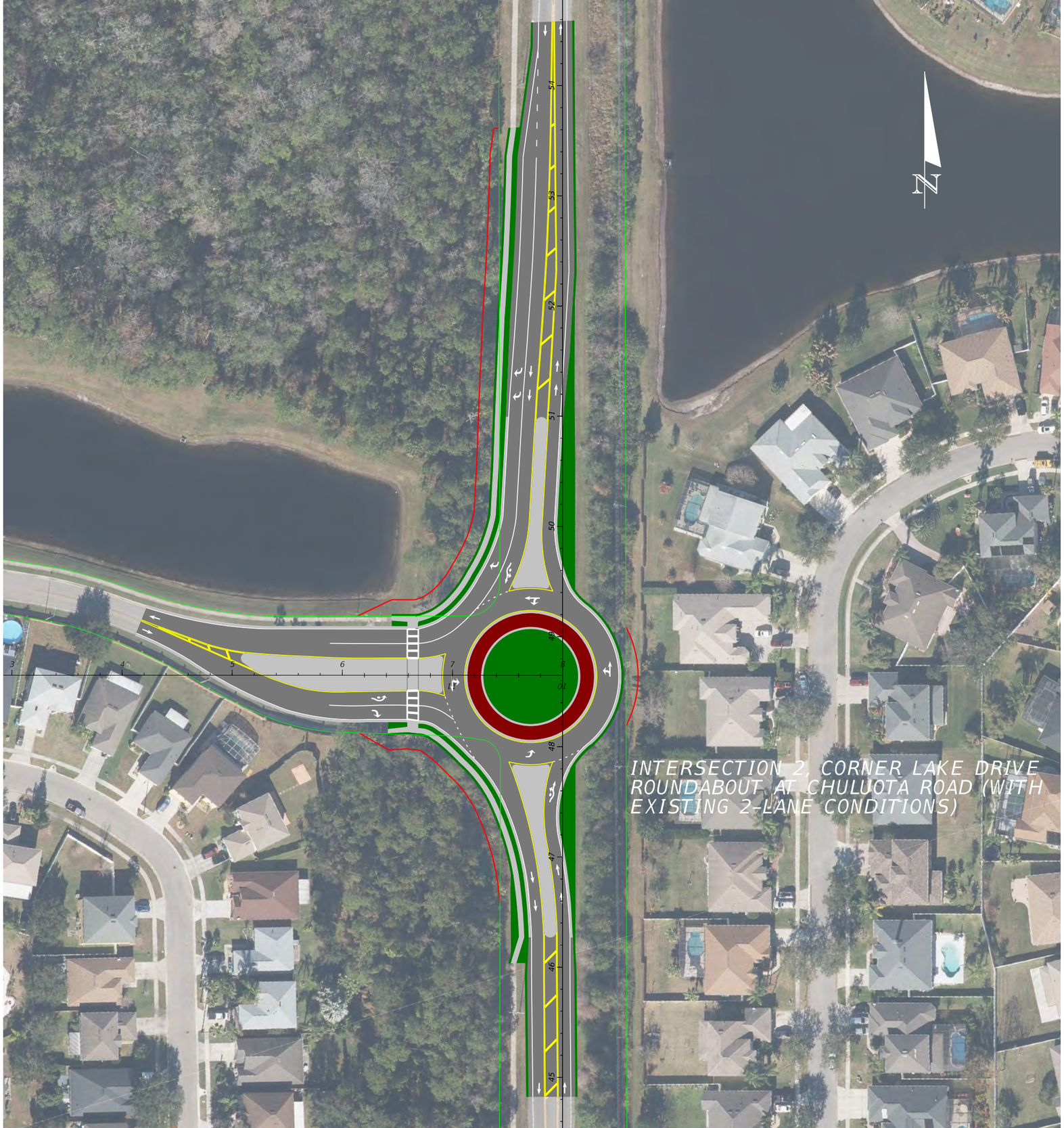
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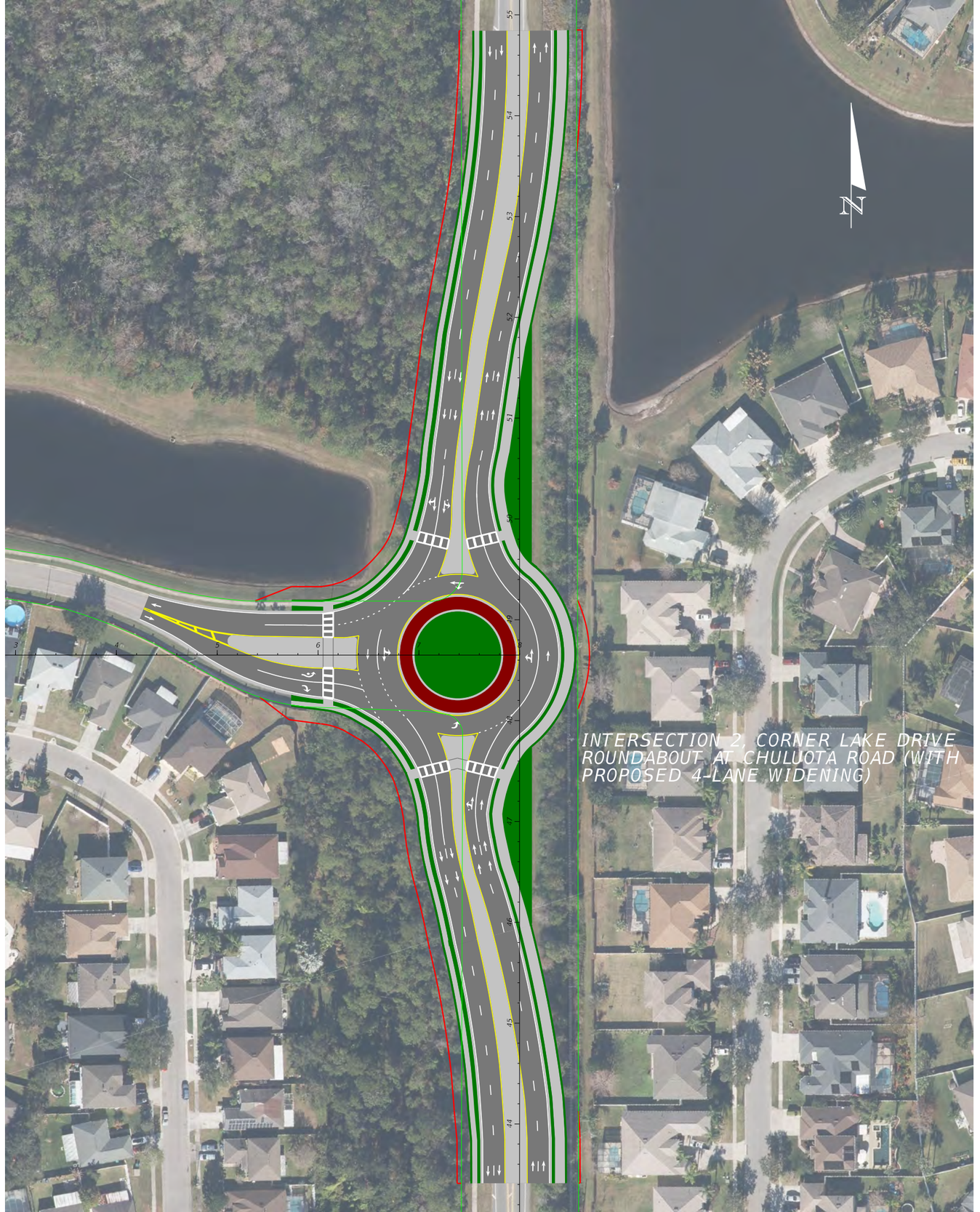
© 2024 Microsoft Corporation © 2024 Maxar ©CNES (2024) Distribution Airbus DS Earthstar Geographics SIO

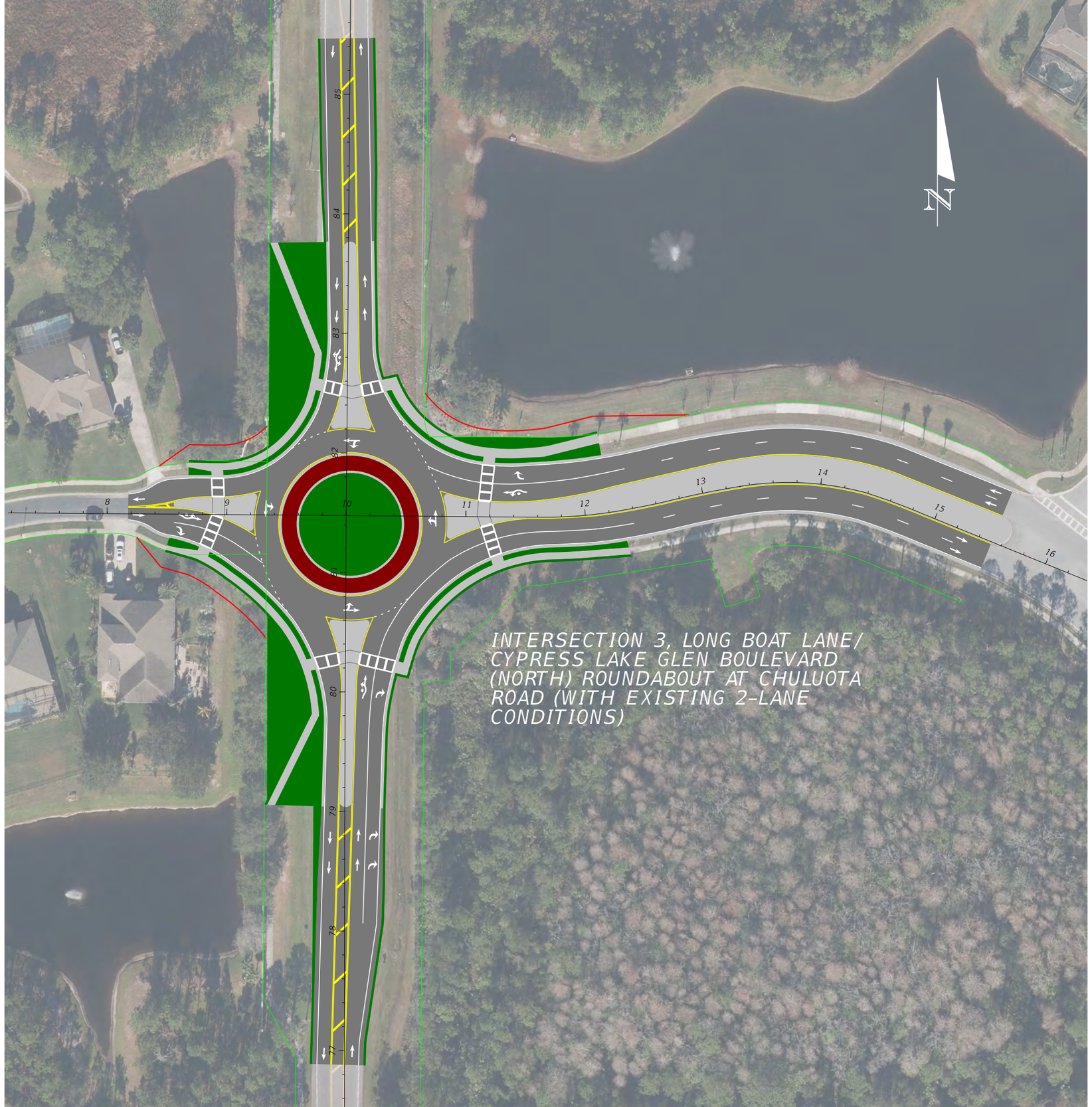


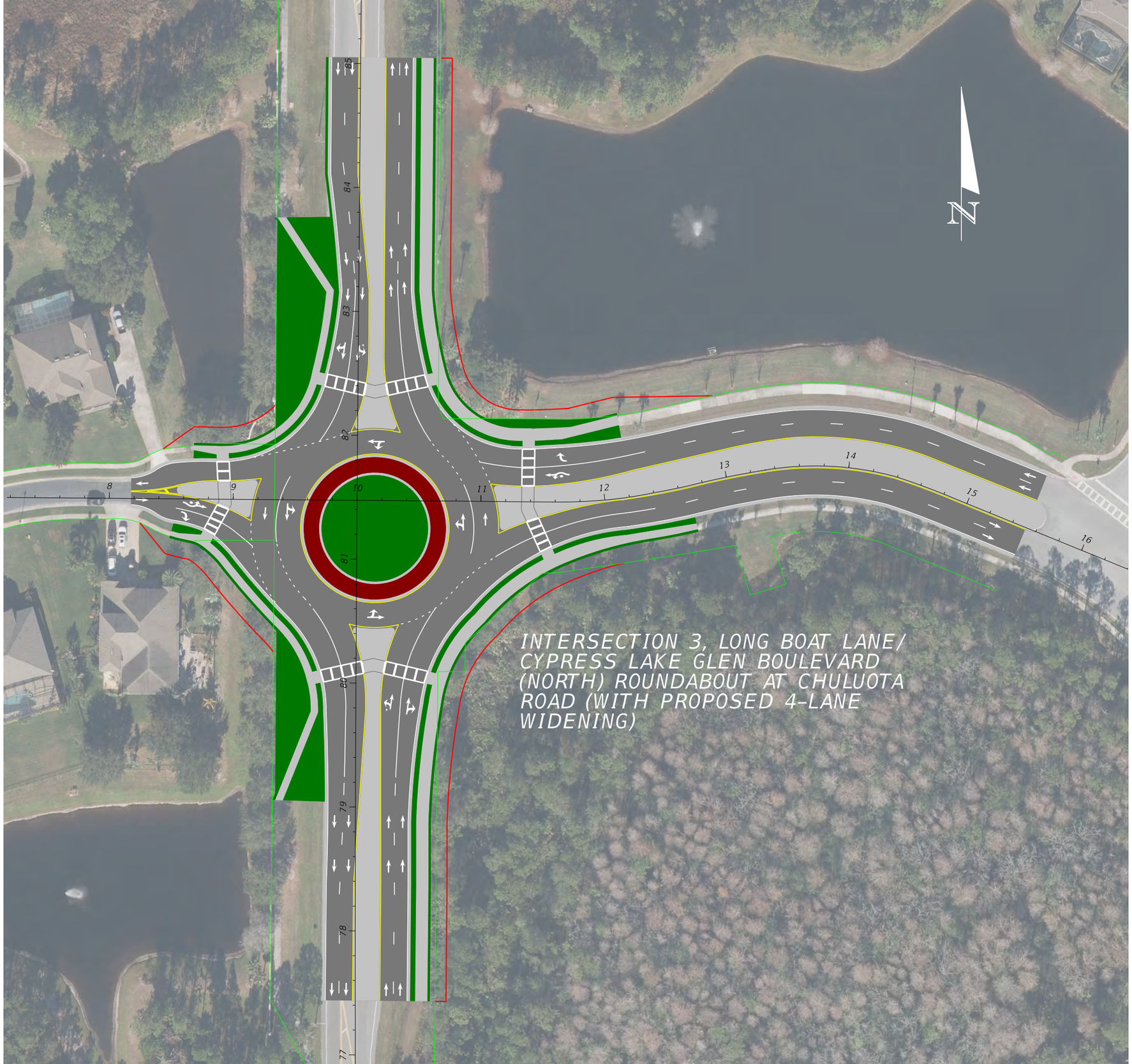
INTERSECTION 1, CYPRESS LAKE GLEN BOULEVARD (SOUTH) ROUNDABOUT AT CHULUOTA ROAD (WITH EXISTING 2-LANE CONDITIONS)


N
7
8
9
10
11
12
13
14
31
32
33
34
35
36
37
38
INTERSECTION 1, CYPRESS LAKE GLEN BOULEVARD (SOUTH) ROUNDABOUT AT CHULUOTA ROAD (WITH PROPOSED 4-LANE WIDENING)

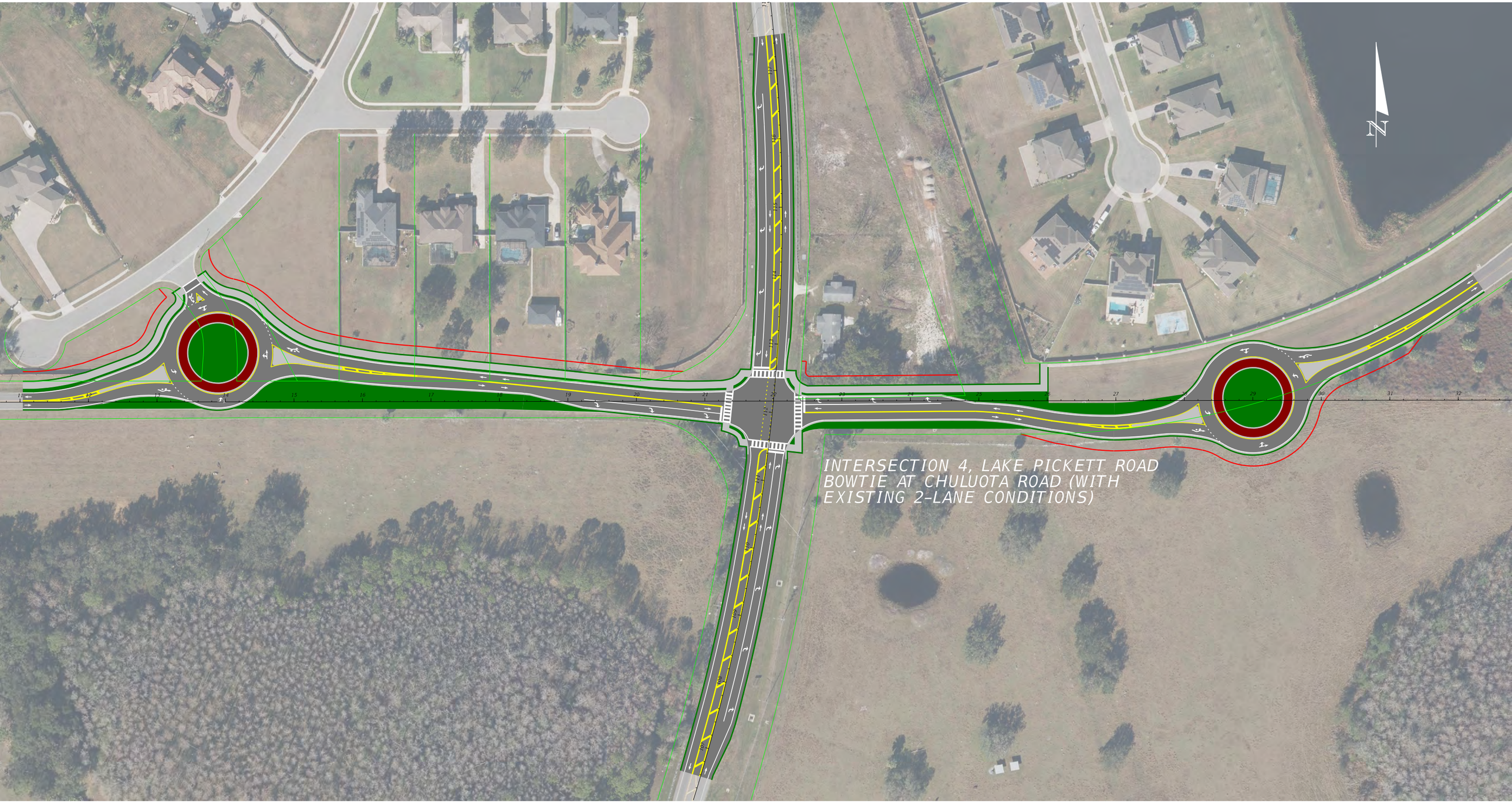

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INTERSECTION 2, CORNER LAKE DRIVE ROUNDABOUT AT CHULUOTA ROAD (WITH EXISTING 2-LANE CONDITIONS)

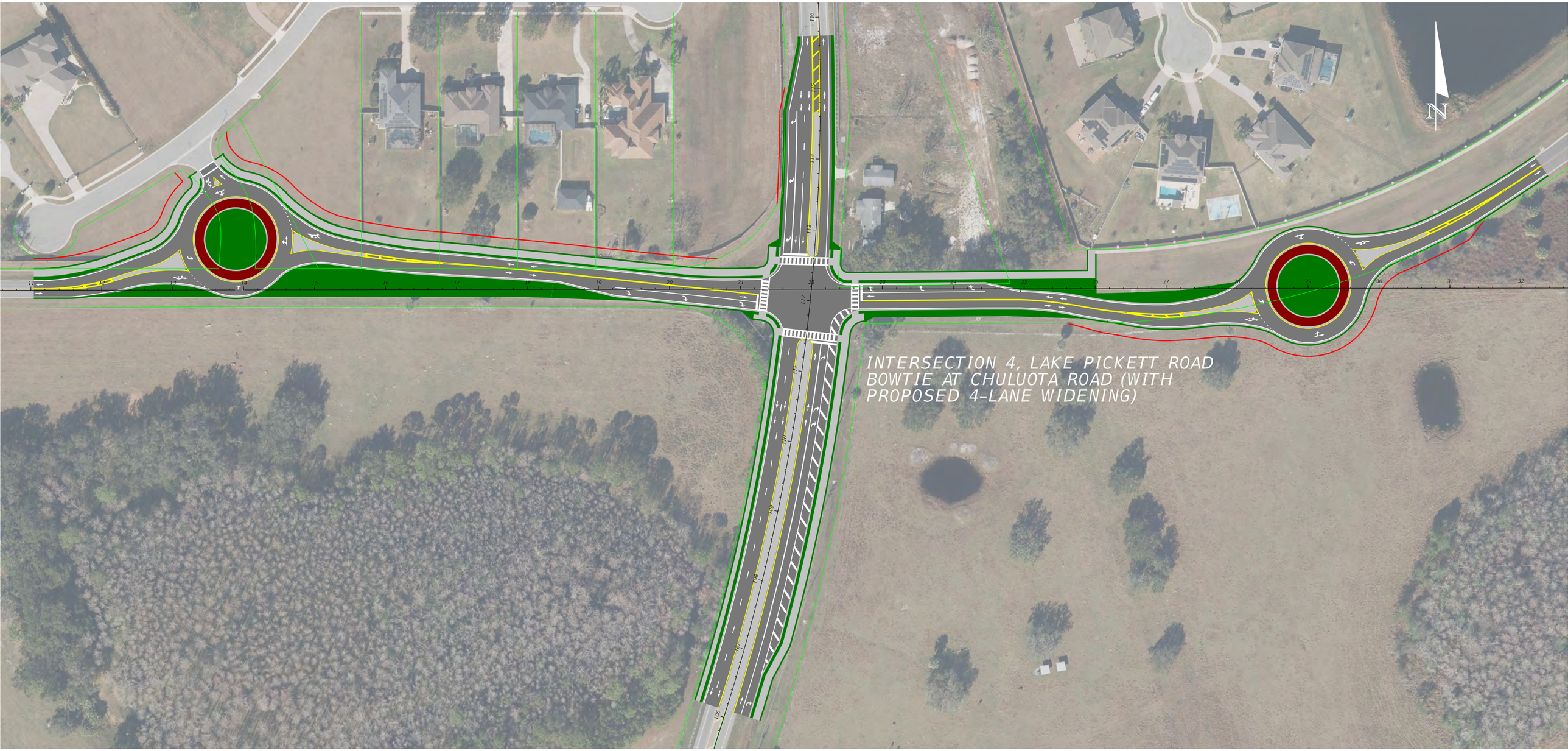

N
INTERSECTION 2, CORNER LAKE DRIVE ROUNDABOUT AT CHULUOTA ROAD (WITH PROPOSED 4-LANE WIDENING)


N
77
78
79
80
81
82
83
84
85
8
9
10
11
12
13
14
15
16
INTERSECTION 3, LONG BOAT LANE/
CYPRESS LAKE GLEN BOULEVARD
(NORTH) ROUNDABOUT AT CHULUOTA
ROAD (WITH EXISTING 2-LANE
CONDITIONS)


N
INTERSECTION 3, LONG BOAT LANE/
CYPRESS LAKE GLEN BOULEVARD
(NORTH) ROUNDABOUT AT CHULUOTA
ROAD (WITH PROPOSED 4-LANE
WIDENING)


N
INTERSECTION 4, LAKE PICKETT ROAD
ROUNDABOUT AT CHULUOTA ROAD (WITH
EXISTING 2-LANE CONDITIONS)


N
INTERSECTION 4, LAKE PICKETT ROAD
BOWTIE AT CHULUOTA ROAD (WITH
EXISTING 2-LANE CONDITIONS)


N
INTERSECTION 4, LAKE PICKETT ROAD
BOWTIE AT CHULUOTA ROAD (WITH
PROPOSED 4-LANE WIDENING)

APPENDIX B
TRAFFIC DATA

luke
transportation
engineering
consultants

transportation engineering + planning

DRAFT

Chuluota Road Roadway Conceptual Analysis (RCA)
Supplemental Analysis
for Schoolview Way & Corner School Drive
(7 JUNE 2024)
(Luke Transportation Engineering Consulting Consultants, Inc. #20-3502)

Luke Transportation Engineering Consultants, Inc. (LTEC), as a sub-consultant to JMT, performed the existing design traffic analysis to determine the impacts and assess the need for future capacity improvements for Chuluota Road (CR 419) from Lake Pickett Road to East Colonial Drive (SR 50). This Design Traffic Technical Report documented the existing traffic conditions and need for widening Chuluota Road from a two-lane undivided roadway to a four-lane divided roadway, as well as associated intersection improvements.

Based on the evaluation of operating conditions for the design year 2048 Build Alternative, that study results supported the need for widening of Chuluota Road to the four-lane, divided cross section developed, from SR 50 to Lake Pickett Road to improve the traffic flow within the Chuluota Road RCA study limits.

To accommodate the re-alignment of Schoolview Way with Cypress Lake Glen Boulevard, including the addition of:

- Addition of a southbound auxiliary right-turn lane, add the westbound approach (left-turn lane and right-turn/though lane)
- Addition of a northbound auxiliary left-turn lane
- modification the right-turn lane to a right-turn/though lane at the Cypress Lake Glen Boulevard intersection as shown in **Figure 1**- Current RCA Proposed Build Alternative Geometry.

After completion of the Design Traffic Technical Report (DTTR), Orange County requested that JMT provide a supplemental analysis of alternative Scenarios for the Cypress Lake Glen Boulevard and Schoolview Way area. These alternative Scenarios included:

<u>Scenario 1 (Chuluota Road Build Alternative/4 Lane)</u>
Scenario 1 includes relocation of Schoolview Way to align with Cypress Lake Glen Boulevard signalized intersection with Chuluota Road (assumes closure/elimination of existing Schoolview Way segment). This Scenario is consistent with the current RCA.

<u>Scenario 2 (Chuluota Road Build Alternative/4 Lane & No Build Alternative/2 Lane)</u>

Scenario 2 maintains the existing Schoolview Way alignment, intersecting at Chuluota Road with full median opening and unsignalized (minor street STOP) control.

[mailing address] po box 941556 maitland florida 32794-1556 • 29 east pine street orlando florida 32801 [phone] 407 423 8055 [fax] 407 423 8022

Scenario 3: Chuluota Road Build Alternative/4 Lane & No Build Alternative /2 Lane

Scenario 3 includes extending Cypress Lake Glen Boulevard west to Corner Lake Drive, from the signalized intersection with Chuluota Road. It also maintains the existing Schoolview Way (Corner Lake Drive to Chuluota Road), intersecting at Chuluota Road right in/out only configuration, with unsignalized (minor street STOP) control. Scenarios 1, 2 and 3 are provided in Figures 2 – 4.

Traffic Data Collection

To provide base conditions for the expanded study area (beyond the RCA study limits) for this supplemental analysis, six (6) hour weekday turning movement counts ([AM peak hour and PM peak period- 2 - 6 pm) at Corner School Drive & Schoolview Way. The raw traffic data collected is included in the Attachment. This turning movement count was used to estimate distribution of DTTR traffic to this intersection.

Design Traffic Projections

Using the adopted growth rates from the Chuluota Road RCA DTTR, the design volume forecasts for Scenarios 1, 2 and 3, involving Schoolview Way, Corner Lake Drive, and extension of Cypress Glen Boulevard: were prepared.

Scenario 1 (Chuluota Road Build Alternative/4 Lane)

- Design hour traffic volumes for Corner Lake Dr & relocated Schoolview Way for Opening Year– 2028, Interim Year- 2038, Design Year– 2048 (Build Alternative).

These are provided in **Figures 2 – 4**, which depict the weekday AM peak hour, school dismissal (afternoon) peak hour, and PM peak hour intersection volumes for years 2028, 2038 and 2048.

Scenario 2 (Chuluota Road Build Alternative/4 Lane & No Build Alternative/2 Lane)

- Design hour traffic volumes for Corner Lake Dr & Schoolview Way for Opening Year 2028, Interim Year 2038, Design Year 2048 based on No Build Alternative (2 lane Chuluota Road)

These are provided in **Figures 5 -7**, which depict the weekday AM peak hour, school dismissal peak hour, and PM peak hour intersection volumes for years 2028, 2038 and 2048.

- Design hour traffic volumes for Corner Lake Dr & Schoolview Way for Opening Year 2028, Interim Year 2038, Design Year 2048 based on Build Alternative (4 lane Chuluota Road)

These are provided in **Figures 8 - 10**, which depict the weekday AM peak hour, school dismissal peak hour, and PM peak hour intersection volumes for years 2028, 2038 and 2048.

Scenario 3: Chuluota Road Build Alternative/4 Lane & No Build Alternative /2 Lane

- Design hour traffic volumes for Corner Lake Drive & Cypress Lake Glen Boulevard (extended), and Corner Lake Drive & Schoolview Way for Opening Year 2028, Interim Year 2038, Design Year 2048 based on Build Alternative (4 lane Chuluota Road)

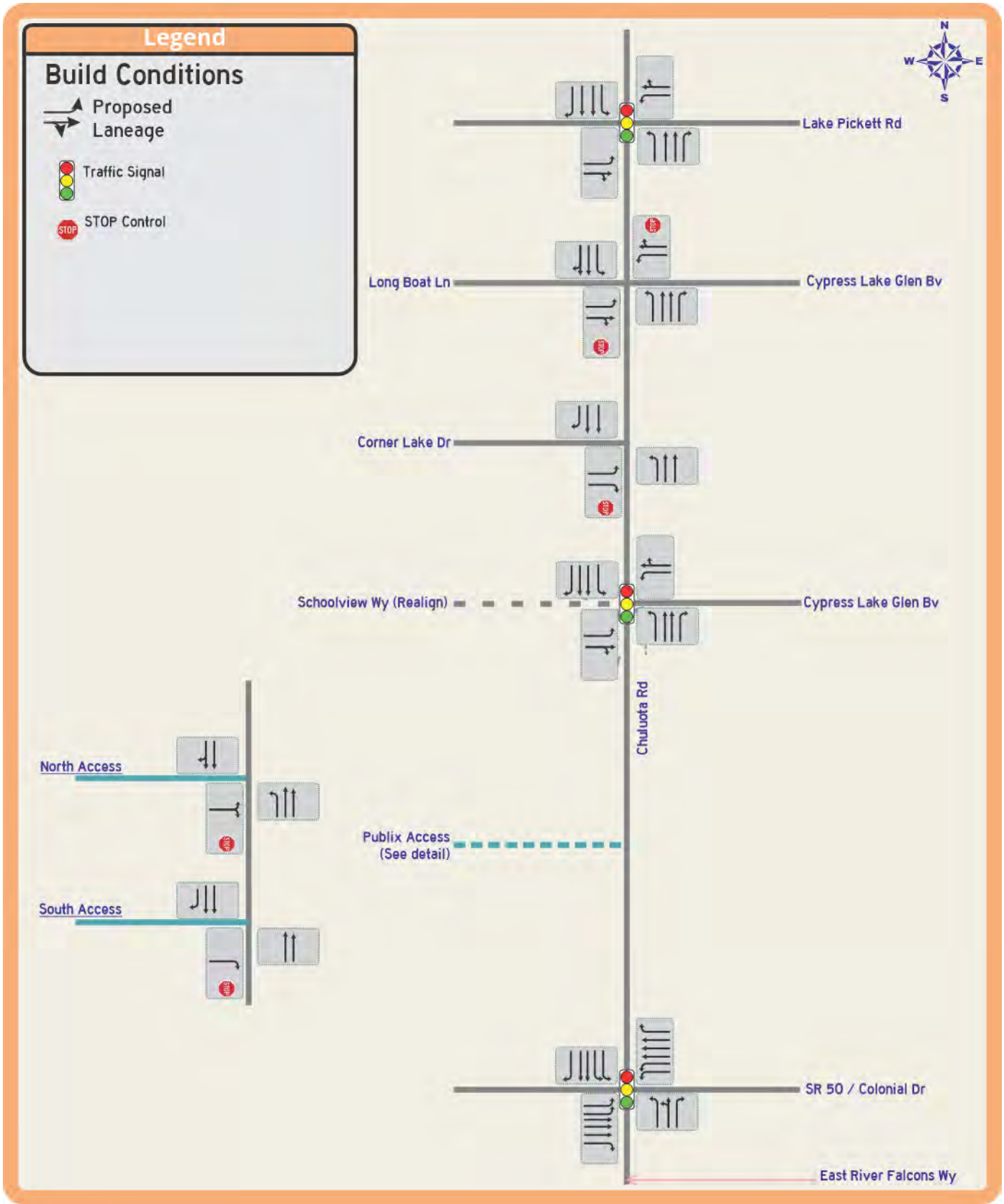
These are provided in **Figures 11 – 13**, which depict the weekday AM peak hour, school dismissal peak hour, and PM peak hour intersection volumes for years 2028, 2038 and 2048.

- Design hour traffic volumes for Corner Lake Dr & Cypress Lake Glen Boulevard (extended), and Corner Lake Drive & Schoolview Way for Opening Year 2028, Interim Year 2038, Design Year 2048 based on No Build Alternative (2 lane Chuluota Road)

These are provided in **Figures 14 - 16**, which depict the weekday AM peak hour, school dismissal peak hour, and PM peak hour intersection volumes for years 2028, 2038 and 2048.

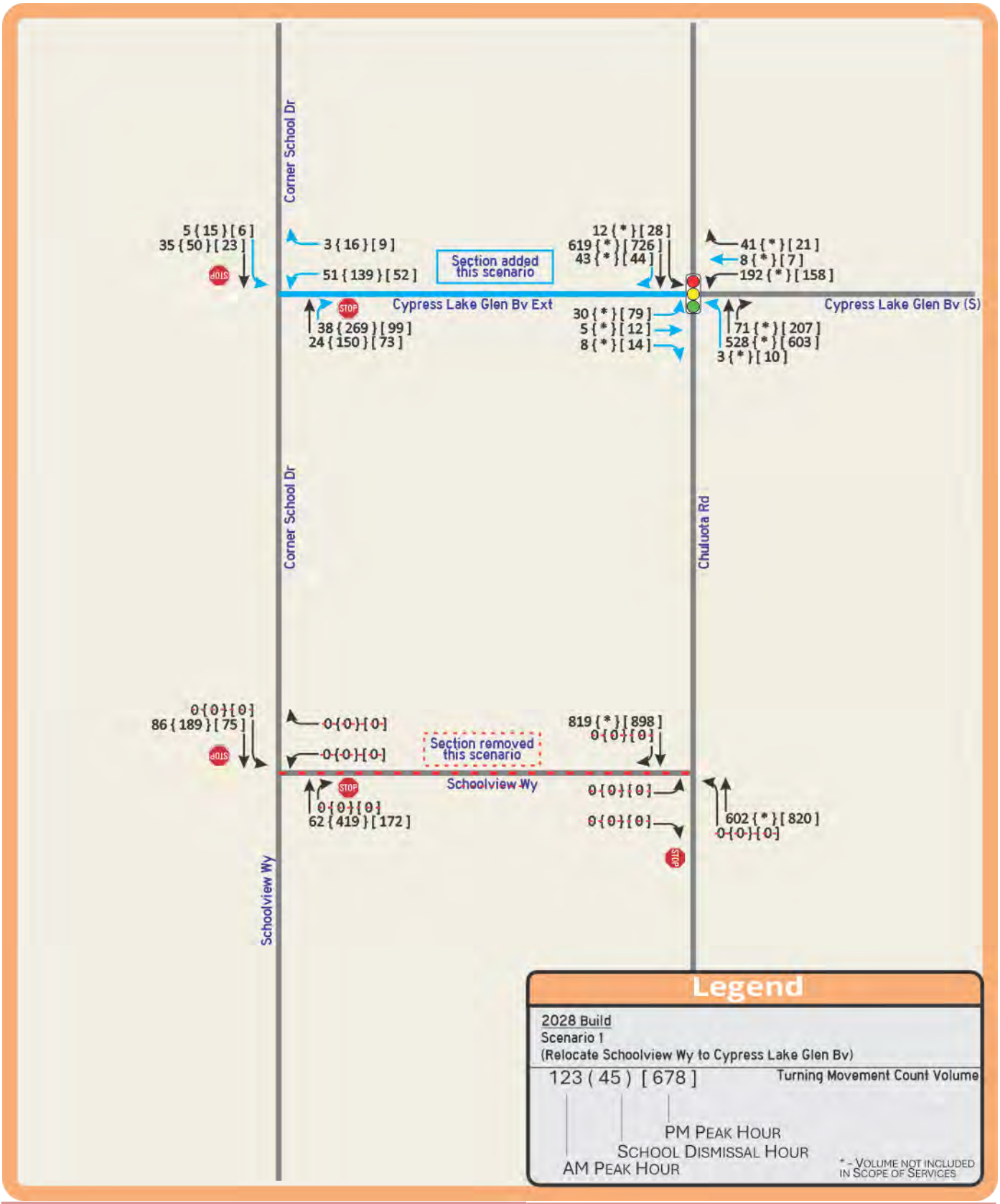
These future traffic volume forecasts are consistent with the AM and PM peak hour volume forecasts prepared for study intersections along Chuluota Road (including Schoolview Way/Cypress Lakes Glen Boulevard intersection) for the Build and No Build Alternatives as part of the Chuluota Road RCA DTTR prepared previously. Design hour volumes for the OCPS afternoon dismissal peak hour were prepared for both intersections, and peak hour volumes for correlating to the AM, PM, and the OCPS afternoon dismissal peak hour peak hours from the Chuluota Road RCA DTTM were prepared for the intersection of Corner School Drive at Schoolview Way.

The traffic projections for the additional study intersection were summarized as directional design hour volumes (DDHV)..



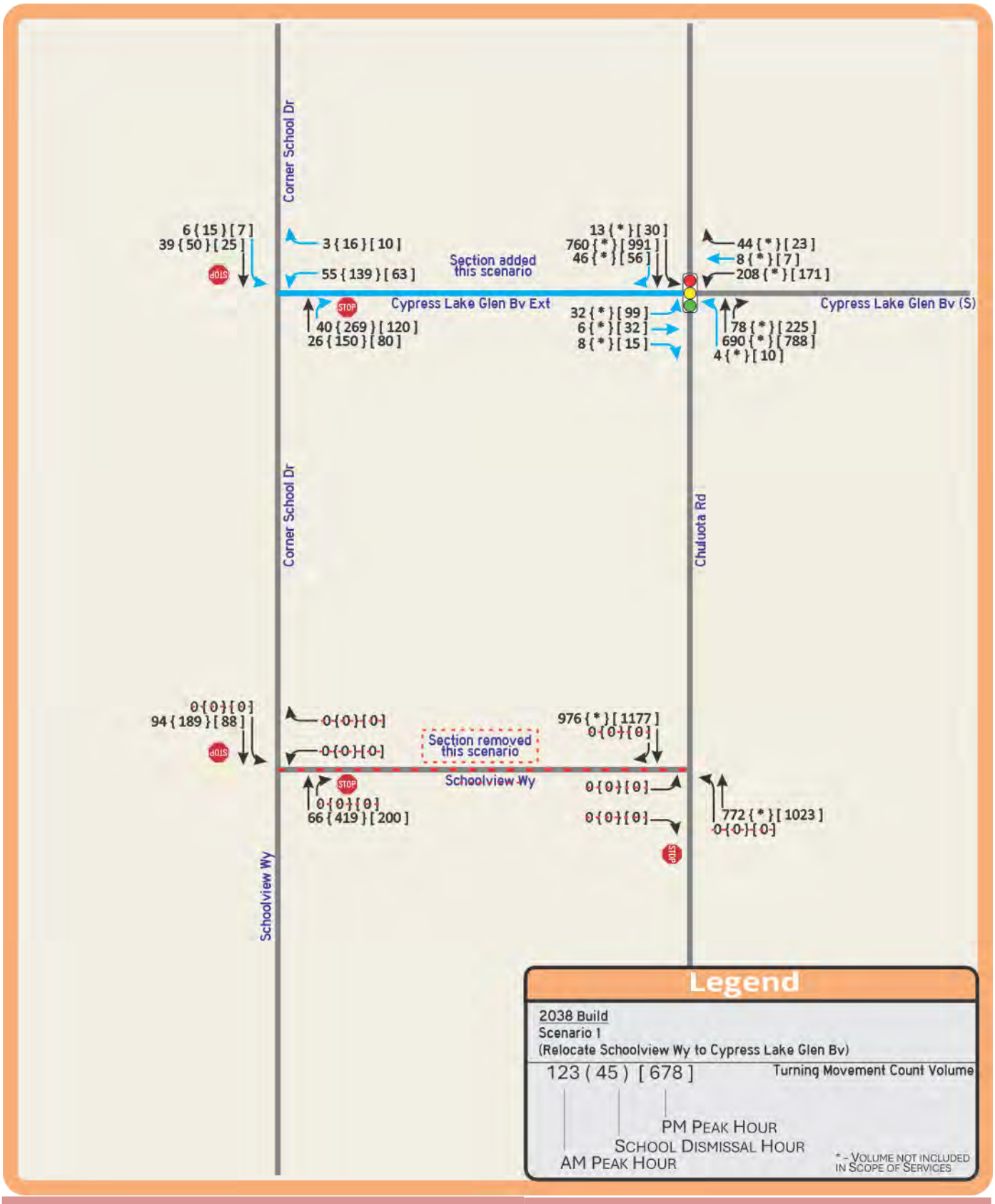
Chuluota Road from Lake Pickett Road to East Colonial Drive:
RCA – Design Traffic Report

Figure 1
Build Geometry



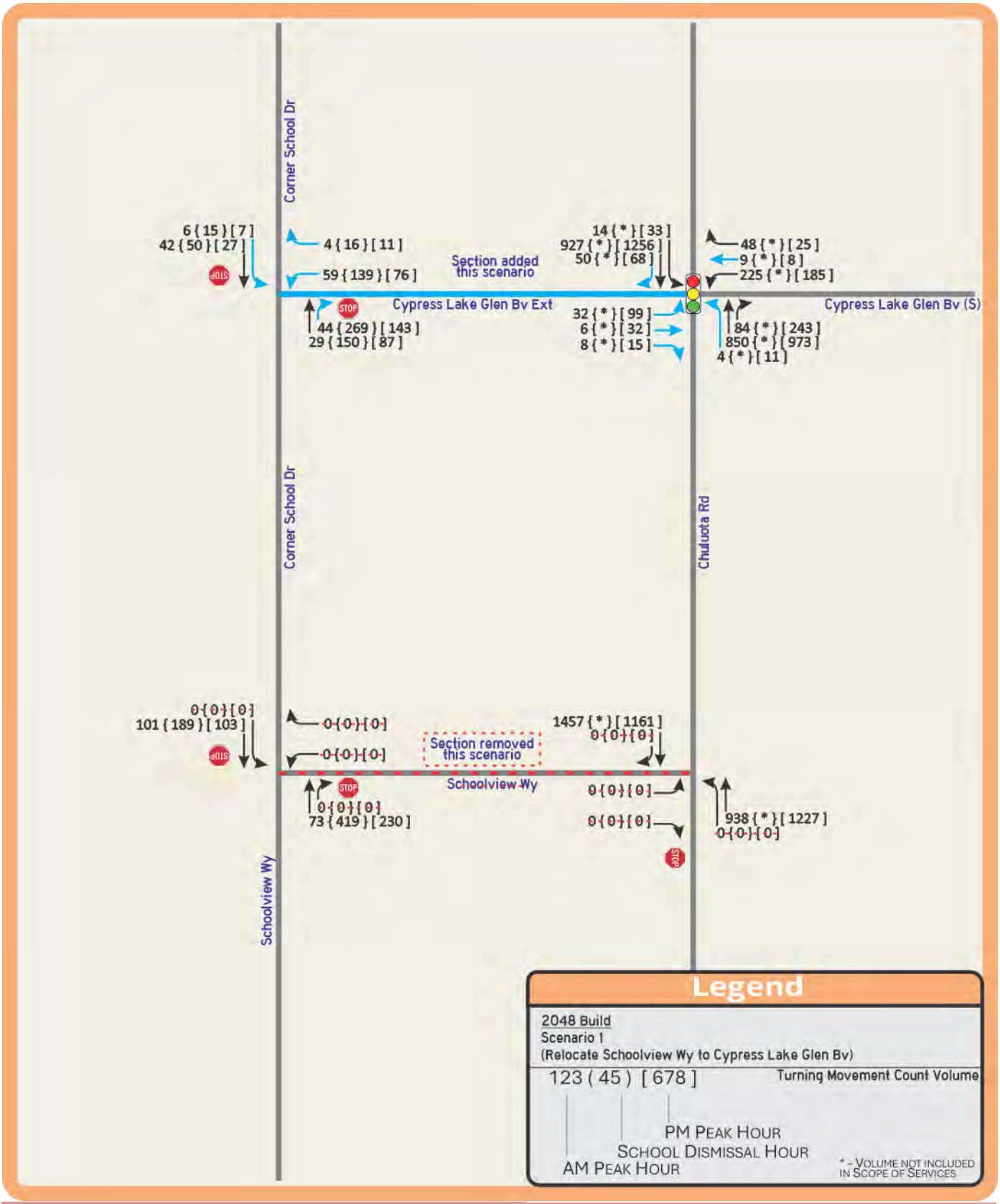
Chuluota Road from Lake Pickett Road to East Colonial Drive:
RCA – Design Traffic Report

Figure 2
Scenario 1 – 2028 Build



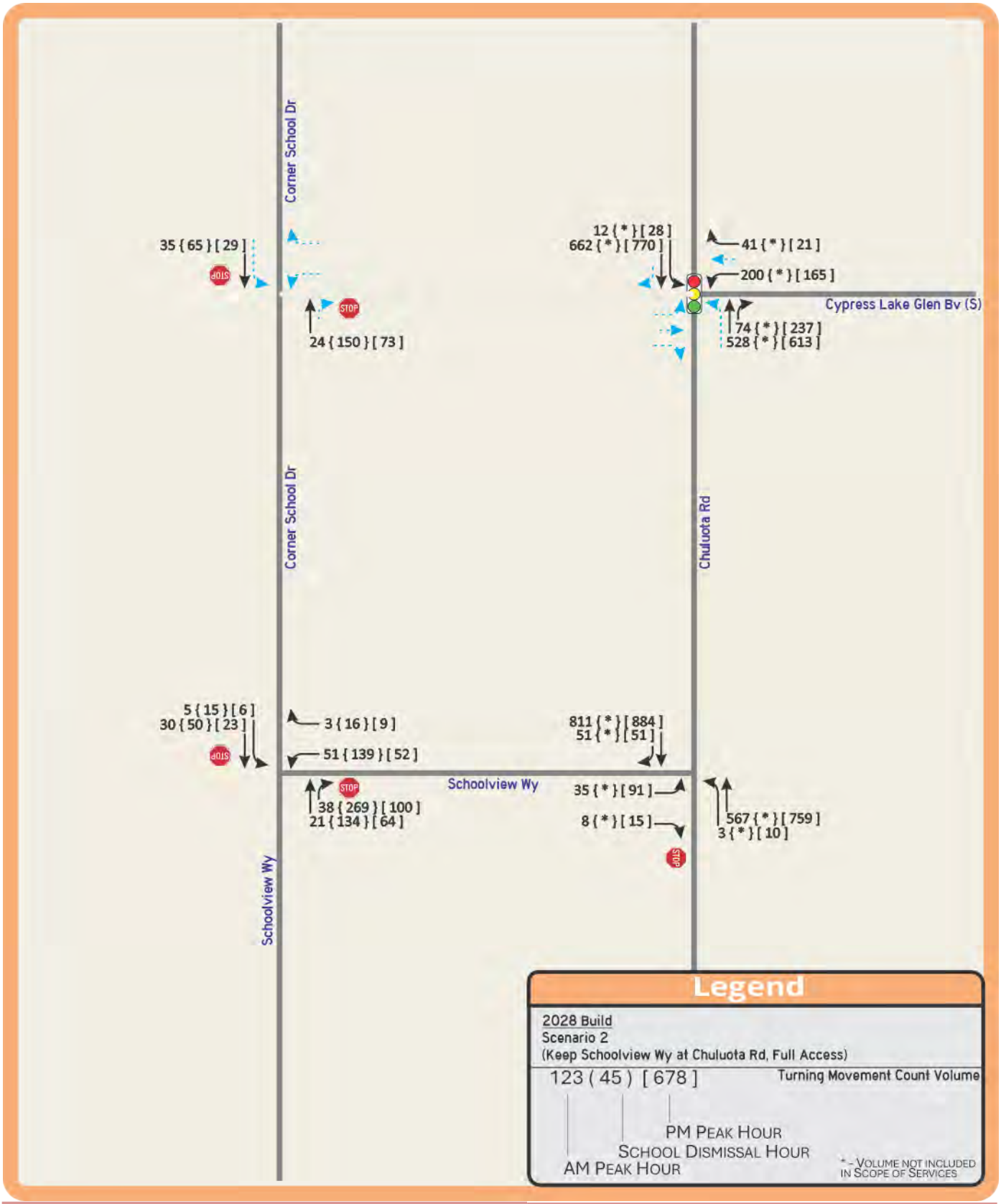
Chuluota Road from Lake Pickett Road to East Colonial Drive:
RCA – Design Traffic Report

Figure 3
Scenario 1 – 2038 Build



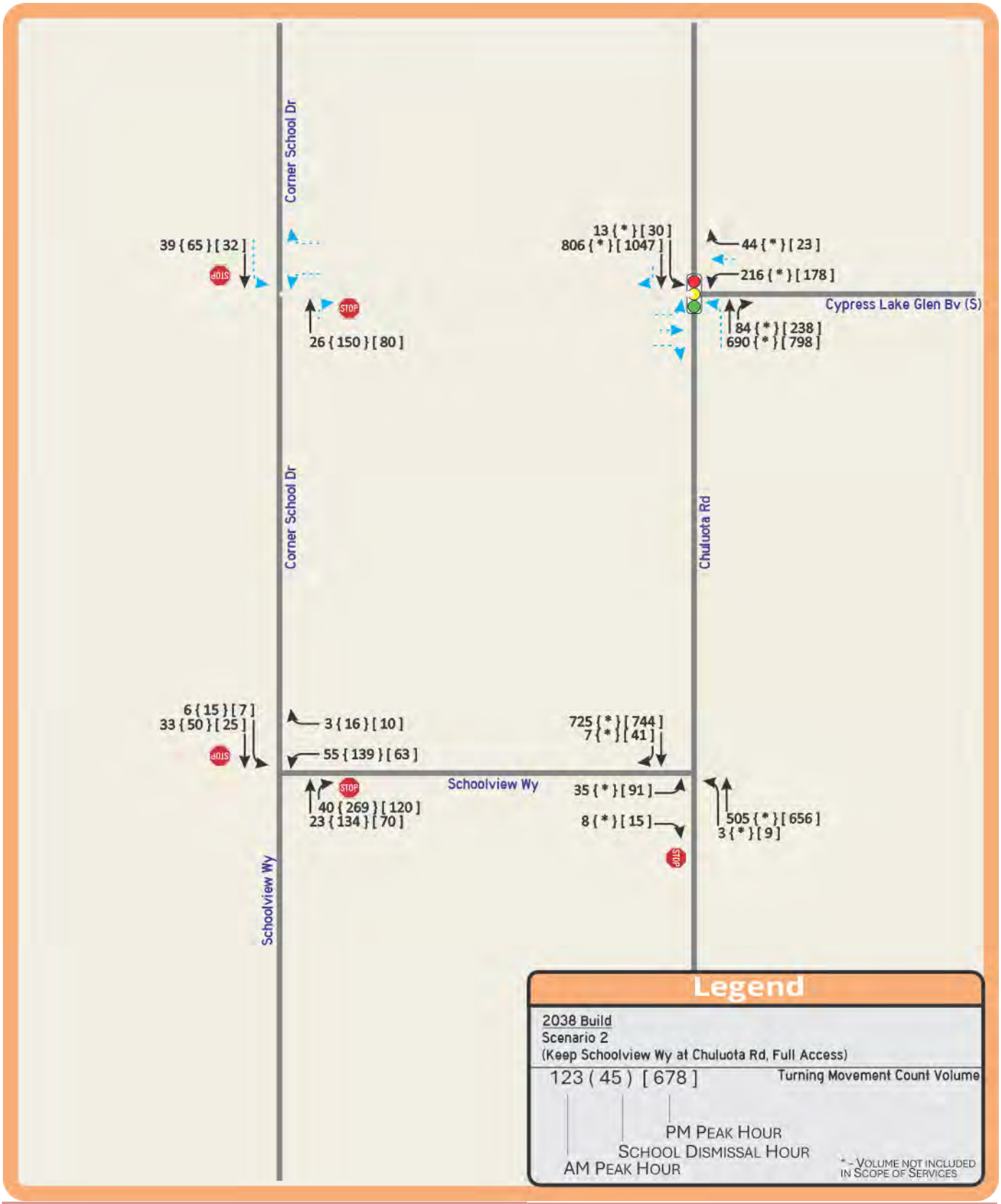
Chuluota Road from Lake Pickett Road to East Colonial Drive:
RCA – Design Traffic Report

Figure 4
Scenario 1 – 2048 Build



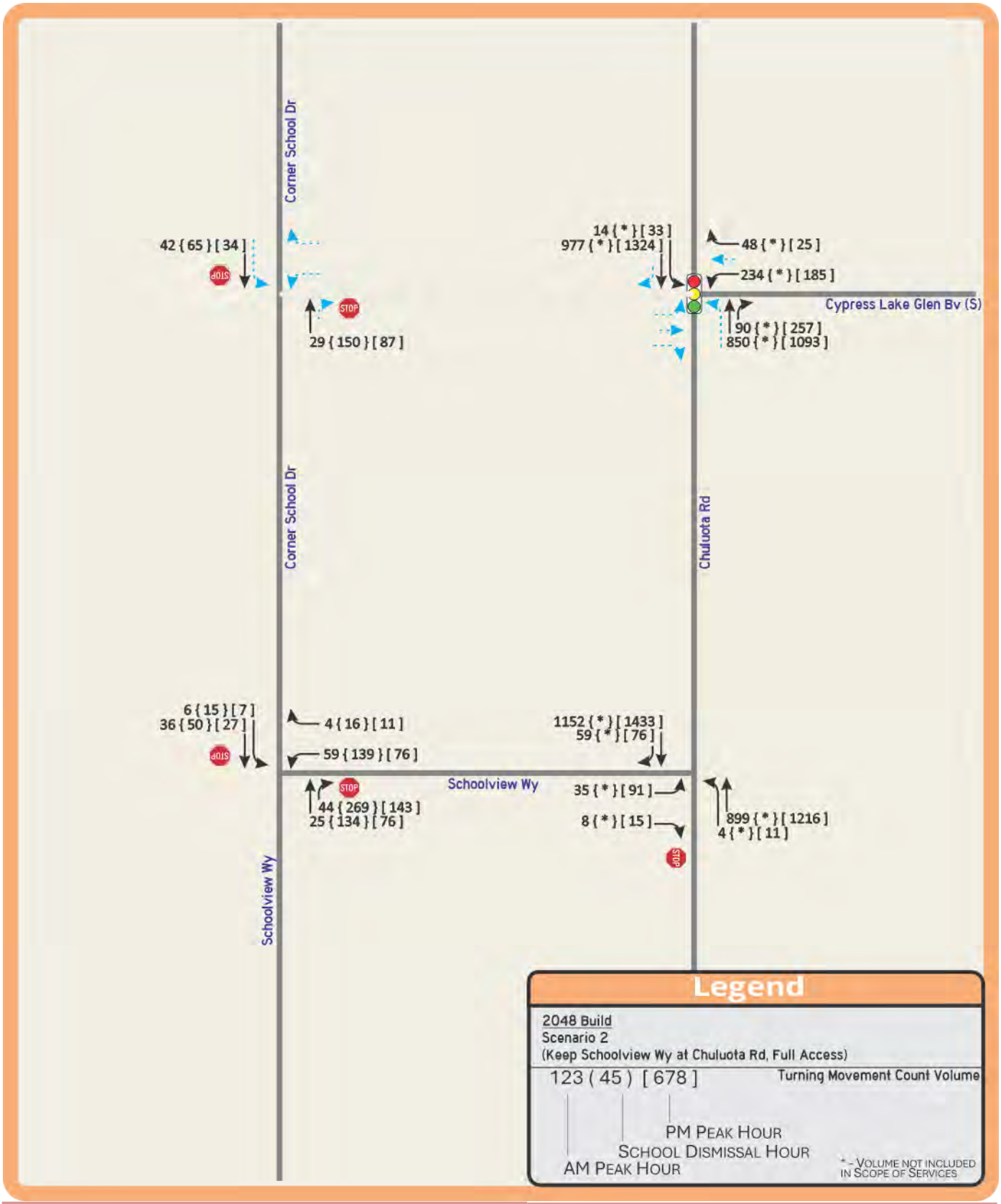
Chuluota Road from Lake Pickett Road to East Colonial Drive:
RCA – Design Traffic Report

Figure 5
Scenario 2 – 2028 Build



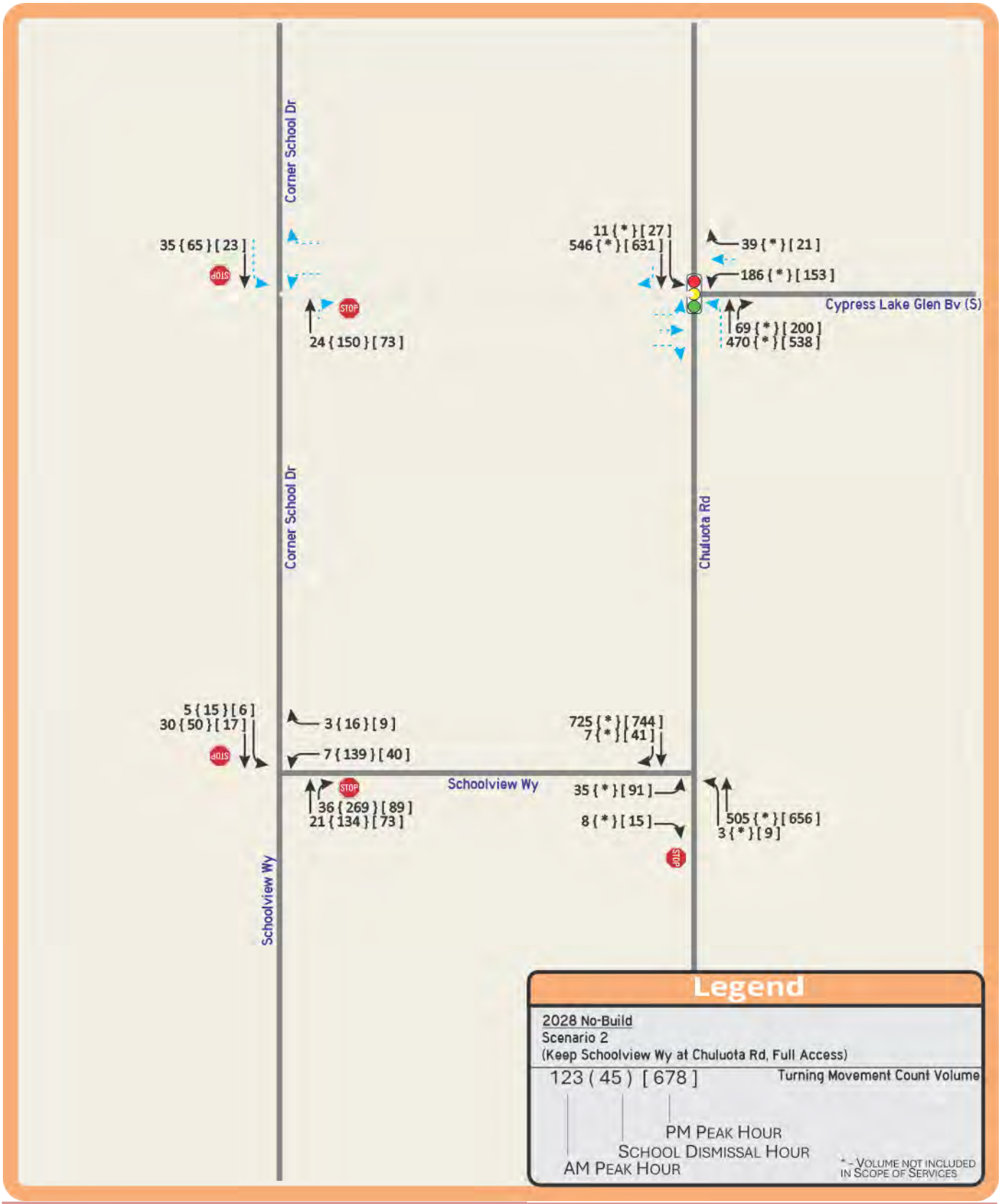
Chuluota Road from Lake Pickett Road to East Colonial Drive:
RCA – Design Traffic Report

Figure 6
Scenario 2 – 2038 Build



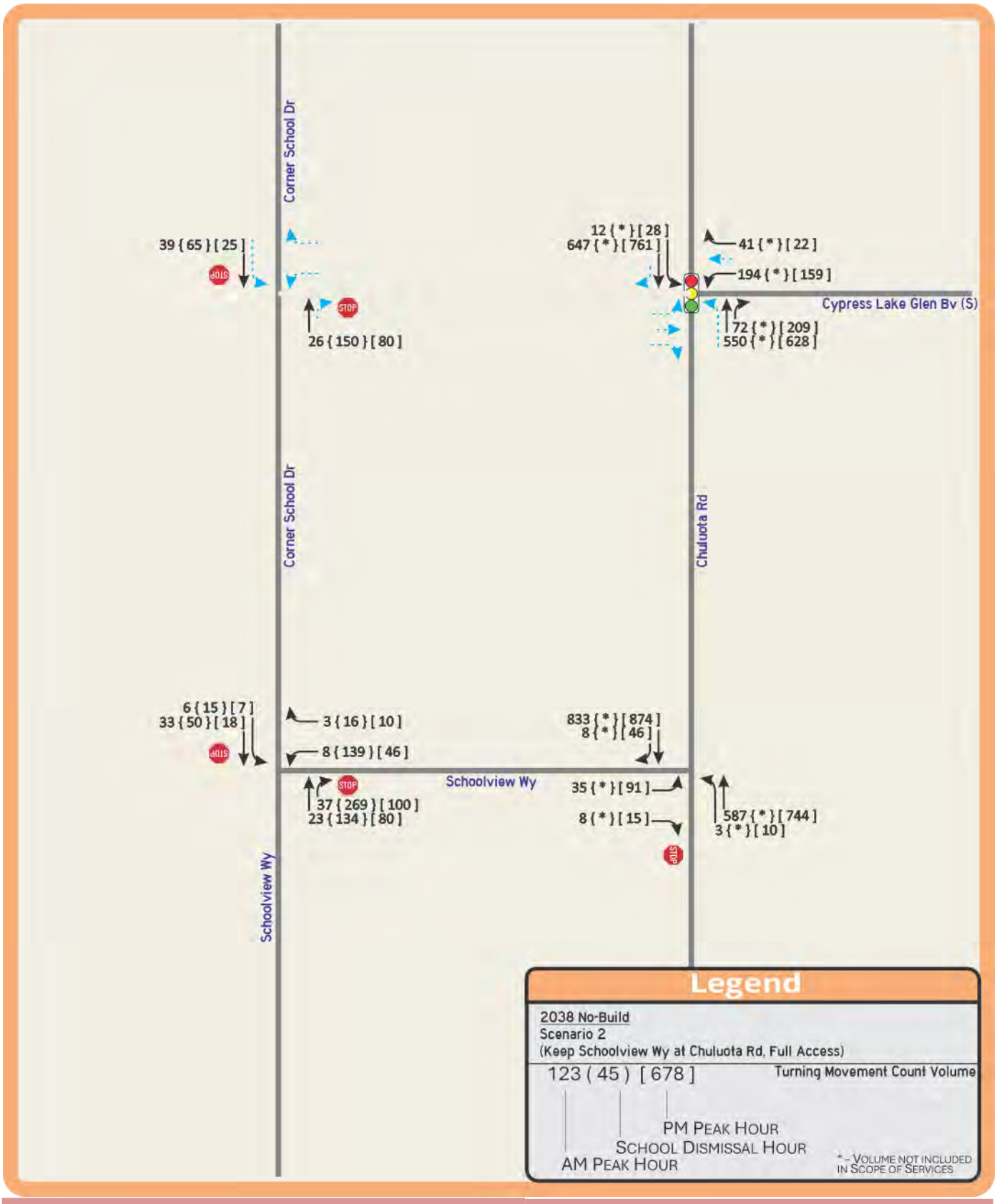
Chuluota Road from Lake Pickett Road to East Colonial Drive:
RCA – Design Traffic Report

Figure 7
Scenario 2 – 2048 Build



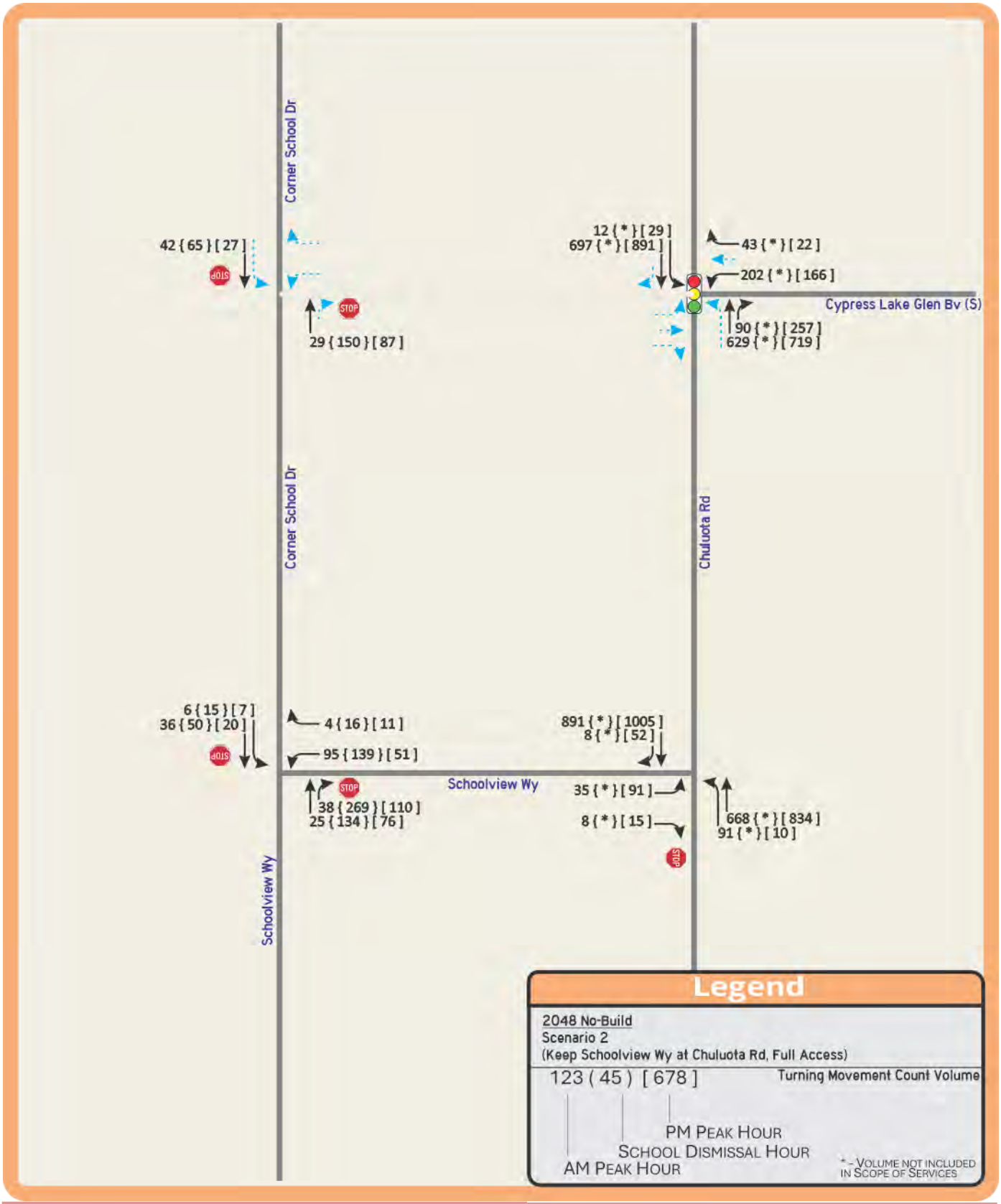
Chuluota Road from Lake Pickett Road to East Colonial Drive:
RCA – Design Traffic Report

Figure 8
Scenario 2 – 2028 No-Build



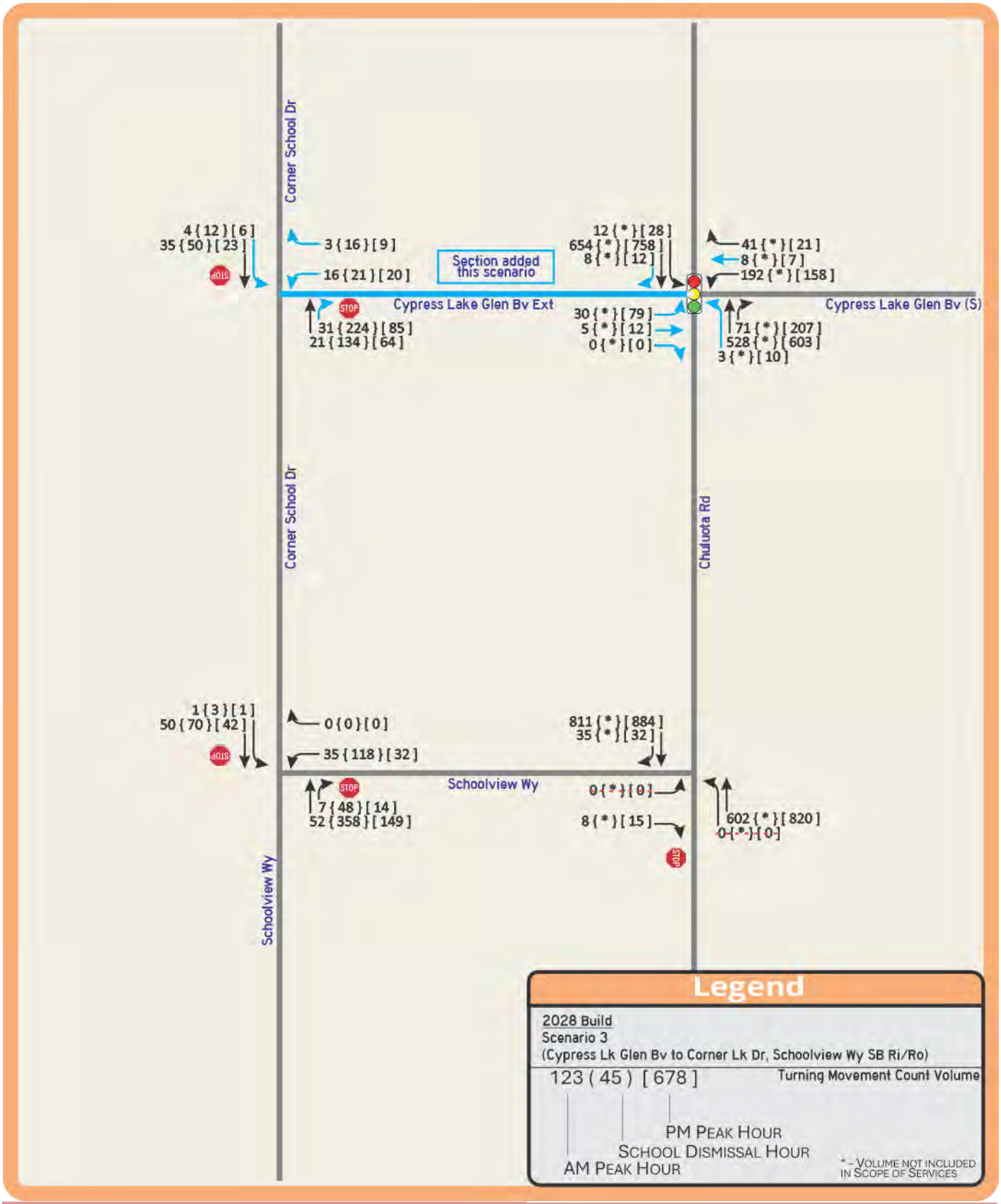
Chuluota Road from Lake Pickett Road to East Colonial Drive:
RCA – Design Traffic Report

Figure 9
Scenario 2 – 2038 No-Build



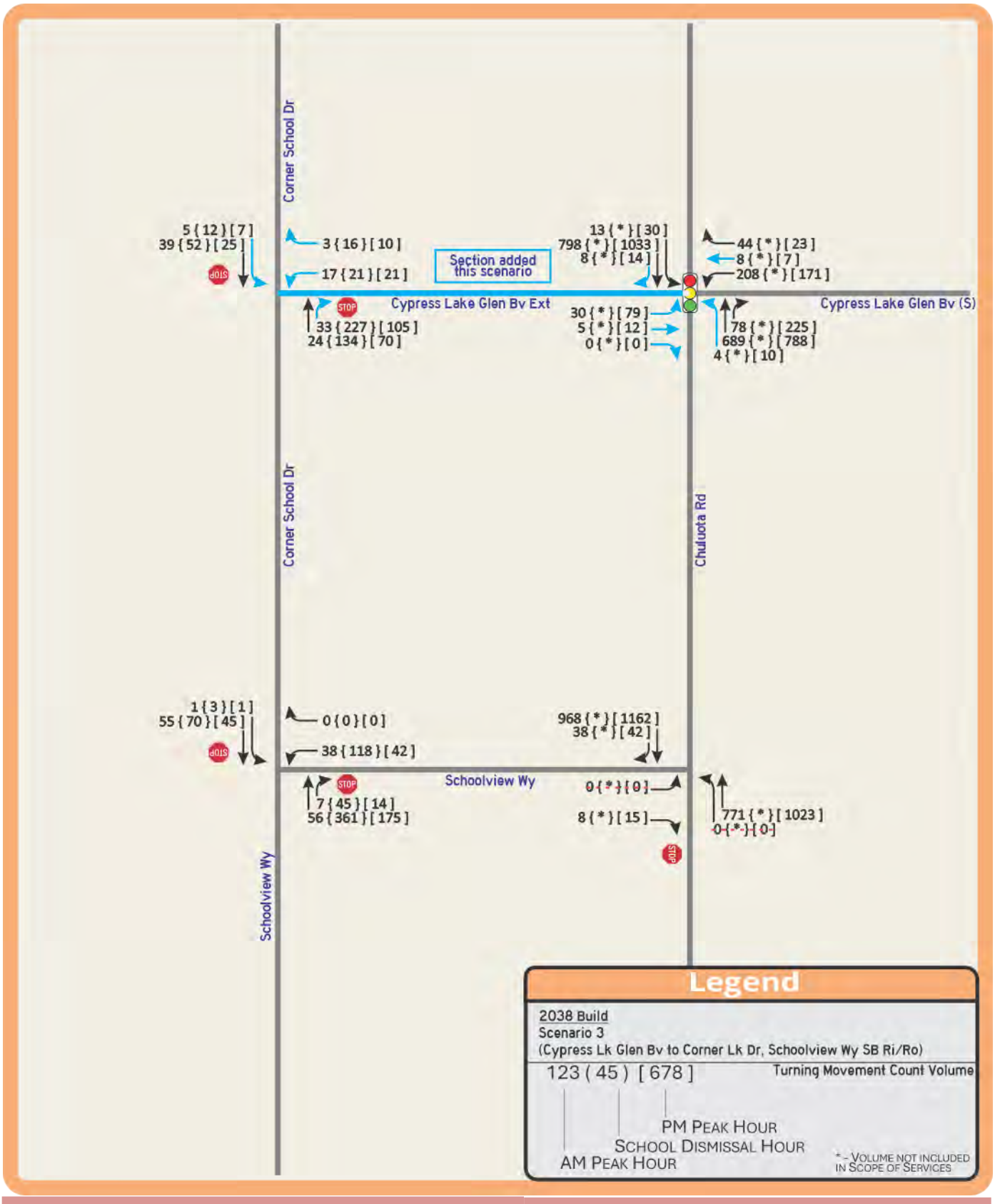
Chuluota Road from Lake Pickett Road to East Colonial Drive:
RCA – Design Traffic Report

Figure 10
Scenario 2 – 2048 No-Build



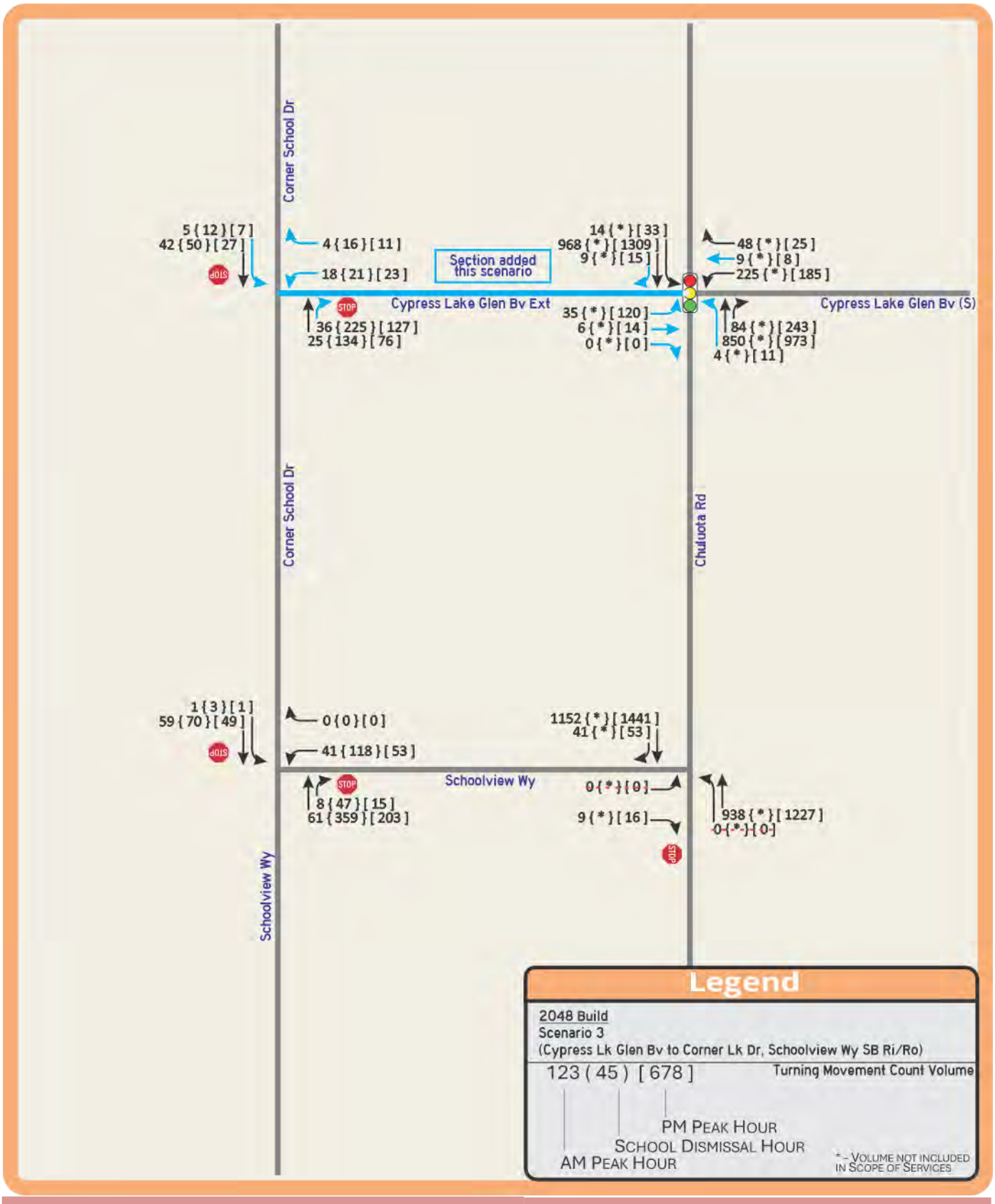
Chuluota Road from Lake Pickett Road to East Colonial Drive:
RCA – Design Traffic Report

Figure 11
Scenario 3 – 2028 Build



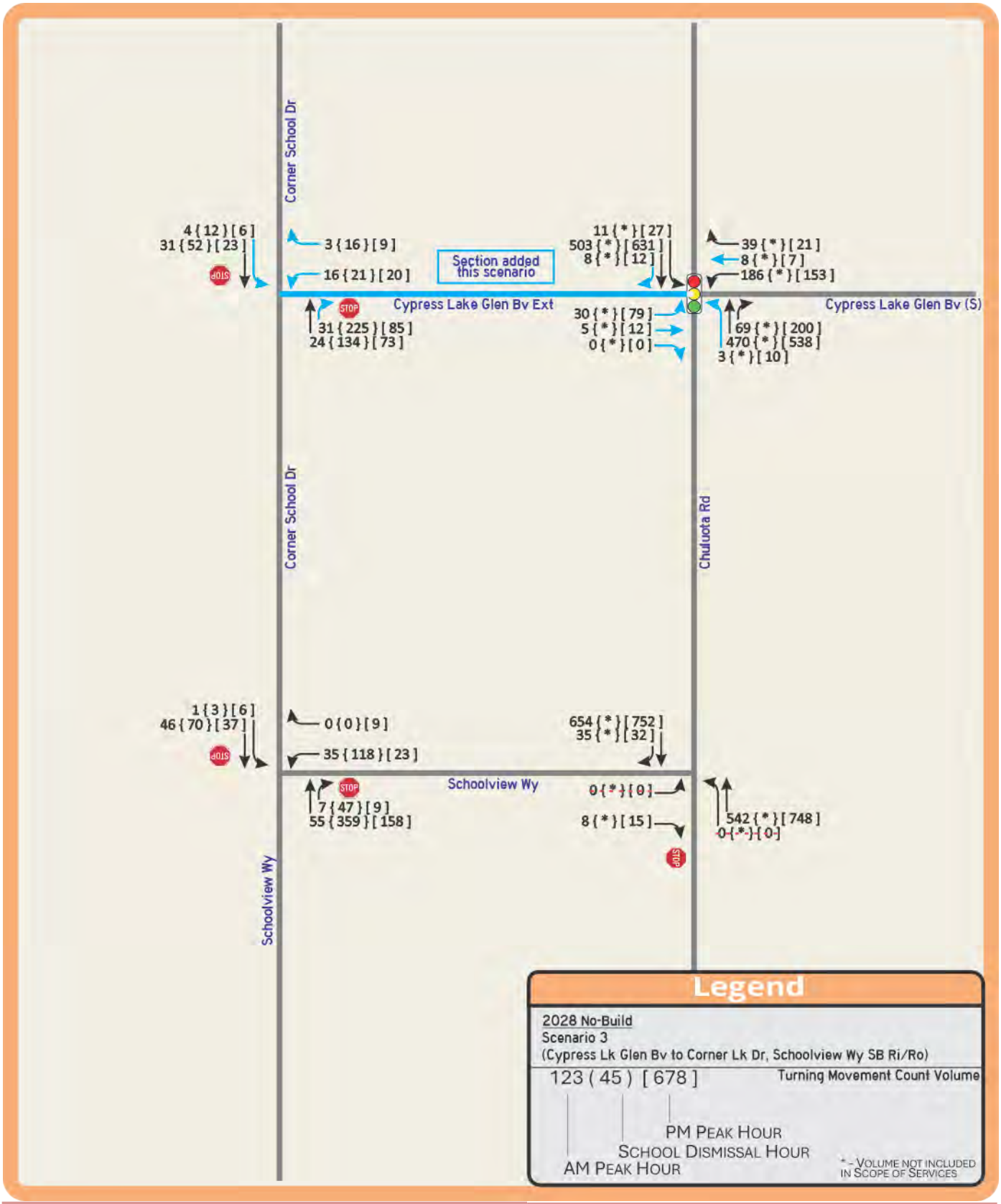
Chuluota Road from Lake Pickett Road to East Colonial Drive:
RCA – Design Traffic Report

Figure 12
Scenario 3 – 2038 Build



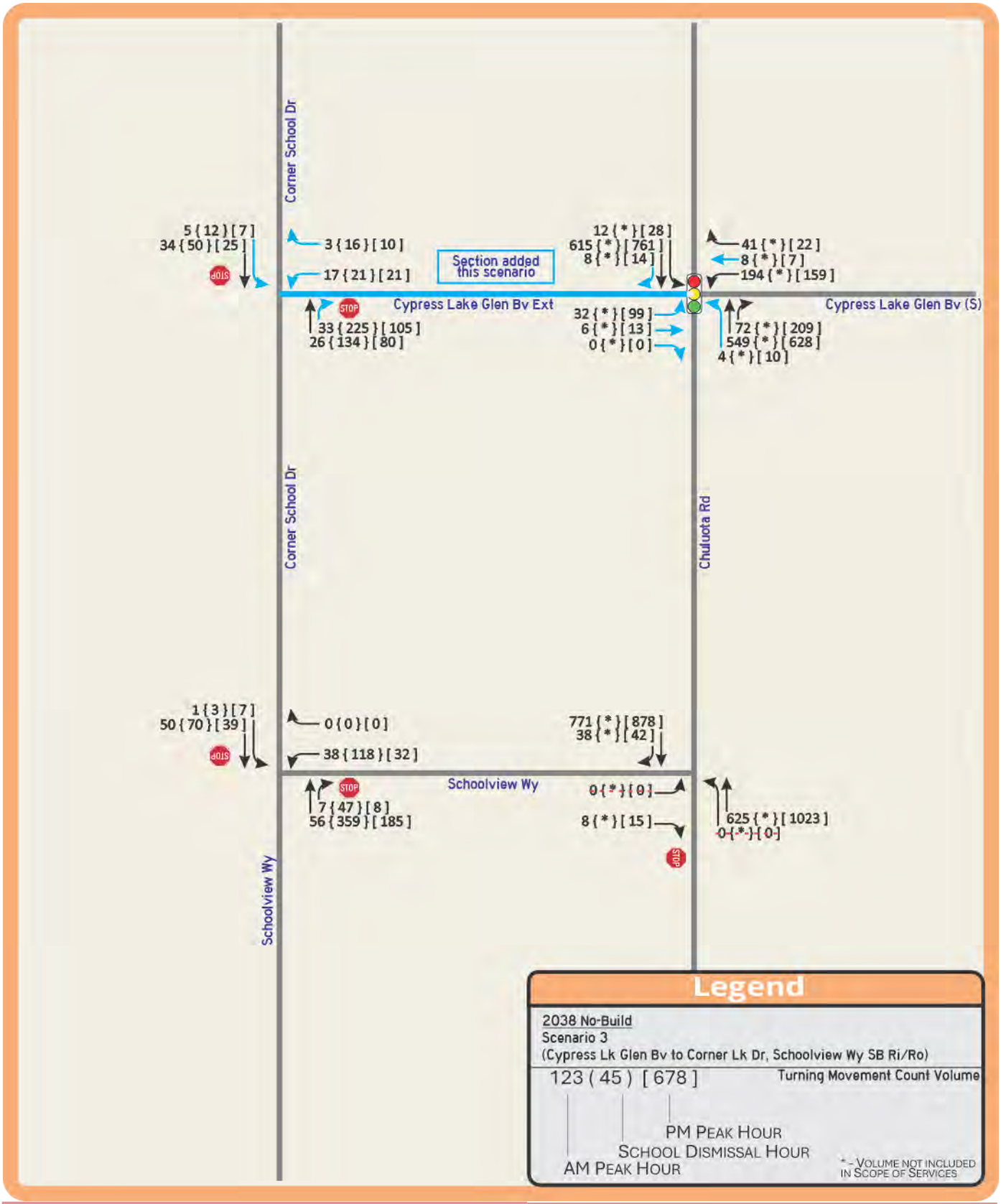
Chuluota Road from Lake Pickett Road to East Colonial Drive:
RCA – Design Traffic Report

Figure 13
Scenario 3 – 2048 Build



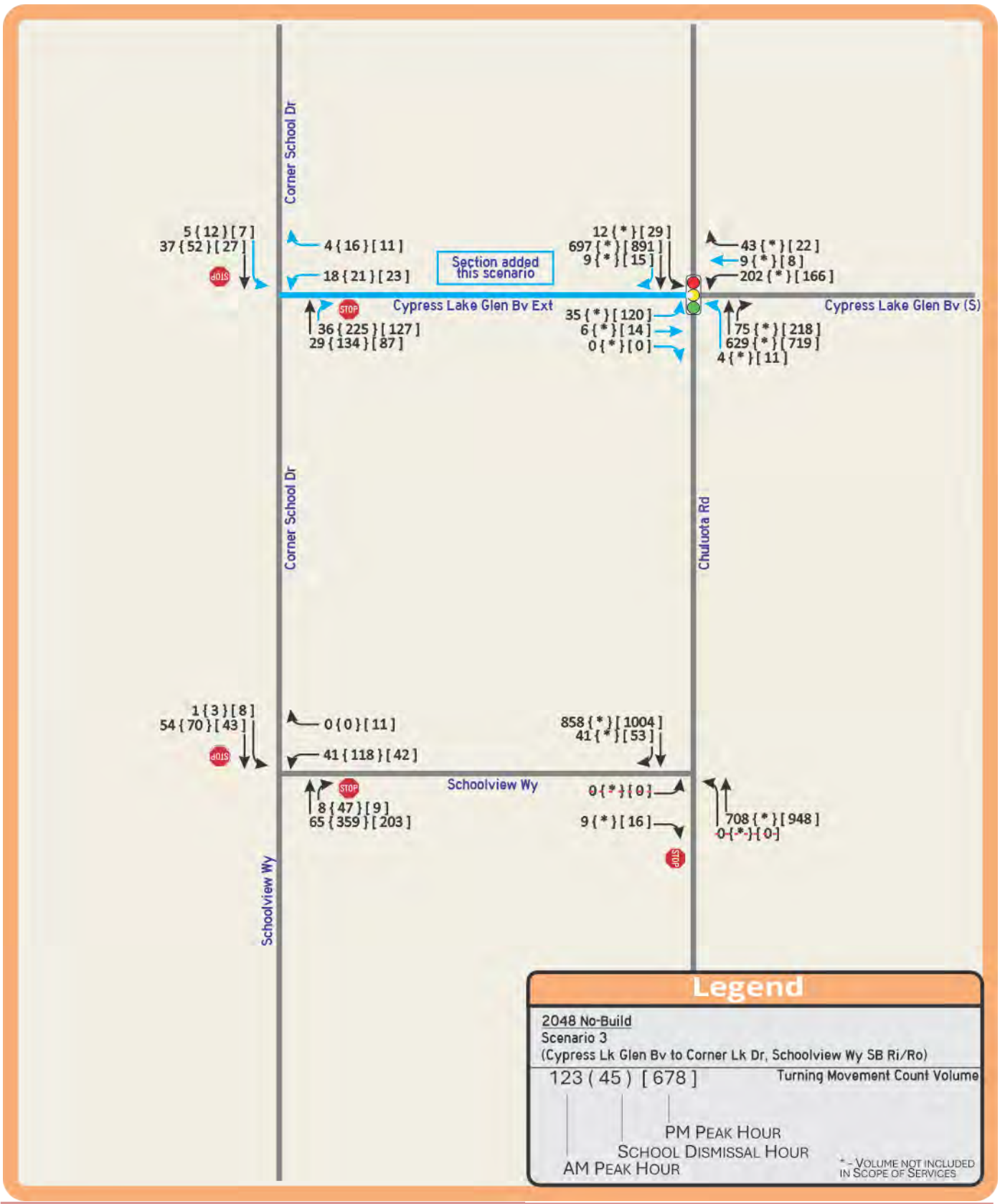
Chuluota Road from Lake Pickett Road to East Colonial Drive:
RCA – Design Traffic Report

Figure 14
Scenario 3 – 2028 No-Build



Chuluota Road from Lake Pickett Road to East Colonial Drive:
RCA – Design Traffic Report

Figure 15
Scenario 3 – 2038 NoBuild



Chuluota Road from Lake Pickett Road to East Colonial Drive:
RCA – Design Traffic Report

Figure 16
Scenario 3 – 2048 No-Build

ATTACHMENT
Raw Traffic Count for Corner School Drive and Schoolview Way

15 MINUTE TURNING MOVEMENT COUNTS

(Cars and Trucks)

DATE: January 23, 2024 (Tuesday) **CITY:** Orlando **LATITUDE:** 0

LOCATION: Corner School Dr & Schoolview Wy **COUNTY:** Orange County **LONGITUDE:** 0

	Corner School Dr					Corner School Dr										Schoolview Wy						
TIME	NORTHBOUND					SOUTHBOUND					N/S	EASTBOUND					WESTBOUND					E/W	GRAND
BEGIN	L	T	R	*U-turn*	TOTAL	L	T	R	*U-turn*	TOTAL	TOTAL	L	T	R	*U-turn*	TOTAL	L	T	R	*U-turn*	TOTAL	TOTAL	TOTAL
07:00 AM	0	3	6	0	**9**	2	24	0	0	**26**	**35**	0	0	0	0	**0**	53	0	1	0	**54**	**54**	**89**
07:15 AM	0	2	5	0	**7**	0	19	0	0	**19**	**26**	0	0	0	0	**0**	20	0	4	0	**24**	**24**	**50**
07:30 AM	0	2	10	0	**12**	1	18	0	0	**19**	**31**	0	0	0	0	**0**	16	0	0	0	**16**	**16**	**47**
07:45 AM	0	5	10	0	**15**	0	6	0	0	**6**	**21**	0	0	0	0	**0**	12	0	0	0	**12**	**12**	**33**
TOTAL	0	12	31	0	**43**	3	67	0	0	**70**	**113**	0	0	0	0	**0**	101	0	5	0	**106**	**106**	**219**
08:00 AM	0	5	7	0	**12**	3	15	0	0	**18**	**30**	0	0	0	0	**0**	12	0	1	0	**13**	**13**	**43**
08:15 AM	0	9	11	0	**20**	1	10	0	0	**11**	**31**	0	0	0	0	**0**	18	0	1	0	**19**	**19**	**50**
08:30 AM	0	4	18	0	**22**	0	8	0	0	**8**	**30**	0	0	0	0	**0**	23	0	1	0	**24**	**24**	**54**
08:45 AM	0	6	25	0	**31**	2	7	0	0	**9**	**40**	0	0	0	0	**0**	37	0	1	0	**38**	**38**	**78**
TOTAL	0	24	61	0	**85**	6	40	0	0	**46**	**131**	0	0	0	0	**0**	90	0	4	0	**94**	**94**	**225**
02:00 PM	0	9	8	0	**17**	1	5	0	0	**6**	**23**	0	0	0	0	**0**	4	0	1	1	**6**	**6**	**29**
02:15 PM	0	10	8	0	**18**	2	4	0	0	**6**	**24**	0	0	0	0	**0**	6	0	1	0	**7**	**7**	**31**
02:30 PM	0	6	18	0	**24**	0	3	0	0	**3**	**27**	0	0	0	0	**0**	5	0	0	0	**5**	**5**	**32**
02:45 PM	0	17	17	0	**34**	2	5	0	0	**7**	**41**	0	0	0	0	**0**	7	0	0	0	**7**	**7**	**48**
TOTAL	0	42	51	0	**93**	5	17	0	0	**22**	**115**	0	0	0	0	**0**	22	0	2	1	**25**	**25**	**140**
03:00 PM	0	8	19	0	**27**	1	6	0	0	**7**	**34**	0	0	0	0	**0**	9	0	0	0	**9**	**9**	**43**
03:15 PM	0	12	25	0	**37**	0	3	0	0	**3**	**40**	0	0	0	0	**0**	22	0	1	0	**23**	**23**	**63**
03:30 PM	0	10	20	0	**30**	2	1	0	0	**3**	**33**	0	0	0	0	**0**	12	0	0	0	**12**	**12**	**45**
03:45 PM	0	8	9	0	**17**	2	6	0	0	**8**	**25**	0	0	0	0	**0**	17	0	4	2	**23**	**23**	**48**
TOTAL	0	38	73	0	**111**	5	16	0	0	**21**	**132**	0	0	0	0	**0**	60	0	5	2	**67**	**67**	**199**
04:00 PM	0	14	44	0	**58**	2	10	0	0	**12**	**70**	0	0	0	0	**0**	35	0	5	0	**40**	**40**	**110**
04:15 PM	0	19	55	0	**74**	2	5	0	0	**7**	**81**	0	0	0	0	**0**	12	0	2	0	**14**	**14**	**95**
04:30 PM	0	22	29	0	**51**	1	8	0	0	**9**	**60**	0	0	0	0	**0**	5	0	1	0	**6**	**6**	**66**
04:45 PM	0	17	37	0	**54**	2	3	0	0	**5**	**59**	0	0	0	0	**0**	9	0	2	1	**12**	**12**	**71**
TOTAL	0	72	165	0	**237**	7	26	0	0	**33**	**270**	0	0	0	0	**0**	61	0	10	1	**72**	**72**	**342**
05:00 PM	0	18	26	0	**44**	2	5	0	0	**7**	**51**	0	0	0	0	**0**	13	0	1	1	**15**	**15**	**66**
05:15 PM	0	19	39	0	**58**	1	9	0	0	**10**	**68**	0	0	0	0	**0**	11	0	2	0	**13**	**13**	**81**
05:30 PM	0	26	29	0	**55**	2	4	0	0	**6**	**61**	0	0	0	0	**0**	8	0	0	0	**8**	**8**	**69**
05:45 PM	0	17	38	0	**55**	2	8	0	0	**10**	**65**	0	0	0	0	**0**	6	0	2	0	**8**	**8**	**73**
TOTAL	0	80	132	0	**212**	7	26	0	0	**33**	**245**	0	0	0	0	**0**	38	0	5	1	**44**	**44**	**289**

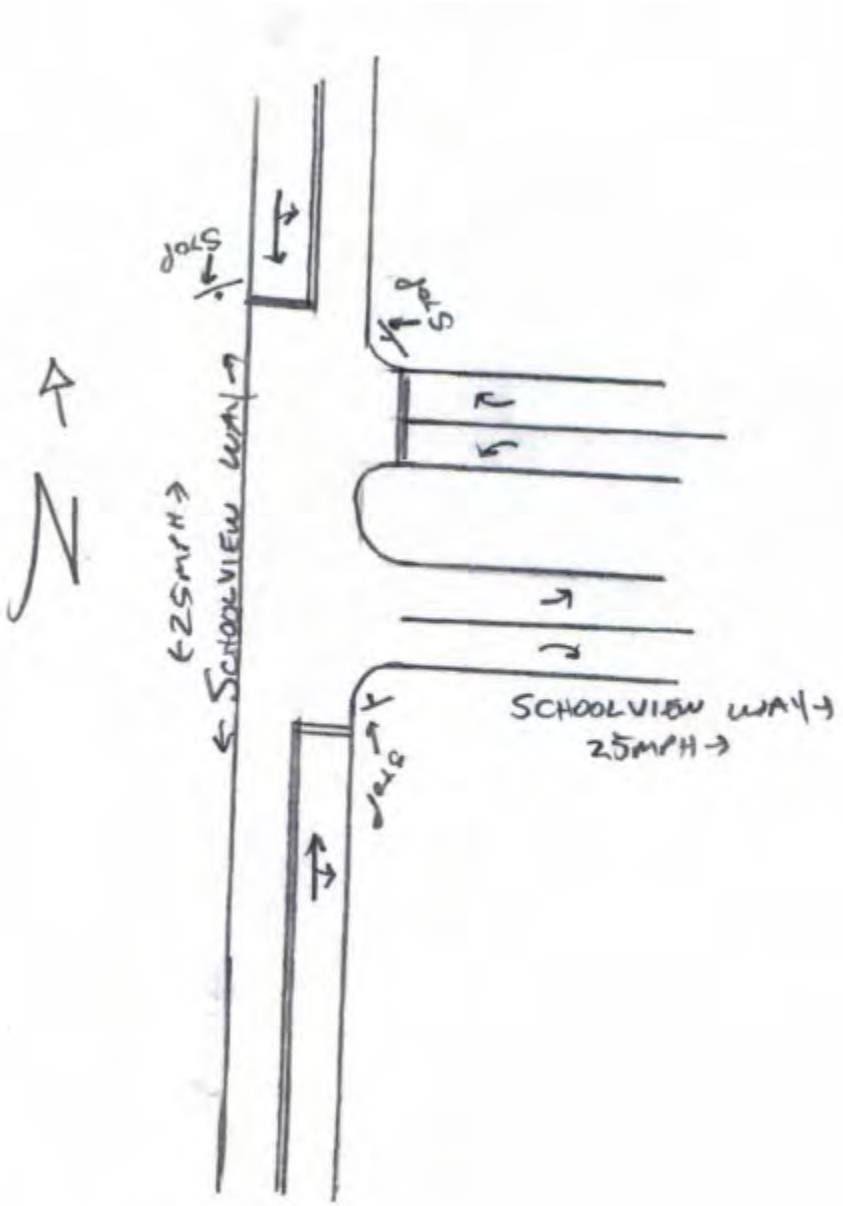
15 MINUTE TURNING MOVEMENT COUNTS

(Trucks Only)

DATE: January 23, 2024 (Tuesday) **CITY:** Orlando **LATITUDE:** 0

LOCATION: Corner School Dr & Schoolview Wy **COUNTY:** Orange County **LONGITUDE:** 0

	Corner School Dr					Corner School Dr										Schoolview Wy						
TIME	NORTHBOUND					SOUTHBOUND					N/S	EASTBOUND					WESTBOUND					E/W	GRAND
BEGIN	L	T	R	*U-turn*	TOTAL	L	T	R	*U-turn*	TOTAL	TOTAL	L	T	R	*U-turn*	TOTAL	L	T	R	*U-turn*	TOTAL	TOTAL	TOTAL
07:00 AM	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	0	0	0	**0**	0	0	0	0	**0**	**0**	**0**
07:15 AM	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	0	0	0	**0**	0	0	0	0	**0**	**0**	**0**
07:30 AM	0	0	2	0	**2**	0	0	0	0	**0**	**2**	0	0	0	0	**0**	0	0	0	0	**0**	**0**	**2**
07:45 AM	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	0	0	0	**0**	0	0	0	0	**0**	**0**	**0**
TOTAL	0	0	2	0	**2**	0	0	0	0	**0**	**2**	0	0	0	0	**0**	0	0	0	0	**0**	**0**	**2**
08:00 AM	0	0	0	0	**0**	0	1	0	0	**1**	**1**	0	0	0	0	**0**	0	0	0	0	**0**	**0**	**1**
08:15 AM	0	0	0	0	**0**	0	1	0	0	**1**	**1**	0	0	0	0	**0**	0	0	1	0	**1**	**1**	**2**
08:30 AM	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	0	0	0	**0**	0	0	0	0	**0**	**0**	**0**
08:45 AM	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	0	0	0	**0**	0	0	0	0	**0**	**0**	**0**
TOTAL	0	0	0	0	**0**	0	2	0	0	**2**	**2**	0	0	0	0	**0**	0	0	1	0	**1**	**1**	**3**
02:00 PM	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	0	0	0	**0**	0	0	0	0	**0**	**0**	**0**
02:15 PM	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	0	0	0	**0**	0	0	0	0	**0**	**0**	**0**
02:30 PM	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	0	0	0	**0**	0	0	0	0	**0**	**0**	**0**
02:45 PM	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	0	0	0	**0**	0	0	0	0	**0**	**0**	**0**
TOTAL	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	0	0	0	**0**	0	0	0	0	**0**	**0**	**0**
03:00 PM	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	0	0	0	**0**	0	0	0	0	**0**	**0**	**0**
03:15 PM	0	0	1	0	**1**	0	0	0	0	**0**	**1**	0	0	0	0	**0**	0	0	0	0	**0**	**0**	**1**
03:30 PM	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	0	0	0	**0**	0	0	0	0	**0**	**0**	**0**
03:45 PM	0	0	0	0	**0**	0	1	0	0	**1**	**1**	0	0	0	0	**0**	0	0	0	0	**0**	**0**	**1**
TOTAL	0	0	1	0	**1**	0	1	0	0	**1**	**2**	0	0	0	0	**0**	0	0	0	0	**0**	**0**	**2**
04:00 PM	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	0	0	0	**0**	5	0	0	0	**5**	**5**	**5**
04:15 PM	0	1	2	0	**3**	0	0	0	0	**0**	**3**	0	0	0	0	**0**	5	0	0	0	**5**	**5**	**8**
04:30 PM	0	0	3	0	**3**	0	0	0	0	**0**	**3**	0	0	0	0	**0**	1	0	0	0	**1**	**1**	**4**
04:45 PM	0	0	2	0	**2**	0	0	0	0	**0**	**2**	0	0	0	0	**0**	1	0	0	0	**1**	**1**	**3**
TOTAL	0	1	7	0	**8**	0	0	0	0	**0**	**8**	0	0	0	0	**0**	12	0	0	0	**12**	**12**	**20**
05:00 PM	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	0	0	0	**0**	0	0	0	0	**0**	**0**	**0**
05:15 PM	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	0	0	0	**0**	0	0	0	0	**0**	**0**	**0**
05:30 PM	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	0	0	0	**0**	0	0	0	0	**0**	**0**	**0**
05:45 PM	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	0	0	0	**0**	0	0	0	0	**0**	**0**	**0**
TOTAL	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	0	0	0	**0**	0	0	0	0	**0**	**0**	**0**


STOP
STOP
STOP
←25MPH→
←SCHOOLVIEW WAY→
SCHOOLVIEW WAY→
25MPH→
N

APPENDIX C
STAGE 1 ICE ANALYSES

APPENDIX C – STAGE 1 ICE ANALYSIS

CHULUOTA ROAD & LAKE PICKETT ROAD

CAP-X WORKSHEETS

Capacity Analysis for Planning of Junctions

Input Worksheet 1

Project Name	Chuloata Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) AM Opening Year (2028)
Location	Chuluota Road (CR 419) at Lake Pickett Road
Date	March 14, 2024
Number of Legs	4
Major Street Direction	North-South

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	0	51	44	135	3.48%	0.00%
Westbound	0	85	108	7	3.48%	0.00%
Southbound	0	3	296	182	3.48%	0.00%
Northbound	0	177	361	66	3.48%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor	**Suggested = 2.00**	2.00
FDOT Context Zone	**C3R-Suburban Residential**	
Critical Lane Volume Threshold — 2-phase signal	**Suggested = 1800**	**1800**
Critical Lane Volume Threshold — 3-phase signal	**Suggested = 1750**	**1750**
Critical Lane Volume Threshold — 4-phase signal	**Suggested = 1700**	**1700**

Equivalent Passenger Car Volume

	Volume (Veh/hr)			
	U-Turn	**Left**	**Thru**	**Right**
Eastbound	0	53	46	140
Westbound	0	88	112	7
Southbound	0	3	306	188
Northbound	0	183	374	68

Notes:	
Left-Turn Adjustment Factor	*Conversion of left-turning vehicles to equivalent through vehicles*
Right-turn Adjustment Factor	*Conversion of right-turning vehicles to equivalent through vehicles*
U-turn Adjustment Factor	*Conversion of U-turning vehicles to equivalent through vehicles*
Truck to PCE Factor	*1 truck = X Passenger Car Equivalents*
Critical Lane Volume Sum Limit	*Saturation Value for Critical Lane Volume Sum at an intersection*

Capacity Analysis for Planning of Junctions

Step 2A: Base Conditions Analysis

Project Name	Chuloata Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) AM Opening Year (2028)
Location	Chuluota Road (CR 419) at Lake Pickett Road
Date	March 14, 2024
Major Street Direction	North-South

Existing Intersection Configuration	*Traffic Signal*

Number of Lanes for Existing Configuration
(Can be edited in "3- Alt Num Lanes Input" as needed)

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		1	1	1		1	1	0		1	1	0		1	1	0

Results for Existing Configuration

TYPE OF	Sheet	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	

Overall v/c Ratio	0.57	Pedestrian Accommodation Score	4.80	Bicycle Accommodation Score	4.37

Step 2B: Alternative Selection

Rankings Inclusion		Yes/No	Comment
At-Grade Non-Roundabout Intersections?		Yes	
Traffic Signal		Yes	
Two-Way Stop Control		Yes	
All-Way Stop Control		Yes	
Continuous Green T		No	4-Leg Intersection
Quadrant Roadway	S-W	No	No Nearby Quadrant Roadway
	N-E	No	No Nearby Quadrant Roadway
	S-E	No	No Nearby Quadrant Roadway
	N-W	No	No Nearby Quadrant Roadway
Partial Displaced Left Turn		Yes	
Displaced Left Turn		Yes	
Signalized Restricted Crossing U-Turn		Yes	
Unsignalized Restricted Crossing U-Turn		Yes	
Median U-Turn		Yes	
Partial Median U-Turn		Yes	
Bowtie		Yes	
Signalized ThruCut		Yes	
Unsignalized ThruCut		Yes	
Roundabouts?		Yes	
50 ICD Miniroundabout		Yes	
75 ICD Miniroundabout		Yes	
1x1		Yes	
1NS x 2EW		No	1x1 Roundabout Only
2NS x 1EW		No	1x1 Roundabout Only
2x2		No	1x1 Roundabout Only
Ramp Terminal Intersections?		No	
Diamond			
Partial Cloverleaf A			
Partial Cloverleaf B			
Displaced Left Turn Interchange			
Diverging Diamond			
Single Point Diamond			

Continue to Step 3 Step 3

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuloata Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) AM Opening Year (2028)
Location	Chuluota Road (CR 419) at Lake Pickett Road
Date	March 14, 2024
Analysis Type	At-Grade Intersections and Interchanges

Number of Lanes for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		1	1	1		1	1	0		1	1	0		1	1	0
Two-Way Stop Control	N-S		1	1	1		1	1	0		1	1	0		1	1	0
All-Way Stop Control	FULL		1	1	1		1	1	0		1	1	0		1	1	0
Partial Displaced Left Turn	N-S		1	1	1		1	1	1		1	1	0		1	1	0
Displaced Left Turn	FULL		1	1	1		1	1	1		1	1	1		1	1	1
Signalized Restricted Crossing U-Turn	N-S	1	1	1	1	1	1	1	1				1				1
Unsignalized Restricted Crossing U-Turn	N-S	1	1	1	1	1	1	1	1				1				1
Median U-Turn	N-S	1		1	1	1		1	1			1	1			1	1
Partial Median U-Turn	N-S	1		1	1	1		1	1		1	1	0		1	1	0
Signalized ThruCut	N-S		1	1	1		1	1	1		1		1		1		1
Unsignalized ThruCut	N-S		1	1	1		1	1	1		1		1		1		1
Bowtie	N-S			1	1			1	1			1	1			1	1

For shared lanes, enter "0" in L or R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Number of Lanes for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuloata Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) AM Opening Year (2028)
Location	Chuluota Road (CR 419) at Lake Pickett Road
Date	March 14, 2024
Analysis Type	At-Grade Intersections and Interchanges

Volume Echo with Shared Lane Adjustment for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		183	374	68		3	494	0		53	186	0		88	119	0
Two-Way Stop Control	N-S		183	374	68		3	494	0		53	186	0		88	119	0
All-Way Stop Control	FULL		183	374	68		3	494	0		53	186	0		88	119	0
Partial Displaced Left Turn	N-S		183	374	68		3	306	188		53	186	0		88	119	0
Displaced Left Turn	FULL		183	374	68		3	306	188		53	46	140		88	112	7
Signalized Restricted Crossing U-Turn	N-S	0	183	374	68	0	3	306	188				140				7
Unsignalized Restricted Crossing U-Turn	N-S	0	183	374	68	0	3	306	188				140				7
Median U-Turn	N-S	0		374	68	0		306	188			46	140			112	7
Partial Median U-Turn	N-S	0		374	68	0		306	188		53	186	0		88	119	0
Signalized ThruCut	N-S		183	374	68		3	306	188		76		163		144		63
Unsignalized ThruCut	N-S		183	374	68		3	306	188		76		163		144		63
Bowtie	N-S		183	374	68		3	306	188			102	228			383	60

Capacity Analysis for Planning of Junctions

Results Worksheet

Project Name	Chuloata Road (CR 419) ICE Evaluation	***Estimated Volume-to-Capacity Ratio***			
Project Number	No-build (2-lane) AM Opening Year (2028)	**Number of Configurations**			
Location	Chuluota Road (CR 419) at Lake Pickett Road	**< 0.750**	**0.750 - 0.875**	**0.875 - 1.00**	**≥ 1.00**
Date	March 14, 2024	**11**	**2**	**0**	**2**

Results for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Zone 1 (North)		Zone 2 (South)		Zone 3 (East)		Zone 4 (West)		Zone 5 (Center)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			
Traffic Signal	FULL									975	0.57	0.57	4.80	4.37
Two-Way Stop Control	N-S									--	>10	>10	2.68	3.62
All-Way Stop Control	FULL									1568	0.87	0.87	3.69	4.37
Partial Displaced Left Turn	N-S	437	*0.24*	727	*0.40*					653	0.37	0.40	2.86	3.04
Displaced Left Turn	FULL	430	*0.24*	587	*0.33*	142	*0.08*	351	*0.19*	486	0.27	0.33	2.97	3.04
Signalized Restricted Crossing U-Turn	N-S	747	*0.42*	749	*0.42*	671	*0.37*	675	*0.38*			0.42	2.97	4.04
Unsignalized Restricted Crossing U-Turn	N-S	497	*0.23*	625	*0.13*	427	*0.33*	394	*0.37*			0.37	2.67	2.96
Median U-Turn	N-S	836	*0.46*	695	*0.39*					784	0.44	0.46	3.01	4.37
Partial Median U-Turn	N-S	726	*0.40*	629	*0.35*					836	0.48	0.48	2.91	4.37
Bowtie	N-S	353	0.26	574	0.42	207	0.19	239	0.19	757	0.42	0.42	4.80	4.33
Signalized ThruCut	N-S									651	0.37	0.37	4.87	4.42
Unsignalized ThruCut	N-S									--	1.62	1.62	4.17	4.08

Capacity Analysis for Planning of Junctions

Results Worksheet

Results for Roundabouts

TYPE OF ROUNDABOUT	Zone 1 (North)			Zone 3 (East)			Zone 2 (South)			Zone 4 (West)			Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3			
50 ICD	0.78			0.39			0.66			0.51			0.78	5.32	4.54
75 ICD	0.74			0.38			0.65			0.44			0.74	5.32	4.54
1 X 1	0.54			0.26			0.51			0.28			0.54	5.32	4.54

Results for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Zone 1 (Rt Mrg)		Zone 2 (Lt Mrg)		Zone 3 (Ctr. 1)		Zone 4 (Ctr. 2)		Zone 5 (Lt Mrg)		Zone 6 (Rt Mrg)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			

TYPE OF INTERSECTION	Overall V/C Ratio	V/C Ranking	Pedestrian Accommodation Score	Bicycle Accommodation Score
Displaced Left Turn	0.33	1	2.97	3.04
Unsignalized Restricted Crossing U-Turn N-S	0.37	2	2.67	2.96
Signalized ThruCut N-S	0.37	3	4.87	4.42
Partial Displaced Left Turn N-S	0.40	4	2.86	3.04
Signalized Restricted Crossing U-Turn N-S	0.42	5	2.97	4.04
Bowtie N-S	0.42	5	4.80	4.33
Median U-Turn N-S	0.46	7	3.01	4.37
Partial Median U-Turn N-S	0.48	8	2.91	4.37
1 X 1	0.54	9	5.32	4.54
Traffic Signal	0.57	10	4.80	4.37

Capacity Analysis for Planning of Junctions

Input Worksheet 1

Project Name	Chuloata Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) AM Interim Year (2038)
Location	Chuluota Road (CR 419) at Lake Pickett Road
Date	March 14, 2024
Number of Legs	4
Major Street Direction	North-South

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	0	60	52	159	3.48%	0.00%
Westbound	0	100	127	8	3.48%	0.00%
Southbound	0	4	378	213	3.48%	0.00%
Northbound	0	208	427	77	3.48%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone		**C3R-Suburban Residential**	
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Equivalent Passenger Car Volume

	Volume (Veh/hr)			
	U-Turn	**Left**	**Thru**	**Right**
Eastbound	0	62	54	165
Westbound	0	103	131	8
Southbound	0	4	391	220
Northbound	0	215	442	80

Notes:	
Left-Turn Adjustment Factor	*Conversion of left-turning vehicles to equivalent through vehicles*
Right-turn Adjustment Factor	*Conversion of right-turning vehicles to equivalent through vehicles*
U-turn Adjustment Factor	*Conversion of U-turning vehicles to equivalent through vehicles*
Truck to PCE Factor	*1 truck = X Passenger Car Equivalents*
Critical Lane Volume Sum Limit	*Saturation Value for Critical Lane Volume Sum at an intersection*

Capacity Analysis for Planning of Junctions

Step 2A: Base Conditions Analysis

Project Name	Chuloata Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) AM Interim Year (2038)
Location	Chuluota Road (CR 419) at Lake Pickett Road
Date	March 14, 2024
Major Street Direction	North-South

Existing Intersection Configuration	*Traffic Signal*

Number of Lanes for Existing Configuration
(Can be edited in "3- Alt Num Lanes Input" as needed)

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		1	1	1		1	1	0		1	1	0		1	1	0

Results for Existing Configuration

TYPE OF	Sheet	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	

Overall v/c Ratio	0.69	Pedestrian Accommodation Score	4.80	Bicycle Accommodation Score	4.37

Step 2B: Alternative Selection

Rankings Inclusion		Yes/No	Comment
At-Grade Non-Roundabout Intersections?		Yes	
Traffic Signal		Yes	
Two-Way Stop Control		Yes	
All-Way Stop Control		Yes	
Continuous Green T		No	4-Leg Intersection
Quadrant Roadway	S-W	No	No Nearby Quadrant Roadway
	N-E	No	No Nearby Quadrant Roadway
	S-E	No	No Nearby Quadrant Roadway
	N-W	No	No Nearby Quadrant Roadway
Partial Displaced Left Turn		Yes	
Displaced Left Turn		Yes	
Signalized Restricted Crossing U-Turn		Yes	
Unsignalized Restricted Crossing U-Turn		Yes	
Median U-Turn		Yes	
Partial Median U-Turn		Yes	
Bowtie		Yes	
Signalized ThruCut		Yes	
Unsignalized ThruCut		Yes	
Roundabouts?		Yes	
50 ICD Miniroundabout		Yes	
75 ICD Miniroundabout		Yes	
1x1		Yes	
1NS x 2EW		No	1x1 Roundabout Only
2NS x 1EW		No	1x1 Roundabout Only
2x2		No	1x1 Roundabout Only
Ramp Terminal Intersections?		No	
Diamond			
Partial Cloverleaf A			
Partial Cloverleaf B			
Displaced Left Turn Interchange			
Diverging Diamond			
Single Point Diamond			

Continue to Step 3 Step 3

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuloata Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) AM Interim Year (2038)
Location	Chuluota Road (CR 419) at Lake Pickett Road
Date	March 14, 2024
Analysis Type	At-Grade Intersections and Interchanges

Number of Lanes for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		1	1	1		1	1	0		1	1	0		1	1	0
Two-Way Stop Control	N-S		1	1	1		1	1	0		1	1	0		1	1	0
All-Way Stop Control	FULL		1	1	1		1	1	0		1	1	0		1	1	0
Partial Displaced Left Turn	N-S		1	1	1		1	1	1		1	1	0		1	1	0
Displaced Left Turn	FULL		1	1	1		1	1	1		1	1	1		1	1	1
Signalized Restricted Crossing U-Turn	N-S	1	1	1	1	1	1	1	1				1				1
Unsignalized Restricted Crossing U-Turn	N-S	1	1	1	1	1	1	1	1				1				1
Median U-Turn	N-S	1		1	1	1		1	1			1	1			1	1
Partial Median U-Turn	N-S	1		1	1	1		1	1		1	1	0		1	1	0
Signalized ThruCut	N-S		1	1	1		1	1	1		1		1		1		1
Unsignalized ThruCut	N-S		1	1	1		1	1	1		1		1		1		1
Bowtie	N-S			1	1			1	1			1	1			1	1

For shared lanes, enter "0" in L or R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Number of Lanes for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuloata Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) AM Interim Year (2038)
Location	Chuluota Road (CR 419) at Lake Pickett Road
Date	March 14, 2024
Analysis Type	At-Grade Intersections and Interchanges

Volume Echo with Shared Lane Adjustment for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		215	442	80		4	611	0		62	219	0		103	139	0
Two-Way Stop Control	N-S		215	442	80		4	611	0		62	219	0		103	139	0
All-Way Stop Control	FULL		215	442	80		4	611	0		62	219	0		103	139	0
Partial Displaced Left Turn	N-S		215	442	80		4	391	220		62	219	0		103	139	0
Displaced Left Turn	FULL		215	442	80		4	391	220		62	54	165		103	131	8
Signalized Restricted Crossing U-Turn	N-S	0	215	442	80	0	4	391	220				165				8
Unsignalized Restricted Crossing U-Turn	N-S	0	215	442	80	0	4	391	220				165				8
Median U-Turn	N-S	0		442	80	0		391	220			54	165			131	8
Partial Median U-Turn	N-S	0		442	80	0		391	220		62	219	0		103	139	0
Signalized ThruCut	N-S		215	442	80		4	391	220		89		192		169		74
Unsignalized ThruCut	N-S		215	442	80		4	391	220		89		192		169		74
Bowtie	N-S		215	442	80		4	391	220			120	268			449	70

Capacity Analysis for Planning of Junctions

Results Worksheet

Project Name	Chuloata Road (CR 419) ICE Evaluation	***Estimated Volume-to-Capacity Ratio***			
Project Number	No-build (2-lane) AM Interim Year (2038)	**Number of Configurations**			
Location	Chuluota Road (CR 419) at Lake Pickett Road	**< 0.750**	**0.750 - 0.875**	**0.875 - 1.00**	**≥ 1.00**
Date	March 14, 2024	**10**	**0**	**0**	**5**

Results for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Zone 1 (North)		Zone 2 (South)		Zone 3 (East)		Zone 4 (West)		Zone 5 (Center)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			
Traffic Signal	FULL									1177	0.69	0.69	4.80	4.37
Two-Way Stop Control	N-S									--	>10	>10	2.68	3.62
All-Way Stop Control	FULL									1875	1.04	1.04	3.69	4.37
Partial Displaced Left Turn	N-S	516	*0.29*	885	*0.49*					769	0.44	0.49	2.86	3.04
Displaced Left Turn	FULL	508	*0.28*	720	*0.40*	166	*0.09*	411	*0.23*	573	0.32	0.40	2.97	3.04
Signalized Restricted Crossing U-Turn	N-S	908	*0.50*	882	*0.49*	789	*0.44*	825	*0.46*			0.50	2.97	4.04
Unsignalized Restricted Crossing U-Turn	N-S	615	*0.29*	737	*0.16*	504	*0.43*	494	*0.49*			0.49	2.59	2.96
Median U-Turn	N-S	1013	*0.56*	820	*0.46*					924	0.51	0.56	2.99	4.37
Partial Median U-Turn	N-S	884	*0.49*	742	*0.41*					984	0.56	0.56	2.90	4.37
Bowtie	N-S	415	0.30	673	0.49	242	0.23	281	0.23	891	0.50	0.50	4.80	4.33
Signalized ThruCut	N-S									794	0.45	0.45	4.87	4.37
Unsignalized ThruCut	N-S									--	3.45	3.45	4.14	4.04

Capacity Analysis for Planning of Junctions

Results Worksheet

Results for Roundabouts

TYPE OF ROUNDABOUT	Zone 1 (North)			Zone 3 (East)			Zone 2 (South)			Zone 4 (West)			Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3			
50 ICD	1.08			0.54			0.80			0.83			1.08	5.24	4.54
75 ICD	1.00			0.52			0.79			0.67			1.00	5.24	4.54
1 X 1	0.71			0.34			0.61			0.37			0.71	5.24	4.54

Results for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Zone 1 (Rt Mrg)		Zone 2 (Lt Mrg)		Zone 3 (Ctr. 1)		Zone 4 (Ctr. 2)		Zone 5 (Lt Mrg)		Zone 6 (Rt Mrg)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			

TYPE OF INTERSECTION	Overall V/C Ratio	V/C Ranking	Pedestrian Accommodation Score	Bicycle Accommodation Score
Displaced Left Turn	0.40	1	2.97	3.04
Signalized ThruCut N-S	0.45	2	4.87	4.37
Partial Displaced Left Turn N-S	0.49	3	2.86	3.04
Unsignalized Restricted Crossing U-Turn N-S	0.49	4	2.59	2.96
Signalized Restricted Crossing U-Turn N-S	0.50	5	2.97	4.04
Bowtie N-S	0.50	5	4.80	4.33
Median U-Turn N-S	0.56	7	2.99	4.37
Partial Median U-Turn N-S	0.56	7	2.90	4.37
Traffic Signal	0.69	9	4.80	4.37
1 X 1	0.71	10	5.24	4.54

Capacity Analysis for Planning of Junctions

Input Worksheet 1

Project Name	Chuloata Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) AM Design Year (2048)
Location	Chuluota Road (CR 419) at Lake Pickett Road
Date	March 14, 2024
Number of Legs	4
Major Street Direction	North-South

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	0	69	60	182	3.48%	0.00%
Westbound	0	115	146	9	3.48%	0.00%
Southbound	0	4	460	245	3.48%	0.00%
Northbound	0	238	494	89	3.48%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone		**C3R-Suburban Residential**	
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Equivalent Passenger Car Volume

	Volume (Veh/hr)			
	U-Turn	**Left**	**Thru**	**Right**
Eastbound	0	71	62	188
Westbound	0	119	151	9
Southbound	0	4	476	254
Northbound	0	246	511	92

Notes:	
Left-Turn Adjustment Factor	*Conversion of left-turning vehicles to equivalent through vehicles*
Right-turn Adjustment Factor	*Conversion of right-turning vehicles to equivalent through vehicles*
U-turn Adjustment Factor	*Conversion of U-turning vehicles to equivalent through vehicles*
Truck to PCE Factor	*1 truck = X Passenger Car Equivalents*
Critical Lane Volume Sum Limit	*Saturation Value for Critical Lane Volume Sum at an intersection*

Capacity Analysis for Planning of Junctions

Step 2A: Base Conditions Analysis

Project Name	Chuloata Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) AM Design Year (2048)
Location	Chuluota Road (CR 419) at Lake Pickett Road
Date	March 14, 2024
Major Street Direction	North-South

Existing Intersection Configuration	*Traffic Signal*

Number of Lanes for Existing Configuration
(Can be edited in "3- Alt Num Lanes Input" as needed)

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		1	1	1		1	1	0		1	1	0		1	1	0

Results for Existing Configuration

TYPE OF	Sheet	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	

Overall v/c Ratio	0.81	Pedestrian Accommodation Score	4.80	Bicycle Accommodation Score	4.37

Step 2B: Alternative Selection

Rankings Inclusion		Yes/No	Comment
At-Grade Non-Roundabout Intersections?		Yes	
Traffic Signal		Yes	
Two-Way Stop Control		Yes	
All-Way Stop Control		Yes	
Continuous Green T		No	4-Leg Intersection
Quadrant Roadway	S-W	No	No Nearby Quadrant Roadway
	N-E	No	No Nearby Quadrant Roadway
	S-E	No	No Nearby Quadrant Roadway
	N-W	No	No Nearby Quadrant Roadway
Partial Displaced Left Turn		Yes	
Displaced Left Turn		Yes	
Signalized Restricted Crossing U-Turn		Yes	
Unsignalized Restricted Crossing U-Turn		Yes	
Median U-Turn		Yes	
Partial Median U-Turn		Yes	
Bowtie		Yes	
Signalized ThruCut		Yes	
Unsignalized ThruCut		Yes	
Roundabouts?		Yes	
50 ICD Miniroundabout		Yes	
75 ICD Miniroundabout		Yes	
1x1		Yes	
1NS x 2EW		No	1x1 Roundabout Only
2NS x 1EW		No	1x1 Roundabout Only
2x2		No	1x1 Roundabout Only
Ramp Terminal Intersections?		No	
Diamond			
Partial Cloverleaf A			
Partial Cloverleaf B			
Displaced Left Turn Interchange			
Diverging Diamond			
Single Point Diamond			

Continue to Step 3 Step 3

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuloata Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) AM Design Year (2048)
Location	Chuluota Road (CR 419) at Lake Pickett Road
Date	March 14, 2024
Analysis Type	At-Grade Intersections and Interchanges

Number of Lanes for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		1	1	1		1	1	0		1	1	0		1	1	0
Two-Way Stop Control	N-S		1	1	1		1	1	0		1	1	0		1	1	0
All-Way Stop Control	FULL		1	1	1		1	1	0		1	1	0		1	1	0
Partial Displaced Left Turn	N-S		1	1	1		1	1	1		1	1	0		1	1	0
Displaced Left Turn	FULL		1	1	1		1	1	1		1	1	1		1	1	1
Signalized Restricted Crossing U-Turn	N-S	1	1	1	1	1	1	1	1				1				1
Unsignalized Restricted Crossing U-Turn	N-S	1	1	1	1	1	1	1	1				1				1
Median U-Turn	N-S	1		1	1	1		1	1			1	1			1	1
Partial Median U-Turn	N-S	1		1	1	1		1	1		1	1	0		1	1	0
Signalized ThruCut	N-S		1	1	1		1	1	1		1		1		1		1
Unsignalized ThruCut	N-S		1	1	1		1	1	1		1		1		1		1
Bowtie	N-S			1	1			1	1			1	1			1	1

For shared lanes, enter "0" in L or R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Number of Lanes for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuloata Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) AM Design Year (2048)
Location	Chuluota Road (CR 419) at Lake Pickett Road
Date	March 14, 2024
Analysis Type	At-Grade Intersections and Interchanges

Volume Echo with Shared Lane Adjustment for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		246	511	92		4	730	0		71	250	0		119	160	0
Two-Way Stop Control	N-S		246	511	92		4	730	0		71	250	0		119	160	0
All-Way Stop Control	FULL		246	511	92		4	730	0		71	250	0		119	160	0
Partial Displaced Left Turn	N-S		246	511	92		4	476	254		71	250	0		119	160	0
Displaced Left Turn	FULL		246	511	92		4	476	254		71	62	188		119	151	9
Signalized Restricted Crossing U-Turn	N-S	0	246	511	92	0	4	476	254				188				9
Unsignalized Restricted Crossing U-Turn	N-S	0	246	511	92	0	4	476	254				188				9
Median U-Turn	N-S	0		511	92	0		476	254			62	188			151	9
Partial Median U-Turn	N-S	0		511	92	0		476	254		71	250	0		119	160	0
Signalized ThruCut	N-S		246	511	92		4	476	254		102		219		195		85
Unsignalized ThruCut	N-S		246	511	92		4	476	254		102		219		195		85
Bowtie	N-S		246	511	92		4	476	254			137	307			516	80

Capacity Analysis for Planning of Junctions

Results Worksheet

Project Name	Chuloata Road (CR 419) ICE Evaluation	***Estimated Volume-to-Capacity Ratio***			
Project Number	No-build (2-lane) AM Design Year (2048)	**Number of Configurations**			
Location	Chuluota Road (CR 419) at Lake Pickett Road	**< 0.750**	**0.750 - 0.875**	**0.875 - 1.00**	**≥ 1.00**
Date	March 14, 2024	**8**	**1**	**1**	**5**

Results for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Zone 1 (North)		Zone 2 (South)		Zone 3 (East)		Zone 4 (West)		Zone 5 (Center)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			
Traffic Signal	FULL									1378	0.81	0.81	4.80	4.37
Two-Way Stop Control	N-S									--	>10	>10	2.68	3.62
All-Way Stop Control	FULL									2183	1.21	1.21	3.69	4.37
Partial Displaced Left Turn	N-S	595	*0.33*	1042	*0.58*					886	0.51	0.58	2.85	3.04
Displaced Left Turn	FULL	586	*0.33*	854	*0.47*	191	*0.11*	472	*0.26*	662	0.37	0.47	2.96	3.04
Signalized Restricted Crossing U-Turn	N-S	1072	*0.60*	1015	*0.56*	910	*0.51*	973	*0.54*			0.60	2.97	4.04
Unsignalized Restricted Crossing U-Turn	N-S	734	*0.38*	849	*0.21*	582	*0.55*	595	*0.64*			0.64	2.57	2.96
Median U-Turn	N-S	1190	*0.66*	943	*0.52*					1062	0.59	0.66	2.97	4.37
Partial Median U-Turn	N-S	1042	*0.58*	854	*0.47*					1132	0.65	0.65	2.88	4.37
Bowtie	N-S	475	0.34	774	0.56	279	0.28	321	0.26	1027	0.57	0.57	4.80	4.33
Signalized ThruCut	N-S									940	0.54	0.54	4.87	4.37
Unsignalized ThruCut	N-S									--	7.72	7.72	4.10	4.04

Capacity Analysis for Planning of Junctions

Results Worksheet

Results for Roundabouts

TYPE OF ROUNDABOUT	Zone 1 (North)			Zone 3 (East)			Zone 2 (South)			Zone 4 (West)			Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3			
50 ICD	1.45			0.77			0.94			1.55			1.55	5.24	4.54
75 ICD	1.33			*0.71*			0.92			1.07			1.33	5.24	4.54
1 X 1	0.91			*0.43*			*0.71*			*0.48*			0.91	5.24	4.54

Results for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Zone 1 (Rt Mrg)		Zone 2 (Lt Mrg)		Zone 3 (Ctr. 1)		Zone 4 (Ctr. 2)		Zone 5 (Lt Mrg)		Zone 6 (Rt Mrg)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			

TYPE OF INTERSECTION	Overall V/C Ratio	V/C Ranking	Pedestrian Accommodation Score	Bicycle Accommodation Score
Displaced Left Turn	0.47	1	2.96	3.04
Signalized ThruCut N-S	0.54	2	4.87	4.37
Bowtie N-S	0.57	3	4.80	4.33
Partial Displaced Left Turn N-S	0.58	4	2.85	3.04
Signalized Restricted Crossing U-Turn N-S	0.60	5	2.97	4.04
Unsignalized Restricted Crossing U-Turn N-S	0.64	6	2.57	2.96
Partial Median U-Turn N-S	0.65	7	2.88	4.37
Median U-Turn N-S	0.66	8	2.97	4.37
Traffic Signal	0.81	9	4.80	4.37
1 X 1	0.91	10	5.24	4.54

Capacity Analysis for Planning of Junctions

Input Worksheet 1

Project Name	Chuloata Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) PM Opening Year (2028)
Location	Chuluota Road (CR 419) at Lake Pickett Road
Date	March 14, 2024
Number of Legs	4
Major Street Direction	North-South

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	0	154	121	229	3.48%	0.00%
Westbound	0	51	53	5	3.48%	0.00%
Southbound	0	15	387	106	3.48%	0.00%
Northbound	0	102	354	97	3.48%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone		**C3R-Suburban Residential**	
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Equivalent Passenger Car Volume

	Volume (Veh/hr)			
	U-Turn	**Left**	**Thru**	**Right**
Eastbound	0	159	125	237
Westbound	0	53	55	5
Southbound	0	16	400	110
Northbound	0	106	366	100

Notes:	
Left-Turn Adjustment Factor	*Conversion of left-turning vehicles to equivalent through vehicles*
Right-turn Adjustment Factor	*Conversion of right-turning vehicles to equivalent through vehicles*
U-turn Adjustment Factor	*Conversion of U-turning vehicles to equivalent through vehicles*
Truck to PCE Factor	*1 truck = X Passenger Car Equivalents*
Critical Lane Volume Sum Limit	*Saturation Value for Critical Lane Volume Sum at an intersection*

Capacity Analysis for Planning of Junctions

Step 2A: Base Conditions Analysis

Project Name	Chuloata Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) PM Opening Year (2028)
Location	Chuluota Road (CR 419) at Lake Pickett Road
Date	March 14, 2024
Major Street Direction	North-South

Existing Intersection Configuration	*Traffic Signal*

Number of Lanes for Existing Configuration
(Can be edited in "3- Alt Num Lanes Input" as needed)

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		1	1	1		1	1	0		1	1	0		1	1	0

Results for Existing Configuration

TYPE OF	Sheet	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	

Overall v/c Ratio	0.61	Pedestrian Accommodation Score	4.80	Bicycle Accommodation Score	4.37

Step 2B: Alternative Selection

Rankings Inclusion		Yes/No	Comment
At-Grade Non-Roundabout Intersections?		Yes	
Traffic Signal		Yes	
Two-Way Stop Control		Yes	
All-Way Stop Control		Yes	
Continuous Green T		No	4-Leg Intersection
Quadrant Roadway	S-W	No	No Nearby Quadrant Roadway
	N-E	No	No Nearby Quadrant Roadway
	S-E	No	No Nearby Quadrant Roadway
	N-W	No	No Nearby Quadrant Roadway
Partial Displaced Left Turn		Yes	
Displaced Left Turn		Yes	
Signalized Restricted Crossing U-Turn		Yes	
Unsignalized Restricted Crossing U-Turn		Yes	
Median U-Turn		Yes	
Partial Median U-Turn		Yes	
Bowtie		Yes	
Signalized ThruCut		Yes	
Unsignalized ThruCut		Yes	
Roundabouts?		Yes	
50 ICD Miniroundabout		Yes	
75 ICD Miniroundabout		Yes	
1x1		Yes	
1NS x 2EW		No	1x1 Roundabout Only
2NS x 1EW		No	1x1 Roundabout Only
2x2		No	1x1 Roundabout Only
Ramp Terminal Intersections?		No	
Diamond			
Partial Cloverleaf A			
Partial Cloverleaf B			
Displaced Left Turn Interchange			
Diverging Diamond			
Single Point Diamond			

Continue to Step 3 Step 3

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuloata Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) PM Opening Year (2028)
Location	Chuluota Road (CR 419) at Lake Pickett Road
Date	March 14, 2024
Analysis Type	At-Grade Intersections and Interchanges

Number of Lanes for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		1	1	1		1	1	0		1	1	0		1	1	0
Two-Way Stop Control	N-S		1	1	1		1	1	0		1	1	0		1	1	0
All-Way Stop Control	FULL		1	1	1		1	1	0		1	1	0		1	1	0
Partial Displaced Left Turn	N-S		1	1	1		1	1	1		1	1	0		1	1	0
Displaced Left Turn	FULL		1	1	1		1	1	1		1	1	1		1	1	1
Signalized Restricted Crossing U-Turn	N-S	1	1	1	1	1	1	1	1				1				1
Unsignalized Restricted Crossing U-Turn	N-S	1	1	1	1	1	1	1	1				1				1
Median U-Turn	N-S	1		1	1	1		1	1			1	1			1	1
Partial Median U-Turn	N-S	1		1	1	1		1	1		1	1	0		1	1	0
Signalized ThruCut	N-S		1	1	1		1	1	1		1		1		1		1
Unsignalized ThruCut	N-S		1	1	1		1	1	1		1		1		1		1
Bowtie	N-S			1	1			1	1			1	1			1	1

For shared lanes, enter "0" in L or R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Number of Lanes for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuloata Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) PM Opening Year (2028)
Location	Chuluota Road (CR 419) at Lake Pickett Road
Date	March 14, 2024
Analysis Type	At-Grade Intersections and Interchanges

Volume Echo with Shared Lane Adjustment for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		106	366	100		16	510	0		159	362	0		53	60	0
Two-Way Stop Control	N-S		106	366	100		16	510	0		159	362	0		53	60	0
All-Way Stop Control	FULL		106	366	100		16	510	0		159	362	0		53	60	0
Partial Displaced Left Turn	N-S		106	366	100		16	400	110		159	362	0		53	60	0
Displaced Left Turn	FULL		106	366	100		16	400	110		159	125	237		53	55	5
Signalized Restricted Crossing U-Turn	N-S	0	106	366	100	0	16	400	110				237				5
Unsignalized Restricted Crossing U-Turn	N-S	0	106	366	100	0	16	400	110				237				5
Median U-Turn	N-S	0		366	100	0		400	110			125	237			55	5
Partial Median U-Turn	N-S	0		366	100	0		400	110		159	362	0		53	60	0
Signalized ThruCut	N-S		106	366	100		16	400	110		222		300		81		33
Unsignalized ThruCut	N-S		106	366	100		16	400	110		222		300		81		33
Bowtie	N-S		106	366	100		16	400	110			300	290			214	164

Capacity Analysis for Planning of Junctions

Results Worksheet

Project Name	Chuloata Road (CR 419) ICE Evaluation	***Estimated Volume-to-Capacity Ratio***			
Project Number	No-build (2-lane) PM Opening Year (2028)	**Number of Configurations**			
Location	Chuluota Road (CR 419) at Lake Pickett Road	**< 0.750**	**0.750 - 0.875**	**0.875 - 1.00**	**≥ 1.00**
Date	March 14, 2024	**9**	**1**	**3**	**2**

Results for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Zone 1 (North)		Zone 2 (South)		Zone 3 (East)		Zone 4 (West)		Zone 5 (Center)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			
Traffic Signal	FULL									1045	0.61	0.61	4.80	4.37
Two-Way Stop Control	N-S									--	7.08	7.08	2.68	3.62
All-Way Stop Control	FULL									1732	0.96	0.96	3.69	4.37
Partial Displaced Left Turn	N-S	547	0.30	802	0.45					818	0.47	0.47	2.85	3.04
Displaced Left Turn	FULL	542	0.30	565	0.31	197	0.11	328	0.18	567	0.32	0.32	2.96	3.04
Signalized Restricted Crossing U-Turn	N-S	661	0.37	927	0.52	658	0.37	1066	0.59			0.59	3.00	4.04
Unsignalized Restricted Crossing U-Turn	N-S	526	0.13	572	0.34	525	0.21	453	0.86			0.86	2.61	2.96
Median U-Turn	N-S	725	0.40	791	0.44					938	0.52	0.52	3.01	4.37
Partial Median U-Turn	N-S	659	0.37	592	0.33					890	0.51	0.51	2.90	4.37
Bowtie	N-S	506	0.37	340	0.25	113	0.11	521	0.41	741	0.41	0.41	4.80	4.33
Signalized ThruCut	N-S									838	0.48	0.48	4.87	4.42
Unsignalized ThruCut	N-S									--	1.48	1.48	4.14	4.08

Capacity Analysis for Planning of Junctions

Results Worksheet

Results for Roundabouts

TYPE OF ROUNDABOUT	Zone 1 (North)			Zone 3 (East)			Zone 2 (South)			Zone 4 (West)			Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3			
50 ICD	*0.65*			0.94			0.77			*0.30*			0.94	5.24	4.54
75 ICD	*0.63*			0.90			*0.74*			*0.25*			0.90	5.24	4.54
1 X 1	*0.48*			*0.62*			*0.57*			*0.16*			0.62	5.24	4.54

Results for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Zone 1 (Rt Mrg)		Zone 2 (Lt Mrg)		Zone 3 (Ctr. 1)		Zone 4 (Ctr. 2)		Zone 5 (Lt Mrg)		Zone 6 (Rt Mrg)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			

TYPE OF INTERSECTION	Overall V/C Ratio	V/C Ranking	Pedestrian Accommodation Score	Bicycle Accommodation Score
Displaced Left Turn	0.32	1	2.96	3.04
Bowtie N-S	0.41	2	4.80	4.33
Partial Displaced Left Turn N-S	0.47	3	2.85	3.04
Signalized ThruCut N-S	0.48	4	4.87	4.42
Partial Median U-Turn N-S	0.51	5	2.90	4.37
Median U-Turn N-S	0.52	6	3.01	4.37
Signalized Restricted Crossing U-Turn N-S	0.59	7	3.00	4.04
Traffic Signal	0.61	8	4.80	4.37
1 X 1	0.62	9	5.24	4.54
Unsignalized Restricted Crossing U-Turn N-S	0.86	10	2.61	2.96

Capacity Analysis for Planning of Junctions

Input Worksheet 1

Project Name	Chuloata Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) PM Interim Year (2038)
Location	Chuluota Road (CR 419) at Lake Pickett Road
Date	March 14, 2024
Number of Legs	4
Major Street Direction	North-South

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	0	180	141	268	3.48%	0.00%
Westbound	0	60	63	6	3.48%	0.00%
Southbound	0	17	481	124	3.48%	0.00%
Northbound	0	120	433	113	3.48%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone		**C3R-Suburban Residential**	
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Equivalent Passenger Car Volume

	Volume (Veh/hr)			
	U-Turn	**Left**	**Thru**	**Right**
Eastbound	0	186	146	277
Westbound	0	62	65	6
Southbound	0	18	498	128
Northbound	0	124	448	117

Notes:	
Left-Turn Adjustment Factor	*Conversion of left-turning vehicles to equivalent through vehicles*
Right-turn Adjustment Factor	*Conversion of right-turning vehicles to equivalent through vehicles*
U-turn Adjustment Factor	*Conversion of U-turning vehicles to equivalent through vehicles*
Truck to PCE Factor	*1 truck = X Passenger Car Equivalents*
Critical Lane Volume Sum Limit	*Saturation Value for Critical Lane Volume Sum at an intersection*

Capacity Analysis for Planning of Junctions

Step 2A: Base Conditions Analysis

Project Name	Chuloata Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) PM Interim Year (2038)
Location	Chuluota Road (CR 419) at Lake Pickett Road
Date	March 14, 2024
Major Street Direction	North-South

Existing Intersection Configuration	*Traffic Signal*

Number of Lanes for Existing Configuration
(Can be edited in "3- Alt Num Lanes Input" as needed)

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		1	1	1		1	1	0		1	1	0		1	1	0

Results for Existing Configuration

TYPE OF	Sheet	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	

Overall v/c Ratio	0.74	Pedestrian Accommodation Score	4.80	Bicycle Accommodation Score	4.37

Step 2B: Alternative Selection

Rankings Inclusion		Yes/No	Comment
At-Grade Non-Roundabout Intersections?		Yes	
Traffic Signal		Yes	
Two-Way Stop Control		Yes	
All-Way Stop Control		Yes	
Continuous Green T		No	4-Leg Intersection
Quadrant Roadway	S-W	No	No Nearby Quadrant Roadway
	N-E	No	No Nearby Quadrant Roadway
	S-E	No	No Nearby Quadrant Roadway
	N-W	No	No Nearby Quadrant Roadway
Partial Displaced Left Turn		Yes	
Displaced Left Turn		Yes	
Signalized Restricted Crossing U-Turn		Yes	
Unsignalized Restricted Crossing U-Turn		Yes	
Median U-Turn		Yes	
Partial Median U-Turn		Yes	
Bowtie		Yes	
Signalized ThruCut		Yes	
Unsignalized ThruCut		Yes	
Roundabouts?		Yes	
50 ICD Miniroundabout		Yes	
75 ICD Miniroundabout		Yes	
1x1		Yes	
1NS x 2EW		No	1x1 Roundabout Only
2NS x 1EW		No	1x1 Roundabout Only
2x2		No	1x1 Roundabout Only
Ramp Terminal Intersections?		No	
Diamond			
Partial Cloverleaf A			
Partial Cloverleaf B			
Displaced Left Turn Interchange			
Diverging Diamond			
Single Point Diamond			

Continue to Step 3 Step 3

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuloata Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) PM Interim Year (2038)
Location	Chuluota Road (CR 419) at Lake Pickett Road
Date	March 14, 2024
Analysis Type	At-Grade Intersections and Interchanges

Number of Lanes for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		1	1	1		1	1	0		1	1	0		1	1	0
Two-Way Stop Control	N-S		1	1	1		1	1	0		1	1	0		1	1	0
All-Way Stop Control	FULL		1	1	1		1	1	0		1	1	0		1	1	0
Partial Displaced Left Turn	N-S		1	1	1		1	1	1		1	1	0		1	1	0
Displaced Left Turn	FULL		1	1	1		1	1	1		1	1	1		1	1	1
Signalized Restricted Crossing U-Turn	N-S	1	1	1	1	1	1	1	1				1				1
Unsignalized Restricted Crossing U-Turn	N-S	1	1	1	1	1	1	1	1				1				1
Median U-Turn	N-S	1		1	1	1		1	1			1	1			1	1
Partial Median U-Turn	N-S	1		1	1	1		1	1		1	1	0		1	1	0
Signalized ThruCut	N-S		1	1	1		1	1	1		1		1		1		1
Unsignalized ThruCut	N-S		1	1	1		1	1	1		1		1		1		1
Bowtie	N-S			1	1			1	1			1	1			1	1

For shared lanes, enter "0" in L or R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Number of Lanes for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuloata Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) PM Interim Year (2038)
Location	Chuluota Road (CR 419) at Lake Pickett Road
Date	March 14, 2024
Analysis Type	At-Grade Intersections and Interchanges

Volume Echo with Shared Lane Adjustment for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		124	448	117		18	626	0		186	423	0		62	71	0
Two-Way Stop Control	N-S		124	448	117		18	626	0		186	423	0		62	71	0
All-Way Stop Control	FULL		124	448	117		18	626	0		186	423	0		62	71	0
Partial Displaced Left Turn	N-S		124	448	117		18	498	128		186	423	0		62	71	0
Displaced Left Turn	FULL		124	448	117		18	498	128		186	146	277		62	65	6
Signalized Restricted Crossing U-Turn	N-S	0	124	448	117	0	18	498	128				277				6
Unsignalized Restricted Crossing U-Turn	N-S	0	124	448	117	0	18	498	128				277				6
Median U-Turn	N-S	0		448	117	0		498	128			146	277			65	6
Partial Median U-Turn	N-S	0		448	117	0		498	128		186	423	0		62	71	0
Signalized ThruCut	N-S		124	448	117		18	498	128		259		350		95		39
Unsignalized ThruCut	N-S		124	448	117		18	498	128		259		350		95		39
Bowtie	N-S		124	448	117		18	498	128			350	339			251	192

Capacity Analysis for Planning of Junctions

Results Worksheet

Project Name	Chuloata Road (CR 419) ICE Evaluation	***Estimated Volume-to-Capacity Ratio***			
Project Number	No-build (2-lane) PM Interim Year (2038)	**Number of Configurations**			
Location	Chuluota Road (CR 419) at Lake Pickett Road	**< 0.750**	**0.750 - 0.875**	**0.875 - 1.00**	**≥ 1.00**
Date	March 14, 2024	**8**	**1**	**0**	**6**

Results for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Zone 1 (North)		Zone 2 (South)		Zone 3 (East)		Zone 4 (West)		Zone 5 (Center)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			
Traffic Signal	FULL									1252	0.74	0.74	4.80	4.37
Two-Way Stop Control	N-S									--	>10	>10	2.68	3.62
All-Way Stop Control	FULL									2075	1.15	1.15	3.69	4.37
Partial Displaced Left Turn	N-S	659	*0.37*	968	*0.54*					986	0.56	0.56	2.85	3.04
Displaced Left Turn	FULL	653	*0.36*	691	*0.38*	229	*0.13*	385	*0.21*	694	0.39	0.39	2.96	3.04
Signalized Restricted Crossing U-Turn	N-S	803	*0.45*	1104	*0.61*	790	*0.44*	1276	*0.71*			0.71	2.97	4.04
Unsignalized Restricted Crossing U-Turn	N-S	644	*0.16*	689	*0.45*	634	*0.28*	560	1.16			1.16	2.59	2.96
Median U-Turn	N-S	877	*0.49*	944	*0.52*					1117	0.62	0.62	2.97	4.37
Partial Median U-Turn	N-S	799	*0.44*	712	*0.40*					1060	0.61	0.61	2.88	4.37
Bowtie	N-S	591	0.43	397	0.29	133	0.13	609	0.48	897	0.50	0.50	4.80	4.33
Signalized ThruCut	N-S									1010	0.58	0.58	4.87	4.37
Unsignalized ThruCut	N-S									--	3.54	3.54	4.10	4.04

Capacity Analysis for Planning of Junctions

Results Worksheet

Results for Roundabouts

TYPE OF ROUNDABOUT	Zone 1 (North)			Zone 3 (East)			Zone 2 (South)			Zone 4 (West)			Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3			
50 ICD	0.83			1.37			1.00			*0.53*			1.37	5.24	4.54
75 ICD	0.81			1.26			0.95			*0.41*			1.26	5.24	4.54
1 X 1	*0.61*			0.80			*0.72*			*0.21*			0.80	5.24	4.54

Results for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Zone 1 (Rt Mrg)		Zone 2 (Lt Mrg)		Zone 3 (Ctr. 1)		Zone 4 (Ctr. 2)		Zone 5 (Lt Mrg)		Zone 6 (Rt Mrg)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			

TYPE OF INTERSECTION	Overall V/C Ratio	V/C Ranking	Pedestrian Accommodation Score	Bicycle Accommodation Score
Displaced Left Turn	0.39	1	2.96	3.04
Bowtie N-S	0.50	2	4.80	4.33
Partial Displaced Left Turn N-S	0.56	3	2.85	3.04
Signalized ThruCut N-S	0.58	4	4.87	4.37
Partial Median U-Turn N-S	0.61	5	2.88	4.37
Median U-Turn N-S	0.62	6	2.97	4.37
Signalized Restricted Crossing U-Turn N-S	0.71	7	2.97	4.04
Traffic Signal	0.74	8	4.80	4.37
1 X 1	0.80	9	5.24	4.54
All-Way Stop Control	1.15	10	3.69	4.37

Capacity Analysis for Planning of Junctions

Input Worksheet 1

Project Name	Chuloata Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) PM Design Year (2048)
Location	Chuluota Road (CR 419) at Lake Pickett Road
Date	March 14, 2024
Number of Legs	4
Major Street Direction	North-South

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	0	207	162	308	3.48%	0.00%
Westbound	0	69	72	6	3.48%	0.00%
Southbound	0	20	574	142	3.48%	0.00%
Northbound	0	138	513	130	3.48%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone		**C3R-Suburban Residential**	
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Equivalent Passenger Car Volume

	Volume (Veh/hr)			
	U-Turn	**Left**	**Thru**	**Right**
Eastbound	0	214	168	319
Westbound	0	71	75	6
Southbound	0	21	594	147
Northbound	0	143	531	135

Notes:	
Left-Turn Adjustment Factor	*Conversion of left-turning vehicles to equivalent through vehicles*
Right-turn Adjustment Factor	*Conversion of right-turning vehicles to equivalent through vehicles*
U-turn Adjustment Factor	*Conversion of U-turning vehicles to equivalent through vehicles*
Truck to PCE Factor	*1 truck = X Passenger Car Equivalents*
Critical Lane Volume Sum Limit	*Saturation Value for Critical Lane Volume Sum at an intersection*

Capacity Analysis for Planning of Junctions

Step 2A: Base Conditions Analysis

Project Name	Chuloata Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) PM Design Year (2048)
Location	Chuluota Road (CR 419) at Lake Pickett Road
Date	March 14, 2024
Major Street Direction	North-South

Existing Intersection Configuration	*Traffic Signal*

Number of Lanes for Existing Configuration
(Can be edited in "3- Alt Num Lanes Input" as needed)

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		1	1	1		1	1	0		1	1	0		1	1	0

Results for Existing Configuration

TYPE OF	Sheet	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	

Overall v/c Ratio	0.86	Pedestrian Accommodation Score	4.80	Bicycle Accommodation Score	4.37

Step 2B: Alternative Selection

Rankings Inclusion		Yes/No	Comment
At-Grade Non-Roundabout Intersections?		Yes	
Traffic Signal		Yes	
Two-Way Stop Control		Yes	
All-Way Stop Control		Yes	
Continuous Green T		No	4-Leg Intersection
Quadrant Roadway	S-W	No	No Nearby Quadrant Roadway
	N-E	No	No Nearby Quadrant Roadway
	S-E	No	No Nearby Quadrant Roadway
	N-W	No	No Nearby Quadrant Roadway
Partial Displaced Left Turn		Yes	
Displaced Left Turn		Yes	
Signalized Restricted Crossing U-Turn		Yes	
Unsignalized Restricted Crossing U-Turn		Yes	
Median U-Turn		Yes	
Partial Median U-Turn		Yes	
Bowtie		Yes	
Signalized ThruCut		Yes	
Unsignalized ThruCut		Yes	
Roundabouts?		Yes	
50 ICD Miniroundabout		Yes	
75 ICD Miniroundabout		Yes	
1x1		Yes	
1NS x 2EW		No	1x1 Roundabout Only
2NS x 1EW		No	1x1 Roundabout Only
2x2		No	1x1 Roundabout Only
Ramp Terminal Intersections?		No	
Diamond			
Partial Cloverleaf A			
Partial Cloverleaf B			
Displaced Left Turn Interchange			
Diverging Diamond			
Single Point Diamond			

Continue to Step 3 Step 3

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuloata Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) PM Design Year (2048)
Location	Chuluota Road (CR 419) at Lake Pickett Road
Date	March 14, 2024
Analysis Type	At-Grade Intersections and Interchanges

Number of Lanes for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		1	1	1		1	1	0		1	1	0		1	1	0
Two-Way Stop Control	N-S		1	1	1		1	1	0		1	1	0		1	1	0
All-Way Stop Control	FULL		1	1	1		1	1	0		1	1	0		1	1	0
Partial Displaced Left Turn	N-S		1	1	1		1	1	1		1	1	0		1	1	0
Displaced Left Turn	FULL		1	1	1		1	1	1		1	1	1		1	1	1
Signalized Restricted Crossing U-Turn	N-S	1	1	1	1	1	1	1	1				1				1
Unsignalized Restricted Crossing U-Turn	N-S	1	1	1	1	1	1	1	1				1				1
Median U-Turn	N-S	1		1	1	1		1	1			1	1			1	1
Partial Median U-Turn	N-S	1		1	1	1		1	1		1	1	0		1	1	0
Signalized ThruCut	N-S		1	1	1		1	1	1		1		1		1		1
Unsignalized ThruCut	N-S		1	1	1		1	1	1		1		1		1		1
Bowtie	N-S			1	1			1	1			1	1			1	1

For shared lanes, enter "0" in L or R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Number of Lanes for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuloata Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) PM Design Year (2048)
Location	Chuluota Road (CR 419) at Lake Pickett Road
Date	March 14, 2024
Analysis Type	At-Grade Intersections and Interchanges

Volume Echo with Shared Lane Adjustment for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		143	531	135		21	741	0		214	487	0		71	81	0
Two-Way Stop Control	N-S		143	531	135		21	741	0		214	487	0		71	81	0
All-Way Stop Control	FULL		143	531	135		21	741	0		214	487	0		71	81	0
Partial Displaced Left Turn	N-S		143	531	135		21	594	147		214	487	0		71	81	0
Displaced Left Turn	FULL		143	531	135		21	594	147		214	168	319		71	75	6
Signalized Restricted Crossing U-Turn	N-S	0	143	531	135	0	21	594	147				319				6
Unsignalized Restricted Crossing U-Turn	N-S	0	143	531	135	0	21	594	147				319				6
Median U-Turn	N-S	0		531	135	0		594	147			168	319			75	6
Partial Median U-Turn	N-S	0		531	135	0		594	147		214	487	0		71	81	0
Signalized ThruCut	N-S		143	531	135		21	594	147		298		403		109		44
Unsignalized ThruCut	N-S		143	531	135		21	594	147		298		403		109		44
Bowtie	N-S		143	531	135		21	594	147			403	390			289	220

Capacity Analysis for Planning of Junctions

Results Worksheet

Project Name	Chuloata Road (CR 419) ICE Evaluation	***Estimated Volume-to-Capacity Ratio***			
Project Number	No-build (2-lane) PM Design Year (2048)	**Number of Configurations**			
Location	Chuluota Road (CR 419) at Lake Pickett Road	**< 0.750**	**0.750 - 0.875**	**0.875 - 1.00**	**≥ 1.00**
Date	March 14, 2024	**6**	**2**	**0**	**7**

Results for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Zone 1 (North)		Zone 2 (South)		Zone 3 (East)		Zone 4 (West)		Zone 5 (Center)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			
Traffic Signal	FULL									1461	0.86	0.86	4.80	4.37
Two-Way Stop Control	N-S									--	>10	>10	2.62	3.62
All-Way Stop Control	FULL									2424	1.35	1.35	3.69	4.37
Partial Displaced Left Turn	N-S	773	*0.43*	1135	*0.63*					1156	0.66	0.66	2.85	3.04
Displaced Left Turn	FULL	767	*0.43*	816	*0.45*	264	*0.15*	443	*0.25*	819	0.46	0.46	2.96	3.04
Signalized Restricted Crossing U-Turn	N-S	945	*0.52*	1287	*0.71*	924	*0.51*	1490	0.83			0.83	2.97	4.04
Unsignalized Restricted Crossing U-Turn	N-S	762	*0.21*	809	*0.57*	745	*0.37*	665	1.53			1.53	2.59	2.96
Median U-Turn	N-S	1030	*0.57*	1103	*0.61*					1301	0.72	0.72	2.97	4.37
Partial Median U-Turn	N-S	941	*0.52*	835	*0.46*					1236	0.71	0.71	2.88	4.37
Bowtie	N-S	681	0.49	457	0.33	152	0.16	701	0.56	1053	0.59	0.59	4.80	4.33
Signalized ThruCut	N-S									1183	0.68	0.68	4.87	4.37
Unsignalized ThruCut	N-S									--	18.82	18.82	4.07	4.04

Capacity Analysis for Planning of Junctions

Results Worksheet

Results for Roundabouts

TYPE OF ROUNDABOUT	Zone 1 (North)			Zone 3 (East)			Zone 2 (South)			Zone 4 (West)			Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3			
50 ICD	1.04			2.08			1.27			1.26			2.08	5.24	4.54
75 ICD	1.00			1.82			1.20			*0.74*			1.82	5.24	4.54
1 X 1	*0.75*			1.03			0.89			*0.28*			1.03	5.24	4.54

Results for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Zone 1 (Rt Mrg)		Zone 2 (Lt Mrg)		Zone 3 (Ctr. 1)		Zone 4 (Ctr. 2)		Zone 5 (Lt Mrg)		Zone 6 (Rt Mrg)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			

TYPE OF INTERSECTION	Overall V/C Ratio	V/C Ranking	Pedestrian Accommodation Score	Bicycle Accommodation Score
Displaced Left Turn	0.46	1	2.96	3.04
Bowtie N-S	0.59	2	4.80	4.33
Partial Displaced Left Turn N-S	0.66	3	2.85	3.04
Signalized ThruCut N-S	0.68	4	4.87	4.37
Partial Median U-Turn N-S	0.71	5	2.88	4.37
Median U-Turn N-S	0.72	6	2.97	4.37
Signalized Restricted Crossing U-Turn N-S	0.83	7	2.97	4.04
Traffic Signal	0.86	8	4.80	4.37
1 X 1	1.03	9	5.24	4.54
All-Way Stop Control	1.35	10	3.69	4.37

Capacity Analysis for Planning of Junctions

Input Worksheet 1

Project Name	Chuloata Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) AM Opening Year (2028)
Location	Chuluota Road (CR 419) at Lake Pickett Road
Date	March 14, 2024
Number of Legs	4
Major Street Direction	North-South

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	0	58	50	152	3.48%	0.00%
Westbound	0	96	122	8	3.48%	0.00%
Southbound	0	4	356	205	3.48%	0.00%
Northbound	0	200	409	74	3.48%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone		**C3R-Suburban Residential**	
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Equivalent Passenger Car Volume

	Volume (Veh/hr)			
	U-Turn	**Left**	**Thru**	**Right**
Eastbound	0	60	52	157
Westbound	0	99	126	8
Southbound	0	4	368	212
Northbound	0	207	423	77

Notes:	
Left-Turn Adjustment Factor	*Conversion of left-turning vehicles to equivalent through vehicles*
Right-turn Adjustment Factor	*Conversion of right-turning vehicles to equivalent through vehicles*
U-turn Adjustment Factor	*Conversion of U-turning vehicles to equivalent through vehicles*
Truck to PCE Factor	*1 truck = X Passenger Car Equivalents*
Critical Lane Volume Sum Limit	*Saturation Value for Critical Lane Volume Sum at an intersection*

Capacity Analysis for Planning of Junctions

Step 2A: Base Conditions Analysis

Project Name	Chuloata Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) AM Opening Year (2028)
Location	Chuluota Road (CR 419) at Lake Pickett Road
Date	March 14, 2024
Major Street Direction	North-South

Existing Intersection Configuration	*Traffic Signal*

Number of Lanes for Existing Configuration
(Can be edited in "3- Alt Num Lanes Input" as needed)

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		1	2	1		1	2	0		1	1	0		1	1	0

Results for Existing Configuration

TYPE OF		Sheet	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	
Overall v/c Ratio	0.49	Pedestrian Accommodation Score		4.64	Bicycle Accommodation Score			4.29

Step 2B: Alternative Selection

Rankings Inclusion		Yes/No	Comment
At-Grade Non-Roundabout Intersections?		Yes	
Traffic Signal		Yes	
Two-Way Stop Control		Yes	
All-Way Stop Control		Yes	
Continuous Green T		No	4-Leg Intersection
Quadrant Roadway	S-W	No	No Nearby Quadrant Roadway
	N-E	No	No Nearby Quadrant Roadway
	S-E	No	No Nearby Quadrant Roadway
	N-W	No	No Nearby Quadrant Roadway
Partial Displaced Left Turn		Yes	
Displaced Left Turn		Yes	
Signalized Restricted Crossing U-Turn		Yes	
Unsignalized Restricted Crossing U-Turn		Yes	
Median U-Turn		Yes	
Partial Median U-Turn		Yes	
Bowtie		Yes	
Signalized ThruCut		Yes	
Unsignalized ThruCut		Yes	
Roundabouts?		Yes	
50 ICD Miniroundabout		Yes	
75 ICD Miniroundabout		Yes	
1x1		No	2x1 Roundabout Only
1NS x 2EW		No	2x1 Roundabout Only
2NS x 1EW		Yes	
2x2		No	2x1 Roundabout Only
Ramp Terminal Intersections?		No	
Diamond			
Partial Cloverleaf A			
Partial Cloverleaf B			
Displaced Left Turn Interchange			
Diverging Diamond			
Single Point Diamond			

Continue to Step 3 → Step 3

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuloata Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) AM Opening Year (2028)
Location	Chuluota Road (CR 419) at Lake Pickett Road
Date	March 14, 2024
Analysis Type	At-Grade Intersections and Interchanges

Number of Lanes for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		1	2	1		1	2	0		1	1	0		1	1	0
Two-Way Stop Control	N-S		1	2	1		1	2	0		1	1	0		1	1	0
All-Way Stop Control	FULL		1	2	1		1	2	0		1	1	0		1	1	0
Partial Displaced Left Turn	N-S		1	2	1		1	2	1		1	1	0		1	1	0
Displaced Left Turn	FULL		1	2	1		1	2	1		1	1	1		1	1	1
Signalized Restricted Crossing U-Turn	N-S	1	1	2	1	1	1	2	1				2				2
Unsignalized Restricted Crossing U-Turn	N-S	1	1	2	1	1	1	2	1				2				2
Median U-Turn	N-S	1		2	1	1		2	1			1	1			1	1
Partial Median U-Turn	N-S	1		2	1	1		2	1		1	1	0		1	1	0
Signalized ThruCut	N-S		1	2	1		1	2	1		1		1		1		1
Unsignalized ThruCut	N-S		1	2	1		1	2	1		1		1		1		1
Bowtie	N-S			2	1			2	1			1	1			1	1

For shared lanes, enter "0" in L or R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Number of Lanes for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuloata Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) AM Opening Year (2028)
Location	Chuluota Road (CR 419) at Lake Pickett Road
Date	March 14, 2024
Analysis Type	At-Grade Intersections and Interchanges

Volume Echo with Shared Lane Adjustment for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		207	423	77		4	580	0		60	209	0		99	134	0
Two-Way Stop Control	N-S		207	423	77		4	580	0		60	209	0		99	134	0
All-Way Stop Control	FULL		207	423	77		4	580	0		60	209	0		99	134	0
Partial Displaced Left Turn	N-S		207	423	77		4	368	212		60	209	0		99	134	0
Displaced Left Turn	FULL		207	423	77		4	368	212		60	52	157		99	126	8
Signalized Restricted Crossing U-Turn	N-S	0	207	423	77	0	4	368	212				157				8
Unsignalized Restricted Crossing U-Turn	N-S	0	207	423	77	0	4	368	212				157				8
Median U-Turn	N-S	0		423	77	0		368	212			52	157			126	8
Partial Median U-Turn	N-S	0		423	77	0		368	212		60	209	0		99	134	0
Signalized ThruCut	N-S		207	423	77		4	368	212		86		183		162		71
Unsignalized ThruCut	N-S		207	423	77		4	368	212		86		183		162		71
Bowtie	N-S		207	423	77		4	368	212			116	256			432	68

Capacity Analysis for Planning of Junctions

Results Worksheet

Project Name	Chuloata Road (CR 419) ICE Evaluation	***Estimated Volume-to-Capacity Ratio***			
Project Number	Build (4-lane) AM Opening Year (2028)	**Number of Configurations**			
Location	Chuluota Road (CR 419) at Lake Pickett Road	**< 0.750**	**0.750 - 0.875**	**0.875 - 1.00**	**≥ 1.00**
Date	March 14, 2024	**10**	**0**	**2**	**3**

Results for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Zone 1 (North)		Zone 2 (South)		Zone 3 (East)		Zone 4 (West)		Zone 5 (Center)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			
Traffic Signal	FULL									833	0.49	0.49	4.64	4.29
Two-Way Stop Control	N-S									--	>10	>10	2.52	3.54
All-Way Stop Control	FULL									1793	1.00	1.00	3.50	4.29
Partial Displaced Left Turn	N-S	250	*0.14*	530	*0.29*					531	0.30	0.30	2.80	2.96
Displaced Left Turn	FULL	246	*0.14*	451	*0.25*	160	*0.09*	396	*0.22*	344	0.19	0.25	2.92	2.96
Signalized Restricted Crossing U-Turn	N-S	573	*0.32*	494	*0.27*	379	*0.21*	616	*0.34*			0.34	2.85	3.87
Unsignalized Restricted Crossing U-Turn	N-S	584	*0.28*	707	*0.15*	483	*0.44*	467	*0.50*			0.50	2.49	2.79
Median U-Turn	N-S	675	*0.37*	434	*0.24*					748	0.42	0.42	2.93	4.29
Partial Median U-Turn	N-S	551	*0.31*	359	*0.20*					743	0.42	0.42	2.82	4.29
Bowtie	N-S	235	0.17	478	0.34	162	0.15	183	0.14	766	0.43	0.43	4.60	4.25
Signalized ThruCut	N-S									573	0.33	0.33	4.72	4.29
Unsignalized ThruCut	N-S									--	2.60	2.60	3.97	3.96

Capacity Analysis for Planning of Junctions

Results Worksheet

Results for Roundabouts

TYPE OF ROUNDABOUT	Zone 1 (North)			Zone 3 (East)			Zone 2 (South)			Zone 4 (West)			Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3			
50 ICD	0.99			*0.50*			0.76			*0.73*			0.99	5.24	4.54
75 ICD	0.93			*0.47*			0.75			*0.60*			0.93	5.24	4.54
2NS X 1EW	*0.32*	*0.33*		*0.30*			*0.29*	0.31		*0.31*			0.33	4.86	4.46

Results for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Zone 1 (Rt Mrg)		Zone 2 (Lt Mrg)		Zone 3 (Ctr. 1)		Zone 4 (Ctr. 2)		Zone 5 (Lt Mrg)		Zone 6 (Rt Mrg)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			

TYPE OF INTERSECTION	Overall V/C Ratio	V/C Ranking	Pedestrian Accommodation Score	Bicycle Accommodation Score
Displaced Left Turn	0.25	1	2.92	2.96
Partial Displaced Left Turn N-S	0.30	2	2.80	2.96
Signalized ThruCut N-S	0.33	3	4.72	4.29
2NS X 1EW	0.33	4	4.86	4.46
Signalized Restricted Crossing U-Turn N-S	0.34	5	2.85	3.87
Median U-Turn N-S	0.42	6	2.93	4.29
Partial Median U-Turn N-S	0.42	6	2.82	4.29
Bowtie N-S	0.43	8	4.60	4.25
Traffic Signal	0.49	9	4.64	4.29
Unsignalized Restricted Crossing U-Turn N-S	0.50	10	2.49	2.79

Capacity Analysis for Planning of Junctions

Input Worksheet 1

Project Name	Chuloata Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) AM Interim Year (2038)
Location	Chuluota Road (CR 419) at Lake Pickett Road
Date	March 14, 2024
Number of Legs	4
Major Street Direction	North-South

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	0	76	65	200	3.48%	0.00%
Westbound	0	126	160	10	3.48%	0.00%
Southbound	0	5	522	269	3.48%	0.00%
Northbound	0	262	544	98	3.48%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone		**C3R-Suburban Residential**	
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Equivalent Passenger Car Volume

	Volume (Veh/hr)			
	U-Turn	**Left**	**Thru**	**Right**
Eastbound	0	79	67	207
Westbound	0	130	166	10
Southbound	0	5	540	278
Northbound	0	271	563	101

Notes:	
Left-Turn Adjustment Factor	*Conversion of left-turning vehicles to equivalent through vehicles*
Right-turn Adjustment Factor	*Conversion of right-turning vehicles to equivalent through vehicles*
U-turn Adjustment Factor	*Conversion of U-turning vehicles to equivalent through vehicles*
Truck to PCE Factor	*1 truck = X Passenger Car Equivalents*
Critical Lane Volume Sum Limit	*Saturation Value for Critical Lane Volume Sum at an intersection*

Capacity Analysis for Planning of Junctions

Step 2A: Base Conditions Analysis

Project Name	Chuloata Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) AM Interim Year (2038)
Location	Chuluota Road (CR 419) at Lake Pickett Road
Date	March 14, 2024
Major Street Direction	North-South

Existing Intersection Configuration	*Traffic Signal*

Number of Lanes for Existing Configuration
(Can be edited in "3- Alt Num Lanes Input" as needed)

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		1	2	1		1	2	0		1	1	0		1	1	0

Results for Existing Configuration

TYPE OF	Sheet	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	

Overall v/c Ratio	0.66	Pedestrian Accommodation Score	4.64	Bicycle Accommodation Score	4.29

Step 2B: Alternative Selection

Rankings Inclusion		Yes/No	Comment
At-Grade Non-Roundabout Intersections?		Yes	
Traffic Signal		Yes	
Two-Way Stop Control		Yes	
All-Way Stop Control		Yes	
Continuous Green T		No	4-Leg Intersection
Quadrant Roadway	S-W	No	No Nearby Quadrant Roadway
	N-E	No	No Nearby Quadrant Roadway
	S-E	No	No Nearby Quadrant Roadway
	N-W	No	No Nearby Quadrant Roadway
Partial Displaced Left Turn		Yes	
Displaced Left Turn		Yes	
Signalized Restricted Crossing U-Turn		Yes	
Unsignalized Restricted Crossing U-Turn		Yes	
Median U-Turn		Yes	
Partial Median U-Turn		Yes	
Bowtie		Yes	
Signalized ThruCut		Yes	
Unsignalized ThruCut		Yes	
Roundabouts?		Yes	
50 ICD Miniroundabout		Yes	
75 ICD Miniroundabout		Yes	
1x1		No	2x1 Roundabout Only
1NS x 2EW		No	2x1 Roundabout Only
2NS x 1EW		Yes	
2x2		No	2x1 Roundabout Only
Ramp Terminal Intersections?		No	
Diamond			
Partial Cloverleaf A			
Partial Cloverleaf B			
Displaced Left Turn Interchange			
Diverging Diamond			
Single Point Diamond			

Continue to Step 3 Step 3

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuloata Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) AM Interim Year (2038)
Location	Chuluota Road (CR 419) at Lake Pickett Road
Date	March 14, 2024
Analysis Type	At-Grade Intersections and Interchanges

Number of Lanes for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		1	2	1		1	2	0		1	1	0		1	1	0
Two-Way Stop Control	N-S		1	2	1		1	2	0		1	1	0		1	1	0
All-Way Stop Control	FULL		1	2	1		1	2	0		1	1	0		1	1	0
Partial Displaced Left Turn	N-S		1	2	1		1	2	1		1	1	0		1	1	0
Displaced Left Turn	FULL		1	2	1		1	2	1		1	1	1		1	1	1
Signalized Restricted Crossing U-Turn	N-S	1	1	2	1	1	1	2	1				2				2
Unsignalized Restricted Crossing U-Turn	N-S	1	1	2	1	1	1	2	1				2				2
Median U-Turn	N-S	1		2	1	1		2	1			1	1			1	1
Partial Median U-Turn	N-S	1		2	1	1		2	1		1	1	0		1	1	0
Signalized ThruCut	N-S		1	2	1		1	2	1		1		1		1		1
Unsignalized ThruCut	N-S		1	2	1		1	2	1		1		1		1		1
Bowtie	N-S			2	1			2	1			1	1			1	1

For shared lanes, enter "0" in L or R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Number of Lanes for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuloata Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) AM Interim Year (2038)
Location	Chuluota Road (CR 419) at Lake Pickett Road
Date	March 14, 2024
Analysis Type	At-Grade Intersections and Interchanges

Volume Echo with Shared Lane Adjustment for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		271	563	101		5	818	0		79	274	0		130	176	0
Two-Way Stop Control	N-S		271	563	101		5	818	0		79	274	0		130	176	0
All-Way Stop Control	FULL		271	563	101		5	818	0		79	274	0		130	176	0
Partial Displaced Left Turn	N-S		271	563	101		5	540	278		79	274	0		130	176	0
Displaced Left Turn	FULL		271	563	101		5	540	278		79	67	207		130	166	10
Signalized Restricted Crossing U-Turn	N-S	0	271	563	101	0	5	540	278				207				10
Unsignalized Restricted Crossing U-Turn	N-S	0	271	563	101	0	5	540	278				207				10
Median U-Turn	N-S	0		563	101	0		540	278			67	207			166	10
Partial Median U-Turn	N-S	0		563	101	0		540	278		79	274	0		130	176	0
Signalized ThruCut	N-S		271	563	101		5	540	278		113		241		213		93
Unsignalized ThruCut	N-S		271	563	101		5	540	278		113		241		213		93
Bowtie	N-S		271	563	101		5	540	278			151	337			567	89

Capacity Analysis for Planning of Junctions

Results Worksheet

Project Name	Chuloata Road (CR 419) ICE Evaluation	***Estimated Volume-to-Capacity Ratio***			
Project Number	Build (4-lane) AM Interim Year (2038)	**Number of Configurations**			
Location	Chuluota Road (CR 419) at Lake Pickett Road	**< 0.750**	**0.750 - 0.875**	**0.875 - 1.00**	**≥ 1.00**
Date	March 14, 2024	**9**	**0**	**1**	**5**

Results for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Zone 1 (North)		Zone 2 (South)		Zone 3 (East)		Zone 4 (West)		Zone 5 (Center)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			
Traffic Signal	FULL									1120	0.66	0.66	4.64	4.29
Two-Way Stop Control	N-S									--	>10	>10	2.47	3.54
All-Way Stop Control	FULL									2417	1.34	1.34	3.50	4.29
Partial Displaced Left Turn	N-S	331	*0.18*	724	*0.40*					696	0.40	0.40	2.79	2.96
Displaced Left Turn	FULL	326	*0.18*	620	*0.34*	209	*0.12*	520	*0.29*	451	0.25	0.34	2.91	2.96
Signalized Restricted Crossing U-Turn	N-S	782	*0.43*	650	*0.36*	501	*0.28*	808	*0.45*			0.45	2.85	3.87
Unsignalized Restricted Crossing U-Turn	N-S	823	*0.45*	935	*0.25*	642	*0.74*	670	0.89			0.89	2.47	2.79
Median U-Turn	N-S	913	*0.51*	573	*0.32*					982	0.55	0.55	2.90	4.29
Partial Median U-Turn	N-S	750	*0.42*	474	*0.26*					974	0.56	0.56	2.80	4.29
Bowtie	N-S	307	0.23	627	0.44	213	0.22	241	0.19	1005	0.56	0.56	4.60	4.25
Signalized ThruCut	N-S									779	0.45	0.45	4.72	4.29
Unsignalized ThruCut	N-S									--	11.94	11.94	3.94	3.96

Capacity Analysis for Planning of Junctions

Results Worksheet

Results for Roundabouts

TYPE OF ROUNDABOUT	Zone 1 (North)			Zone 3 (East)			Zone 2 (South)			Zone 4 (West)			Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3			
50 ICD	1.82			1.03			1.05			3.22			3.22	5.24	4.54
75 ICD	1.63			0.91			1.03			1.67			1.67	5.24	4.54
2NS X 1EW	*0.51*	*0.52*		*0.46*			*0.39*	0.42		*0.49*			0.52	4.86	4.46

Results for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Zone 1 (Rt Mrg)		Zone 2 (Lt Mrg)		Zone 3 (Ctr. 1)		Zone 4 (Ctr. 2)		Zone 5 (Lt Mrg)		Zone 6 (Rt Mrg)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			

TYPE OF INTERSECTION	Overall V/C Ratio	V/C Ranking	Pedestrian Accommodation Score	Bicycle Accommodation Score
Displaced Left Turn	0.34	1	2.91	2.96
Partial Displaced Left Turn N-S	0.40	2	2.79	2.96
Signalized Restricted Crossing U-Turn N-S	0.45	3	2.85	3.87
Signalized ThruCut N-S	0.45	3	4.72	4.29
2NS X 1EW	0.52	5	4.86	4.46
Median U-Turn N-S	0.55	6	2.90	4.29
Partial Median U-Turn N-S	0.56	7	2.80	4.29
Bowtie N-S	0.56	7	4.60	4.25
Traffic Signal	0.66	9	4.64	4.29
Unsignalized Restricted Crossing U-Turn N-S	0.89	10	2.47	2.79

Capacity Analysis for Planning of Junctions

Input Worksheet 1

Project Name	Chuloata Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) AM Design Year (2048)
Location	Chuluota Road (CR 419) at Lake Pickett Road
Date	March 14, 2024
Number of Legs	4
Major Street Direction	North-South

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	0	94	81	248	3.48%	0.00%
Westbound	0	156	198	12	3.48%	0.00%
Southbound	0	6	689	333	3.48%	0.00%
Northbound	0	324	680	121	3.48%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone		**C3R-Suburban Residential**	
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Equivalent Passenger Car Volume

	Volume (Veh/hr)			
	U-Turn	**Left**	**Thru**	**Right**
Eastbound	0	97	84	257
Westbound	0	161	205	12
Southbound	0	6	713	345
Northbound	0	335	704	125

Notes:	
Left-Turn Adjustment Factor	*Conversion of left-turning vehicles to equivalent through vehicles*
Right-turn Adjustment Factor	*Conversion of right-turning vehicles to equivalent through vehicles*
U-turn Adjustment Factor	*Conversion of U-turning vehicles to equivalent through vehicles*
Truck to PCE Factor	*1 truck = X Passenger Car Equivalents*
Critical Lane Volume Sum Limit	*Saturation Value for Critical Lane Volume Sum at an intersection*

Capacity Analysis for Planning of Junctions

Step 2A: Base Conditions Analysis

Project Name	Chuloata Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) AM Design Year (2048)
Location	Chuluota Road (CR 419) at Lake Pickett Road
Date	March 14, 2024
Major Street Direction	North-South

Existing Intersection Configuration	*Traffic Signal*

Number of Lanes for Existing Configuration
(Can be edited in "3- Alt Num Lanes Input" as needed)

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		1	2	1		1	2	0		1	1	0		1	1	0

Results for Existing Configuration

TYPE OF		Sheet	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	
Overall v/c Ratio	0.83	Pedestrian Accommodation Score		4.64	Bicycle Accommodation Score			4.29

Step 2B: Alternative Selection

Rankings Inclusion		Yes/No	Comment
At-Grade Non-Roundabout Intersections?		Yes	
Traffic Signal		Yes	
Two-Way Stop Control		Yes	
All-Way Stop Control		Yes	
Continuous Green T		No	4-Leg Intersection
Quadrant Roadway	S-W	No	No Nearby Quadrant Roadway
	N-E	No	No Nearby Quadrant Roadway
	S-E	No	No Nearby Quadrant Roadway
	N-W	No	No Nearby Quadrant Roadway
Partial Displaced Left Turn		Yes	
Displaced Left Turn		Yes	
Signalized Restricted Crossing U-Turn		Yes	
Unsignalized Restricted Crossing U-Turn		Yes	
Median U-Turn		Yes	
Partial Median U-Turn		Yes	
Bowtie		Yes	
Signalized ThruCut		Yes	
Unsignalized ThruCut		Yes	
Roundabouts?		Yes	
50 ICD Miniroundabout		Yes	
75 ICD Miniroundabout		Yes	
1x1		No	2x1 Roundabout Only
1NS x 2EW		No	2x1 Roundabout Only
2NS x 1EW		Yes	
2x2		No	2x1 Roundabout Only
Ramp Terminal Intersections?		No	
Diamond			
Partial Cloverleaf A			
Partial Cloverleaf B			
Displaced Left Turn Interchange			
Diverging Diamond			
Single Point Diamond			

Continue to Step 3 Step 3

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuloata Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) AM Design Year (2048)
Location	Chuluota Road (CR 419) at Lake Pickett Road
Date	March 14, 2024
Analysis Type	At-Grade Intersections and Interchanges

Number of Lanes for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		1	2	1		1	2	0		1	1	0		1	1	0
Two-Way Stop Control	N-S		1	2	1		1	2	0		1	1	0		1	1	0
All-Way Stop Control	FULL		1	2	1		1	2	0		1	1	0		1	1	0
Partial Displaced Left Turn	N-S		1	2	1		1	2	1		1	1	0		1	1	0
Displaced Left Turn	FULL		1	2	1		1	2	1		1	1	1		1	1	1
Signalized Restricted Crossing U-Turn	N-S	1	1	2	1	1	1	2	1				2				2
Unsignalized Restricted Crossing U-Turn	N-S	1	1	2	1	1	1	2	1				2				2
Median U-Turn	N-S	1		2	1	1		2	1			1	1			1	1
Partial Median U-Turn	N-S	1		2	1	1		2	1		1	1	0		1	1	0
Signalized ThruCut	N-S		1	2	1		1	2	1		1		1		1		1
Unsignalized ThruCut	N-S		1	2	1		1	2	1		1		1		1		1
Bowtie	N-S			2	1			2	1			1	1			1	1

For shared lanes, enter "0" in L or R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Number of Lanes for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuloata Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) AM Design Year (2048)
Location	Chuluota Road (CR 419) at Lake Pickett Road
Date	March 14, 2024
Analysis Type	At-Grade Intersections and Interchanges

Volume Echo with Shared Lane Adjustment for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		335	704	125		6	1058	0		97	341	0		161	217	0
Two-Way Stop Control	N-S		335	704	125		6	1058	0		97	341	0		161	217	0
All-Way Stop Control	FULL		335	704	125		6	1058	0		97	341	0		161	217	0
Partial Displaced Left Turn	N-S		335	704	125		6	713	345		97	341	0		161	217	0
Displaced Left Turn	FULL		335	704	125		6	713	345		97	84	257		161	205	12
Signalized Restricted Crossing U-Turn	N-S	0	335	704	125	0	6	713	345				257				12
Unsignalized Restricted Crossing U-Turn	N-S	0	335	704	125	0	6	713	345				257				12
Median U-Turn	N-S	0		704	125	0		713	345			84	257			205	12
Partial Median U-Turn	N-S	0		704	125	0		713	345		97	341	0		161	217	0
Signalized ThruCut	N-S		335	704	125		6	713	345		139		299		264		115
Unsignalized ThruCut	N-S		335	704	125		6	713	345		139		299		264		115
Bowtie	N-S		335	704	125		6	713	345			187	418			701	109

Capacity Analysis for Planning of Junctions

Results Worksheet

Project Name	Chuloata Road (CR 419) ICE Evaluation	***Estimated Volume-to-Capacity Ratio***			
Project Number	Build (4-lane) AM Design Year (2048)	**Number of Configurations**			
Location	Chuluota Road (CR 419) at Lake Pickett Road	**< 0.750**	**0.750 - 0.875**	**0.875 - 1.00**	**≥ 1.00**
Date	March 14, 2024	**7**	**2**	**0**	**6**

Results for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Zone 1 (North)		Zone 2 (South)		Zone 3 (East)		Zone 4 (West)		Zone 5 (Center)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			
Traffic Signal	FULL									1411	0.83	0.83	4.64	4.29
Two-Way Stop Control	N-S									--	>10	>10	2.47	3.54
All-Way Stop Control	FULL									3044	1.69	1.69	3.50	4.29
Partial Displaced Left Turn	N-S	413	*0.23*	918	*0.51*					867	0.50	0.51	2.77	2.96
Displaced Left Turn	FULL	407	*0.23*	790	*0.44*	259	*0.14*	642	*0.36*	562	0.31	0.44	2.90	2.96
Signalized Restricted Crossing U-Turn	N-S	990	*0.55*	808	*0.45*	623	*0.35*	1000	*0.56*			0.56	2.82	3.87
Unsignalized Restricted Crossing U-Turn	N-S	1064	*0.70*	1164	*0.38*	801	1.17	874	1.51			1.51	2.45	2.79
Median U-Turn	N-S	1152	*0.64*	711	*0.39*					1216	0.68	0.68	2.90	4.29
Partial Median U-Turn	N-S	951	*0.53*	590	*0.33*					1208	0.69	0.69	2.79	4.29
Bowtie	N-S	380	0.28	776	0.55	264	0.29	299	0.24	1242	0.69	0.69	4.60	4.25
Signalized ThruCut	N-S									986	0.56	0.56	4.72	4.29
Unsignalized ThruCut	N-S									--	73.55	73.55	3.94	3.96

Capacity Analysis for Planning of Junctions

Results Worksheet

Results for Roundabouts

TYPE OF ROUNDABOUT	Zone 1 (North)			Zone 3 (East)			Zone 2 (South)			Zone 4 (West)			Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3			
50 ICD	3.36			3.09			1.36			*-2.88*			3.36	5.24	4.54
75 ICD	2.81			2.16			1.33			*-14.90*			2.81	5.24	4.54
2NS X 1EW	*0.74*	0.76		*0.69*			*0.51*	0.54		*0.74*			0.76	4.86	4.46

Results for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Zone 1 (Rt Mrg)		Zone 2 (Lt Mrg)		Zone 3 (Ctr. 1)		Zone 4 (Ctr. 2)		Zone 5 (Lt Mrg)		Zone 6 (Rt Mrg)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			

TYPE OF INTERSECTION	Overall V/C Ratio	V/C Ranking	Pedestrian Accommodation Score	Bicycle Accommodation Score
Displaced Left Turn	0.44	1	2.90	2.96
Partial Displaced Left Turn N-S	0.51	2	2.77	2.96
Signalized Restricted Crossing U-Turn N-S	0.56	3	2.82	3.87
Signalized ThruCut N-S	0.56	3	4.72	4.29
Median U-Turn N-S	0.68	5	2.90	4.29
Partial Median U-Turn N-S	0.69	6	2.79	4.29
Bowtie N-S	0.69	6	4.60	4.25
2NS X 1EW	0.76	8	4.86	4.46
Traffic Signal	0.83	9	4.64	4.29
Unsignalized Restricted Crossing U-Turn N-S	1.51	10	2.45	2.79

Capacity Analysis for Planning of Junctions

Input Worksheet 1

Project Name	Chuloata Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) PM Opening Year (2028)
Location	Chuluota Road (CR 419) at Lake Pickett Road
Date	March 14, 2024
Number of Legs	4
Major Street Direction	North-South

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	0	173	136	257	3.48%	0.00%
Westbound	0	58	60	5	3.48%	0.00%
Southbound	0	17	455	119	3.48%	0.00%
Northbound	0	115	412	109	3.48%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone		**C3R-Suburban Residential**	
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Equivalent Passenger Car Volume

	Volume (Veh/hr)			
	U-Turn	**Left**	**Thru**	**Right**
Eastbound	0	179	141	266
Westbound	0	60	62	5
Southbound	0	18	471	123
Northbound	0	119	426	113

Notes:	
Left-Turn Adjustment Factor	*Conversion of left-turning vehicles to equivalent through vehicles*
Right-turn Adjustment Factor	*Conversion of right-turning vehicles to equivalent through vehicles*
U-turn Adjustment Factor	*Conversion of U-turning vehicles to equivalent through vehicles*
Truck to PCE Factor	*1 truck = X Passenger Car Equivalents*
Critical Lane Volume Sum Limit	*Saturation Value for Critical Lane Volume Sum at an intersection*

Capacity Analysis for Planning of Junctions

Step 2A: Base Conditions Analysis

Project Name	Chuloata Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) PM Opening Year (2028)
Location	Chuluota Road (CR 419) at Lake Pickett Road
Date	March 14, 2024
Major Street Direction	North-South

Existing Intersection Configuration	*Traffic Signal*

Number of Lanes for Existing Configuration
(Can be edited in "3- Alt Num Lanes Input" as needed)

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		1	2	1		1	2	0		1	1	0		1	1	0

Results for Existing Configuration

TYPE OF		Sheet	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	
Overall v/c Ratio	0.53	Pedestrian Accommodation Score		4.64	Bicycle Accommodation Score			4.29

Step 2B: Alternative Selection

Rankings Inclusion		Yes/No	Comment
At-Grade Non-Roundabout Intersections?		Yes	
Traffic Signal		Yes	
Two-Way Stop Control		Yes	
All-Way Stop Control		Yes	
Continuous Green T		No	4-Leg Intersection
Quadrant Roadway	S-W	No	No Nearby Quadrant Roadway
	N-E	No	No Nearby Quadrant Roadway
	S-E	No	No Nearby Quadrant Roadway
	N-W	No	No Nearby Quadrant Roadway
Partial Displaced Left Turn		Yes	
Displaced Left Turn		Yes	
Signalized Restricted Crossing U-Turn		Yes	
Unsignalized Restricted Crossing U-Turn		Yes	
Median U-Turn		Yes	
Partial Median U-Turn		Yes	
Bowtie		Yes	
Signalized ThruCut		Yes	
Unsignalized ThruCut		Yes	
Roundabouts?		Yes	
50 ICD Miniroundabout		Yes	
75 ICD Miniroundabout		Yes	
1x1		No	2x1 Roundabout Only
1NS x 2EW		No	2x1 Roundabout Only
2NS x 1EW		Yes	
2x2		No	2x1 Roundabout Only
Ramp Terminal Intersections?		No	
Diamond			
Partial Cloverleaf A			
Partial Cloverleaf B			
Displaced Left Turn Interchange			
Diverging Diamond			
Single Point Diamond			

Continue to Step 3 Step 3

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuloata Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) PM Opening Year (2028)
Location	Chuluota Road (CR 419) at Lake Pickett Road
Date	March 14, 2024
Analysis Type	At-Grade Intersections and Interchanges

Number of Lanes for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		1	2	1		1	2	0		1	1	0		1	1	0
Two-Way Stop Control	N-S		1	2	1		1	2	0		1	1	0		1	1	0
All-Way Stop Control	FULL		1	2	1		1	2	0		1	1	0		1	1	0
Partial Displaced Left Turn	N-S		1	2	1		1	2	1		1	1	0		1	1	0
Displaced Left Turn	FULL		1	2	1		1	2	1		1	1	1		1	1	1
Signalized Restricted Crossing U-Turn	N-S	1	1	2	1	1	1	2	1				2				2
Unsignalized Restricted Crossing U-Turn	N-S	1	1	2	1	1	1	2	1				2				2
Median U-Turn	N-S	1		2	1	1		2	1			1	1			1	1
Partial Median U-Turn	N-S	1		2	1	1		2	1		1	1	0		1	1	0
Signalized ThruCut	N-S		1	2	1		1	2	1		1		1		1		1
Unsignalized ThruCut	N-S		1	2	1		1	2	1		1		1		1		1
Bowtie	N-S			2	1			2	1			1	1			1	1

For shared lanes, enter "0" in L or R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Number of Lanes for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuloata Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) PM Opening Year (2028)
Location	Chuluota Road (CR 419) at Lake Pickett Road
Date	March 14, 2024
Analysis Type	At-Grade Intersections and Interchanges

Volume Echo with Shared Lane Adjustment for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		119	426	113		18	594	0		179	407	0		60	67	0
Two-Way Stop Control	N-S		119	426	113		18	594	0		179	407	0		60	67	0
All-Way Stop Control	FULL		119	426	113		18	594	0		179	407	0		60	67	0
Partial Displaced Left Turn	N-S		119	426	113		18	471	123		179	407	0		60	67	0
Displaced Left Turn	FULL		119	426	113		18	471	123		179	141	266		60	62	5
Signalized Restricted Crossing U-Turn	N-S	0	119	426	113	0	18	471	123				266				5
Unsignalized Restricted Crossing U-Turn	N-S	0	119	426	113	0	18	471	123				266				5
Median U-Turn	N-S	0		426	113	0		471	123			141	266			62	5
Partial Median U-Turn	N-S	0		426	113	0		471	123		179	407	0		60	67	0
Signalized ThruCut	N-S		119	426	113		18	471	123		250		337		91		36
Unsignalized ThruCut	N-S		119	426	113		18	471	123		250		337		91		36
Bowtie	N-S		119	426	113		18	471	123			338	326			241	184

Capacity Analysis for Planning of Junctions

Results Worksheet

Project Name	Chuloata Road (CR 419) ICE Evaluation	***Estimated Volume-to-Capacity Ratio***			
Project Number	Build (4-lane) PM Opening Year (2028)	**Number of Configurations**			
Location	Chuluota Road (CR 419) at Lake Pickett Road	**< 0.750**	**0.750 - 0.875**	**0.875 - 1.00**	**≥ 1.00**
Date	March 14, 2024	**9**	**0**	**0**	**6**

Results for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Zone 1 (North)		Zone 2 (South)		Zone 3 (East)		Zone 4 (West)		Zone 5 (Center)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			
Traffic Signal	FULL									899	0.53	0.53	4.64	4.29
Two-Way Stop Control	N-S									--	8.14	8.14	2.52	3.54
All-Way Stop Control	FULL									1983	1.10	1.10	3.50	4.29
Partial Displaced Left Turn	N-S	324	*0.18*	524	*0.29*					706	0.40	0.40	2.79	2.96
Displaced Left Turn	FULL	321	*0.18*	391	*0.22*	222	*0.12*	369	*0.21*	424	0.24	0.24	2.91	2.96
Signalized Restricted Crossing U-Turn	N-S	459	*0.25*	729	*0.41*	377	*0.21*	610	*0.34*			0.41	2.85	3.87
Unsignalized Restricted Crossing U-Turn	N-S	612	*0.15*	658	*0.42*	605	*0.29*	531	1.20			1.20	2.49	2.79
Median U-Turn	N-S	530	*0.29*	575	*0.32*					808	0.45	0.45	2.92	4.29
Partial Median U-Turn	N-S	455	*0.25*	352	*0.20*					743	0.42	0.42	2.80	4.29
Bowtie	N-S	372	0.26	274	0.19	91	0.09	337	0.25	657	0.37	0.37	4.60	4.25
Signalized ThruCut	N-S									727	0.42	0.42	4.72	4.29
Unsignalized ThruCut	N-S									--	2.41	2.41	3.94	3.96

Capacity Analysis for Planning of Junctions

Results Worksheet

Results for Roundabouts

TYPE OF ROUNDABOUT	Zone 1 (North)			Zone 3 (East)			Zone 2 (South)			Zone 4 (West)			Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3			
50 ICD	0.78			1.23			0.94			*0.44*			1.23	5.24	4.54
75 ICD	0.76			1.15			0.90			*0.35*			1.15	5.24	4.54
2NS X 1EW	*0.28*	*0.30*		*0.69*			*0.33*	0.34		*0.17*			0.69	4.86	4.46

Results for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Zone 1 (Rt Mrg)		Zone 2 (Lt Mrg)		Zone 3 (Ctr. 1)		Zone 4 (Ctr. 2)		Zone 5 (Lt Mrg)		Zone 6 (Rt Mrg)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			

TYPE OF INTERSECTION	Overall V/C Ratio	V/C Ranking	Pedestrian Accommodation Score	Bicycle Accommodation Score
Displaced Left Turn	0.24	1	2.91	2.96
Bowtie N-S	0.37	2	4.60	4.25
Partial Displaced Left Turn N-S	0.40	3	2.79	2.96
Signalized Restricted Crossing U-Turn N-S	0.41	4	2.85	3.87
Partial Median U-Turn N-S	0.42	5	2.80	4.29
Signalized ThruCut N-S	0.42	5	4.72	4.29
Median U-Turn N-S	0.45	7	2.92	4.29
Traffic Signal	0.53	8	4.64	4.29
2NS X 1EW	0.69	9	4.86	4.46
All-Way Stop Control	1.10	10	3.50	4.29

Capacity Analysis for Planning of Junctions

Input Worksheet 1

Project Name	Chuloata Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) PM Interim Year (2038)
Location	Chuluota Road (CR 419) at Lake Pickett Road
Date	March 14, 2024
Number of Legs	4
Major Street Direction	North-South

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	0	227	178	338	3.48%	0.00%
Westbound	0	76	79	7	3.48%	0.00%
Southbound	0	22	646	156	3.48%	0.00%
Northbound	0	151	573	143	3.48%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone		**C3R-Suburban Residential**	
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Equivalent Passenger Car Volume

	Volume (Veh/hr)			
	U-Turn	**Left**	**Thru**	**Right**
Eastbound	0	235	184	350
Westbound	0	79	82	7
Southbound	0	23	668	161
Northbound	0	156	593	148

Notes:	
Left-Turn Adjustment Factor	*Conversion of left-turning vehicles to equivalent through vehicles*
Right-turn Adjustment Factor	*Conversion of right-turning vehicles to equivalent through vehicles*
U-turn Adjustment Factor	*Conversion of U-turning vehicles to equivalent through vehicles*
Truck to PCE Factor	*1 truck = X Passenger Car Equivalents*
Critical Lane Volume Sum Limit	*Saturation Value for Critical Lane Volume Sum at an intersection*

Capacity Analysis for Planning of Junctions

Step 2A: Base Conditions Analysis

Project Name	Chuloata Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) PM Interim Year (2038)
Location	Chuluota Road (CR 419) at Lake Pickett Road
Date	March 14, 2024
Major Street Direction	North-South

Existing Intersection Configuration	*Traffic Signal*

Number of Lanes for Existing Configuration
(Can be edited in "3- Alt Num Lanes Input" as needed)

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		1	2	1		1	2	0		1	1	0		1	1	0

Results for Existing Configuration

TYPE OF	Sheet	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	

Overall v/c Ratio	0.71	Pedestrian Accommodation Score	4.64	Bicycle Accommodation Score	4.29

Step 2B: Alternative Selection

Rankings Inclusion		Yes/No	Comment
At-Grade Non-Roundabout Intersections?		Yes	
Traffic Signal		Yes	
Two-Way Stop Control		Yes	
All-Way Stop Control		Yes	
Continuous Green T		No	4-Leg Intersection
Quadrant Roadway	S-W	No	No Nearby Quadrant Roadway
	N-E	No	No Nearby Quadrant Roadway
	S-E	No	No Nearby Quadrant Roadway
	N-W	No	No Nearby Quadrant Roadway
Partial Displaced Left Turn		Yes	
Displaced Left Turn		Yes	
Signalized Restricted Crossing U-Turn		Yes	
Unsignalized Restricted Crossing U-Turn		Yes	
Median U-Turn		Yes	
Partial Median U-Turn		Yes	
Bowtie		Yes	
Signalized ThruCut		Yes	
Unsignalized ThruCut		Yes	
Roundabouts?		Yes	
50 ICD Miniroundabout		Yes	
75 ICD Miniroundabout		Yes	
1x1		No	2x1 Roundabout Only
1NS x 2EW		No	2x1 Roundabout Only
2NS x 1EW		Yes	
2x2		No	2x1 Roundabout Only
Ramp Terminal Intersections?		No	
Diamond			
Partial Cloverleaf A			
Partial Cloverleaf B			
Displaced Left Turn Interchange			
Diverging Diamond			
Single Point Diamond			

Continue to Step 3 → Step 3

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuloata Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) PM Interim Year (2038)
Location	Chuluota Road (CR 419) at Lake Pickett Road
Date	March 14, 2024
Analysis Type	At-Grade Intersections and Interchanges

Number of Lanes for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		1	2	1		1	2	0		1	1	0		1	1	0
Two-Way Stop Control	N-S		1	2	1		1	2	0		1	1	0		1	1	0
All-Way Stop Control	FULL		1	2	1		1	2	0		1	1	0		1	1	0
Partial Displaced Left Turn	N-S		1	2	1		1	2	1		1	1	0		1	1	0
Displaced Left Turn	FULL		1	2	1		1	2	1		1	1	1		1	1	1
Signalized Restricted Crossing U-Turn	N-S	1	1	2	1	1	1	2	1				2				2
Unsignalized Restricted Crossing U-Turn	N-S	1	1	2	1	1	1	2	1				2				2
Median U-Turn	N-S	1		2	1	1		2	1			1	1			1	1
Partial Median U-Turn	N-S	1		2	1	1		2	1		1	1	0		1	1	0
Signalized ThruCut	N-S		1	2	1		1	2	1		1		1		1		1
Unsignalized ThruCut	N-S		1	2	1		1	2	1		1		1		1		1
Bowtie	N-S			2	1			2	1			1	1			1	1

For shared lanes, enter "0" in L or R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Number of Lanes for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuloata Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) PM Interim Year (2038)
Location	Chuluota Road (CR 419) at Lake Pickett Road
Date	March 14, 2024
Analysis Type	At-Grade Intersections and Interchanges

Volume Echo with Shared Lane Adjustment for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		156	593	148		23	829	0		235	534	0		79	89	0
Two-Way Stop Control	N-S		156	593	148		23	829	0		235	534	0		79	89	0
All-Way Stop Control	FULL		156	593	148		23	829	0		235	534	0		79	89	0
Partial Displaced Left Turn	N-S		156	593	148		23	668	161		235	534	0		79	89	0
Displaced Left Turn	FULL		156	593	148		23	668	161		235	184	350		79	82	7
Signalized Restricted Crossing U-Turn	N-S	0	156	593	148	0	23	668	161				350				7
Unsignalized Restricted Crossing U-Turn	N-S	0	156	593	148	0	23	668	161				350				7
Median U-Turn	N-S	0		593	148	0		668	161			184	350			82	7
Partial Median U-Turn	N-S	0		593	148	0		668	161		235	534	0		79	89	0
Signalized ThruCut	N-S		156	593	148		23	668	161		327		442		120		48
Unsignalized ThruCut	N-S		156	593	148		23	668	161		327		442		120		48
Bowtie	N-S		156	593	148		23	668	161			442	429			317	242

Capacity Analysis for Planning of Junctions

Results Worksheet

Project Name	Chuloata Road (CR 419) ICE Evaluation	***Estimated Volume-to-Capacity Ratio***			
Project Number	Build (4-lane) PM Interim Year (2038)	**Number of Configurations**			
Location	Chuluota Road (CR 419) at Lake Pickett Road	**< 0.750**	**0.750 - 0.875**	**0.875 - 1.00**	**≥ 1.00**
Date	March 14, 2024	**8**	**0**	**0**	**7**

Results for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Zone 1 (North)		Zone 2 (South)		Zone 3 (East)		Zone 4 (West)		Zone 5 (Center)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			
Traffic Signal	FULL									1205	0.71	0.71	4.64	4.29
Two-Way Stop Control	N-S									--	>10	>10	2.47	3.54
All-Way Stop Control	FULL									2686	1.49	1.49	3.50	4.29
Partial Displaced Left Turn	N-S	442	*0.25*	713	*0.40*					951	0.54	0.54	2.79	2.96
Displaced Left Turn	FULL	438	*0.24*	538	*0.30*	290	*0.16*	485	*0.27*	582	0.32	0.32	2.91	2.96
Signalized Restricted Crossing U-Turn	N-S	627	*0.35*	972	*0.54*	513	*0.28*	826	*0.46*			0.54	2.82	3.87
Unsignalized Restricted Crossing U-Turn	N-S	852	*0.25*	897	*0.68*	828	*0.54*	747	2.18			2.18	2.47	2.79
Median U-Turn	N-S	720	*0.40*	771	*0.43*					1063	0.59	0.59	2.90	4.29
Partial Median U-Turn	N-S	621	*0.35*	477	*0.27*					992	0.57	0.57	2.80	4.29
Bowtie	N-S	487	0.34	359	0.25	120	0.13	442	0.34	863	0.48	0.48	4.60	4.25
Signalized ThruCut	N-S									980	0.56	0.56	4.72	4.29
Unsignalized ThruCut	N-S									--	16.00	16.00	3.91	3.96

Capacity Analysis for Planning of Junctions

Results Worksheet

Results for Roundabouts

TYPE OF ROUNDABOUT	Zone 1 (North)			Zone 3 (East)			Zone 2 (South)			Zone 4 (West)			Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3			
50 ICD	1.21			3.03			1.51			7.36			7.36	5.24	4.54
75 ICD	1.16			2.50			1.41			1.44			2.50	5.24	4.54
2NS X 1EW	*0.42*	*0.44*		1.10			*0.49*	0.51		*0.29*			1.10	4.86	4.46

Results for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Zone 1 (Rt Mrg)		Zone 2 (Lt Mrg)		Zone 3 (Ctr. 1)		Zone 4 (Ctr. 2)		Zone 5 (Lt Mrg)		Zone 6 (Rt Mrg)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			

TYPE OF INTERSECTION	Overall V/C Ratio	V/C Ranking	Pedestrian Accommodation Score	Bicycle Accommodation Score
Displaced Left Turn	0.32	1	2.91	2.96
Bowtie N-S	0.48	2	4.60	4.25
Partial Displaced Left Turn N-S	0.54	3	2.79	2.96
Signalized Restricted Crossing U-Turn N-S	0.54	3	2.82	3.87
Signalized ThruCut N-S	0.56	5	4.72	4.29
Partial Median U-Turn N-S	0.57	6	2.80	4.29
Median U-Turn N-S	0.59	7	2.90	4.29
Traffic Signal	0.71	8	4.64	4.29
2NS X 1EW	1.10	9	4.86	4.46
All-Way Stop Control	1.49	10	3.50	4.29

Capacity Analysis for Planning of Junctions

Input Worksheet 1

Project Name	Chuloata Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) PM Design Year (2048)
Location	Chuluota Road (CR 419) at Lake Pickett Road
Date	March 14, 2024
Number of Legs	4
Major Street Direction	North-South

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	0	281	220	418	3.48%	0.00%
Westbound	0	94	98	9	3.48%	0.00%
Southbound	0	27	836	193	3.48%	0.00%
Northbound	0	187	734	177	3.48%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone		**C3R-Suburban Residential**	
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Equivalent Passenger Car Volume

	Volume (Veh/hr)			
	U-Turn	**Left**	**Thru**	**Right**
Eastbound	0	291	228	433
Westbound	0	97	101	9
Southbound	0	28	865	200
Northbound	0	194	760	183

Notes:	
Left-Turn Adjustment Factor	*Conversion of left-turning vehicles to equivalent through vehicles*
Right-turn Adjustment Factor	*Conversion of right-turning vehicles to equivalent through vehicles*
U-turn Adjustment Factor	*Conversion of U-turning vehicles to equivalent through vehicles*
Truck to PCE Factor	*1 truck = X Passenger Car Equivalents*
Critical Lane Volume Sum Limit	*Saturation Value for Critical Lane Volume Sum at an intersection*

Capacity Analysis for Planning of Junctions

Step 2A: Base Conditions Analysis

Project Name	Chuloata Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) PM Design Year (2048)
Location	Chuluota Road (CR 419) at Lake Pickett Road
Date	March 14, 2024
Major Street Direction	North-South

Existing Intersection Configuration	*Traffic Signal*

Number of Lanes for Existing Configuration
(Can be edited in "3- Alt Num Lanes Input" as needed)

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		1	2	1		1	2	0		1	1	0		1	1	0

Results for Existing Configuration

TYPE OF		Sheet	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	
Overall v/c Ratio	0.89	Pedestrian Accommodation Score		4.64	Bicycle Accommodation Score			4.25

Step 2B: Alternative Selection

Rankings Inclusion		Yes/No	Comment
At-Grade Non-Roundabout Intersections?		Yes	
Traffic Signal		Yes	
Two-Way Stop Control		Yes	
All-Way Stop Control		Yes	
Continuous Green T		No	4-Leg Intersection
Quadrant Roadway	S-W	No	No Nearby Quadrant Roadway
	N-E	No	No Nearby Quadrant Roadway
	S-E	No	No Nearby Quadrant Roadway
	N-W	No	No Nearby Quadrant Roadway
Partial Displaced Left Turn		Yes	
Displaced Left Turn		Yes	
Signalized Restricted Crossing U-Turn		Yes	
Unsignalized Restricted Crossing U-Turn		Yes	
Median U-Turn		Yes	
Partial Median U-Turn		Yes	
Bowtie		Yes	
Signalized ThruCut		Yes	
Unsignalized ThruCut		Yes	
Roundabouts?		Yes	
50 ICD Miniroundabout		Yes	
75 ICD Miniroundabout		Yes	
1x1		No	2x1 Roundabout Only
1NS x 2EW		No	2x1 Roundabout Only
2NS x 1EW		Yes	
2x2		No	2x1 Roundabout Only
Ramp Terminal Intersections?		No	
Diamond			
Partial Cloverleaf A			
Partial Cloverleaf B			
Displaced Left Turn Interchange			
Diverging Diamond			
Single Point Diamond			

Continue to Step 3 → Step 3

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuloata Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) PM Design Year (2048)
Location	Chuluota Road (CR 419) at Lake Pickett Road
Date	March 14, 2024
Analysis Type	At-Grade Intersections and Interchanges

Number of Lanes for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		1	2	1		1	2	0		1	1	0		1	1	0
Two-Way Stop Control	N-S		1	2	1		1	2	0		1	1	0		1	1	0
All-Way Stop Control	FULL		1	2	1		1	2	0		1	1	0		1	1	0
Partial Displaced Left Turn	N-S		1	2	1		1	2	1		1	1	0		1	1	0
Displaced Left Turn	FULL		1	2	1		1	2	1		1	1	1		1	1	1
Signalized Restricted Crossing U-Turn	N-S	1	1	2	1	1	1	2	1				2				2
Unsignalized Restricted Crossing U-Turn	N-S	1	1	2	1	1	1	2	1				2				2
Median U-Turn	N-S	1		2	1	1		2	1			1	1			1	1
Partial Median U-Turn	N-S	1		2	1	1		2	1		1	1	0		1	1	0
Signalized ThruCut	N-S		1	2	1		1	2	1		1		1		1		1
Unsignalized ThruCut	N-S		1	2	1		1	2	1		1		1		1		1
Bowtie	N-S			2	1			2	1			1	1			1	1

For shared lanes, enter "0" in L or R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Number of Lanes for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuloata Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) PM Design Year (2048)
Location	Chuluota Road (CR 419) at Lake Pickett Road
Date	March 14, 2024
Analysis Type	At-Grade Intersections and Interchanges

Volume Echo with Shared Lane Adjustment for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		194	760	183		28	1065	0		291	661	0		97	110	0
Two-Way Stop Control	N-S		194	760	183		28	1065	0		291	661	0		97	110	0
All-Way Stop Control	FULL		194	760	183		28	1065	0		291	661	0		97	110	0
Partial Displaced Left Turn	N-S		194	760	183		28	865	200		291	661	0		97	110	0
Displaced Left Turn	FULL		194	760	183		28	865	200		291	228	433		97	101	9
Signalized Restricted Crossing U-Turn	N-S	0	194	760	183	0	28	865	200				433				9
Unsignalized Restricted Crossing U-Turn	N-S	0	194	760	183	0	28	865	200				433				9
Median U-Turn	N-S	0		760	183	0		865	200			228	433			101	9
Partial Median U-Turn	N-S	0		760	183	0		865	200		291	661	0		97	110	0
Signalized ThruCut	N-S		194	760	183		28	865	200		405		547		148		60
Unsignalized ThruCut	N-S		194	760	183		28	865	200		405		547		148		60
Bowtie	N-S		194	760	183		28	865	200			547	530			392	300

Capacity Analysis for Planning of Junctions

Results Worksheet

Project Name	Chuloata Road (CR 419) ICE Evaluation	***Estimated Volume-to-Capacity Ratio***			
Project Number	Build (4-lane) PM Design Year (2048)	**Number of Configurations**			
Location	Chuluota Road (CR 419) at Lake Pickett Road	**< 0.750**	**0.750 - 0.875**	**0.875 - 1.00**	**≥ 1.00**
Date	March 14, 2024	**7**	**0**	**1**	**7**

Results for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Zone 1 (North)		Zone 2 (South)		Zone 3 (East)		Zone 4 (West)		Zone 5 (Center)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			
Traffic Signal	FULL									1511	0.89	0.89	4.64	4.25
Two-Way Stop Control	N-S									--	>10	>10	2.42	3.50
All-Way Stop Control	FULL									3389	1.88	1.88	3.50	4.25
Partial Displaced Left Turn	N-S	559	*0.31*	902	*0.50*					1196	0.68	0.68	2.79	2.92
Displaced Left Turn	FULL	555	*0.31*	685	*0.38*	358	*0.20*	601	*0.33*	739	0.41	0.41	2.91	2.92
Signalized Restricted Crossing U-Turn	N-S	794	*0.44*	1217	*0.68*	647	*0.36*	1041	*0.58*			0.68	2.82	3.83
Unsignalized Restricted Crossing U-Turn	N-S	1093	*0.39*	1137	1.06	1051	0.94	962	3.76			3.76	2.47	2.75
Median U-Turn	N-S	910	*0.51*	967	*0.54*					1329	0.74	0.74	2.90	4.25
Partial Median U-Turn	N-S	789	*0.44*	604	*0.34*					1240	0.71	0.71	2.80	4.25
Bowtie	N-S	602	0.42	445	0.31	148	0.17	547	0.43	1068	0.59	0.59	4.60	4.25
Signalized ThruCut	N-S									1232	0.70	0.70	4.72	4.29
Unsignalized ThruCut	N-S									--	28.50	28.50	3.87	3.96

Capacity Analysis for Planning of Junctions

Results Worksheet

Results for Roundabouts

TYPE OF ROUNDABOUT	Zone 1 (North)			Zone 3 (East)			Zone 2 (South)			Zone 4 (West)			Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3			
50 ICD	1.73			29.11			2.32			*-0.86*			29.11	5.21	4.50
75 ICD	1.64			9.11			2.11			*-1.65*			9.11	5.21	4.50
2NS X 1EW	*0.57*	*0.60*		1.64			*0.69*	0.71		*0.44*			1.64	4.82	4.42

Results for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Zone 1 (Rt Mrg)		Zone 2 (Lt Mrg)		Zone 3 (Ctr. 1)		Zone 4 (Ctr. 2)		Zone 5 (Lt Mrg)		Zone 6 (Rt Mrg)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			

TYPE OF INTERSECTION	Overall V/C Ratio	V/C Ranking	Pedestrian Accommodation Score	Bicycle Accommodation Score
Displaced Left Turn	0.41	1	2.91	2.92
Bowtie N-S	0.59	2	4.60	4.25
Partial Displaced Left Turn N-S	0.68	3	2.79	2.92
Signalized Restricted Crossing U-Turn N-S	0.68	3	2.82	3.83
Signalized ThruCut N-S	0.70	5	4.72	4.29
Partial Median U-Turn N-S	0.71	6	2.80	4.25
Median U-Turn N-S	0.74	7	2.90	4.25
Traffic Signal	0.89	8	4.64	4.25
2NS X 1EW	1.64	9	4.82	4.42
All-Way Stop Control	1.88	10	3.50	4.25

Table 1, Lake Pickett Road Cap-x Results

Build Type	Year	Peak Hour	Intersection Control Rank 1 (V/C Ratio)	Intersection Control Rank 2 (V/C Ratio)	Intersection Control Rank 3 (V/C Ratio)	Intersection Control Rank 4 (V/C Ratio)	Intersection Control Rank 5 (V/C Ratio)	Intersection Control Rank 6 (V/C Ratio)	Intersection Control Rank 7 (V/C Ratio)	Intersection Control Rank 8 (V/C Ratio)	Intersection Control Rank 9 (V/C Ratio)	Intersection Control Rank 10 (V/C Ratio)
No-Build (2-lane)	2028	AM	DLT (0.33)	Unsignalized RCUT N-S (0.37)	Signalized ThruCut N-S (0.37)	Partial DLT N-S (0.40)	Signalized RCUT N-S (0.42)	Bowtie N-S (0.42)	MUT N-S (0.46)	Partial MUT N-S (0.48)	1 X 1 Roundabout (0.54)	Traffic Signal (0.57)
	2038		DLT (0.40)	Signalized ThruCut N-S (0.45)	Partial DLT N-S (0.49)	Unsignalized RCUT N-S (0.49)	Signalized RCUT N-S (0.50)	Bowtie N-S (0.50)	MUT N-S (0.56)	Partial MUT N-S (0.56)	Traffic Signal (0.69)	1 X 1 Roundabout (0.71)
	2048		DLT (0.47)	Signalized ThruCut N-S (0.54)	Bowtie N-S (0.57)	Partial DLT N-S (0.58)	Signalized RCUT N-S (0.60)	Unsignalized RCUT N-S (0.64)	Partial MUT N-S (0.65)	MUT N-S (0.66)	Traffic Signal (0.81)	1 X 1 Roundabout (0.91)
	2028	PM	DLT (0.32)	Bowtie N-S (0.41)	Partial DLT N-S (0.47)	Signalized ThruCut N-S (0.48)	Partial MUT N-S (0.51)	MUT N-S (0.52)	Signalized RCUT N-S (0.59)	Traffic Signal (0.61)	1 X 1 Roundabout (0.62)	Unsignalized RCUT N-S (0.86)
	2038		DLT (0.39)	Bowtie N-S (0.50)	Partial DLT N-S (0.56)	Signalized ThruCut N-S (0.58)	Partial MUT N-S (0.61)	MUT N-S (0.62)	Signalized RCUT N-S (0.71)	Traffic Signal (0.74)	1 X 1 Roundabout (0.80)	AWSC (1.15)
	2048		DLT (0.46)	Bowtie N-S (0.59)	Partial DLT N-S (0.66)	Signalized ThruCut N-S (0.68)	Partial MUT N-S (0.71)	MUT N-S (0.72)	Signalized RCUT N-S (0.83)	Traffic Signal (0.86)	1 X 1 Roundabout (1.03)	AWSC (1.35)
Build (4-lane)	2028	AM	DLT (0.25)	Partial DLT N-S (0.30)	Signalized ThruCut N-S (0.33)	2NS X 1EW Roundabout (0.33)	Signalized RCUT N-S (0.34)	MUT N-S (0.42)	Partial MUT N-S (0.42)	Bowtie N-S (0.43)	Traffic Signal (0.49)	Unsignalized RCUT N-S (0.50)
	2038		DLT (0.34)	Partial DLT N-S (0.40)	Signalized RCUT N-S (0.45)	Signalized ThruCut N-S (0.45)	2NS X 1EW Roundabout (0.52)	MUT N-S (0.55)	Partial MUT N-S (0.56)	Bowtie N-S (0.56)	Traffic Signal (0.66)	Unsignalized RCUT N-S (0.89)
	2048		DLT (0.44)	Partial DLT N-S (0.51)	Signalized RCUT N-S (0.56)	Signalized ThruCut N-S (0.56)	MUT N-S (0.68)	Partial MUT N-S (0.69)	Bowtie N-S (0.69)	2NS X 1EW Roundabout (0.76)	Traffic Signal (0.83)	Unsignalized RCUT N-S (1.51)
	2028	PM	DLT (0.24)	Bowtie N-S (0.37)	Partial DLT N-S (0.40)	Signalized RCUT N-S (0.41)	Partial MUT N-S (0.42)	Signalized ThruCut N-S (0.42)	MUT N-S (0.45)	Traffic Signal (0.53)	2NS X 1EW Roundabout (0.69)	AWSC (1.10)
	2038		DLT (0.32)	Bowtie N-S (0.48)	Partial DLT N-S (0.54)	Signalized RCUT N-S (0.54)	Signalized ThruCut N-S (0.56)	Partial MUT N-S (0.57)	MUT N-S (0.59)	Traffic Signal (0.71)	2NS X 1EW Roundabout (1.10)	AWSC (1.49)
	2048		DLT (0.41)	Bowtie N-S (0.59)	Partial DLT N-S (0.68)	Signalized RCUT N-S (0.68)	Signalized ThruCut N-S (0.70)	Partial MUT N-S (0.71)	MUT N-S (0.74)	Traffic Signal (0.89)	2NS X 1EW Roundabout (1.64)	AWSC (1.88)

Greyed out cells indicate that the intersection control type may not be viable due to right-of-way, cost, or other factors

V/C Ratio Legend	
	< 0.750
	0.750 - 0.875
	0.875 - 1.00
	≥ 1.00

SPICE WORKSHEETS

Florida Department of Transportation
Safety Performance for Intersection Control Evaluation Tool

Results

Summary of crash prediction results for each alternative

Project Information

Project Name:	Chuluota Road (CR 419) ICE Evaluation	**Intersection Type**	At-Grade Intersection
Intersection:	Chuluota Road (CR 419) at Lake Pickett Road	**Opening Year**	2028
Agency:	Orange County	**Design Year**	0
Project Reference:	No-Build (2-lane) Opening Year (2028)	**Facility Type**	On Rural Two Lane Highway
City:	Orlando	**Number of Legs**	4-leg
State:	FL	**1-Way/2-Way**	
Date:	1/26/2024	**# of Major Street Lanes (both directions)**	
Analyst:	JMT	**Major Street Approach Speed**	

Crash Prediction Summary

Control Strategy	Crash Type	Opening Year	Design Year	Total Project Life Cycle	Crash Prediction Rank	AADT Within SPF Prediction Range? (Open Year)	AADT Within SPF Prediction Range? (Design Year)	Source of Prediction	SSI Score: Opening Year	SSI Score: Design Year	SSI Score: Rank
Traffic Signal	Total	3.16	--	--	8	Yes	Yes	Calibrated SPF w/ EB	94		9
	Fatal & Injury	1.07	--	--							
Minor Road Stop	Total	3.22	--	--	9	No	Yes	Calibrated SPF	93		12
	Fatal & Injury	1.39	--	--							
All Way Stop	Total	3.30	--	--	6	Yes	Yes	Uncalibrated SPF w/ EB	99		2
	Fatal & Injury	0.91	--	--							
1-lane Roundabout	Total	1.82	--	--	1	Yes	Yes	Uncalibrated SPF	100		1
	Fatal & Injury	0.35	--	--							
Displaced Left Turn (DLT)	Total	2.78	--	--	7	N/A	N/A	CMF	94		10
	Fatal & Injury	0.94	--	--							
Median U-Turn (MUT)	Total	1.99	--	--	5	N/A	N/A	CMF	98		3
	Fatal & Injury	0.82	--	--							
Signalized RCUT	Total	2.98	--	--	2	Yes	Yes	Uncalibrated SPF	97		4
	Fatal & Injury	0.66	--	--							
Unsignalized RCUT	Total	3.57	--	--	3	Yes	Yes	Uncalibrated SPF	96		6
	Fatal & Injury	0.71	--	--							
Signalized Thru-Cut	Total	No SPF	--	--	--	N/A	N/A	N/A	97		5
	Fatal & Injury	No SPF	--	--							
Unsignalized Thru-Cut	Total	No SPF	--	--	--	N/A	N/A	N/A	95		7
	Fatal & Injury	No SPF	--	--							
Bowtie	Total	No SPF	--	--	--	N/A	N/A	N/A	95	####	8
	Fatal & Injury	No SPF	--	--							
Jughandle	Total	2.34	--	--	4	N/A	N/A	CMF	94		11
	Fatal & Injury	0.79	--	--							
Other 1*	Total	No SPF	--	--	--	N/A	N/A	CMF	--		--
	Fatal & Injury	No SPF	--	--							
Other 2*	Total	No SPF	--	--	--	N/A	N/A	CMF	--		--
	Fatal & Injury	No SPF	--	--							
			--	--							
			--	--							

Control Strategy Selection and Inputs

Specify the Facility Level Inputs and the Control Strategies to be included in the SPICE Analysis.

Intersection Type	At-Grade Intersection	
Analysis Year	Opening Year Only	
Opening Year	2028	
Design Year		
Facility Type	On Rural Two Lane Highway	For more information on how to determine these values, see the "Definitions" worksheet
Number of Legs	4-leg	
1-Way/2-Way		
# of Major Street Lanes (both directions)		
Major Street Approach Speed		
Opening Year - Major Road AADT	12,250	
Opening Year - Minor Road AADT	5,800	
Design Year - Major Road AADT		
Design Year - Minor Road AADT		

Control Strategy	**Include**	**Base Intersection**	
Traffic Signal	Yes	--	
Traffic Signal (Alternative Configuration)	No	--	
Minor Road Stop Control	Yes	--	Opening Year AADT Outside of SPF Development Range
All Way Stop Control	Yes	--	
1-Lane Roundabout	Yes	--	
2-Lane Roundabout	No	--	
Displaced Left Turn (DLT)	Yes	Traffic Signal	
Median U-Turn (MUT)	Yes	Traffic Signal	
Signalized Restricted Crossing U-Turn (RCUT)	Yes	--	
Unsignalized Restricted Crossing U-Turn (RCUT)	Yes	--	
Signalized Thru-Cut*	Yes	--	**SSI Only, No Crash Prediction Available*
Unsignalized Thru-Cut*	Yes	--	**SSI Only, No Crash Prediction Available*
Bowtie*	Yes	--	**SSI Only, No Crash Prediction Available*
Continuous Green-T Intersection	No	Traffic Signal	
Jughandle	Yes	Traffic Signal	
Other 1*		Traffic Signal	**Please Select*
Other 2*		Minor Road Stop	**Please Select*

Safe System for Intersection (SSI) Inputs

Specify the geomtric, exposure, severity, and conflicting traffic complexity inputs required for an SSI analysis.

1. Roadway Geometry	Lanes
Major number thru lanes (one direction)	1
Minor number thru lanes (one direction)	1

Major Street Designation	
Select major street direction	N-S
Median Presence on Major Road	No
Median Presence on Minor Road	No

	Required Inputs
	Default Available, Override Optional
	Planning-Level Default Input
	Computed Value, Override Optional
	Computed Value - No Override
	Disabled Cell (Often based on input selections)

2. Complete the **"Exposure"** inputs. These inputs will apply to all interesections selected for analysis.
3. Complete the **"Severity"** inputs
4. Complete the **"Conflicting Traffic Complexity"** inputs

2. Exposure - All Intersections

Average Daily Traffic (veh/day)	Open	Design
Major	12,250	
Minor	5,800	

ADT Directional Split	
Major	0.50
Minor	0.50

Are turning movement ADT values are available? **No** If "Yes", input values in **Table 2-A**
Are peak hour turning movement counts available? **Yes** If "Yes", input values in **Table 2-B**
If no turning movment volumes or counts are available, a user can optionally override the planning-level default turning movment proportions in **Table 2-C**

Nonmotorized Total ADBP (ped-bike/day)	Activity Level	ADBP Value (ped-
Open Year Total Intersection NM	Low (20)	20
Design Year Total Intersection NM		

(or overwrite ped movement ADBPs below)

Nonmotorized Movement ADBP (ped-bike/day)	Open	Design
Major NM 1 (NM mvmt crossing Maj1)	5	
Major NM 2	5	
Minor NM 1	5	
Minor NM 2	5	

Table 2-A: Turning Movement (vol/day)

	Open	Design
Major Thru 1	3790.845	
Major Left Turn 1	1462.328	
Major Right Turn 1	871.8276	
Major Thru 2	4737.42	
Major Left Turn 2	109.529	
Major Right Turn 2	1278.051	
Minor Thru 1	817.764	
Minor Left Turn 1	764.5773	
Minor Right Turn 1	1317.659	
Minor Thru 2	310.6193	
Minor Left Turn 2	1294.69	
Minor Right Turn 2	1294.69	

Table 2-B: Turning Movement Counts (Optional)

	Mvmt	AM Peak	AM %	PM Peak	PM %	Avg %
Major Thru 1	NBT	361	0.597682119	354	0.640145	0.618913
Major Left Turn 1	NBL	177	0.293046358	102	0.184448	0.238747
Major Right Turn 1	NBR	66	0.109271523	97	0.175407	0.142339
Major Thru 2	SBT	296	0.615384615	387	0.761811	0.688598
Major Left Turn 2	SBL	3	0.006237006	15	0.029528	0.017882
Major Right Turn 2	SBR	182	0.378378378	106	0.208661	0.29352
Minor Thru 1	EBT	44	0.191304348	121	0.240079	0.215692
Minor Left Turn 1	EBL	51	0.22173913	154	0.305556	0.263647
Minor Right Turn 1	EBR	135	0.586956522	229	0.454365	0.520661
Minor Thru 2	WBT	108	0.54	53	0.486239	0.513119
Minor Left Turn 2	WBL	85	0.425	51	0.46789	0.446445
Minor Right Turn 2	WBR	7	0.035	5	0.045872	0.040436

Table 2-C: Turning Proportions (optional)

	Decimal
Major Thru 1	0.618913392
Major Left Turn 1	0.23874741
Major Right Turn 1	0.142339197
Major Thru 2	0.7734563
Major Left Turn 2	0.017882283
Major Right Turn 2	0.208661417
Minor Thru 1	0.281987578
Minor Left Turn 1	0.263647343
Minor Right Turn 1	0.454365079
Minor Thru 2	0.107110092
Minor Left Turn 2	0.446444954
Minor Right Turn 2	0.446444954

3. Severity

Vehicle Speeds	mph
Major Posted Speed Limit	50
Minor Posted Speed Limit	45
Major thru	50
Major left	20
Major right	15
Minor thru	38.25
Minor left	20
Minor right	15
Stop near	15
Stop far	25
Signal near	15
Signal far	25

4. Conflicting Traffic Complexity

Traffic Control	Decimal
Base Traffic Control Adjustment Value (BTCAV) for permitted	1
Base Traffic Control Adjustment Value (BTCAV) for protected/permitted	0.85
Base Traffic Control Adjustment Value (BTCAV) for protected	0.01
Base Traffic Control Adjustment Value (BTCAV) for stop-controlled	0.45
Weight, f, for permitted	0.5
Weight, f, for protected/permitted	0.5
Weight, f, for protected	0.5
Weight, f, for stop-controlled	0.5
Major LT signal phasing (drop-down)	Protected/Permitted
Minor LT signal phasing (drop-down)	Protected/Permitted
Exclusive Pedestrian phasing (drop-down)	No

Historical Crash Data Input

Note: In order to use Empirical Bayes (EB), the historical intersection type must be a traffic signal or a minor road stop. Additionally, this alternative must be selected to be included in the analysis, and the historical intersection specified below. Up to 10 years of historical data can be used to perform the EB adjustment.

Is historical crash data available?	Yes		
Number of years available:	5	(Up to 10)	First Year Data is available: 2016
Historical Intx Type:	4SG		

Historical Crash Counts		Year										
		2016	2017	2018	2019	2020	--	--	--	--	--	Total
Combined	Total	5	5	0	2	1	--	--	--	--	--	13
	Fatal/Injury	1	2	0	1	1						5
	PDO	4	3	0	1	0						8
Single-Vehicle	Total											
	Fatal/Injury											
	PDO											
Multiple-Vehicle	Total											
	Fatal/Injury											
	PDO											
Veh-Ped	Fatal/Injury	0	0	0	0	0						0
Veh-Bike	Fatal/Injury	0	0	0	0	0						0
Total	All	5	5	0	2	1	--	--	--	--	--	13

Florida Department of Transportation
Safety Performance for Intersection Control Evaluation Tool

Results

Summary of crash prediction results for each alternative

Project Information

Project Name:	Chuluota Road (CR 419) ICE Evaluation	**Intersection Type**	At-Grade Intersection
Intersection:	Chuluota Road (CR 419) at Lake Pickett Road	**Opening Year**	2038
Agency:	Orange County	**Design Year**	0
Project Reference:	No-Build (2-lane) Interim Year (2038)	**Facility Type**	On Rural Two Lane Highway
City:	Orlando	**Number of Legs**	4-leg
State:	FL	**1-Way/2-Way**	
Date:	1/26/2024	**# of Major Street Lanes (both directions)**	
Analyst:	JMT	**Major Street Approach Speed**	

Crash Prediction Summary

Control Strategy	Crash Type	Opening Year	Design Year	Total Project Life Cycle	Crash Prediction Rank	AADT Within SPF Prediction Range? (Open Year)	AADT Within SPF Prediction Range? (Design Year)	Source of Prediction	SSI Score: Opening Year	SSI Score: Design Year	SSI Score: Rank
Traffic Signal	Total	3.46	--	--	8	Yes	Yes	Calibrated SPF w/ EB	92		9
	Fatal & Injury	1.18	--	--							
Minor Road Stop	Total	3.92	--	--	9	No	Yes	Calibrated SPF	90		12
	Fatal & Injury	1.69	--	--							
All Way Stop	Total	3.95	--	--	7	No	Yes	Uncalibrated SPF w/ EB	98		2
	Fatal & Injury	1.09	--	--							
1-lane Roundabout	Total	2.05	--	--	1	Yes	Yes	Uncalibrated SPF	100		1
	Fatal & Injury	0.40	--	--							
Displaced Left Turn (DLT)	Total	3.05	--	--	6	N/A	N/A	CMF	92		10
	Fatal & Injury	1.04	--	--							
Median U-Turn (MUT)	Total	2.18	--	--	5	N/A	N/A	CMF	97		3
	Fatal & Injury	0.89	--	--							
Signalized RCUT	Total	3.81	--	--	3	Yes	Yes	Uncalibrated SPF	96		4
	Fatal & Injury	0.86	--	--							
Unsignalized RCUT	Total	3.96	--	--	2	Yes	Yes	Uncalibrated SPF	95		6
	Fatal & Injury	0.80	--	--							
Signalized Thru-Cut	Total	No SPF	--	--	--	N/A	N/A	N/A	95		5
	Fatal & Injury	No SPF	--	--							
Unsignalized Thru-Cut	Total	No SPF	--	--	--	N/A	N/A	N/A	94		7
	Fatal & Injury	No SPF	--	--							
Bowtie	Total	No SPF	--	--	--	N/A	N/A	N/A	93	####	8
	Fatal & Injury	No SPF	--	--							
Jughandle	Total	2.56	--	--	4	N/A	N/A	CMF	92		11
	Fatal & Injury	0.87	--	--							
Other 1*	Total	No SPF	--	--	--	N/A	N/A	CMF	--		--
	Fatal & Injury	No SPF	--	--							
Other 2*	Total	No SPF	--	--	--	N/A	N/A	CMF	--		--
	Fatal & Injury	No SPF	--	--							
			--	--							
			--	--							

Control Strategy Selection and Inputs

Specify the Facility Level Inputs and the Control Strategies to be included in the SPICE Analysis.

Intersection Type	At-Grade Intersection	
Analysis Year	Opening Year Only	
Opening Year	2038	
Design Year		
Facility Type	On Rural Two Lane Highway	For more information on how to determine these values, see the "Definitions" worksheet
Number of Legs	4-leg	
1-Way/2-Way		
# of Major Street Lanes (both directions)		
Major Street Approach Speed		
Opening Year - Major Road AADT	14,350	
Opening Year - Minor Road AADT	6,850	
Design Year - Major Road AADT		
Design Year - Minor Road AADT		

Control Strategy	**Include**	**Base Intersection**	
Traffic Signal	Yes	--	
Traffic Signal (Alternative Configuration)	No	--	
Minor Road Stop Control	Yes	--	Opening Year AADT Outside of SPF Development Range
All Way Stop Control	Yes	--	Opening Year AADT Outside of SPF Development Range
1-Lane Roundabout	Yes	--	
2-Lane Roundabout	No	--	
Displaced Left Turn (DLT)	Yes	Traffic Signal	
Median U-Turn (MUT)	Yes	Traffic Signal	
Signalized Restricted Crossing U-Turn (RCUT)	Yes	--	
Unsignalized Restricted Crossing U-Turn (RCUT)	Yes	--	
Signalized Thru-Cut*	Yes	--	*SSI Only, No Crash Prediction Available
Unsignalized Thru-Cut*	Yes	--	*SSI Only, No Crash Prediction Available
Bowtie*	Yes	--	*SSI Only, No Crash Prediction Available
Continuous Green-T Intersection	No	Traffic Signal	
Jughandle	Yes	Traffic Signal	
Other 1*		Traffic Signal	*Please Select
Other 2*		Minor Road Stop	*Please Select

Safe System for Intersection (SSI) Inputs

Specify the geomtric, exposure, severity, and conflicting traffic complexity inputs required for an SSI analysis.

1. Roadway Geometry	Lanes
Major number thru lanes (one direction)	1
Minor number thru lanes (one direction)	1

Major Street Designation	
Select major street direction	N-S
Median Presence on Major Road	No
Median Presence on Minor Road	No

	Required Inputs
	Default Available, Override Optional
	Planning-Level Default Input
	Computed Value, Override Optional
	Computed Value - No Override
	Disabled Cell (Often based on input selections)

2. Complete the **"Exposure"** inputs. These inputs will apply to all interesections selected for analysis.
3. Complete the **"Severity"** inputs
4. Complete the **"Conflicting Traffic Complexity"** inputs

2. Exposure - All Intersections

Average Daily Traffic (veh/day)	Open	Design
Major	14,350	
Minor	6,850	

ADT Directional Split	
Major	0.50
Minor	0.50

Nonmotorized Total ADBP (ped-bike/day)	Activity Level	ADBP Value (ped-
Open Year Total Intersection NM	Low (20)	20
Design Year Total Intersection NM		

(or overwrite ped movement ADBPs below)

Nonmotorized Movement ADBP (ped-bike/day)	Open	Design
Major NM 1 (NM mvmt crossing Maj1)	5	
Major NM 2	5	
Minor NM 1	5	
Minor NM 2	5	

Are turning movement ADT values are available?	No
Are peak hour turning movement counts available?	Yes

If "Yes", input values in **Table 2-A**
If "Yes", input values in **Table 2-B**

If no turning movment volumes or counts are available, a user can optionally override the planning-level default turning movment proportions in **Table 2-C**

Table 2-A: Turning Movement (vol/day)

	Open	Design
Major Thru 1	4483.906	
Major Left Turn 1	1694.43	
Major Right Turn 1	996.664	
Major Thru 2	5622.446	
Major Left Turn 2	122.1683	
Major Right Turn 2	1430.386	
Minor Thru 1	964.1	
Minor Left Turn 1	902.4959	
Minor Right Turn 1	1558.404	
Minor Thru 2	374.5299	
Minor Left Turn 2	1525.235	
Minor Right Turn 2	1525.235	

Table 2-B: Turning Movement Counts (Optional)

	Mvmt	AM Peak	AM %	PM Peak	PM %	Avg %
Major Thru 1	NBT	427	0.599719101	433	0.65015	0.624935
Major Left Turn 1	NBL	208	0.292134831	120	0.18018	0.236158
Major Right Turn 1	NBR	77	0.108146067	113	0.16967	0.138908
Major Thru 2	SBT	378	0.635294118	481	0.773312	0.704303
Major Left Turn 2	SBL	4	0.006722689	17	0.027331	0.017027
Major Right Turn 2	SBR	213	0.357983193	124	0.199357	0.27867
Minor Thru 1	EBT	52	0.191881919	141	0.239389	0.215635
Minor Left Turn 1	EBL	60	0.221402214	180	0.305603	0.263502
Minor Right Turn 1	EBR	159	0.586715867	268	0.455008	0.520862
Minor Thru 2	WBT	127	0.540425532	63	0.488372	0.514399
Minor Left Turn 2	WBL	100	0.425531915	60	0.465116	0.445324
Minor Right Turn 2	WBR	8	0.034042553	6	0.046512	0.040277

Table 2-C: Turning Proportions (optional)

	Decimal
Major Thru 1	0.624934626
Major Left Turn 1	0.236157506
Major Right Turn 1	0.138907869
Major Thru 2	0.783616147
Major Left Turn 2	0.017026939
Major Right Turn 2	0.199356913
Minor Thru 1	0.281489046
Minor Left Turn 1	0.263502465
Minor Right Turn 1	0.455008489
Minor Thru 2	0.109351806
Minor Left Turn 2	0.445324097
Minor Right Turn 2	0.445324097

3. Severity

Vehicle Speeds	mph
Major Posted Speed Limit	50
Minor Posted Speed Limit	45
Major thru	50
Major left	20
Major right	15
Minor thru	38.25
Minor left	20
Minor right	15
Stop near	15
Stop far	25
Signal near	15
Signal far	25

4. Conflicting Traffic Complexity

Traffic Control	Decimal
Base Traffic Control Adjustment Value (BTCAV) for permitted	1
Base Traffic Control Adjustment Value (BTCAV) for protected/permitted	0.85
Base Traffic Control Adjustment Value (BTCAV) for protected	0.01
Base Traffic Control Adjustment Value (BTCAV) for stop-controlled	0.45
Weight, f, for permitted	0.5
Weight, f, for protected/permitted	0.5
Weight, f, for protected	0.5
Weight, f, for stop-controlled	0.5
Major LT signal phasing (drop-down)	Protected/Permitted
Minor LT signal phasing (drop-down)	Protected/Permitted
Exclusive Pedestrian phasing (drop-down)	No

Historical Crash Data Input

Note: In order to use Empirical Bayes (EB), the historical intersection type must be a traffic signal or a minor road stop. Additionally, this alternative must be selected to be included in the analysis, and the historical intersection specified below. Up to 10 years of historical data can be used to perform the EB adjustment.

Is historical crash data available?	Yes		
Number of years available:	5	(Up to 10)	First Year Data is available: 2016
Historical Intx Type:	4SG		

Historical Crash Counts		Year										
		2016	2017	2018	2019	2020	--	--	--	--	--	Total
Combined	Total	5	5	0	2	1	--	--	--	--	--	13
	Fatal/Injury	1	2	0	1	1						5
	PDO	4	3	0	1	0						8
Single-Vehicle	Total											
	Fatal/Injury											
	PDO											
Multiple-Vehicle	Total											
	Fatal/Injury											
	PDO											
Veh-Ped	Fatal/Injury	0	0	0	0	0						0
Veh-Bike	Fatal/Injury	0	0	0	0	0						0
Total	All	5	5	0	2	1	--	--	--	--	--	13

Florida Department of Transportation
Safety Performance for Intersection Control Evaluation Tool

Results

Summary of crash prediction results for each alternative

Project Information

Project Name:	Chuluota Road (CR 419) ICE Evaluation	**Intersection Type**	At-Grade Intersection
Intersection:	Chuluota Road (CR 419) at Lake Pickett Road	**Opening Year**	2048
Agency:	Orange County	**Design Year**	0
Project Reference:	No-Build (2-lane) Design Year (2048)	**Facility Type**	On Rural Two Lane Highway
City:	Orlando	**Number of Legs**	4-leg
State:	FL	**1-Way/2-Way**	
Date:	1/26/2024	**# of Major Street Lanes (both directions)**	
Analyst:	JMT	**Major Street Approach Speed**	

Crash Prediction Summary

Control Strategy	Crash Type	Opening Year	Design Year	Total Project Life Cycle	Crash Prediction Rank	AADT Within SPF Prediction Range? (Open Year)	AADT Within SPF Prediction Range? (Design Year)	Source of Prediction	SSI Score: Opening Year	SSI Score: Design Year	SSI Score: Rank
Traffic Signal	Total	3.73	--	--	8	Yes	Yes	Calibrated SPF w/ EB	90		9
	Fatal & Injury	1.27	--	--							
Minor Road Stop	Total	4.63	--	--	9	No	Yes	Calibrated SPF	87		12
	Fatal & Injury	2.00	--	--							
All Way Stop	Total	4.60	--	--	7	No	Yes	Uncalibrated SPF w/ EB	98		2
	Fatal & Injury	1.26	--	--							
1-lane Roundabout	Total	2.27	--	--	1	Yes	Yes	Uncalibrated SPF	99		1
	Fatal & Injury	0.45	--	--							
Displaced Left Turn (DLT)	Total	3.29	--	--	6	N/A	N/A	CMF	90		10
	Fatal & Injury	1.12	--	--							
Median U-Turn (MUT)	Total	2.35	--	--	4	N/A	N/A	CMF	96		3
	Fatal & Injury	0.96	--	--							
Signalized RCUT	Total	4.71	--	--	5	Yes	Yes	Uncalibrated SPF	95		4
	Fatal & Injury	1.08	--	--							
Unsignalized RCUT	Total	4.34	--	--	2	Yes	Yes	Uncalibrated SPF	94		6
	Fatal & Injury	0.89	--	--							
Signalized Thru-Cut	Total	No SPF	--	--	--	N/A	N/A	N/A	94		5
	Fatal & Injury	No SPF	--	--							
Unsignalized Thru-Cut	Total	No SPF	--	--	--	N/A	N/A	N/A	92		7
	Fatal & Injury	No SPF	--	--							
Bowtie	Total	No SPF	--	--	--	N/A	N/A	N/A	91	####	8
	Fatal & Injury	No SPF	--	--							
Jughandle	Total	2.76	--	--	3	N/A	N/A	CMF	90		11
	Fatal & Injury	0.94	--	--							
Other 1*	Total	No SPF	--	--	--	N/A	N/A	CMF	--		--
	Fatal & Injury	No SPF	--	--							
Other 2*	Total	No SPF	--	--	--	N/A	N/A	CMF	--		--
	Fatal & Injury	No SPF	--	--							
			--	--							
			--	--							

Control Strategy Selection and Inputs

Specify the Facility Level Inputs and the Control Strategies to be included in the SPICE Analysis.

Intersection Type	At-Grade Intersection	
Analysis Year	Opening Year Only	
Opening Year	2048	
Design Year		
Facility Type	On Rural Two Lane Highway	For more information on how to determine these values, see the "Definitions" worksheet
Number of Legs	4-leg	
1-Way/2-Way		
# of Major Street Lanes (both directions)		
Major Street Approach Speed		
Opening Year - Major Road AADT	16,450	
Opening Year - Minor Road AADT	7,850	
Design Year - Major Road AADT		
Design Year - Minor Road AADT		

Control Strategy	**Include**	**Base Intersection**	
Traffic Signal	Yes	--	
Traffic Signal (Alternative Configuration)	No	--	
Minor Road Stop Control	Yes	--	Opening Year AADT Outside of SPF Development Range
All Way Stop Control	Yes	--	Opening Year AADT Outside of SPF Development Range
1-Lane Roundabout	Yes	--	
2-Lane Roundabout	No	--	
Displaced Left Turn (DLT)	Yes	Traffic Signal	
Median U-Turn (MUT)	Yes	Traffic Signal	
Signalized Restricted Crossing U-Turn (RCUT)	Yes	--	
Unsignalized Restricted Crossing U-Turn (RCUT)	Yes	--	
Signalized Thru-Cut*	Yes	--	**SSI Only, No Crash Prediction Available*
Unsignalized Thru-Cut*	Yes	--	**SSI Only, No Crash Prediction Available*
Bowtie*	Yes	--	**SSI Only, No Crash Prediction Available*
Continuous Green-T Intersection	No	Traffic Signal	
Jughandle	Yes	Traffic Signal	
Other 1*		Traffic Signal	**Please Select*
Other 2*		Minor Road Stop	**Please Select*

Safe System for Intersection (SSI) Inputs

Specify the geomtric, exposure, severity, and conflicting traffic complexity inputs required for an SSI analysis.

1. Roadway Geometry	Lanes
Major number thru lanes (one direction)	1
Minor number thru lanes (one direction)	1

Major Street Designation	
Select major street direction	N-S
Median Presence on Major Road	No
Median Presence on Minor Road	No

	Required Inputs
	Default Available, Override Optional
	Planning-Level Default Input
	Computed Value, Override Optional
	Computed Value - No Override
	Disabled Cell (Often based on input selections)

2. Complete the **"Exposure"** inputs. These inputs will apply to all interesections selected for analysis.
3. Complete the **"Severity"** inputs
4. Complete the **"Conflicting Traffic Complexity"** inputs

2. Exposure - All Intersections

Average Daily Traffic (veh/day)	Open	Design
Major	16,450	
Minor	7,850	

ADT Directional Split	
Major	0.50
Minor	0.50

Are turning movement ADT values are available? **No** If "Yes", input values in **Table 2-A**
Are peak hour turning movement counts available? **Yes** If "Yes", input values in **Table 2-B**
If no turning movment volumes or counts are available, a user can optionally override the planning-level default turning movment proportions in **Table 2-C**

Nonmotorized Total ADBP (ped-bike/day)	Activity Level	ADBP Value (ped-
Open Year Total Intersection NM	Low (20)	20
Design Year Total Intersection NM		

(or overwrite ped movement ADBPs below)

Nonmotorized Movement ADBP (ped-bike/day)	Open	Design
Major NM 1 (NM mvmt crossing Maj1)	5	
Major NM 2	5	
Minor NM 1	5	
Minor NM 2	5	

Table 2-A: Turning Movement (vol/day)

	Open	Design
Major Thru 1	5175.809	
Major Left Turn 1	1918.839	
Major Right Turn 1	1130.352	
Major Thru 2	6503.157	
Major Left Turn 2	134.9544	
Major Right Turn 2	1586.889	
Minor Thru 1	1103.863	
Minor Left Turn 1	1035.465	
Minor Right Turn 1	1785.672	
Minor Thru 2	410.8938	
Minor Left Turn 2	1757.053	
Minor Right Turn 2	1757.053	

Table 2-B: Turning Movement Counts (Optional)

	Mvmt	AM Peak	AM %	PM Peak	PM %	Avg %
Major Thru 1	NBT	494	0.601705238	513	0.65685	0.629278
Major Left Turn 1	NBL	238	0.289890378	138	0.176697	0.233293
Major Right Turn 1	NBR	89	0.108404385	130	0.166453	0.137429
Major Thru 2	SBT	460	0.648801128	574	0.779891	0.714346
Major Left Turn 2	SBL	4	0.005641749	20	0.027174	0.016408
Major Right Turn 2	SBR	245	0.345557123	142	0.192935	0.269246
Minor Thru 1	EBT	60	0.192926045	162	0.239291	0.216109
Minor Left Turn 1	EBL	69	0.221864952	207	0.305761	0.263813
Minor Right Turn 1	EBR	182	0.585209003	308	0.454948	0.520079
Minor Thru 2	WBT	146	0.540740741	72	0.489796	0.515268
Minor Left Turn 2	WBL	115	0.425925926	69	0.469388	0.447657
Minor Right Turn 2	WBR	9	0.033333333	6	0.040816	0.037075

Table 2-C: Turning Proportions (optional)

	Decimal
Major Thru 1	0.629277715
Major Left Turn 1	0.23329346
Major Right Turn 1	0.137428825
Major Thru 2	0.790657386
Major Left Turn 2	0.016407831
Major Right Turn 2	0.192934783
Minor Thru 1	0.281238868
Minor Left Turn 1	0.26381283
Minor Right Turn 1	0.454948301
Minor Thru 2	0.104686319
Minor Left Turn 2	0.447656841
Minor Right Turn 2	0.447656841

3. Severity

Vehicle Speeds	mph
Major Posted Speed Limit	50
Minor Posted Speed Limit	45
Major thru	50
Major left	20
Major right	15
Minor thru	38.25
Minor left	20
Minor right	15
Stop near	15
Stop far	25
Signal near	15
Signal far	25

4. Conflicting Traffic Complexity

Traffic Control	Decimal
Base Traffic Control Adjustment Value (BTCAV) for permitted	1
Base Traffic Control Adjustment Value (BTCAV) for protected/permitted	0.85
Base Traffic Control Adjustment Value (BTCAV) for protected	0.01
Base Traffic Control Adjustment Value (BTCAV) for stop-controlled	0.45
Weight, f, for permitted	0.5
Weight, f, for protected/permitted	0.5
Weight, f, for protected	0.5
Weight, f, for stop-controlled	0.5
Major LT signal phasing (drop-down)	Protected/Permitted
Minor LT signal phasing (drop-down)	Protected/Permitted
Exclusive Pedestrian phasing (drop-down)	No

Historical Crash Data Input

Note: In order to use Empirical Bayes (EB), the historical intersection type must be a traffic signal or a minor road stop. Additionally, this alternative must be selected to be included in the analysis, and the historical intersection specified below. Up to 10 years of historical data can be used to perform the EB adjustment.

Is historical crash data available?	Yes		
Number of years available:	5	(Up to 10)	First Year Data is available: 2016
Historical Intx Type:	4SG		

Historical Crash Counts		Year										
		2016	2017	2018	2019	2020	--	--	--	--	--	Total
Combined	Total	5	5	0	2	1	--	--	--	--	--	13
	Fatal/Injury	1	2	0	1	1						5
	PDO	4	3	0	1	0						8
Single-Vehicle	Total											
	Fatal/Injury											
	PDO											
Multiple-Vehicle	Total											
	Fatal/Injury											
	PDO											
Veh-Ped	Fatal/Injury	0	0	0	0	0						0
Veh-Bike	Fatal/Injury	0	0	0	0	0						0
Total	All	5	5	0	2	1	--	--	--	--	--	13

Florida Department of Transportation
Safety Performance for Intersection Control Evaluation Tool

Results

Summary of crash prediction results for each alternative

Project Information

Project Name:	Chuluota Road (CR 419) ICE Evaluation	**Intersection Type**	At-Grade Intersection
Intersection:	Chuluota Road (CR 419) at Lake Pickett Road	**Opening Year**	2028
Agency:	Orange County	**Design Year**	0
Project Reference:	Build (4-lane) Opening Year (2028)	**Facility Type**	On Rural Two Lane Highway
City:	Orlando	**Number of Legs**	4-leg
State:	FL	**1-Way/2-Way**	
Date:	1/26/2024	**# of Major Street Lanes (both directions)**	
Analyst:	JMT	**Major Street Approach Speed**	

Crash Prediction Summary

Control Strategy	Crash Type	Opening Year	Design Year	Total Project Life Cycle	Crash Prediction Rank	AADT Within SPF Prediction Range? (Open Year)	AADT Within SPF Prediction Range? (Design Year)	Source of Prediction	SSI Score: Opening Year	SSI Score: Design Year	SSI Score: Rank
Traffic Signal	Total	3.45	--	--	8	Yes	Yes	Calibrated SPF w/ EB	87		10
	Fatal & Injury	1.17	--	--							
Minor Road Stop	Total	3.83	--	--	9	No	Yes	Calibrated SPF	84		12
	Fatal & Injury	1.65	--	--							
All Way Stop	Total	3.91	--	--	6	No	Yes	Uncalibrated SPF w/ EB	98		2
	Fatal & Injury	1.07	--	--							
2-lane Roundabout	Total	5.21	--	--	7	Yes	Yes	Uncalibrated SPF	99		1
	Fatal & Injury	1.10	--	--							
Displaced Left Turn (DLT)	Total	3.04	--	--	5	N/A	N/A	CMF	88		9
	Fatal & Injury	1.03	--	--							
Median U-Turn (MUT)	Total	2.17	--	--	4	N/A	N/A	CMF	95		3
	Fatal & Injury	0.89	--	--							
Signalized RCUT	Total	3.77	--	--	2	Yes	Yes	Uncalibrated SPF	94		4
	Fatal & Injury	0.84	--	--							
Unsignalized RCUT	Total	3.90	--	--	1	Yes	Yes	Uncalibrated SPF	92		5
	Fatal & Injury	0.80	--	--							
Signalized Thru-Cut	Total	No SPF	--	--	--	N/A	N/A	N/A	92		6
	Fatal & Injury	No SPF	--	--							
Unsignalized Thru-Cut	Total	No SPF	--	--	--	N/A	N/A	N/A	89		7
	Fatal & Injury	No SPF	--	--							
Bowtie	Total	No SPF	--	--	--	N/A	N/A	N/A	88	####	8
	Fatal & Injury	No SPF	--	--							
Jughandle	Total	2.55	--	--	3	N/A	N/A	CMF	87		11
	Fatal & Injury	0.87	--	--							
Other 1*	Total	No SPF	--	--	--	N/A	N/A	CMF	--		--
	Fatal & Injury	No SPF	--	--							
Other 2*	Total	No SPF	--	--	--	N/A	N/A	CMF	--		--
	Fatal & Injury	No SPF	--	--							
			--	--							
			--	--							

Control Strategy Selection and Inputs

Specify the Facility Level Inputs and the Control Strategies to be included in the SPICE Analysis.

Intersection Type	At-Grade Intersection	
Analysis Year	Opening Year Only	
Opening Year	2028	
Design Year		
Facility Type	On Rural Two Lane Highway	For more information on how to determine these values, see the "Definitions" worksheet
Number of Legs	4-leg	
1-Way/2-Way		
# of Major Street Lanes (both directions)		
Major Street Approach Speed		
Opening Year - Major Road AADT	14,450	
Opening Year - Minor Road AADT	6,550	
Design Year - Major Road AADT		
Design Year - Minor Road AADT		

Control Strategy	**Include**	**Base Intersection**	
Traffic Signal	Yes	--	
Traffic Signal (Alternative Configuration)	No	--	
Minor Road Stop Control	Yes	--	Opening Year AADT Outside of SPF Development Range
All Way Stop Control	Yes	--	Opening Year AADT Outside of SPF Development Range
1-Lane Roundabout	No	--	
2-Lane Roundabout	Yes	--	
Displaced Left Turn (DLT)	Yes	Traffic Signal	
Median U-Turn (MUT)	Yes	Traffic Signal	
Signalized Restricted Crossing U-Turn (RCUT)	Yes	--	
Unsignalized Restricted Crossing U-Turn (RCUT)	Yes	--	
Signalized Thru-Cut*	Yes	--	**SSI Only, No Crash Prediction Available*
Unsignalized Thru-Cut*	Yes	--	**SSI Only, No Crash Prediction Available*
Bowtie*	Yes	--	**SSI Only, No Crash Prediction Available*
Continuous Green-T Intersection	No	Traffic Signal	
Jughandle	Yes	Traffic Signal	
Other 1*		Traffic Signal	**Please Select*
Other 2*		Minor Road Stop	**Please Select*

Safe System for Intersection (SSI) Inputs

Specify the geomtric, exposure, severity, and conflicting traffic complexity inputs required for an SSI analysis.

1. Roadway Geometry	Lanes
Major number thru lanes (one direction)	2
Minor number thru lanes (one direction)	1

Major Street Designation	
Select major street direction	N-S
Median Presence on Major Road	No
Median Presence on Minor Road	No

	Required Inputs
	Default Available, Override Optional
	Planning-Level Default Input
	Computed Value, Override Optional
	Computed Value - No Override
	Disabled Cell (Often based on input selections)

2. Complete the "Exposure" inputs. These inputs will apply to all interesections selected for analysis.
3. Complete the "Severity" inputs
4. Complete the "Conflicting Traffic Complexity" inputs

2. Exposure - All Intersections

Average Daily Traffic (veh/day)	Open	Design
Major	14,450	
Minor	6,550	

ADT Directional Split	
Major	0.50
Minor	0.50

Nonmotorized Total ADBP (ped-bike/day)	Activity Level	ADBP Value (ped-
Open Year Total Intersection NM	Low (20)	20
Design Year Total Intersection NM		

(or overwrite ped movement ADBPs below)

Nonmotorized Movement ADBP (ped-bike/day)	Open	Design
Major NM 1 (NM mvmt crossing Maj1)	5	
Major NM 2	5	
Minor NM 1	5	
Minor NM 2	5	

Are turning movement ADT values are available?	No
Are peak hour turning movement counts available?	Yes

If "Yes", input values in Table 2-A
If "Yes", input values in Table 2-B

If no turning movment volumes or counts are available, a user can optionally override the planning-level default turning movment proportions in Table 2-C

Table 2-A: Turning Movement (vol/day)

	Open	Design
Major Thru 1	4503.442	
Major Left Turn 1	1711.037	
Major Right Turn 1	1010.522	
Major Thru 2	5640.732	
Major Left Turn 2	129.4881	
Major Right Turn 2	1454.78	
Minor Thru 1	922.1453	
Minor Left Turn 1	865.7964	
Minor Right Turn 1	1487.058	
Minor Thru 2	339.5406	
Minor Left Turn 2	1467.73	
Minor Right Turn 2	1467.73	

Table 2-B: Turning Movement Counts (Optional)

	Mvmt	AM Peak	AM %	PM Peak	PM %	Avg %
Major Thru 1	NBT	409	0.598828697	412	0.647799	0.623314
Major Left Turn 1	NBL	200	0.292825769	115	0.180818	0.236822
Major Right Turn 1	NBR	74	0.108345534	109	0.171384	0.139865
Major Thru 2	SBT	356	0.630088496	455	0.769882	0.699985
Major Left Turn 2	SBL	4	0.007079646	17	0.028765	0.017922
Major Right Turn 2	SBR	205	0.362831858	119	0.201354	0.282093
Minor Thru 1	EBT	50	0.192307692	136	0.240283	0.216295
Minor Left Turn 1	EBL	58	0.223076923	173	0.305654	0.264365
Minor Right Turn 1	EBR	152	0.584615385	257	0.454064	0.519339
Minor Thru 2	WBT	122	0.539823009	60	0.487805	0.513814
Minor Left Turn 2	WBL	96	0.424778761	58	0.471545	0.448162
Minor Right Turn 2	WBR	8	0.03539823	5	0.04065	0.038024

Table 2-C: Turning Proportions (optional)

	Decimal
Major Thru 1	0.62331372
Major Left Turn 1	0.236821689
Major Right Turn 1	0.139864591
Major Thru 2	0.780724136
Major Left Turn 2	0.017922226
Major Right Turn 2	0.201353638
Minor Thru 1	0.281571079
Minor Left Turn 1	0.264365317
Minor Right Turn 1	0.454063604
Minor Thru 2	0.103676523
Minor Left Turn 2	0.448161738
Minor Right Turn 2	0.448161738

3. Severity

Vehicle Speeds	mph
Major Posted Speed Limit	50
Minor Posted Speed Limit	45
Major thru	50
Major left	20
Major right	15
Minor thru	38.25
Minor left	20
Minor right	15
Stop near	15
Stop far	25
Signal near	15
Signal far	25

4. Conflicting Traffic Complexity

Traffic Control	Decimal
Base Traffic Control Adjustment Value (BTCAV) for permitted	1
Base Traffic Control Adjustment Value (BTCAV) for protected/permitted	0.85
Base Traffic Control Adjustment Value (BTCAV) for protected	0.01
Base Traffic Control Adjustment Value (BTCAV) for stop-controlled	0.45
Weight, f, for permitted	0.5
Weight, f, for protected/permitted	0.5
Weight, f, for protected	0.5
Weight, f, for stop-controlled	0.5
Major LT signal phasing (drop-down)	Protected/Permitted
Minor LT signal phasing (drop-down)	Protected/Permitted
Exclusive Pedestrian phasing (drop-down)	No

Historical Crash Data Input

Note: In order to use Empirical Bayes (EB), the historical intersection type must be a traffic signal or a minor road stop. Additionally, this alternative must be selected to be included in the analysis, and the historical intersection specified below. Up to 10 years of historical data can be used to perform the EB adjustment.

Is historical crash data available?	Yes		
Number of years available:	5	(Up to 10)	First Year Data is available: 2016
Historical Intx Type:	4SG		

Historical Crash Counts		Year										
		2016	2017	2018	2019	2020	--	--	--	--	--	Total
Combined	Total	5	5	0	2	1	--	--	--	--	--	13
	Fatal/Injury	1	2	0	1	1						5
	PDO	4	3	0	1	0						8
Single-Vehicle	Total											
	Fatal/Injury											
	PDO											
Multiple-Vehicle	Total											
	Fatal/Injury											
	PDO											
Veh-Ped	Fatal/Injury	0	0	0	0	0						0
Veh-Bike	Fatal/Injury	0	0	0	0	0						0
Total	All	5	5	0	2	1	--	--	--	--	--	13

Florida Department of Transportation
Safety Performance for Intersection Control Evaluation Tool

Results

Summary of crash prediction results for each alternative

Project Information

Project Name:	Chuluota Road (CR 419) ICE Evaluation	**Intersection Type**	At-Grade Intersection
Intersection:	Chuluota Road (CR 419) at Lake Pickett Road	**Opening Year**	2038
Agency:	Orange County	**Design Year**	0
Project Reference:	Build (4-lane) Interim Year (2038)	**Facility Type**	On Rural Two Lane Highway
City:	Orlando	**Number of Legs**	4-leg
State:	FL	**1-Way/2-Way**	
Date:	1/26/2024	**# of Major Street Lanes (both directions)**	
Analyst:	JMT	**Major Street Approach Speed**	

Crash Prediction Summary

Control Strategy	Crash Type	Opening Year	Design Year	Total Project Life Cycle	Crash Prediction Rank	AADT Within SPF Prediction Range? (Open Year)	AADT Within SPF Prediction Range? (Design Year)	Source of Prediction	SSI Score: Opening Year	SSI Score: Design Year	SSI Score: Rank
Traffic Signal	Total	4.00	--	--	6	Yes	Yes	Calibrated SPF w/ EB	80		10
	Fatal & Injury	1.36	--	--							
Minor Road Stop	Total	5.33	--	--	9	No	Yes	Calibrated SPF	74		12
	Fatal & Injury	2.30	--	--							
All Way Stop	Total	5.29	--	--	7	No	Yes	Uncalibrated SPF w/ EB	96		2
	Fatal & Injury	1.46	--	--							
2-lane Roundabout	Total	7.14	--	--	8	Yes	Yes	Uncalibrated SPF	99		1
	Fatal & Injury	1.56	--	--							
Displaced Left Turn (DLT)	Total	3.52	--	--	4	N/A	N/A	CMF	80		9
	Fatal & Injury	1.20	--	--							
Median U-Turn (MUT)	Total	2.52	--	--	3	N/A	N/A	CMF	91		3
	Fatal & Injury	1.03	--	--							
Signalized RCUT	Total	5.72	--	--	5	Yes	Yes	Uncalibrated SPF	91		4
	Fatal & Injury	1.32	--	--							
Unsignalized RCUT	Total	4.72	--	--	1	Yes	Yes	Uncalibrated SPF	87		5
	Fatal & Injury	0.98	--	--							
Signalized Thru-Cut	Total	No SPF	--	--	--	N/A	N/A	N/A	87		6
	Fatal & Injury	No SPF	--	--							
Unsignalized Thru-Cut	Total	No SPF	--	--	--	N/A	N/A	N/A	82		7
	Fatal & Injury	No SPF	--	--							
Bowtie	Total	No SPF	--	--	--	N/A	N/A	N/A	80	####	8
	Fatal & Injury	No SPF	--	--							
Jughandle	Total	2.96	--	--	2	N/A	N/A	CMF	78		11
	Fatal & Injury	1.01	--	--							
Other 1*	Total	No SPF	--	--	--	N/A	N/A	CMF	--		--
	Fatal & Injury	No SPF	--	--							
Other 2*	Total	No SPF	--	--	--	N/A	N/A	CMF	--		--
	Fatal & Injury	No SPF	--	--							
			--	--							
			--	--							

Control Strategy Selection and Inputs

Specify the Facility Level Inputs and the Control Strategies to be included in the SPICE Analysis.

Intersection Type	At-Grade Intersection	
Analysis Year	Opening Year Only	
Opening Year	2038	
Design Year		
Facility Type	On Rural Two Lane Highway	For more information on how to determine these values, see the "Definitions" worksheet
Number of Legs	4-leg	
1-Way/2-Way		
# of Major Street Lanes (both directions)		
Major Street Approach Speed		
Opening Year - Major Road AADT	18,950	
Opening Year - Minor Road AADT	8,600	
Design Year - Major Road AADT		
Design Year - Minor Road AADT		

Control Strategy	**Include**	**Base Intersection**	
Traffic Signal	Yes	--	
Traffic Signal (Alternative Configuration)	No	--	
Minor Road Stop Control	Yes	--	Opening Year AADT Outside of SPF Development Range
All Way Stop Control	Yes	--	Opening Year AADT Outside of SPF Development Range
1-Lane Roundabout	No	--	
2-Lane Roundabout	Yes	--	
Displaced Left Turn (DLT)	Yes	Traffic Signal	
Median U-Turn (MUT)	Yes	Traffic Signal	
Signalized Restricted Crossing U-Turn (RCUT)	Yes	--	
Unsignalized Restricted Crossing U-Turn (RCUT)	Yes	--	
Signalized Thru-Cut*	Yes	--	**SSI Only, No Crash Prediction Available*
Unsignalized Thru-Cut*	Yes	--	**SSI Only, No Crash Prediction Available*
Bowtie*	Yes	--	**SSI Only, No Crash Prediction Available*
Continuous Green-T Intersection	No	Traffic Signal	
Jughandle	Yes	Traffic Signal	
Other 1*		Traffic Signal	**Please Select*
Other 2*		Minor Road Stop	**Please Select*

Safe System for Intersection (SSI) Inputs

Specify the geomtric, exposure, severity, and conflicting traffic complexity inputs required for an SSI analysis.

1. Roadway Geometry	Lanes
Major number thru lanes (one direction)	2
Minor number thru lanes (one direction)	1

Major Street Designation	
Select major street direction	N-S
Median Presence on Major Road	No
Median Presence on Minor Road	No

	Required Inputs
	Default Available, Override Optional
	Planning-Level Default Input
	Computed Value, Override Optional
	Computed Value - No Override
	Disabled Cell (Often based on input selections)

2. Complete the "Exposure" inputs. These inputs will apply to all interesections selected for analysis.
3. Complete the "Severity" inputs
4. Complete the "Conflicting Traffic Complexity" inputs

2. Exposure - All Intersections

Average Daily Traffic (veh/day)	Open	Design
Major	18,950	
Minor	8,600	

ADT Directional Split	
Major	0.50
Minor	0.50

Nonmotorized Total ADBP (ped-bike/day)	Activity Level	ADBP Value (ped-
Open Year Total Intersection NM	Low (20)	20
Design Year Total Intersection NM		

(or overwrite ped movement ADBPs below)

Nonmotorized Movement ADBP (ped-bike/day)	Open	Design
Major NM 1 (NM mvmt crossing Maj1)	5	
Major NM 2	5	
Minor NM 1	5	
Minor NM 2	5	

Are turning movement ADT values are available?	No
Are peak hour turning movement counts available?	Yes

If "Yes", input values in Table 2-A
If "Yes", input values in Table 2-B

If no turning movment volumes or counts are available, a user can optionally override the planning-level default turning movment proportions in Table 2-C

Table 2-A: Turning Movement (vol/day)

	Open	Design
Major Thru 1	5981.897	
Major Left Turn 1	2198.137	
Major Right Turn 1	1294.966	
Major Thru 2	7524.945	
Major Left Turn 2	156.2448	
Major Right Turn 2	1793.811	
Minor Thru 1	1207.833	
Minor Left Turn 1	1136.043	
Minor Right Turn 1	1956.124	
Minor Thru 2	452.3106	
Minor Left Turn 2	1923.845	
Minor Right Turn 2	1923.845	

Table 2-B: Turning Movement Counts (Optional)

	Mvmt	AM Peak	AM %	PM Peak	PM %	Avg %
Major Thru 1	NBT	544	0.601769912	573	0.6609	0.631335
Major Left Turn 1	NBL	262	0.289823009	151	0.174164	0.231993
Major Right Turn 1	NBR	98	0.10840708	143	0.164937	0.136672
Major Thru 2	SBT	522	0.655778894	646	0.783981	0.71988
Major Left Turn 2	SBL	5	0.006281407	22	0.026699	0.01649
Major Right Turn 2	SBR	269	0.337939698	156	0.18932	0.26363
Minor Thru 1	EBT	65	0.190615836	178	0.239569	0.215093
Minor Left Turn 1	EBL	76	0.2228739	227	0.305518	0.264196
Minor Right Turn 1	EBR	200	0.586510264	338	0.454913	0.520711
Minor Thru 2	WBT	160	0.540540541	79	0.487654	0.514097
Minor Left Turn 2	WBL	126	0.425675676	76	0.469136	0.447406
Minor Right Turn 2	WBR	10	0.033783784	7	0.04321	0.038497

Table 2-C: Turning Proportions (optional)

	Decimal
Major Thru 1	0.631334783
Major Left Turn 1	0.231993396
Major Right Turn 1	0.136671821
Major Thru 2	0.794189394
Major Left Turn 2	0.016490218
Major Right Turn 2	0.189320388
Minor Thru 1	0.280891448
Minor Left Turn 1	0.264196035
Minor Right Turn 1	0.454912517
Minor Thru 2	0.105188522
Minor Left Turn 2	0.447405739
Minor Right Turn 2	0.447405739

3. Severity

Vehicle Speeds	mph
Major Posted Speed Limit	50
Minor Posted Speed Limit	45
Major thru	50
Major left	20
Major right	15
Minor thru	38.25
Minor left	20
Minor right	15
Stop near	15
Stop far	25
Signal near	15
Signal far	25

4. Conflicting Traffic Complexity

Traffic Control	Decimal
Base Traffic Control Adjustment Value (BTCAV) for permitted	1
Base Traffic Control Adjustment Value (BTCAV) for protected/permitted	0.85
Base Traffic Control Adjustment Value (BTCAV) for protected	0.01
Base Traffic Control Adjustment Value (BTCAV) for stop-controlled	0.45
Weight, f, for permitted	0.5
Weight, f, for protected/permitted	0.5
Weight, f, for protected	0.5
Weight, f, for stop-controlled	0.5
Major LT signal phasing (drop-down)	Protected/Permitted
Minor LT signal phasing (drop-down)	Protected/Permitted
Exclusive Pedestrian phasing (drop-down)	No

Historical Crash Data Input

Note: In order to use Empirical Bayes (EB), the historical intersection type must be a traffic signal or a minor road stop. Additionally, this alternative must be selected to be included in the analysis, and the historical intersection specified below. Up to 10 years of historical data can be used to perform the EB adjustment.

Is historical crash data available?	Yes		
Number of years available:	5	(Up to 10)	First Year Data is available: 2016
Historical Intx Type:	4SG		

Historical Crash Counts		Year										
		2016	2017	2018	2019	2020	--	--	--	--	--	Total
Combined	Total	5	5	0	2	1	--	--	--	--	--	13
	Fatal/Injury	1	2	0	1	1						5
	PDO	4	3	0	1	0						8
Single-Vehicle	Total											
	Fatal/Injury											
	PDO											
Multiple-Vehicle	Total											
	Fatal/Injury											
	PDO											
Veh-Ped	Fatal/Injury	0	0	0	0	0						0
Veh-Bike	Fatal/Injury	0	0	0	0	0						0
Total	All	5	5	0	2	1	--	--	--	--	--	13

Florida Department of Transportation
Safety Performance for Intersection Control Evaluation Tool

Results

Summary of crash prediction results for each alternative

Project Information

Project Name:	Chuluota Road (CR 419) ICE Evaluation	**Intersection Type**	At-Grade Intersection
Intersection:	Chuluota Road (CR 419) at Lake Pickett Road	**Opening Year**	2048
Agency:	Orange County	**Design Year**	0
Project Reference:	Build (4-lane) Design Year (2048)	**Facility Type**	On Rural Two Lane Highway
City:	Orlando	**Number of Legs**	4-leg
State:	FL	**1-Way/2-Way**	
Date:	1/26/2024	**# of Major Street Lanes (both directions)**	
Analyst:	JMT	**Major Street Approach Speed**	

Crash Prediction Summary

Control Strategy	Crash Type	Opening Year	Design Year	Total Project Life Cycle	Crash Prediction Rank	AADT Within SPF Prediction Range? (Open Year)	AADT Within SPF Prediction Range? (Design Year)	Source of Prediction	SSI Score: Opening Year	SSI Score: Design Year	SSI Score: Rank
Traffic Signal	Total	4.46	--	--	5	Yes	Yes	Calibrated SPF w/ EB	70		10
	Fatal & Injury	1.52	--	--							
Minor Road Stop	Total	6.90	--	--	9	No	Yes	Calibrated SPF	63		12
	Fatal & Injury	2.97	--	--							
All Way Stop	Total	6.72	--	--	6	No	Yes	Uncalibrated SPF w/ EB	94		2
	Fatal & Injury	1.85	--	--							
2-lane Roundabout	Total	9.15	--	--	8	Yes	Yes	Uncalibrated SPF	98		1
	Fatal & Injury	2.05	--	--							
Displaced Left Turn (DLT)	Total	3.93	--	--	4	N/A	N/A	CMF	71		8
	Fatal & Injury	1.33	--	--							
Median U-Turn (MUT)	Total	2.81	--	--	3	N/A	N/A	CMF	87		3
	Fatal & Injury	1.15	--	--							
Signalized RCUT	Total	7.94	--	--	7	Yes	Yes	Uncalibrated SPF	86		4
	Fatal & Injury	1.88	--	--							
Unsignalized RCUT	Total	5.58	--	--	2	Yes	Yes	Uncalibrated SPF	81		5
	Fatal & Injury	1.15	--	--							
Signalized Thru-Cut	Total	No SPF	--	--	--	N/A	N/A	N/A	81		6
	Fatal & Injury	No SPF	--	--							
Unsignalized Thru-Cut	Total	No SPF	--	--	--	N/A	N/A	N/A	74		7
	Fatal & Injury	No SPF	--	--							
Bowtie	Total	No SPF	--	--	--	N/A	N/A	N/A	71	####	9
	Fatal & Injury	No SPF	--	--							
Jughandle	Total	3.30	--	--	1	N/A	N/A	CMF	69		11
	Fatal & Injury	1.12	--	--							
Other 1*	Total	No SPF	--	--	--	N/A	N/A	CMF	--		--
	Fatal & Injury	No SPF	--	--							
Other 2*	Total	No SPF	--	--	--	N/A	N/A	CMF	--		--
	Fatal & Injury	No SPF	--	--							
			--	--							
			--	--							

Control Strategy Selection and Inputs

Specify the Facility Level Inputs and the Control Strategies to be included in the SPICE Analysis.

Intersection Type	At-Grade Intersection	
Analysis Year	Opening Year Only	
Opening Year	2048	
Design Year		
Facility Type	On Rural Two Lane Highway	For more information on how to determine these values, see the "Definitions" worksheet
Number of Legs	4-leg	
1-Way/2-Way		
# of Major Street Lanes (both directions)		
Major Street Approach Speed		
Opening Year - Major Road AADT	23,450	
Opening Year - Minor Road AADT	10,650	
Design Year - Major Road AADT		
Design Year - Minor Road AADT		

Control Strategy	**Include**	**Base Intersection**	
Traffic Signal	Yes	--	
Traffic Signal (Alternative Configuration)	No	--	
Minor Road Stop Control	Yes	--	Opening Year AADT Outside of SPF Development Range
All Way Stop Control	Yes	--	Opening Year AADT Outside of SPF Development Range
1-Lane Roundabout	No	--	Opening Year AADT Outside of SPF Development Range
2-Lane Roundabout	Yes	--	
Displaced Left Turn (DLT)	Yes	Traffic Signal	
Median U-Turn (MUT)	Yes	Traffic Signal	
Signalized Restricted Crossing U-Turn (RCUT)	Yes	--	
Unsignalized Restricted Crossing U-Turn (RCUT)	Yes	--	
Signalized Thru-Cut*	Yes	--	**SSI Only, No Crash Prediction Available*
Unsignalized Thru-Cut*	Yes	--	**SSI Only, No Crash Prediction Available*
Bowtie*	Yes	--	**SSI Only, No Crash Prediction Available*
Continuous Green-T Intersection	No	Traffic Signal	
Jughandle	Yes	Traffic Signal	
Other 1*		Traffic Signal	**Please Select*
Other 2*		Minor Road Stop	**Please Select*

Safe System for Intersection (SSI) Inputs

Specify the geomtric, exposure, severity, and conflicting traffic complexity inputs required for an SSI analysis.

1. Roadway Geometry	Lanes
Major number thru lanes (one direction)	2
Minor number thru lanes (one direction)	1

Major Street Designation	
Select major street direction	N-S
Median Presence on Major Road	No
Median Presence on Minor Road	No

	Required Inputs
	Default Available, Override Optional
	Planning-Level Default Input
	Computed Value, Override Optional
	Computed Value - No Override
	Disabled Cell (Often based on input selections)

2. Complete the "Exposure" inputs. These inputs will apply to all interesections selected for analysis.
3. Complete the "Severity" inputs
4. Complete the "Conflicting Traffic Complexity" inputs

2. Exposure - All Intersections

Average Daily Traffic (veh/day)	Open	Design
Major	23,450	
Minor	10,650	

ADT Directional Split	
Major	0.50
Minor	0.50

Nonmotorized Total ADBP (ped-bike/day)	Activity Level	ADBP Value (ped-
Open Year Total Intersection NM	Low (20)	20
Design Year Total Intersection NM		

(or overwrite ped movement ADBPs below)

Nonmotorized Movement ADBP (ped-bike/day)	Open	Design
Major NM 1 (NM mvmt crossing Maj1)	5	
Major NM 2	5	
Minor NM 1	5	
Minor NM 2	5	

Are turning movement ADT values are available?	No
Are peak hour turning movement counts available?	Yes

If "Yes", input values in Table 2-A
If "Yes", input values in Table 2-B

If no turning movment volumes or counts are available, a user can optionally override the planning-level default turning movment proportions in Table 2-C

Table 2-A: Turning Movement (vol/day)

	Open	Design
Major Thru 1	7462.567	
Major Left Turn 1	2686.84	
Major Right Turn 1	1575.592	
Major Thru 2	9397.968	
Major Left Turn 2	184.1104	
Major Right Turn 2	2142.921	
Minor Thru 1	1497.194	
Minor Left Turn 1	1405.772	
Minor Right Turn 1	2422.035	
Minor Thru 2	565.0294	
Minor Left Turn 2	2379.985	
Minor Right Turn 2	2379.985	

Table 2-B: Turning Movement Counts (Optional)

	Mvmt	AM Peak	AM %	PM Peak	PM %	Avg %
Major Thru 1	NBT	680	0.604444444	734	0.668488	0.636466
Major Left Turn 1	NBL	324	0.288	187	0.17031	0.229155
Major Right Turn 1	NBR	121	0.107555556	177	0.161202	0.134379
Major Thru 2	SBT	689	0.670233463	836	0.791667	0.73095
Major Left Turn 2	SBL	6	0.005836576	27	0.025568	0.015702
Major Right Turn 2	SBR	333	0.323929961	193	0.182765	0.253348
Minor Thru 1	EBT	81	0.191489362	220	0.239391	0.21544
Minor Left Turn 1	EBL	94	0.222222222	281	0.305767	0.263995
Minor Right Turn 1	EBR	248	0.586288416	418	0.454842	0.520565
Minor Thru 2	WBT	198	0.540983607	98	0.487562	0.514273
Minor Left Turn 2	WBL	156	0.426229508	94	0.467662	0.446946
Minor Right Turn 2	WBR	12	0.032786885	9	0.044776	0.038782

Table 2-C: Turning Proportions (optional)

	Decimal
Major Thru 1	0.636466302
Major Left Turn 1	0.229154827
Major Right Turn 1	0.134378871
Major Thru 2	0.80153247
Major Left Turn 2	0.015702379
Major Right Turn 2	0.182765152
Minor Thru 1	0.2811631
Minor Left Turn 1	0.26399468
Minor Right Turn 1	0.45484222
Minor Thru 2	0.1061088
Minor Left Turn 2	0.4469456
Minor Right Turn 2	0.4469456

3. Severity

Vehicle Speeds	mph
Major Posted Speed Limit	50
Minor Posted Speed Limit	45
Major thru	50
Major left	20
Major right	15
Minor thru	38.25
Minor left	20
Minor right	15
Stop near	15
Stop far	25
Signal near	15
Signal far	25

4. Conflicting Traffic Complexity

Traffic Control	Decimal
Base Traffic Control Adjustment Value (BTCAV) for permitted	1
Base Traffic Control Adjustment Value (BTCAV) for protected/permitted	0.85
Base Traffic Control Adjustment Value (BTCAV) for protected	0.01
Base Traffic Control Adjustment Value (BTCAV) for stop-controlled	0.45
Weight, f, for permitted	0.5
Weight, f, for protected/permitted	0.5
Weight, f, for protected	0.5
Weight, f, for stop-controlled	0.5
Major LT signal phasing (drop-down)	Protected/Permitted
Minor LT signal phasing (drop-down)	Protected/Permitted
Exclusive Pedestrian phasing (drop-down)	No

Historical Crash Data Input

Note: In order to use Empirical Bayes (EB), the historical intersection type must be a traffic signal or a minor road stop. Additionally, this alternative must be selected to be included in the analysis, and the historical intersection specified below. Up to 10 years of historical data can be used to perform the EB adjustment.

Is historical crash data available?	Yes		
Number of years available:	5	(Up to 10)	First Year Data is available: 2016
Historical Intx Type:	4SG		

Historical Crash Counts		Year										
		2016	2017	2018	2019	2020	--	--	--	--	--	Total
Combined	Total	5	5	0	2	1	--	--	--	--	--	13
	Fatal/Injury	1	2	0	1	1						5
	PDO	4	3	0	1	0						8
Single-Vehicle	Total											
	Fatal/Injury											
	PDO											
Multiple-Vehicle	Total											
	Fatal/Injury											
	PDO											
Veh-Ped	Fatal/Injury	0	0	0	0	0						0
Veh-Bike	Fatal/Injury	0	0	0	0	0						0
Total	All	5	5	0	2	1	--	--	--	--	--	13

Table 2, Lake Pickett Road SPICE Results - Crash Prediction

Build Type	Year	Intersection Control Rank 1 (Fatal & Injury Crashes)	Intersection Control Rank 2 (Fatal & Injury Crashes)	Intersection Control Rank 3 (Fatal & Injury Crashes)	Intersection Control Rank 4 (Fatal & Injury Crashes)	Intersection Control Rank 5 (Fatal & Injury Crashes)	Intersection Control Rank 6 (Fatal & Injury Crashes)	Intersection Control Rank 7 (Fatal & Injury Crashes)	Intersection Control Rank 8 (Fatal & Injury Crashes)	Intersection Control Rank 9 (Fatal & Injury Crashes)	Intersection Control Rank 10 (Fatal & Injury Crashes)
No-Build (2-lane)	2028	1 Lane Roundabout (0.35)	Signalized RCUT N-S (0.66)	Unsignalized RCUT N-S (0.71)	Jughandle (0.79)	MUT N-S (0.82)	AWSC (0.91)	DLT (0.94)	Traffic Signal (1.07)	TWSC (1.39)	Bowtie N-S (No SPF)
	2038	1 Lane Roundabout (0.40)	Unsignalized RCUT N-S (0.80)	Signalized RCUT N-S (0.86)	Jughandle (0.87)	MUT N-S (0.89)	DLT (1.04)	AWSC (1.09)	Traffic Signal (1.18)	TWSC (1.69)	Bowtie N-S (No SPF)
	2048	1 Lane Roundabout (0.45)	Unsignalized RCUT N-S (0.89)	Jughandle (0.94)	MUT N-S (0.96)	Signalized RCUT N-S (1.08)	DLT (1.12)	AWSC (1.26)	Traffic Signal (1.27)	TWSC (2.00)	Bowtie N-S (No SPF)
Build (4-lane)	2028	Unsignalized RCUT N-S (0.80)	Signalized RCUT N-S (0.84)	Jughandle (0.87)	MUT N-S (0.89)	DLT (1.03)	AWSC (1.07)	2 Lane Roundabout (1.10)	Traffic Signal (1.17)	TWSC (1.65)	Bowtie N-S (No SPF)
	2038	Unsignalized RCUT N-S (0.98)	Jughandle (1.01)	MUT N-S (1.03)	DLT (1.20)	Signalized RCUT N-S (1.32)	Traffic Signal (1.36)	AWSC (1.46)	2 Lane Roundabout (1.56)	TWSC (2.30)	Bowtie N-S (No SPF)
	2048	Jughandle (1.12)	Unsignalized RCUT N-S (1.15)	MUT N-S (1.15)	DLT (1.33)	Traffic Signal (1.52)	AWSC (1.85)	Signalized RCUT N-S (1.88)	2 Lane Roundabout (2.05)	TWSC (2.97)	Bowtie N-S (No SPF)

Greyed out cells indicate that the intersection control type may not be viable due to right-of-way, cost, or other factors

Table 3, Lake Pickett Road SPICE Results - SSI Score

Build Type	Year	Intersection Control Rank 1 (SSI Score)	Intersection Control Rank 2 (SSI Score)	Intersection Control Rank 3 (SSI Score)	Intersection Control Rank 4 (SSI Score)	Intersection Control Rank 5 (SSI Score)	Intersection Control Rank 6 (SSI Score)	Intersection Control Rank 7 (SSI Score)	Intersection Control Rank 8 (SSI Score)	Intersection Control Rank 9 (SSI Score)	Intersection Control Rank 10 (SSI Score)
No-Build	2028	1 Lane Roundabout (100)	AWSC (99)	MUT N-S (98)	Signalized RCUT N-S (97)	Signalized ThruCut N-S (97)	Unsignalized RCUT N-S (96)	Unsignalized ThruCut N-S (95)	Bowtie N-S (95)	Traffic Signal (94)	DLT (94)
	2038	1 Lane Roundabout (100)	AWSC (98)	MUT N-S (97)	Signalized RCUT N-S (96)	Signalized ThruCut N-S (95)	Unsignalized RCUT N-S (95)	Unsignalized ThruCut N-S (94)	Bowtie N-S (93)	Traffic Signal (92)	DLT (92)
	2048	1 Lane Roundabout (99)	AWSC (98)	MUT N-S (96)	Signalized RCUT N-S (95)	Signalized ThruCut N-S (94)	Unsignalized RCUT N-S (94)	Unsignalized ThruCut N-S (92)	Bowtie N-S (91)	Traffic Signal (90)	DLT (90)
Build	2028	2 Lane Roundabout (99)	AWSC (98)	MUT N-S (95)	Signalized RCUT N-S (94)	Unsignalized RCUT N-S (92)	Signalized ThruCut N-S (92)	Unsignalized ThruCut N-S (89)	Bowtie N-S (88)	DLT (88)	Traffic Signal (87)
	2038	2 Lane Roundabout (99)	AWSC (96)	MUT N-S (91)	Signalized RCUT N-S (91)	Unsignalized RCUT N-S (87)	Signalized ThruCut N-S (87)	Unsignalized ThruCut N-S (82)	Bowtie N-S (80)	DLT (80)	Traffic Signal (80)
	2048	2 Lane Roundabout (98)	AWSC (94)	MUT N-S (87)	Signalized RCUT N-S (86)	Unsignalized RCUT N-S (81)	Signalized ThruCut N-S (81)	Unsignalized ThruCut N-S (74)	DLT (71)	Bowtie N-S (71)	Traffic Signal (70)

Greyed out cells indicate that the intersection control type may not be viable due to right-of-way, cost, or other factors

SSI Legend	
	90-100
	80-89
	70-79
	< 70

CHULUOTA ROAD & CYPRESS LAKE GLEN BOULEVARD S/LONG BOAT LANE

CAP-X WORKSHEETS

Capacity Analysis for Planning of Junctions

Input Worksheet 1

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) AM Opening Year (2028)
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard/Long Boat Lane
Date	March 14, 2024
Number of Legs	4
Major Street Direction	North-South

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	Left	Thru	Right	Heavy Vehicles	Volume Growth
Eastbound	0	5	1	8	3.48%	0.00%
Westbound	0	98	2	128	3.48%	0.00%
Southbound	0	65	424	3	3.48%	0.00%
Northbound	0	3	465	89	3.48%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone		**C3R-Suburban Residential**	
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Equivalent Passenger Car Volume

	Volume (Veh/hr)			
	U-Turn	Left	Thru	Right
Eastbound	0	5	1	8
Westbound	0	101	2	132
Southbound	0	67	439	3
Northbound	0	3	481	92

Notes:	
Left-Turn Adjustment Factor	*Conversion of left-turning vehicles to equivalent through vehicles*
Right-turn Adjustment Factor	*Conversion of right-turning vehicles to equivalent through vehicles*
U-turn Adjustment Factor	*Conversion of U-turning vehicles to equivalent through vehicles*
Truck to PCE Factor	*1 truck = X Passenger Car Equivalents*
Critical Lane Volume Sum Limit	*Saturation Value for Critical Lane Volume Sum at an intersection*

Capacity Analysis for Planning of Junctions

Step 2A: Base Conditions Analysis

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) AM Opening Year (2028)
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard/Long Boat Lane
Date	March 14, 2024
Major Street Direction	North-South

Existing Intersection Configuration	*Two-Way Stop Control*

Number of Lanes for Existing Configuration
(Can be edited in "3- Alt Num Lanes Input" as needed)

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Two-Way Stop Control	N-S		1	1	1		1	1	0		1	1	0		0	1	1

Results for Existing Configuration

TYPE OF	Sheet	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	

Overall v/c Ratio	0.50	Pedestrian Accommodation Score	2.89	Bicycle Accommodation Score	3.83

Step 2B: Alternative Selection

Rankings Inclusion		Yes/No	Comment
At-Grade Non-Roundabout Intersections?		Yes	
Traffic Signal		Yes	
Two-Way Stop Control		Yes	
All-Way Stop Control		Yes	
Continuous Green T		No	4-Leg Intersection
Quadrant Roadway	S-W	No	No Nearby Quadrant Roadway
	N-E	No	No Nearby Quadrant Roadway
	S-E	No	No Nearby Quadrant Roadway
	N-W	No	No Nearby Quadrant Roadway
Partial Displaced Left Turn		Yes	
Displaced Left Turn		Yes	
Signalized Restricted Crossing U-Turn		Yes	
Unsignalized Restricted Crossing U-Turn		Yes	
Median U-Turn		Yes	
Partial Median U-Turn		Yes	
Bowtie		Yes	
Signalized ThruCut		Yes	
Unsignalized ThruCut		Yes	
Roundabouts?		Yes	
50 ICD Miniroundabout		Yes	
75 ICD Miniroundabout		Yes	
1x1		Yes	
1NS x 2EW		No	1x1 Roundabout Only
2NS x 1EW		No	1x1 Roundabout Only
2x2		No	1x1 Roundabout Only
Ramp Terminal Intersections?		No	
Diamond			
Partial Cloverleaf A			
Partial Cloverleaf B			
Displaced Left Turn Interchange			
Diverging Diamond			
Single Point Diamond			

Continue to Step 3 Step 3

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) AM Opening Year (2028)
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard/Long Boat Lane
Date	March 14, 2024
Analysis Type	At-Grade Intersections and Interchanges

Number of Lanes for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		1	1	1		1	1	0		1	1	0		0	1	1
Two-Way Stop Control	N-S		1	1	1		1	1	0		1	1	0		0	1	1
All-Way Stop Control	FULL		1	1	1		1	1	0		1	1	0		0	1	1
Partial Displaced Left Turn	N-S		1	1	1		1	1	1		1	1	0		0	1	1
Displaced Left Turn	FULL		1	1	1		1	1	1		1	1	1		1	1	1
Signalized Restricted Crossing U-Turn	N-S	1	1	1	1	1	1	1	1				1				1
Unsignalized Restricted Crossing U-Turn	N-S	1	1	1	1	1	1	1	1				1				1
Median U-Turn	N-S	1		1	1	1		1	1			1	1			1	1
Partial Median U-Turn	N-S	1		1	1	1		1	1		1	1	0		0	1	1
Signalized ThruCut	N-S		1	1	1		1	1	0		1		1		1		1
Unsignalized ThruCut	N-S		1	1	1		1	1	0		1		1		1		1
Bowtie	N-S			1	1			1	1			1	1			1	1

For shared lanes, enter "0" in L or R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Number of Lanes for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) AM Opening Year (2028)
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard/Long Boat Lane
Date	March 14, 2024
Analysis Type	At-Grade Intersections and Interchanges

Volume Echo with Shared Lane Adjustment for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		3	481	92		67	442	0		5	9	0		0	103	132
Two-Way Stop Control	N-S		3	481	92		67	442	0		5	9	0		0	103	132
All-Way Stop Control	FULL		3	481	92		67	442	0		5	9	0		0	103	132
Partial Displaced Left Turn	N-S		3	481	92		67	439	3		5	9	0		0	103	132
Displaced Left Turn	FULL		3	481	92		67	439	3		5	1	8		101	2	132
Signalized Restricted Crossing U-Turn	N-S	0	3	481	92	0	67	439	3				8				132
Unsignalized Restricted Crossing U-Turn	N-S	0	3	481	92	0	67	439	3				8				132
Median U-Turn	N-S	0		481	92	0		439	3			1	8			2	132
Partial Median U-Turn	N-S	0		481	92	0		439	3		5	9	0		0	103	132
Signalized ThruCut	N-S		3	481	92		67	443	0		6		9		102		133
Unsignalized ThruCut	N-S		3	481	92		67	442	0		6		9		102		133
Bowtie	N-S		3	481	92		67	442	3			73	109			106	137

Capacity Analysis for Planning of Junctions

Results Worksheet

Project Name	Chuluota Road (CR 419) ICE Evaluation	***Estimated Volume-to-Capacity Ratio***			
Project Number	No-build (2-lane) AM Opening Year (2028)	**Number of Configurations**			
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard/Long Boat Lane	**< 0.750**	**0.750 - 0.875**	**0.875 - 1.00**	**≥ 1.00**
Date	March 14, 2024	**15**	**0**	**0**	**0**

Results for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Zone 1 (North)		Zone 2 (South)		Zone 3 (East)		Zone 4 (West)		Zone 5 (Center)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			
Traffic Signal	FULL									664	0.39	0.39	4.94	4.58
Two-Way Stop Control	N-S									--	0.50	0.50	2.89	3.83
All-Way Stop Control	FULL									1334	0.74	0.74	3.81	4.58
Partial Displaced Left Turn	N-S	557	*0.31*	551	*0.31*					589	0.34	0.34	2.92	3.25
Displaced Left Turn	FULL	557	*0.31*	543	*0.30*	174	*0.10*	10	*0.01*	587	0.33	0.33	3.06	3.25
Signalized Restricted Crossing U-Turn	N-S	638	*0.35*	584	*0.32*	762	*0.42*	556	*0.31*			0.42	3.06	4.25
Unsignalized Restricted Crossing U-Turn	N-S	509	*0.12*	576	*0.01*	486	*0.41*	540	*0.03*			0.41	2.72	3.16
Median U-Turn	N-S	639	*0.36*	666	*0.37*					780	0.43	0.43	3.08	4.58
Partial Median U-Turn	N-S	513	*0.28*	660	*0.37*					667	0.38	0.38	2.99	4.58
Bowtie	N-S	168	0.12	176	0.13	235	0.17	14	0.01	642	0.36	0.36	4.90	4.58
Signalized ThruCut	N-S									666	0.38	0.38	5.06	4.58
Unsignalized ThruCut	N-S									--	0.61	0.61	4.39	4.25

Capacity Analysis for Planning of Junctions

Results Worksheet

Results for Roundabouts

TYPE OF ROUNDABOUT	Zone 1 (North)			Zone 3 (East)			Zone 2 (South)			Zone 4 (West)			Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3			
50 ICD	*0.55*			*0.05*			*0.59*			*0.45*			0.59	5.36	4.62
75 ICD	*0.54*			*0.05*			*0.59*			*0.41*			0.59	5.36	4.62
1 X 1	*0.42*			*0.02*			*0.45*			*0.28*			0.45	5.36	4.62

Results for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Zone 1 (Rt Mrg)		Zone 2 (Lt Mrg)		Zone 3 (Ctr. 1)		Zone 4 (Ctr. 2)		Zone 5 (Lt Mrg)		Zone 6 (Rt Mrg)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			

TYPE OF INTERSECTION	Overall V/C Ratio	V/C Ranking	Pedestrian Accommodation Score	Bicycle Accommodation Score
Displaced Left Turn	0.33	1	3.06	3.25
Partial Displaced Left Turn N-S	0.34	2	2.92	3.25
Bowtie N-S	0.36	3	4.90	4.58
Partial Median U-Turn N-S	0.38	4	2.99	4.58
Signalized ThruCut N-S	0.38	4	5.06	4.58
Traffic Signal	0.39	6	4.94	4.58
Unsignalized Restricted Crossing U-Turn N-S	0.41	7	2.72	3.16
Signalized Restricted Crossing U-Turn N-S	0.42	8	3.06	4.25
Median U-Turn N-S	0.43	9	3.08	4.58
1 X 1	0.45	10	5.36	4.62

Capacity Analysis for Planning of Junctions

Input Worksheet 1

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) AM Interim Year (2038)
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard/Long Boat Lane
Date	March 14, 2024
Number of Legs	4
Major Street Direction	North-South

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	Left	Thru	Right	Heavy Vehicles	Volume Growth
Eastbound	0	5	1	9	3.48%	0.00%
Westbound	0	102	2	134	3.48%	0.00%
Southbound	0	68	530	3	3.48%	0.00%
Northbound	0	3	549	93	3.48%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor	**Suggested = 2.00**	2.00
FDOT Context Zone	**C3R-Suburban Residential**	
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Equivalent Passenger Car Volume

	Volume (Veh/hr)			
	U-Turn	Left	Thru	Right
Eastbound	0	5	1	9
Westbound	0	106	2	139
Southbound	0	70	548	3
Northbound	0	3	568	96

Notes:	
Left-Turn Adjustment Factor	*Conversion of left-turning vehicles to equivalent through vehicles*
Right-turn Adjustment Factor	*Conversion of right-turning vehicles to equivalent through vehicles*
U-turn Adjustment Factor	*Conversion of U-turning vehicles to equivalent through vehicles*
Truck to PCE Factor	*1 truck = X Passenger Car Equivalents*
Critical Lane Volume Sum Limit	*Saturation Value for Critical Lane Volume Sum at an intersection*

Capacity Analysis for Planning of Junctions

Step 2A: Base Conditions Analysis

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) AM Interim Year (2038)
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard/Long Boat Lane
Date	March 14, 2024
Major Street Direction	North-South

Existing Intersection Configuration	*Two-Way Stop Control*

Number of Lanes for Existing Configuration
(Can be edited in "3- Alt Num Lanes Input" as needed)

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Two-Way Stop Control	N-S		1	1	1		1	1	0		1	1	0		0	1	1

Results for Existing Configuration

TYPE OF	Sheet	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	

Overall v/c Ratio	0.70	Pedestrian Accommodation Score	2.89	Bicycle Accommodation Score	3.83

Step 2B: Alternative Selection

Rankings Inclusion		Yes/No	Comment
At-Grade Non-Roundabout Intersections?		Yes	
Traffic Signal		Yes	
Two-Way Stop Control		Yes	
All-Way Stop Control		Yes	
Continuous Green T		No	4-Leg Intersection
Quadrant Roadway	S-W	No	No Nearby Quadrant Roadway
	N-E	No	No Nearby Quadrant Roadway
	S-E	No	No Nearby Quadrant Roadway
	N-W	No	No Nearby Quadrant Roadway
Partial Displaced Left Turn		Yes	
Displaced Left Turn		Yes	
Signalized Restricted Crossing U-Turn		Yes	
Unsignalized Restricted Crossing U-Turn		Yes	
Median U-Turn		Yes	
Partial Median U-Turn		Yes	
Bowtie		Yes	
Signalized ThruCut		Yes	
Unsignalized ThruCut		Yes	
Roundabouts?		Yes	
50 ICD Miniroundabout		Yes	
75 ICD Miniroundabout		Yes	
1x1		Yes	
1NS x 2EW		No	1x1 Roundabout Only
2NS x 1EW		No	1x1 Roundabout Only
2x2		No	1x1 Roundabout Only
Ramp Terminal Intersections?		No	
Diamond			
Partial Cloverleaf A			
Partial Cloverleaf B			
Displaced Left Turn Interchange			
Diverging Diamond			
Single Point Diamond			

Continue to Step 3 Step 3

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) AM Interim Year (2038)
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard/Long Boat Lane
Date	March 14, 2024
Analysis Type	At-Grade Intersections and Interchanges

Number of Lanes for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		1	1	1		1	1	0		1	1	0		0	1	1
Two-Way Stop Control	N-S		1	1	1		1	1	0		1	1	0		0	1	1
All-Way Stop Control	FULL		1	1	1		1	1	0		1	1	0		0	1	1
Partial Displaced Left Turn	N-S		1	1	1		1	1	1		1	1	0		0	1	1
Displaced Left Turn	FULL		1	1	1		1	1	1		1	1	1		1	1	1
Signalized Restricted Crossing U-Turn	N-S	1	1	1	1	1	1	1	1				1				1
Unsignalized Restricted Crossing U-Turn	N-S	1	1	1	1	1	1	1	1				1				1
Median U-Turn	N-S	1		1	1		1	1				1	1			1	1
Partial Median U-Turn	N-S	1		1	1		1	1			1	1	0		0	1	1
Signalized ThruCut	N-S		1	1	1		1	1	0		1		1		1		1
Unsignalized ThruCut	N-S		1	1	1		1	1	0		1		1		1		1
Bowtie	N-S			1	1			1	1			1	1			1	1

For shared lanes, enter "0" in L or R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Number of Lanes for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) AM Interim Year (2038)
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard/Long Boat Lane
Date	March 14, 2024
Analysis Type	At-Grade Intersections and Interchanges

Volume Echo with Shared Lane Adjustment for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		3	568	96		70	551	0		5	10	0		0	108	139
Two-Way Stop Control	N-S		3	568	96		70	551	0		5	10	0		0	108	139
All-Way Stop Control	FULL		3	568	96		70	551	0		5	10	0		0	108	139
Partial Displaced Left Turn	N-S		3	568	96		70	548	3		5	10	0		0	108	139
Displaced Left Turn	FULL		3	568	96		70	548	3		5	1	9		106	2	139
Signalized Restricted Crossing U-Turn	N-S	0	3	568	96	0	70	548	3				9				139
Unsignalized Restricted Crossing U-Turn	N-S	0	3	568	96	0	70	548	3				9				139
Median U-Turn	N-S	0		568	96	0		548	3			1	9			2	139
Partial Median U-Turn	N-S	0		568	96	0		548	3		5	10	0		0	108	139
Signalized ThruCut	N-S		3	568	96		70	552	0		6		10		107		140
Unsignalized ThruCut	N-S		3	568	96		70	551	0		6		10		107		140
Bowtie	N-S		3	568	96		70	551	3			76	115			111	144

Capacity Analysis for Planning of Junctions

Results Worksheet

Project Name	Chuluota Road (CR 419) ICE Evaluation	***Estimated Volume-to-Capacity Ratio***			
Project Number	No-build (2-lane) AM Interim Year (2038)	**Number of Configurations**			
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard/Long Boat Lane	**< 0.750**	**0.750 - 0.875**	**0.875 - 1.00**	**≥ 1.00**
Date	March 14, 2024	**13**	**1**	**1**	**0**

Results for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Zone 1 (North)		Zone 2 (South)		Zone 3 (East)		Zone 4 (West)		Zone 5 (Center)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			
Traffic Signal	FULL									759	0.45	0.45	4.94	4.58
Two-Way Stop Control	N-S									--	0.70	0.70	2.89	3.83
All-Way Stop Control	FULL									1550	0.86	0.86	3.81	4.58
Partial Displaced Left Turn	N-S	647	*0.36*	666	*0.37*					681	0.39	0.39	2.92	3.25
Displaced Left Turn	FULL	647	*0.36*	657	*0.37*	183	*0.10*	10	*0.01*	680	0.38	0.38	3.06	3.25
Signalized Restricted Crossing U-Turn	N-S	756	*0.42*	675	*0.37*	864	*0.48*	672	*0.37*			0.48	3.06	4.25
Unsignalized Restricted Crossing U-Turn	N-S	621	*0.14*	667	*0.01*	573	*0.48*	654	*0.03*			0.48	2.72	3.16
Median U-Turn	N-S	757	*0.42*	761	*0.42*					906	0.50	0.50	3.08	4.58
Partial Median U-Turn	N-S	625	*0.35*	755	*0.42*					787	0.45	0.45	2.99	4.58
Bowtie	N-S	175	0.13	184	0.13	247	0.18	15	0.01	737	0.41	0.41	4.90	4.58
Signalized ThruCut	N-S									763	0.44	0.44	5.06	4.58
Unsignalized ThruCut	N-S									--	0.89	0.89	4.39	4.25

Capacity Analysis for Planning of Junctions

Results Worksheet

Results for Roundabouts

TYPE OF ROUNDABOUT	Zone 1 (North)			Zone 3 (East)			Zone 2 (South)			Zone 4 (West)			Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3			
50 ICD	*0.68*			*0.08*			*0.69*			*0.56*			0.69	5.36	4.62
75 ICD	*0.67*			*0.07*			*0.68*			*0.49*			0.68	5.36	4.62
1 X 1	*0.51*			*0.02*			*0.53*			*0.33*			0.53	5.36	4.62

Results for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Zone 1 (Rt Mrg)		Zone 2 (Lt Mrg)		Zone 3 (Ctr. 1)		Zone 4 (Ctr. 2)		Zone 5 (Lt Mrg)		Zone 6 (Rt Mrg)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			

TYPE OF INTERSECTION	Overall V/C Ratio	V/C Ranking	Pedestrian Accommodation Score	Bicycle Accommodation Score
Displaced Left Turn	0.38	1	3.06	3.25
Partial Displaced Left Turn N-S	0.39	2	2.92	3.25
Bowtie N-S	0.41	3	4.90	4.58
Signalized ThruCut N-S	0.44	4	5.06	4.58
Traffic Signal	0.45	5	4.94	4.58
Partial Median U-Turn N-S	0.45	5	2.99	4.58
Unsignalized Restricted Crossing U-Turn N-S	0.48	7	2.72	3.16
Signalized Restricted Crossing U-Turn N-S	0.48	8	3.06	4.25
Median U-Turn N-S	0.50	9	3.08	4.58
1 X 1	0.53	10	5.36	4.62

Capacity Analysis for Planning of Junctions

Input Worksheet 1

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) AM Design Year (2048)
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard/Long Boat Lane
Date	March 14, 2024
Number of Legs	4
Major Street Direction	North-South

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	Left	Thru	Right	Heavy Vehicles	Volume Growth
Eastbound	0	5	1	9	3.48%	0.00%
Westbound	0	107	2	139	3.48%	0.00%
Southbound	0	71	637	3	3.48%	0.00%
Northbound	0	3	632	97	3.48%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor	**Suggested = 2.00**	2.00
FDOT Context Zone	**C3R-Suburban Residential**	
Critical Lane Volume Threshold — 2-phase signal	**Suggested = 1800**	**1800**
Critical Lane Volume Threshold — 3-phase signal	**Suggested = 1750**	**1750**
Critical Lane Volume Threshold — 4-phase signal	**Suggested = 1700**	**1700**

Equivalent Passenger Car Volume

	Volume (Veh/hr)			
	U-Turn	Left	Thru	Right
Eastbound	0	5	1	9
Westbound	0	111	2	144
Southbound	0	73	659	3
Northbound	0	3	654	100

Notes:	
Left-Turn Adjustment Factor	*Conversion of left-turning vehicles to equivalent through vehicles*
Right-turn Adjustment Factor	*Conversion of right-turning vehicles to equivalent through vehicles*
U-turn Adjustment Factor	*Conversion of U-turning vehicles to equivalent through vehicles*
Truck to PCE Factor	*1 truck = X Passenger Car Equivalents*
Critical Lane Volume Sum Limit	*Saturation Value for Critical Lane Volume Sum at an intersection*

Capacity Analysis for Planning of Junctions

Step 2A: Base Conditions Analysis

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) AM Design Year (2048)
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard/Long Boat Lane
Date	March 14, 2024
Major Street Direction	North-South

Existing Intersection Configuration	*Two-Way Stop Control*

Number of Lanes for Existing Configuration
(Can be edited in "3- Alt Num Lanes Input" as needed)

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Two-Way Stop Control	N-S		1	1	1		1	1	0		1	1	0		0	1	1

Results for Existing Configuration

TYPE OF	Sheet	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	
Overall v/c Ratio	**1.11**	**Pedestrian Accommodation Score**		**2.89**	**Bicycle Accommodation Score**		**3.83**

Step 2B: Alternative Selection

Rankings Inclusion		Yes/No	Comment
At-Grade Non-Roundabout Intersections?		Yes	
Traffic Signal		Yes	
Two-Way Stop Control		Yes	
All-Way Stop Control		Yes	
Continuous Green T		No	4-Leg Intersection
Quadrant Roadway	S-W	No	No Nearby Quadrant Roadway
	N-E	No	No Nearby Quadrant Roadway
	S-E	No	No Nearby Quadrant Roadway
	N-W	No	No Nearby Quadrant Roadway
Partial Displaced Left Turn		Yes	
Displaced Left Turn		Yes	
Signalized Restricted Crossing U-Turn		Yes	
Unsignalized Restricted Crossing U-Turn		Yes	
Median U-Turn		Yes	
Partial Median U-Turn		Yes	
Bowtie		Yes	
Signalized ThruCut		Yes	
Unsignalized ThruCut		Yes	
Roundabouts?		Yes	
50 ICD Miniroundabout		Yes	
75 ICD Miniroundabout		Yes	
1x1		Yes	
1NS x 2EW		No	1x1 Roundabout Only
2NS x 1EW		No	1x1 Roundabout Only
2x2		No	1x1 Roundabout Only
Ramp Terminal Intersections?		No	
Diamond			
Partial Cloverleaf A			
Partial Cloverleaf B			
Displaced Left Turn Interchange			
Diverging Diamond			
Single Point Diamond			

Continue to Step 3 → **Step 3**

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) AM Design Year (2048)
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard/Long Boat Lane
Date	March 14, 2024
Analysis Type	At-Grade Intersections and Interchanges

Number of Lanes for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		1	1	1		1	1	0		1	1	0		0	1	1
Two-Way Stop Control	N-S		1	1	1		1	1	0		1	1	0		0	1	1
All-Way Stop Control	FULL		1	1	1		1	1	0		1	1	0		0	1	1
Partial Displaced Left Turn	N-S		1	1	1		1	1	1		1	1	0		0	1	1
Displaced Left Turn	FULL		1	1	1		1	1	1		1	1	1		1	1	1
Signalized Restricted Crossing U-Turn	N-S	1	1	1	1	1	1	1	1				1				1
Unsignalized Restricted Crossing U-Turn	N-S	1	1	1	1	1	1	1	1				1				1
Median U-Turn	N-S	1		1	1	1		1	1			1	1			1	1
Partial Median U-Turn	N-S	1		1	1	1		1	1		1	1	0		0	1	1
Signalized ThruCut	N-S		1	1	1		1	1	0		1		1		1		1
Unsignalized ThruCut	N-S		1	1	1		1	1	0		1		1		1		1
Bowtie	N-S			1	1			1	1			1	1			1	1

For shared lanes, enter "0" in L or R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Number of Lanes for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) AM Design Year (2048)
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard/Long Boat Lane
Date	March 14, 2024
Analysis Type	At-Grade Intersections and Interchanges

Volume Echo with Shared Lane Adjustment for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		3	654	100		73	662	0		5	10	0		0	113	144
Two-Way Stop Control	N-S		3	654	100		73	662	0		5	10	0		0	113	144
All-Way Stop Control	FULL		3	654	100		73	662	0		5	10	0		0	113	144
Partial Displaced Left Turn	N-S		3	654	100		73	659	3		5	10	0		0	113	144
Displaced Left Turn	FULL		3	654	100		73	659	3		5	1	9		111	2	144
Signalized Restricted Crossing U-Turn	N-S	0	3	654	100	0	73	659	3				9				144
Unsignalized Restricted Crossing U-Turn	N-S	0	3	654	100	0	73	659	3				9				144
Median U-Turn	N-S	0		654	100	0		659	3			1	9			2	144
Partial Median U-Turn	N-S	0		654	100	0		659	3		5	10	0		0	113	144
Signalized ThruCut	N-S		3	654	100		73	663	0		6		10		112		145
Unsignalized ThruCut	N-S		3	654	100		73	662	0		6		10		112		145
Bowtie	N-S		3	654	100		73	662	3			79	120			116	149

Capacity Analysis for Planning of Junctions

Results Worksheet

Project Name	Chuluota Road (CR 419) ICE Evaluation	***Estimated Volume-to-Capacity Ratio***			
Project Number	No-build (2-lane) AM Design Year (2048)	**Number of Configurations**			
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard/Long Boat Lane	**< 0.750**	**0.750 - 0.875**	**0.875 - 1.00**	**≥ 1.00**
Date	March 14, 2024	**10**	**2**	**1**	**2**

Results for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Zone 1 (North)		Zone 2 (South)		Zone 3 (East)		Zone 4 (West)		Zone 5 (Center)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			
Traffic Signal	FULL									853	0.50	0.50	4.94	4.58
Two-Way Stop Control	N-S									--	1.11	1.11	2.89	3.83
All-Way Stop Control	FULL									1764	0.98	0.98	3.81	4.58
Partial Displaced Left Turn	N-S	736	*0.41*	782	*0.43*					777	0.44	0.44	2.92	3.25
Displaced Left Turn	FULL	736	*0.41*	773	*0.43*	191	*0.11*	10	*0.01*	776	0.43	0.43	3.06	3.25
Signalized Restricted Crossing U-Turn	N-S	876	*0.49*	765	*0.42*	961	*0.53*	788	*0.44*			0.53	3.06	4.25
Unsignalized Restricted Crossing U-Turn	N-S	735	*0.16*	757	*0.01*	659	*0.56*	770	*0.04*			0.56	2.72	3.16
Median U-Turn	N-S	878	*0.49*	855	*0.47*					1032	0.57	0.57	3.08	4.58
Partial Median U-Turn	N-S	739	*0.41*	848	*0.47*					907	0.52	0.52	2.99	4.58
Bowtie	N-S	182	0.13	192	0.14	257	0.19	15	0.01	837	0.47	0.47	4.90	4.58
Signalized ThruCut	N-S									857	0.49	0.49	5.06	4.58
Unsignalized ThruCut	N-S									--	1.32	1.32	4.39	4.25

Capacity Analysis for Planning of Junctions

Results Worksheet

Results for Roundabouts

TYPE OF ROUNDABOUT	Zone 1 (North)			Zone 3 (East)			Zone 2 (South)			Zone 4 (West)			Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3			
50 ICD	0.81			0.13			0.79			0.73			0.81	5.36	4.62
75 ICD	0.79			0.11			0.78			0.61			0.79	5.36	4.62
1 X 1	0.61			0.03			0.60			0.37			0.61	5.36	4.62

Results for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Zone 1 (Rt Mrg)		Zone 2 (Lt Mrg)		Zone 3 (Ctr. 1)		Zone 4 (Ctr. 2)		Zone 5 (Lt Mrg)		Zone 6 (Rt Mrg)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			

TYPE OF INTERSECTION	Overall V/C Ratio	V/C Ranking	Pedestrian Accommodation Score	Bicycle Accommodation Score
Displaced Left Turn	0.43	1	3.06	3.25
Partial Displaced Left Turn N-S	0.44	2	2.92	3.25
Bowtie N-S	0.47	3	4.90	4.58
Signalized ThruCut N-S	0.49	4	5.06	4.58
Traffic Signal	0.50	5	4.94	4.58
Partial Median U-Turn N-S	0.52	6	2.99	4.58
Signalized Restricted Crossing U-Turn N-S	0.53	7	3.06	4.25
Unsignalized Restricted Crossing U-Turn N-S	0.56	8	2.72	3.16
Median U-Turn N-S	0.57	9	3.08	4.58
1 X 1	0.61	10	5.36	4.62

Capacity Analysis for Planning of Junctions

Input Worksheet 1

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) PM Opening Year (2028)
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard/Long Boat Lane
Date	March 14, 2024
Number of Legs	4
Major Street Direction	North-South

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	Left	Thru	Right	Heavy Vehicles	Volume Growth
Eastbound	0	4	0	2	3.48%	0.00%
Westbound	0	68	0	63	3.48%	0.00%
Southbound	0	71	578	4	3.48%	0.00%
Northbound	0	5	472	78	3.48%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone		**C3R-Suburban Residential**	
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Equivalent Passenger Car Volume

	Volume (Veh/hr)			
	U-Turn	Left	Thru	Right
Eastbound	0	4	0	2
Westbound	0	70	0	65
Southbound	0	73	598	4
Northbound	0	5	488	81

Notes:	
Left-Turn Adjustment Factor	*Conversion of left-turning vehicles to equivalent through vehicles*
Right-turn Adjustment Factor	*Conversion of right-turning vehicles to equivalent through vehicles*
U-turn Adjustment Factor	*Conversion of U-turning vehicles to equivalent through vehicles*
Truck to PCE Factor	*1 truck = X Passenger Car Equivalents*
Critical Lane Volume Sum Limit	*Saturation Value for Critical Lane Volume Sum at an intersection*

Capacity Analysis for Planning of Junctions

Step 2A: Base Conditions Analysis

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) PM Opening Year (2028)
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard/Long Boat Lane
Date	March 14, 2024
Major Street Direction	North-South

Existing Intersection Configuration	*Two-Way Stop Control*

Number of Lanes for Existing Configuration
(Can be edited in "3- Alt Num Lanes Input" as needed)

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Two-Way Stop Control	N-S		1	1	1		1	1	0		1	1	0		0	1	1

Results for Existing Configuration

TYPE OF	Sheet	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	

Overall v/c Ratio	0.44	Pedestrian Accommodation Score	2.89	Bicycle Accommodation Score	3.83

Step 2B: Alternative Selection

Rankings Inclusion		Yes/No	Comment
At-Grade Non-Roundabout Intersections?		Yes	
Traffic Signal		Yes	
Two-Way Stop Control		Yes	
All-Way Stop Control		Yes	
Continuous Green T		No	4-Leg Intersection
Quadrant Roadway	S-W	No	No Nearby Quadrant Roadway
	N-E	No	No Nearby Quadrant Roadway
	S-E	No	No Nearby Quadrant Roadway
	N-W	No	No Nearby Quadrant Roadway
Partial Displaced Left Turn		Yes	
Displaced Left Turn		Yes	
Signalized Restricted Crossing U-Turn		Yes	
Unsignalized Restricted Crossing U-Turn		Yes	
Median U-Turn		Yes	
Partial Median U-Turn		Yes	
Bowtie		Yes	
Signalized ThruCut		Yes	
Unsignalized ThruCut		Yes	
Roundabouts?		Yes	
50 ICD Miniroundabout		Yes	
75 ICD Miniroundabout		Yes	
1x1		Yes	
1NS x 2EW		No	1x1 Roundabout Only
2NS x 1EW		No	1x1 Roundabout Only
2x2		No	1x1 Roundabout Only
Ramp Terminal Intersections?		No	
Diamond			
Partial Cloverleaf A			
Partial Cloverleaf B			
Displaced Left Turn Interchange			
Diverging Diamond			
Single Point Diamond			

Continue to Step 3 Step 3

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) PM Opening Year (2028)
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard/Long Boat Lane
Date	March 14, 2024
Analysis Type	At-Grade Intersections and Interchanges

Number of Lanes for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		1	1	1		1	1	0		1	1	0		0	1	1
Two-Way Stop Control	N-S		1	1	1		1	1	0		1	1	0		0	1	1
All-Way Stop Control	FULL		1	1	1		1	1	0		1	1	0		0	1	1
Partial Displaced Left Turn	N-S		1	1	1		1	1	1		1	1	0		0	1	1
Displaced Left Turn	FULL		1	1	1		1	1	1		1	1	1		1	1	1
Signalized Restricted Crossing U-Turn	N-S	1	1	1	1	1	1	1	1				1				1
Unsignalized Restricted Crossing U-Turn	N-S	1	1	1	1	1	1	1	1				1				1
Median U-Turn	N-S	1		1	1	1		1	1			1	1			1	1
Partial Median U-Turn	N-S	1		1	1	1		1	1		1	1	0		0	1	1
Signalized ThruCut	N-S		1	1	1		1	1	0		1		1		1		1
Unsignalized ThruCut	N-S		1	1	1		1	1	0		1		1		1		1
Bowtie	N-S			1	1			1	1			1	1			1	1

For shared lanes, enter "0" in L or R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Number of Lanes for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) PM Opening Year (2028)
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard/Long Boat Lane
Date	March 14, 2024
Analysis Type	At-Grade Intersections and Interchanges

Volume Echo with Shared Lane Adjustment for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		5	488	81		73	602	0		4	2	0		0	70	65
Two-Way Stop Control	N-S		5	488	81		73	602	0		4	2	0		0	70	65
All-Way Stop Control	FULL		5	488	81		73	602	0		4	2	0		0	70	65
Partial Displaced Left Turn	N-S		5	488	81		73	598	4		4	2	0		0	70	65
Displaced Left Turn	FULL		5	488	81		73	598	4		4	0	2		70	0	65
Signalized Restricted Crossing U-Turn	N-S	0	5	488	81	0	73	598	4				2				65
Unsignalized Restricted Crossing U-Turn	N-S	0	5	488	81	0	73	598	4				2				65
Median U-Turn	N-S	0		488	81	0		598	4			0	2			0	65
Partial Median U-Turn	N-S	0		488	81	0		598	4		4	2	0		0	70	65
Signalized ThruCut	N-S		5	488	81		73	603	0		4		2		70		65
Unsignalized ThruCut	N-S		5	488	81		73	602	0		4		2		70		65
Bowtie	N-S		5	488	81		73	602	4			77	72			75	69

Capacity Analysis for Planning of Junctions

Results Worksheet

		Estimated Volume-to-Capacity Ratio			
Project Name	Chuluota Road (CR 419) ICE Evaluation	**Number of Configurations**			
Project Number	No-build (2-lane) PM Opening Year (2028)	**< 0.750**	**0.750 - 0.875**	**0.875 - 1.00**	**≥ 1.00**
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard/Long Boat Lane	**14**	**1**	**0**	**0**
Date	March 14, 2024				

Results for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Zone 1 (North)		Zone 2 (South)		Zone 3 (East)		Zone 4 (West)		Zone 5 (Center)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			
Traffic Signal	FULL									682	0.40	0.40	4.94	4.58
Two-Way Stop Control	N-S									--	0.44	0.44	2.89	3.83
All-Way Stop Control	FULL									1390	0.77	0.77	3.81	4.58
Partial Displaced Left Turn	N-S	569	*0.32*	675	*0.38*					672	0.38	0.38	2.92	3.25
Displaced Left Turn	FULL	569	*0.32*	673	*0.37*	147	*0.08*	9	*0.01*	672	0.37	0.37	3.06	3.25
Signalized Restricted Crossing U-Turn	N-S	763	*0.42*	579	*0.32*	651	*0.36*	675	*0.38*			0.42	3.06	4.25
Unsignalized Restricted Crossing U-Turn	N-S	675	*0.09*	574	*0.00*	492	*0.24*	668	*0.01*			0.24	2.74	3.16
Median U-Turn	N-S	769	*0.43*	670	*0.37*					830	0.46	0.46	3.10	4.58
Partial Median U-Turn	N-S	681	*0.38*	665	*0.37*					752	0.43	0.43	2.99	4.58
Bowtie	N-S	163	0.12	152	0.11	135	0.10	6	0.01	687	0.38	0.38	4.90	4.58
Signalized ThruCut	N-S									682	0.39	0.39	5.06	4.58
Unsignalized ThruCut	N-S									--	0.55	0.55	4.42	4.25

Capacity Analysis for Planning of Junctions

Results Worksheet

Results for Roundabouts

TYPE OF ROUNDABOUT	Zone 1 (North)			Zone 3 (East)			Zone 2 (South)			Zone 4 (West)			Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3			
50 ICD	*0.71*			*0.05*			*0.60*			*0.26*			0.71	5.39	4.62
75 ICD	*0.70*			*0.05*			*0.59*			*0.24*			0.70	5.39	4.62
1 X 1	*0.53*			*0.01*			*0.45*			*0.16*			0.53	5.39	4.62

Results for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Zone 1 (Rt Mrg)		Zone 2 (Lt Mrg)		Zone 3 (Ctr. 1)		Zone 4 (Ctr. 2)		Zone 5 (Lt Mrg)		Zone 6 (Rt Mrg)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			

TYPE OF INTERSECTION	Overall V/C Ratio	V/C Ranking	Pedestrian Accommodation Score	Bicycle Accommodation Score
Unsignalized Restricted Crossing U-Turn N-S	0.24	1	2.74	3.16
Displaced Left Turn	0.37	2	3.06	3.25
Partial Displaced Left Turn N-S	0.38	3	2.92	3.25
Bowtie N-S	0.38	3	4.90	4.58
Signalized ThruCut N-S	0.39	5	5.06	4.58
Traffic Signal	0.40	6	4.94	4.58
Signalized Restricted Crossing U-Turn N-S	0.42	7	3.06	4.25
Partial Median U-Turn N-S	0.43	8	2.99	4.58
Two-Way Stop Control N-S	0.44	9	2.89	3.83
Median U-Turn N-S	0.46	10	3.10	4.58

Capacity Analysis for Planning of Junctions

Input Worksheet 1

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) PM Interim Year (2038)
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard/Long Boat Lane
Date	March 14, 2024
Number of Legs	4
Major Street Direction	North-South

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	Left	Thru	Right	Heavy Vehicles	Volume Growth
Eastbound	0	4	0	2	3.48%	0.00%
Westbound	0	71	0	66	3.48%	0.00%
Southbound	0	74	699	4	3.48%	0.00%
Northbound	0	5	566	82	3.48%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone		**C3R-Suburban Residential**	
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Equivalent Passenger Car Volume

	Volume (Veh/hr)			
	U-Turn	Left	Thru	Right
Eastbound	0	4	0	2
Westbound	0	73	0	68
Southbound	0	77	723	4
Northbound	0	5	586	85

Notes:	
Left-Turn Adjustment Factor	*Conversion of left-turning vehicles to equivalent through vehicles*
Right-turn Adjustment Factor	*Conversion of right-turning vehicles to equivalent through vehicles*
U-turn Adjustment Factor	*Conversion of U-turning vehicles to equivalent through vehicles*
Truck to PCE Factor	*1 truck = X Passenger Car Equivalents*
Critical Lane Volume Sum Limit	*Saturation Value for Critical Lane Volume Sum at an intersection*

Capacity Analysis for Planning of Junctions

Step 2A: Base Conditions Analysis

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) PM Interim Year (2038)
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard/Long Boat Lane
Date	March 14, 2024
Major Street Direction	North-South

Existing Intersection Configuration	*Two-Way Stop Control*

Number of Lanes for Existing Configuration
(Can be edited in "3- Alt Num Lanes Input" as needed)

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Two-Way Stop Control	N-S		1	1	1		1	1	0		1	1	0		0	1	1

Results for Existing Configuration

TYPE OF	Sheet	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	

Overall v/c Ratio	0.64	Pedestrian Accommodation Score	2.89	Bicycle Accommodation Score	3.83

Step 2B: Alternative Selection

Rankings Inclusion		Yes/No	Comment
At-Grade Non-Roundabout Intersections?		Yes	
Traffic Signal		Yes	
Two-Way Stop Control		Yes	
All-Way Stop Control		Yes	
Continuous Green T		No	4-Leg Intersection
Quadrant Roadway	S-W	No	No Nearby Quadrant Roadway
	N-E	No	No Nearby Quadrant Roadway
	S-E	No	No Nearby Quadrant Roadway
	N-W	No	No Nearby Quadrant Roadway
Partial Displaced Left Turn		Yes	
Displaced Left Turn		Yes	
Signalized Restricted Crossing U-Turn		Yes	
Unsignalized Restricted Crossing U-Turn		Yes	
Median U-Turn		Yes	
Partial Median U-Turn		Yes	
Bowtie		Yes	
Signalized ThruCut		Yes	
Unsignalized ThruCut		Yes	
Roundabouts?		Yes	
50 ICD Miniroundabout		Yes	
75 ICD Miniroundabout		Yes	
1x1		Yes	
1NS x 2EW		No	1x1 Roundabout Only
2NS x 1EW		No	1x1 Roundabout Only
2x2		No	1x1 Roundabout Only
Ramp Terminal Intersections?		No	
Diamond			
Partial Cloverleaf A			
Partial Cloverleaf B			
Displaced Left Turn Interchange			
Diverging Diamond			
Single Point Diamond			

Continue to Step 3 Step 3

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) PM Interim Year (2038)
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard/Long Boat Lane
Date	March 14, 2024
Analysis Type	At-Grade Intersections and Interchanges

Number of Lanes for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		1	1	1		1	1	0		1	1	0		0	1	1
Two-Way Stop Control	N-S		1	1	1		1	1	0		1	1	0		0	1	1
All-Way Stop Control	FULL		1	1	1		1	1	0		1	1	0		0	1	1
Partial Displaced Left Turn	N-S		1	1	1		1	1	1		1	1	0		0	1	1
Displaced Left Turn	FULL		1	1	1		1	1	1		1	1	1		1	1	1
Signalized Restricted Crossing U-Turn	N-S	1	1	1	1	1	1	1	1				1				1
Unsignalized Restricted Crossing U-Turn	N-S	1	1	1	1	1	1	1	1				1				1
Median U-Turn	N-S	1		1	1	1		1	1			1	1			1	1
Partial Median U-Turn	N-S	1		1	1	1		1	1		1	1	0		0	1	1
Signalized ThruCut	N-S		1	1	1		1	1	0		1		1		1		1
Unsignalized ThruCut	N-S		1	1	1		1	1	0		1		1		1		1
Bowtie	N-S			1	1			1	1			1	1			1	1

For shared lanes, enter "0" in L or R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Number of Lanes for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) PM Interim Year (2038)
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard/Long Boat Lane
Date	March 14, 2024
Analysis Type	At-Grade Intersections and Interchanges

Volume Echo with Shared Lane Adjustment for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		5	586	85		77	727	0		4	2	0		0	73	68
Two-Way Stop Control	N-S		5	586	85		77	727	0		4	2	0		0	73	68
All-Way Stop Control	FULL		5	586	85		77	727	0		4	2	0		0	73	68
Partial Displaced Left Turn	N-S		5	586	85		77	723	4		4	2	0		0	73	68
Displaced Left Turn	FULL		5	586	85		77	723	4		4	0	2		73	0	68
Signalized Restricted Crossing U-Turn	N-S	0	5	586	85	0	77	723	4				2				68
Unsignalized Restricted Crossing U-Turn	N-S	0	5	586	85	0	77	723	4				2				68
Median U-Turn	N-S	0		586	85	0		723	4			0	2			0	68
Partial Median U-Turn	N-S	0		586	85	0		723	4		4	2	0		0	73	68
Signalized ThruCut	N-S		5	586	85		77	728	0		4		2		73		68
Unsignalized ThruCut	N-S		5	586	85		77	727	0		4		2		73		68
Bowtie	N-S		5	586	85		77	727	4			81	75			78	72

Capacity Analysis for Planning of Junctions

Results Worksheet

Project Name	Chuluota Road (CR 419) ICE Evaluation	***Estimated Volume-to-Capacity Ratio***			
Project Number	No-build (2-lane) PM Interim Year (2038)	**Number of Configurations**			
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard/Long Boat Lane	**< 0.750**	**0.750 - 0.875**	**0.875 - 1.00**	**≥ 1.00**
Date	March 14, 2024	**11**	**3**	**1**	**0**

Results for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Zone 1 (North)		Zone 2 (South)		Zone 3 (East)		Zone 4 (West)		Zone 5 (Center)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			
Traffic Signal	FULL									810	0.48	0.48	4.94	4.58
Two-Way Stop Control	N-S									--	0.64	0.64	2.89	3.83
All-Way Stop Control	FULL									1627	0.90	0.90	3.81	4.58
Partial Displaced Left Turn	N-S	671	0.37	803	0.45					800	0.46	0.46	2.92	3.25
Displaced Left Turn	FULL	671	0.37	801	0.45	154	0.09	9	0.01	800	0.44	0.45	3.06	3.25
Signalized Restricted Crossing U-Turn	N-S	895	0.50	681	0.38	756	0.42	803	0.45			0.50	3.06	4.25
Unsignalized Restricted Crossing U-Turn	N-S	804	0.11	676	0.01	590	0.28	796	0.02			0.28	2.74	3.16
Median U-Turn	N-S	902	0.50	777	0.43					966	0.54	0.54	3.10	4.58
Partial Median U-Turn	N-S	810	0.45	772	0.43					884	0.51	0.51	2.99	4.58
Bowtie	N-S	171	0.12	159	0.12	141	0.10	6	0.01	815	0.45	0.45	4.90	4.58
Signalized ThruCut	N-S									810	0.46	0.46	5.06	4.58
Unsignalized ThruCut	N-S									--	0.84	0.84	4.39	4.25

Capacity Analysis for Planning of Junctions

Results Worksheet

Results for Roundabouts

TYPE OF ROUNDABOUT	Zone 1 (North)			Zone 3 (East)			Zone 2 (South)			Zone 4 (West)			Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3			
50 ICD	0.85			*0.10*			*0.70*			*0.34*			0.85	5.39	4.62
75 ICD	0.84			*0.08*			*0.69*			*0.30*			0.84	5.39	4.62
1 X 1	*0.64*			*0.01*			*0.54*			*0.19*			0.64	5.39	4.62

Results for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Zone 1 (Rt Mrg)		Zone 2 (Lt Mrg)		Zone 3 (Ctr. 1)		Zone 4 (Ctr. 2)		Zone 5 (Lt Mrg)		Zone 6 (Rt Mrg)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			

TYPE OF INTERSECTION	Overall V/C Ratio	V/C Ranking	Pedestrian Accommodation Score	Bicycle Accommodation Score
Unsignalized Restricted Crossing U-Turn N-S	0.28	1	2.74	3.16
Displaced Left Turn	0.45	2	3.06	3.25
Bowtie N-S	0.45	2	4.90	4.58
Partial Displaced Left Turn N-S	0.46	4	2.92	3.25
Signalized ThruCut N-S	0.46	4	5.06	4.58
Traffic Signal	0.48	6	4.94	4.58
Signalized Restricted Crossing U-Turn N-S	0.50	7	3.06	4.25
Partial Median U-Turn N-S	0.51	8	2.99	4.58
Median U-Turn N-S	0.54	9	3.10	4.58
1 X 1	0.64	10	5.39	4.62

Capacity Analysis for Planning of Junctions

Input Worksheet 1

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) PM Design Year (2048)
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard/Long Boat Lane
Date	March 14, 2024
Number of Legs	4
Major Street Direction	North-South

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	Left	Thru	Right	Heavy Vehicles	Volume Growth
Eastbound	0	4	0	2	3.48%	0.00%
Westbound	0	74	0	68	3.48%	0.00%
Southbound	0	77	819	4	3.48%	0.00%
Northbound	0	5	660	85	3.48%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone		**C3R-Suburban Residential**	
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Equivalent Passenger Car Volume

	Volume (Veh/hr)			
	U-Turn	Left	Thru	Right
Eastbound	0	4	0	2
Westbound	0	77	0	70
Southbound	0	80	848	4
Northbound	0	5	683	88

Notes:	
Left-Turn Adjustment Factor	*Conversion of left-turning vehicles to equivalent through vehicles*
Right-turn Adjustment Factor	*Conversion of right-turning vehicles to equivalent through vehicles*
U-turn Adjustment Factor	*Conversion of U-turning vehicles to equivalent through vehicles*
Truck to PCE Factor	*1 truck = X Passenger Car Equivalents*
Critical Lane Volume Sum Limit	*Saturation Value for Critical Lane Volume Sum at an intersection*

Capacity Analysis for Planning of Junctions

Step 2A: Base Conditions Analysis

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) PM Design Year (2048)
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard/Long Boat Lane
Date	March 14, 2024
Major Street Direction	North-South

Existing Intersection Configuration	*Two-Way Stop Control*

Number of Lanes for Existing Configuration
(Can be edited in "3- Alt Num Lanes Input" as needed)

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Two-Way Stop Control	N-S		1	1	1		1	1	0		1	1	0		0	1	1

Results for Existing Configuration

TYPE OF	Sheet	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	

Overall v/c Ratio	0.95	Pedestrian Accommodation Score	2.89	Bicycle Accommodation Score	3.83

Step 2B: Alternative Selection

Rankings Inclusion		Yes/No	Comment
At-Grade Non-Roundabout Intersections?		Yes	
Traffic Signal		Yes	
Two-Way Stop Control		Yes	
All-Way Stop Control		Yes	
Continuous Green T		No	4-Leg Intersection
Quadrant Roadway	S-W	No	No Nearby Quadrant Roadway
	N-E	No	No Nearby Quadrant Roadway
	S-E	No	No Nearby Quadrant Roadway
	N-W	No	No Nearby Quadrant Roadway
Partial Displaced Left Turn		Yes	
Displaced Left Turn		Yes	
Signalized Restricted Crossing U-Turn		Yes	
Unsignalized Restricted Crossing U-Turn		Yes	
Median U-Turn		Yes	
Partial Median U-Turn		Yes	
Bowtie		Yes	
Signalized ThruCut		Yes	
Unsignalized ThruCut		Yes	
Roundabouts?		Yes	
50 ICD Miniroundabout		Yes	
75 ICD Miniroundabout		Yes	
1x1		Yes	
1NS x 2EW		No	1x1 Roundabout Only
2NS x 1EW		No	1x1 Roundabout Only
2x2		No	1x1 Roundabout Only
Ramp Terminal Intersections?		No	
Diamond			
Partial Cloverleaf A			
Partial Cloverleaf B			
Displaced Left Turn Interchange			
Diverging Diamond			
Single Point Diamond			

Continue to Step 3 Step 3

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) PM Design Year (2048)
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard/Long Boat Lane
Date	March 14, 2024
Analysis Type	At-Grade Intersections and Interchanges

Number of Lanes for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		1	1	1		1	1	0		1	1	0		0	1	1
Two-Way Stop Control	N-S		1	1	1		1	1	0		1	1	0		0	1	1
All-Way Stop Control	FULL		1	1	1		1	1	0		1	1	0		0	1	1
Partial Displaced Left Turn	N-S		1	1	1		1	1	1		1	1	0		0	1	1
Displaced Left Turn	FULL		1	1	1		1	1	1		1	1	1		1	1	1
Signalized Restricted Crossing U-Turn	N-S	1	1	1	1	1	1	1	1				1				1
Unsignalized Restricted Crossing U-Turn	N-S	1	1	1	1	1	1	1	1				1				1
Median U-Turn	N-S	1		1	1		1	1				1	1			1	1
Partial Median U-Turn	N-S	1		1	1		1	1			1	1	0		0	1	1
Signalized ThruCut	N-S		1	1	1		1	1	0		1		1		1		1
Unsignalized ThruCut	N-S		1	1	1		1	1	0		1		1		1		1
Bowtie	N-S			1	1			1	1			1	1			1	1

For shared lanes, enter "0" in L or R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Number of Lanes for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) PM Design Year (2048)
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard/Long Boat Lane
Date	March 14, 2024
Analysis Type	At-Grade Intersections and Interchanges

Volume Echo with Shared Lane Adjustment for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		5	683	88		80	852	0		4	2	0		0	77	70
Two-Way Stop Control	N-S		5	683	88		80	852	0		4	2	0		0	77	70
All-Way Stop Control	FULL		5	683	88		80	852	0		4	2	0		0	77	70
Partial Displaced Left Turn	N-S		5	683	88		80	848	4		4	2	0		0	77	70
Displaced Left Turn	FULL		5	683	88		80	848	4		4	0	2		77	0	70
Signalized Restricted Crossing U-Turn	N-S	0	5	683	88	0	80	848	4				2				70
Unsignalized Restricted Crossing U-Turn	N-S	0	5	683	88	0	80	848	4				2				70
Median U-Turn	N-S	0		683	88	0		848	4			0	2			0	70
Partial Median U-Turn	N-S	0		683	88	0		848	4		4	2	0		0	77	70
Signalized ThruCut	N-S		5	683	88		80	853	0		4		2		77		70
Unsignalized ThruCut	N-S		5	683	88		80	852	0		4		2		77		70
Bowtie	N-S		5	683	88		80	852	4			84	79			82	74

Capacity Analysis for Planning of Junctions

Results Worksheet

Project Name	Chuluota Road (CR 419) ICE Evaluation	***Estimated Volume-to-Capacity Ratio***			
Project Number	No-build (2-lane) PM Design Year (2048)	**Number of Configurations**			
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard/Long Boat Lane	**< 0.750**	**0.750 - 0.875**	**0.875 - 1.00**	**≥ 1.00**
Date	March 14, 2024	**10**	**0**	**3**	**2**

Results for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Zone 1 (North)		Zone 2 (South)		Zone 3 (East)		Zone 4 (West)		Zone 5 (Center)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			
Traffic Signal	FULL									939	0.55	0.55	4.94	4.58
Two-Way Stop Control	N-S									--	0.95	0.95	2.89	3.83
All-Way Stop Control	FULL									1861	1.03	1.03	3.81	4.58
Partial Displaced Left Turn	N-S	771	*0.43*	932	*0.52*					929	0.53	0.53	2.92	3.25
Displaced Left Turn	FULL	771	*0.43*	930	*0.52*	161	*0.09*	9	*0.01*	929	0.52	0.52	3.06	3.25
Signalized Restricted Crossing U-Turn	N-S	1028	*0.57*	781	*0.43*	860	*0.48*	932	*0.52*			0.57	3.06	4.25
Unsignalized Restricted Crossing U-Turn	N-S	932	*0.13*	776	*0.01*	687	*0.33*	925	*0.02*			0.33	2.74	3.16
Median U-Turn	N-S	1035	*0.57*	881	*0.49*					1101	0.61	0.61	3.10	4.58
Partial Median U-Turn	N-S	938	*0.52*	876	*0.49*					1015	0.58	0.58	2.99	4.58
Bowtie	N-S	177	0.13	166	0.12	147	0.11	6	0.01	945	0.53	0.53	4.90	4.58
Signalized ThruCut	N-S									939	0.54	0.54	5.06	4.58
Unsignalized ThruCut	N-S									--	1.31	1.31	4.39	4.25

Capacity Analysis for Planning of Junctions

Results Worksheet

Results for Roundabouts

TYPE OF ROUNDABOUT	Zone 1 (North)			Zone 3 (East)			Zone 2 (South)			Zone 4 (West)			Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3			
50 ICD	0.98			0.77			0.81			*0.46*			0.98	5.39	4.62
75 ICD	0.97			*0.18*			0.80			*0.38*			0.97	5.39	4.62
1 X 1	*0.74*			*0.01*			*0.62*			*0.22*			0.74	5.39	4.62

Results for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Zone 1 (Rt Mrg)		Zone 2 (Lt Mrg)		Zone 3 (Ctr. 1)		Zone 4 (Ctr. 2)		Zone 5 (Lt Mrg)		Zone 6 (Rt Mrg)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			

TYPE OF INTERSECTION	Overall V/C Ratio	V/C Ranking	Pedestrian Accommodation Score	Bicycle Accommodation Score
Unsignalized Restricted Crossing U-Turn N-S	0.33	1	2.74	3.16
Displaced Left Turn	0.52	2	3.06	3.25
Partial Displaced Left Turn N-S	0.53	3	2.92	3.25
Bowtie N-S	0.53	3	4.90	4.58
Signalized ThruCut N-S	0.54	5	5.06	4.58
Traffic Signal	0.55	6	4.94	4.58
Signalized Restricted Crossing U-Turn N-S	0.57	7	3.06	4.25
Partial Median U-Turn N-S	0.58	8	2.99	4.58
Median U-Turn N-S	0.61	9	3.10	4.58
1 X 1	0.74	10	5.39	4.62

Capacity Analysis for Planning of Junctions

Input Worksheet 1

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) AM Opening Year (2028)
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard/Long Boat Lane
Date	March 14, 2024
Number of Legs	4
Major Street Direction	North-South

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	Left	Thru	Right	Heavy Vehicles	Volume Growth
Eastbound	0	5	1	9	3.48%	0.00%
Westbound	0	101	2	132	3.48%	0.00%
Southbound	0	67	501	3	3.48%	0.00%
Northbound	0	3	526	92	3.48%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor	**Suggested = 2.00**	2.00
FDOT Context Zone	**C3R-Suburban Residential**	
Critical Lane Volume Threshold — 2-phase signal	**Suggested = 1800**	**1800**
Critical Lane Volume Threshold — 3-phase signal	**Suggested = 1750**	**1750**
Critical Lane Volume Threshold — 4-phase signal	**Suggested = 1700**	**1700**

Equivalent Passenger Car Volume

	Volume (Veh/hr)			
	U-Turn	Left	Thru	Right
Eastbound	0	5	1	9
Westbound	0	105	2	137
Southbound	0	69	518	3
Northbound	0	3	544	95

Notes:	
Left-Turn Adjustment Factor	*Conversion of left-turning vehicles to equivalent through vehicles*
Right-turn Adjustment Factor	*Conversion of right-turning vehicles to equivalent through vehicles*
U-turn Adjustment Factor	*Conversion of U-turning vehicles to equivalent through vehicles*
Truck to PCE Factor	*1 truck = X Passenger Car Equivalents*
Critical Lane Volume Sum Limit	*Saturation Value for Critical Lane Volume Sum at an intersection*

Capacity Analysis for Planning of Junctions

Step 2A: Base Conditions Analysis

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) AM Opening Year (2028)
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard/Long Boat Lane
Date	March 14, 2024
Major Street Direction	North-South

Existing Intersection Configuration	*Two-Way Stop Control*

Number of Lanes for Existing Configuration
(Can be edited in "3- Alt Num Lanes Input" as needed)

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Two-Way Stop Control	N-S		1	2	1		1	2	0		1	1	0		0	1	1

Results for Existing Configuration

TYPE OF	Sheet	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	

Overall v/c Ratio	0.65	Pedestrian Accommodation Score	2.73	Bicycle Accommodation Score	3.75

Step 2B: Alternative Selection

Rankings Inclusion		Yes/No	Comment
At-Grade Non-Roundabout Intersections?		Yes	
Traffic Signal		Yes	
Two-Way Stop Control		Yes	
All-Way Stop Control		Yes	
Continuous Green T		No	4-Leg Intersection
Quadrant Roadway	S-W	No	No Nearby Quadrant Roadway
	N-E	No	No Nearby Quadrant Roadway
	S-E	No	No Nearby Quadrant Roadway
	N-W	No	No Nearby Quadrant Roadway
Partial Displaced Left Turn		Yes	
Displaced Left Turn		Yes	
Signalized Restricted Crossing U-Turn		Yes	
Unsignalized Restricted Crossing U-Turn		Yes	
Median U-Turn		Yes	
Partial Median U-Turn		Yes	
Bowtie		Yes	
Signalized ThruCut		Yes	
Unsignalized ThruCut		Yes	
Roundabouts?		Yes	
50 ICD Miniroundabout		Yes	
75 ICD Miniroundabout		Yes	
1x1		No	2NS X 1EW Roundabout Only
1NS x 2EW		No	2NS X 1EW Roundabout Only
2NS x 1EW		Yes	
2x2		No	2NS X 1EW Roundabout Only
Ramp Terminal Intersections?		No	
Diamond			
Partial Cloverleaf A			
Partial Cloverleaf B			
Displaced Left Turn Interchange			
Diverging Diamond			
Single Point Diamond			

Continue to Step 3 Step 3

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) AM Opening Year (2028)
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard/Long Boat Lane
Date	March 14, 2024
Analysis Type	At-Grade Intersections and Interchanges

Number of Lanes for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		1	2	1		1	2	0		1	1	0		0	1	1
Two-Way Stop Control	N-S		1	2	1		1	2	0		1	1	0		0	1	1
All-Way Stop Control	FULL		1	2	1		1	2	0		1	1	0		0	1	1
Partial Displaced Left Turn	N-S		1	2	1		1	2	1		1	1	0		0	1	1
Displaced Left Turn	FULL		1	2	1		1	2	1		1	1	1		1	1	1
Signalized Restricted Crossing U-Turn	N-S	1	1	2	1	1	1	2	1				2				2
Unsignalized Restricted Crossing U-Turn	N-S	1	1	2	1	1	1	2	1				2				2
Median U-Turn	N-S	1		2	1	1		2	1			1	1			1	1
Partial Median U-Turn	N-S	1		2	1	1		2	1		1	1	0		0	1	1
Signalized ThruCut	N-S		1	2	1		1	2	0		1		1		1		1
Unsignalized ThruCut	N-S		1	2	1		1	2	0		1		1		1		1
Bowtie	N-S			2	1			2	1			1	1			1	1

For shared lanes, enter "0" in L or R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Number of Lanes for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) AM Opening Year (2028)
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard/Long Boat Lane
Date	March 14, 2024
Analysis Type	At-Grade Intersections and Interchanges

Volume Echo with Shared Lane Adjustment for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		3	544	95		69	521	0		5	10	0		0	107	137
Two-Way Stop Control	N-S		3	544	95		69	521	0		5	10	0		0	107	137
All-Way Stop Control	FULL		3	544	95		69	521	0		5	10	0		0	107	137
Partial Displaced Left Turn	N-S		3	544	95		69	518	3		5	10	0		0	107	137
Displaced Left Turn	FULL		3	544	95		69	518	3		5	1	9		105	2	137
Signalized Restricted Crossing U-Turn	N-S	0	3	544	95	0	69	518	3				9				137
Unsignalized Restricted Crossing U-Turn	N-S	0	3	544	95	0	69	518	3				9				137
Median U-Turn	N-S	0		544	95	0		518	3			1	9			2	137
Partial Median U-Turn	N-S	0		544	95	0		518	3		5	10	0		0	107	137
Signalized ThruCut	N-S		3	544	95		69	522	0		6		10		106		138
Unsignalized ThruCut	N-S		3	544	95		69	521	0		6		10		106		138
Bowtie	N-S		3	544	95		69	521	3			75	114			110	142

Capacity Analysis for Planning of Junctions

Results Worksheet

Project Name	Chuluota Road (CR 419) ICE Evaluation	***Estimated Volume-to-Capacity Ratio***			
Project Number	Build (4-lane) AM Opening Year (2028)	**Number of Configurations**			
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard/Long Boat Lane	**< 0.750**	**0.750 - 0.875**	**0.875 - 1.00**	**≥ 1.00**
Date	March 14, 2024	**13**	**1**	**1**	**0**

Results for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Zone 1 (North)		Zone 2 (South)		Zone 3 (East)		Zone 4 (West)		Zone 5 (Center)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			
Traffic Signal	FULL									461	0.27	0.27	4.79	4.49
Two-Way Stop Control	N-S									--	0.65	0.65	2.73	3.75
All-Way Stop Control	FULL									1491	0.83	0.83	3.62	4.49
Partial Displaced Left Turn	N-S	347	*0.19*	319	*0.18*					384	0.22	0.22	2.86	3.16
Displaced Left Turn	FULL	347	*0.19*	315	*0.17*	181	*0.10*	10	*0.01*	383	0.21	0.21	3.01	3.16
Signalized Restricted Crossing U-Turn	N-S	429	*0.24*	329	*0.18*	418	*0.23*	320	*0.18*			0.24	2.94	4.08
Unsignalized Restricted Crossing U-Turn	N-S	590	*0.13*	642	*0.01*	549	*0.51*	623	*0.04*			0.51	2.62	3.00
Median U-Turn	N-S	430	*0.24*	414	*0.23*					578	0.32	0.32	3.00	4.49
Partial Median U-Turn	N-S	299	*0.17*	407	*0.23*					460	0.26	0.26	2.91	4.49
Bowtie	N-S	135	0.10	111	0.08	138	0.10	10	0.01	439	0.24	0.24	4.70	4.49
Signalized ThruCut	N-S									465	0.27	0.27	4.90	4.49
Unsignalized ThruCut	N-S									--	0.93	0.93	4.22	4.17

Capacity Analysis for Planning of Junctions

Results Worksheet

Results for Roundabouts

TYPE OF ROUNDABOUT	Zone 1 (North)			Zone 3 (East)			Zone 2 (South)			Zone 4 (West)			Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3			
50 ICD	*0.64*			*0.07*			*0.66*			*0.53*			0.66	5.36	4.62
75 ICD	*0.63*			*0.07*			*0.66*			*0.47*			0.66	5.36	4.62
2NS X 1EW	*0.24*	*0.25*		*0.02*			*0.25*	0.27		*0.29*			0.29	4.97	4.54

Results for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Zone 1 (Rt Mrg)		Zone 2 (Lt Mrg)		Zone 3 (Ctr. 1)		Zone 4 (Ctr. 2)		Zone 5 (Lt Mrg)		Zone 6 (Rt Mrg)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			

TYPE OF INTERSECTION	Overall V/C Ratio	V/C Ranking	Pedestrian Accommodation Score	Bicycle Accommodation Score
Displaced Left Turn	0.21	1	3.01	3.16
Partial Displaced Left Turn N-S	0.22	2	2.86	3.16
Signalized Restricted Crossing U-Turn N-S	0.24	3	2.94	4.08
Bowtie N-S	0.24	3	4.70	4.49
Partial Median U-Turn N-S	0.26	5	2.91	4.49
Traffic Signal	0.27	6	4.79	4.49
Signalized ThruCut N-S	0.27	6	4.90	4.49
2NS X 1EW	0.29	8	4.97	4.54
Median U-Turn N-S	0.32	9	3.00	4.49
Unsignalized Restricted Crossing U-Turn N-S	0.51	10	2.62	3.00

Capacity Analysis for Planning of Junctions

Input Worksheet 1

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) AM Interim Year (2038)
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard/Long Boat Lane
Date	March 14, 2024
Number of Legs	4
Major Street Direction	North-South

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	Left	Thru	Right	Heavy Vehicles	Volume Growth
Eastbound	0	6	1	9	3.48%	0.00%
Westbound	0	110	3	144	3.48%	0.00%
Southbound	0	73	718	4	3.48%	0.00%
Northbound	0	4	696	100	3.48%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor	**Suggested = 2.00**	2.00
FDOT Context Zone	**C3R-Suburban Residential**	
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Equivalent Passenger Car Volume

	Volume (Veh/hr)			
	U-Turn	Left	Thru	Right
Eastbound	0	6	1	9
Westbound	0	114	3	149
Southbound	0	76	743	4
Northbound	0	4	720	103

Notes:	
Left-Turn Adjustment Factor	*Conversion of left-turning vehicles to equivalent through vehicles*
Right-turn Adjustment Factor	*Conversion of right-turning vehicles to equivalent through vehicles*
U-turn Adjustment Factor	*Conversion of U-turning vehicles to equivalent through vehicles*
Truck to PCE Factor	*1 truck = X Passenger Car Equivalents*
Critical Lane Volume Sum Limit	*Saturation Value for Critical Lane Volume Sum at an intersection*

Capacity Analysis for Planning of Junctions

Step 2A: Base Conditions Analysis

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) AM Interim Year (2038)
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard/Long Boat Lane
Date	March 14, 2024
Major Street Direction	North-South

Existing Intersection Configuration	*Two-Way Stop Control*

Number of Lanes for Existing Configuration
(Can be edited in "3- Alt Num Lanes Input" as needed)

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Two-Way Stop Control	N-S		1	2	1		1	2	0		1	1	0		0	1	1

Results for Existing Configuration

TYPE OF	Sheet	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	
Overall v/c Ratio	1.31	Pedestrian Accommodation Score	2.73	Bicycle Accommodation Score	3.75		

Step 2B: Alternative Selection

Rankings Inclusion		Yes/No	Comment
At-Grade Non-Roundabout Intersections?		Yes	
Traffic Signal		Yes	
Two-Way Stop Control		Yes	
All-Way Stop Control		Yes	
Continuous Green T		No	4-Leg Intersection
Quadrant Roadway	S-W	No	No Nearby Quadrant Roadway
	N-E	No	No Nearby Quadrant Roadway
	S-E	No	No Nearby Quadrant Roadway
	N-W	No	No Nearby Quadrant Roadway
Partial Displaced Left Turn		Yes	
Displaced Left Turn		Yes	
Signalized Restricted Crossing U-Turn		Yes	
Unsignalized Restricted Crossing U-Turn		Yes	
Median U-Turn		Yes	
Partial Median U-Turn		Yes	
Bowtie		Yes	
Signalized ThruCut		Yes	
Unsignalized ThruCut		Yes	
Roundabouts?		Yes	
50 ICD Miniroundabout		Yes	
75 ICD Miniroundabout		Yes	
1x1		No	2NS X 1EW Roundabout Only
1NS x 2EW		No	2NS X 1EW Roundabout Only
2NS x 1EW		Yes	
2x2		No	2NS X 1EW Roundabout Only
Ramp Terminal Intersections?		No	
Diamond			
Partial Cloverleaf A			
Partial Cloverleaf B			
Displaced Left Turn Interchange			
Diverging Diamond			
Single Point Diamond			

Continue to Step 3 Step 3

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) AM Interim Year (2038)
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard/Long Boat Lane
Date	March 14, 2024
Analysis Type	At-Grade Intersections and Interchanges

Number of Lanes for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		1	2	1		1	2	0		1	1	0		0	1	1
Two-Way Stop Control	N-S		1	2	1		1	2	0		1	1	0		0	1	1
All-Way Stop Control	FULL		1	2	1		1	2	0		1	1	0		0	1	1
Partial Displaced Left Turn	N-S		1	2	1		1	2	1		1	1	0		0	1	1
Displaced Left Turn	FULL		1	2	1		1	2	1		1	1	1		1	1	1
Signalized Restricted Crossing U-Turn	N-S	1	1	2	1	1	1	2	1				2				2
Unsignalized Restricted Crossing U-Turn	N-S	1	1	2	1	1	1	2	1				2				2
Median U-Turn	N-S	1		2	1	1		2	1			1	1			1	1
Partial Median U-Turn	N-S	1		2	1	1		2	1		1	1	0		0	1	1
Signalized ThruCut	N-S		1	2	1		1	2	0		1		1		1		1
Unsignalized ThruCut	N-S		1	2	1		1	2	0		1		1		1		1
Bowtie	N-S			2	1			2	1			1	1			1	1

For shared lanes, enter "0" in L or R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Number of Lanes for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) AM Interim Year (2038)
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard/Long Boat Lane
Date	March 14, 2024
Analysis Type	At-Grade Intersections and Interchanges

Volume Echo with Shared Lane Adjustment for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		4	720	103		76	747	0		6	10	0		0	117	149
Two-Way Stop Control	N-S		4	720	103		76	747	0		6	10	0		0	117	149
All-Way Stop Control	FULL		4	720	103		76	747	0		6	10	0		0	117	149
Partial Displaced Left Turn	N-S		4	720	103		76	743	4		6	10	0		0	117	149
Displaced Left Turn	FULL		4	720	103		76	743	4		6	1	9		114	3	149
Signalized Restricted Crossing U-Turn	N-S	0	4	720	103	0	76	743	4				9				149
Unsignalized Restricted Crossing U-Turn	N-S	0	4	720	103	0	76	743	4				9				149
Median U-Turn	N-S	0		720	103	0		743	4			1	9			3	149
Partial Median U-Turn	N-S	0		720	103	0		743	4		6	10	0		0	117	149
Signalized ThruCut	N-S		4	720	103		76	748	0		7		10		116		151
Unsignalized ThruCut	N-S		4	720	103		76	747	0		7		10		116		151
Bowtie	N-S		4	720	103		76	747	4			83	123			121	155

Capacity Analysis for Planning of Junctions

Results Worksheet

Project Name	Chuluota Road (CR 419) ICE Evaluation	***Estimated Volume-to-Capacity Ratio***			
Project Number	Build (4-lane) AM Interim Year (2038)	**Number of Configurations**			
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard/Long Boat Lane	**< 0.750**	**0.750 - 0.875**	**0.875 - 1.00**	**≥ 1.00**
Date	March 14, 2024	**10**	**0**	**2**	**3**

Results for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Zone 1 (North)		Zone 2 (South)		Zone 3 (East)		Zone 4 (West)		Zone 5 (Center)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			
Traffic Signal	FULL									568	0.33	0.33	4.79	4.49
Two-Way Stop Control	N-S									--	1.31	1.31	2.73	3.75
All-Way Stop Control	FULL									1932	1.07	1.07	3.62	4.49
Partial Displaced Left Turn	N-S	443	0.25	437	0.24					495	0.28	0.28	2.86	3.16
Displaced Left Turn	FULL	443	0.25	433	0.24	197	0.11	13	0.01	492	0.27	0.27	3.01	3.16
Signalized Restricted Crossing U-Turn	N-S	558	0.31	422	0.23	519	0.29	438	0.24			0.31	2.94	4.08
Unsignalized Restricted Crossing U-Turn	N-S	823	0.18	827	0.01	726	0.73	857	0.05			0.73	2.62	3.00
Median U-Turn	N-S	559	0.31	516	0.29					719	0.40	0.40	3.00	4.49
Partial Median U-Turn	N-S	417	0.23	509	0.28					591	0.34	0.34	2.91	4.49
Bowtie	N-S	148	0.10	122	0.09	151	0.11	10	0.01	556	0.31	0.31	4.70	4.49
Signalized ThruCut	N-S									569	0.33	0.33	4.90	4.49
Unsignalized ThruCut	N-S									--	2.17	2.17	4.22	4.17

Capacity Analysis for Planning of Junctions

Results Worksheet

Results for Roundabouts

TYPE OF ROUNDABOUT	Zone 1 (North)			Zone 3 (East)			Zone 2 (South)			Zone 4 (West)			Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3			
50 ICD	0.91			*0.28*			0.86			0.95			0.95	5.36	4.62
75 ICD	0.89			*0.17*			0.85			0.75			0.89	5.36	4.62
2NS X 1EW	*0.34*	*0.36*		*0.03*			*0.33*	0.35		*0.37*			0.37	4.97	4.54

Results for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Zone 1 (Rt Mrg)		Zone 2 (Lt Mrg)		Zone 3 (Ctr. 1)		Zone 4 (Ctr. 2)		Zone 5 (Lt Mrg)		Zone 6 (Rt Mrg)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			

TYPE OF INTERSECTION	Overall V/C Ratio	V/C Ranking	Pedestrian Accommodation Score	Bicycle Accommodation Score
Displaced Left Turn	0.27	1	3.01	3.16
Partial Displaced Left Turn N-S	0.28	2	2.86	3.16
Signalized Restricted Crossing U-Turn N-S	0.31	3	2.94	4.08
Bowtie N-S	0.31	3	4.70	4.49
Traffic Signal	0.33	5	4.79	4.49
Signalized ThruCut N-S	0.33	5	4.90	4.49
Partial Median U-Turn N-S	0.34	7	2.91	4.49
2NS X 1EW	0.37	8	4.97	4.54
Median U-Turn N-S	0.40	9	3.00	4.49
Unsignalized Restricted Crossing U-Turn N-S	0.73	10	2.62	3.00

Capacity Analysis for Planning of Junctions

Input Worksheet 1

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) AM Design Year (2048)
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard/Long Boat Lane
Date	March 14, 2024
Number of Legs	4
Major Street Direction	North-South

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	Left	Thru	Right	Heavy Vehicles	Volume Growth
Eastbound	0	6	1	10	3.48%	0.00%
Westbound	0	119	3	155	3.48%	0.00%
Southbound	0	79	935	4	3.48%	0.00%
Northbound	0	4	866	108	3.48%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone		**C3R-Suburban Residential**	
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Equivalent Passenger Car Volume

	Volume (Veh/hr)			
	U-Turn	Left	Thru	Right
Eastbound	0	6	1	10
Westbound	0	123	3	160
Southbound	0	82	968	4
Northbound	0	4	896	112

Notes:	
Left-Turn Adjustment Factor	*Conversion of left-turning vehicles to equivalent through vehicles*
Right-turn Adjustment Factor	*Conversion of right-turning vehicles to equivalent through vehicles*
U-turn Adjustment Factor	*Conversion of U-turning vehicles to equivalent through vehicles*
Truck to PCE Factor	*1 truck = X Passenger Car Equivalents*
Critical Lane Volume Sum Limit	*Saturation Value for Critical Lane Volume Sum at an intersection*

Capacity Analysis for Planning of Junctions

Step 2A: Base Conditions Analysis

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) AM Design Year (2048)
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard/Long Boat Lane
Date	March 14, 2024
Major Street Direction	North-South

Existing Intersection Configuration	*Two-Way Stop Control*

Number of Lanes for Existing Configuration
(Can be edited in "3- Alt Num Lanes Input" as needed)

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Two-Way Stop Control	N-S		1	2	1		1	2	0		1	1	0		0	1	1

Results for Existing Configuration

TYPE OF	Sheet	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	
Overall v/c Ratio	**2.63**	**Pedestrian Accommodation Score**		**2.68**	**Bicycle Accommodation Score**		**3.75**

Step 2B: Alternative Selection

Rankings Inclusion		Yes/No	Comment
At-Grade Non-Roundabout Intersections?		Yes	
Traffic Signal		Yes	
Two-Way Stop Control		Yes	
All-Way Stop Control		Yes	
Continuous Green T		No	4-Leg Intersection
Quadrant Roadway	S-W	No	No Nearby Quadrant Roadway
	N-E	No	No Nearby Quadrant Roadway
	S-E	No	No Nearby Quadrant Roadway
	N-W	No	No Nearby Quadrant Roadway
Partial Displaced Left Turn		Yes	
Displaced Left Turn		Yes	
Signalized Restricted Crossing U-Turn		Yes	
Unsignalized Restricted Crossing U-Turn		Yes	
Median U-Turn		Yes	
Partial Median U-Turn		Yes	
Bowtie		Yes	
Signalized ThruCut		Yes	
Unsignalized ThruCut		Yes	
Roundabouts?		Yes	
50 ICD Miniroundabout		Yes	
75 ICD Miniroundabout		Yes	
1x1		No	2NS X 1EW Roundabout Only
1NS x 2EW		No	2NS X 1EW Roundabout Only
2NS x 1EW		Yes	
2x2		No	2NS X 1EW Roundabout Only
Ramp Terminal Intersections?		No	
Diamond			
Partial Cloverleaf A			
Partial Cloverleaf B			
Displaced Left Turn Interchange			
Diverging Diamond			
Single Point Diamond			

Continue to Step 3 Step 3

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) AM Design Year (2048)
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard/Long Boat Lane
Date	March 14, 2024
Analysis Type	At-Grade Intersections and Interchanges

Number of Lanes for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		1	2	1		1	2	0		1	1	0		0	1	1
Two-Way Stop Control	N-S		1	2	1		1	2	0		1	1	0		0	1	1
All-Way Stop Control	FULL		1	2	1		1	2	0		1	1	0		0	1	1
Partial Displaced Left Turn	N-S		1	2	1		1	2	1		1	1	0		0	1	1
Displaced Left Turn	FULL		1	2	1		1	2	1		1	1	1		1	1	1
Signalized Restricted Crossing U-Turn	N-S	1	1	2	1	1	1	2	1				2				2
Unsignalized Restricted Crossing U-Turn	N-S	1	1	2	1	1	1	2	1				2				2
Median U-Turn	N-S	1		2	1	1		2	1			1	1			1	1
Partial Median U-Turn	N-S	1		2	1	1		2	1		1	1	0		0	1	1
Signalized ThruCut	N-S		1	2	1		1	2	0		1		1		1		1
Unsignalized ThruCut	N-S		1	2	1		1	2	0		1		1		1		1
Bowtie	N-S			2	1			2	1			1	1			1	1

For shared lanes, enter "0" in L or R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Number of Lanes for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) AM Design Year (2048)
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard/Long Boat Lane
Date	March 14, 2024
Analysis Type	At-Grade Intersections and Interchanges

Volume Echo with Shared Lane Adjustment for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		4	896	112		82	972	0		6	11	0		0	126	160
Two-Way Stop Control	N-S		4	896	112		82	972	0		6	11	0		0	126	160
All-Way Stop Control	FULL		4	896	112		82	972	0		6	11	0		0	126	160
Partial Displaced Left Turn	N-S		4	896	112		82	968	4		6	11	0		0	126	160
Displaced Left Turn	FULL		4	896	112		82	968	4		6	1	10		123	3	160
Signalized Restricted Crossing U-Turn	N-S	0	4	896	112	0	82	968	4				10				160
Unsignalized Restricted Crossing U-Turn	N-S	0	4	896	112	0	82	968	4				10				160
Median U-Turn	N-S	0		896	112	0		968	4			1	10			3	160
Partial Median U-Turn	N-S	0		896	112	0		968	4		6	11	0		0	126	160
Signalized ThruCut	N-S		4	896	112		82	973	0		7		11		125		162
Unsignalized ThruCut	N-S		4	896	112		82	972	0		7		11		125		162
Bowtie	N-S		4	896	112		82	972	4			89	133			130	166

Capacity Analysis for Planning of Junctions

Results Worksheet

Project Name	Chuluota Road (CR 419) ICE Evaluation	***Estimated Volume-to-Capacity Ratio***			
Project Number	Build (4-lane) AM Design Year (2048)	**Number of Configurations**			
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard/Long Boat Lane	**< 0.750**	**0.750 - 0.875**	**0.875 - 1.00**	**≥ 1.00**
Date	March 14, 2024	**9**	**0**	**0**	**6**

Results for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Zone 1 (North)		Zone 2 (South)		Zone 3 (East)		Zone 4 (West)		Zone 5 (Center)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			
Traffic Signal	FULL									671	0.39	0.39	4.79	4.49
Two-Way Stop Control	N-S									--	2.63	2.63	2.68	3.75
All-Way Stop Control	FULL									2369	1.32	1.32	3.62	4.49
Partial Displaced Left Turn	N-S	537	*0.30*	555	*0.31*					616	0.35	0.35	2.86	3.16
Displaced Left Turn	FULL	537	*0.30*	550	*0.31*	212	*0.12*	13	*0.01*	613	0.34	0.34	3.01	3.16
Signalized Restricted Crossing U-Turn	N-S	685	*0.38*	515	*0.29*	619	*0.34*	556	*0.31*			0.38	2.94	4.08
Unsignalized Restricted Crossing U-Turn	N-S	1054	*0.24*	1012	*0.01*	902	1.03	1091	*0.08*			1.03	2.62	3.00
Median U-Turn	N-S	686	*0.38*	616	*0.34*					858	0.48	0.48	3.00	4.49
Partial Median U-Turn	N-S	532	*0.30*	609	*0.34*					720	0.41	0.41	2.91	4.49
Bowtie	N-S	160	0.11	131	0.09	162	0.11	11	0.01	681	0.38	0.38	4.70	4.49
Signalized ThruCut	N-S									673	0.38	0.38	4.90	4.49
Unsignalized ThruCut	N-S									--	5.05	5.05	4.22	4.17

Capacity Analysis for Planning of Junctions

Results Worksheet

Results for Roundabouts

TYPE OF ROUNDABOUT	Zone 1 (North)			Zone 3 (East)			Zone 2 (South)			Zone 4 (West)			Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3			
50 ICD	1.18			-0.17			1.06			2.82			2.82	5.36	4.62
75 ICD	1.16			-0.44			1.05			1.51			1.51	5.36	4.62
2NS X 1EW	0.44	0.46		0.03			0.40	0.43		0.46			0.46	4.97	4.54

Results for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Zone 1 (Rt Mrg)		Zone 2 (Lt Mrg)		Zone 3 (Ctr. 1)		Zone 4 (Ctr. 2)		Zone 5 (Lt Mrg)		Zone 6 (Rt Mrg)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			

TYPE OF INTERSECTION	Overall V/C Ratio	V/C Ranking	Pedestrian Accommodation Score	Bicycle Accommodation Score
Displaced Left Turn	0.34	1	3.01	3.16
Partial Displaced Left Turn N-S	0.35	2	2.86	3.16
Signalized Restricted Crossing U-Turn N-S	0.38	3	2.94	4.08
Signalized ThruCut N-S	0.38	3	4.90	4.49
Bowtie N-S	0.38	3	4.70	4.49
Traffic Signal	0.39	6	4.79	4.49
Partial Median U-Turn N-S	0.41	7	2.91	4.49
2NS X 1EW	0.46	8	4.97	4.54
Median U-Turn N-S	0.48	9	3.00	4.49
Unsignalized Restricted Crossing U-Turn N-S	1.03	10	2.62	3.00

Capacity Analysis for Planning of Junctions

Input Worksheet 1

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) PM Opening Year (2028)
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard/Long Boat Lane
Date	March 14, 2024
Number of Legs	4
Major Street Direction	North-South

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	Left	Thru	Right	Heavy Vehicles	Volume Growth
Eastbound	0	4	0	2	3.48%	0.00%
Westbound	0	70	0	65	3.48%	0.00%
Southbound	0	73	666	4	3.48%	0.00%
Northbound	0	5	540	81	3.48%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone		**C3R-Suburban Residential**	
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Equivalent Passenger Car Volume

	Volume (Veh/hr)			
	U-Turn	Left	Thru	Right
Eastbound	0	4	0	2
Westbound	0	72	0	67
Southbound	0	76	689	4
Northbound	0	5	559	84

Notes:	
Left-Turn Adjustment Factor	*Conversion of left-turning vehicles to equivalent through vehicles*
Right-turn Adjustment Factor	*Conversion of right-turning vehicles to equivalent through vehicles*
U-turn Adjustment Factor	*Conversion of U-turning vehicles to equivalent through vehicles*
Truck to PCE Factor	*1 truck = X Passenger Car Equivalents*
Critical Lane Volume Sum Limit	*Saturation Value for Critical Lane Volume Sum at an intersection*

Capacity Analysis for Planning of Junctions

Step 2A: Base Conditions Analysis

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) PM Opening Year (2028)
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard/Long Boat Lane
Date	March 14, 2024
Major Street Direction	North-South

Existing Intersection Configuration	*Two-Way Stop Control*

Number of Lanes for Existing Configuration
(Can be edited in "3- Alt Num Lanes Input" as needed)

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Two-Way Stop Control	N-S		1	2	1		1	2	0		1	1	0		0	1	1

Results for Existing Configuration

TYPE OF	Sheet	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	

Overall v/c Ratio	0.59	Pedestrian Accommodation Score	2.73	Bicycle Accommodation Score	3.75

Step 2B: Alternative Selection

Rankings Inclusion		Yes/No	Comment
At-Grade Non-Roundabout Intersections?		Yes	
Traffic Signal		Yes	
Two-Way Stop Control		Yes	
All-Way Stop Control		Yes	
Continuous Green T		No	4-Leg Intersection
Quadrant Roadway	S-W	No	No Nearby Quadrant Roadway
	N-E	No	No Nearby Quadrant Roadway
	S-E	No	No Nearby Quadrant Roadway
	N-W	No	No Nearby Quadrant Roadway
Partial Displaced Left Turn		Yes	
Displaced Left Turn		Yes	
Signalized Restricted Crossing U-Turn		Yes	
Unsignalized Restricted Crossing U-Turn		Yes	
Median U-Turn		Yes	
Partial Median U-Turn		Yes	
Bowtie		Yes	
Signalized ThruCut		Yes	
Unsignalized ThruCut		Yes	
Roundabouts?		Yes	
50 ICD Miniroundabout		Yes	
75 ICD Miniroundabout		Yes	
1x1		No	2NS X 1EW Roundabout Only
1NS x 2EW		No	2NS X 1EW Roundabout Only
2NS x 1EW		Yes	
2x2		No	2NS X 1EW Roundabout Only
Ramp Terminal Intersections?		No	
Diamond			
Partial Cloverleaf A			
Partial Cloverleaf B			
Displaced Left Turn Interchange			
Diverging Diamond			
Single Point Diamond			

Continue to Step 3 Step 3

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) PM Opening Year (2028)
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard/Long Boat Lane
Date	March 14, 2024
Analysis Type	At-Grade Intersections and Interchanges

Number of Lanes for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		1	2	1		1	2	0		1	1	0		0	1	1
Two-Way Stop Control	N-S		1	2	1		1	2	0		1	1	0		0	1	1
All-Way Stop Control	FULL		1	2	1		1	2	0		1	1	0		0	1	1
Partial Displaced Left Turn	N-S		1	2	1		1	2	1		1	1	0		0	1	1
Displaced Left Turn	FULL		1	2	1		1	2	1		1	1	1		1	1	1
Signalized Restricted Crossing U-Turn	N-S	1	1	2	1	1	1	2	1				2				2
Unsignalized Restricted Crossing U-Turn	N-S	1	1	2	1	1	1	2	1				2				2
Median U-Turn	N-S	1		2	1	1		2	1			1	1			1	1
Partial Median U-Turn	N-S	1		2	1	1		2	1		1	1	0		0	1	1
Signalized ThruCut	N-S		1	2	1		1	2	0		1		1		1		1
Unsignalized ThruCut	N-S		1	2	1		1	2	0		1		1		1		1
Bowtie	N-S			2	1			2	1			1	1			1	1

For shared lanes, enter "0" in L or R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Number of Lanes for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) PM Opening Year (2028)
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard/Long Boat Lane
Date	March 14, 2024
Analysis Type	At-Grade Intersections and Interchanges

Volume Echo with Shared Lane Adjustment for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		5	559	84		76	693	0		4	2	0		0	72	67
Two-Way Stop Control	N-S		5	559	84		76	693	0		4	2	0		0	72	67
All-Way Stop Control	FULL		5	559	84		76	693	0		4	2	0		0	72	67
Partial Displaced Left Turn	N-S		5	559	84		76	689	4		4	2	0		0	72	67
Displaced Left Turn	FULL		5	559	84		76	689	4		4	0	2		72	0	67
Signalized Restricted Crossing U-Turn	N-S	0	5	559	84	0	76	689	4				2				67
Unsignalized Restricted Crossing U-Turn	N-S	0	5	559	84	0	76	689	4				2				67
Median U-Turn	N-S	0		559	84	0		689	4			0	2			0	67
Partial Median U-Turn	N-S	0		559	84	0		689	4		4	2	0		0	72	67
Signalized ThruCut	N-S		5	559	84		76	694	0		4		2		72		67
Unsignalized ThruCut	N-S		5	559	84		76	693	0		4		2		72		67
Bowtie	N-S		5	559	84		76	693	4			80	74			77	71

Capacity Analysis for Planning of Junctions

Results Worksheet

Project Name	Chuluota Road (CR 419) ICE Evaluation	***Estimated Volume-to-Capacity Ratio***			
Project Number	Build (4-lane) PM Opening Year (2028)	**Number of Configurations**			
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard/Long Boat Lane	**< 0.750**	**0.750 - 0.875**	**0.875 - 1.00**	**≥ 1.00**
Date	March 14, 2024	**11**	**3**	**1**	**0**

Results for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Zone 1 (North)		Zone 2 (South)		Zone 3 (East)		Zone 4 (West)		Zone 5 (Center)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			
Traffic Signal	FULL									440	0.26	0.26	4.79	4.49
Two-Way Stop Control	N-S									--	0.59	0.59	2.73	3.75
All-Way Stop Control	FULL									1562	0.87	0.87	3.62	4.49
Partial Displaced Left Turn	N-S	362	0.20	387	0.21					421	0.24	0.24	2.86	3.16
Displaced Left Turn	FULL	362	0.20	386	0.21	152	0.08	9	0.01	420	0.23	0.23	3.01	3.16
Signalized Restricted Crossing U-Turn	N-S	475	0.26	329	0.18	363	0.20	386	0.21			0.26	2.94	4.08
Unsignalized Restricted Crossing U-Turn	N-S	769	0.10	648	0.01	563	0.30	761	0.02			0.30	2.64	3.00
Median U-Turn	N-S	481	0.27	424	0.24					546	0.30	0.30	3.02	4.49
Partial Median U-Turn	N-S	391	0.22	419	0.23					466	0.27	0.27	2.91	4.49
Bowtie	N-S	126	0.09	79	0.06	72	0.05	2	0.00	434	0.24	0.24	4.70	4.49
Signalized ThruCut	N-S									436	0.25	0.25	4.90	4.49
Unsignalized ThruCut	N-S									--	0.89	0.89	4.22	4.17

Capacity Analysis for Planning of Junctions

Results Worksheet

Results for Roundabouts

TYPE OF ROUNDABOUT	Zone 1 (North)			Zone 3 (East)			Zone 2 (South)			Zone 4 (West)			Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3			
50 ICD	0.81			*0.08*			*0.67*			*0.31*			0.81	5.39	4.62
75 ICD	0.80			*0.07*			*0.66*			*0.28*			0.80	5.39	4.62
2NS X 1EW	*0.30*	*0.32*		*0.01*			*0.26*	0.27		*0.17*			0.32	5.00	4.54

Results for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Zone 1 (Rt Mrg)		Zone 2 (Lt Mrg)		Zone 3 (Ctr. 1)		Zone 4 (Ctr. 2)		Zone 5 (Lt Mrg)		Zone 6 (Rt Mrg)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			

TYPE OF INTERSECTION	Overall V/C Ratio	V/C Ranking	Pedestrian Accommodation Score	Bicycle Accommodation Score
Displaced Left Turn	0.23	1	3.01	3.16
Partial Displaced Left Turn N-S	0.24	2	2.86	3.16
Bowtie N-S	0.24	2	4.70	4.49
Signalized ThruCut N-S	0.25	4	4.90	4.49
Traffic Signal	0.26	5	4.79	4.49
Signalized Restricted Crossing U-Turn N-S	0.26	5	2.94	4.08
Partial Median U-Turn N-S	0.27	7	2.91	4.49
Unsignalized Restricted Crossing U-Turn N-S	0.30	8	2.64	3.00
Median U-Turn N-S	0.30	9	3.02	4.49
2NS X 1EW	0.32	10	5.00	4.54

Capacity Analysis for Planning of Junctions

Input Worksheet 1

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) PM Interim Year (2038)
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard/Long Boat Lane
Date	March 14, 2024
Number of Legs	4
Major Street Direction	North-South

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	Left	Thru	Right	Heavy Vehicles	Volume Growth
Eastbound	0	5	0	3	3.48%	0.00%
Westbound	0	77	0	70	3.48%	0.00%
Southbound	0	80	911	5	3.48%	0.00%
Northbound	0	6	732	88	3.48%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor	**Suggested = 2.00**	2.00
FDOT Context Zone	**C3R-Suburban Residential**	
Critical Lane Volume Threshold – 2-phase signal	**Suggested = 1800**	**1800**
Critical Lane Volume Threshold – 3-phase signal	**Suggested = 1750**	**1750**
Critical Lane Volume Threshold – 4-phase signal	**Suggested = 1700**	**1700**

Equivalent Passenger Car Volume

	Volume (Veh/hr)			
	U-Turn	Left	Thru	Right
Eastbound	0	5	0	3
Westbound	0	80	0	72
Southbound	0	83	943	5
Northbound	0	6	757	91

Notes:	
Left-Turn Adjustment Factor	*Conversion of left-turning vehicles to equivalent through vehicles*
Right-turn Adjustment Factor	*Conversion of right-turning vehicles to equivalent through vehicles*
U-turn Adjustment Factor	*Conversion of U-turning vehicles to equivalent through vehicles*
Truck to PCE Factor	*1 truck = X Passenger Car Equivalents*
Critical Lane Volume Sum Limit	*Saturation Value for Critical Lane Volume Sum at an intersection*

Capacity Analysis for Planning of Junctions

Step 2A: Base Conditions Analysis

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) PM Interim Year (2038)
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard/Long Boat Lane
Date	March 14, 2024
Major Street Direction	North-South

Existing Intersection Configuration	*Two-Way Stop Control*

Number of Lanes for Existing Configuration
(Can be edited in "3- Alt Num Lanes Input" as needed)

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Two-Way Stop Control	N-S		1	2	1		1	2	0		1	1	0		0	1	1

Results for Existing Configuration

TYPE OF	Sheet	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	
Overall v/c Ratio	**1.31**	**Pedestrian Accommodation Score**		**2.73**	**Bicycle Accommodation Score**		**3.75**

Step 2B: Alternative Selection

Rankings Inclusion		Yes/No	Comment
At-Grade Non-Roundabout Intersections?		Yes	
Traffic Signal		Yes	
Two-Way Stop Control		Yes	
All-Way Stop Control		Yes	
Continuous Green T		No	4-Leg Intersection
Quadrant Roadway	S-W	No	No Nearby Quadrant Roadway
	N-E	No	No Nearby Quadrant Roadway
	S-E	No	No Nearby Quadrant Roadway
	N-W	No	No Nearby Quadrant Roadway
Partial Displaced Left Turn		Yes	
Displaced Left Turn		Yes	
Signalized Restricted Crossing U-Turn		Yes	
Unsignalized Restricted Crossing U-Turn		Yes	
Median U-Turn		Yes	
Partial Median U-Turn		Yes	
Bowtie		Yes	
Signalized ThruCut		Yes	
Unsignalized ThruCut		Yes	
Roundabouts?		Yes	
50 ICD Miniroundabout		Yes	
75 ICD Miniroundabout		Yes	
1x1		No	2NS X 1EW Roundabout Only
1NS x 2EW		No	2NS X 1EW Roundabout Only
2NS x 1EW		Yes	
2x2		No	2NS X 1EW Roundabout Only
Ramp Terminal Intersections?		No	
Diamond			
Partial Cloverleaf A			
Partial Cloverleaf B			
Displaced Left Turn Interchange			
Diverging Diamond			
Single Point Diamond			

Continue to Step 3 Step 3

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) PM Interim Year (2038)
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard/Long Boat Lane
Date	March 14, 2024
Analysis Type	At-Grade Intersections and Interchanges

Number of Lanes for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		1	2	1		1	2	0		1	1	0		0	1	1
Two-Way Stop Control	N-S		1	2	1		1	2	0		1	1	0		0	1	1
All-Way Stop Control	FULL		1	2	1		1	2	0		1	1	0		0	1	1
Partial Displaced Left Turn	N-S		1	2	1		1	2	1		1	1	0		0	1	1
Displaced Left Turn	FULL		1	2	1		1	2	1		1	1	1		1	1	1
Signalized Restricted Crossing U-Turn	N-S	1	1	2	1	1	1	2	1				2				2
Unsignalized Restricted Crossing U-Turn	N-S	1	1	2	1	1	1	2	1				2				2
Median U-Turn	N-S	1		2	1	1		2	1			1	1			1	1
Partial Median U-Turn	N-S	1		2	1	1		2	1		1	1	0		0	1	1
Signalized ThruCut	N-S		1	2	1		1	2	0		1		1		1		1
Unsignalized ThruCut	N-S		1	2	1		1	2	0		1		1		1		1
Bowtie	N-S			2	1			2	1			1	1			1	1

For shared lanes, enter "0" in L or R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Number of Lanes for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) PM Interim Year (2038)
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard/Long Boat Lane
Date	March 14, 2024
Analysis Type	At-Grade Intersections and Interchanges

Volume Echo with Shared Lane Adjustment for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		6	757	91		83	948	0		5	3	0		0	80	72
Two-Way Stop Control	N-S		6	757	91		83	948	0		5	3	0		0	80	72
All-Way Stop Control	FULL		6	757	91		83	948	0		5	3	0		0	80	72
Partial Displaced Left Turn	N-S		6	757	91		83	943	5		5	3	0		0	80	72
Displaced Left Turn	FULL		6	757	91		83	943	5		5	0	3		80	0	72
Signalized Restricted Crossing U-Turn	N-S	0	6	757	91	0	83	943	5				3				72
Unsignalized Restricted Crossing U-Turn	N-S	0	6	757	91	0	83	943	5				3				72
Median U-Turn	N-S	0		757	91	0		943	5			0	3			0	72
Partial Median U-Turn	N-S	0		757	91	0		943	5		5	3	0		0	80	72
Signalized ThruCut	N-S		6	757	91		83	949	0		5		3		80		72
Unsignalized ThruCut	N-S		6	757	91		83	948	0		5		3		80		72
Bowtie	N-S		6	757	91		83	948	5			88	83			86	77

Capacity Analysis for Planning of Junctions

Results Worksheet

Project Name	Chuluota Road (CR 419) ICE Evaluation	***Estimated Volume-to-Capacity Ratio***			
Project Number	Build (4-lane) PM Interim Year (2038)	**Number of Configurations**			
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard/Long Boat Lane	**< 0.750**	**0.750 - 0.875**	**0.875 - 1.00**	**≥ 1.00**
Date	March 14, 2024	**10**	**0**	**0**	**5**

Results for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Zone 1 (North)		Zone 2 (South)		Zone 3 (East)		Zone 4 (West)		Zone 5 (Center)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			
Traffic Signal	FULL									566	0.33	0.33	4.79	4.49
Two-Way Stop Control	N-S									--	1.31	1.31	2.73	3.75
All-Way Stop Control	FULL									2045	1.14	1.14	3.62	4.49
Partial Displaced Left Turn	N-S	468	0.26	519	0.29					557	0.32	0.32	2.86	3.16
Displaced Left Turn	FULL	468	0.26	518	0.29	167	0.09	11	0.01	556	0.31	0.31	3.01	3.16
Signalized Restricted Crossing U-Turn	N-S	616	0.34	433	0.24	470	0.26	518	0.29			0.34	2.94	4.08
Unsignalized Restricted Crossing U-Turn	N-S	1031	0.15	854	0.01	762	0.44	1023	0.03			0.44	2.64	3.00
Median U-Turn	N-S	623	0.35	537	0.30					692	0.38	0.38	3.02	4.49
Partial Median U-Turn	N-S	523	0.29	531	0.29					603	0.34	0.34	2.91	4.49
Bowtie	N-S	138	0.10	88	0.06	80	0.06	3	0.00	572	0.32	0.32	4.70	4.49
Signalized ThruCut	N-S									565	0.32	0.32	4.90	4.49
Unsignalized ThruCut	N-S									--	2.33	2.33	4.22	4.17

Capacity Analysis for Planning of Junctions

Results Worksheet

Results for Roundabouts

TYPE OF ROUNDABOUT	Zone 1 (North)			Zone 3 (East)			Zone 2 (South)			Zone 4 (West)			Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3			
50 ICD	1.09			-0.20			0.90			0.63			1.09	5.39	4.62
75 ICD	1.08			-11.05			0.88			0.48			1.08	5.39	4.62
2NS X 1EW	0.41	0.44		0.02			0.34	0.36		0.22			0.44	5.00	4.54

Results for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Zone 1 (Rt Mrg)		Zone 2 (Lt Mrg)		Zone 3 (Ctr. 1)		Zone 4 (Ctr. 2)		Zone 5 (Lt Mrg)		Zone 6 (Rt Mrg)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			

TYPE OF INTERSECTION	Overall V/C Ratio	V/C Ranking	Pedestrian Accommodation Score	Bicycle Accommodation Score
Displaced Left Turn	0.31	1	3.01	3.16
Partial Displaced Left Turn N-S	0.32	2	2.86	3.16
Signalized ThruCut N-S	0.32	2	4.90	4.49
Bowtie N-S	0.32	2	4.70	4.49
Traffic Signal	0.33	5	4.79	4.49
Signalized Restricted Crossing U-Turn N-S	0.34	6	2.94	4.08
Partial Median U-Turn N-S	0.34	6	2.91	4.49
Median U-Turn N-S	0.38	8	3.02	4.49
2NS X 1EW	0.44	9	5.00	4.54
Unsignalized Restricted Crossing U-Turn N-S	0.44	10	2.64	3.00

Capacity Analysis for Planning of Junctions

Input Worksheet 1

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) PM Design Year (2048)
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard/Long Boat Lane
Date	March 14, 2024
Number of Legs	4
Major Street Direction	North-South

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	0	5	0	3	3.48%	0.00%
Westbound	0	83	0	76	3.48%	0.00%
Southbound	0	86	1156	5	3.48%	0.00%
Northbound	0	6	924	95	3.48%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone		**C3R-Suburban Residential**	
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Equivalent Passenger Car Volume

	Volume (Veh/hr)			
	U-Turn	**Left**	**Thru**	**Right**
Eastbound	0	5	0	3
Westbound	0	86	0	79
Southbound	0	89	1196	5
Northbound	0	6	956	98

Notes:	
Left-Turn Adjustment Factor	*Conversion of left-turning vehicles to equivalent through vehicles*
Right-turn Adjustment Factor	*Conversion of right-turning vehicles to equivalent through vehicles*
U-turn Adjustment Factor	*Conversion of U-turning vehicles to equivalent through vehicles*
Truck to PCE Factor	*1 truck = X Passenger Car Equivalents*
Critical Lane Volume Sum Limit	*Saturation Value for Critical Lane Volume Sum at an intersection*

Capacity Analysis for Planning of Junctions

Step 2A: Base Conditions Analysis

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) PM Design Year (2048)
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard/Long Boat Lane
Date	March 14, 2024
Major Street Direction	North-South

Existing Intersection Configuration	*Two-Way Stop Control*

Number of Lanes for Existing Configuration
(Can be edited in "3- Alt Num Lanes Input" as needed)

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Two-Way Stop Control	N-S		1	2	1		1	2	0		1	1	0		0	1	1

Results for Existing Configuration

TYPE OF	Sheet	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	

Overall v/c Ratio	2.89	Pedestrian Accommodation Score	2.73	Bicycle Accommodation Score	3.75

Step 2B: Alternative Selection

Rankings Inclusion		Yes/No	Comment
At-Grade Non-Roundabout Intersections?		Yes	
Traffic Signal		Yes	
Two-Way Stop Control		Yes	
All-Way Stop Control		Yes	
Continuous Green T		No	4-Leg Intersection
Quadrant Roadway	S-W	No	No Nearby Quadrant Roadway
	N-E	No	No Nearby Quadrant Roadway
	S-E	No	No Nearby Quadrant Roadway
	N-W	No	No Nearby Quadrant Roadway
Partial Displaced Left Turn		Yes	
Displaced Left Turn		Yes	
Signalized Restricted Crossing U-Turn		Yes	
Unsignalized Restricted Crossing U-Turn		Yes	
Median U-Turn		Yes	
Partial Median U-Turn		Yes	
Bowtie		Yes	
Signalized ThruCut		Yes	
Unsignalized ThruCut		Yes	
Roundabouts?		Yes	
50 ICD Miniroundabout		Yes	
75 ICD Miniroundabout		Yes	
1x1		No	2NS X 1EW Roundabout Only
1NS x 2EW		No	2NS X 1EW Roundabout Only
2NS x 1EW		Yes	
2x2		No	2NS X 1EW Roundabout Only
Ramp Terminal Intersections?		No	
Diamond			
Partial Cloverleaf A			
Partial Cloverleaf B			
Displaced Left Turn Interchange			
Diverging Diamond			
Single Point Diamond			

Continue to Step 3 Step 3

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) PM Design Year (2048)
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard/Long Boat Lane
Date	March 14, 2024
Analysis Type	At-Grade Intersections and Interchanges

Number of Lanes for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		1	2	1		1	2	0		1	1	0		0	1	1
Two-Way Stop Control	N-S		1	2	1		1	2	0		1	1	0		0	1	1
All-Way Stop Control	FULL		1	2	1		1	2	0		1	1	0		0	1	1
Partial Displaced Left Turn	N-S		1	2	1		1	2	1		1	1	0		0	1	1
Displaced Left Turn	FULL		1	2	1		1	2	1		1	1	1		1	1	1
Signalized Restricted Crossing U-Turn	N-S	1	1	2	1	1	1	2	1				2				2
Unsignalized Restricted Crossing U-Turn	N-S	1	1	2	1	1	1	2	1				2				2
Median U-Turn	N-S	1		2	1	1		2	1			1	1			1	1
Partial Median U-Turn	N-S	1		2	1	1		2	1		1	1	0		0	1	1
Signalized ThruCut	N-S		1	2	1		1	2	0		1		1		1		1
Unsignalized ThruCut	N-S		1	2	1		1	2	0		1		1		1		1
Bowtie	N-S			2	1			2	1			1	1			1	1

For shared lanes, enter "0" in L or R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Number of Lanes for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) PM Design Year (2048)
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard/Long Boat Lane
Date	March 14, 2024
Analysis Type	At-Grade Intersections and Interchanges

Volume Echo with Shared Lane Adjustment for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		6	956	98		89	1201	0		5	3	0		0	86	79
Two-Way Stop Control	N-S		6	956	98		89	1201	0		5	3	0		0	86	79
All-Way Stop Control	FULL		6	956	98		89	1201	0		5	3	0		0	86	79
Partial Displaced Left Turn	N-S		6	956	98		89	1196	5		5	3	0		0	86	79
Displaced Left Turn	FULL		6	956	98		89	1196	5		5	0	3		86	0	79
Signalized Restricted Crossing U-Turn	N-S	0	6	956	98	0	89	1196	5				3				79
Unsignalized Restricted Crossing U-Turn	N-S	0	6	956	98	0	89	1196	5				3				79
Median U-Turn	N-S	0		956	98	0		1196	5			0	3			0	79
Partial Median U-Turn	N-S	0		956	98	0		1196	5		5	3	0		0	86	79
Signalized ThruCut	N-S		6	956	98		89	1202	0		5		3		86		79
Unsignalized ThruCut	N-S		6	956	98		89	1201	0		5		3		86		79
Bowtie	N-S		6	956	98		89	1201	5			94	89			92	84

Capacity Analysis for Planning of Junctions

Results Worksheet

Project Name	Chuluota Road (CR 419) ICE Evaluation	***Estimated Volume-to-Capacity Ratio***			
Project Number	Build (4-lane) PM Design Year (2048)	**Number of Configurations**			
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard/Long Boat Lane	**< 0.750**	**0.750 - 0.875**	**0.875 - 1.00**	**≥ 1.00**
Date	March 14, 2024	**10**	**0**	**0**	**5**

Results for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Zone 1 (North)		Zone 2 (South)		Zone 3 (East)		Zone 4 (West)		Zone 5 (Center)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			
Traffic Signal	FULL									698	0.41	0.41	4.79	4.49
Two-Way Stop Control	N-S									--	2.89	2.89	2.73	3.75
All-Way Stop Control	FULL									2523	1.40	1.40	3.62	4.49
Partial Displaced Left Turn	N-S	574	*0.32*	649	*0.36*					689	0.39	0.39	2.86	3.16
Displaced Left Turn	FULL	574	*0.32*	647	*0.36*	180	*0.10*	11	*0.01*	689	0.38	0.38	3.01	3.16
Signalized Restricted Crossing U-Turn	N-S	753	*0.42*	536	*0.30*	578	*0.32*	647	*0.36*			0.42	2.94	4.08
Unsignalized Restricted Crossing U-Turn	N-S	1290	*0.20*	1060	*0.01*	961	*0.65*	1282	*0.05*			0.65	2.64	3.00
Median U-Turn	N-S	760	*0.42*	648	*0.36*					837	0.46	0.46	3.02	4.49
Partial Median U-Turn	N-S	653	*0.36*	641	*0.36*					741	0.42	0.42	2.89	4.49
Bowtie	N-S	148	0.10	94	0.07	86	0.06	3	0.00	706	0.39	0.39	4.70	4.49
Signalized ThruCut	N-S									698	0.40	0.40	4.90	4.49
Unsignalized ThruCut	N-S									--	5.98	5.98	4.22	4.17

Capacity Analysis for Planning of Junctions

Results Worksheet

Results for Roundabouts

TYPE OF ROUNDABOUT	Zone 1 (North)			Zone 3 (East)			Zone 2 (South)			Zone 4 (West)			Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3			
50 ICD	1.38			-0.05			1.12			4.16			4.16	5.39	4.62
75 ICD	1.36			-0.08			1.10			1.24			1.36	5.39	4.62
2NS X 1EW	0.51	0.55		0.02			0.42	0.45		0.28			0.55	5.00	4.54

Results for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Zone 1 (Rt Mrg)		Zone 2 (Lt Mrg)		Zone 3 (Ctr. 1)		Zone 4 (Ctr. 2)		Zone 5 (Lt Mrg)		Zone 6 (Rt Mrg)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			

TYPE OF INTERSECTION	Overall V/C Ratio	V/C Ranking	Pedestrian Accommodation Score	Bicycle Accommodation Score
Displaced Left Turn	0.38	1	3.01	3.16
Partial Displaced Left Turn N-S	0.39	2	2.86	3.16
Bowtie N-S	0.39	2	4.70	4.49
Signalized ThruCut N-S	0.40	4	4.90	4.49
Traffic Signal	0.41	5	4.79	4.49
Signalized Restricted Crossing U-Turn N-S	0.42	6	2.94	4.08
Partial Median U-Turn N-S	0.42	6	2.89	4.49
Median U-Turn N-S	0.46	8	3.02	4.49
2NS X 1EW	0.55	9	5.00	4.54
Unsignalized Restricted Crossing U-Turn N-S	0.65	10	2.64	3.00

Table 1, Cypress Lake Glen Boulevard N/Long Boat Lane Cap-x Results

Build Type	Year	Peak Hour	Intersection Control Rank 1 (V/C Ratio)	Intersection Control Rank 2 (V/C Ratio)	Intersection Control Rank 3 (V/C Ratio)	Intersection Control Rank 4 (V/C Ratio)	Intersection Control Rank 5 (V/C Ratio)	Intersection Control Rank 6 (V/C Ratio)	Intersection Control Rank 7 (V/C Ratio)	Intersection Control Rank 8 (V/C Ratio)	Intersection Control Rank 9 (V/C Ratio)	Intersection Control Rank 10 (V/C Ratio)
No-Build (2-lane)	2028	AM	DLT (0.33)	Partial DLT N-S (0.34)	Bowtie N-S (0.36)	Partial MUT N-S (0.38)	Signalized ThruCut N-S (0.38)	Traffic Signal (0.39)	Unsignalized RCUT N-S (0.41)	Signalized RCUT N-S (0.42)	MUT N-S (0.43)	1 X 1 Roundabout (0.45)
	2038		DLT (0.38)	Partial DLT N-S (0.39)	Bowtie N-S (0.41)	Signalized ThruCut N-S (0.44)	Traffic Signal (0.45)	Partial MUT N-S (0.45)	Unsignalized RCUT N-S (0.48)	Signalized RCUT N-S (0.48)	MUT N-S (0.50)	1 X 1 Roundabout (0.53)
	2048		DLT (0.43)	Partial DLT N-S (0.44)	Bowtie N-S (0.47)	Signalized ThruCut N-S (0.49)	Traffic Signal (0.50)	Partial MUT N-S (0.52)	Signalized RCUT N-S (0.53)	Unsignalized RCUT N-S (0.56)	MUT N-S (0.57)	1 X 1 Roundabout (0.61)
	2028	PM	Unsignalized RCUT N-S (0.24)	DLT (0.37)	Partial DLT N-S (0.38)	Bowtie N-S (0.38)	Signalized ThruCut N-S (0.39)	Traffic Signal (0.40)	Signalized RCUT N-S (0.42)	Partial MUT N-S (0.43)	TWSC (0.44)	MUT N-S (0.46)
	2038		Unsignalized RCUT N-S (0.28)	DLT (0.45)	Bowtie N-S (0.45)	Partial DLT N-S (0.46)	Signalized ThruCut N-S (0.46)	Traffic Signal (0.48)	Signalized RCUT N-S (0.50)	Partial MUT N-S (0.51)	MUT N-S (0.54)	1 X 1 Roundabout (0.64)
	2048		Unsignalized RCUT N-S (0.33)	DLT (0.52)	Partial DLT N-S (0.53)	Bowtie N-S (0.53)	Signalized ThruCut N-S (0.54)	Traffic Signal (0.55)	Signalized RCUT N-S (0.57)	Partial MUT N-S (0.58)	MUT N-S (0.61)	1 X 1 Roundabout (0.74)
Build (4-lane)	2028	AM	DLT (0.21)	Partial DLT N-S (0.22)	Signalized RCUT N-S (0.24)	Bowtie N-S (0.24)	Partial MUT N-S (0.26)	Traffic Signal (0.27)	Signalized ThruCut N-S (0.27)	2NS X 1EW Roundabout (0.29)	MUT N-S (0.32)	Unsignalized RCUT N-S (0.51)
	2038		DLT (0.27)	Partial DLT N-S (0.28)	Signalized RCUT N-S (0.31)	Bowtie N-S (0.31)	Traffic Signal (0.33)	Signalized ThruCut N-S (0.33)	Partial MUT N-S (0.34)	2NS X 1EW Roundabout (0.37)	MUT N-S (0.40)	Unsignalized RCUT N-S (0.73)
	2048		DLT (0.34)	Partial DLT N-S (0.35)	Signalized RCUT N-S (0.38)	Signalized ThruCut N-S (0.38)	Bowtie N-S (0.38)	Traffic Signal (0.39)	Partial MUT N-S (0.41)	2NS X 1EW Roundabout (0.46)	MUT N-S (0.48)	Unsignalized RCUT N-S (1.03)
	2028	PM	DLT (0.23)	Partial DLT N-S (0.24)	Bowtie N-S (0.24)	Signalized ThruCut N-S (0.25)	Traffic Signal (0.26)	Signalized RCUT N-S (0.26)	Partial MUT N-S (0.27)	Unsignalized RCUT N-S (0.30)	MUT N-S (0.30)	2NS X 1EW Roundabout (0.32)
	2038		DLT (0.31)	Partial DLT N-S (0.32)	Signalized ThruCut N-S (0.32)	Bowtie N-S (0.32)	Traffic Signal (0.33)	Signalized RCUT N-S (0.34)	Partial MUT N-S (0.34)	MUT N-S (0.38)	2NS X 1EW Roundabout (0.44)	Unsignalized RCUT N-S (0.44)
	2048		DLT (0.38)	Partial DLT N-S (0.39)	Bowtie N-S (0.39)	Signalized ThruCut N-S (0.40)	Traffic Signal (0.41)	Signalized RCUT N-S (0.42)	Partial MUT N-S (0.42)	MUT N-S (0.46)	2NS X 1EW Roundabout (0.55)	Unsignalized RCUT N-S (0.65)

Greyed out cells indicate that the intersection control type may not be viable due to right-of-way, cost, or other factors

V/C Ratio Legend	
	< 0.750
	0.750 - 0.875
	0.875 - 1.00
	≥ 1.00

SPICE WORKSHEETS

Florida Department of Transportation
Safety Performance for Intersection Control Evaluation Tool

Results

Summary of crash prediction results for each alternative

Project Information

Project Name:	Chuluota Road (CR 419) ICE Evaluation	**Intersection Type**	At-Grade Intersection
Intersection:	Chuluota Road (CR 419) at Cypress Lake Glen Blvd/Long Boat Ln	**Opening Year**	2028
Agency:	Orange County	**Design Year**	0
Project Reference:	No-build (2-lane) Opening Year (2028)	**Facility Type**	On Rural Two Lane Highway
City:	Orlando	**Number of Legs**	4-leg
State:	FL	**1-Way/2-Way**	
Date:	1/26/2024	**# of Major Street Lanes (both directions)**	
Analyst:	JMT	**Major Street Approach Speed**	

Crash Prediction Summary

Control Strategy	Crash Type	Opening Year	Design Year	Total Project Life Cycle	Crash Prediction Rank	AADT Within SPF Prediction Range? (Open Year)	AADT Within SPF Prediction Range? (Design Year)	Source of Prediction	SSI Score: Opening Year	SSI Score: Design Year	SSI Score: Rank
Traffic Signal	Total	4.09	--	--	9	Yes	Yes	Calibrated SPF	96		6
	Fatal & Injury	1.39	--	--							
Minor Road Stop	Total	2.00	--	--	4	No	Yes	Calibrated SPF w/ EB	95		9
	Fatal & Injury	0.86	--	--							
All Way Stop	Total	3.44	--	--	5	No	Yes	Uncalibrated SPF w/ EB	99		2
	Fatal & Injury	0.95	--	--							
1-lane Roundabout	Total	1.87	--	--	1	Yes	Yes	Uncalibrated SPF	100		1
	Fatal & Injury	0.36	--	--							
Displaced Left Turn (DLT)	Total	3.60	--	--	8	N/A	N/A	CMF	93		12
	Fatal & Injury	1.22	--	--							
Median U-Turn (MUT)	Total	2.58	--	--	7	N/A	N/A	CMF	98		3
	Fatal & Injury	1.06	--	--							
Signalized RCUT	Total	3.18	--	--	2	Yes	Yes	Uncalibrated SPF	98		4
	Fatal & Injury	0.69	--	--							
Unsignalized RCUT	Total	3.56	--	--	3	Yes	Yes	Uncalibrated SPF	97		5
	Fatal & Injury	0.74	--	--							
Signalized Thru-Cut	Total	No SPF	--	--	--	N/A	N/A	N/A	96		8
	Fatal & Injury	No SPF	--	--							
Unsignalized Thru-Cut	Total	No SPF	--	--	--	N/A	N/A	N/A	94		11
	Fatal & Injury	No SPF	--	--							
Bowtie	Total	No SPF	--	--	--	N/A	N/A	N/A	94	####	10
	Fatal & Injury	No SPF	--	--							
Jughandle	Total	3.03	--	--	6	N/A	N/A	CMF	96		7
	Fatal & Injury	1.03	--	--							
Other 1*	Total	No SPF	--	--	--	N/A	N/A	CMF	--		--
	Fatal & Injury	No SPF	--	--							
Other 2*	Total	No SPF	--	--	--	N/A	N/A	CMF	--		--
	Fatal & Injury	No SPF	--	--							
			--	--							
			--	--							

Control Strategy Selection and Inputs

Specify the Facility Level Inputs and the Control Strategies to be included in the SPICE Analysis.

Intersection Type	At-Grade Intersection	
Analysis Year	Opening Year Only	
Opening Year	2028	
Design Year		
Facility Type	On Rural Two Lane Highway	For more information on how to determine these values, see the "Definitions" worksheet
Number of Legs	4-leg	
1-Way/2-Way		
# of Major Street Lanes (both directions)		
Major Street Approach Speed		
Opening Year - Major Road AADT	13,350	
Opening Year - Minor Road AADT	5,400	
Design Year - Major Road AADT		
Design Year - Minor Road AADT		

Control Strategy	**Include**	**Base Intersection**	
Traffic Signal	Yes	--	
Traffic Signal (Alternative Configuration)	No	--	
Minor Road Stop Control	Yes	--	Opening Year AADT Outside of SPF Development Range
All Way Stop Control	Yes	--	Opening Year AADT Outside of SPF Development Range
1-Lane Roundabout	Yes	--	
2-Lane Roundabout	No	--	
Displaced Left Turn (DLT)	Yes	Traffic Signal	
Median U-Turn (MUT)	Yes	Traffic Signal	
Signalized Restricted Crossing U-Turn (RCUT)	Yes	--	
Unsignalized Restricted Crossing U-Turn (RCUT)	Yes	--	
Signalized Thru-Cut*	Yes	--	**SSI Only, No Crash Prediction Available*
Unsignalized Thru-Cut*	Yes	--	**SSI Only, No Crash Prediction Available*
Bowtie*	Yes	--	**SSI Only, No Crash Prediction Available*
Continuous Green-T Intersection	No	Traffic Signal	
Jughandle	Yes	Traffic Signal	
Other 1*		Traffic Signal	**Please Select*
Other 2*		Minor Road Stop	**Please Select*

Safe System for Intersection (SSI) Inputs

Specify the geomtric, exposure, severity, and conflicting traffic complexity inputs required for an SSI analysis.

1. Roadway Geometry	Lanes
Major number thru lanes (one direction)	1
Minor number thru lanes (one direction)	1

Major Street Designation	
Select major street direction	N-S
Median Presence on Major Road	No
Median Presence on Minor Road	Yes

	Required Inputs
	Default Available, Override Optional
	Planning-Level Default Input
	Computed Value, Override Optional
	Computed Value - No Override
	Disabled Cell (Often based on input selections)

2. Complete the **"Exposure"** inputs. These inputs will apply to all interesections selected for analysis.
3. Complete the **"Severity"** inputs
4. Complete the **"Conflicting Traffic Complexity"** inputs

2. Exposure - All Intersections

Average Daily Traffic (veh/day)	Open	Design
Major	13,350	
Minor	5,400	

ADT Directional Split	
Major	0.50
Minor	0.50

Nonmotorized Total ADBP (ped-bike/day)	Activity Level	ADBP Value (ped-
Open Year Total Intersection NM	Low (20)	20
Design Year Total Intersection NM		

(or overwrite ped movement ADBPs below)

Nonmotorized Movement ADBP (ped-bike/day)	Open	Design
Major NM 1 (NM mvmt crossing Maj1)	5	
Major NM 2	5	
Minor NM 1	5	
Minor NM 2	5	

Are turning movement ADT values are available? **No** If "Yes", input values in **Table 2-A**
Are peak hour turning movement counts available? **Yes** If "Yes", input values in **Table 2-B**
If no turning movment volumes or counts are available, a user can optionally override the planning-level default turning movment proportions in **Table 2-C**

Table 2-A: Turning Movement (vol/day)

	Open	Design
Major Thru 1	5624.622	
Major Left Turn 1	48.04333	
Major Right Turn 1	1002.335	
Major Thru 2	5830.299	
Major Left Turn 2	803.8127	
Major Right Turn 2	40.88821	
Minor Thru 1	417.8571	
Minor Left Turn 1	1382.143	
Minor Right Turn 1	900	
Minor Thru 2	137.947	
Minor Left Turn 2	1281.027	
Minor Right Turn 2	1281.027	

Table 2-B: Turning Movement Counts (Optional)

	Mvmt	AM Peak	AM %	PM Peak	PM %	Avg %
Major Thru 1	NBT	465	0.834829443	472	0.85045	0.84264
Major Left Turn 1	NBL	3	0.005385996	5	0.009009	0.007198
Major Right Turn 1	NBR	89	0.15978456	78	0.140541	0.150163
Major Thru 2	SBT	424	0.861788618	578	0.885145	0.873467
Major Left Turn 2	SBL	65	0.132113821	71	0.108729	0.120421
Major Right Turn 2	SBR	3	0.006097561	4	0.006126	0.006112
Minor Thru 1	EBT	1	0.071428571	0	0	0.035714
Minor Left Turn 1	EBL	5	0.357142857	4	0.666667	0.511905
Minor Right Turn 1	EBR	8	0.571428571	2	0.333333	0.452381
Minor Thru 2	WBT	2	0.00877193	0	0	0.004386
Minor Left Turn 2	WBL	98	0.429824561	68	0.519084	0.474454
Minor Right Turn 2	WBR	128	0.561403509	63	0.480916	0.52116

Table 2-C: Turning Proportions (optional)

	Decimal
Major Thru 1	0.842639947
Major Left Turn 1	0.007197503
Major Right Turn 1	0.15016255
Major Thru 2	0.873453043
Major Left Turn 2	0.120421382
Major Right Turn 2	0.006125574
Minor Thru 1	0.154761905
Minor Left Turn 1	0.511904762
Minor Right Turn 1	0.333333333
Minor Thru 2	0.051091469
Minor Left Turn 2	0.474454265
Minor Right Turn 2	0.474454265

3. Severity

Vehicle Speeds	mph
Major Posted Speed Limit	50
Minor Posted Speed Limit	35
Major thru	50
Major left	20
Major right	15
Minor thru	29.75
Minor left	20
Minor right	15
Stop near	15
Stop far	25
Signal near	15
Signal far	25

4. Conflicting Traffic Complexity

Traffic Control	Decimal
Base Traffic Control Adjustment Value (BTCAV) for permitted	1
Base Traffic Control Adjustment Value (BTCAV) for protected/permitted	0.85
Base Traffic Control Adjustment Value (BTCAV) for protected	0.01
Base Traffic Control Adjustment Value (BTCAV) for stop-controlled	0.45
Weight, f, for permitted	0.5
Weight, f, for protected/permitted	0.5
Weight, f, for protected	0.5
Weight, f, for stop-controlled	0.5
Major LT signal phasing (drop-down)	Protected/Permitted
Minor LT signal phasing (drop-down)	Protected/Permitted
Exclusive Pedestrian phasing (drop-down)	No

Historical Crash Data Input

Note: In order to use Empirical Bayes (EB), the historical intersection type must be a traffic signal or a minor road stop. Additionally, this alternative must be selected to be included in the analysis, and the historical intersection specified below. Up to 10 years of historical data can be used to perform the EB adjustment.

Is historical crash data available?	Yes		
Number of years available:	5	(Up to 10)	First Year Data is available: 2016
Historical Intx Type:	4ST		

Historical Crash Counts		Year										
		2016	2017	2018	2019	2020	--	--	--	--	--	Total
Combined	Total	0	1	1	0	0	--	--	--	--	--	2
	Fatal/Injury	0	0	0	0	0						0
	PDO	0	1	1	0	0						2
Single-Vehicle	Total											
	Fatal/Injury											
	PDO											
Multiple-Vehicle	Total											
	Fatal/Injury											
	PDO											
Veh-Ped	Fatal/Injury	0	0	0	0	0						0
Veh-Bike	Fatal/Injury	0	0	0	0	0						0
Total	All	0	1	1	0	0	--	--	--	--	--	2

Florida Department of Transportation
Safety Performance for Intersection Control Evaluation Tool

Results

Summary of crash prediction results for each alternative

Project Information

Project Name:	Chuluota Road (CR 419) ICE Evaluation	**Intersection Type**	At-Grade Intersection
Intersection:	Chuluota Road (CR 419) at Cypress Lake Glen Blvd/Long Boat Ln	**Opening Year**	2038
Agency:	Orange County	**Design Year**	0
Project Reference:	No-build (2-lane) Interim Year (2038)	**Facility Type**	On Rural Two Lane Highway
City:	Orlando	**Number of Legs**	4-leg
State:	FL	**1-Way/2-Way**	
Date:	1/26/2024	**# of Major Street Lanes (both directions)**	
Analyst:	JMT	**Major Street Approach Speed**	

Crash Prediction Summary

Control Strategy	Crash Type	Opening Year	Design Year	Total Project Life Cycle	Crash Prediction Rank	AADT Within SPF Prediction Range? (Open Year)	AADT Within SPF Prediction Range? (Design Year)	Source of Prediction	SSI Score: Opening Year	SSI Score: Design Year	SSI Score: Rank
Traffic Signal	Total	4.59	--	--	9	Yes	Yes	Calibrated SPF	95		6
	Fatal & Injury	1.56	--	--							
Minor Road Stop	Total	2.17	--	--	4	No	Yes	Calibrated SPF w/ EB	93		9
	Fatal & Injury	0.94	--	--							
All Way Stop	Total	4.03	--	--	5	No	Yes	Uncalibrated SPF w/ EB	99		2
	Fatal & Injury	1.11	--	--							
1-lane Roundabout	Total	2.08	--	--	1	Yes	Yes	Uncalibrated SPF	100		1
	Fatal & Injury	0.41	--	--							
Displaced Left Turn (DLT)	Total	4.04	--	--	8	N/A	N/A	CMF	91		12
	Fatal & Injury	1.37	--	--							
Median U-Turn (MUT)	Total	2.89	--	--	7	N/A	N/A	CMF	97		3
	Fatal & Injury	1.19	--	--							
Signalized RCUT	Total	3.95	--	--	3	Yes	Yes	Uncalibrated SPF	97		4
	Fatal & Injury	0.87	--	--							
Unsignalized RCUT	Total	3.86	--	--	2	Yes	Yes	Uncalibrated SPF	96		5
	Fatal & Injury	0.83	--	--							
Signalized Thru-Cut	Total	No SPF	--	--	--	N/A	N/A	N/A	95		8
	Fatal & Injury	No SPF	--	--							
Unsignalized Thru-Cut	Total	No SPF	--	--	--	N/A	N/A	N/A	93		11
	Fatal & Injury	No SPF	--	--							
Bowtie	Total	No SPF	--	--	--	N/A	N/A	N/A	93	####	10
	Fatal & Injury	No SPF	--	--							
Jughandle	Total	3.40	--	--	6	N/A	N/A	CMF	95		7
	Fatal & Injury	1.15	--	--							
Other 1*	Total	No SPF	--	--	--	N/A	N/A	CMF	--		--
	Fatal & Injury	No SPF	--	--							
Other 2*	Total	No SPF	--	--	--	N/A	N/A	CMF	--		--
	Fatal & Injury	No SPF	--	--							
			--	--							
			--	--							

Control Strategy Selection and Inputs

Specify the Facility Level Inputs and the Control Strategies to be included in the SPICE Analysis.

Intersection Type	At-Grade Intersection	
Analysis Year	Opening Year Only	
Opening Year	2038	
Design Year		
Facility Type	On Rural Two Lane Highway	For more information on how to determine these values, see the "Definitions" worksheet
Number of Legs	4-leg	
1-Way/2-Way		
# of Major Street Lanes (both directions)		
Major Street Approach Speed		
Opening Year - Major Road AADT	15,700	
Opening Year - Minor Road AADT	5,900	
Design Year - Major Road AADT		
Design Year - Minor Road AADT		

Control Strategy	**Include**	**Base Intersection**	
Traffic Signal	Yes	--	
Traffic Signal (Alternative Configuration)	No	--	
Minor Road Stop Control	Yes	--	Opening Year AADT Outside of SPF Development Range
All Way Stop Control	Yes	--	Opening Year AADT Outside of SPF Development Range
1-Lane Roundabout	Yes	--	
2-Lane Roundabout	No	--	
Displaced Left Turn (DLT)	Yes	Traffic Signal	
Median U-Turn (MUT)	Yes	Traffic Signal	
Signalized Restricted Crossing U-Turn (RCUT)	Yes	--	
Unsignalized Restricted Crossing U-Turn (RCUT)	Yes	--	
Signalized Thru-Cut*	Yes	--	**SSI Only, No Crash Prediction Available*
Unsignalized Thru-Cut*	Yes	--	**SSI Only, No Crash Prediction Available*
Bowtie*	Yes	--	**SSI Only, No Crash Prediction Available*
Continuous Green-T Intersection	No	Traffic Signal	
Jughandle	Yes	Traffic Signal	
Other 1*		Traffic Signal	**Please Select*
Other 2*		Minor Road Stop	**Please Select*

Safe System for Intersection (SSI) Inputs

Specify the geomtric, exposure, severity, and conflicting traffic complexity inputs required for an SSI analysis.

1. Roadway Geometry	Lanes
Major number thru lanes (one direction)	1
Minor number thru lanes (one direction)	1

Major Street Designation	
Select major street direction	N-S
Median Presence on Major Road	No
Median Presence on Minor Road	Yes

	Required Inputs
	Default Available, Override Optional
	Planning-Level Default Input
	Computed Value, Override Optional
	Computed Value - No Override
	Disabled Cell (Often based on input selections)

2. Complete the "Exposure" inputs. These inputs will apply to all interesections selected for analysis.
3. Complete the "Severity" inputs
4. Complete the "Conflicting Traffic Complexity" inputs

2. Exposure - All Intersections

Average Daily Traffic (veh/day)	Open	Design
Major	15,700	
Minor	5,900	

ADT Directional Split	
Major	0.50
Minor	0.50

Nonmotorized Total ADBP (ped-bike/day)	Activity Level	ADBP Value (ped-
Open Year Total Intersection NM	Low (20)	20
Design Year Total Intersection NM		

(or overwrite ped movement ADBPs below)

Nonmotorized Movement ADBP (ped-bike/day)	Open	Design
Major NM 1 (NM mvmt crossing Maj1)	5	
Major NM 2	5	
Minor NM 1	5	
Minor NM 2	5	

Are turning movement ADT values are available?	No
Are peak hour turning movement counts available?	Yes

If "Yes", input values in Table 2-A
If "Yes", input values in Table 2-B
If no turning movment volumes or counts are available, a user can optionally override the planning-level default turning movment proportions in Table 2-C

Table 2-A: Turning Movement (vol/day)

	Open	Design
Major Thru 1	6742.881	
Major Left Turn 1	48.30941	
Major Right Turn 1	1058.809	
Major Thru 2	6991.685	
Major Left Turn 2	817.9027	
Major Right Turn 2	40.41184	
Minor Thru 1	491.6667	
Minor Left Turn 1	1475	
Minor Right Turn 1	983.3333	
Minor Thru 2	156.8822	
Minor Left Turn 2	1396.559	
Minor Right Turn 2	1396.559	

Table 2-B: Turning Movement Counts (Optional)

	Mvmt	AM Peak	AM %	PM Peak	PM %	Avg %
Major Thru 1	NBT	549	0.851162791	566	0.866769	0.858966
Major Left Turn 1	NBL	3	0.004651163	5	0.007657	0.006154
Major Right Turn 1	NBR	93	0.144186047	82	0.125574	0.13488
Major Thru 2	SBT	530	0.881863561	699	0.899614	0.890739
Major Left Turn 2	SBL	68	0.113144759	74	0.095238	0.104191
Major Right Turn 2	SBR	3	0.004991681	4	0.005148	0.00507
Minor Thru 1	EBT	1	0.066666667	0	0	0.033333
Minor Left Turn 1	EBL	5	0.333333333	4	0.666667	0.5
Minor Right Turn 1	EBR	9	0.6	2	0.333333	0.466667
Minor Thru 2	WBT	2	0.008403361	0	0	0.004202
Minor Left Turn 2	WBL	102	0.428571429	71	0.518248	0.47341
Minor Right Turn 2	WBR	134	0.56302521	66	0.481752	0.522389

Table 2-C: Turning Proportions (optional)

	Decimal
Major Thru 1	0.858965775
Major Left Turn 1	0.006154065
Major Right Turn 1	0.13488016
Major Thru 2	0.890660568
Major Left Turn 2	0.104191427
Major Right Turn 2	0.005148005
Minor Thru 1	0.166666667
Minor Left Turn 1	0.5
Minor Right Turn 1	0.333333333
Minor Thru 2	0.053180396
Minor Left Turn 2	0.473409802
Minor Right Turn 2	0.473409802

3. Severity

Vehicle Speeds	mph
Major Posted Speed Limit	50
Minor Posted Speed Limit	35
Major thru	50
Major left	20
Major right	15
Minor thru	29.75
Minor left	20
Minor right	15
Stop near	15
Stop far	25
Signal near	15
Signal far	25

4. Conflicting Traffic Complexity

Traffic Control	Decimal
Base Traffic Control Adjustment Value (BTCAV) for permitted	1
Base Traffic Control Adjustment Value (BTCAV) for protected/permitted	0.85
Base Traffic Control Adjustment Value (BTCAV) for protected	0.01
Base Traffic Control Adjustment Value (BTCAV) for stop-controlled	0.45
Weight, f, for permitted	0.5
Weight, f, for protected/permitted	0.5
Weight, f, for protected	0.5
Weight, f, for stop-controlled	0.5
Major LT signal phasing (drop-down)	Protected/Permitted
Minor LT signal phasing (drop-down)	Protected/Permitted
Exclusive Pedestrian phasing (drop-down)	No

Historical Crash Data Input

Note: In order to use Empirical Bayes (EB), the historical intersection type must be a traffic signal or a minor road stop. Additionally, this alternative must be selected to be included in the analysis, and the historical intersection specified below. Up to 10 years of historical data can be used to perform the EB adjustment.

Is historical crash data available?	Yes		
Number of years available:	5	(Up to 10)	First Year Data is available: 2016
Historical Intx Type:	4ST		

Historical Crash Counts		Year										
		2016	2017	2018	2019	2020	--	--	--	--	--	Total
Combined	Total	0	1	1	0	0	--	--	--	--	--	2
	Fatal/Injury	0	0	0	0	0						0
	PDO	0	1	1	0	0						2
Single-Vehicle	Total											
	Fatal/Injury											
	PDO											
Multiple-Vehicle	Total											
	Fatal/Injury											
	PDO											
Veh-Ped	Fatal/Injury	0	0	0	0	0						0
Veh-Bike	Fatal/Injury	0	0	0	0	0						0
Total	All	0	1	1	0	0	--	--	--	--	--	2

Florida Department of Transportation
Safety Performance for Intersection Control Evaluation Tool

Results

Summary of crash prediction results for each alternative

Project Information

Project Name:	Chuluota Road (CR 419) ICE Evaluation	**Intersection Type**	At-Grade Intersection
Intersection:	Chuluota Road (CR 419) at Cypress Lake Glen Blvd/Long Boat Ln	**Opening Year**	2048
Agency:	Orange County	**Design Year**	0
Project Reference:	No-build (2-lane) Design Year (2048)	**Facility Type**	On Rural Two Lane Highway
City:	Orlando	**Number of Legs**	4-leg
State:	FL	**1-Way/2-Way**	
Date:	1/26/2024	**# of Major Street Lanes (both directions)**	
Analyst:	JMT	**Major Street Approach Speed**	

Crash Prediction Summary

Control Strategy	Crash Type	Opening Year	Design Year	Total Project Life Cycle	Crash Prediction Rank	AADT Within SPF Prediction Range? (Open Year)	AADT Within SPF Prediction Range? (Design Year)	Source of Prediction	SSI Score: Opening Year	SSI Score: Design Year	SSI Score: Rank
Traffic Signal	Total	5.04	--	--	9	Yes	Yes	Calibrated SPF	94		6
	Fatal & Injury	1.71	--	--							
Minor Road Stop	Total	2.31	--	--	3	No	Yes	Calibrated SPF w/ EB	92		9
	Fatal & Injury	1.00	--	--							
All Way Stop	Total	4.59	--	--	5	No	Yes	Uncalibrated SPF w/ EB	99		2
	Fatal & Injury	1.26	--	--							
1-lane Roundabout	Total	2.27	--	--	1	Yes	Yes	Uncalibrated SPF	100		1
	Fatal & Injury	0.45	--	--							
Displaced Left Turn (DLT)	Total	4.43	--	--	8	N/A	N/A	CMF	89		12
	Fatal & Injury	1.51	--	--							
Median U-Turn (MUT)	Total	3.17	--	--	7	N/A	N/A	CMF	97		3
	Fatal & Injury	1.30	--	--							
Signalized RCUT	Total	4.71	--	--	4	Yes	Yes	Uncalibrated SPF	96		4
	Fatal & Injury	1.04	--	--							
Unsignalized RCUT	Total	4.14	--	--	2	Yes	Yes	Uncalibrated SPF	95		5
	Fatal & Injury	0.90	--	--							
Signalized Thru-Cut	Total	No SPF	--	--	--	N/A	N/A	N/A	94		8
	Fatal & Injury	No SPF	--	--							
Unsignalized Thru-Cut	Total	No SPF	--	--	--	N/A	N/A	N/A	91		11
	Fatal & Injury	No SPF	--	--							
Bowtie	Total	No SPF	--	--	--	N/A	N/A	N/A	91	####	10
	Fatal & Injury	No SPF	--	--							
Jughandle	Total	3.73	--	--	6	N/A	N/A	CMF	94		7
	Fatal & Injury	1.27	--	--							
Other 1*	Total	No SPF	--	--	--	N/A	N/A	CMF	--		--
	Fatal & Injury	No SPF	--	--							
Other 2*	Total	No SPF	--	--	--	N/A	N/A	CMF	--		--
	Fatal & Injury	No SPF	--	--							
			--	--							
			--	--							

Control Strategy Selection and Inputs

Specify the Facility Level Inputs and the Control Strategies to be included in the SPICE Analysis.

Intersection Type	At-Grade Intersection	
Analysis Year	Opening Year Only	
Opening Year	2048	
Design Year		
Facility Type	On Rural Two Lane Highway	For more information on how to determine these values, see the "Definitions" worksheet
Number of Legs	4-leg	
1-Way/2-Way		
# of Major Street Lanes (both directions)		
Major Street Approach Speed		
Opening Year - Major Road AADT	17,950	
Opening Year - Minor Road AADT	6,300	
Design Year - Major Road AADT		
Design Year - Minor Road AADT		

Control Strategy	**Include**	**Base Intersection**	
Traffic Signal	Yes	--	
Traffic Signal (Alternative Configuration)	No	--	
Minor Road Stop Control	Yes	--	Opening Year AADT Outside of SPF Development Range
All Way Stop Control	Yes	--	Opening Year AADT Outside of SPF Development Range
1-Lane Roundabout	Yes	--	
2-Lane Roundabout	No	--	
Displaced Left Turn (DLT)	Yes	Traffic Signal	
Median U-Turn (MUT)	Yes	Traffic Signal	
Signalized Restricted Crossing U-Turn (RCUT)	Yes	--	
Unsignalized Restricted Crossing U-Turn (RCUT)	Yes	--	
Signalized Thru-Cut*	Yes	--	**SSI Only, No Crash Prediction Available*
Unsignalized Thru-Cut*	Yes	--	**SSI Only, No Crash Prediction Available*
Bowtie*	Yes	--	**SSI Only, No Crash Prediction Available*
Continuous Green-T Intersection	No	Traffic Signal	
Jughandle	Yes	Traffic Signal	
Other 1*		Traffic Signal	**Please Select*
Other 2*		Minor Road Stop	**Please Select*

Safe System for Intersection (SSI) Inputs

Specify the geomtric, exposure, severity, and conflicting traffic complexity inputs required for an SSI analysis.

1. Roadway Geometry	Lanes
Major number thru lanes (one direction)	1
Minor number thru lanes (one direction)	1

Major Street Designation	
Select major street direction	N-S
Median Presence on Major Road	No
Median Presence on Minor Road	Yes

	Required Inputs
	Default Available, Override Optional
	Planning-Level Default Input
	Computed Value, Override Optional
	Computed Value - No Override
	Disabled Cell (Often based on input selections)

2. Complete the "Exposure" inputs. These inputs will apply to all interesections selected for analysis.
3. Complete the "Severity" inputs
4. Complete the "Conflicting Traffic Complexity" inputs

2. Exposure - All Intersections

Average Daily Traffic (veh/day)	Open	Design
Major	17,950	
Minor	6,300	

ADT Directional Split	
Major	0.50
Minor	0.50

Nonmotorized Total ADBP (ped-bike/day)	Activity Level	ADBP Value (ped-
Open Year Total Intersection NM	Low (20)	20
Design Year Total Intersection NM		

(or overwrite ped movement ADBPs below)

Nonmotorized Movement ADBP (ped-bike/day)	Open	Design
Major NM 1 (NM mvmt crossing Maj1)	5	
Major NM 2	5	
Minor NM 1	5	
Minor NM 2	5	

Are turning movement ADT values are available? No If "Yes", input values in Table 2-A
Are peak hour turning movement counts available? Yes If "Yes", input values in Table 2-B
If no turning movment volumes or counts are available, a user can optionally override the planning-level default turning movment proportions in Table 2-C

Table 2-A: Turning Movement (vol/day)

	Open	Design
Major Thru 1	7823.454	
Major Left Turn 1	48.30806	
Major Right Turn 1	1103.238	
Major Thru 2	8103.062	
Major Left Turn 2	832.0494	
Major Right Turn 2	39.88889	
Minor Thru 1	525	
Minor Left Turn 1	1575	
Minor Right Turn 1	1050	
Minor Thru 2	149.3781	
Minor Left Turn 2	1500.311	
Minor Right Turn 2	1500.311	

Table 2-B: Turning Movement Counts (Optional)

	Mvmt	AM Peak	AM %	PM Peak	PM %	Avg %
Major Thru 1	NBT	632	0.863387978	660	0.88	0.871694
Major Left Turn 1	NBL	3	0.004098361	5	0.006667	0.005383
Major Right Turn 1	NBR	97	0.132513661	85	0.113333	0.122923
Major Thru 2	SBT	637	0.895921238	819	0.91	0.902961
Major Left Turn 2	SBL	71	0.099859353	77	0.085556	0.092707
Major Right Turn 2	SBR	3	0.004219409	4	0.004444	0.004332
Minor Thru 1	EBT	1	0.066666667	0	0	0.033333
Minor Left Turn 1	EBL	5	0.333333333	4	0.666667	0.5
Minor Right Turn 1	EBR	9	0.6	2	0.333333	0.466667
Minor Thru 2	WBT	2	0.008064516	0	0	0.004032
Minor Left Turn 2	WBL	107	0.431451613	74	0.521127	0.476289
Minor Right Turn 2	WBR	139	0.560483871	68	0.478873	0.519679

Table 2-C: Turning Proportions (optional)

	Decimal
Major Thru 1	0.871693989
Major Left Turn 1	0.005382514
Major Right Turn 1	0.122923497
Major Thru 2	0.902848101
Major Left Turn 2	0.092707454
Major Right Turn 2	0.004444444
Minor Thru 1	0.166666667
Minor Left Turn 1	0.5
Minor Right Turn 1	0.333333333
Minor Thru 2	0.047421627
Minor Left Turn 2	0.476289187
Minor Right Turn 2	0.476289187

3. Severity

Vehicle Speeds	mph
Major Posted Speed Limit	50
Minor Posted Speed Limit	35
Major thru	50
Major left	20
Major right	15
Minor thru	29.75
Minor left	20
Minor right	15
Stop near	15
Stop far	25
Signal near	15
Signal far	25

4. Conflicting Traffic Complexity

Traffic Control	Decimal
Base Traffic Control Adjustment Value (BTCAV) for permitted	1
Base Traffic Control Adjustment Value (BTCAV) for protected/permitted	0.85
Base Traffic Control Adjustment Value (BTCAV) for protected	0.01
Base Traffic Control Adjustment Value (BTCAV) for stop-controlled	0.45
Weight, f, for permitted	0.5
Weight, f, for protected/permitted	0.5
Weight, f, for protected	0.5
Weight, f, for stop-controlled	0.5
Major LT signal phasing (drop-down)	Protected/Permitted
Minor LT signal phasing (drop-down)	Protected/Permitted
Exclusive Pedestrian phasing (drop-down)	No

Historical Crash Data Input

Note: In order to use Empirical Bayes (EB), the historical intersection type must be a traffic signal or a minor road stop. Additionally, this alternative must be selected to be included in the analysis, and the historical intersection specified below. Up to 10 years of historical data can be used to perform the EB adjustment.

Is historical crash data available?	Yes		
Number of years available:	5	(Up to 10)	First Year Data is available: 2016
Historical Intx Type:	4ST		

Historical Crash Counts		Year										
		2016	2017	2018	2019	2020	--	--	--	--	--	Total
Combined	Total	0	1	1	0	0	--	--	--	--	--	2
	Fatal/Injury	0	0	0	0	0						0
	PDO	0	1	1	0	0						2
Single-Vehicle	Total											
	Fatal/Injury											
	PDO											
Multiple-Vehicle	Total											
	Fatal/Injury											
	PDO											
Veh-Ped	Fatal/Injury	0	0	0	0	0						0
Veh-Bike	Fatal/Injury	0	0	0	0	0						0
Total	All	0	1	1	0	0	--	--	--	--	--	2

Florida Department of Transportation
Safety Performance for Intersection Control Evaluation Tool

Results

Summary of crash prediction results for each alternative

Project Information

Project Name:	Chuluota Road (CR 419) ICE Evaluation	**Intersection Type**	At-Grade Intersection
Intersection:	Chuluota Road (CR 419) at Cypress Lake Glen Blvd/Long Boat Ln	**Opening Year**	2028
Agency:	Orange County	**Design Year**	0
Project Reference:	Build (4-lane) Opening Year (2028)	**Facility Type**	On Rural Two Lane Highway
City:	Orlando	**Number of Legs**	4-leg
State:	FL	**1-Way/2-Way**	
Date:	1/26/2024	**# of Major Street Lanes (both directions)**	
Analyst:	JMT	**Major Street Approach Speed**	

Crash Prediction Summary

Control Strategy	Crash Type	Opening Year	Design Year	Total Project Life Cycle	Crash Prediction Rank	AADT Within SPF Prediction Range? (Open Year)	AADT Within SPF Prediction Range? (Design Year)	Source of Prediction	SSI Score: Opening Year	SSI Score: Design Year	SSI Score: Rank
Traffic Signal	Total	4.51	--	--	9	Yes	Yes	Calibrated SPF	92		6
	Fatal & Injury	1.53	--	--							
Minor Road Stop	Total	2.11	--	--	3	No	Yes	Calibrated SPF w/ EB	89		9
	Fatal & Injury	0.91	--	--							
All Way Stop	Total	3.93	--	--	4	No	Yes	Uncalibrated SPF w/ EB	98		2
	Fatal & Injury	1.08	--	--							
2-lane Roundabout	Total	5.24	--	--	5	Yes	Yes	Uncalibrated SPF	99		1
	Fatal & Injury	1.11	--	--							
Displaced Left Turn (DLT)	Total	3.97	--	--	8	N/A	N/A	CMF	87		12
	Fatal & Injury	1.35	--	--							
Median U-Turn (MUT)	Total	2.84	--	--	7	N/A	N/A	CMF	96		3
	Fatal & Injury	1.17	--	--							
Signalized RCUT	Total	3.80	--	--	2	Yes	Yes	Uncalibrated SPF	95		4
	Fatal & Injury	0.82	--	--							
Unsignalized RCUT	Total	3.74	--	--	1	Yes	Yes	Uncalibrated SPF	93		5
	Fatal & Injury	0.81	--	--							
Signalized Thru-Cut	Total	No SPF	--	--	--	N/A	N/A	N/A	92		7
	Fatal & Injury	No SPF	--	--							
Unsignalized Thru-Cut	Total	No SPF	--	--	--	N/A	N/A	N/A	88		10
	Fatal & Injury	No SPF	--	--							
Bowtie	Total	No SPF	--	--	--	N/A	N/A	N/A	87	####	11
	Fatal & Injury	No SPF	--	--							
Jughandle	Total	3.34	--	--	6	N/A	N/A	CMF	91		8
	Fatal & Injury	1.13	--	--							
Other 1*	Total	No SPF	--	--	--	N/A	N/A	CMF	--		--
	Fatal & Injury	No SPF	--	--							
Other 2*	Total	No SPF	--	--	--	N/A	N/A	CMF	--		--
	Fatal & Injury	No SPF	--	--							
			--	--							
			--	--							

Control Strategy Selection and Inputs

Specify the Facility Level Inputs and the Control Strategies to be included in the SPICE Analysis.

Intersection Type	At-Grade Intersection	
Analysis Year	Opening Year Only	
Opening Year	2028	
Design Year		
Facility Type	On Rural Two Lane Highway	For more information on how to determine these values, see the "Definitions" worksheet
Number of Legs	4-leg	
1-Way/2-Way		
# of Major Street Lanes (both directions)		
Major Street Approach Speed		
Opening Year - Major Road AADT	15,700	
Opening Year - Minor Road AADT	5,400	
Design Year - Major Road AADT		
Design Year - Minor Road AADT		

Control Strategy	**Include**	**Base Intersection**	
Traffic Signal	Yes	--	
Traffic Signal (Alternative Configuration)	No	--	
Minor Road Stop Control	Yes	--	Opening Year AADT Outside of SPF Development Range
All Way Stop Control	Yes	--	Opening Year AADT Outside of SPF Development Range
1-Lane Roundabout	No	--	
2-Lane Roundabout	Yes	--	
Displaced Left Turn (DLT)	Yes	Traffic Signal	
Median U-Turn (MUT)	Yes	Traffic Signal	
Signalized Restricted Crossing U-Turn (RCUT)	Yes	--	
Unsignalized Restricted Crossing U-Turn (RCUT)	Yes	--	
Signalized Thru-Cut*	Yes	--	**SSI Only, No Crash Prediction Available*
Unsignalized Thru-Cut*	Yes	--	**SSI Only, No Crash Prediction Available*
Bowtie*	Yes	--	**SSI Only, No Crash Prediction Available*
Continuous Green-T Intersection	No	Traffic Signal	
Jughandle	Yes	Traffic Signal	
Other 1*		Traffic Signal	**Please Select*
Other 2*		Minor Road Stop	**Please Select*

Safe System for Intersection (SSI) Inputs

Specify the geomtric, exposure, severity, and conflicting traffic complexity inputs required for an SSI analysis.

1. Roadway Geometry	Lanes
Major number thru lanes (one direction)	2
Minor number thru lanes (one direction)	1

Major Street Designation	
Select major street direction	N-S
Median Presence on Major Road	No
Median Presence on Minor Road	Yes

	Required Inputs
	Default Available, Override Optional
	Planning-Level Default Input
	Computed Value, Override Optional
	Computed Value - No Override
	Disabled Cell (Often based on input selections)

2. Complete the **"Exposure"** inputs. These inputs will apply to all interesections selected for analysis.
3. Complete the **"Severity"** inputs
4. Complete the **"Conflicting Traffic Complexity"** inputs

2. Exposure - All Intersections

Average Daily Traffic (veh/day)	Open	Design
Major	15,700	
Minor	5,400	

ADT Directional Split	
Major	0.50
Minor	0.50

Nonmotorized Total ADBP (ped-bike/day)	Activity Level	ADBP Value (ped-
Open Year Total Intersection NM	Low (20)	20
Design Year Total Intersection NM		

(or overwrite ped movement ADBPs below)

Nonmotorized Movement ADBP (ped-bike/day)	Open	Design
Major NM 1 (NM mvmt crossing Maj1)	5	
Major NM 2	5	
Minor NM 1	5	
Minor NM 2	5	

Are turning movement ADT values are available?	No
Are peak hour turning movement counts available?	Yes

If "Yes", input values in **Table 2-A**
If "Yes", input values in **Table 2-B**

If no turning movment volumes or counts are available, a user can optionally override the planning-level default turning movment proportions in **Table 2-C**

Table 2-A: Turning Movement (vol/day)

	Open	Design
Major Thru 1	6710.34	
Major Left Turn 1	50.31119	
Major Right Turn 1	1089.349	
Major Thru 2	6961.555	
Major Left Turn 2	846.1842	
Major Right Turn 2	42.2611	
Minor Thru 1	450	
Minor Left Turn 1	1350	
Minor Right Turn 1	900	
Minor Thru 2	139.5745	
Minor Left Turn 2	1280.213	
Minor Right Turn 2	1280.213	

Table 2-B: Turning Movement Counts (Optional)

	Mvmt	AM Peak	AM %	PM Peak	PM %	Avg %
Major Thru 1	NBT	526	0.847020934	540	0.86262	0.85482
Major Left Turn 1	NBL	3	0.004830918	5	0.007987	0.006409
Major Right Turn 1	NBR	92	0.148148148	81	0.129393	0.138771
Major Thru 2	SBT	501	0.877408056	666	0.896366	0.886887
Major Left Turn 2	SBL	67	0.117338004	73	0.09825	0.107794
Major Right Turn 2	SBR	3	0.00525394	4	0.005384	0.005319
Minor Thru 1	EBT	1	0.066666667	0	0	0.033333
Minor Left Turn 1	EBL	5	0.333333333	4	0.666667	0.5
Minor Right Turn 1	EBR	9	0.6	2	0.333333	0.466667
Minor Thru 2	WBT	2	0.008510638	0	0	0.004255
Minor Left Turn 2	WBL	101	0.429787234	70	0.518519	0.474153
Minor Right Turn 2	WBR	132	0.561702128	65	0.481481	0.521592

Table 2-C: Turning Proportions (optional)

	Decimal
Major Thru 1	0.854820371
Major Left Turn 1	0.006409069
Major Right Turn 1	0.13877056
Major Thru 2	0.88682225
Major Left Turn 2	0.10779417
Major Right Turn 2	0.00538358
Minor Thru 1	0.166666667
Minor Left Turn 1	0.5
Minor Right Turn 1	0.333333333
Minor Thru 2	0.051694247
Minor Left Turn 2	0.474152876
Minor Right Turn 2	0.474152876

3. Severity

Vehicle Speeds	mph
Major Posted Speed Limit	50
Minor Posted Speed Limit	35
Major thru	50
Major left	20
Major right	15
Minor thru	29.75
Minor left	20
Minor right	15
Stop near	15
Stop far	25
Signal near	15
Signal far	25

4. Conflicting Traffic Complexity

Traffic Control	Decimal
Base Traffic Control Adjustment Value (BTCAV) for permitted	1
Base Traffic Control Adjustment Value (BTCAV) for protected/permitted	0.85
Base Traffic Control Adjustment Value (BTCAV) for protected	0.01
Base Traffic Control Adjustment Value (BTCAV) for stop-controlled	0.45
Weight, f, for permitted	0.5
Weight, f, for protected/permitted	0.5
Weight, f, for protected	0.5
Weight, f, for stop-controlled	0.5
Major LT signal phasing (drop-down)	Protected/Permitted
Minor LT signal phasing (drop-down)	Protected/Permitted
Exclusive Pedestrian phasing (drop-down)	No

Historical Crash Data Input

Note: In order to use Empirical Bayes (EB), the historical intersection type must be a traffic signal or a minor road stop. Additionally, this alternative must be selected to be included in the analysis, and the historical intersection specified below. Up to 10 years of historical data can be used to perform the EB adjustment.

Is historical crash data available?	Yes		
Number of years available:	5	(Up to 10)	First Year Data is available: 2016
Historical Intx Type:	4ST		

Historical Crash Counts		Year										
		2016	2017	2018	2019	2020	--	--	--	--	--	Total
Combined	Total	0	1	1	0	0	--	--	--	--	--	2
	Fatal/Injury	0	0	0	0	0						0
	PDO	0	1	1	0	0						2
Single-Vehicle	Total											
	Fatal/Injury											
	PDO											
Multiple-Vehicle	Total											
	Fatal/Injury											
	PDO											
Veh-Ped	Fatal/Injury	0	0	0	0	0						0
Veh-Bike	Fatal/Injury	0	0	0	0	0						0
Total	All	0	1	1	0	0	--	--	--	--	--	2

Florida Department of Transportation
Safety Performance for Intersection Control Evaluation Tool

Results

Summary of crash prediction results for each alternative

Project Information

Project Name:	Chuluota Road (CR 419) ICE Evaluation	**Intersection Type**	At-Grade Intersection
Intersection:	Chuluota Road (CR 419) at Cypress Lake Glen Blvd/Long Boat Ln	**Opening Year**	2038
Agency:	Orange County	**Design Year**	0
Project Reference:	Build (4-lane) Interim Year (2038)	**Facility Type**	On Rural Two Lane Highway
City:	Orlando	**Number of Legs**	4-leg
State:	FL	**1-Way/2-Way**	
Date:	1/26/2024	**# of Major Street Lanes (both directions)**	
Analyst:	JMT	**Major Street Approach Speed**	

Crash Prediction Summary

Control Strategy	Crash Type	Opening Year	Design Year	Total Project Life Cycle	Crash Prediction Rank	AADT Within SPF Prediction Range? (Open Year)	AADT Within SPF Prediction Range? (Design Year)	Source of Prediction	SSI Score: Opening Year	SSI Score: Design Year	SSI Score: Rank
Traffic Signal	Total	5.40	--	--	9	Yes	Yes	Calibrated SPF	89		6
	Fatal & Injury	1.84	--	--							
Minor Road Stop	Total	2.36	--	--	2	No	Yes	Calibrated SPF w/ EB	85		9
	Fatal & Injury	1.02	--	--							
All Way Stop	Total	5.07	--	--	5	No	Yes	Uncalibrated SPF w/ EB	98		2
	Fatal & Injury	1.39	--	--							
2-lane Roundabout	Total	6.82	--	--	7	Yes	Yes	Uncalibrated SPF	99		1
	Fatal & Injury	1.49	--	--							
Displaced Left Turn (DLT)	Total	4.75	--	--	8	N/A	N/A	CMF	82		12
	Fatal & Injury	1.62	--	--							
Median U-Turn (MUT)	Total	3.40	--	--	6	N/A	N/A	CMF	94		3
	Fatal & Injury	1.40	--	--							
Signalized RCUT	Total	5.33	--	--	3	Yes	Yes	Uncalibrated SPF	94		4
	Fatal & Injury	1.16	--	--							
Unsignalized RCUT	Total	4.28	--	--	1	Yes	Yes	Uncalibrated SPF	91		5
	Fatal & Injury	0.97	--	--							
Signalized Thru-Cut	Total	No SPF	--	--	--	N/A	N/A	N/A	88		8
	Fatal & Injury	No SPF	--	--							
Unsignalized Thru-Cut	Total	No SPF	--	--	--	N/A	N/A	N/A	83		10
	Fatal & Injury	No SPF	--	--							
Bowtie	Total	No SPF	--	--	--	N/A	N/A	N/A	83	####	11
	Fatal & Injury	No SPF	--	--							
Jughandle	Total	4.00	--	--	4	N/A	N/A	CMF	88		7
	Fatal & Injury	1.36	--	--							
Other 1*	Total	No SPF	--	--	--	N/A	N/A	CMF	--		--
	Fatal & Injury	No SPF	--	--							
Other 2*	Total	No SPF	--	--	--	N/A	N/A	CMF	--		--
	Fatal & Injury	No SPF	--	--							
			--	--							
			--	--							

Control Strategy Selection and Inputs

Specify the Facility Level Inputs and the Control Strategies to be included in the SPICE Analysis.

Intersection Type	At-Grade Intersection	
Analysis Year	Opening Year Only	
Opening Year	2038	
Design Year		
Facility Type	On Rural Two Lane Highway	For more information on how to determine these values, see the "Definitions" worksheet
Number of Legs	4-leg	
1-Way/2-Way		
# of Major Street Lanes (both directions)		
Major Street Approach Speed		
Opening Year - Major Road AADT	20,600	
Opening Year - Minor Road AADT	5,900	
Design Year - Major Road AADT		
Design Year - Minor Road AADT		

Control Strategy	**Include**	**Base Intersection**	
Traffic Signal	Yes	--	
Traffic Signal (Alternative Configuration)	No	--	
Minor Road Stop Control	Yes	--	Opening Year AADT Outside of SPF Development Range
All Way Stop Control	Yes	--	Opening Year AADT Outside of SPF Development Range
1-Lane Roundabout	No	--	Opening Year AADT Outside of SPF Development Range
2-Lane Roundabout	Yes	--	
Displaced Left Turn (DLT)	Yes	Traffic Signal	
Median U-Turn (MUT)	Yes	Traffic Signal	
Signalized Restricted Crossing U-Turn (RCUT)	Yes	--	
Unsignalized Restricted Crossing U-Turn (RCUT)	Yes	--	
Signalized Thru-Cut*	Yes	--	**SSI Only, No Crash Prediction Available*
Unsignalized Thru-Cut*	Yes	--	**SSI Only, No Crash Prediction Available*
Bowtie*	Yes	--	**SSI Only, No Crash Prediction Available*
Continuous Green-T Intersection	No	Traffic Signal	
Jughandle	Yes	Traffic Signal	
Other 1*		Traffic Signal	**Please Select*
Other 2*		Minor Road Stop	**Please Select*

Safe System for Intersection (SSI) Inputs

Specify the geomtric, exposure, severity, and conflicting traffic complexity inputs required for an SSI analysis.

1. Roadway Geometry	Lanes
Major number thru lanes (one direction)	2
Minor number thru lanes (one direction)	1

Major Street Designation	
Select major street direction	N-S
Median Presence on Major Road	No
Median Presence on Minor Road	Yes

	Required Inputs
	Default Available, Override Optional
	Planning-Level Default Input
	Computed Value, Override Optional
	Computed Value - No Override
	Disabled Cell (Often based on input selections)

2. Complete the "Exposure" inputs. These inputs will apply to all interesections selected for analysis.
3. Complete the "Severity" inputs
4. Complete the "Conflicting Traffic Complexity" inputs

2. Exposure - All Intersections

Average Daily Traffic (veh/day)	Open	Design
Major	20,600	
Minor	5,900	

ADT Directional Split	
Major	0.50
Minor	0.50

Nonmotorized Total ADBP (ped-bike/day)	Activity Level	ADBP Value (ped-
Open Year Total Intersection NM	Low (20)	20
Design Year Total Intersection NM		

(or overwrite ped movement ADBPs below)

Nonmotorized Movement ADBP (ped-bike/day)	Open	Design
Major NM 1 (NM mvmt crossing Maj1)	5	
Major NM 2	5	
Minor NM 1	5	
Minor NM 2	5	

Are turning movement ADT values are available?	No
Are peak hour turning movement counts available?	Yes

If "Yes", input values in Table 2-A
If "Yes", input values in Table 2-B
If no turning movment volumes or counts are available, a user can optionally override the planning-level default turning movment proportions in Table 2-C

Table 2-A: Turning Movement (vol/day)

	Open	Design
Major Thru 1	9044.423	
Major Left Turn 1	63.1592	
Major Right Turn 1	1192.418	
Major Thru 2	9361.745	
Major Left Turn 2	886.5477	
Major Right Turn 2	51.70683	
Minor Thru 1	368.75	
Minor Left Turn 1	1475	
Minor Right Turn 1	1106.25	
Minor Thru 2	142.116	
Minor Left Turn 2	1403.942	
Minor Right Turn 2	1403.942	

Table 2-B: Turning Movement Counts (Optional)

	Mvmt	AM Peak	AM %	PM Peak	PM %	Avg %
Major Thru 1	NBT	696	0.87	732	0.886199	0.878099
Major Left Turn 1	NBL	4	0.005	6	0.007264	0.006132
Major Right Turn 1	NBR	100	0.125	88	0.106538	0.115769
Major Thru 2	SBT	718	0.903144654	911	0.914659	0.908902
Major Left Turn 2	SBL	73	0.091823899	80	0.080321	0.086073
Major Right Turn 2	SBR	4	0.005031447	5	0.00502	0.005026
Minor Thru 1	EBT	1	0.0625	0	0	0.03125
Minor Left Turn 1	EBL	6	0.375	5	0.625	0.5
Minor Right Turn 1	EBR	9	0.5625	3	0.375	0.46875
Minor Thru 2	WBT	3	0.011673152	0	0	0.005837
Minor Left Turn 2	WBL	110	0.428015564	77	0.52381	0.475913
Minor Right Turn 2	WBR	144	0.560311284	70	0.47619	0.518251

Table 2-C: Turning Proportions (optional)

	Decimal
Major Thru 1	0.878099274
Major Left Turn 1	0.006131961
Major Right Turn 1	0.115768765
Major Thru 2	0.908907327
Major Left Turn 2	0.086072592
Major Right Turn 2	0.00502008
Minor Thru 1	0.125
Minor Left Turn 1	0.5
Minor Right Turn 1	0.375
Minor Thru 2	0.048174912
Minor Left Turn 2	0.475912544
Minor Right Turn 2	0.475912544

3. Severity

Vehicle Speeds	mph
Major Posted Speed Limit	50
Minor Posted Speed Limit	35
Major thru	50
Major left	20
Major right	15
Minor thru	29.75
Minor left	20
Minor right	15
Stop near	15
Stop far	25
Signal near	15
Signal far	25

4. Conflicting Traffic Complexity

Traffic Control	Decimal
Base Traffic Control Adjustment Value (BTCAV) for permitted	1
Base Traffic Control Adjustment Value (BTCAV) for protected/permitted	0.85
Base Traffic Control Adjustment Value (BTCAV) for protected	0.01
Base Traffic Control Adjustment Value (BTCAV) for stop-controlled	0.45
Weight, f, for permitted	0.5
Weight, f, for protected/permitted	0.5
Weight, f, for protected	0.5
Weight, f, for stop-controlled	0.5
Major LT signal phasing (drop-down)	Protected/Permitted
Minor LT signal phasing (drop-down)	Protected/Permitted
Exclusive Pedestrian phasing (drop-down)	No

Historical Crash Data Input

Note: In order to use Empirical Bayes (EB), the historical intersection type must be a traffic signal or a minor road stop. Additionally, this alternative must be selected to be included in the analysis, and the historical intersection specified below. Up to 10 years of historical data can be used to perform the EB adjustment.

Is historical crash data available?	Yes		
Number of years available:	5	(Up to 10)	First Year Data is available: 2016
Historical Intx Type:	4ST		

Historical Crash Counts		Year										
		2016	2017	2018	2019	2020	--	--	--	--	--	Total
Combined	Total	0	1	1	0	0	--	--	--	--	--	2
	Fatal/Injury	0	0	0	0	0						0
	PDO	0	1	1	0	0						2
Single-Vehicle	Total											
	Fatal/Injury											
	PDO											
Multiple-Vehicle	Total											
	Fatal/Injury											
	PDO											
Veh-Ped	Fatal/Injury	0	0	0	0	0						0
Veh-Bike	Fatal/Injury	0	0	0	0	0						0
Total	All	0	1	1	0	0	--	--	--	--	--	2

Florida Department of Transportation
Safety Performance for Intersection Control Evaluation Tool

Results

Summary of crash prediction results for each alternative

Project Information

Project Name:	Chuluota Road (CR 419) ICE Evaluation	**Intersection Type**	At-Grade Intersection
Intersection:	Chuluota Road (CR 419) at Cypress Lake Glen Blvd/Long Boat Ln	**Opening Year**	2048
Agency:	Orange County	**Design Year**	0
Project Reference:	Build (4-lane) Design Year (2048)	**Facility Type**	On Rural Two Lane Highway
City:	Orlando	**Number of Legs**	4-leg
State:	FL	**1-Way/2-Way**	
Date:	1/26/2024	**# of Major Street Lanes (both directions)**	
Analyst:	JMT	**Major Street Approach Speed**	

Crash Prediction Summary

Control Strategy	Crash Type	Opening Year	Design Year	Total Project Life Cycle	Crash Prediction Rank	AADT Within SPF Prediction Range? (Open Year)	AADT Within SPF Prediction Range? (Design Year)	Source of Prediction	SSI Score: Opening Year	SSI Score: Design Year	SSI Score: Rank
Traffic Signal	Total	6.23	--	--	9	No	Yes	Calibrated SPF	85		6
	Fatal & Injury	2.12	--	--							
Minor Road Stop	Total	2.55	--	--	1	No	Yes	Calibrated SPF w/ EB	80		9
	Fatal & Injury	1.10	--	--							
All Way Stop	Total	6.23	--	--	6	No	Yes	Uncalibrated SPF w/ EB	97		2
	Fatal & Injury	1.71	--	--							
2-lane Roundabout	Total	8.45	--	--	8	Yes	Yes	Uncalibrated SPF	99		1
	Fatal & Injury	1.88	--	--							
Displaced Left Turn (DLT)	Total	5.48	--	--	7	N/A	N/A	CMF	76		12
	Fatal & Injury	1.86	--	--							
Median U-Turn (MUT)	Total	3.92	--	--	5	N/A	N/A	CMF	93		3
	Fatal & Injury	1.61	--	--							
Signalized RCUT	Total	6.96	--	--	3	Yes	Yes	Uncalibrated SPF	92		4
	Fatal & Injury	1.51	--	--							
Unsignalized RCUT	Total	4.85	--	--	2	Yes	Yes	Uncalibrated SPF	88		5
	Fatal & Injury	1.12	--	--							
Signalized Thru-Cut	Total	No SPF	--	--	--	N/A	N/A	N/A	84		8
	Fatal & Injury	No SPF	--	--							
Unsignalized Thru-Cut	Total	No SPF	--	--	--	N/A	N/A	N/A	78		10
	Fatal & Injury	No SPF	--	--							
Bowtie	Total	No SPF	--	--	--	N/A	N/A	N/A	78	####	11
	Fatal & Injury	No SPF	--	--							
Jughandle	Total	4.61	--	--	4	N/A	N/A	CMF	84		7
	Fatal & Injury	1.57	--	--							
Other 1*	Total	No SPF	--	--	--	N/A	N/A	CMF	--		--
	Fatal & Injury	No SPF	--	--							
Other 2*	Total	No SPF	--	--	--	N/A	N/A	CMF	--		--
	Fatal & Injury	No SPF	--	--							
			--	--							
			--	--							

Control Strategy Selection and Inputs

Specify the Facility Level Inputs and the Control Strategies to be included in the SPICE Analysis.

Intersection Type	At-Grade Intersection	
Analysis Year	Opening Year Only	
Opening Year	2048	
Design Year		
Facility Type	On Rural Two Lane Highway	For more information on how to determine these values, see the "Definitions" worksheet
Number of Legs	4-leg	
1-Way/2-Way		
# of Major Street Lanes (both directions)		
Major Street Approach Speed		
Opening Year - Major Road AADT	25,550	
Opening Year - Minor Road AADT	6,300	
Design Year - Major Road AADT		
Design Year - Minor Road AADT		

Control Strategy	**Include**	**Base Intersection**		
Traffic Signal	Yes	--	Opening Year AADT Outside of SPF Development Range	
Traffic Signal (Alternative Configuration)	No	--	Opening Year AADT Outside of SPF Development Range	
Minor Road Stop Control	Yes	--	Opening Year AADT Outside of SPF Development Range	
All Way Stop Control	Yes	--	Opening Year AADT Outside of SPF Development Range	
1-Lane Roundabout	No	--	Opening Year AADT Outside of SPF Development Range	
2-Lane Roundabout	Yes	--		
Displaced Left Turn (DLT)	Yes	Traffic Signal		
Median U-Turn (MUT)	Yes	Traffic Signal		
Signalized Restricted Crossing U-Turn (RCUT)	Yes	--		
Unsignalized Restricted Crossing U-Turn (RCUT)	Yes	--		
Signalized Thru-Cut*	Yes	--	*SSI Only, No Crash Prediction Available	
Unsignalized Thru-Cut*	Yes	--	*SSI Only, No Crash Prediction Available	
Bowtie*	Yes	--	*SSI Only, No Crash Prediction Available	
Continuous Green-T Intersection	No	Traffic Signal		
Jughandle	Yes	Traffic Signal		
Other 1*		Traffic Signal	*Please Select	
Other 2*		Minor Road Stop	*Please Select	

Safe System for Intersection (SSI) Inputs

Specify the geomtric, exposure, severity, and conflicting traffic complexity inputs required for an SSI analysis.

1. Roadway Geometry	Lanes
Major number thru lanes (one direction)	2
Minor number thru lanes (one direction)	1

Major Street Designation	
Select major street direction	N-S
Median Presence on Major Road	No
Median Presence on Minor Road	Yes

	Required Inputs
	Default Available, Override Optional
	Planning-Level Default Input
	Computed Value, Override Optional
	Computed Value - No Override
	Disabled Cell (Often based on input selections)

2. Complete the **"Exposure"** inputs. These inputs will apply to all interesections selected for analysis.
3. Complete the **"Severity"** inputs
4. Complete the **"Conflicting Traffic Complexity"** inputs

2. Exposure - All Intersections

Average Daily Traffic (veh/day)	Open	Design
Major	25,550	
Minor	6,300	

ADT Directional Split	
Major	0.50
Minor	0.50

Nonmotorized Total ADBP (ped-bike/day)	Activity Level	ADBP Value (ped-
Open Year Total Intersection NM	Low (20)	20
Design Year Total Intersection NM		

(or overwrite ped movement ADBPs below)

Nonmotorized Movement ADBP (ped-bike/day)	Open	Design
Major NM 1 (NM mvmt crossing Maj1)	5	
Major NM 2	5	
Minor NM 1	5	
Minor NM 2	5	

Are turning movement ADT values are available?	No
Are peak hour turning movement counts available?	Yes

If "Yes", input values in **Table 2-A**
If "Yes", input values in **Table 2-B**

If no turning movment volumes or counts are available, a user can optionally override the planning-level default turning movment proportions in **Table 2-C**

Table 2-A: Turning Movement (vol/day)

	Open	Design
Major Thru 1	11414.1	
Major Left Turn 1	63.51499	
Major Right Turn 1	1297.38	
Major Thru 2	11787.57	
Major Left Turn 2	936.2073	
Major Right Turn 2	51.22294	
Minor Thru 1	428.4926	
Minor Left Turn 1	1540.257	
Minor Right Turn 1	1181.25	
Minor Thru 2	152.4113	
Minor Left Turn 2	1498.794	
Minor Right Turn 2	1498.794	

Table 2-B: Turning Movement Counts (Optional)

	Mvmt	AM Peak	AM %	PM Peak	PM %	Avg %
Major Thru 1	NBT	866	0.885480573	924	0.901463	0.893472
Major Left Turn 1	NBL	4	0.00408998	6	0.005854	0.004972
Major Right Turn 1	NBR	108	0.110429448	95	0.092683	0.101556
Major Thru 2	SBT	935	0.918467583	1156	0.927025	0.922746
Major Left Turn 2	SBL	79	0.077603143	86	0.068966	0.073284
Major Right Turn 2	SBR	4	0.003929273	5	0.00401	0.003969
Minor Thru 1	EBT	1	0.058823529	0	0	0.029412
Minor Left Turn 1	EBL	6	0.352941176	5	0.625	0.488971
Minor Right Turn 1	EBR	10	0.588235294	3	0.375	0.481618
Minor Thru 2	WBT	3	0.010830325	0	0	0.005415
Minor Left Turn 2	WBL	119	0.429602888	83	0.522013	0.475808
Minor Right Turn 2	WBR	155	0.559566787	76	0.477987	0.518777

Table 2-C: Turning Proportions (optional)

	Decimal
Major Thru 1	0.893471994
Major Left Turn 1	0.004971819
Major Right Turn 1	0.101556187
Major Thru 2	0.922706047
Major Left Turn 2	0.07328433
Major Right Turn 2	0.004009623
Minor Thru 1	0.136029412
Minor Left Turn 1	0.488970588
Minor Right Turn 1	0.375
Minor Thru 2	0.048384533
Minor Left Turn 2	0.475807733
Minor Right Turn 2	0.475807733

3. Severity

Vehicle Speeds	mph
Major Posted Speed Limit	50
Minor Posted Speed Limit	35
Major thru	50
Major left	20
Major right	15
Minor thru	29.75
Minor left	20
Minor right	15
Stop near	15
Stop far	25
Signal near	15
Signal far	25

4. Conflicting Traffic Complexity

Traffic Control	Decimal
Base Traffic Control Adjustment Value (BTCAV) for permitted	1
Base Traffic Control Adjustment Value (BTCAV) for protected/permitted	0.85
Base Traffic Control Adjustment Value (BTCAV) for protected	0.01
Base Traffic Control Adjustment Value (BTCAV) for stop-controlled	0.45
Weight, f, for permitted	0.5
Weight, f, for protected/permitted	0.5
Weight, f, for protected	0.5
Weight, f, for stop-controlled	0.5
Major LT signal phasing (drop-down)	Protected/Permitted
Minor LT signal phasing (drop-down)	Protected/Permitted
Exclusive Pedestrian phasing (drop-down)	No

Historical Crash Data Input

Note: In order to use Empirical Bayes (EB), the historical intersection type must be a traffic signal or a minor road stop. Additionally, this alternative must be selected to be included in the analysis, and the historical intersection specified below. Up to 10 years of historical data can be used to perform the EB adjustment.

Is historical crash data available?	Yes		
Number of years available:	5	(Up to 10)	First Year Data is available: 2016
Historical Intx Type:	4ST		

Historical Crash Counts		Year										
		2016	2017	2018	2019	2020	--	--	--	--	--	Total
Combined	Total	0	1	1	0	0	--	--	--	--	--	2
	Fatal/Injury	0	0	0	0	0						0
	PDO	0	1	1	0	0						2
Single-Vehicle	Total											
	Fatal/Injury											
	PDO											
Multiple-Vehicle	Total											
	Fatal/Injury											
	PDO											
Veh-Ped	Fatal/Injury	0	0	0	0	0						0
Veh-Bike	Fatal/Injury	0	0	0	0	0						0
Total	All	0	1	1	0	0	--	--	--	--	--	2

Table 2, Cypress Lake Glen Boulevard N/Long Boat Lane SPICE Results - Crash Prediction

Build Type	Year	Intersection Control Rank 1 (Fatal & Injury Crashes)	Intersection Control Rank 2 (Fatal & Injury Crashes)	Intersection Control Rank 3 (Fatal & Injury Crashes)	Intersection Control Rank 4 (Fatal & Injury Crashes)	Intersection Control Rank 5 (Fatal & Injury Crashes)	Intersection Control Rank 6 (Fatal & Injury Crashes)	Intersection Control Rank 7 (Fatal & Injury Crashes)	Intersection Control Rank 8 (Fatal & Injury Crashes)	Intersection Control Rank 9 (Fatal & Injury Crashes)	Intersection Control Rank 10 (Fatal & Injury Crashes)
No-Build (2-lane)	2028	1 Lane Roundabout (0.36)	Signalized RCUT N-S (0.69)	Unsignalized RCUT N-S (0.74)	TWSC (0.86)	AWSC (0.95)	Jughandle (1.03)	MUT N-S (1.06)	DLT (1.22)	Traffic Signal (1.39)	Bowtie N-S (No SPF)
	2038	1 Lane Roundabout (0.41)	Unsignalized RCUT N-S (0.83)	Signalized RCUT N-S (0.87)	TWSC (0.94)	AWSC (1.11)	Jughandle (1.15)	MUT N-S (1.19)	DLT (1.37)	Traffic Signal (1.56)	Bowtie N-S (No SPF)
	2048	1 Lane Roundabout (0.45)	Unsignalized RCUT N-S (0.90)	TWSC (1.00)	Signalized RCUT N-S (1.04)	AWSC (1.26)	Jughandle (1.27)	MUT N-S (1.30)	DLT (1.51)	Traffic Signal (1.71)	Bowtie N-S (No SPF)
Build (4-lane)	2028	Unsignalized RCUT N-S (0.81)	Signalized RCUT N-S (0.82)	TWSC (0.91)	AWSC (1.08)	2 Lane Roundabout (1.11)	Jughandle (1.13)	MUT N-S (1.17)	DLT (1.35)	Traffic Signal (1.53)	Bowtie N-S (No SPF)
	2038	Unsignalized RCUT N-S (0.97)	TWSC (1.02)	Signalized RCUT N-S (1.16)	Jughandle (1.36)	AWSC (1.39)	MUT N-S (1.40)	2 Lane Roundabout (1.49)	DLT (1.62)	Traffic Signal (1.84)	Bowtie N-S (No SPF)
	2048	TWSC (1.10)	Unsignalized RCUT N-S (1.12)	Signalized RCUT N-S (1.51)	Jughandle (1.57)	MUT N-S (1.61)	AWSC (1.71)	DLT (1.86)	2 Lane Roundabout (1.88)	Traffic Signal (2.12)	Bowtie N-S (No SPF)

Greyed out cells indicate that the intersection control type may not be viable due to right-of-way, cost, or other factors

Table 3, Cypress Lake Glen Boulevard N/Long Boat Lane SPICE Results - SSI Score

Build Type	Year	Intersection Control Rank 1 (SSI Score)	Intersection Control Rank 2 (SSI Score)	Intersection Control Rank 3 (SSI Score)	Intersection Control Rank 4 (SSI Score)	Intersection Control Rank 5 (SSI Score)	Intersection Control Rank 6 (SSI Score)	Intersection Control Rank 7 (SSI Score)	Intersection Control Rank 8 (SSI Score)	Intersection Control Rank 9 (SSI Score)	Intersection Control Rank 10 (SSI Score)
No-Build (2-lane)	2028	1 Lane Roundabout (100)	AWSC (99)	MUT N-S (98)	Signalized RCUT N-S (98)	Unsignalized RCUT N-S (97)	Traffic Signal (96)	Jughandle (96)	Signalized ThruCut N-S (96)	TWSC (95)	Bowtie N-S (94)
	2038	1 Lane Roundabout (100)	AWSC (99)	MUT N-S (97)	Signalized RCUT N-S (97)	Unsignalized RCUT N-S (96)	Traffic Signal (95)	Jughandle (95)	Signalized ThruCut N-S (95)	TWSC (93)	Bowtie N-S (93)
	2048	1 Lane Roundabout (100)	AWSC (99)	MUT N-S (97)	Signalized RCUT N-S (96)	Unsignalized RCUT N-S (95)	Traffic Signal (94)	Jughandle (94)	Signalized ThruCut N-S (94)	TWSC (92)	Bowtie N-S (91)
Build (4-lane)	2028	2 Lane Roundabout (99)	AWSC (98)	MUT N-S (96)	Signalized RCUT N-S (95)	Unsignalized RCUT N-S (93)	Traffic Signal (92)	Signalized ThruCut N-S (92)	Jughandle (91)	TWSC (89)	Unsignalized ThruCut N-S (88)
	2038	2 Lane Roundabout (99)	AWSC (98)	MUT N-S (94)	Signalized RCUT N-S (94)	Unsignalized RCUT N-S (91)	Traffic Signal (89)	Jughandle (88)	Signalized ThruCut N-S (88)	TWSC (85)	Unsignalized ThruCut N-S (83)
	2048	2 Lane Roundabout (99)	AWSC (97)	MUT N-S (93)	Signalized RCUT N-S (92)	Unsignalized RCUT N-S (88)	Traffic Signal (85)	Jughandle (84)	Signalized ThruCut N-S (84)	TWSC (80)	Unsignalized ThruCut N-S (78)

Greyed out cells indicate that the intersection control type may not be viable due to right-of-way, cost, or other factors

SSI Legend	
	90-100
	80-89
	70-79
	< 70

CHULUOTA ROAD & CORNER LAKE DRIVE

CAP-X WORKSHEETS

Capacity Analysis for Planning of Junctions

Input Worksheet 1

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) AM Opening Year (2028)
Location	Chuluota Road (CR 419) at Corner Lake Drive
Date	March 18, 2024
Number of Legs	3
Which leg is the minor street?	W

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	0	50	0	45	3.48%	0.00%
Westbound	0	0	0	0	3.48%	0.00%
Southbound	0	0	518	21	3.48%	0.00%
Northbound	0	13	502	0	3.48%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone		**C3R-Suburban Residential**	
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Equivalent Passenger Car Volume

	Volume (Veh/hr)			
	U-Turn	**Left**	**Thru**	**Right**
Eastbound	0	52	0	47
Westbound	0	0	0	0
Southbound	0	0	536	22
Northbound	0	13	519	0

Notes:	
Left-Turn Adjustment Factor	*Conversion of left-turning vehicles to equivalent through vehicles*
Right-turn Adjustment Factor	*Conversion of right-turning vehicles to equivalent through vehicles*
U-turn Adjustment Factor	*Conversion of U-turning vehicles to equivalent through vehicles*
Truck to PCE Factor	*1 truck = X Passenger Car Equivalents*
Critical Lane Volume Sum Limit	*Saturation Value for Critical Lane Volume Sum at an intersection*

Capacity Analysis for Planning of Junctions

Step 2A: Base Conditions Analysis

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) AM Opening Year (2028)
Location	Chuluota Road (CR 419) at Corner Lake Drive
Date	March 18, 2024
Which leg is the minor street?	W

Existing Intersection Configuration	*Two-Way Stop Control*

Number of Lanes for Existing Configuration
(Can be edited in "3- Alt Num Lanes Input" as needed)

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Two-Way Stop Control	N-S		1	1	0		0	1	1		1	0	1		0	0	0

Results for Existing Configuration

TYPE OF		Sheet	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	
Overall v/c Ratio	0.30	Pedestrian Accommodation Score	--		Bicycle Accommodation Score			--

Step 2B: Alternative Selection

Rankings Inclusion		Yes/No	Comment
At-Grade Non-Roundabout Intersections?		Yes	
Traffic Signal		Yes	
Two-Way Stop Control		Yes	
All-Way Stop Control		Yes	
Continuous Green T		Yes	
Quadrant Roadway	S-W	No	No Nearby Quadrant Roadway
	N-E	No	No Nearby Quadrant Roadway
	S-E	No	No Nearby Quadrant Roadway
	N-W	No	No Nearby Quadrant Roadway
Partial Displaced Left Turn		No	3-Leg Intersection
Displaced Left Turn		No	3-Leg Intersection
Signalized Restricted Crossing U-Turn		Yes	
Unsignalized Restricted Crossing U-Turn		Yes	
Median U-Turn		Yes	
Partial Median U-Turn		Yes	
Bowtie		Yes	
Signalized ThruCut		Yes	
Unsignalized ThruCut		Yes	
Roundabouts?		Yes	
50 ICD Miniroundabout		Yes	
75 ICD Miniroundabout		Yes	
1x1		Yes	
1NS x 2EW		No	1x1 Roundabout Only
2NS x 1EW		No	1x1 Roundabout Only
2x2		No	1x1 Roundabout Only
Ramp Terminal Intersections?		No	
Diamond			
Partial Cloverleaf A			
Partial Cloverleaf B			
Displaced Left Turn Interchange			
Diverging Diamond			
Single Point Diamond			

Continue to Step 3 Step 3

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) AM Opening Year (2028)
Location	Chuluota Road (CR 419) at Corner Lake Drive
Date	March 18, 2024
Analysis Type	At-Grade Intersections and Interchanges

Number of Lanes for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		1	1	0		0	1	1		1	0	1		0	0	0
Two-Way Stop Control	N-S		1	1	0		0	1	1		1	0	1		0	0	0
All-Way Stop Control	FULL		1	1	0		0	1	1		1	0	1		0	0	0
Continuous Green T	W		1	1				1	1		1		1				
Signalized Restricted Crossing U-Turn	N-S	1	1	1	0	1	0	1	1				1				0
Unsignalized Restricted Crossing U-Turn	N-S	1	1	1	0	1	0	1	1				1				0
Median U-Turn	N-S	1		1	0	1		1	1			0	1			0	0
Partial Median U-Turn	N-S	1		1	0	1		1	1		1	0	1		0	0	0
Signalized ThruCut	N-S		1	1	0		0	1	1		1		1		0		0
Unsignalized ThruCut	N-S		1	1	0		0	1	1		1		1		0		0
Bowtie	N-S			1	0			1	1			0	1			0	0

For shared lanes, enter "0" in L or R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Number of Lanes for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) AM Opening Year (2028)
Location	Chuluota Road (CR 419) at Corner Lake Drive
Date	March 18, 2024
Analysis Type	At-Grade Intersections and Interchanges

Volume Echo with Shared Lane Adjustment for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		13	519	0		0	536	22		52	0	47		0	0	0
Two-Way Stop Control	N-S		13	519	0		0	536	22		52	0	47		0	0	0
All-Way Stop Control	FULL		13	519	0		0	536	22		52	0	47		0	0	0
Continuous Green T	W		13	519				536	22		52		47				
Signalized Restricted Crossing U-Turn	N-S	0	13	519	0	0	0	536	22				47				0
Unsignalized Restricted Crossing U-Turn	N-S	0	13	519	0	0	0	536	22				47				0
Median U-Turn	N-S	0		519	0	0		536	22			0	47			0	0
Partial Median U-Turn	N-S	0		519	0	0		536	22		52	0	47		0	0	0
Signalized ThruCut	N-S		13	519	0		0	536	22		52		47		0		0
Unsignalized ThruCut	N-S		13	519	0		0	536	22		52		47		0		0
Bowtie	N-S		0	534	0		0	536	22			52	47			74	0

Capacity Analysis for Planning of Junctions

Results Worksheet

Project Name	Chuluota Road (CR 419) ICE Evaluation	***Estimated Volume-to-Capacity Ratio***			
Project Number	No-build (2-lane) AM Opening Year (2028)	**Number of Configurations**			
Location	Chuluota Road (CR 419) at Corner Lake Drive	**< 0.750**	**0.750 - 0.875**	**0.875 - 1.00**	**≥ 1.00**
Date	March 18, 2024	**13**	**1**	**0**	**0**

Results for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Zone 1 (North)		Zone 2 (South)		Zone 3 (East)		Zone 4 (West)		Zone 5 (Center)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			
Traffic Signal	FULL									605	0.35	0.35		
Two-Way Stop Control	N-S									--	0.30	0.30		
All-Way Stop Control	FULL									1189	0.79	0.79		
Continuous Green T	W									604	0.35	0.35		
Signalized Restricted Crossing U-Turn	N-S	558	*0.31*	597	*0.33*	571	*0.32*	652	*0.36*			0.36		
Unsignalized Restricted Crossing U-Turn	N-S	558	*0.00*	532	*0.06*	571	*0.00*	536	*0.18*			0.18		
Median U-Turn	N-S	574	*0.32*	597	*0.33*					652	0.36	0.36		
Partial Median U-Turn	N-S	574	*0.32*	532	*0.30*					591	0.34	0.34		
Bowtie	N-S	65	0.05	35	0.03	0	0.00	99	0.07	591	0.33	0.33		
Signalized ThruCut	N-S									605	0.35	0.35		
Unsignalized ThruCut	N-S									--	0.30	0.30		

Capacity Analysis for Planning of Junctions

Results Worksheet

Results for Roundabouts

TYPE OF ROUNDABOUT	Zone 1 (North)			Zone 3 (East)			Zone 2 (South)			Zone 4 (West)			Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3			
50 ICD	*0.55*			*0.22*			*0.54*			*0.00*			0.55		
75 ICD	*0.55*			*0.21*			*0.53*			*0.00*			0.55		
1 X 1	*0.41*			*0.13*			*0.41*			*0.00*			0.41		

Results for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Zone 1 (Rt Mrg)		Zone 2 (Lt Mrg)		Zone 3 (Ctr. 1)		Zone 4 (Ctr. 2)		Zone 5 (Lt Mrg)		Zone 6 (Rt Mrg)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			

TYPE OF INTERSECTION	Overall V/C Ratio	V/C Ranking	Pedestrian Accommodation Score	Bicycle Accommodation Score
Unsignalized Restricted Crossing U-Turn N-S	0.18	1	--	--
Two-Way Stop Control N-S	0.30	2	--	--
Unsignalized ThruCut N-S	0.30	2	--	--
Bowtie N-S	0.33	4	--	--
Partial Median U-Turn N-S	0.34	5	--	--
Traffic Signal	0.35	6	--	--
Continuous Green T W	0.35	6	--	--
Signalized ThruCut N-S	0.35	6	--	--
Signalized Restricted Crossing U-Turn N-S	0.36	9	--	--
Median U-Turn N-S	0.36	9	--	--

Capacity Analysis for Planning of Junctions

Input Worksheet 1

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) AM Interim Year (2038)
Location	Chuluota Road (CR 419) at Corner Lake Drive
Date	March 18, 2024
Number of Legs	3
Which leg is the minor street?	W

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	0	52	0	47	3.48%	0.00%
Westbound	0	0	0	0	3.48%	0.00%
Southbound	0	0	627	22	3.48%	0.00%
Northbound	0	14	588	0	3.48%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone		**C3R-Suburban Residential**	
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Equivalent Passenger Car Volume

	Volume (Veh/hr)			
	U-Turn	**Left**	**Thru**	**Right**
Eastbound	0	54	0	49
Westbound	0	0	0	0
Southbound	0	0	649	23
Northbound	0	14	608	0

Notes:	
Left-Turn Adjustment Factor	*Conversion of left-turning vehicles to equivalent through vehicles*
Right-turn Adjustment Factor	*Conversion of right-turning vehicles to equivalent through vehicles*
U-turn Adjustment Factor	*Conversion of U-turning vehicles to equivalent through vehicles*
Truck to PCE Factor	*1 truck = X Passenger Car Equivalents*
Critical Lane Volume Sum Limit	*Saturation Value for Critical Lane Volume Sum at an intersection*

Capacity Analysis for Planning of Junctions

Step 2A: Base Conditions Analysis

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) AM Interim Year (2038)
Location	Chuluota Road (CR 419) at Corner Lake Drive
Date	March 18, 2024
Which leg is the minor street?	W

Existing Intersection Configuration	*Two-Way Stop Control*

Number of Lanes for Existing Configuration
(Can be edited in "3- Alt Num Lanes Input" as needed)

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Two-Way Stop Control	N-S		1	1	0		0	1	1		1	0	1		0	0	0

Results for Existing Configuration

TYPE OF		Sheet	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	
Overall v/c Ratio	0.36	Pedestrian Accommodation Score	--		Bicycle Accommodation Score			--

Step 2B: Alternative Selection

Rankings Inclusion		Yes/No	Comment
At-Grade Non-Roundabout Intersections?		Yes	
Traffic Signal		Yes	
Two-Way Stop Control		Yes	
All-Way Stop Control		Yes	
Continuous Green T		Yes	
Quadrant Roadway	S-W	No	No Nearby Quadrant Roadway
	N-E	No	No Nearby Quadrant Roadway
	S-E	No	No Nearby Quadrant Roadway
	N-W	No	No Nearby Quadrant Roadway
Partial Displaced Left Turn		No	3-Leg Intersection
Displaced Left Turn		No	3-Leg Intersection
Signalized Restricted Crossing U-Turn		Yes	
Unsignalized Restricted Crossing U-Turn		Yes	
Median U-Turn		Yes	
Partial Median U-Turn		Yes	
Bowtie		Yes	
Signalized ThruCut		Yes	
Unsignalized ThruCut		Yes	
Roundabouts?		Yes	
50 ICD Miniroundabout		Yes	
75 ICD Miniroundabout		Yes	
1x1		Yes	
1NS x 2EW		No	1x1 Roundabout Only
2NS x 1EW		No	1x1 Roundabout Only
2x2		No	1x1 Roundabout Only
Ramp Terminal Intersections?		No	
Diamond			
Partial Cloverleaf A			
Partial Cloverleaf B			
Displaced Left Turn Interchange			
Diverging Diamond			
Single Point Diamond			

Continue to Step 3 Step 3

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) AM Interim Year (2038)
Location	Chuluota Road (CR 419) at Corner Lake Drive
Date	March 18, 2024
Analysis Type	At-Grade Intersections and Interchanges

Number of Lanes for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		1	1	0		0	1	1		1	0	1		0	0	0
Two-Way Stop Control	N-S		1	1	0		0	1	1		1	0	1		0	0	0
All-Way Stop Control	FULL		1	1	0		0	1	1		1	0	1		0	0	0
Continuous Green T	W		1	1				1	1		1		1				
Signalized Restricted Crossing U-Turn	N-S	1	1	1	0	1	0	1	1				1				0
Unsignalized Restricted Crossing U-Turn	N-S	1	1	1	0	1	0	1	1				1				0
Median U-Turn	N-S	1		1	0	1		1	1			0	1			0	0
Partial Median U-Turn	N-S	1		1	0	1		1	1		1	0	1		0	0	0
Signalized ThruCut	N-S		1	1	0		0	1	1		1		1		0		0
Unsignalized ThruCut	N-S		1	1	0		0	1	1		1		1		0		0
Bowtie	N-S			1	0			1	1			0	1			0	0

For shared lanes, enter "0" in L or R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Number of Lanes for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) AM Interim Year (2038)
Location	Chuluota Road (CR 419) at Corner Lake Drive
Date	March 18, 2024
Analysis Type	At-Grade Intersections and Interchanges

Volume Echo with Shared Lane Adjustment for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		14	608	0		0	649	23		54	0	49		0	0	0
Two-Way Stop Control	N-S		14	608	0		0	649	23		54	0	49		0	0	0
All-Way Stop Control	FULL		14	608	0		0	649	23		54	0	49		0	0	0
Continuous Green T	W		14	608				649	23		54		49				
Signalized Restricted Crossing U-Turn	N-S	0	14	608	0	0	0	649	23				49				0
Unsignalized Restricted Crossing U-Turn	N-S	0	14	608	0	0	0	649	23				49				0
Median U-Turn	N-S	0		608	0	0		649	23			0	49			0	0
Partial Median U-Turn	N-S	0		608	0	0		649	23		54	0	49		0	0	0
Signalized ThruCut	N-S		14	608	0		0	649	23		54		49		0		0
Unsignalized ThruCut	N-S		14	608	0		0	649	23		54		49		0		0
Bowtie	N-S		0	624	0		0	649	23			54	49			78	0

Capacity Analysis for Planning of Junctions

Results Worksheet

Project Name	Chuluota Road (CR 419) ICE Evaluation	***Estimated Volume-to-Capacity Ratio***			
Project Number	No-build (2-lane) AM Interim Year (2038)	**Number of Configurations**			
Location	Chuluota Road (CR 419) at Corner Lake Drive	**< 0.750**	**0.750 - 0.875**	**0.875 - 1.00**	**≥ 1.00**
Date	March 18, 2024	**13**	**0**	**1**	**0**

Results for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Zone 1 (North)		Zone 2 (South)		Zone 3 (East)		Zone 4 (West)		Zone 5 (Center)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			
Traffic Signal	FULL									721	0.41	0.41		
Two-Way Stop Control	N-S									--	0.36	0.36		
All-Way Stop Control	FULL									1397	0.93	0.93		
Continuous Green T	W									721	0.41	0.41		
Signalized Restricted Crossing U-Turn	N-S	672	*0.37*	690	*0.38*	662	*0.37*	770	*0.43*			0.43		
Unsignalized Restricted Crossing U-Turn	N-S	672	*0.00*	622	*0.07*	662	*0.00*	649	*0.22*			0.22		
Median U-Turn	N-S	690	*0.38*	690	*0.38*					770	0.43	0.43		
Partial Median U-Turn	N-S	690	*0.38*	622	*0.35*					707	0.40	0.40		
Bowtie	N-S	68	0.05	37	0.03	0	0.00	103	0.07	707	0.39	0.39		
Signalized ThruCut	N-S									721	0.41	0.41		
Unsignalized ThruCut	N-S									--	0.36	0.36		

Capacity Analysis for Planning of Junctions

Results Worksheet

Results for Roundabouts

TYPE OF ROUNDABOUT	Zone 1 (North)			Zone 3 (East)			Zone 2 (South)			Zone 4 (West)			Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3			
50 ICD	*0.66*			*0.29*			*0.63*			*0.00*			0.66		
75 ICD	*0.66*			*0.27*			*0.62*			*0.00*			0.66		
1 X 1	*0.50*			*0.15*			*0.48*			*0.00*			0.50		

Results for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Zone 1 (Rt Mrg)		Zone 2 (Lt Mrg)		Zone 3 (Ctr. 1)		Zone 4 (Ctr. 2)		Zone 5 (Lt Mrg)		Zone 6 (Rt Mrg)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			

TYPE OF INTERSECTION	Overall V/C Ratio	V/C Ranking	Pedestrian Accommodation Score	Bicycle Accommodation Score
Unsignalized Restricted Crossing U-Turn N-S	0.22	1	--	--
Two-Way Stop Control N-S	0.36	2	--	--
Unsignalized ThruCut N-S	0.36	2	--	--
Bowtie N-S	0.39	4	--	--
Partial Median U-Turn N-S	0.40	5	--	--
Traffic Signal	0.41	6	--	--
Continuous Green T W	0.41	6	--	--
Signalized ThruCut N-S	0.41	6	--	--
Signalized Restricted Crossing U-Turn N-S	0.43	9	--	--
Median U-Turn N-S	0.43	9	--	--

Capacity Analysis for Planning of Junctions

Input Worksheet 1

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) AM Design Year (2048)
Location	Chuluota Road (CR 419) at Corner Lake Drive
Date	March 18, 2024
Number of Legs	3
Which leg is the minor street?	W

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	0	54	0	49	3.48%	0.00%
Westbound	0	0	0	0	3.48%	0.00%
Southbound	0	0	735	22	3.48%	0.00%
Northbound	0	14	675	0	3.48%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone		**C3R-Suburban Residential**	
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Equivalent Passenger Car Volume

	Volume (Veh/hr)			
	U-Turn	**Left**	**Thru**	**Right**
Eastbound	0	56	0	51
Westbound	0	0	0	0
Southbound	0	0	761	23
Northbound	0	14	698	0

Notes:	
Left-Turn Adjustment Factor	*Conversion of left-turning vehicles to equivalent through vehicles*
Right-turn Adjustment Factor	*Conversion of right-turning vehicles to equivalent through vehicles*
U-turn Adjustment Factor	*Conversion of U-turning vehicles to equivalent through vehicles*
Truck to PCE Factor	*1 truck = X Passenger Car Equivalents*
Critical Lane Volume Sum Limit	*Saturation Value for Critical Lane Volume Sum at an intersection*

Capacity Analysis for Planning of Junctions

Step 2A: Base Conditions Analysis

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) AM Design Year (2048)
Location	Chuluota Road (CR 419) at Corner Lake Drive
Date	March 18, 2024
Which leg is the minor street?	W

Existing Intersection Configuration	*Two-Way Stop Control*

Number of Lanes for Existing Configuration
(Can be edited in "3- Alt Num Lanes Input" as needed)

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Two-Way Stop Control	N-S		1	1	0		0	1	1		1	0	1		0	0	0

Results for Existing Configuration

TYPE OF		Sheet	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	
Overall v/c Ratio	0.43	Pedestrian Accommodation Score	--		Bicycle Accommodation Score			--

Step 2B: Alternative Selection

Rankings Inclusion		Yes/No	Comment
At-Grade Non-Roundabout Intersections?		Yes	
Traffic Signal		Yes	
Two-Way Stop Control		Yes	
All-Way Stop Control		Yes	
Continuous Green T		Yes	
Quadrant Roadway	S-W	No	No Nearby Quadrant Roadway
	N-E	No	No Nearby Quadrant Roadway
	S-E	No	No Nearby Quadrant Roadway
	N-W	No	No Nearby Quadrant Roadway
Partial Displaced Left Turn		No	3-Leg Intersection
Displaced Left Turn		No	3-Leg Intersection
Signalized Restricted Crossing U-Turn		Yes	
Unsignalized Restricted Crossing U-Turn		Yes	
Median U-Turn		Yes	
Partial Median U-Turn		Yes	
Bowtie		Yes	
Signalized ThruCut		Yes	
Unsignalized ThruCut		Yes	
Roundabouts?		Yes	
50 ICD Miniroundabout		Yes	
75 ICD Miniroundabout		Yes	
1x1		Yes	
1NS x 2EW		No	1x1 Roundabout Only
2NS x 1EW		No	1x1 Roundabout Only
2x2		No	1x1 Roundabout Only
Ramp Terminal Intersections?		No	
Diamond			
Partial Cloverleaf A			
Partial Cloverleaf B			
Displaced Left Turn Interchange			
Diverging Diamond			
Single Point Diamond			

Continue to Step 3 Step 3

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) AM Design Year (2048)
Location	Chuluota Road (CR 419) at Corner Lake Drive
Date	March 18, 2024
Analysis Type	At-Grade Intersections and Interchanges

Number of Lanes for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		1	1	0		0	1	1		1	0	1		0	0	0
Two-Way Stop Control	N-S		1	1	0		0	1	1		1	0	1		0	0	0
All-Way Stop Control	FULL		1	1	0		0	1	1		1	0	1		0	0	0
Continuous Green T	W		1	1				1	1		1		1				
Signalized Restricted Crossing U-Turn	N-S	1	1	1	0	1	0	1	1				1				0
Unsignalized Restricted Crossing U-Turn	N-S	1	1	1	0	1	0	1	1				1				0
Median U-Turn	N-S	1		1	0	1		1	1			0	1			0	0
Partial Median U-Turn	N-S	1		1	0	1		1	1		1	0	1		0	0	0
Signalized ThruCut	N-S		1	1	0		0	1	1		1		1		0		0
Unsignalized ThruCut	N-S		1	1	0		0	1	1		1		1		0		0
Bowtie	N-S			1	0			1	1			0	1			0	0

For shared lanes, enter "0" in L or R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Number of Lanes for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) AM Design Year (2048)
Location	Chuluota Road (CR 419) at Corner Lake Drive
Date	March 18, 2024
Analysis Type	At-Grade Intersections and Interchanges

Volume Echo with Shared Lane Adjustment for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		14	698	0		0	761	23		56	0	51		0	0	0
Two-Way Stop Control	N-S		14	698	0		0	761	23		56	0	51		0	0	0
All-Way Stop Control	FULL		14	698	0		0	761	23		56	0	51		0	0	0
Continuous Green T	W		14	698				761	23		56		51				
Signalized Restricted Crossing U-Turn	N-S	0	14	698	0	0	0	761	23				51				0
Unsignalized Restricted Crossing U-Turn	N-S	0	14	698	0	0	0	761	23				51				0
Median U-Turn	N-S	0		698	0	0		761	23			0	51			0	0
Partial Median U-Turn	N-S	0		698	0	0		761	23		56	0	51		0	0	0
Signalized ThruCut	N-S		14	698	0		0	761	23		56		51		0		0
Unsignalized ThruCut	N-S		14	698	0		0	761	23		56		51		0		0
Bowtie	N-S		0	714	0		0	761	23			56	51			80	0

Capacity Analysis for Planning of Junctions

Results Worksheet

Project Name	Chuluota Road (CR 419) ICE Evaluation	***Estimated Volume-to-Capacity Ratio***			
Project Number	No-build (2-lane) AM Design Year (2048)	**Number of Configurations**			
Location	Chuluota Road (CR 419) at Corner Lake Drive	**< 0.750**	**0.750 - 0.875**	**0.875 - 1.00**	**≥ 1.00**
Date	March 18, 2024	**11**	**2**	**0**	**1**

Results for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Zone 1 (North)		Zone 2 (South)		Zone 3 (East)		Zone 4 (West)		Zone 5 (Center)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			
Traffic Signal	FULL									835	0.48	0.48		
Two-Way Stop Control	N-S									--	0.43	0.43		
All-Way Stop Control	FULL									1603	1.07	1.07		
Continuous Green T	W									835	0.48	0.48		
Signalized Restricted Crossing U-Turn	N-S	784	*0.44*	782	*0.43*	754	*0.42*	887	*0.49*			0.49		
Unsignalized Restricted Crossing U-Turn	N-S	784	*0.00*	712	*0.08*	754	*0.00*	761	*0.27*			0.27		
Median U-Turn	N-S	802	*0.45*	782	*0.43*					887	0.49	0.49		
Partial Median U-Turn	N-S	802	*0.45*	712	*0.40*					821	0.47	0.47		
Bowtie	N-S	70	0.05	37	0.03	0	0.00	107	0.08	821	0.46	0.46		
Signalized ThruCut	N-S									835	0.48	0.48		
Unsignalized ThruCut	N-S									--	0.43	0.43		

Capacity Analysis for Planning of Junctions

Results Worksheet

Results for Roundabouts

TYPE OF ROUNDABOUT	Zone 1 (North)			Zone 3 (East)			Zone 2 (South)			Zone 4 (West)			Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3			
50 ICD	0.77			0.43			0.72			0.00			0.77		
75 ICD	0.77			0.37			0.71			0.00			0.77		
1 X 1	0.58			0.17			0.55			0.00			0.58		

Results for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Zone 1 (Rt Mrg)		Zone 2 (Lt Mrg)		Zone 3 (Ctr. 1)		Zone 4 (Ctr. 2)		Zone 5 (Lt Mrg)		Zone 6 (Rt Mrg)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			

TYPE OF INTERSECTION	Overall V/C Ratio	V/C Ranking	Pedestrian Accommodation Score	Bicycle Accommodation Score
Unsignalized Restricted Crossing U-Turn N-S	0.27	1	--	--
Two-Way Stop Control N-S	0.43	2	--	--
Unsignalized ThruCut N-S	0.43	3	--	--
Bowtie N-S	0.46	4	--	--
Partial Median U-Turn N-S	0.47	5	--	--
Traffic Signal	0.48	6	--	--
Continuous Green T W	0.48	6	--	--
Signalized ThruCut N-S	0.48	6	--	--
Signalized Restricted Crossing U-Turn N-S	0.49	9	--	--
Median U-Turn N-S	0.49	9	--	--

Capacity Analysis for Planning of Junctions

Input Worksheet 1

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) PM Opening Year (2028)
Location	Chuluota Road (CR 419) at Corner Lake Drive
Date	March 18, 2024
Number of Legs	3
Which leg is the minor street?	W

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	0	23	0	40	3.48%	0.00%
Westbound	0	0	0	0	3.48%	0.00%
Southbound	0	0	612	35	3.48%	0.00%
Northbound	0	21	532	0	3.48%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone		**C3R-Suburban Residential**	
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Equivalent Passenger Car Volume

	Volume (Veh/hr)			
	U-Turn	**Left**	**Thru**	**Right**
Eastbound	0	24	0	41
Westbound	0	0	0	0
Southbound	0	0	633	36
Northbound	0	22	551	0

Notes:	
Left-Turn Adjustment Factor	*Conversion of left-turning vehicles to equivalent through vehicles*
Right-turn Adjustment Factor	*Conversion of right-turning vehicles to equivalent through vehicles*
U-turn Adjustment Factor	*Conversion of U-turning vehicles to equivalent through vehicles*
Truck to PCE Factor	*1 truck = X Passenger Car Equivalents*
Critical Lane Volume Sum Limit	*Saturation Value for Critical Lane Volume Sum at an intersection*

Capacity Analysis for Planning of Junctions

Step 2A: Base Conditions Analysis

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) PM Opening Year (2028)
Location	Chuluota Road (CR 419) at Corner Lake Drive
Date	March 18, 2024
Which leg is the minor street?	W

Existing Intersection Configuration	*Two-Way Stop Control*

Number of Lanes for Existing Configuration
(Can be edited in "3- Alt Num Lanes Input" as needed)

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Two-Way Stop Control	N-S		1	1	0		0	1	1		1	0	1		0	0	0

Results for Existing Configuration

TYPE OF		Sheet	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	
Overall v/c Ratio	0.35	Pedestrian Accommodation Score	--		Bicycle Accommodation Score			--

Step 2B: Alternative Selection

Rankings Inclusion		Yes/No	Comment
At-Grade Non-Roundabout Intersections?		Yes	
Traffic Signal		Yes	
Two-Way Stop Control		Yes	
All-Way Stop Control		Yes	
Continuous Green T		Yes	
Quadrant Roadway	S-W	No	No Nearby Quadrant Roadway
	N-E	No	No Nearby Quadrant Roadway
	S-E	No	No Nearby Quadrant Roadway
	N-W	No	No Nearby Quadrant Roadway
Partial Displaced Left Turn		No	3-Leg Intersection
Displaced Left Turn		No	3-Leg Intersection
Signalized Restricted Crossing U-Turn		Yes	
Unsignalized Restricted Crossing U-Turn		Yes	
Median U-Turn		Yes	
Partial Median U-Turn		Yes	
Bowtie		Yes	
Signalized ThruCut		Yes	
Unsignalized ThruCut		Yes	
Roundabouts?		Yes	
50 ICD Miniroundabout		Yes	
75 ICD Miniroundabout		Yes	
1x1		Yes	
1NS x 2EW		No	1x1 Roundabout Only
2NS x 1EW		No	1x1 Roundabout Only
2x2		No	1x1 Roundabout Only
Ramp Terminal Intersections?		No	
Diamond			
Partial Cloverleaf A			
Partial Cloverleaf B			
Displaced Left Turn Interchange			
Diverging Diamond			
Single Point Diamond			

Continue to Step 3 Step 3

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) PM Opening Year (2028)
Location	Chuluota Road (CR 419) at Corner Lake Drive
Date	March 18, 2024
Analysis Type	At-Grade Intersections and Interchanges

Number of Lanes for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		1	1	0		0	1	1		1	0	1		0	0	0
Two-Way Stop Control	N-S		1	1	0		0	1	1		1	0	1		0	0	0
All-Way Stop Control	FULL		1	1	0		0	1	1		1	0	1		0	0	0
Continuous Green T	W		1	1				1	1		1		1				
Signalized Restricted Crossing U-Turn	N-S	1	1	1	0	1	0	1	1				1				0
Unsignalized Restricted Crossing U-Turn	N-S	1	1	1	0	1	0	1	1				1				0
Median U-Turn	N-S	1		1	0	1		1	1			0	1			0	0
Partial Median U-Turn	N-S	1		1	0	1		1	1		1	0	1		0	0	0
Signalized ThruCut	N-S		1	1	0		0	1	1		1		1		0		0
Unsignalized ThruCut	N-S		1	1	0		0	1	1		1		1		0		0
Bowtie	N-S			1	0			1	1			0	1			0	0

For shared lanes, enter "0" in L or R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Number of Lanes for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) PM Opening Year (2028)
Location	Chuluota Road (CR 419) at Corner Lake Drive
Date	March 18, 2024
Analysis Type	At-Grade Intersections and Interchanges

Volume Echo with Shared Lane Adjustment for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		22	551	0		0	633	36		24	0	41		0	0	0
Two-Way Stop Control	N-S		22	551	0		0	633	36		24	0	41		0	0	0
All-Way Stop Control	FULL		22	551	0		0	633	36		24	0	41		0	0	0
Continuous Green T	W		22	551				633	36		24		41				
Signalized Restricted Crossing U-Turn	N-S	0	22	551	0	0	0	633	36				41				0
Unsignalized Restricted Crossing U-Turn	N-S	0	22	551	0	0	0	633	36				41				0
Median U-Turn	N-S	0		551	0	0		633	36			0	41			0	0
Partial Median U-Turn	N-S	0		551	0	0		633	36		24	0	41		0	0	0
Signalized ThruCut	N-S		22	551	0		0	633	36		24		41		0		0
Unsignalized ThruCut	N-S		22	551	0		0	633	36		24		41		0		0
Bowtie	N-S		0	577	0		0	633	36			24	41			50	0

Capacity Analysis for Planning of Junctions

Results Worksheet

Project Name	Chuluota Road (CR 419) ICE Evaluation	***Estimated Volume-to-Capacity Ratio***			
Project Number	No-build (2-lane) PM Opening Year (2028)	**Number of Configurations**			
Location	Chuluota Road (CR 419) at Corner Lake Drive	**< 0.750**	**0.750 - 0.875**	**0.875 - 1.00**	**≥ 1.00**
Date	March 18, 2024	**13**	**1**	**0**	**0**

Results for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Zone 1 (North)		Zone 2 (South)		Zone 3 (East)		Zone 4 (West)		Zone 5 (Center)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			
Traffic Signal	FULL									683	0.39	0.39		
Two-Way Stop Control	N-S									--	0.35	0.35		
All-Way Stop Control	FULL									1307	0.87	0.87		
Continuous Green T	W									681	0.39	0.39		
Signalized Restricted Crossing U-Turn	N-S	669	*0.37*	603	*0.34*	575	*0.32*	709	*0.39*			0.39		
Unsignalized Restricted Crossing U-Turn	N-S	669	*0.00*	573	*0.03*	575	*0.00*	633	*0.14*			0.14		
Median U-Turn	N-S	697	*0.39*	603	*0.34*					709	0.39	0.39		
Partial Median U-Turn	N-S	697	*0.39*	573	*0.32*					681	0.39	0.39		
Bowtie	N-S	46	0.03	58	0.04	0	0.00	65	0.05	681	0.38	0.38		
Signalized ThruCut	N-S									681	0.39	0.39		
Unsignalized ThruCut	N-S									--	0.35	0.35		

Capacity Analysis for Planning of Junctions

Results Worksheet

Results for Roundabouts

TYPE OF ROUNDABOUT	Zone 1 (North)			Zone 3 (East)			Zone 2 (South)			Zone 4 (West)			Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3			
50 ICD	*0.67*			*0.19*			*0.56*			*0.00*			0.67		
75 ICD	*0.66*			*0.17*			*0.56*			*0.00*			0.66		
1 X 1	*0.50*			*0.09*			*0.43*			*0.00*			0.50		

Results for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Zone 1 (Rt Mrg)		Zone 2 (Lt Mrg)		Zone 3 (Ctr. 1)		Zone 4 (Ctr. 2)		Zone 5 (Lt Mrg)		Zone 6 (Rt Mrg)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			

TYPE OF INTERSECTION	Overall V/C Ratio	V/C Ranking	Pedestrian Accommodation Score	Bicycle Accommodation Score
Unsignalized Restricted Crossing U-Turn N-S	0.14	1	--	--
Two-Way Stop Control N-S	0.35	2	--	--
Unsignalized ThruCut N-S	0.35	2	--	--
Bowtie N-S	0.38	4	--	--
Traffic Signal	0.39	5	--	--
Continuous Green T W	0.39	5	--	--
Signalized Restricted Crossing U-Turn N-S	0.39	5	--	--
Median U-Turn N-S	0.39	5	--	--
Partial Median U-Turn N-S	0.39	5	--	--
Signalized ThruCut N-S	0.39	5	--	--

Capacity Analysis for Planning of Junctions

Input Worksheet 1

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) PM Interim Year (2038)
Location	Chuluota Road (CR 419) at Corner Lake Drive
Date	March 18, 2024
Number of Legs	3
Which leg is the minor street?	W

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	0	24	0	42	3.48%	0.00%
Westbound	0	0	0	0	3.48%	0.00%
Southbound	0	0	734	37	3.48%	0.00%
Northbound	0	22	629	0	3.48%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone		**C3R-Suburban Residential**	
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Equivalent Passenger Car Volume

	Volume (Veh/hr)			
	U-Turn	**Left**	**Thru**	**Right**
Eastbound	0	25	0	43
Westbound	0	0	0	0
Southbound	0	0	760	38
Northbound	0	23	651	0

Notes:	
Left-Turn Adjustment Factor	*Conversion of left-turning vehicles to equivalent through vehicles*
Right-turn Adjustment Factor	*Conversion of right-turning vehicles to equivalent through vehicles*
U-turn Adjustment Factor	*Conversion of U-turning vehicles to equivalent through vehicles*
Truck to PCE Factor	*1 truck = X Passenger Car Equivalents*
Critical Lane Volume Sum Limit	*Saturation Value for Critical Lane Volume Sum at an intersection*

Capacity Analysis for Planning of Junctions

Step 2A: Base Conditions Analysis

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) PM Interim Year (2038)
Location	Chuluota Road (CR 419) at Corner Lake Drive
Date	March 18, 2024
Which leg is the minor street?	W

Existing Intersection Configuration	*Two-Way Stop Control*

Number of Lanes for Existing Configuration
(Can be edited in "3- Alt Num Lanes Input" as needed)

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Two-Way Stop Control	N-S		1	1	0		0	1	1		1	0	1		0	0	0

Results for Existing Configuration

TYPE OF		Sheet	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	
Overall v/c Ratio	0.42	Pedestrian Accommodation Score	--		Bicycle Accommodation Score			--

Step 2B: Alternative Selection

Rankings Inclusion		Yes/No	Comment
At-Grade Non-Roundabout Intersections?		Yes	
Traffic Signal		Yes	
Two-Way Stop Control		Yes	
All-Way Stop Control		Yes	
Continuous Green T		Yes	
Quadrant Roadway	S-W	No	No Nearby Quadrant Roadway
	N-E	No	No Nearby Quadrant Roadway
	S-E	No	No Nearby Quadrant Roadway
	N-W	No	No Nearby Quadrant Roadway
Partial Displaced Left Turn		No	3-Leg Intersection
Displaced Left Turn		No	3-Leg Intersection
Signalized Restricted Crossing U-Turn		Yes	
Unsignalized Restricted Crossing U-Turn		Yes	
Median U-Turn		Yes	
Partial Median U-Turn		Yes	
Bowtie		Yes	
Signalized ThruCut		Yes	
Unsignalized ThruCut		Yes	
Roundabouts?		Yes	
50 ICD Miniroundabout		Yes	
75 ICD Miniroundabout		Yes	
1x1		Yes	
1NS x 2EW		No	1x1 Roundabout Only
2NS x 1EW		No	1x1 Roundabout Only
2x2		No	1x1 Roundabout Only
Ramp Terminal Intersections?		No	
Diamond			
Partial Cloverleaf A			
Partial Cloverleaf B			
Displaced Left Turn Interchange			
Diverging Diamond			
Single Point Diamond			

Continue to Step 3 Step 3

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) PM Interim Year (2038)
Location	Chuluota Road (CR 419) at Corner Lake Drive
Date	March 18, 2024
Analysis Type	At-Grade Intersections and Interchanges

Number of Lanes for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		1	1	0		0	1	1		1	0	1		0	0	0
Two-Way Stop Control	N-S		1	1	0		0	1	1		1	0	1		0	0	0
All-Way Stop Control	FULL		1	1	0		0	1	1		1	0	1		0	0	0
Continuous Green T	W		1	1				1	1		1		1				
Signalized Restricted Crossing U-Turn	N-S	1	1	1	0	1	0	1	1				1				0
Unsignalized Restricted Crossing U-Turn	N-S	1	1	1	0	1	0	1	1				1				0
Median U-Turn	N-S	1		1	0	1		1	1			0	1			0	0
Partial Median U-Turn	N-S	1		1	0	1		1	1		1	0	1		0	0	0
Signalized ThruCut	N-S		1	1	0		0	1	1		1		1		0		0
Unsignalized ThruCut	N-S		1	1	0		0	1	1		1		1		0		0
Bowtie	N-S			1	0			1	1			0	1			0	0

For shared lanes, enter "0" in L or R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Number of Lanes for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) PM Interim Year (2038)
Location	Chuluota Road (CR 419) at Corner Lake Drive
Date	March 18, 2024
Analysis Type	At-Grade Intersections and Interchanges

Volume Echo with Shared Lane Adjustment for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		23	651	0		0	760	38		25	0	43		0	0	0
Two-Way Stop Control	N-S		23	651	0		0	760	38		25	0	43		0	0	0
All-Way Stop Control	FULL		23	651	0		0	760	38		25	0	43		0	0	0
Continuous Green T	W		23	651				760	38		25		43				
Signalized Restricted Crossing U-Turn	N-S	0	23	651	0	0	0	760	38				43				0
Unsignalized Restricted Crossing U-Turn	N-S	0	23	651	0	0	0	760	38				43				0
Median U-Turn	N-S	0		651	0	0		760	38			0	43			0	0
Partial Median U-Turn	N-S	0		651	0	0		760	38		25	0	43		0	0	0
Signalized ThruCut	N-S		23	651	0		0	760	38		25		43		0		0
Unsignalized ThruCut	N-S		23	651	0		0	760	38		25		43		0		0
Bowtie	N-S		0	678	0		0	760	38			25	43			52	0

Capacity Analysis for Planning of Junctions

Results Worksheet

Project Name	Chuluota Road (CR 419) ICE Evaluation	***Estimated Volume-to-Capacity Ratio***			
Project Number	No-build (2-lane) PM Interim Year (2038)	**Number of Configurations**			
Location	Chuluota Road (CR 419) at Corner Lake Drive	**< 0.750**	**0.750 - 0.875**	**0.875 - 1.00**	**≥ 1.00**
Date	March 18, 2024	**11**	**2**	**0**	**1**

Results for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Zone 1 (North)		Zone 2 (South)		Zone 3 (East)		Zone 4 (West)		Zone 5 (Center)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			
Traffic Signal	FULL									812	0.46	0.46		
Two-Way Stop Control	N-S									--	0.42	0.42		
All-Way Stop Control	FULL									1540	1.03	1.03		
Continuous Green T	W									811	0.46	0.46		
Signalized Restricted Crossing U-Turn	N-S	798	*0.44*	705	*0.39*	676	*0.38*	840	*0.47*			0.47		
Unsignalized Restricted Crossing U-Turn	N-S	798	*0.00*	674	*0.03*	676	*0.00*	760	*0.17*			0.17		
Median U-Turn	N-S	827	*0.46*	705	*0.39*					840	0.47	0.47		
Partial Median U-Turn	N-S	827	*0.46*	674	*0.37*					811	0.46	0.46		
Bowtie	N-S	48	0.03	61	0.04	0	0.00	68	0.05	811	0.45	0.45		
Signalized ThruCut	N-S									810	0.46	0.46		
Unsignalized ThruCut	N-S									--	0.42	0.42		

Capacity Analysis for Planning of Junctions

Results Worksheet

Results for Roundabouts

TYPE OF ROUNDABOUT	Zone 1 (North)			Zone 3 (East)			Zone 2 (South)			Zone 4 (West)			Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3			
50 ICD	0.79			0.29			0.66			0.00			0.79		
75 ICD	0.79			0.25			0.66			0.00			0.79		
1 X 1	0.60			0.11			0.51			0.00			0.60		

Results for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Zone 1 (Rt Mrg)		Zone 2 (Lt Mrg)		Zone 3 (Ctr. 1)		Zone 4 (Ctr. 2)		Zone 5 (Lt Mrg)		Zone 6 (Rt Mrg)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			

TYPE OF INTERSECTION	Overall V/C Ratio	V/C Ranking	Pedestrian Accommodation Score	Bicycle Accommodation Score
Unsignalized Restricted Crossing U-Turn N-S	0.17	1	--	--
Two-Way Stop Control N-S	0.42	2	--	--
Unsignalized ThruCut N-S	0.42	2	--	--
Bowtie N-S	0.45	4	--	--
Traffic Signal	0.46	5	--	--
Continuous Green T W	0.46	5	--	--
Partial Median U-Turn N-S	0.46	5	--	--
Signalized ThruCut N-S	0.46	5	--	--
Signalized Restricted Crossing U-Turn N-S	0.47	9	--	--
Median U-Turn N-S	0.47	9	--	--

Capacity Analysis for Planning of Junctions

Input Worksheet 1

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) PM Design Year (2048)
Location	Chuluota Road (CR 419) at Corner Lake Drive
Date	March 18, 2024
Number of Legs	3
Which leg is the minor street?	W

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	0	25	0	44	3.48%	0.00%
Westbound	0	0	0	0	3.48%	0.00%
Southbound	0	0	856	38	3.48%	0.00%
Northbound	0	22	726	0	3.48%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone		**C3R-Suburban Residential**	
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Equivalent Passenger Car Volume

	Volume (Veh/hr)			
	U-Turn	**Left**	**Thru**	**Right**
Eastbound	0	26	0	46
Westbound	0	0	0	0
Southbound	0	0	886	39
Northbound	0	23	751	0

Notes:	
Left-Turn Adjustment Factor	*Conversion of left-turning vehicles to equivalent through vehicles*
Right-turn Adjustment Factor	*Conversion of right-turning vehicles to equivalent through vehicles*
U-turn Adjustment Factor	*Conversion of U-turning vehicles to equivalent through vehicles*
Truck to PCE Factor	*1 truck = X Passenger Car Equivalents*
Critical Lane Volume Sum Limit	*Saturation Value for Critical Lane Volume Sum at an intersection*

Capacity Analysis for Planning of Junctions

Step 2A: Base Conditions Analysis

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) PM Design Year (2048)
Location	Chuluota Road (CR 419) at Corner Lake Drive
Date	March 18, 2024
Which leg is the minor street?	W

Existing Intersection Configuration	*Two-Way Stop Control*

Number of Lanes for Existing Configuration
(Can be edited in "3- Alt Num Lanes Input" as needed)

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Two-Way Stop Control	N-S		1	1	0		0	1	1		1	0	1		0	0	0

Results for Existing Configuration

TYPE OF	Sheet	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	
Overall v/c Ratio	**0.49**	**Pedestrian Accommodation Score**		**--**	**Bicycle Accommodation Score**		**--**

Step 2B: Alternative Selection

Rankings Inclusion		Yes/No	Comment
At-Grade Non-Roundabout Intersections?		Yes	
Traffic Signal		Yes	
Two-Way Stop Control		Yes	
All-Way Stop Control		Yes	
Continuous Green T		Yes	
Quadrant Roadway	S-W	No	No Nearby Quadrant Roadway
	N-E	No	No Nearby Quadrant Roadway
	S-E	No	No Nearby Quadrant Roadway
	N-W	No	No Nearby Quadrant Roadway
Partial Displaced Left Turn		No	3-Leg Intersection
Displaced Left Turn		No	3-Leg Intersection
Signalized Restricted Crossing U-Turn		Yes	
Unsignalized Restricted Crossing U-Turn		Yes	
Median U-Turn		Yes	
Partial Median U-Turn		Yes	
Bowtie		Yes	
Signalized ThruCut		Yes	
Unsignalized ThruCut		Yes	
Roundabouts?		Yes	
50 ICD Miniroundabout		Yes	
75 ICD Miniroundabout		Yes	
1x1		Yes	
1NS x 2EW		No	1x1 Roundabout Only
2NS x 1EW		No	1x1 Roundabout Only
2x2		No	1x1 Roundabout Only
Ramp Terminal Intersections?		No	
Diamond			
Partial Cloverleaf A			
Partial Cloverleaf B			
Displaced Left Turn Interchange			
Diverging Diamond			
Single Point Diamond			

Continue to Step 3 Step 3

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) PM Design Year (2048)
Location	Chuluota Road (CR 419) at Corner Lake Drive
Date	March 18, 2024
Analysis Type	At-Grade Intersections and Interchanges

Number of Lanes for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		1	1	0		0	1	1		1	0	1		0	0	0
Two-Way Stop Control	N-S		1	1	0		0	1	1		1	0	1		0	0	0
All-Way Stop Control	FULL		1	1	0		0	1	1		1	0	1		0	0	0
Continuous Green T	W		1	1				1	1		1		1				
Signalized Restricted Crossing U-Turn	N-S	1	1	1	0	1	0	1	1				1				0
Unsignalized Restricted Crossing U-Turn	N-S	1	1	1	0	1	0	1	1				1				0
Median U-Turn	N-S	1		1	0	1		1	1			0	1			0	0
Partial Median U-Turn	N-S	1		1	0	1		1	1		1	0	1		0	0	0
Signalized ThruCut	N-S		1	1	0		0	1	1		1		1		0		0
Unsignalized ThruCut	N-S		1	1	0		0	1	1		1		1		0		0
Bowtie	N-S			1	0			1	1			0	1			0	0

For shared lanes, enter "0" in L or R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Number of Lanes for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) PM Design Year (2048)
Location	Chuluota Road (CR 419) at Corner Lake Drive
Date	March 18, 2024
Analysis Type	At-Grade Intersections and Interchanges

Volume Echo with Shared Lane Adjustment for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		23	751	0		0	886	39		26	0	46		0	0	0
Two-Way Stop Control	N-S		23	751	0		0	886	39		26	0	46		0	0	0
All-Way Stop Control	FULL		23	751	0		0	886	39		26	0	46		0	0	0
Continuous Green T	W		23	751				886	39		26		46				
Signalized Restricted Crossing U-Turn	N-S	0	23	751	0	0	0	886	39				46				0
Unsignalized Restricted Crossing U-Turn	N-S	0	23	751	0	0	0	886	39				46				0
Median U-Turn	N-S	0		751	0	0		886	39			0	46			0	0
Partial Median U-Turn	N-S	0		751	0	0		886	39		26	0	46		0	0	0
Signalized ThruCut	N-S		23	751	0		0	886	39		26		46		0		0
Unsignalized ThruCut	N-S		23	751	0		0	886	39		26		46		0		0
Bowtie	N-S		0	778	0		0	886	39			26	46			54	0

Capacity Analysis for Planning of Junctions

Results Worksheet

Project Name	Chuluota Road (CR 419) ICE Evaluation	***Estimated Volume-to-Capacity Ratio***			
Project Number	No-build (2-lane) PM Design Year (2048)	**Number of Configurations**			
Location	Chuluota Road (CR 419) at Corner Lake Drive	**< 0.750**	**0.750 - 0.875**	**0.875 - 1.00**	**≥ 1.00**
Date	March 18, 2024	**11**	**0**	**2**	**1**

Results for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Zone 1 (North)		Zone 2 (South)		Zone 3 (East)		Zone 4 (West)		Zone 5 (Center)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			
Traffic Signal	FULL									941	0.54	0.54		
Two-Way Stop Control	N-S									--	0.49	0.49		
All-Way Stop Control	FULL									1771	1.18	1.18		
Continuous Green T	W									938	0.54	0.54		
Signalized Restricted Crossing U-Turn	N-S	925	*0.51*	807	*0.45*	777	*0.43*	971	*0.54*			0.54		
Unsignalized Restricted Crossing U-Turn	N-S	925	*0.00*	774	*0.04*	777	*0.00*	886	*0.21*			0.21		
Median U-Turn	N-S	954	*0.53*	807	*0.45*					971	0.54	0.54		
Partial Median U-Turn	N-S	954	*0.53*	774	*0.43*					940	0.54	0.54		
Bowtie	N-S	49	0.04	62	0.04	0	0.00	72	0.05	940	0.52	0.52		
Signalized ThruCut	N-S									940	0.54	0.54		
Unsignalized ThruCut	N-S									--	0.49	0.49		

Capacity Analysis for Planning of Junctions

Results Worksheet

Results for Roundabouts

TYPE OF ROUNDABOUT	Zone 1 (North)			Zone 3 (East)			Zone 2 (South)			Zone 4 (West)			Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3			
50 ICD	0.92			*0.58*			0.76			*0.00*			0.92		
75 ICD	0.91			*0.40*			0.75			*0.00*			0.91		
1 X 1	*0.69*			*0.13*			*0.58*			*0.00*			0.69		

Results for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Zone 1 (Rt Mrg)		Zone 2 (Lt Mrg)		Zone 3 (Ctr. 1)		Zone 4 (Ctr. 2)		Zone 5 (Lt Mrg)		Zone 6 (Rt Mrg)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			

TYPE OF INTERSECTION	Overall V/C Ratio	V/C Ranking	Pedestrian Accommodation Score	Bicycle Accommodation Score
Unsignalized Restricted Crossing U-Turn N-S	0.21	1	--	--
Two-Way Stop Control N-S	0.49	2	--	--
Unsignalized ThruCut N-S	0.49	2	--	--
Bowtie N-S	0.52	4	--	--
Traffic Signal	0.54	5	--	--
Continuous Green T W	0.54	5	--	--
Signalized Restricted Crossing U-Turn N-S	0.54	5	--	--
Median U-Turn N-S	0.54	5	--	--
Partial Median U-Turn N-S	0.54	5	--	--
Signalized ThruCut N-S	0.54	5	--	--

Capacity Analysis for Planning of Junctions

Input Worksheet 1

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) AM Opening Year (2028)
Location	Chuluota Road (CR 419) at Corner Lake Drive
Date	March 18, 2024
Number of Legs	3
Which leg is the minor street?	W

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	0	51	0	47	3.48%	0.00%
Westbound	0	0	0	0	3.48%	0.00%
Southbound	0	0	597	21	3.48%	0.00%
Northbound	0	14	565	0	3.48%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone		**C3R-Suburban Residential**	
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Equivalent Passenger Car Volume

	Volume (Veh/hr)			
	U-Turn	**Left**	**Thru**	**Right**
Eastbound	0	53	0	49
Westbound	0	0	0	0
Southbound	0	0	618	22
Northbound	0	14	585	0

Notes:	
Left-Turn Adjustment Factor	*Conversion of left-turning vehicles to equivalent through vehicles*
Right-turn Adjustment Factor	*Conversion of right-turning vehicles to equivalent through vehicles*
U-turn Adjustment Factor	*Conversion of U-turning vehicles to equivalent through vehicles*
Truck to PCE Factor	*1 truck = X Passenger Car Equivalents*
Critical Lane Volume Sum Limit	*Saturation Value for Critical Lane Volume Sum at an intersection*

Capacity Analysis for Planning of Junctions

Step 2A: Base Conditions Analysis

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) AM Opening Year (2028)
Location	Chuluota Road (CR 419) at Corner Lake Drive
Date	March 18, 2024
Which leg is the minor street?	W

Existing Intersection Configuration	*Two-Way Stop Control*

Number of Lanes for Existing Configuration
(Can be edited in "3- Alt Num Lanes Input" as needed)

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Two-Way Stop Control	N-S		1	2	0		0	2	1		1	0	1		0	0	0

Results for Existing Configuration

TYPE OF		Sheet	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	
Overall v/c Ratio	0.21	Pedestrian Accommodation Score	--		Bicycle Accommodation Score			--

Step 2B: Alternative Selection

Rankings Inclusion		Yes/No	Comment
At-Grade Non-Roundabout Intersections?		Yes	
Traffic Signal		Yes	
Two-Way Stop Control		Yes	
All-Way Stop Control		Yes	
Continuous Green T		Yes	
Quadrant Roadway	S-W	No	No Nearby Quadrant Roadway
	N-E	No	No Nearby Quadrant Roadway
	S-E	No	No Nearby Quadrant Roadway
	N-W	No	No Nearby Quadrant Roadway
Partial Displaced Left Turn		No	3-Leg Intersection
Displaced Left Turn		No	3-Leg Intersection
Signalized Restricted Crossing U-Turn		Yes	
Unsignalized Restricted Crossing U-Turn		Yes	
Median U-Turn		Yes	
Partial Median U-Turn		Yes	
Bowtie		Yes	
Signalized ThruCut		Yes	
Unsignalized ThruCut		Yes	
Roundabouts?		Yes	
50 ICD Miniroundabout		Yes	
75 ICD Miniroundabout		Yes	
1x1		No	2x1 Roundabout Only
1NS x 2EW		No	2x1 Roundabout Only
2NS x 1EW		Yes	
2x2		No	2x1 Roundabout Only
Ramp Terminal Intersections?		No	
Diamond			
Partial Cloverleaf A			
Partial Cloverleaf B			
Displaced Left Turn Interchange			
Diverging Diamond			
Single Point Diamond			

Continue to Step 3 Step 3

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) AM Opening Year (2028)
Location	Chuluota Road (CR 419) at Corner Lake Drive
Date	March 18, 2024
Analysis Type	At-Grade Intersections and Interchanges

Number of Lanes for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		1	2	0		0	2	1		1	0	1		0	0	0
Two-Way Stop Control	N-S		1	2	0		0	2	1		1	0	1		0	0	0
All-Way Stop Control	FULL		1	2	0		0	2	1		1	0	1		0	0	0
Continuous Green T	W		1	2				2	1		1		1				
Signalized Restricted Crossing U-Turn	N-S	1	1	2	0	1	0	2	1				2				0
Unsignalized Restricted Crossing U-Turn	N-S	1	1	2	0	1	0	2	1				2				0
Median U-Turn	N-S	1		2	0	1		2	1			0	1			0	0
Partial Median U-Turn	N-S	1		2	0	1		2	1		1	0	1		0	0	0
Signalized ThruCut	N-S		1	2	0		0	2	1		1		1		0		0
Unsignalized ThruCut	N-S		1	2	0		0	2	1		1		1		0		0
Bowtie	N-S			2	0			2	1			0	1			0	0

For shared lanes, enter "0" in L or R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Number of Lanes for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) AM Opening Year (2028)
Location	Chuluota Road (CR 419) at Corner Lake Drive
Date	March 18, 2024
Analysis Type	At-Grade Intersections and Interchanges

Volume Echo with Shared Lane Adjustment for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		14	585	0		0	618	22		53	0	49		0	0	0
Two-Way Stop Control	N-S		14	585	0		0	618	22		53	0	49		0	0	0
All-Way Stop Control	FULL		14	585	0		0	618	22		53	0	49		0	0	0
Continuous Green T	W		14	585				618	22		53		49				
Signalized Restricted Crossing U-Turn	N-S	0	14	585	0	0	0	618	22				49				0
Unsignalized Restricted Crossing U-Turn	N-S	0	14	585	0	0	0	618	22				49				0
Median U-Turn	N-S	0		585	0	0		618	22			0	49			0	0
Partial Median U-Turn	N-S	0		585	0	0		618	22		53	0	49		0	0	0
Signalized ThruCut	N-S		14	585	0		0	618	22		53		49		0		0
Unsignalized ThruCut	N-S		14	585	0		0	618	22		53		49		0		0
Bowtie	N-S		0	601	0		0	618	22			53	49			76	0

Capacity Analysis for Planning of Junctions

Results Worksheet

Project Name	Chuluota Road (CR 419) ICE Evaluation	***Estimated Volume-to-Capacity Ratio***			
Project Number	Build (4-lane) AM Opening Year (2028)	**Number of Configurations**			
Location	Chuluota Road (CR 419) at Corner Lake Drive	**< 0.750**	**0.750 - 0.875**	**0.875 - 1.00**	**≥ 1.00**
Date	March 18, 2024	**13**	**0**	**1**	**0**

Results for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Zone 1 (North)		Zone 2 (South)		Zone 3 (East)		Zone 4 (West)		Zone 5 (Center)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			
Traffic Signal	FULL									380	0.22	0.22		
Two-Way Stop Control	N-S									--	0.21	0.21		
All-Way Stop Control	FULL									1341	0.89	0.89		
Continuous Green T	W									380	0.22	0.22		
Signalized Restricted Crossing U-Turn	N-S	320	*0.18*	366	*0.20*	319	*0.18*	369	*0.21*			0.21		
Unsignalized Restricted Crossing U-Turn	N-S	640	*0.00*	599	*0.07*	638	*0.00*	618	*0.24*			0.24		
Median U-Turn	N-S	338	*0.19*	366	*0.20*					429	0.24	0.24		
Partial Median U-Turn	N-S	338	*0.19*	300	*0.17*					367	0.21	0.21		
Bowtie	N-S	53	0.04	29	0.02	0	0.00	49	0.03	367	0.20	0.20		
Signalized ThruCut	N-S									380	0.22	0.22		
Unsignalized ThruCut	N-S									--	0.33	0.33		

Capacity Analysis for Planning of Junctions

Results Worksheet

Results for Roundabouts

TYPE OF ROUNDABOUT	Zone 1 (North)			Zone 3 (East)			Zone 2 (South)			Zone 4 (West)			Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3			
50 ICD	*0.63*			*0.27*			*0.61*			*0.00*			0.63		
75 ICD	*0.63*			*0.25*			*0.60*			*0.00*			0.63		
2NS X 1EW	*0.23*	*0.25*		*0.13*			*0.23*	0.24		*0.00*			0.25		

Results for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Zone 1 (Rt Mrg)		Zone 2 (Lt Mrg)		Zone 3 (Ctr. 1)		Zone 4 (Ctr. 2)		Zone 5 (Lt Mrg)		Zone 6 (Rt Mrg)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			

TYPE OF INTERSECTION	Overall V/C Ratio	V/C Ranking	Pedestrian Accommodation Score	Bicycle Accommodation Score
Bowtie N-S	0.20	1	--	--
Signalized Restricted Crossing U-Turn N-S	0.21	2	--	--
Two-Way Stop Control N-S	0.21	2	--	--
Partial Median U-Turn N-S	0.21	4	--	--
Traffic Signal	0.22	5	--	--
Continuous Green T W	0.22	5	--	--
Signalized ThruCut N-S	0.22	5	--	--
Unsignalized Restricted Crossing U-Turn N-S	0.24	8	--	--
Median U-Turn N-S	0.24	9	--	--
2NS X 1EW	0.25	10	--	--

Capacity Analysis for Planning of Junctions

Input Worksheet 1

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) AM Interim Year (2038)
Location	Chuluota Road (CR 419) at Corner Lake Drive
Date	March 18, 2024
Number of Legs	3
Which leg is the minor street?	W

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	0	56	0	51	3.48%	0.00%
Westbound	0	0	0	0	3.48%	0.00%
Southbound	0	0	818	21	3.48%	0.00%
Northbound	0	15	741	0	3.48%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone		**C3R-Suburban Residential**	
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Equivalent Passenger Car Volume

	Volume (Veh/hr)			
	U-Turn	**Left**	**Thru**	**Right**
Eastbound	0	58	0	53
Westbound	0	0	0	0
Southbound	0	0	846	22
Northbound	0	16	767	0

Notes:	
Left-Turn Adjustment Factor	*Conversion of left-turning vehicles to equivalent through vehicles*
Right-turn Adjustment Factor	*Conversion of right-turning vehicles to equivalent through vehicles*
U-turn Adjustment Factor	*Conversion of U-turning vehicles to equivalent through vehicles*
Truck to PCE Factor	*1 truck = X Passenger Car Equivalents*
Critical Lane Volume Sum Limit	*Saturation Value for Critical Lane Volume Sum at an intersection*

Capacity Analysis for Planning of Junctions

Step 2A: Base Conditions Analysis

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) AM Interim Year (2038)
Location	Chuluota Road (CR 419) at Corner Lake Drive
Date	March 18, 2024
Which leg is the minor street?	W

Existing Intersection Configuration	*Two-Way Stop Control*

Number of Lanes for Existing Configuration
(Can be edited in "3- Alt Num Lanes Input" as needed)

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Two-Way Stop Control	N-S		1	2	0		0	2	1		1	0	1		0	0	0

Results for Existing Configuration

TYPE OF		Sheet	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	
Overall v/c Ratio	0.38	Pedestrian Accommodation Score	--		Bicycle Accommodation Score			--

Step 2B: Alternative Selection

Rankings Inclusion		Yes/No	Comment
At-Grade Non-Roundabout Intersections?		Yes	
Traffic Signal		Yes	
Two-Way Stop Control		Yes	
All-Way Stop Control		Yes	
Continuous Green T		Yes	
Quadrant Roadway	S-W	No	No Nearby Quadrant Roadway
	N-E	No	No Nearby Quadrant Roadway
	S-E	No	No Nearby Quadrant Roadway
	N-W	No	No Nearby Quadrant Roadway
Partial Displaced Left Turn		No	3-Leg Intersection
Displaced Left Turn		No	3-Leg Intersection
Signalized Restricted Crossing U-Turn		Yes	
Unsignalized Restricted Crossing U-Turn		Yes	
Median U-Turn		Yes	
Partial Median U-Turn		Yes	
Bowtie		Yes	
Signalized ThruCut		Yes	
Unsignalized ThruCut		Yes	
Roundabouts?		Yes	
50 ICD Miniroundabout		Yes	
75 ICD Miniroundabout		Yes	
1x1		No	2x1 Roundabout Only
1NS x 2EW		No	2x1 Roundabout Only
2NS x 1EW		Yes	
2x2		No	2x1 Roundabout Only
Ramp Terminal Intersections?		No	
Diamond			
Partial Cloverleaf A			
Partial Cloverleaf B			
Displaced Left Turn Interchange			
Diverging Diamond			
Single Point Diamond			

Continue to Step 3 Step 3

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) AM Interim Year (2038)
Location	Chuluota Road (CR 419) at Corner Lake Drive
Date	March 18, 2024
Analysis Type	At-Grade Intersections and Interchanges

Number of Lanes for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		1	2	0		0	2	1		1	0	1		0	0	0
Two-Way Stop Control	N-S		1	2	0		0	2	1		1	0	1		0	0	0
All-Way Stop Control	FULL		1	2	0		0	2	1		1	0	1		0	0	0
Continuous Green T	W		1	2				2	1		1		1				
Signalized Restricted Crossing U-Turn	N-S	1	1	2	0	1	0	2	1				2				0
Unsignalized Restricted Crossing U-Turn	N-S	1	1	2	0	1	0	2	1				2				0
Median U-Turn	N-S	1		2	0	1		2	1			0	1			0	0
Partial Median U-Turn	N-S	1		2	0	1		2	1		1	0	1		0	0	0
Signalized ThruCut	N-S		1	2	0		0	2	1		1		1		0		0
Unsignalized ThruCut	N-S		1	2	0		0	2	1		1		1		0		0
Bowtie	N-S			2	0			2	1			0	1			0	0

For shared lanes, enter "0" in L or R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Number of Lanes for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) AM Interim Year (2038)
Location	Chuluota Road (CR 419) at Corner Lake Drive
Date	March 18, 2024
Analysis Type	At-Grade Intersections and Interchanges

Volume Echo with Shared Lane Adjustment for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		16	767	0		0	846	22		58	0	53		0	0	0
Two-Way Stop Control	N-S		16	767	0		0	846	22		58	0	53		0	0	0
All-Way Stop Control	FULL		16	767	0		0	846	22		58	0	53		0	0	0
Continuous Green T	W		16	767				846	22		58		53				
Signalized Restricted Crossing U-Turn	N-S	0	16	767	0	0	0	846	22				53				0
Unsignalized Restricted Crossing U-Turn	N-S	0	16	767	0	0	0	846	22				53				0
Median U-Turn	N-S	0		767	0	0		846	22			0	53			0	0
Partial Median U-Turn	N-S	0		767	0	0		846	22		58	0	53		0	0	0
Signalized ThruCut	N-S		16	767	0		0	846	22		58		53		0		0
Unsignalized ThruCut	N-S		16	767	0		0	846	22		58		53		0		0
Bowtie	N-S		0	786	0		0	846	22			58	53			84	0

Capacity Analysis for Planning of Junctions

Results Worksheet

Project Name	Chuluota Road (CR 419) ICE Evaluation	***Estimated Volume-to-Capacity Ratio***			
Project Number	Build (4-lane) AM Interim Year (2038)	**Number of Configurations**			
Location	Chuluota Road (CR 419) at Corner Lake Drive	**< 0.750**	**0.750 - 0.875**	**0.875 - 1.00**	**≥ 1.00**
Date	March 18, 2024	**11**	**2**	**0**	**1**

Results for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Zone 1 (North)		Zone 2 (South)		Zone 3 (East)		Zone 4 (West)		Zone 5 (Center)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			
Traffic Signal	FULL									502	0.29	0.29		
Two-Way Stop Control	N-S									--	0.38	0.38		
All-Way Stop Control	FULL									1762	1.17	1.17		
Continuous Green T	W									501	0.29	0.29		
Signalized Restricted Crossing U-Turn	N-S	434	*0.24*	464	*0.26*	413	*0.23*	488	*0.27*			0.27		
Unsignalized Restricted Crossing U-Turn	N-S	868	*0.00*	783	*0.09*	825	*0.00*	846	*0.37*			0.37		
Median U-Turn	N-S	454	*0.25*	464	*0.26*					554	0.31	0.31		
Partial Median U-Turn	N-S	454	*0.25*	392	*0.22*					485	0.28	0.28		
Bowtie	N-S	58	0.04	30	0.02	0	0.00	53	0.04	485	0.27	0.27		
Signalized ThruCut	N-S									501	0.29	0.29		
Unsignalized ThruCut	N-S									--	0.68	0.68		

Capacity Analysis for Planning of Junctions

Results Worksheet

Results for Roundabouts

TYPE OF ROUNDABOUT	Zone 1 (North)			Zone 3 (East)			Zone 2 (South)			Zone 4 (West)			Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3			
50 ICD	0.86			0.67			0.79			0.00			0.86		
75 ICD	0.85			0.51			0.79			0.00			0.85		
2NS X 1EW	0.32	0.34		0.17			0.30	0.32		0.00			0.34		

Results for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Zone 1 (Rt Mrg)		Zone 2 (Lt Mrg)		Zone 3 (Ctr. 1)		Zone 4 (Ctr. 2)		Zone 5 (Lt Mrg)		Zone 6 (Rt Mrg)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			

TYPE OF INTERSECTION	Overall V/C Ratio	V/C Ranking	Pedestrian Accommodation Score	Bicycle Accommodation Score
Signalized Restricted Crossing U-Turn N-S	0.27	1	--	--
Bowtie N-S	0.27	1	--	--
Partial Median U-Turn N-S	0.28	3	--	--
Traffic Signal	0.29	4	--	--
Continuous Green T W	0.29	4	--	--
Signalized ThruCut N-S	0.29	4	--	--
Median U-Turn N-S	0.31	7	--	--
2NS X 1EW	0.34	8	--	--
Unsignalized Restricted Crossing U-Turn N-S	0.37	9	--	--
Two-Way Stop Control N-S	0.38	10	--	--

Capacity Analysis for Planning of Junctions

Input Worksheet 1

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) AM Design Year (2048)
Location	Chuluota Road (CR 419) at Corner Lake Drive
Date	March 18, 2024
Number of Legs	3
Which leg is the minor street?	W

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	0	60	0	55	3.48%	0.00%
Westbound	0	0	0	0	3.48%	0.00%
Southbound	0	0	1039	25	3.48%	0.00%
Northbound	0	16	918	0	3.48%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone		**C3R-Suburban Residential**	
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Equivalent Passenger Car Volume

	Volume (Veh/hr)			
	U-Turn	**Left**	**Thru**	**Right**
Eastbound	0	62	0	57
Westbound	0	0	0	0
Southbound	0	0	1075	26
Northbound	0	17	950	0

Notes:	
Left-Turn Adjustment Factor	*Conversion of left-turning vehicles to equivalent through vehicles*
Right-turn Adjustment Factor	*Conversion of right-turning vehicles to equivalent through vehicles*
U-turn Adjustment Factor	*Conversion of U-turning vehicles to equivalent through vehicles*
Truck to PCE Factor	*1 truck = X Passenger Car Equivalents*
Critical Lane Volume Sum Limit	*Saturation Value for Critical Lane Volume Sum at an intersection*

Capacity Analysis for Planning of Junctions

Step 2A: Base Conditions Analysis

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) AM Design Year (2048)
Location	Chuluota Road (CR 419) at Corner Lake Drive
Date	March 18, 2024
Which leg is the minor street?	W

Existing Intersection Configuration	*Two-Way Stop Control*

Number of Lanes for Existing Configuration
(Can be edited in "3- Alt Num Lanes Input" as needed)

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Two-Way Stop Control	N-S		1	2	0		0	2	1		1	0	1		0	0	0

Results for Existing Configuration

TYPE OF		Sheet	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	
Overall v/c Ratio	0.66	Pedestrian Accommodation Score	--		Bicycle Accommodation Score			--

Step 2B: Alternative Selection

Rankings Inclusion		Yes/No	Comment
At-Grade Non-Roundabout Intersections?		Yes	
Traffic Signal		Yes	
Two-Way Stop Control		Yes	
All-Way Stop Control		Yes	
Continuous Green T		Yes	
Quadrant Roadway	S-W	No	No Nearby Quadrant Roadway
	N-E	No	No Nearby Quadrant Roadway
	S-E	No	No Nearby Quadrant Roadway
	N-W	No	No Nearby Quadrant Roadway
Partial Displaced Left Turn		No	3-Leg Intersection
Displaced Left Turn		No	3-Leg Intersection
Signalized Restricted Crossing U-Turn		Yes	
Unsignalized Restricted Crossing U-Turn		Yes	
Median U-Turn		Yes	
Partial Median U-Turn		Yes	
Bowtie		Yes	
Signalized ThruCut		Yes	
Unsignalized ThruCut		Yes	
Roundabouts?		Yes	
50 ICD Miniroundabout		Yes	
75 ICD Miniroundabout		Yes	
1x1		No	2x1 Roundabout Only
1NS x 2EW		No	2x1 Roundabout Only
2NS x 1EW		Yes	
2x2		No	2x1 Roundabout Only
Ramp Terminal Intersections?		No	
Diamond			
Partial Cloverleaf A			
Partial Cloverleaf B			
Displaced Left Turn Interchange			
Diverging Diamond			
Single Point Diamond			

Continue to Step 3 Step 3

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) AM Design Year (2048)
Location	Chuluota Road (CR 419) at Corner Lake Drive
Date	March 18, 2024
Analysis Type	At-Grade Intersections and Interchanges

Number of Lanes for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		1	2	0		0	2	1		1	0	1		0	0	0
Two-Way Stop Control	N-S		1	2	0		0	2	1		1	0	1		0	0	0
All-Way Stop Control	FULL		1	2	0		0	2	1		1	0	1		0	0	0
Continuous Green T	W		1	2				2	1		1		1				
Signalized Restricted Crossing U-Turn	N-S	1	1	2	0	1	0	2	1				2				0
Unsignalized Restricted Crossing U-Turn	N-S	1	1	2	0	1	0	2	1				2				0
Median U-Turn	N-S	1		2	0	1		2	1			0	1			0	0
Partial Median U-Turn	N-S	1		2	0	1		2	1		1	0	1		0	0	0
Signalized ThruCut	N-S		1	2	0		0	2	1		1		1		0		0
Unsignalized ThruCut	N-S		1	2	0		0	2	1		1		1		0		0
Bowtie	N-S			2	0			2	1			0	1			0	0

For shared lanes, enter "0" in L or R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Number of Lanes for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) AM Design Year (2048)
Location	Chuluota Road (CR 419) at Corner Lake Drive
Date	March 18, 2024
Analysis Type	At-Grade Intersections and Interchanges

Volume Echo with Shared Lane Adjustment for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		17	950	0		0	1075	26		62	0	57		0	0	0
Two-Way Stop Control	N-S		17	950	0		0	1075	26		62	0	57		0	0	0
All-Way Stop Control	FULL		17	950	0		0	1075	26		62	0	57		0	0	0
Continuous Green T	W		17	950				1075	26		62		57				
Signalized Restricted Crossing U-Turn	N-S	0	17	950	0	0	0	1075	26				57				0
Unsignalized Restricted Crossing U-Turn	N-S	0	17	950	0	0	0	1075	26				57				0
Median U-Turn	N-S	0		950	0	0		1075	26			0	57			0	0
Partial Median U-Turn	N-S	0		950	0	0		1075	26		62	0	57		0	0	0
Signalized ThruCut	N-S		17	950	0		0	1075	26		62		57		0		0
Unsignalized ThruCut	N-S		17	950	0		0	1075	26		62		57		0		0
Bowtie	N-S		0	970	0		0	1075	26			62	57			90	0

Capacity Analysis for Planning of Junctions

Results Worksheet

Project Name	Chuluota Road (CR 419) ICE Evaluation	***Estimated Volume-to-Capacity Ratio***			
Project Number	Build (4-lane) AM Design Year (2048)	**Number of Configurations**			
Location	Chuluota Road (CR 419) at Corner Lake Drive	**< 0.750**	**0.750 - 0.875**	**0.875 - 1.00**	**≥ 1.00**
Date	March 18, 2024	**10**	**0**	**0**	**4**

Results for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Zone 1 (North)		Zone 2 (South)		Zone 3 (East)		Zone 4 (West)		Zone 5 (Center)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			
Traffic Signal	FULL									622	0.36	0.36		
Two-Way Stop Control	N-S									--	0.66	0.66		
All-Way Stop Control	FULL									2187	1.46	1.46		
Continuous Green T	W									621	0.35	0.35		
Signalized Restricted Crossing U-Turn	N-S	551	*0.31*	561	*0.31*	506	*0.28*	608	*0.34*			0.34		
Unsignalized Restricted Crossing U-Turn	N-S	1101	*0.00*	967	*0.11*	1012	*0.00*	1075	*0.56*			0.56		
Median U-Turn	N-S	572	*0.32*	561	*0.31*					678	0.38	0.38		
Partial Median U-Turn	N-S	572	*0.32*	484	*0.27*					605	0.35	0.35		
Bowtie	N-S	62	0.04	35	0.02	0	0.00	57	0.04	605	0.34	0.34		
Signalized ThruCut	N-S									620	0.35	0.35		
Unsignalized ThruCut	N-S									--	1.40	1.40		

Capacity Analysis for Planning of Junctions

Results Worksheet

Results for Roundabouts

TYPE OF ROUNDABOUT	Zone 1 (North)			Zone 3 (East)			Zone 2 (South)			Zone 4 (West)			Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3			
50 ICD	1.09			-2.40			0.99			0.00			1.09		
75 ICD	1.08			4.94			0.97			0.00			4.94		
2NS X 1EW	0.40	0.43		0.22			0.37	0.39		0.00			0.43		

Results for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Zone 1 (Rt Mrg)		Zone 2 (Lt Mrg)		Zone 3 (Ctr. 1)		Zone 4 (Ctr. 2)		Zone 5 (Lt Mrg)		Zone 6 (Rt Mrg)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			

TYPE OF INTERSECTION	Overall V/C Ratio	V/C Ranking	Pedestrian Accommodation Score	Bicycle Accommodation Score
Signalized Restricted Crossing U-Turn N-S	0.34	1	--	--
Bowtie N-S	0.34	1	--	--
Continuous Green T W	0.35	3	--	--
Partial Median U-Turn N-S	0.35	3	--	--
Signalized ThruCut N-S	0.35	3	--	--
Traffic Signal	0.36	6	--	--
Median U-Turn N-S	0.38	7	--	--
2NS X 1EW	0.43	8	--	--
Unsignalized Restricted Crossing U-Turn N-S	0.56	9	--	--
Two-Way Stop Control N-S	0.66	10	--	--

Capacity Analysis for Planning of Junctions

Input Worksheet 1

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) PM Opening Year (2028)
Location	Chuluota Road (CR 419) at Corner Lake Drive
Date	March 18, 2024
Number of Legs	3
Which leg is the minor street?	W

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	0	24	0	42	3.48%	0.00%
Westbound	0	0	0	0	3.48%	0.00%
Southbound	0	0	700	36	3.48%	0.00%
Northbound	0	21	602	0	3.48%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone		**C3R-Suburban Residential**	
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Equivalent Passenger Car Volume

	Volume (Veh/hr)			
	U-Turn	**Left**	**Thru**	**Right**
Eastbound	0	25	0	43
Westbound	0	0	0	0
Southbound	0	0	724	37
Northbound	0	22	623	0

Notes:	
Left-Turn Adjustment Factor	*Conversion of left-turning vehicles to equivalent through vehicles*
Right-turn Adjustment Factor	*Conversion of right-turning vehicles to equivalent through vehicles*
U-turn Adjustment Factor	*Conversion of U-turning vehicles to equivalent through vehicles*
Truck to PCE Factor	*1 truck = X Passenger Car Equivalents*
Critical Lane Volume Sum Limit	*Saturation Value for Critical Lane Volume Sum at an intersection*

Capacity Analysis for Planning of Junctions

Step 2A: Base Conditions Analysis

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) PM Opening Year (2028)
Location	Chuluota Road (CR 419) at Corner Lake Drive
Date	March 18, 2024
Which leg is the minor street?	W

Existing Intersection Configuration	*Two-Way Stop Control*

Number of Lanes for Existing Configuration
(Can be edited in "3- Alt Num Lanes Input" as needed)

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Two-Way Stop Control	N-S		1	2	0		0	2	1		1	0	1		0	0	0

Results for Existing Configuration

TYPE OF		Sheet	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	
Overall v/c Ratio	0.20	Pedestrian Accommodation Score	--		Bicycle Accommodation Score			--

Step 2B: Alternative Selection

Rankings Inclusion		Yes/No	Comment
At-Grade Non-Roundabout Intersections?		Yes	
Traffic Signal		Yes	
Two-Way Stop Control		Yes	
All-Way Stop Control		Yes	
Continuous Green T		Yes	
Quadrant Roadway	S-W	No	No Nearby Quadrant Roadway
	N-E	No	No Nearby Quadrant Roadway
	S-E	No	No Nearby Quadrant Roadway
	N-W	No	No Nearby Quadrant Roadway
Partial Displaced Left Turn		No	3-Leg Intersection
Displaced Left Turn		No	3-Leg Intersection
Signalized Restricted Crossing U-Turn		Yes	
Unsignalized Restricted Crossing U-Turn		Yes	
Median U-Turn		Yes	
Partial Median U-Turn		Yes	
Bowtie		Yes	
Signalized ThruCut		Yes	
Unsignalized ThruCut		Yes	
Roundabouts?		Yes	
50 ICD Miniroundabout		Yes	
75 ICD Miniroundabout		Yes	
1x1		No	2x1 Roundabout Only
1NS x 2EW		No	2x1 Roundabout Only
2NS x 1EW		Yes	
2x2		No	2x1 Roundabout Only
Ramp Terminal Intersections?		No	
Diamond			
Partial Cloverleaf A			
Partial Cloverleaf B			
Displaced Left Turn Interchange			
Diverging Diamond			
Single Point Diamond			

Continue to Step 3 Step 3

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) PM Opening Year (2028)
Location	Chuluota Road (CR 419) at Corner Lake Drive
Date	March 18, 2024
Analysis Type	At-Grade Intersections and Interchanges

Number of Lanes for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		1	2	0		0	2	1		1	0	1		0	0	0
Two-Way Stop Control	N-S		1	2	0		0	2	1		1	0	1		0	0	0
All-Way Stop Control	FULL		1	2	0		0	2	1		1	0	1		0	0	0
Continuous Green T	W		1	2				2	1		1		1				
Signalized Restricted Crossing U-Turn	N-S	1	1	2	0	1	0	2	1				2				0
Unsignalized Restricted Crossing U-Turn	N-S	1	1	2	0	1	0	2	1				2				0
Median U-Turn	N-S	1		2	0	1		2	1			0	1			0	0
Partial Median U-Turn	N-S	1		2	0	1		2	1		1	0	1		0	0	0
Signalized ThruCut	N-S		1	2	0		0	2	1		1		1		0		0
Unsignalized ThruCut	N-S		1	2	0		0	2	1		1		1		0		0
Bowtie	N-S			2	0			2	1			0	1			0	0

For shared lanes, enter "0" in L or R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Number of Lanes for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) PM Opening Year (2028)
Location	Chuluota Road (CR 419) at Corner Lake Drive
Date	March 18, 2024
Analysis Type	At-Grade Intersections and Interchanges

Volume Echo with Shared Lane Adjustment for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		22	623	0		0	724	37		25	0	43		0	0	0
Two-Way Stop Control	N-S		22	623	0		0	724	37		25	0	43		0	0	0
All-Way Stop Control	FULL		22	623	0		0	724	37		25	0	43		0	0	0
Continuous Green T	W		22	623				724	37		25		43				
Signalized Restricted Crossing U-Turn	N-S	0	22	623	0	0	0	724	37				43				0
Unsignalized Restricted Crossing U-Turn	N-S	0	22	623	0	0	0	724	37				43				0
Median U-Turn	N-S	0		623	0	0		724	37			0	43			0	0
Partial Median U-Turn	N-S	0		623	0	0		724	37		25	0	43		0	0	0
Signalized ThruCut	N-S		22	623	0		0	724	37		25		43		0		0
Unsignalized ThruCut	N-S		22	623	0		0	724	37		25		43		0		0
Bowtie	N-S		0	649	0		0	724	37			25	43			51	0

Capacity Analysis for Planning of Junctions

Results Worksheet

Project Name	Chuluota Road (CR 419) ICE Evaluation	***Estimated Volume-to-Capacity Ratio***			
Project Number	Build (4-lane) PM Opening Year (2028)	**Number of Configurations**			
Location	Chuluota Road (CR 419) at Corner Lake Drive	**< 0.750**	**0.750 - 0.875**	**0.875 - 1.00**	**≥ 1.00**
Date	March 18, 2024	**11**	**2**	**1**	**0**

Results for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Zone 1 (North)		Zone 2 (South)		Zone 3 (East)		Zone 4 (West)		Zone 5 (Center)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			
Traffic Signal	FULL									413	0.24	0.24		
Two-Way Stop Control	N-S									--	0.20	0.20		
All-Way Stop Control	FULL									1474	0.98	0.98		
Continuous Green T	W									411	0.24	0.24		
Signalized Restricted Crossing U-Turn	N-S	381	*0.21*	354	*0.20*	324	*0.18*	402	*0.22*			0.22		
Unsignalized Restricted Crossing U-Turn	N-S	761	*0.00*	645	*0.03*	648	*0.00*	724	*0.19*			0.19		
Median U-Turn	N-S	408	*0.23*	354	*0.20*					442	0.25	0.25		
Partial Median U-Turn	N-S	408	*0.23*	323	*0.18*					413	0.24	0.24		
Bowtie	N-S	25	0.02	48	0.03	0	0.00	43	0.03	413	0.23	0.23		
Signalized ThruCut	N-S									412	0.24	0.24		
Unsignalized ThruCut	N-S									--	0.20	0.20		

Capacity Analysis for Planning of Junctions

Results Worksheet

Results for Roundabouts

TYPE OF ROUNDABOUT	Zone 1 (North)			Zone 3 (East)			Zone 2 (South)			Zone 4 (West)			Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3			
50 ICD	0.76			0.25			0.63			0.00			0.76		
75 ICD	0.75			0.22			0.63			0.00			0.75		
2NS X 1EW	0.28	0.30		0.09			0.24	0.25		0.00			0.30		

Results for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Zone 1 (Rt Mrg)		Zone 2 (Lt Mrg)		Zone 3 (Ctr. 1)		Zone 4 (Ctr. 2)		Zone 5 (Lt Mrg)		Zone 6 (Rt Mrg)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			

TYPE OF INTERSECTION	Overall V/C Ratio	V/C Ranking	Pedestrian Accommodation Score	Bicycle Accommodation Score
Unsignalized Restricted Crossing U-Turn N-S	0.19	1	--	--
Two-Way Stop Control N-S	0.20	2	--	--
Unsignalized ThruCut N-S	0.20	3	--	--
Signalized Restricted Crossing U-Turn N-S	0.22	4	--	--
Bowtie N-S	0.23	5	--	--
Traffic Signal	0.24	6	--	--
Continuous Green T W	0.24	6	--	--
Partial Median U-Turn N-S	0.24	6	--	--
Signalized ThruCut N-S	0.24	6	--	--
Median U-Turn N-S	0.25	10	--	--

Capacity Analysis for Planning of Junctions

Input Worksheet 1

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) PM Interim Year (2038)
Location	Chuluota Road (CR 419) at Corner Lake Drive
Date	March 18, 2024
Number of Legs	3
Which leg is the minor street?	W

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	0	26	0	45	3.48%	0.00%
Westbound	0	0	0	0	3.48%	0.00%
Southbound	0	0	950	36	3.48%	0.00%
Northbound	0	23	800	0	3.48%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone		**C3R-Suburban Residential**	
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Equivalent Passenger Car Volume

	Volume (Veh/hr)			
	U-Turn	**Left**	**Thru**	**Right**
Eastbound	0	27	0	47
Westbound	0	0	0	0
Southbound	0	0	983	37
Northbound	0	24	828	0

Notes:	
Left-Turn Adjustment Factor	*Conversion of left-turning vehicles to equivalent through vehicles*
Right-turn Adjustment Factor	*Conversion of right-turning vehicles to equivalent through vehicles*
U-turn Adjustment Factor	*Conversion of U-turning vehicles to equivalent through vehicles*
Truck to PCE Factor	*1 truck = X Passenger Car Equivalents*
Critical Lane Volume Sum Limit	*Saturation Value for Critical Lane Volume Sum at an intersection*

Capacity Analysis for Planning of Junctions

Step 2A: Base Conditions Analysis

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) PM Interim Year (2038)
Location	Chuluota Road (CR 419) at Corner Lake Drive
Date	March 18, 2024
Which leg is the minor street?	W

Existing Intersection Configuration	*Two-Way Stop Control*

Number of Lanes for Existing Configuration
(Can be edited in "3- Alt Num Lanes Input" as needed)

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Two-Way Stop Control	N-S		1	2	0		0	2	1		1	0	1		0	0	0

Results for Existing Configuration

TYPE OF		Sheet	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	
Overall v/c Ratio	0.27	Pedestrian Accommodation Score	--		Bicycle Accommodation Score			--

Step 2B: Alternative Selection

Rankings Inclusion		Yes/No	Comment
At-Grade Non-Roundabout Intersections?		Yes	
Traffic Signal		Yes	
Two-Way Stop Control		Yes	
All-Way Stop Control		Yes	
Continuous Green T		Yes	
Quadrant Roadway	S-W	No	No Nearby Quadrant Roadway
	N-E	No	No Nearby Quadrant Roadway
	S-E	No	No Nearby Quadrant Roadway
	N-W	No	No Nearby Quadrant Roadway
Partial Displaced Left Turn		No	3-Leg Intersection
Displaced Left Turn		No	3-Leg Intersection
Signalized Restricted Crossing U-Turn		Yes	
Unsignalized Restricted Crossing U-Turn		Yes	
Median U-Turn		Yes	
Partial Median U-Turn		Yes	
Bowtie		Yes	
Signalized ThruCut		Yes	
Unsignalized ThruCut		Yes	
Roundabouts?		Yes	
50 ICD Miniroundabout		Yes	
75 ICD Miniroundabout		Yes	
1x1		No	2x1 Roundabout Only
1NS x 2EW		No	2x1 Roundabout Only
2NS x 1EW		Yes	
2x2		No	2x1 Roundabout Only
Ramp Terminal Intersections?		No	
Diamond			
Partial Cloverleaf A			
Partial Cloverleaf B			
Displaced Left Turn Interchange			
Diverging Diamond			
Single Point Diamond			

Continue to Step 3 Step 3

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) PM Interim Year (2038)
Location	Chuluota Road (CR 419) at Corner Lake Drive
Date	March 18, 2024
Analysis Type	At-Grade Intersections and Interchanges

Number of Lanes for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		1	2	0		0	2	1		1	0	1		0	0	0
Two-Way Stop Control	N-S		1	2	0		0	2	1		1	0	1		0	0	0
All-Way Stop Control	FULL		1	2	0		0	2	1		1	0	1		0	0	0
Continuous Green T	W		1	2				2	1		1		1				
Signalized Restricted Crossing U-Turn	N-S	1	1	2	0	1	0	2	1				2				0
Unsignalized Restricted Crossing U-Turn	N-S	1	1	2	0	1	0	2	1				2				0
Median U-Turn	N-S	1		2	0	1		2	1			0	1			0	0
Partial Median U-Turn	N-S	1		2	0	1		2	1		1	0	1		0	0	0
Signalized ThruCut	N-S		1	2	0		0	2	1		1		1		0		0
Unsignalized ThruCut	N-S		1	2	0		0	2	1		1		1		0		0
Bowtie	N-S			2	0			2	1			0	1			0	0

For shared lanes, enter "0" in L or R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Number of Lanes for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) PM Interim Year (2038)
Location	Chuluota Road (CR 419) at Corner Lake Drive
Date	March 18, 2024
Analysis Type	At-Grade Intersections and Interchanges

Volume Echo with Shared Lane Adjustment for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		24	828	0		0	983	37		27	0	47		0	0	0
Two-Way Stop Control	N-S		24	828	0		0	983	37		27	0	47		0	0	0
All-Way Stop Control	FULL		24	828	0		0	983	37		27	0	47		0	0	0
Continuous Green T	W		24	828				983	37		27		47				
Signalized Restricted Crossing U-Turn	N-S	0	24	828	0	0	0	983	37				47				0
Unsignalized Restricted Crossing U-Turn	N-S	0	24	828	0	0	0	983	37				47				0
Median U-Turn	N-S	0		828	0	0		983	37			0	47			0	0
Partial Median U-Turn	N-S	0		828	0	0		983	37		27	0	47		0	0	0
Signalized ThruCut	N-S		24	828	0		0	983	37		27		47		0		0
Unsignalized ThruCut	N-S		24	828	0		0	983	37		27		47		0		0
Bowtie	N-S		0	856	0		0	983	37			27	47			56	0

Capacity Analysis for Planning of Junctions

Results Worksheet

Project Name	Chuluota Road (CR 419) ICE Evaluation	***Estimated Volume-to-Capacity Ratio***			
Project Number	Build (4-lane) PM Interim Year (2038)	**Number of Configurations**			
Location	Chuluota Road (CR 419) at Corner Lake Drive	**< 0.750**	**0.750 - 0.875**	**0.875 - 1.00**	**≥ 1.00**
Date	March 18, 2024	**11**	**0**	**0**	**3**

Results for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Zone 1 (North)		Zone 2 (South)		Zone 3 (East)		Zone 4 (West)		Zone 5 (Center)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			
Traffic Signal	FULL									548	0.31	0.31		
Two-Way Stop Control	N-S									--	0.27	0.27		
All-Way Stop Control	FULL									1946	1.30	1.30		
Continuous Green T	W									545	0.31	0.31		
Signalized Restricted Crossing U-Turn	N-S	510	*0.28*	460	*0.26*	428	*0.24*	535	*0.30*			0.30		
Unsignalized Restricted Crossing U-Turn	N-S	1020	*0.00*	852	*0.04*	855	*0.00*	983	*0.30*			0.30		
Median U-Turn	N-S	540	*0.30*	460	*0.26*					579	0.32	0.32		
Partial Median U-Turn	N-S	540	*0.30*	426	*0.24*					547	0.31	0.31		
Bowtie	N-S	27	0.02	49	0.03	0	0.00	47	0.03	547	0.30	0.30		
Signalized ThruCut	N-S									547	0.31	0.31		
Unsignalized ThruCut	N-S									--	0.45	0.45		

Capacity Analysis for Planning of Junctions

Results Worksheet

Results for Roundabouts

TYPE OF ROUNDABOUT	Zone 1 (North)			Zone 3 (East)			Zone 2 (South)			Zone 4 (West)			Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3			
50 ICD	1.02			2.04			0.84			*0.00*			2.04		
75 ICD	1.01			0.75			0.83			*0.00*			1.01		
2NS X 1EW	*0.37*	*0.40*		*0.12*			*0.31*	0.34		*0.00*			0.40		

Results for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Zone 1 (Rt Mrg)		Zone 2 (Lt Mrg)		Zone 3 (Ctr. 1)		Zone 4 (Ctr. 2)		Zone 5 (Lt Mrg)		Zone 6 (Rt Mrg)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			

TYPE OF INTERSECTION	Overall V/C Ratio	V/C Ranking	Pedestrian Accommodation Score	Bicycle Accommodation Score
Two-Way Stop Control N-S	0.27	1	--	--
Signalized Restricted Crossing U-Turn N-S	0.30	2	--	--
Unsignalized Restricted Crossing U-Turn N-S	0.30	2	--	--
Bowtie N-S	0.30	4	--	--
Traffic Signal	0.31	5	--	--
Continuous Green T W	0.31	5	--	--
Partial Median U-Turn N-S	0.31	5	--	--
Signalized ThruCut N-S	0.31	5	--	--
Median U-Turn N-S	0.32	9	--	--
2NS X 1EW	0.40	10	--	--

Capacity Analysis for Planning of Junctions

Input Worksheet 1

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) PM Design Year (2048)
Location	Chuluota Road (CR 419) at Corner Lake Drive
Date	March 18, 2024
Number of Legs	3
Which leg is the minor street?	W

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	0	28	0	49	3.48%	0.00%
Westbound	0	0	0	0	3.48%	0.00%
Southbound	0	0	1199	43	3.48%	0.00%
Northbound	0	25	997	0	3.48%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone		**C3R-Suburban Residential**	
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Equivalent Passenger Car Volume

	Volume (Veh/hr)			
	U-Turn	**Left**	**Thru**	**Right**
Eastbound	0	29	0	51
Westbound	0	0	0	0
Southbound	0	0	1241	44
Northbound	0	26	1032	0

Notes:	
Left-Turn Adjustment Factor	*Conversion of left-turning vehicles to equivalent through vehicles*
Right-turn Adjustment Factor	*Conversion of right-turning vehicles to equivalent through vehicles*
U-turn Adjustment Factor	*Conversion of U-turning vehicles to equivalent through vehicles*
Truck to PCE Factor	*1 truck = X Passenger Car Equivalents*
Critical Lane Volume Sum Limit	*Saturation Value for Critical Lane Volume Sum at an intersection*

Capacity Analysis for Planning of Junctions

Step 2A: Base Conditions Analysis

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) PM Design Year (2048)
Location	Chuluota Road (CR 419) at Corner Lake Drive
Date	March 18, 2024
Which leg is the minor street?	W

Existing Intersection Configuration	*Two-Way Stop Control*

Number of Lanes for Existing Configuration
(Can be edited in "3- Alt Num Lanes Input" as needed)

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Two-Way Stop Control	N-S		1	2	0		0	2	1		1	0	1		0	0	0

Results for Existing Configuration

TYPE OF		Sheet	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	
Overall v/c Ratio	0.45	Pedestrian Accommodation Score	--		Bicycle Accommodation Score			--

Step 2B: Alternative Selection

Rankings Inclusion		Yes/No	Comment
At-Grade Non-Roundabout Intersections?		Yes	
Traffic Signal		Yes	
Two-Way Stop Control		Yes	
All-Way Stop Control		Yes	
Continuous Green T		Yes	
Quadrant Roadway	S-W	No	No Nearby Quadrant Roadway
	N-E	No	No Nearby Quadrant Roadway
	S-E	No	No Nearby Quadrant Roadway
	N-W	No	No Nearby Quadrant Roadway
Partial Displaced Left Turn		No	3-Leg Intersection
Displaced Left Turn		No	3-Leg Intersection
Signalized Restricted Crossing U-Turn		Yes	
Unsignalized Restricted Crossing U-Turn		Yes	
Median U-Turn		Yes	
Partial Median U-Turn		Yes	
Bowtie		Yes	
Signalized ThruCut		Yes	
Unsignalized ThruCut		Yes	
Roundabouts?		Yes	
50 ICD Miniroundabout		Yes	
75 ICD Miniroundabout		Yes	
1x1		No	2x1 Roundabout Only
1NS x 2EW		No	2x1 Roundabout Only
2NS x 1EW		Yes	
2x2		No	2x1 Roundabout Only
Ramp Terminal Intersections?		No	
Diamond			
Partial Cloverleaf A			
Partial Cloverleaf B			
Displaced Left Turn Interchange			
Diverging Diamond			
Single Point Diamond			

Continue to Step 3 Step 3

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) PM Design Year (2048)
Location	Chuluota Road (CR 419) at Corner Lake Drive
Date	March 18, 2024
Analysis Type	At-Grade Intersections and Interchanges

Number of Lanes for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		1	2	0		0	2	1		1	0	1		0	0	0
Two-Way Stop Control	N-S		1	2	0		0	2	1		1	0	1		0	0	0
All-Way Stop Control	FULL		1	2	0		0	2	1		1	0	1		0	0	0
Continuous Green T	W		1	2				2	1		1		1				
Signalized Restricted Crossing U-Turn	N-S	1	1	2	0	1	0	2	1				2				0
Unsignalized Restricted Crossing U-Turn	N-S	1	1	2	0	1	0	2	1				2				0
Median U-Turn	N-S	1		2	0	1		2	1			0	1			0	0
Partial Median U-Turn	N-S	1		2	0	1		2	1		1	0	1		0	0	0
Signalized ThruCut	N-S		1	2	0		0	2	1		1		1		0		0
Unsignalized ThruCut	N-S		1	2	0		0	2	1		1		1		0		0
Bowtie	N-S			2	0			2	1			0	1			0	0

For shared lanes, enter "0" in L or R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Number of Lanes for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) PM Design Year (2048)
Location	Chuluota Road (CR 419) at Corner Lake Drive
Date	March 18, 2024
Analysis Type	At-Grade Intersections and Interchanges

Volume Echo with Shared Lane Adjustment for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		26	1032	0		0	1241	44		29	0	51		0	0	0
Two-Way Stop Control	N-S		26	1032	0		0	1241	44		29	0	51		0	0	0
All-Way Stop Control	FULL		26	1032	0		0	1241	44		29	0	51		0	0	0
Continuous Green T	W		26	1032				1241	44		29		51				
Signalized Restricted Crossing U-Turn	N-S	0	26	1032	0	0	0	1241	44				51				0
Unsignalized Restricted Crossing U-Turn	N-S	0	26	1032	0	0	0	1241	44				51				0
Median U-Turn	N-S	0		1032	0	0		1241	44			0	51			0	0
Partial Median U-Turn	N-S	0		1032	0	0		1241	44		29	0	51		0	0	0
Signalized ThruCut	N-S		26	1032	0		0	1241	44		29		51		0		0
Unsignalized ThruCut	N-S		26	1032	0		0	1241	44		29		51		0		0
Bowtie	N-S		0	1063	0		0	1241	44			29	51			60	0

Capacity Analysis for Planning of Junctions

Results Worksheet

Project Name	Chuluota Road (CR 419) ICE Evaluation	***Estimated Volume-to-Capacity Ratio***			
Project Number	Build (4-lane) PM Design Year (2048)	**Number of Configurations**			
Location	Chuluota Road (CR 419) at Corner Lake Drive	**< 0.750**	**0.750 - 0.875**	**0.875 - 1.00**	**≥ 1.00**
Date	March 18, 2024	**10**	**0**	**0**	**4**

Results for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Zone 1 (North)		Zone 2 (South)		Zone 3 (East)		Zone 4 (West)		Zone 5 (Center)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			
Traffic Signal	FULL									682	0.39	0.39		
Two-Way Stop Control	N-S									--	0.45	0.45		
All-Way Stop Control	FULL									2423	1.62	1.62		
Continuous Green T	W									678	0.39	0.39		
Signalized Restricted Crossing U-Turn	N-S	643	*0.36*	565	*0.31*	531	*0.29*	668	*0.37*			0.37		
Unsignalized Restricted Crossing U-Turn	N-S	1285	*0.00*	1058	*0.05*	1061	*0.00*	1241	*0.49*			0.49		
Median U-Turn	N-S	675	*0.38*	565	*0.31*					715	0.40	0.40		
Partial Median U-Turn	N-S	675	*0.38*	529	*0.29*					681	0.39	0.39		
Bowtie	N-S	29	0.02	57	0.04	0	0.00	51	0.04	681	0.38	0.38		
Signalized ThruCut	N-S									681	0.39	0.39		
Unsignalized ThruCut	N-S									--	1.04	1.04		

Capacity Analysis for Planning of Junctions

Results Worksheet

Results for Roundabouts

TYPE OF ROUNDABOUT	Zone 1 (North)			Zone 3 (East)			Zone 2 (South)			Zone 4 (West)			Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3			
50 ICD	1.28			-0.40			1.04			0.00			1.28		
75 ICD	1.27			-0.71			1.03			0.00			1.27		
2NS X 1EW	0.47	0.51		0.17			0.39	0.42		0.00			0.51		

Results for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Zone 1 (Rt Mrg)		Zone 2 (Lt Mrg)		Zone 3 (Ctr. 1)		Zone 4 (Ctr. 2)		Zone 5 (Lt Mrg)		Zone 6 (Rt Mrg)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			

TYPE OF INTERSECTION	Overall V/C Ratio	V/C Ranking	Pedestrian Accommodation Score	Bicycle Accommodation Score
Signalized Restricted Crossing U-Turn N-S	0.37	1	--	--
Bowtie N-S	0.38	2	--	--
Traffic Signal	0.39	3	--	--
Continuous Green T W	0.39	3	--	--
Partial Median U-Turn N-S	0.39	3	--	--
Signalized ThruCut N-S	0.39	3	--	--
Median U-Turn N-S	0.40	7	--	--
Two-Way Stop Control N-S	0.45	8	--	--
Unsignalized Restricted Crossing U-Turn N-S	0.49	9	--	--
2NS X 1EW	0.51	10	--	--

Table 1, Corner Lake Drive Cap-x Results

Build Type	Year	Peak Hour	Intersection Control Rank 1 (V/C Ratio)	Intersection Control Rank 2 (V/C Ratio)	Intersection Control Rank 3 (V/C Ratio)	Intersection Control Rank 4 (V/C Ratio)	Intersection Control Rank 5 (V/C Ratio)	Intersection Control Rank 6 (V/C Ratio)	Intersection Control Rank 7 (V/C Ratio)	Intersection Control Rank 8 (V/C Ratio)	Intersection Control Rank 9 (V/C Ratio)	Intersection Control Rank 10 (V/C Ratio)
No-Build (2-lane)	2028	AM	Unsignalized RCUT N-S (0.18)	TWSC (0.30)	Unsignalized ThruCut N-S (0.30)	Bowtie N-S (0.33)	Partial MUT N-S (0.34)	Traffic Signal (0.35)	Continuous Green T (0.35)	Signalized ThruCut N-S (0.35)	Signalized RCUT N-S (0.36)	MUT N-S (0.36)
	2038		Unsignalized RCUT N-S (0.22)	TWSC (0.36)	Unsignalized ThruCut N-S (0.36)	Bowtie N-S (0.39)	Partial MUT N-S (0.40)	Traffic Signal (0.41)	Continuous Green T (0.41)	Signalized ThruCut N-S (0.41)	Signalized RCUT N-S (0.43)	MUT N-S (0.43)
	2048		Unsignalized RCUT N-S (0.27)	TWSC (0.43)	Unsignalized ThruCut N-S (0.43)	Bowtie N-S (0.46)	Partial MUT N-S (0.47)	Traffic Signal (0.48)	Continuous Green T (0.48)	Signalized ThruCut N-S (0.48)	Signalized RCUT N-S (0.49)	MUT N-S (0.49)
	2028	PM	Unsignalized RCUT N-S (0.14)	TWSC (0.35)	Unsignalized ThruCut N-S (0.35)	Bowtie N-S (0.38)	Traffic Signal (0.39)	Continuous Green T (0.39)	Signalized RCUT N-S (0.39)	MUT N-S (0.39)	Partial MUT N-S (0.39)	Signalized ThruCut N-S (0.39)
	2038		Unsignalized RCUT N-S (0.17)	TWSC (0.42)	Unsignalized ThruCut N-S (0.42)	Bowtie N-S (0.45)	Traffic Signal (0.46)	Continuous Green T (0.46)	Partial MUT N-S (0.46)	Signalized ThruCut N-S (0.46)	Signalized RCUT N-S (0.47)	MUT N-S (0.47)
	2048		Unsignalized RCUT N-S (0.21)	TWSC (0.49)	Unsignalized ThruCut N-S (0.49)	Bowtie N-S (0.52)	Traffic Signal (0.54)	Continuous Green T (0.54)	Signalized RCUT N-S (0.54)	MUT N-S (0.54)	Partial MUT N-S (0.54)	Signalized ThruCut N-S (0.54)
Build (4-lane)	2028	AM	Bowtie N-S (0.20)	Signalized RCUT N-S (0.21)	TWSC (0.21)	Partial MUT N-S (0.21)	Traffic Signal (0.22)	Continuous Green T (0.22)	Signalized ThruCut N-S (0.22)	Unsignalized RCUT N-S (0.24)	MUT N-S (0.24)	2NS X 1EW Roundabout (0.25)
	2038		Signalized RCUT N-S (0.27)	Bowtie N-S (0.27)	Partial MUT N-S (0.28)	Traffic Signal (0.29)	Continuous Green T (0.29)	Signalized ThruCut N-S (0.29)	MUT N-S (0.31)	2NS X 1EW Roundabout (0.34)	Unsignalized RCUT N-S (0.37)	TWSC (0.38)
	2048		Signalized RCUT N-S (0.34)	Bowtie N-S (0.34)	Continuous Green T (0.35)	Partial MUT N-S (0.35)	Signalized ThruCut N-S (0.35)	Traffic Signal (0.36)	MUT N-S (0.38)	2NS X 1EW Roundabout (0.43)	Unsignalized RCUT N-S (0.56)	TWSC (0.66)
	2028	PM	Unsignalized RCUT N-S (0.19)	TWSC (0.20)	Unsignalized ThruCut N-S (0.20)	Signalized RCUT N-S (0.22)	Bowtie N-S (0.23)	Traffic Signal (0.24)	Continuous Green T (0.24)	Partial MUT N-S (0.24)	Signalized ThruCut N-S (0.24)	MUT N-S (0.25)
	2038		TWSC (0.27)	Signalized RCUT N-S (0.30)	Unsignalized ThruCut N-S (0.30)	Bowtie N-S (0.30)	Traffic Signal (0.31)	Continuous Green T (0.31)	Partial MUT N-S (0.31)	Signalized ThruCut N-S (0.31)	MUT N-S (0.32)	2NS X 1EW Roundabout (0.40)
	2048		Signalized RCUT N-S (0.37)	Bowtie N-S (0.38)	Traffic Signal (0.39)	Continuous Green T (0.39)	Partial MUT N-S (0.39)	Signalized ThruCut N-S (0.39)	MUT N-S (0.40)	TWSC (0.45)	Unsignalized RCUT N-S (0.49)	2NS X 1EW Roundabout (0.51)

Greyed out cells indicate that the intersection control type may not be viable due to right-of-way, cost, or other factors

V/C Ratio Legend	
	< 0.750
	0.750 - 0.875
	0.875 - 1.00
	≥ 1.00

SPICE WORKSHEETS

Florida Department of Transportation
Safety Performance for Intersection Control Evaluation Tool

Results

Summary of crash prediction results for each alternative

Project Information

Project Name:	Chuluota Road (CR 419) ICE Evaluation	**Intersection Type**	At-Grade Intersection
Intersection:	Chuluota Road (CR 419) at Corner Lake Drive	**Opening Year**	2028
Agency:	Orange County	**Design Year**	0
Project Reference:	No-Build (2-lane) Opening Year (2028)	**Facility Type**	On Rural Two Lane Highway
City:	Orlando	**Number of Legs**	3-leg
State:	FL	**1-Way/2-Way**	
Date:	1/26/2024	**# of Major Street Lanes (both directions)**	
Analyst:	JMT	**Major Street Approach Speed**	

Crash Prediction Summary

Control Strategy	Crash Type	Opening Year	Design Year	Total Project Life Cycle	Crash Prediction Rank	AADT Within SPF Prediction Range?		Source of Prediction	SSI Score		
						(Open Year)	(Design Year)		Opening Year	Design Year	Rank
Traffic Signal	Total	1.59	--	--	6	Yes	Yes	Uncalibrated SPF	99		6
	Fatal & Injury	0.59	--	--							
Minor Road Stop	Total	1.28	--	--	5	Yes	Yes	Calibrated SPF w/ EB	98		7
	Fatal & Injury	0.53	--	--							
All Way Stop	Total	No SPF	--	--	--	No	Yes	Uncalibrated SPF w/ EB	100		2
	Fatal & Injury	No SPF	--	--							
1-lane Roundabout	Total	0.77	--	--	1	Yes	Yes	Uncalibrated SPF	100		1
	Fatal & Injury	0.19	--	--							
Signalized RCUT	Total	1.97	--	--	2	Yes	Yes	Uncalibrated SPF	100		3
	Fatal & Injury	0.35	--	--							
Unsignalized RCUT	Total	2.36	--	--	7	Yes	Yes	Uncalibrated SPF	99		5
	Fatal & Injury	0.63	--	--							
Signalized Thru-Cut	Total	No SPF	--	--	--	N/A	N/A	N/A	--		--
	Fatal & Injury	No SPF	--	--							
Unsignalized Thru-Cut	Total	No SPF	--	--	--	N/A	N/A	N/A	--		--
	Fatal & Injury	No SPF	--	--							
Continuous Green-T Intersection	Total	1.53	--	--	4	N/A	N/A	CMF	99		4
	Fatal & Injury	0.50	--	--							
Jughandle	Total	1.18	--	--	3	N/A	N/A	CMF	--		--
	Fatal & Injury	0.44	--	--							
Other 1*	Total	No SPF	--	--	--	N/A	N/A	CMF	--		--
	Fatal & Injury	No SPF	--	--							
Other 2*	Total	No SPF	--	--	--	N/A	N/A	CMF	--		--
	Fatal & Injury	No SPF	--	--							
			--	--							
			--	--							

Control Strategy Selection and Inputs

Specify the Facility Level Inputs and the Control Strategies to be included in the SPICE Analysis.

Intersection Type	At-Grade Intersection
Analysis Year	Opening Year Only
Opening Year	2028
Design Year	
Facility Type	On Rural Two Lane Highway
Number of Legs	3-leg
1-Way/2-Way	
# of Major Street Lanes (both directions)	
Major Street Approach Speed	
Opening Year - Major Road AADT	13,950
Opening Year - Minor Road AADT	1,600
Design Year - Major Road AADT	
Design Year - Minor Road AADT	

For more information on how to determine these values, see the "Definitions" worksheet

Control Strategy	Include	Base Intersection		
Traffic Signal	Yes	--		
Traffic Signal (Alternative Configuration)	No	--		
Minor Road Stop Control	Yes	--		
All Way Stop Control	Yes	--	No SPF Available	No SPF
1-Lane Roundabout	Yes	--		
2-Lane Roundabout	No	--		
Displaced Left Turn (DLT)	No	Traffic Signal		
Median U-Turn (MUT)	No	Traffic Signal		
Signalized Restricted Crossing U-Turn (RCUT)	Yes	--		
Unsignalized Restricted Crossing U-Turn (RCUT)	Yes	--		
Signalized Thru-Cut*	Yes	--	*SSI Only, No Crash Prediction Available	
Unsignalized Thru-Cut*	Yes	--	*SSI Only, No Crash Prediction Available	
Bowtie*	No	--	*SSI Only, No Crash Prediction Available	
Continuous Green-T Intersection	Yes	Traffic Signal		
Jughandle	Yes	Traffic Signal		
Other 1*		Traffic Signal	*Please Select	
Other 2*		Minor Road Stop	*Please Select	

Safe System for Intersection (SSI) Inputs

Specify the geomtric, exposure, severity, and conflicting traffic complexity inputs required for an SSI analysis.

1. Roadway Geometry	Lanes
Major number thru lanes (one direction)	1
Minor number thru lanes (one direction)	0

Major Street Designation	
Select major street direction	N-S
Median Presence on Major Road	No
Median Presence on Minor Road	Yes

	Required Inputs
	Default Available, Override Optional
	Planning-Level Default Input
	Computed Value, Override Optional
	Computed Value - No Override
	Disabled Cell (Often based on input selections)

2. Complete the "Exposure" inputs. These inputs will apply to all interesections selected for analysis.
3. Complete the "Severity" inputs
4. Complete the "Conflicting Traffic Complexity" inputs

2. Exposure - All Intersections

Average Daily Traffic (veh/day)	Open	Design
Major	13,950	
Minor	1,600	

ADT Directional Split	
Major	0.50
Minor	0.50

Nonmotorized Total ADBP (ped-bike/day)	Activity Level	ADBP Value (ped-
Open Year Total Intersection NM	Low (20)	20
Design Year Total Intersection NM		

(or overwrite ped movement ADBPs below)

Nonmotorized Movement ADBP (ped-bike/day)	Open	Design
Major NM 1 (NM mvmt crossing Maj1)	7	
Major NM 2	7	
Minor NM 1	7	
~~Minor NM 2~~	~~0~~	

Are turning movement ADT values are available?	No	If "Yes", input values in Table 2-A
Are peak hour turning movement counts available?	Yes	If "Yes", input values in Table 2-B

If no turning movment volumes or counts are available, a user can optionally override the planning-level default turning movment proportions in Table 2-C

Table 2-A: Turning Movement (vol/day)

	Open	Design
Major Thru 1	6711.893	
~~Major Left Turn 1~~	~~0~~	
Major Right Turn 1	263.1072	
Major Thru 2	6764.333	
Major Left Turn 2	210.6668	
~~Major Right Turn 2~~	~~0~~	
~~Minor Thru 1~~	~~398.8852~~	
Minor Left Turn 1	169.2308	
Minor Right Turn 1	231.8841	
~~Minor Thru 2~~	~~0~~	
~~Minor Left Turn 2~~	~~0~~	
~~Minor Right Turn 2~~	~~0~~	

Table 2-B: Turning Movement Counts (Optional)

	Mvmt	AM Peak	AM %	PM Peak	PM %	Avg %
Major Thru 1	NBT	518	0.810641628	612	0.744526	0.777584
~~Major Left Turn 1~~	~~NBL~~	~~100~~	~~0.156494523~~	~~175~~	~~0.212895~~	~~0.184695~~
Major Right Turn 1	NBR	21	0.03286385	35	0.042579	0.037721
Major Thru 2	SBT	502	0.92962963	532	0.920415	0.925022
Major Left Turn 2	SBL	13	0.024074074	21	0.036332	0.030203
~~Major Right Turn 2~~	~~SBR~~	~~25~~	~~0.046296296~~	~~25~~	~~0.043253~~	~~0.044774~~
~~Minor Thru 1~~	~~EBT~~	~~100~~	~~0.512820513~~	~~75~~	~~0.543478~~	~~0.528149~~
Minor Left Turn 1	EBL	50	0.256410256	23	0.166667	0.211538
Minor Right Turn 1	EBR	45	0.230769231	40	0.289855	0.260312
~~Minor Thru 2~~	~~WBT~~	~~75~~	~~0.428571429~~	~~100~~	~~0.5~~	~~0.464286~~
~~Minor Left Turn 2~~	~~WBL~~	~~50~~	~~0.285714286~~	~~50~~	~~0.25~~	~~0.267857~~
~~Minor Right Turn 2~~	~~WBR~~	~~50~~	~~0.285714286~~	~~50~~	~~0.25~~	~~0.267857~~

Table 2-C: Turning Proportions (optional)

	Decimal
Major Thru 1	0.962278537
~~Major Left Turn 1~~	~~0~~
Major Right Turn 1	0.037721463
Major Thru 2	0.969796873
Major Left Turn 2	0.030203127
~~Major Right Turn 2~~	~~0~~
~~Minor Thru 1~~	~~0.498606466~~
Minor Left Turn 1	0.211538462
Minor Right Turn 1	0.289855072
~~Minor Thru 2~~	~~0~~
~~Minor Left Turn 2~~	~~0~~
~~Minor Right Turn 2~~	~~0~~

3. Severity

Vehicle Speeds	mph
Major Posted Speed Limit	50
Minor Posted Speed Limit	25
Major thru	50
Major left	20
Major right	15
Minor thru	21.25
Minor left	20
Minor right	15
Stop near	15
Stop far	25
Signal near	15
Signal far	25

4. Conflicting Traffic Complexity

Traffic Control	Decimal
Base Traffic Control Adjustment Value (BTCAV) for permitted	1
Base Traffic Control Adjustment Value (BTCAV) for protected/permitted	0.85
Base Traffic Control Adjustment Value (BTCAV) for protected	0.01
Base Traffic Control Adjustment Value (BTCAV) for stop-controlled	0.45
Weight, f, for permitted	0.5
Weight, f, for protected/permitted	0.5
Weight, f, for protected	0.5
Weight, f, for stop-controlled	0.5
Major LT signal phasing (drop-down)	Protected/Permitted
Minor LT signal phasing (drop-down)	Protected/Permitted
Exclusive Pedestrian phasing (drop-down)	No

Historical Crash Data Input

Note: In order to use Empirical Bayes (EB), the historical intersection type must be a traffic signal or a minor road stop. Additionally, this alternative must be selected to be included in the analysis, and the historical intersection specified below. Up to 10 years of historical data can be used to perform the EB adjustment.

Is historical crash data available? Yes

Number of years available: 5 (Up to 10)

First Year Data is available: 2016

Historical Intx Type: 3ST

Historical Crash Counts		Year										
		2016	2017	2018	2019	2020	--	--	--	--	--	Total
Combined	Total	1	0	1	1	0	--	--	--	--	--	3
	Fatal/Injury	0	0	0	1	0						1
	PDO	1	0	1	0	0						2
Single-Vehicle	Total											
	Fatal/Injury											
	PDO											
Multiple-Vehicle	Total											
	Fatal/Injury											
	PDO											
Veh-Ped	Fatal/Injury	0	0	0	0	0						0
Veh-Bike	Fatal/Injury	0	0	0	0	0						0
Total	All	1	0	1	1	0	--	--	--	--	--	3

Florida Department of Transportation
Safety Performance for Intersection Control Evaluation Tool

Results

Summary of crash prediction results for each alternative

Project Information

Project Name:	Chuluota Road (CR 419) ICE Evaluation	**Intersection Type**	At-Grade Intersection
Intersection:	Chuluota Road (CR 419) at Corner Lake Drive	**Opening Year**	2038
Agency:	Orange County	**Design Year**	0
Project Reference:	No-Build (2-lane) Interim Year (2038)	**Facility Type**	On Rural Two Lane Highway
City:	Orlando	**Number of Legs**	3-leg
State:	FL	**1-Way/2-Way**	
Date:	1/26/2024	**# of Major Street Lanes (both directions)**	
Analyst:	JMT	**Major Street Approach Speed**	

Crash Prediction Summary

Control Strategy	Crash Type	Opening Year	Design Year	Total Project Life Cycle	Crash Prediction Rank	AADT Within SPF Prediction Range?		Source of Prediction	SSI Score		
						(Open Year)	(Design Year)		Opening Year	Design Year	Rank
Traffic Signal	Total	1.76	--	--	6	Yes	Yes	Uncalibrated SPF	99		6
	Fatal & Injury	0.66	--	--							
Minor Road Stop	Total	1.37	--	--	5	Yes	Yes	Calibrated SPF w/ EB	98		7
	Fatal & Injury	0.57	--	--							
All Way Stop	Total	No SPF	--	--	--	No	Yes	Uncalibrated SPF w/ EB	100		2
	Fatal & Injury	No SPF	--	--							
1-lane Roundabout	Total	0.85	--	--	1	Yes	Yes	Uncalibrated SPF	100		1
	Fatal & Injury	0.23	--	--							
Signalized RCUT	Total	2.42	--	--	2	Yes	Yes	Uncalibrated SPF	99		3
	Fatal & Injury	0.44	--	--							
Unsignalized RCUT	Total	2.54	--	--	7	Yes	Yes	Uncalibrated SPF	99		5
	Fatal & Injury	0.70	--	--							
Signalized Thru-Cut	Total	No SPF	--	--	--	N/A	N/A	N/A	--		--
	Fatal & Injury	No SPF	--	--							
Unsignalized Thru-Cut	Total	No SPF	--	--	--	N/A	N/A	N/A	--		--
	Fatal & Injury	No SPF	--	--							
Continuous Green-T Intersection	Total	1.69	--	--	4	N/A	N/A	CMF	99		4
	Fatal & Injury	0.56	--	--							
Jughandle	Total	1.30	--	--	3	N/A	N/A	CMF	--		--
	Fatal & Injury	0.49	--	--							
Other 1*	Total	No SPF	--	--	--	N/A	N/A	CMF	--		--
	Fatal & Injury	No SPF	--	--							
Other 2*	Total	No SPF	--	--	--	N/A	N/A	CMF	--		--
	Fatal & Injury	No SPF	--	--							
			--	--							
			--	--							

Control Strategy Selection and Inputs

Specify the Facility Level Inputs and the Control Strategies to be included in the SPICE Analysis.

Intersection Type	At-Grade Intersection
Analysis Year	Opening Year Only
Opening Year	2038
Design Year	
Facility Type	On Rural Two Lane Highway
Number of Legs	3-leg
1-Way/2-Way	
# of Major Street Lanes (both directions)	
Major Street Approach Speed	
Opening Year - Major Road AADT	16,400
Opening Year - Minor Road AADT	1,700
Design Year - Major Road AADT	
Design Year - Minor Road AADT	

For more information on how to determine these values, see the "Definitions" worksheet

Control Strategy	Include	Base Intersection		
Traffic Signal	Yes	--		
Traffic Signal (Alternative Configuration)	No	--		
Minor Road Stop Control	Yes	--		
All Way Stop Control	Yes	--	No SPF Available	No SPF
1-Lane Roundabout	Yes	--		
2-Lane Roundabout	No	--		
Displaced Left Turn (DLT)	No	Traffic Signal		
Median U-Turn (MUT)	No	Traffic Signal		
Signalized Restricted Crossing U-Turn (RCUT)	Yes	--		
Unsignalized Restricted Crossing U-Turn (RCUT)	Yes	--		
Signalized Thru-Cut*	Yes	--	*SSI Only, No Crash Prediction Available	
Unsignalized Thru-Cut*	Yes	--	*SSI Only, No Crash Prediction Available	
Bowtie*	No	--	*SSI Only, No Crash Prediction Available	
Continuous Green-T Intersection	Yes	Traffic Signal		
Jughandle	Yes	Traffic Signal		
Other 1*		Traffic Signal	*Please Select	
Other 2*		Minor Road Stop	*Please Select	

Safe System for Intersection (SSI) Inputs

Specify the geomtric, exposure, severity, and conflicting traffic complexity inputs required for an SSI analysis.

1. Roadway Geometry	Lanes
Major number thru lanes (one direction)	1
Minor number thru lanes (one direction)	0

Major Street Designation	
Select major street direction	N-S
Median Presence on Major Road	No
Median Presence on Minor Road	Yes

	Required Inputs
	Default Available, Override Optional
	Planning-Level Default Input
	Computed Value, Override Optional
	Computed Value - No Override
	Disabled Cell (Often based on input selections)

2. Complete the "Exposure" inputs. These inputs will apply to all interesections selected for analysis.
3. Complete the "Severity" inputs
4. Complete the "Conflicting Traffic Complexity" inputs

2. Exposure - All Intersections

Average Daily Traffic (veh/day)	Open	Design
Major	16,400	
Minor	1,700	

ADT Directional Split	
Major	0.50
Minor	0.50

Nonmotorized Total ADBP (ped-bike/day)	Activity Level	ADBP Value (ped-
Open Year Total Intersection NM	Low (20)	20
Design Year Total Intersection NM		

(or overwrite ped movement ADBPs below)

Nonmotorized Movement ADBP (ped-bike/day)	Open	Design
Major NM 1 (NM mvmt crossing Maj1)	7	
Major NM 2	7	
Minor NM 1	7	
~~Minor NM 2~~	~~0~~	

Are turning movement ADT values are available?	No	If "Yes", input values in Table 2-A
Are peak hour turning movement counts available?	Yes	If "Yes", input values in Table 2-B

If no turning movment volumes or counts are available, a user can optionally override the planning-level default turning movment proportions in Table 2-C

Table 2-A: Turning Movement (vol/day)

	Open	Design
Major Thru 1	7919.213	
~~Major Left Turn 1~~	~~0~~	
Major Right Turn 1	280.7866	
Major Thru 2	7975.021	
Major Left Turn 2	224.979	
~~Major Right Turn 2~~	~~0~~	
~~Minor Thru 1~~	~~413.4128~~	
Minor Left Turn 1	183.3957	
Minor Right Turn 1	253.1915	
~~Minor Thru 2~~	~~0~~	
~~Minor Left Turn 2~~	~~0~~	
~~Minor Right Turn 2~~	~~0~~	

Table 2-B: Turning Movement Counts (Optional)

	Mvmt	AM Peak	AM %	PM Peak	PM %	Avg %
Major Thru 1	NBT	627	0.837116155	734	0.775899	0.806507
~~Major Left Turn 1~~	~~NBL~~	~~100~~	~~0.133511348~~	~~175~~	~~0.184989~~	~~0.15925~~
Major Right Turn 1	NBR	22	0.029372497	37	0.039112	0.034242
Major Thru 2	SBT	588	0.937799043	629	0.930473	0.934136
Major Left Turn 2	SBL	14	0.022328549	22	0.032544	0.027436
~~Major Right Turn 2~~	~~SBR~~	~~25~~	~~0.039872408~~	~~25~~	~~0.036982~~	~~0.038427~~
~~Minor Thru 1~~	~~EBT~~	~~100~~	~~0.502512563~~	~~75~~	~~0.531915~~	~~0.517214~~
Minor Left Turn 1	EBL	52	0.261306533	24	0.170213	0.21576
Minor Right Turn 1	EBR	47	0.236180905	42	0.297872	0.267027
~~Minor Thru 2~~	~~WBT~~	~~75~~	~~0.428571429~~	~~100~~	~~0.5~~	~~0.464286~~
~~Minor Left Turn 2~~	~~WBL~~	~~50~~	~~0.285714286~~	~~50~~	~~0.25~~	~~0.267857~~
~~Minor Right Turn 2~~	~~WBR~~	~~50~~	~~0.285714286~~	~~50~~	~~0.25~~	~~0.267857~~

Table 2-C: Turning Proportions (optional)

	Decimal
Major Thru 1	0.965757726
~~Major Left Turn 1~~	~~0~~
Major Right Turn 1	0.034242274
Major Thru 2	0.972563536
Major Left Turn 2	0.027436464
~~Major Right Turn 2~~	~~0~~
~~Minor Thru 1~~	~~0.48636801~~
Minor Left Turn 1	0.215759649
Minor Right Turn 1	0.29787234
~~Minor Thru 2~~	~~0~~
~~Minor Left Turn 2~~	~~0~~
~~Minor Right Turn 2~~	~~0~~

3. Severity

Vehicle Speeds	mph
Major Posted Speed Limit	50
Minor Posted Speed Limit	25
Major thru	50
Major left	20
Major right	15
Minor thru	21.25
Minor left	20
Minor right	15
Stop near	15
Stop far	25
Signal near	15
Signal far	25

4. Conflicting Traffic Complexity

Traffic Control	Decimal
Base Traffic Control Adjustment Value (BTCAV) for permitted	1
Base Traffic Control Adjustment Value (BTCAV) for protected/permitted	0.85
Base Traffic Control Adjustment Value (BTCAV) for protected	0.01
Base Traffic Control Adjustment Value (BTCAV) for stop-controlled	0.45
Weight, f, for permitted	0.5
Weight, f, for protected/permitted	0.5
Weight, f, for protected	0.5
Weight, f, for stop-controlled	0.5
Major LT signal phasing (drop-down)	Protected/Permitted
Minor LT signal phasing (drop-down)	Protected/Permitted
Exclusive Pedestrian phasing (drop-down)	No

Historical Crash Data Input

Note: In order to use Empirical Bayes (EB), the historical intersection type must be a traffic signal or a minor road stop. Additionally, this alternative must be selected to be included in the analysis, and the historical intersection specified below. Up to 10 years of historical data can be used to perform the EB adjustment.

Is historical crash data available? Yes

Number of years available: 5 (Up to 10)

First Year Data is available: 2016

Historical Intx Type: 3ST

Historical Crash Counts		Year										
		2016	2017	2018	2019	2020	--	--	--	--	--	Total
Combined	Total	1	0	1	1	0	--	--	--	--	--	3
	Fatal/Injury	0	0	0	1	0						1
	PDO	1	0	1	0	0						2
Single-Vehicle	Total											
	Fatal/Injury											
	PDO											
Multiple-Vehicle	Total											
	Fatal/Injury											
	PDO											
Veh-Ped	Fatal/Injury	0	0	0	0	0						0
Veh-Bike	Fatal/Injury	0	0	0	0	0						0
Total	All	1	0	1	1	0	--	--	--	--	--	3

Florida Department of Transportation
Safety Performance for Intersection Control Evaluation Tool

Results

Summary of crash prediction results for each alternative

Project Information

Project Name:	Chuluota Road (CR 419) ICE Evaluation	**Intersection Type**	At-Grade Intersection
Intersection:	Chuluota Road (CR 419) at Corner Lake Drive	**Opening Year**	2048
Agency:	Orange County	**Design Year**	0
Project Reference:	No-Build (2-lane) Design Year (2048)	**Facility Type**	On Rural Two Lane Highway
City:	Orlando	**Number of Legs**	3-leg
State:	FL	**1-Way/2-Way**	
Date:	1/26/2024	**# of Major Street Lanes (both directions)**	
Analyst:	JMT	**Major Street Approach Speed**	

Crash Prediction Summary

Control Strategy	Crash Type	Opening Year	Design Year	Total Project Life Cycle	Crash Prediction Rank	AADT Within SPF Prediction Range?		Source of Prediction	SSI Score		
						(Open Year)	(Design Year)		Opening Year	Design Year	Rank
Traffic Signal	Total	1.92	--	--	6	Yes	Yes	Uncalibrated SPF	99		6
	Fatal & Injury	0.72	--	--							
Minor Road Stop	Total	1.45	--	--	4	Yes	Yes	Calibrated SPF w/ EB	97		7
	Fatal & Injury	0.60	--	--							
All Way Stop	Total	No SPF	--	--	--	No	Yes	Uncalibrated SPF w/ EB	100		2
	Fatal & Injury	No SPF	--	--							
1-lane Roundabout	Total	0.92	--	--	1	No	Yes	Uncalibrated SPF	100		1
	Fatal & Injury	0.26	--	--							
Signalized RCUT	Total	2.88	--	--	2	Yes	Yes	Uncalibrated SPF	99		3
	Fatal & Injury	0.52	--	--							
Unsignalized RCUT	Total	2.72	--	--	7	Yes	Yes	Uncalibrated SPF	99		5
	Fatal & Injury	0.77	--	--							
Signalized Thru-Cut	Total	No SPF	--	--	--	N/A	N/A	N/A	--		--
	Fatal & Injury	No SPF	--	--							
Unsignalized Thru-Cut	Total	No SPF	--	--	--	N/A	N/A	N/A	--		--
	Fatal & Injury	No SPF	--	--							
Continuous Green-T Intersection	Total	1.84	--	--	5	N/A	N/A	CMF	99		4
	Fatal & Injury	0.61	--	--							
Jughandle	Total	1.42	--	--	3	N/A	N/A	CMF	--		--
	Fatal & Injury	0.53	--	--							
Other 1*	Total	No SPF	--	--	--	N/A	N/A	CMF	--		--
	Fatal & Injury	No SPF	--	--							
Other 2*	Total	No SPF	--	--	--	N/A	N/A	CMF	--		--
	Fatal & Injury	No SPF	--	--							
			--	--							
			--	--							

Control Strategy Selection and Inputs

Specify the Facility Level Inputs and the Control Strategies to be included in the SPICE Analysis.

Intersection Type	At-Grade Intersection	
Analysis Year	Opening Year Only	
Opening Year	2048	
Design Year		
Facility Type	On Rural Two Lane Highway	For more information on how to determine these values, see the "Definitions" worksheet
Number of Legs	3-leg	
1-Way/2-Way		
# of Major Street Lanes (both directions)		
Major Street Approach Speed		
Opening Year - Major Road AADT	18,800	
Opening Year - Minor Road AADT	1,800	
Design Year - Major Road AADT		
Design Year - Minor Road AADT		

Control Strategy	**Include**	**Base Intersection**		
Traffic Signal	Yes	--		
Traffic Signal (Alternative Configuration)	No	--		
Minor Road Stop Control	Yes	--		
All Way Stop Control	Yes	--	No SPF Available	No SPF
1-Lane Roundabout	Yes	--	Opening Year AADT Outside of SPF Development Range	
2-Lane Roundabout	No	--		
Displaced Left Turn (DLT)	No	Traffic Signal		
Median U-Turn (MUT)	No	Traffic Signal		
Signalized Restricted Crossing U-Turn (RCUT)	Yes	--		
Unsignalized Restricted Crossing U-Turn (RCUT)	Yes	--		
Signalized Thru-Cut*	Yes	--	**SSI Only, No Crash Prediction Available*	
Unsignalized Thru-Cut*	Yes	--	**SSI Only, No Crash Prediction Available*	
Bowtie*	No	--	**SSI Only, No Crash Prediction Available*	
Continuous Green-T Intersection	Yes	Traffic Signal		
Jughandle	Yes	Traffic Signal		
Other 1*		Traffic Signal	**Please Select*	
Other 2*		Minor Road Stop	**Please Select*	

Safe System for Intersection (SSI) Inputs

Specify the geomtric, exposure, severity, and conflicting traffic complexity inputs required for an SSI analysis.

1. Roadway Geometry	Lanes
Major number thru lanes (one direction)	1
Minor number thru lanes (one direction)	0

Major Street Designation	
Select major street direction	N-S
Median Presence on Major Road	No
Median Presence on Minor Road	Yes

	Required Inputs
	Default Available, Override Optional
	Planning-Level Default Input
	Computed Value, Override Optional
	Computed Value - No Override
	Disabled Cell (Often based on input selections)

2. Complete the "Exposure" inputs. These inputs will apply to all interesections selected for analysis.
3. Complete the "Severity" inputs
4. Complete the "Conflicting Traffic Complexity" inputs

2. Exposure - All Intersections

Average Daily Traffic (veh/day)	Open	Design
Major	18,800	
Minor	1,800	

ADT Directional Split	
Major	0.50
Minor	0.50

Nonmotorized Total ADBP (ped-bike/day)	Activity Level	ADBP Value (ped-
Open Year Total Intersection NM	Low (20)	20
Design Year Total Intersection NM		

(or overwrite ped movement ADBPs below)

Nonmotorized Movement ADBP (ped-bike/day)	Open	Design
Major NM 1 (NM mvmt crossing Maj1)	7	
Major NM 2	7	
Minor NM 1	7	
~~Minor NM 2~~	~~0~~	

Are turning movement ADT values are available?	No	If "Yes", input values in Table 2-A
Are peak hour turning movement counts available?	Yes	If "Yes", input values in Table 2-B

If no turning movment volumes or counts are available, a user can optionally override the planning-level default turning movment proportions in Table 2-C

Table 2-A: Turning Movement (vol/day)

	Open	Design
Major Thru 1	9112.275	
~~Major Left Turn 1~~	~~0~~	
Major Right Turn 1	287.7255	
Major Thru 2	9174.079	
Major Left Turn 2	225.9214	
~~Major Right Turn 2~~	~~0~~	
~~Minor Thru 1~~	~~427.1706~~	
Minor Left Turn 1	197.8294	
Minor Right Turn 1	275	
~~Minor Thru 2~~	~~0~~	
~~Minor Left Turn 2~~	~~0~~	
~~Minor Right Turn 2~~	~~0~~	

Table 2-B: Turning Movement Counts (Optional)

	Mvmt	AM Peak	AM %	PM Peak	PM %	Avg %
Major Thru 1	NBT	735	0.85764294	856	0.800748	0.829196
~~Major Left Turn 1~~	~~NBL~~	~~100~~	~~0.116686114~~	~~175~~	~~0.163704~~	~~0.140195~~
Major Right Turn 1	NBR	22	0.025670945	38	0.035547	0.030609
Major Thru 2	SBT	675	0.945378151	726	0.939198	0.942288
Major Left Turn 2	SBL	14	0.019607843	22	0.028461	0.024034
~~Major Right Turn 2~~	~~SBR~~	~~25~~	~~0.035014006~~	~~25~~	~~0.032342~~	~~0.033678~~
~~Minor Thru 1~~	~~EBT~~	~~100~~	~~0.492610837~~	~~75~~	~~0.520833~~	~~0.506722~~
Minor Left Turn 1	EBL	54	0.266009852	25	0.173611	0.21981
Minor Right Turn 1	EBR	49	0.24137931	44	0.305556	0.273467
~~Minor Thru 2~~	~~WBT~~	~~75~~	~~0.428571429~~	~~100~~	~~0.5~~	~~0.464286~~
~~Minor Left Turn 2~~	~~WBL~~	~~50~~	~~0.285714286~~	~~50~~	~~0.25~~	~~0.267857~~
~~Minor Right Turn 2~~	~~WBR~~	~~50~~	~~0.285714286~~	~~50~~	~~0.25~~	~~0.267857~~

Table 2-C: Turning Proportions (optional)

	Decimal
Major Thru 1	0.969390907
~~Major Left Turn 1~~	~~0~~
Major Right Turn 1	0.030609093
Major Thru 2	0.975965807
Major Left Turn 2	0.024034193
~~Major Right Turn 2~~	~~0~~
~~Minor Thru 1~~	~~0.474633963~~
Minor Left Turn 1	0.219810482
Minor Right Turn 1	0.305555556
~~Minor Thru 2~~	~~0~~
~~Minor Left Turn 2~~	~~0~~
~~Minor Right Turn 2~~	~~0~~

3. Severity

Vehicle Speeds	mph
Major Posted Speed Limit	50
Minor Posted Speed Limit	25
Major thru	50
Major left	20
Major right	15
Minor thru	21.25
Minor left	20
Minor right	15
Stop near	15
Stop far	25
Signal near	15
Signal far	25

4. Conflicting Traffic Complexity

Traffic Control	Decimal
Base Traffic Control Adjustment Value (BTCAV) for permitted	1
Base Traffic Control Adjustment Value (BTCAV) for protected/permitted	0.85
Base Traffic Control Adjustment Value (BTCAV) for protected	0.01
Base Traffic Control Adjustment Value (BTCAV) for stop-controlled	0.45
Weight, f, for permitted	0.5
Weight, f, for protected/permitted	0.5
Weight, f, for protected	0.5
Weight, f, for stop-controlled	0.5
Major LT signal phasing (drop-down)	Protected/Permitted
Minor LT signal phasing (drop-down)	Protected/Permitted
Exclusive Pedestrian phasing (drop-down)	No

Historical Crash Data Input

Note: In order to use Empirical Bayes (EB), the historical intersection type must be a traffic signal or a minor road stop. Additionally, this alternative must be selected to be included in the analysis, and the historical intersection specified below. Up to 10 years of historical data can be used to perform the EB adjustment.

Is historical crash data available? Yes

Number of years available: 5 (Up to 10)

First Year Data is available: 2016

Historical Intx Type: 3ST

Historical Crash Counts		Year										
		2016	2017	2018	2019	2020	--	--	--	--	--	Total
Combined	Total	1	0	1	1	0	--	--	--	--	--	3
	Fatal/Injury	0	0	0	1	0						1
	PDO	1	0	1	0	0						2
Single-Vehicle	Total											
	Fatal/Injury											
	PDO											
Multiple-Vehicle	Total											
	Fatal/Injury											
	PDO											
Veh-Ped	Fatal/Injury	0	0	0	0	0						0
Veh-Bike	Fatal/Injury	0	0	0	0	0						0
Total	All	1	0	1	1	0	--	--	--	--	--	3

Florida Department of Transportation
Safety Performance for Intersection Control Evaluation Tool

Results

Summary of crash prediction results for each alternative

Project Information

Project Name:	Chuluota Road (CR 419) ICE Evaluation	**Intersection Type**	At-Grade Intersection
Intersection:	Chuluota Road (CR 419) at Corner Lake Drive	**Opening Year**	2028
Agency:	Orange County	**Design Year**	0
Project Reference:	Build (4-lane) Opening Year (2028)	**Facility Type**	On Rural Two Lane Highway
City:	Orlando	**Number of Legs**	3-leg
State:	FL	**1-Way/2-Way**	
Date:	1/26/2024	**# of Major Street Lanes (both directions)**	
Analyst:	JMT	**Major Street Approach Speed**	

Crash Prediction Summary

Control Strategy	Crash Type	Opening Year	Design Year	Total Project Life Cycle	Crash Prediction Rank	AADT Within SPF Prediction Range?		Source of Prediction	SSI Score		
						(Open Year)	(Design Year)		Opening Year	Design Year	Rank
Traffic Signal	Total	1.70	--	--	5	Yes	Yes	Uncalibrated SPF	98		6
	Fatal & Injury	0.63	--	--							
Minor Road Stop	Total	1.33	--	--	4	Yes	Yes	Calibrated SPF w/ EB	96		7
	Fatal & Injury	0.55	--	--							
All Way Stop	Total	No SPF	--	--	--	No	Yes	Uncalibrated SPF w/ EB	100		2
	Fatal & Injury	No SPF	--	--							
2-lane Roundabout	Total	3.24	--	--	6	Yes	Yes	Uncalibrated SPF	100		1
	Fatal & Injury	0.66	--	--							
Signalized RCUT	Total	2.24	--	--	1	Yes	Yes	Uncalibrated SPF	99		4
	Fatal & Injury	0.40	--	--							
Unsignalized RCUT	Total	2.45	--	--	7	Yes	Yes	Uncalibrated SPF	99		5
	Fatal & Injury	0.68	--	--							
Signalized Thru-Cut	Total	No SPF	--	--	--	N/A	N/A	N/A	--		--
	Fatal & Injury	No SPF	--	--							
Unsignalized Thru-Cut	Total	No SPF	--	--	--	N/A	N/A	N/A	--		--
	Fatal & Injury	No SPF	--	--							
Continuous Green-T Intersection	Total	1.63	--	--	3	N/A	N/A	CMF	99		3
	Fatal & Injury	0.54	--	--							
Jughandle	Total	1.26	--	--	2	N/A	N/A	CMF	--		--
	Fatal & Injury	0.47	--	--							
Other 1*	Total	No SPF	--	--	--	N/A	N/A	CMF	--		--
	Fatal & Injury	No SPF	--	--							
Other 2*	Total	No SPF	--	--	--	N/A	N/A	CMF	--		--
	Fatal & Injury	No SPF	--	--							
			--	--							
			--	--							

Control Strategy Selection and Inputs

Specify the Facility Level Inputs and the Control Strategies to be included in the SPICE Analysis.

Intersection Type	At-Grade Intersection
Analysis Year	Opening Year Only
Opening Year	2028
Design Year	
Facility Type	On Rural Two Lane Highway
Number of Legs	3-leg
1-Way/2-Way	
# of Major Street Lanes (both directions)	
Major Street Approach Speed	
Opening Year - Major Road AADT	15,700
Opening Year - Minor Road AADT	1,600
Design Year - Major Road AADT	
Design Year - Minor Road AADT	

For more information on how to determine these values, see the "Definitions" worksheet

Control Strategy	Include	Base Intersection		
Traffic Signal	Yes	--		
Traffic Signal (Alternative Configuration)	No	--		
Minor Road Stop Control	Yes	--		
All Way Stop Control	Yes	--	No SPF Available	No SPF
1-Lane Roundabout	No	--		
2-Lane Roundabout	Yes	--		
Displaced Left Turn (DLT)	No	Traffic Signal		
Median U-Turn (MUT)	No	Traffic Signal		
Signalized Restricted Crossing U-Turn (RCUT)	Yes	--		
Unsignalized Restricted Crossing U-Turn (RCUT)	Yes	--		
Signalized Thru-Cut*	Yes	--	*SSI Only, No Crash Prediction Available	
Unsignalized Thru-Cut*	Yes	--	*SSI Only, No Crash Prediction Available	
Bowtie*	No	--	*SSI Only, No Crash Prediction Available	
Continuous Green-T Intersection	Yes	Traffic Signal		
Jughandle	Yes	Traffic Signal		
Other 1*		Traffic Signal	*Please Select	
Other 2*		Minor Road Stop	*Please Select	

Safe System for Intersection (SSI) Inputs

Specify the geomtric, exposure, severity, and conflicting traffic complexity inputs required for an SSI analysis.

1. Roadway Geometry	Lanes
Major number thru lanes (one direction)	2
Minor number thru lanes (one direction)	0

Major Street Designation	
Select major street direction	N-S
Median Presence on Major Road	No
Median Presence on Minor Road	Yes

	Required Inputs
	Default Available, Override Optional
	Planning-Level Default Input
	Computed Value, Override Optional
	Computed Value - No Override
	Disabled Cell (Often based on input selections)

2. Complete the "Exposure" inputs. These inputs will apply to all interesections selected for analysis.
3. Complete the "Severity" inputs
4. Complete the "Conflicting Traffic Complexity" inputs

2. Exposure - All Intersections

Average Daily Traffic (veh/day)	Open	Design
Major	15,700	
Minor	1,600	

ADT Directional Split	
Major	0.50
Minor	0.50

Nonmotorized Total ADBP (ped-bike/day)	Activity Level	ADBP Value (ped-
Open Year Total Intersection NM	Low (20)	20
Design Year Total Intersection NM		

(or overwrite ped movement ADBPs below)

Nonmotorized Movement ADBP (ped-bike/day)	Open	Design
Major NM 1 (NM mvmt crossing Maj1)	7	
Major NM 2	7	
Minor NM 1	7	
~~Minor NM 2~~	~~0~~	

Are turning movement ADT values are available?	No	If "Yes", input values in Table 2-A
Are peak hour turning movement counts available?	Yes	If "Yes", input values in Table 2-B

If no turning movment volumes or counts are available, a user can optionally override the planning-level default turning movment proportions in Table 2-C

Table 2-A: Turning Movement (vol/day)

	Open	Design
Major Thru 1	7580.098	
~~Major Left Turn 1~~	~~0~~	
Major Right Turn 1	269.9023	
Major Thru 2	7631.824	
Major Left Turn 2	218.1759	
~~Major Right Turn 2~~	~~0~~	
~~Minor Thru 1~~	~~390.5867~~	
Minor Left Turn 1	171.1154	
Minor Right Turn 1	238.2979	
~~Minor Thru 2~~	~~0~~	
~~Minor Left Turn 2~~	~~0~~	
~~Minor Right Turn 2~~	~~0~~	

Table 2-B: Turning Movement Counts (Optional)

	Mvmt	AM Peak	AM %	PM Peak	PM %	Avg %
Major Thru 1	NBT	597	0.831476323	700	0.768386	0.799931
~~Major Left Turn 1~~	~~NBL~~	~~100~~	~~0.139275766~~	~~175~~	~~0.192097~~	~~0.165686~~
Major Right Turn 1	NBR	21	0.029247911	36	0.039517	0.034382
Major Thru 2	SBT	565	0.935430464	602	0.929012	0.932221
Major Left Turn 2	SBL	14	0.023178808	21	0.032407	0.027793
~~Major Right Turn 2~~	~~SBR~~	~~25~~	~~0.041390728~~	~~25~~	~~0.03858~~	~~0.039985~~
~~Minor Thru 1~~	~~EBT~~	~~100~~	~~0.505050505~~	~~75~~	~~0.531915~~	~~0.518483~~
Minor Left Turn 1	EBL	51	0.257575758	24	0.170213	0.213894
Minor Right Turn 1	EBR	47	0.237373737	42	0.297872	0.267623
~~Minor Thru 2~~	~~WBT~~	~~75~~	~~0.428571429~~	~~100~~	~~0.5~~	~~0.464286~~
~~Minor Left Turn 2~~	~~WBL~~	~~50~~	~~0.285714286~~	~~50~~	~~0.25~~	~~0.267857~~
~~Minor Right Turn 2~~	~~WBR~~	~~50~~	~~0.285714286~~	~~50~~	~~0.25~~	~~0.267857~~

Table 2-C: Turning Proportions (optional)

	Decimal
Major Thru 1	0.965617537
~~Major Left Turn 1~~	~~0~~
Major Right Turn 1	0.034382463
Major Thru 2	0.972206892
Major Left Turn 2	0.027793108
~~Major Right Turn 2~~	~~0~~
~~Minor Thru 1~~	~~0.488233398~~
Minor Left Turn 1	0.213894262
Minor Right Turn 1	0.29787234
~~Minor Thru 2~~	~~0~~
~~Minor Left Turn 2~~	~~0~~
~~Minor Right Turn 2~~	~~0~~

3. Severity

Vehicle Speeds	mph
Major Posted Speed Limit	50
Minor Posted Speed Limit	25
Major thru	50
Major left	20
Major right	15
Minor thru	21.25
Minor left	20
Minor right	15
Stop near	15
Stop far	25
Signal near	15
Signal far	25

4. Conflicting Traffic Complexity

Traffic Control	Decimal
Base Traffic Control Adjustment Value (BTCAV) for permitted	1
Base Traffic Control Adjustment Value (BTCAV) for protected/permitted	0.85
Base Traffic Control Adjustment Value (BTCAV) for protected	0.01
Base Traffic Control Adjustment Value (BTCAV) for stop-controlled	0.45
Weight, f, for permitted	0.5
Weight, f, for protected/permitted	0.5
Weight, f, for protected	0.5
Weight, f, for stop-controlled	0.5
Major LT signal phasing (drop-down)	Protected/Permitted
Minor LT signal phasing (drop-down)	Protected/Permitted
Exclusive Pedestrian phasing (drop-down)	No

Historical Crash Data Input

Note: In order to use Empirical Bayes (EB), the historical intersection type must be a traffic signal or a minor road stop. Additionally, this alternative must be selected to be included in the analysis, and the historical intersection specified below. Up to 10 years of historical data can be used to perform the EB adjustment.

Is historical crash data available? Yes

Number of years available: 5 (Up to 10)

First Year Data is available: 2016

Historical Intx Type: 3ST

Historical Crash Counts		Year										
		2016	2017	2018	2019	2020	--	--	--	--	--	Total
Combined	Total	1	0	1	1	0	--	--	--	--	--	3
	Fatal/Injury	0	0	0	1	0						1
	PDO	1	0	1	0	0						2
Single-Vehicle	Total											
	Fatal/Injury											
	PDO											
Multiple-Vehicle	Total											
	Fatal/Injury											
	PDO											
Veh-Ped	Fatal/Injury	0	0	0	0	0						0
Veh-Bike	Fatal/Injury	0	0	0	0	0						0
Total	All	1	0	1	1	0	--	--	--	--	--	3

Florida Department of Transportation
Safety Performance for Intersection Control Evaluation Tool

Results

Summary of crash prediction results for each alternative

Project Information

Project Name:	Chuluota Road (CR 419) ICE Evaluation	**Intersection Type**	At-Grade Intersection
Intersection:	Chuluota Road (CR 419) at Corner Lake Drive	**Opening Year**	2038
Agency:	Orange County	**Design Year**	0
Project Reference:	Build (4-lane) Interim Year (2038)	**Facility Type**	On Rural Two Lane Highway
City:	Orlando	**Number of Legs**	3-leg
State:	FL	**1-Way/2-Way**	
Date:	1/26/2024	**# of Major Street Lanes (both directions)**	
Analyst:	JMT	**Major Street Approach Speed**	

Crash Prediction Summary

Control Strategy	Crash Type	Opening Year	Design Year	Total Project Life Cycle	Crash Prediction Rank	AADT Within SPF Prediction Range?		Source of Prediction	SSI Score		
						(Open Year)	(Design Year)		Opening Year	Design Year	Rank
Traffic Signal	Total	1.99	--	--	5	Yes	Yes	Uncalibrated SPF	97		6
	Fatal & Injury	0.74	--	--							
Minor Road Stop	Total	1.48	--	--	3	No	Yes	Calibrated SPF w/ EB	95		7
	Fatal & Injury	0.61	--	--							
All Way Stop	Total	No SPF	--	--	--	No	Yes	Uncalibrated SPF w/ EB	99		2
	Fatal & Injury	No SPF	--	--							
2-lane Roundabout	Total	4.29	--	--	7	Yes	Yes	Uncalibrated SPF	100		1
	Fatal & Injury	0.92	--	--							
Signalized RCUT	Total	3.11	--	--	2	Yes	Yes	Uncalibrated SPF	99		4
	Fatal & Injury	0.56	--	--							
Unsignalized RCUT	Total	2.77	--	--	6	Yes	Yes	Uncalibrated SPF	98		5
	Fatal & Injury	0.80	--	--							
Signalized Thru-Cut	Total	No SPF	--	--	--	N/A	N/A	N/A	--		--
	Fatal & Injury	No SPF	--	--							
Unsignalized Thru-Cut	Total	No SPF	--	--	--	N/A	N/A	N/A	--		--
	Fatal & Injury	No SPF	--	--							
Continuous Green-T Intersection	Total	1.91	--	--	4	N/A	N/A	CMF	99		3
	Fatal & Injury	0.63	--	--							
Jughandle	Total	1.47	--	--	1	N/A	N/A	CMF	--		--
	Fatal & Injury	0.55	--	--							
Other 1*	Total	No SPF	--	--	--	N/A	N/A	CMF	--		--
	Fatal & Injury	No SPF	--	--							
Other 2*	Total	No SPF	--	--	--	N/A	N/A	CMF	--		--
	Fatal & Injury	No SPF	--	--							
			--	--							
			--	--							

Control Strategy Selection and Inputs

Specify the Facility Level Inputs and the Control Strategies to be included in the SPICE Analysis.

Intersection Type	At-Grade Intersection	
Analysis Year	Opening Year Only	
Opening Year	2038	
Design Year		
Facility Type	On Rural Two Lane Highway	For more information on how to determine these values, see the "Definitions" worksheet
Number of Legs	3-leg	
1-Way/2-Way		
# of Major Street Lanes (both directions)		
Major Street Approach Speed		
Opening Year - Major Road AADT	20,600	
Opening Year - Minor Road AADT	1,700	
Design Year - Major Road AADT		
Design Year - Minor Road AADT		

Control Strategy	**Include**	**Base Intersection**		
Traffic Signal	Yes	--		
Traffic Signal (Alternative Configuration)	No	--		
Minor Road Stop Control	Yes	--	Opening Year AADT Outside of SPF Development Range	
All Way Stop Control	Yes	--	No SPF Available	No SPF
1-Lane Roundabout	No	--	Opening Year AADT Outside of SPF Development Range	
2-Lane Roundabout	Yes	--		
Displaced Left Turn (DLT)	No	Traffic Signal		
Median U-Turn (MUT)	No	Traffic Signal		
Signalized Restricted Crossing U-Turn (RCUT)	Yes	--		
Unsignalized Restricted Crossing U-Turn (RCUT)	Yes	--		
Signalized Thru-Cut*	Yes	--	*SSI Only, No Crash Prediction Available	
Unsignalized Thru-Cut*	Yes	--	*SSI Only, No Crash Prediction Available	
Bowtie*	No	--	*SSI Only, No Crash Prediction Available	
Continuous Green-T Intersection	Yes	Traffic Signal		
Jughandle	Yes	Traffic Signal		
Other 1*		Traffic Signal	*Please Select	
Other 2*		Minor Road Stop	*Please Select	

Safe System for Intersection (SSI) Inputs

Specify the geomtric, exposure, severity, and conflicting traffic complexity inputs required for an SSI analysis.

1. Roadway Geometry	Lanes
Major number thru lanes (one direction)	2
Minor number thru lanes (one direction)	0

Major Street Designation	
Select major street direction	N-S
Median Presence on Major Road	No
Median Presence on Minor Road	Yes

	Required Inputs
	Default Available, Override Optional
	Planning-Level Default Input
	Computed Value, Override Optional
	Computed Value - No Override
	Disabled Cell (Often based on input selections)

2. Complete the "Exposure" inputs. These inputs will apply to all interesections selected for analysis.
3. Complete the "Severity" inputs
4. Complete the "Conflicting Traffic Complexity" inputs

2. Exposure - All Intersections

Average Daily Traffic (veh/day)	Open	Design
Major	20,600	
Minor	1,700	

ADT Directional Split	
Major	0.50
Minor	0.50

Nonmotorized Total ADBP (ped-bike/day)	Activity Level	ADBP Value (ped-
Open Year Total Intersection NM	Low (20)	20
Design Year Total Intersection NM		

(or overwrite ped movement ADBPs below)

Nonmotorized Movement ADBP (ped-bike/day)	Open	Design
Major NM 1 (NM mvmt crossing Maj1)	7	
Major NM 2	7	
Minor NM 1	7	
~~Minor NM 2~~	~~0~~	

Are turning movement ADT values are available?	No	If "Yes", input values in Table 2-A
Are peak hour turning movement counts available?	Yes	If "Yes", input values in Table 2-B

If no turning movment volumes or counts are available, a user can optionally override the planning-level default turning movment proportions in Table 2-C

Table 2-A: Turning Movement (vol/day)

	Open	Design
Major Thru 1	10025.13	
~~Major Left Turn 1~~	~~0~~	
Major Right Turn 1	274.8656	
Major Thru 2	10061.41	
Major Left Turn 2	238.5933	
~~Major Right Turn 2~~	~~0~~	
~~Minor Thru 1~~	~~397.3529~~	
Minor Left Turn 1	190.6608	
Minor Right Turn 1	261.9863	
~~Minor Thru 2~~	~~0~~	
~~Minor Left Turn 2~~	~~0~~	
~~Minor Right Turn 2~~	~~0~~	

Table 2-B: Turning Movement Counts (Optional)

	Mvmt	AM Peak	AM %	PM Peak	PM %	Avg %
Major Thru 1	NBT	818	0.87113951	950	0.81826	0.8447
~~Major Left Turn 1~~	~~NBL~~	~~100~~	~~0.106496273~~	~~175~~	~~0.150732~~	~~0.128614~~
Major Right Turn 1	NBR	21	0.022364217	36	0.031008	0.026686
Major Thru 2	SBT	741	0.948783611	800	0.943396	0.94609
Major Left Turn 2	SBL	15	0.019206146	23	0.027123	0.023164
~~Major Right Turn 2~~	~~SBR~~	~~25~~	~~0.032010243~~	~~25~~	~~0.029481~~	~~0.030746~~
~~Minor Thru 1~~	~~EBT~~	~~100~~	~~0.483091787~~	~~75~~	~~0.513699~~	~~0.498395~~
Minor Left Turn 1	EBL	56	0.270531401	26	0.178082	0.224307
Minor Right Turn 1	EBR	51	0.246376812	45	0.308219	0.277298
~~Minor Thru 2~~	~~WBT~~	~~75~~	~~0.428571429~~	~~100~~	~~0.5~~	~~0.464286~~
~~Minor Left Turn 2~~	~~WBL~~	~~50~~	~~0.285714286~~	~~50~~	~~0.25~~	~~0.267857~~
~~Minor Right Turn 2~~	~~WBR~~	~~50~~	~~0.285714286~~	~~50~~	~~0.25~~	~~0.267857~~

Table 2-C: Turning Proportions (optional)

	Decimal
Major Thru 1	0.973314015
~~Major Left Turn 1~~	~~0~~
Major Right Turn 1	0.026685985
Major Thru 2	0.976835606
Major Left Turn 2	0.023164394
~~Major Right Turn 2~~	~~0~~
~~Minor Thru 1~~	~~0.467474026~~
Minor Left Turn 1	0.224306796
Minor Right Turn 1	0.308219178
~~Minor Thru 2~~	~~0~~
~~Minor Left Turn 2~~	~~0~~
~~Minor Right Turn 2~~	~~0~~

3. Severity

Vehicle Speeds	mph
Major Posted Speed Limit	50
Minor Posted Speed Limit	25
Major thru	50
Major left	20
Major right	15
Minor thru	21.25
Minor left	20
Minor right	15
Stop near	15
Stop far	25
Signal near	15
Signal far	25

4. Conflicting Traffic Complexity

Traffic Control	Decimal
Base Traffic Control Adjustment Value (BTCAV) for permitted	1
Base Traffic Control Adjustment Value (BTCAV) for protected/permitted	0.85
Base Traffic Control Adjustment Value (BTCAV) for protected	0.01
Base Traffic Control Adjustment Value (BTCAV) for stop-controlled	0.45
Weight, f, for permitted	0.5
Weight, f, for protected/permitted	0.5
Weight, f, for protected	0.5
Weight, f, for stop-controlled	0.5
Major LT signal phasing (drop-down)	Protected/Permitted
Minor LT signal phasing (drop-down)	Protected/Permitted
Exclusive Pedestrian phasing (drop-down)	No

Historical Crash Data Input

Note: In order to use Empirical Bayes (EB), the historical intersection type must be a traffic signal or a minor road stop. Additionally, this alternative must be selected to be included in the analysis, and the historical intersection specified below. Up to 10 years of historical data can be used to perform the EB adjustment.

Is historical crash data available? Yes

Number of years available: 5 (Up to 10)

First Year Data is available: 2016

Historical Intx Type: 3ST

Historical Crash Counts		Year										
		2016	2017	2018	2019	2020	--	--	--	--	--	Total
Combined	Total	1	0	1	1	0	--	--	--	--	--	3
	Fatal/Injury	0	0	0	1	0						1
	PDO	1	0	1	0	0						2
Single-Vehicle	Total											
	Fatal/Injury											
	PDO											
Multiple-Vehicle	Total											
	Fatal/Injury											
	PDO											
Veh-Ped	Fatal/Injury	0	0	0	0	0						0
Veh-Bike	Fatal/Injury	0	0	0	0	0						0
Total	All	1	0	1	1	0	--	--	--	--	--	3

Florida Department of Transportation
Safety Performance for Intersection Control Evaluation Tool

Results

Summary of crash prediction results for each alternative

Project Information

Project Name:	Chuluota Road (CR 419) ICE Evaluation	**Intersection Type**	At-Grade Intersection
Intersection:	Chuluota Road (CR 419) at Corner Lake Drive	**Opening Year**	2048
Agency:	Orange County	**Design Year**	0
Project Reference:	Build (4-lane) Design Year (2048)	**Facility Type**	On Rural Two Lane Highway
City:	Orlando	**Number of Legs**	3-leg
State:	FL	**1-Way/2-Way**	
Date:	1/26/2024	**# of Major Street Lanes (both directions)**	
Analyst:	JMT	**Major Street Approach Speed**	

Crash Prediction Summary

Control Strategy	Crash Type	Opening Year	Design Year	Total Project Life Cycle	Crash Prediction Rank	AADT Within SPF Prediction Range?		Source of Prediction	SSI Score		
						(Open Year)	(Design Year)		Opening Year	Design Year	Rank
Traffic Signal	Total	2.27	--	--	5	No	Yes	Uncalibrated SPF	97		6
	Fatal & Injury	0.85	--	--							
Minor Road Stop	Total	1.59	--	--	2	No	Yes	Calibrated SPF w/ EB	94		7
	Fatal & Injury	0.66	--	--							
All Way Stop	Total	No SPF	--	--	--	No	Yes	Uncalibrated SPF w/ EB	99		2
	Fatal & Injury	No SPF	--	--							
2-lane Roundabout	Total	5.38	--	--	7	No	Yes	Uncalibrated SPF	99		1
	Fatal & Injury	1.20	--	--							
Signalized RCUT	Total	4.04	--	--	4	Yes	Yes	Uncalibrated SPF	98		4
	Fatal & Injury	0.72	--	--							
Unsignalized RCUT	Total	3.13	--	--	6	Yes	Yes	Uncalibrated SPF	98		5
	Fatal & Injury	0.92	--	--							
Signalized Thru-Cut	Total	No SPF	--	--	--	N/A	N/A	N/A	--		--
	Fatal & Injury	No SPF	--	--							
Unsignalized Thru-Cut	Total	No SPF	--	--	--	N/A	N/A	N/A	--		--
	Fatal & Injury	No SPF	--	--							
Continuous Green-T Intersection	Total	2.18	--	--	3	N/A	N/A	CMF	99		3
	Fatal & Injury	0.72	--	--							
Jughandle	Total	1.68	--	--	1	N/A	N/A	CMF	--		--
	Fatal & Injury	0.63	--	--							
Other 1*	Total	No SPF	--	--	--	N/A	N/A	CMF	--		--
	Fatal & Injury	No SPF	--	--							
Other 2*	Total	No SPF	--	--	--	N/A	N/A	CMF	--		--
	Fatal & Injury	No SPF	--	--							
			--	--							
			--	--							

Control Strategy Selection and Inputs

Specify the Facility Level Inputs and the Control Strategies to be included in the SPICE Analysis.

Intersection Type	At-Grade Intersection	
Analysis Year	Opening Year Only	
Opening Year	2048	
Design Year		
Facility Type	On Rural Two Lane Highway	For more information on how to determine these values, see the "Definitions" worksheet
Number of Legs	3-leg	
1-Way/2-Way		
# of Major Street Lanes (both directions)		
Major Street Approach Speed		
Opening Year - Major Road AADT	25,550	
Opening Year - Minor Road AADT	1,800	
Design Year - Major Road AADT		
Design Year - Minor Road AADT		

Control Strategy	**Include**	**Base Intersection**		
Traffic Signal	Yes	--	Opening Year AADT Outside of SPF Development Range	
Traffic Signal (Alternative Configuration)	No	--	Opening Year AADT Outside of SPF Development Range	
Minor Road Stop Control	Yes	--	Opening Year AADT Outside of SPF Development Range	
All Way Stop Control	Yes	--	No SPF Available	No SPF
1-Lane Roundabout	No	--	Opening Year AADT Outside of SPF Development Range	
2-Lane Roundabout	Yes	--	Opening Year AADT Outside of SPF Development Range	
Displaced Left Turn (DLT)	No	Traffic Signal		
Median U-Turn (MUT)	No	Traffic Signal		
Signalized Restricted Crossing U-Turn (RCUT)	Yes	--		
Unsignalized Restricted Crossing U-Turn (RCUT)	Yes	--		
Signalized Thru-Cut*	Yes	--	*SSI Only, No Crash Prediction Available	
Unsignalized Thru-Cut*	Yes	--	*SSI Only, No Crash Prediction Available	
Bowtie*	No	--	*SSI Only, No Crash Prediction Available	
Continuous Green-T Intersection	Yes	Traffic Signal		
Jughandle	Yes	Traffic Signal		
Other 1*		Traffic Signal	*Please Select	
Other 2*		Minor Road Stop	*Please Select	

Safe System for Intersection (SSI) Inputs

Specify the geomtric, exposure, severity, and conflicting traffic complexity inputs required for an SSI analysis.

1. Roadway Geometry	Lanes
Major number thru lanes (one direction)	2
Minor number thru lanes (one direction)	0

Major Street Designation	
Select major street direction	N-S
Median Presence on Major Road	No
Median Presence on Minor Road	Yes

	Required Inputs
	Default Available, Override Optional
	Planning-Level Default Input
	Computed Value, Override Optional
	Computed Value - No Override
	Disabled Cell (Often based on input selections)

2. Complete the "Exposure" inputs. These inputs will apply to all interesections selected for analysis.
3. Complete the "Severity" inputs
4. Complete the "Conflicting Traffic Complexity" inputs

2. Exposure - All Intersections

Average Daily Traffic (veh/day)	Open	Design
Major	25,550	
Minor	1,800	

ADT Directional Split	
Major	0.50
Minor	0.50

Nonmotorized Total ADBP (ped-bike/day)	Activity Level	ADBP Value (ped-
Open Year Total Intersection NM	Low (20)	20
Design Year Total Intersection NM		

(or overwrite ped movement ADBPs below)

Nonmotorized Movement ADBP (ped-bike/day)	Open	Design
Major NM 1 (NM mvmt crossing Maj1)	7	
Major NM 2	7	
Minor NM 1	7	
~~Minor NM 2~~	~~0~~	

Are turning movement ADT values are available?	No	If "Yes", input values in Table 2-A
Are peak hour turning movement counts available?	Yes	If "Yes", input values in Table 2-B

If no turning movment volumes or counts are available, a user can optionally override the planning-level default turning movment proportions in Table 2-C

Table 2-A: Turning Movement (vol/day)

	Open	Design
Major Thru 1	12443.98	
~~Major Left Turn 1~~	~~0~~	
Major Right Turn 1	331.0224	
Major Thru 2	12515.91	
Major Left Turn 2	259.0884	
~~Major Right Turn 2~~	~~0~~	
~~Minor Thru 1~~	~~401.3923~~	
Minor Left Turn 1	208.4761	
Minor Right Turn 1	290.1316	
~~Minor Thru 2~~	~~0~~	
~~Minor Left Turn 2~~	~~0~~	
~~Minor Right Turn 2~~	~~0~~	

Table 2-B: Turning Movement Counts (Optional)

	Mvmt	AM Peak	AM %	PM Peak	PM %	Avg %
Major Thru 1	NBT	1039	0.892611684	1199	0.846154	0.869383
~~Major Left Turn 1~~	~~NBL~~	~~100~~	~~0.085910653~~	~~175~~	~~0.1235~~	~~0.104706~~
Major Right Turn 1	NBR	25	0.021477663	43	0.030346	0.025912
Major Thru 2	SBT	918	0.957247132	997	0.952245	0.954746
Major Left Turn 2	SBL	16	0.016684046	25	0.023878	0.020281
~~Major Right Turn 2~~	~~SBR~~	~~25~~	~~0.026068822~~	~~25~~	~~0.023878~~	~~0.024973~~
~~Minor Thru 1~~	~~EBT~~	~~100~~	~~0.465116279~~	~~75~~	~~0.493421~~	~~0.479269~~
Minor Left Turn 1	EBL	60	0.279069767	28	0.184211	0.23164
Minor Right Turn 1	EBR	55	0.255813953	49	0.322368	0.289091
~~Minor Thru 2~~	~~WBT~~	~~75~~	~~0.428571429~~	~~100~~	~~0.5~~	~~0.464286~~
~~Minor Left Turn 2~~	~~WBL~~	~~50~~	~~0.285714286~~	~~50~~	~~0.25~~	~~0.267857~~
~~Minor Right Turn 2~~	~~WBR~~	~~50~~	~~0.285714286~~	~~50~~	~~0.25~~	~~0.267857~~

Table 2-C: Turning Proportions (optional)

	Decimal
Major Thru 1	0.974088268
~~Major Left Turn 1~~	~~0~~
Major Right Turn 1	0.025911732
Major Thru 2	0.979719104
Major Left Turn 2	0.020280896
~~Major Right Turn 2~~	~~0~~
~~Minor Thru 1~~	~~0.445991432~~
Minor Left Turn 1	0.231640147
Minor Right Turn 1	0.322368421
~~Minor Thru 2~~	~~0~~
~~Minor Left Turn 2~~	~~0~~
~~Minor Right Turn 2~~	~~0~~

3. Severity

Vehicle Speeds	mph
Major Posted Speed Limit	50
Minor Posted Speed Limit	25
Major thru	50
Major left	20
Major right	15
Minor thru	21.25
Minor left	20
Minor right	15
Stop near	15
Stop far	25
Signal near	15
Signal far	25

4. Conflicting Traffic Complexity

Traffic Control	Decimal
Base Traffic Control Adjustment Value (BTCAV) for permitted	1
Base Traffic Control Adjustment Value (BTCAV) for protected/permitted	0.85
Base Traffic Control Adjustment Value (BTCAV) for protected	0.01
Base Traffic Control Adjustment Value (BTCAV) for stop-controlled	0.45
Weight, f, for permitted	0.5
Weight, f, for protected/permitted	0.5
Weight, f, for protected	0.5
Weight, f, for stop-controlled	0.5
Major LT signal phasing (drop-down)	Protected/Permitted
Minor LT signal phasing (drop-down)	Protected/Permitted
Exclusive Pedestrian phasing (drop-down)	No

Historical Crash Data Input

Note: In order to use Empirical Bayes (EB), the historical intersection type must be a traffic signal or a minor road stop. Additionally, this alternative must be selected to be included in the analysis, and the historical intersection specified below. Up to 10 years of historical data can be used to perform the EB adjustment.

Is historical crash data available? Yes

Number of years available: 5 (Up to 10)

First Year Data is available: 2016

Historical Intx Type: 3ST

Historical Crash Counts		Year										
		2016	2017	2018	2019	2020	--	--	--	--	--	Total
Combined	Total	1	0	1	1	0	--	--	--	--	--	3
	Fatal/Injury	0	0	0	1	0						1
	PDO	1	0	1	0	0						2
Single-Vehicle	Total											
	Fatal/Injury											
	PDO											
Multiple-Vehicle	Total											
	Fatal/Injury											
	PDO											
Veh-Ped	Fatal/Injury	0	0	0	0	0						0
Veh-Bike	Fatal/Injury	0	0	0	0	0						0
Total	All	1	0	1	1	0	--	--	--	--	--	3

Table 2, Corner Lake Drive SPICE Results - Crash Prediction

Build Type	Year	Intersection Control Rank 1 (Fatal & Injury Crashes)	Intersection Control Rank 2 (Fatal & Injury Crashes)	Intersection Control Rank 3 (Fatal & Injury Crashes)	Intersection Control Rank 4 (Fatal & Injury Crashes)	Intersection Control Rank 5 (Fatal & Injury Crashes)	Intersection Control Rank 6 (Fatal & Injury Crashes)	Intersection Control Rank 7 (Fatal & Injury Crashes)	Intersection Control Rank 8 (Fatal & Injury Crashes)	Intersection Control Rank 9 (Fatal & Injury Crashes)	Intersection Control Rank 10 (Fatal & Injury Crashes)
No-Build (2-lane)	2028	1 Lane Roundabout (0.19)	Signalized RCUT N-S (0.35)	Jughandle (0.44)	Continuous Green T (0.50)	TWSC (0.53)	Traffic Signal (0.59)	Unsignalized RCUT N-S (0.63)	Bowtie N-S (No SPF)	Signalized ThruCut N-S (No SPF)	Unsignalized ThruCut N-S (No SPF)
	2038	1 Lane Roundabout (0.23)	Signalized RCUT N-S (0.44)	Jughandle (0.49)	Continuous Green T (0.56)	TWSC (0.57)	Traffic Signal (0.66)	Unsignalized RCUT N-S (0.70)	Bowtie N-S (No SPF)	Signalized ThruCut N-S (No SPF)	Unsignalized ThruCut N-S (No SPF)
	2048	1 Lane Roundabout (0.26)	Signalized RCUT N-S (0.52)	Jughandle (0.53)	TWSC (0.60)	Continuous Green T (0.61)	Traffic Signal (0.72)	Unsignalized RCUT N-S (0.77)	Bowtie N-S (No SPF)	Signalized ThruCut N-S (No SPF)	Unsignalized ThruCut N-S (No SPF)
Build (4-lane)	2028	Signalized RCUT N-S (0.40)	Jughandle (0.47)	Continuous Green T (0.54)	TWSC (0.55)	Traffic Signal (0.63)	2 Lane Roundabout (0.66)	Unsignalized RCUT N-S (0.68)	Bowtie N-S (No SPF)	Signalized ThruCut N-S (No SPF)	Unsignalized ThruCut N-S (No SPF)
	2038	Jughandle (0.55)	Signalized RCUT N-S (0.56)	TWSC (0.61)	Continuous Green T (0.63)	Traffic Signal (0.74)	Unsignalized RCUT N-S (0.80)	2 Lane Roundabout (0.92)	Bowtie N-S (No SPF)	Signalized ThruCut N-S (No SPF)	Unsignalized ThruCut N-S (No SPF)
	2048	Jughandle (0.63)	TWSC (0.66)	Continuous Green T (0.72)	Signalized RCUT N-S (0.72)	Traffic Signal (0.85)	Unsignalized RCUT N-S (0.92)	2 Lane Roundabout (1.20)	Bowtie N-S (No SPF)	Signalized ThruCut N-S (No SPF)	Unsignalized ThruCut N-S (No SPF)

Greyed out cells indicate that the intersection control type may not be viable due to right-of-way, cost, or other factors

Table 3, Corner Lake Drive SPICE Results - SSI Score

Build Type	Year	Intersection Control Rank 1 (SSI Score)	Intersection Control Rank 2 (SSI Score)	Intersection Control Rank 3 (SSI Score)	Intersection Control Rank 4 (SSI Score)	Intersection Control Rank 5 (SSI Score)	Intersection Control Rank 6 (SSI Score)	Intersection Control Rank 7 (SSI Score)	Intersection Control Rank 8 (SSI Score)	Intersection Control Rank 9 (SSI Score)	Intersection Control Rank 10 (SSI Score)
No-Build (2-lane)	2028	1 Lane Roundabout (100)	AWSC (100)	Signalized RCUT N-S (100)	Continuous Green T (99)	Unsignalized RCUT N-S (99)	Traffic Signal (99)	TWSC (98)	Bowtie N-S (N/A)	Unsignalized ThruCut N-S (N/A)	Jughandle (N/A)
	2038	1 Lane Roundabout (100)	AWSC (100)	Signalized RCUT N-S (99)	Continuous Green T (99)	Unsignalized RCUT N-S (99)	Traffic Signal (99)	TWSC (98)	Bowtie N-S (N/A)	Unsignalized ThruCut N-S (N/A)	Jughandle (N/A)
	2048	1 Lane Roundabout (100)	AWSC (100)	Signalized RCUT N-S (99)	Continuous Green T (99)	Unsignalized RCUT N-S (99)	Traffic Signal (99)	TWSC (97)	Bowtie N-S (N/A)	Unsignalized ThruCut N-S (N/A)	Jughandle (N/A)
Build (4-lane)	2028	2 Lane Roundabout (100)	AWSC (100)	Continuous Green T (99)	Signalized RCUT N-S (99)	Unsignalized RCUT N-S (99)	Traffic Signal (98)	TWSC (96)	Bowtie N-S (N/A)	Unsignalized ThruCut N-S (N/A)	Jughandle (N/A)
	2038	2 Lane Roundabout (100)	AWSC (99)	Continuous Green T (99)	Signalized RCUT N-S (99)	Unsignalized RCUT N-S (98)	Traffic Signal (97)	TWSC (95)	Bowtie N-S (N/A)	Unsignalized ThruCut N-S (N/A)	Jughandle (N/A)
	2048	2 Lane Roundabout (99)	AWSC (99)	Continuous Green T (99)	Signalized RCUT N-S (98)	Unsignalized RCUT N-S (98)	Traffic Signal (97)	TWSC (94)	Bowtie N-S (N/A)	Unsignalized ThruCut N-S (N/A)	Jughandle (N/A)

Greyed out cells indicate that the intersection control type may not be viable due to right-of-way, cost, or other factors

SSI Legend	
	90-100
	80-89
	70-79
	< 70

CHULUOTA ROAD & CYPRESS LAKE GLEN BOULEVARD S

CAP-X WORKSHEETS

Capacity Analysis for Planning of Junctions

Input Worksheet 1

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) AM Opening Year (2028)
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard S
Date	March 19, 2024
Number of Legs	3
Which leg is the minor street?	E

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	0	0	0	0	3.48%	0.00%
Westbound	0	186	0	39	3.48%	0.00%
Southbound	0	11	546	0	3.48%	0.00%
Northbound	0	0	470	69	3.48%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone		**C3R-Suburban Residential**	
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Equivalent Passenger Car Volume

	Volume (Veh/hr)			
	U-Turn	**Left**	**Thru**	**Right**
Eastbound	0	0	0	0
Westbound	0	192	0	40
Southbound	0	11	565	0
Northbound	0	0	486	71

Notes:	
Left-Turn Adjustment Factor	*Conversion of left-turning vehicles to equivalent through vehicles*
Right-turn Adjustment Factor	*Conversion of right-turning vehicles to equivalent through vehicles*
U-turn Adjustment Factor	*Conversion of U-turning vehicles to equivalent through vehicles*
Truck to PCE Factor	*1 truck = X Passenger Car Equivalents*
Critical Lane Volume Sum Limit	*Saturation Value for Critical Lane Volume Sum at an intersection*

Capacity Analysis for Planning of Junctions

Step 2A: Base Conditions Analysis

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) AM Opening Year (2028)
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard S
Date	March 19, 2024
Which leg is the minor street?	E

Existing Intersection Configuration	*Traffic Signal*

Number of Lanes for Existing Configuration
(Can be edited in "3- Alt Num Lanes Input" as needed)

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	**FULL**		0	1	1		1	1	0		0	0	0		1	0	1

Results for Existing Configuration

TYPE OF		Sheet	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	
Overall v/c Ratio	0.44	Pedestrian Accommodation Score	--		Bicycle Accommodation Score			--

Step 2B: Alternative Selection

Rankings Inclusion		Yes/No	Comment
At-Grade Non-Roundabout Intersections?		Yes	
Traffic Signal		Yes	
Two-Way Stop Control		Yes	
All-Way Stop Control		Yes	
Continuous Green T		Yes	
Quadrant Roadway	S-W	No	No Nearby Quadrant Roadway
	N-E	No	No Nearby Quadrant Roadway
	S-E	No	No Nearby Quadrant Roadway
	N-W	No	No Nearby Quadrant Roadway
Partial Displaced Left Turn		No	3-Leg Intersection
Displaced Left Turn		No	3-Leg Intersection
Signalized Restricted Crossing U-Turn		Yes	
Unsignalized Restricted Crossing U-Turn		Yes	
Median U-Turn		Yes	
Partial Median U-Turn		Yes	
Bowtie		Yes	
Signalized ThruCut		Yes	
Unsignalized ThruCut		Yes	
Roundabouts?		Yes	
50 ICD Miniroundabout		Yes	
75 ICD Miniroundabout		Yes	
1x1		Yes	
1NS x 2EW		No	1x1 Roundabout Only
2NS x 1EW		No	1x1 Roundabout Only
2x2		No	1x1 Roundabout Only
Ramp Terminal Intersections?		No	
Diamond			
Partial Cloverleaf A			
Partial Cloverleaf B			
Displaced Left Turn Interchange			
Diverging Diamond			
Single Point Diamond			

Continue to Step 3

Step 3

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) AM Opening Year (2028)
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard S
Date	March 19, 2024
Analysis Type	At-Grade Intersections and Interchanges

Number of Lanes for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		0	1	1		1	1	0		0	0	0		1	0	1
Two-Way Stop Control	N-S		0	1	1		1	1	0		0	0	0		1	0	1
All-Way Stop Control	FULL		0	1	1		1	1	0		0	0	0		1	0	1
Continuous Green T	E			1	1		1	1							1		1
Signalized Restricted Crossing U-Turn	N-S	1	0	1	1	1	1	1	0				0				1
Unsignalized Restricted Crossing U-Turn	N-S	1	0	1	1	1	1	1	0				0				1
Median U-Turn	N-S	1		1	1	1		1	1			0	0			0	1
Partial Median U-Turn	N-S	1		1	1	1		1	1		0	0	0		1	0	1
Signalized ThruCut	N-S		0	1	1		1	1	0		0		0		1		1
Unsignalized ThruCut	N-S		0	1	1		1	1	0		0		0		1		1
Bowtie	N-S			1	1			1	1			0	0			0	1

For shared lanes, enter "0" in L or R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Number of Lanes for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) AM Opening Year (2028)
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard S
Date	March 19, 2024
Analysis Type	At-Grade Intersections and Interchanges

Volume Echo with Shared Lane Adjustment for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		0	486	71		11	565	0		0	0	0		192	0	40
Two-Way Stop Control	N-S		0	486	71		11	565	0		0	0	0		192	0	40
All-Way Stop Control	FULL		0	486	71		11	565	0		0	0	0		192	0	40
Continuous Green T	E			486	71		11	565							192		192
Signalized Restricted Crossing U-Turn	N-S	0	0	486	71	0	11	565	0				0				40
Unsignalized Restricted Crossing U-Turn	N-S	0	0	486	71	0	11	565	0				0				40
Median U-Turn	N-S	0		486	71	0		565	0			0	0			0	40
Partial Median U-Turn	N-S	0		486	71	0		565	0		0	0	0		192	0	40
Signalized ThruCut	N-S		0	486	71		11	565	0		0		0		192		40
Unsignalized ThruCut	N-S		0	486	71		11	565	0		0		0		192		40
Bowtie	N-S		0	486	71		11	565	0			237	0			192	40

Capacity Analysis for Planning of Junctions

Results Worksheet

Project Name	Chuluota Road (CR 419) ICE Evaluation	***Estimated Volume-to-Capacity Ratio***			
Project Number	No-build (2-lane) AM Opening Year (2028)	**Number of Configurations**			
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard S	**< 0.750**	**0.750 - 0.875**	**0.875 - 1.00**	**≥ 1.00**
Date	March 19, 2024	**11**	**2**	**1**	**0**

Results for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Zone 1 (North)		Zone 2 (South)		Zone 3 (East)		Zone 4 (West)		Zone 5 (Center)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			
Traffic Signal	FULL									767	0.44	0.44		
Two-Way Stop Control	N-S									--	0.84	0.84		
All-Way Stop Control	FULL									1365	0.91	0.91		
Continuous Green T	E									700	0.40	0.40		
Signalized Restricted Crossing U-Turn	N-S	816	0.45	557	0.31	759	0.42	757	0.42			0.45		
Unsignalized Restricted Crossing U-Turn	N-S	576	0.23	557	0.00	486	0.40	757	0.00			0.40		
Median U-Turn	N-S	816	0.45	571	0.32					849	0.47	0.47		
Partial Median U-Turn	N-S	576	0.32	571	0.32					778	0.44	0.44		
Bowtie	N-S	82	0.06	203	0.15	232	0.17	0	0.00	612	0.34	0.34		
Signalized ThruCut	N-S									767	0.44	0.44		
Unsignalized ThruCut	N-S									--	0.85	0.85		

Capacity Analysis for Planning of Junctions

Results Worksheet

Results for Roundabouts

TYPE OF ROUNDABOUT	Zone 1 (North)			Zone 3 (East)			Zone 2 (South)			Zone 4 (West)			Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3			
50 ICD	*0.69*			*0.03*			*0.54*			*0.44*			0.69		
75 ICD	*0.67*			*0.03*			*0.54*			*0.40*			0.67		
1 X 1	*0.51*			*0.00*			*0.41*			*0.28*			0.51		

Results for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Zone 1 (Rt Mrg)		Zone 2 (Lt Mrg)		Zone 3 (Ctr. 1)		Zone 4 (Ctr. 2)		Zone 5 (Lt Mrg)		Zone 6 (Rt Mrg)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			

TYPE OF INTERSECTION	Overall V/C Ratio	V/C Ranking	Pedestrian Accommodation Score	Bicycle Accommodation Score
Bowtie N-S	0.34	1	--	--
Continuous Green T E	0.40	2	--	--
Unsignalized Restricted Crossing U-Turn N-S	0.40	3	--	--
Traffic Signal	0.44	4	--	--
Partial Median U-Turn N-S	0.44	4	--	--
Signalized ThruCut N-S	0.44	4	--	--
Signalized Restricted Crossing U-Turn N-S	0.45	7	--	--
Median U-Turn N-S	0.47	8	--	--
1 X 1	0.51	9	--	--
75 ICD	0.67	10	--	--

Capacity Analysis for Planning of Junctions

Input Worksheet 1

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) AM Interim Year (2038)
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard S
Date	March 19, 2024
Number of Legs	3
Which leg is the minor street?	E

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	0	0	0	0	3.48%	0.00%
Westbound	0	194	0	41	3.48%	0.00%
Southbound	0	12	647	0	3.48%	0.00%
Northbound	0	0	550	72	3.48%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone		**C3R-Suburban Residential**	
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Equivalent Passenger Car Volume

	Volume (Veh/hr)			
	U-Turn	**Left**	**Thru**	**Right**
Eastbound	0	0	0	0
Westbound	0	201	0	42
Southbound	0	12	670	0
Northbound	0	0	569	75

Notes:	
Left-Turn Adjustment Factor	*Conversion of left-turning vehicles to equivalent through vehicles*
Right-turn Adjustment Factor	*Conversion of right-turning vehicles to equivalent through vehicles*
U-turn Adjustment Factor	*Conversion of U-turning vehicles to equivalent through vehicles*
Truck to PCE Factor	*1 truck = X Passenger Car Equivalents*
Critical Lane Volume Sum Limit	*Saturation Value for Critical Lane Volume Sum at an intersection*

Capacity Analysis for Planning of Junctions

Step 2A: Base Conditions Analysis

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) AM Interim Year (2038)
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard S
Date	March 19, 2024
Which leg is the minor street?	E

Existing Intersection Configuration	*Traffic Signal*

Number of Lanes for Existing Configuration
(Can be edited in "3- Alt Num Lanes Input" as needed)

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	**FULL**		0	1	1		1	1	0		0	0	0		1	0	1

Results for Existing Configuration

TYPE OF		Sheet	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	
Overall v/c Ratio	0.50	Pedestrian Accommodation Score	--		Bicycle Accommodation Score			--

Step 2B: Alternative Selection

Rankings Inclusion		Yes/No	Comment
At-Grade Non-Roundabout Intersections?		Yes	
Traffic Signal		Yes	
Two-Way Stop Control		Yes	
All-Way Stop Control		Yes	
Continuous Green T		Yes	
Quadrant Roadway	S-W	No	No Nearby Quadrant Roadway
	N-E	No	No Nearby Quadrant Roadway
	S-E	No	No Nearby Quadrant Roadway
	N-W	No	No Nearby Quadrant Roadway
Partial Displaced Left Turn		No	3-Leg Intersection
Displaced Left Turn		No	3-Leg Intersection
Signalized Restricted Crossing U-Turn		Yes	
Unsignalized Restricted Crossing U-Turn		Yes	
Median U-Turn		Yes	
Partial Median U-Turn		Yes	
Bowtie		Yes	
Signalized ThruCut		Yes	
Unsignalized ThruCut		Yes	
Roundabouts?		Yes	
50 ICD Miniroundabout		Yes	
75 ICD Miniroundabout		Yes	
1x1		Yes	
1NS x 2EW		No	1x1 Roundabout Only
2NS x 1EW		No	1x1 Roundabout Only
2x2		No	1x1 Roundabout Only
Ramp Terminal Intersections?		No	
Diamond			
Partial Cloverleaf A			
Partial Cloverleaf B			
Displaced Left Turn Interchange			
Diverging Diamond			
Single Point Diamond			

Continue to Step 3 Step 3

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) AM Interim Year (2038)
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard S
Date	March 19, 2024
Analysis Type	At-Grade Intersections and Interchanges

Number of Lanes for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		0	1	1		1	1	0		0	0	0		1	0	1
Two-Way Stop Control	N-S		0	1	1		1	1	0		0	0	0		1	0	1
All-Way Stop Control	FULL		0	1	1		1	1	0		0	0	0		1	0	1
Continuous Green T	E			1	1		1	1							1		1
Signalized Restricted Crossing U-Turn	N-S	1	0	1	1	1	1	1	0				0				1
Unsignalized Restricted Crossing U-Turn	N-S	1	0	1	1	1	1	1	0				0				1
Median U-Turn	N-S	1		1	1	1		1	1			0	0			0	1
Partial Median U-Turn	N-S	1		1	1	1		1	1		0	0	0		1	0	1
Signalized ThruCut	N-S		0	1	1		1	1	0		0		0		1		1
Unsignalized ThruCut	N-S		0	1	1		1	1	0		0		0		1		1
Bowtie	N-S			1	1			1	1			0	0			0	1

For shared lanes, enter "0" in L or R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Number of Lanes for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) AM Interim Year (2038)
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard S
Date	March 19, 2024
Analysis Type	At-Grade Intersections and Interchanges

Volume Echo with Shared Lane Adjustment for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		0	569	75		12	670	0		0	0	0		201	0	42
Two-Way Stop Control	N-S		0	569	75		12	670	0		0	0	0		201	0	42
All-Way Stop Control	FULL		0	569	75		12	670	0		0	0	0		201	0	42
Continuous Green T	E			569	75		12	670							201		201
Signalized Restricted Crossing U-Turn	N-S	0	0	569	75	0	12	670	0				0				42
Unsignalized Restricted Crossing U-Turn	N-S	0	0	569	75	0	12	670	0				0				42
Median U-Turn	N-S	0		569	75	0		670	0			0	0			0	42
Partial Median U-Turn	N-S	0		569	75	0		670	0		0	0	0		201	0	42
Signalized ThruCut	N-S		0	569	75		12	670	0		0		0		201		42
Unsignalized ThruCut	N-S		0	569	75		12	670	0		0		0		201		42
Bowtie	N-S		0	569	75		12	670	0			248	0			201	42

Capacity Analysis for Planning of Junctions

Results Worksheet

Project Name	Chuluota Road (CR 419) ICE Evaluation	***Estimated Volume-to-Capacity Ratio***			
Project Number	No-build (2-lane) AM Interim Year (2038)	**Number of Configurations**			
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard S	**< 0.750**	**0.750 - 0.875**	**0.875 - 1.00**	**≥ 1.00**
Date	March 19, 2024	**9**	**2**	**0**	**3**

Results for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Zone 1 (North)		Zone 2 (South)		Zone 3 (East)		Zone 4 (West)		Zone 5 (Center)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			
Traffic Signal	FULL									882	0.50	0.50		
Two-Way Stop Control	N-S									--	1.16	1.16		
All-Way Stop Control	FULL									1569	1.05	1.05		
Continuous Green T	E									793	0.45	0.45		
Signalized Restricted Crossing U-Turn	N-S	933	*0.52*	644	*0.36*	855	*0.47*	871	*0.48*			0.52		
Unsignalized Restricted Crossing U-Turn	N-S	682	*0.27*	644	*0.00*	569	*0.47*	871	*0.00*			0.47		
Median U-Turn	N-S	933	*0.52*	659	*0.37*					968	0.54	0.54		
Partial Median U-Turn	N-S	682	*0.38*	659	*0.37*					894	0.51	0.51		
Bowtie	N-S	87	0.06	213	0.15	243	0.18	0	0.00	719	0.40	0.40		
Signalized ThruCut	N-S									882	0.50	0.50		
Unsignalized ThruCut	N-S									--	1.16	1.16		

Capacity Analysis for Planning of Junctions

Results Worksheet

Results for Roundabouts

TYPE OF ROUNDABOUT	Zone 1 (North)			Zone 3 (East)			Zone 2 (South)			Zone 4 (West)			Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3			
50 ICD	0.83			*0.06*			*0.62*			*0.55*			0.83		
75 ICD	0.81			*0.05*			*0.62*			*0.48*			0.81		
1 X 1	*0.61*			*0.00*			*0.48*			*0.32*			0.61		

Results for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Zone 1 (Rt Mrg)		Zone 2 (Lt Mrg)		Zone 3 (Ctr. 1)		Zone 4 (Ctr. 2)		Zone 5 (Lt Mrg)		Zone 6 (Rt Mrg)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			

TYPE OF INTERSECTION	Overall V/C Ratio	V/C Ranking	Pedestrian Accommodation Score	Bicycle Accommodation Score
Bowtie N-S	0.40	1	--	--
Continuous Green T E	0.45	2	--	--
Unsignalized Restricted Crossing U-Turn N-S	0.47	3	--	--
Traffic Signal	0.50	4	--	--
Signalized ThruCut N-S	0.50	4	--	--
Partial Median U-Turn N-S	0.51	6	--	--
Signalized Restricted Crossing U-Turn N-S	0.52	7	--	--
Median U-Turn N-S	0.54	8	--	--
1 X 1	0.61	9	--	--
75 ICD	0.81	10	--	--

Capacity Analysis for Planning of Junctions

Input Worksheet 1

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) AM Design Year (2048)
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard S
Date	March 19, 2024
Number of Legs	3
Which leg is the minor street?	E

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	0	0	0	0	3.48%	0.00%
Westbound	0	202	0	43	3.48%	0.00%
Southbound	0	12	747	0	3.48%	0.00%
Northbound	0	0	629	75	3.48%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone		**C3R-Suburban Residential**	
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Equivalent Passenger Car Volume

	Volume (Veh/hr)			
	U-Turn	**Left**	**Thru**	**Right**
Eastbound	0	0	0	0
Westbound	0	209	0	44
Southbound	0	12	773	0
Northbound	0	0	651	78

Notes:	
Left-Turn Adjustment Factor	*Conversion of left-turning vehicles to equivalent through vehicles*
Right-turn Adjustment Factor	*Conversion of right-turning vehicles to equivalent through vehicles*
U-turn Adjustment Factor	*Conversion of U-turning vehicles to equivalent through vehicles*
Truck to PCE Factor	*1 truck = X Passenger Car Equivalents*
Critical Lane Volume Sum Limit	*Saturation Value for Critical Lane Volume Sum at an intersection*

Capacity Analysis for Planning of Junctions

Step 2A: Base Conditions Analysis

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) AM Design Year (2048)
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard S
Date	March 19, 2024
Which leg is the minor street?	E

Existing Intersection Configuration	*Traffic Signal*

Number of Lanes for Existing Configuration
(Can be edited in "3- Alt Num Lanes Input" as needed)

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	**FULL**		0	1	1		1	1	0		0	0	0		1	0	1

Results for Existing Configuration

TYPE OF		Sheet	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	
Overall v/c Ratio	0.57	Pedestrian Accommodation Score	--		Bicycle Accommodation Score			--

Step 2B: Alternative Selection

Rankings Inclusion		Yes/No	Comment
At-Grade Non-Roundabout Intersections?		Yes	
Traffic Signal		Yes	
Two-Way Stop Control		Yes	
All-Way Stop Control		Yes	
Continuous Green T		Yes	
Quadrant Roadway	S-W	No	No Nearby Quadrant Roadway
	N-E	No	No Nearby Quadrant Roadway
	S-E	No	No Nearby Quadrant Roadway
	N-W	No	No Nearby Quadrant Roadway
Partial Displaced Left Turn		No	3-Leg Intersection
Displaced Left Turn		No	3-Leg Intersection
Signalized Restricted Crossing U-Turn		Yes	
Unsignalized Restricted Crossing U-Turn		Yes	
Median U-Turn		Yes	
Partial Median U-Turn		Yes	
Bowtie		Yes	
Signalized ThruCut		Yes	
Unsignalized ThruCut		Yes	
Roundabouts?		Yes	
50 ICD Miniroundabout		Yes	
75 ICD Miniroundabout		Yes	
1x1		Yes	
1NS x 2EW		No	1x1 Roundabout Only
2NS x 1EW		No	1x1 Roundabout Only
2x2		No	1x1 Roundabout Only
Ramp Terminal Intersections?		No	
Diamond			
Partial Cloverleaf A			
Partial Cloverleaf B			
Displaced Left Turn Interchange			
Diverging Diamond			
Single Point Diamond			

Continue to Step 3 Step 3

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) AM Design Year (2048)
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard S
Date	March 19, 2024
Analysis Type	At-Grade Intersections and Interchanges

Number of Lanes for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		0	1	1		1	1	0		0	0	0		1	0	1
Two-Way Stop Control	N-S		0	1	1		1	1	0		0	0	0		1	0	1
All-Way Stop Control	FULL		0	1	1		1	1	0		0	0	0		1	0	1
Continuous Green T	E			1	1		1	1							1		1
Signalized Restricted Crossing U-Turn	N-S	1	0	1	1	1	1	1	0				0				1
Unsignalized Restricted Crossing U-Turn	N-S	1	0	1	1	1	1	1	0				0				1
Median U-Turn	N-S	1		1	1	1		1	1			0	0			0	1
Partial Median U-Turn	N-S	1		1	1	1		1	1		0	0	0		1	0	1
Signalized ThruCut	N-S		0	1	1		1	1	0		0		0		1		1
Unsignalized ThruCut	N-S		0	1	1		1	1	0		0		0		1		1
Bowtie	N-S			1	1			1	1			0	0			0	1

For shared lanes, enter "0" in L or R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Number of Lanes for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) AM Design Year (2048)
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard S
Date	March 19, 2024
Analysis Type	At-Grade Intersections and Interchanges

Volume Echo with Shared Lane Adjustment for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		0	651	78		12	773	0		0	0	0		209	0	44
Two-Way Stop Control	N-S		0	651	78		12	773	0		0	0	0		209	0	44
All-Way Stop Control	FULL		0	651	78		12	773	0		0	0	0		209	0	44
Continuous Green T	E			651	78		12	773							209		209
Signalized Restricted Crossing U-Turn	N-S	0	0	651	78	0	12	773	0				0				44
Unsignalized Restricted Crossing U-Turn	N-S	0	0	651	78	0	12	773	0				0				44
Median U-Turn	N-S	0		651	78	0		773	0			0	0			0	44
Partial Median U-Turn	N-S	0		651	78	0		773	0		0	0	0		209	0	44
Signalized ThruCut	N-S		0	651	78		12	773	0		0		0		209		44
Unsignalized ThruCut	N-S		0	651	78		12	773	0		0		0		209		44
Bowtie	N-S		0	651	78		12	773	0			258	0			209	44

Capacity Analysis for Planning of Junctions

Results Worksheet

Project Name	Chuluota Road (CR 419) ICE Evaluation	***Estimated Volume-to-Capacity Ratio***			
Project Number	No-build (2-lane) AM Design Year (2048)	**Number of Configurations**			
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard S	**< 0.750**	**0.750 - 0.875**	**0.875 - 1.00**	**≥ 1.00**
Date	March 19, 2024	**9**	**0**	**2**	**3**

Results for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Zone 1 (North)		Zone 2 (South)		Zone 3 (East)		Zone 4 (West)		Zone 5 (Center)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			
Traffic Signal	FULL									993	0.57	0.57		
Two-Way Stop Control	N-S									--	1.56	1.56		
All-Way Stop Control	FULL									1767	1.18	1.18		
Continuous Green T	E									884	0.50	0.50		
Signalized Restricted Crossing U-Turn	N-S	1046	*0.58*	729	*0.41*	949	*0.53*	982	*0.55*			0.58		
Unsignalized Restricted Crossing U-Turn	N-S	785	*0.31*	729	*0.00*	651	*0.54*	982	*0.00*			0.54		
Median U-Turn	N-S	1046	*0.58*	744	*0.41*					1083	0.60	0.60		
Partial Median U-Turn	N-S	785	*0.44*	744	*0.41*					1005	0.57	0.57		
Bowtie	N-S	90	0.07	221	0.16	253	0.18	0	0.00	825	0.46	0.46		
Signalized ThruCut	N-S									993	0.57	0.57		
Unsignalized ThruCut	N-S									--	1.57	1.57		

Capacity Analysis for Planning of Junctions

Results Worksheet

Results for Roundabouts

TYPE OF ROUNDABOUT	Zone 1 (North)			Zone 3 (East)			Zone 2 (South)			Zone 4 (West)			Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3			
50 ICD	0.96			*0.30*			*0.71*			*0.70*			0.96		
75 ICD	0.94			*0.11*			*0.70*			*0.59*			0.94		
1 X 1	*0.71*			*0.00*			*0.54*			*0.36*			0.71		

Results for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Zone 1 (Rt Mrg)		Zone 2 (Lt Mrg)		Zone 3 (Ctr. 1)		Zone 4 (Ctr. 2)		Zone 5 (Lt Mrg)		Zone 6 (Rt Mrg)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			

TYPE OF INTERSECTION	Overall V/C Ratio	V/C Ranking	Pedestrian Accommodation Score	Bicycle Accommodation Score
Bowtie N-S	0.46	1	--	--
Continuous Green T E	0.50	2	--	--
Unsignalized Restricted Crossing U-Turn N-S	0.54	3	--	--
Traffic Signal	0.57	4	--	--
Partial Median U-Turn N-S	0.57	4	--	--
Signalized ThruCut N-S	0.57	4	--	--
Signalized Restricted Crossing U-Turn N-S	0.58	7	--	--
Median U-Turn N-S	0.60	8	--	--
1 X 1	0.71	9	--	--
75 ICD	0.94	10	--	--

Capacity Analysis for Planning of Junctions

Input Worksheet 1

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) PM Opening Year (2028)
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard S
Date	March 19, 2024
Number of Legs	3
Which leg is the minor street?	E

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	0	0	0	0	3.48%	0.00%
Westbound	0	153	0	21	3.48%	0.00%
Southbound	0	27	631	0	3.48%	0.00%
Northbound	0	0	538	200	3.48%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone		**C3R-Suburban Residential**	
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Equivalent Passenger Car Volume

	Volume (Veh/hr)			
	U-Turn	**Left**	**Thru**	**Right**
Eastbound	0	0	0	0
Westbound	0	158	0	22
Southbound	0	28	653	0
Northbound	0	0	557	207

Notes:	
Left-Turn Adjustment Factor	*Conversion of left-turning vehicles to equivalent through vehicles*
Right-turn Adjustment Factor	*Conversion of right-turning vehicles to equivalent through vehicles*
U-turn Adjustment Factor	*Conversion of U-turning vehicles to equivalent through vehicles*
Truck to PCE Factor	*1 truck = X Passenger Car Equivalents*
Critical Lane Volume Sum Limit	*Saturation Value for Critical Lane Volume Sum at an intersection*

Capacity Analysis for Planning of Junctions

Step 2A: Base Conditions Analysis

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) PM Opening Year (2028)
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard S
Date	March 19, 2024
Which leg is the minor street?	E

Existing Intersection Configuration	*Traffic Signal*

Number of Lanes for Existing Configuration
(Can be edited in "3- Alt Num Lanes Input" as needed)

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	**FULL**		0	1	1		1	1	0		0	0	0		1	0	1

Results for Existing Configuration

TYPE OF		Sheet	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	
Overall v/c Ratio	0.47	Pedestrian Accommodation Score	--		Bicycle Accommodation Score			--

Step 2B: Alternative Selection

Rankings Inclusion		Yes/No	Comment
At-Grade Non-Roundabout Intersections?		Yes	
Traffic Signal		Yes	
Two-Way Stop Control		Yes	
All-Way Stop Control		Yes	
Continuous Green T		Yes	
Quadrant Roadway	S-W	No	No Nearby Quadrant Roadway
	N-E	No	No Nearby Quadrant Roadway
	S-E	No	No Nearby Quadrant Roadway
	N-W	No	No Nearby Quadrant Roadway
Partial Displaced Left Turn		No	3-Leg Intersection
Displaced Left Turn		No	3-Leg Intersection
Signalized Restricted Crossing U-Turn		Yes	
Unsignalized Restricted Crossing U-Turn		Yes	
Median U-Turn		Yes	
Partial Median U-Turn		Yes	
Bowtie		Yes	
Signalized ThruCut		Yes	
Unsignalized ThruCut		Yes	
Roundabouts?		Yes	
50 ICD Miniroundabout		Yes	
75 ICD Miniroundabout		Yes	
1x1		Yes	
1NS x 2EW		No	1x1 Roundabout Only
2NS x 1EW		No	1x1 Roundabout Only
2x2		No	1x1 Roundabout Only
Ramp Terminal Intersections?		No	
Diamond			
Partial Cloverleaf A			
Partial Cloverleaf B			
Displaced Left Turn Interchange			
Diverging Diamond			
Single Point Diamond			

Continue to Step 3 Step 3

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) PM Opening Year (2028)
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard S
Date	March 19, 2024
Analysis Type	At-Grade Intersections and Interchanges

Number of Lanes for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		0	1	1		1	1	0		0	0	0		1	0	1
Two-Way Stop Control	N-S		0	1	1		1	1	0		0	0	0		1	0	1
All-Way Stop Control	FULL		0	1	1		1	1	0		0	0	0		1	0	1
Continuous Green T	E			1	1		1	1							1		1
Signalized Restricted Crossing U-Turn	N-S	1	0	1	1	1	1	1	0				0				1
Unsignalized Restricted Crossing U-Turn	N-S	1	0	1	1	1	1	1	0				0				1
Median U-Turn	N-S	1		1	1	1		1	1			0	0			0	1
Partial Median U-Turn	N-S	1		1	1	1		1	1		0	0	0		1	0	1
Signalized ThruCut	N-S		0	1	1		1	1	0		0		0		1		1
Unsignalized ThruCut	N-S		0	1	1		1	1	0		0		0		1		1
Bowtie	N-S			1	1			1	1			0	0			0	1

For shared lanes, enter "0" in L or R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Number of Lanes for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) PM Opening Year (2028)
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard S
Date	March 19, 2024
Analysis Type	At-Grade Intersections and Interchanges

Volume Echo with Shared Lane Adjustment for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		0	557	207		28	653	0		0	0	0		158	0	22
Two-Way Stop Control	N-S		0	557	207		28	653	0		0	0	0		158	0	22
All-Way Stop Control	FULL		0	557	207		28	653	0		0	0	0		158	0	22
Continuous Green T	E			557	207		28	653							158		158
Signalized Restricted Crossing U-Turn	N-S	0	0	557	207	0	28	653	0				0				22
Unsignalized Restricted Crossing U-Turn	N-S	0	0	557	207	0	28	653	0				0				22
Median U-Turn	N-S	0		557	207	0		653	0			0	0			0	22
Partial Median U-Turn	N-S	0		557	207	0		653	0		0	0	0		158	0	22
Signalized ThruCut	N-S		0	557	207		28	653	0		0		0		158		22
Unsignalized ThruCut	N-S		0	557	207		28	653	0		0		0		158		22
Bowtie	N-S		0	557	207		28	653	0			214	0			158	22

Capacity Analysis for Planning of Junctions

Results Worksheet

Project Name	Chuluota Road (CR 419) ICE Evaluation	***Estimated Volume-to-Capacity Ratio***			
Project Number	No-build (2-lane) PM Opening Year (2028)	**Number of Configurations**			
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard S	**< 0.750**	**0.750 - 0.875**	**0.875 - 1.00**	**≥ 1.00**
Date	March 19, 2024	**9**	**2**	**0**	**3**

Results for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Zone 1 (North)		Zone 2 (South)		Zone 3 (East)		Zone 4 (West)		Zone 5 (Center)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			
Traffic Signal	FULL									819	0.47	0.47		
Two-Way Stop Control	N-S									--	1.02	1.02		
All-Way Stop Control	FULL									1625	1.08	1.08		
Continuous Green T	E									753	0.43	0.43		
Signalized Restricted Crossing U-Turn	N-S	879	*0.49*	764	*0.42*	769	*0.43*	811	*0.45*			0.49		
Unsignalized Restricted Crossing U-Turn	N-S	681	*0.21*	764	*0.00*	557	*0.34*	811	*0.00*			0.34		
Median U-Turn	N-S	879	*0.49*	799	*0.44*					893	0.50	0.50		
Partial Median U-Turn	N-S	681	*0.38*	799	*0.44*					847	0.48	0.48		
Bowtie	N-S	235	0.17	186	0.13	180	0.13	0	0.00	679	0.38	0.38		
Signalized ThruCut	N-S									819	0.47	0.47		
Unsignalized ThruCut	N-S									--	1.03	1.03		

Capacity Analysis for Planning of Junctions

Results Worksheet

Results for Roundabouts

TYPE OF ROUNDABOUT	Zone 1 (North)			Zone 3 (East)			Zone 2 (South)			Zone 4 (West)			Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3			
50 ICD	0.78			*0.05*			0.75			*0.39*			0.78		
75 ICD	0.77			*0.04*			*0.75*			*0.35*			0.77		
1 X 1	*0.59*			*0.00*			*0.58*			*0.23*			0.59		

Results for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Zone 1 (Rt Mrg)		Zone 2 (Lt Mrg)		Zone 3 (Ctr. 1)		Zone 4 (Ctr. 2)		Zone 5 (Lt Mrg)		Zone 6 (Rt Mrg)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			

TYPE OF INTERSECTION	Overall V/C Ratio	V/C Ranking	Pedestrian Accommodation Score	Bicycle Accommodation Score
Unsignalized Restricted Crossing U-Turn N-S	0.34	1	--	--
Bowtie N-S	0.38	2	--	--
Continuous Green T E	0.43	3	--	--
Traffic Signal	0.47	4	--	--
Signalized ThruCut N-S	0.47	4	--	--
Partial Median U-Turn N-S	0.48	6	--	--
Signalized Restricted Crossing U-Turn N-S	0.49	7	--	--
Median U-Turn N-S	0.50	8	--	--
1 X 1	0.59	9	--	--
75 ICD	0.77	10	--	--

Capacity Analysis for Planning of Junctions

Input Worksheet 1

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) PM Interim Year (2038)
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard S
Date	March 19, 2024
Number of Legs	3
Which leg is the minor street?	E

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	0	0	0	0	3.48%	0.00%
Westbound	0	159	0	22	3.48%	0.00%
Southbound	0	28	761	0	3.48%	0.00%
Northbound	0	0	628	209	3.48%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone		**C3R-Suburban Residential**	
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Equivalent Passenger Car Volume

	Volume (Veh/hr)			
	U-Turn	**Left**	**Thru**	**Right**
Eastbound	0	0	0	0
Westbound	0	165	0	23
Southbound	0	29	787	0
Northbound	0	0	650	216

Notes:	
Left-Turn Adjustment Factor	*Conversion of left-turning vehicles to equivalent through vehicles*
Right-turn Adjustment Factor	*Conversion of right-turning vehicles to equivalent through vehicles*
U-turn Adjustment Factor	*Conversion of U-turning vehicles to equivalent through vehicles*
Truck to PCE Factor	*1 truck = X Passenger Car Equivalents*
Critical Lane Volume Sum Limit	*Saturation Value for Critical Lane Volume Sum at an intersection*

Capacity Analysis for Planning of Junctions

Step 2A: Base Conditions Analysis

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) PM Interim Year (2038)
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard S
Date	March 19, 2024
Which leg is the minor street?	E

Existing Intersection Configuration	*Traffic Signal*

Number of Lanes for Existing Configuration
(Can be edited in "3- Alt Num Lanes Input" as needed)

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	**FULL**		0	1	1		1	1	0		0	0	0		1	0	1

Results for Existing Configuration

TYPE OF		Sheet	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	
Overall v/c Ratio	0.55	Pedestrian Accommodation Score	--		Bicycle Accommodation Score			--

Step 2B: Alternative Selection

Rankings Inclusion		Yes/No	Comment
At-Grade Non-Roundabout Intersections?		Yes	
Traffic Signal		Yes	
Two-Way Stop Control		Yes	
All-Way Stop Control		Yes	
Continuous Green T		Yes	
Quadrant Roadway	S-W	No	No Nearby Quadrant Roadway
	N-E	No	No Nearby Quadrant Roadway
	S-E	No	No Nearby Quadrant Roadway
	N-W	No	No Nearby Quadrant Roadway
Partial Displaced Left Turn		No	3-Leg Intersection
Displaced Left Turn		No	3-Leg Intersection
Signalized Restricted Crossing U-Turn		Yes	
Unsignalized Restricted Crossing U-Turn		Yes	
Median U-Turn		Yes	
Partial Median U-Turn		Yes	
Bowtie		Yes	
Signalized ThruCut		Yes	
Unsignalized ThruCut		Yes	
Roundabouts?		Yes	
50 ICD Miniroundabout		Yes	
75 ICD Miniroundabout		Yes	
1x1		Yes	
1NS x 2EW		No	1x1 Roundabout Only
2NS x 1EW		No	1x1 Roundabout Only
2x2		No	1x1 Roundabout Only
Ramp Terminal Intersections?		No	
Diamond			
Partial Cloverleaf A			
Partial Cloverleaf B			
Displaced Left Turn Interchange			
Diverging Diamond			
Single Point Diamond			

Continue to Step 3 Step 3

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) PM Interim Year (2038)
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard S
Date	March 19, 2024
Analysis Type	At-Grade Intersections and Interchanges

Number of Lanes for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		0	1	1		1	1	0		0	0	0		1	0	1
Two-Way Stop Control	N-S		0	1	1		1	1	0		0	0	0		1	0	1
All-Way Stop Control	FULL		0	1	1		1	1	0		0	0	0		1	0	1
Continuous Green T	E			1	1		1	1							1		1
Signalized Restricted Crossing U-Turn	N-S	1	0	1	1	1	1	1	0				0				1
Unsignalized Restricted Crossing U-Turn	N-S	1	0	1	1	1	1	1	0				0				1
Median U-Turn	N-S	1		1	1	1		1	1			0	0			0	1
Partial Median U-Turn	N-S	1		1	1	1		1	1		0	0	0		1	0	1
Signalized ThruCut	N-S		0	1	1		1	1	0		0		0		1		1
Unsignalized ThruCut	N-S		0	1	1		1	1	0		0		0		1		1
Bowtie	N-S			1	1			1	1			0	0			0	1

For shared lanes, enter "0" in L or R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Number of Lanes for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) PM Interim Year (2038)
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard S
Date	March 19, 2024
Analysis Type	At-Grade Intersections and Interchanges

Volume Echo with Shared Lane Adjustment for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		0	650	216		29	787	0		0	0	0		165	0	23
Two-Way Stop Control	N-S		0	650	216		29	787	0		0	0	0		165	0	23
All-Way Stop Control	FULL		0	650	216		29	787	0		0	0	0		165	0	23
Continuous Green T	E			650	216		29	787							165		165
Signalized Restricted Crossing U-Turn	N-S	0	0	650	216	0	29	787	0				0				23
Unsignalized Restricted Crossing U-Turn	N-S	0	0	650	216	0	29	787	0				0				23
Median U-Turn	N-S	0		650	216	0		787	0			0	0			0	23
Partial Median U-Turn	N-S	0		650	216	0		787	0		0	0	0		165	0	23
Signalized ThruCut	N-S		0	650	216		29	787	0		0		0		165		23
Unsignalized ThruCut	N-S		0	650	216		29	787	0		0		0		165		23
Bowtie	N-S		0	650	216		29	787	0			223	0			165	23

Capacity Analysis for Planning of Junctions

Results Worksheet

Project Name	Chuluota Road (CR 419) ICE Evaluation	***Estimated Volume-to-Capacity Ratio***			
Project Number	No-build (2-lane) PM Interim Year (2038)	**Number of Configurations**			
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard S	**< 0.750**	**0.750 - 0.875**	**0.875 - 1.00**	**≥ 1.00**
Date	March 19, 2024	**9**	**0**	**2**	**3**

Results for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Zone 1 (North)		Zone 2 (South)		Zone 3 (East)		Zone 4 (West)		Zone 5 (Center)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			
Traffic Signal	FULL									961	0.55	0.55		
Two-Way Stop Control	N-S									--	1.48	1.48		
All-Way Stop Control	FULL									1870	1.25	1.25		
Continuous Green T	E									854	0.49	0.49		
Signalized Restricted Crossing U-Turn	N-S	1022	*0.57*	866	*0.48*	871	*0.48*	952	*0.53*			0.57		
Unsignalized Restricted Crossing U-Turn	N-S	816	*0.25*	866	*0.00*	650	*0.40*	952	*0.00*			0.40		
Median U-Turn	N-S	1022	*0.57*	902	*0.50*					1037	0.58	0.58		
Partial Median U-Turn	N-S	816	*0.45*	902	*0.50*					990	0.57	0.57		
Bowtie	N-S	245	0.18	194	0.14	188	0.14	0	0.00	814	0.45	0.45		
Signalized ThruCut	N-S									961	0.55	0.55		
Unsignalized ThruCut	N-S									--	1.50	1.50		

Capacity Analysis for Planning of Junctions

Results Worksheet

Results for Roundabouts

TYPE OF ROUNDABOUT	Zone 1 (North)			Zone 3 (East)			Zone 2 (South)			Zone 4 (West)			Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3			
50 ICD	0.95			0.20			0.85			0.52			0.95		
75 ICD	0.93			0.10			0.85			0.44			0.93		
1 X 1	0.71			0.00			0.65			0.27			0.71		

Results for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Zone 1 (Rt Mrg)		Zone 2 (Lt Mrg)		Zone 3 (Ctr. 1)		Zone 4 (Ctr. 2)		Zone 5 (Lt Mrg)		Zone 6 (Rt Mrg)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			

TYPE OF INTERSECTION	Overall V/C Ratio	V/C Ranking	Pedestrian Accommodation Score	Bicycle Accommodation Score
Unsignalized Restricted Crossing U-Turn N-S	0.40	1	--	--
Bowtie N-S	0.45	2	--	--
Continuous Green T E	0.49	3	--	--
Traffic Signal	0.55	4	--	--
Signalized ThruCut N-S	0.55	4	--	--
Signalized Restricted Crossing U-Turn N-S	0.57	6	--	--
Partial Median U-Turn N-S	0.57	6	--	--
Median U-Turn N-S	0.58	8	--	--
1 X 1	0.71	9	--	--
75 ICD	0.93	10	--	--

Capacity Analysis for Planning of Junctions

Input Worksheet 1

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) PM Design Year (2048)
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard S
Date	March 19, 2024
Number of Legs	3
Which leg is the minor street?	E

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	0	0	0	0	3.48%	0.00%
Westbound	0	166	0	22	3.48%	0.00%
Southbound	0	29	891	0	3.48%	0.00%
Northbound	0	0	719	218	3.48%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone		**C3R-Suburban Residential**	
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Equivalent Passenger Car Volume

	Volume (Veh/hr)			
	U-Turn	**Left**	**Thru**	**Right**
Eastbound	0	0	0	0
Westbound	0	172	0	23
Southbound	0	30	922	0
Northbound	0	0	744	226

Notes:	
Left-Turn Adjustment Factor	*Conversion of left-turning vehicles to equivalent through vehicles*
Right-turn Adjustment Factor	*Conversion of right-turning vehicles to equivalent through vehicles*
U-turn Adjustment Factor	*Conversion of U-turning vehicles to equivalent through vehicles*
Truck to PCE Factor	*1 truck = X Passenger Car Equivalents*
Critical Lane Volume Sum Limit	*Saturation Value for Critical Lane Volume Sum at an intersection*

Capacity Analysis for Planning of Junctions

Step 2A: Base Conditions Analysis

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) PM Design Year (2048)
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard S
Date	March 19, 2024
Which leg is the minor street?	E

Existing Intersection Configuration	*Traffic Signal*

Number of Lanes for Existing Configuration
(Can be edited in "3- Alt Num Lanes Input" as needed)

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		0	1	1		1	1	0		0	0	0		1	0	1

Results for Existing Configuration

TYPE OF		Sheet	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	
Overall v/c Ratio	0.63	Pedestrian Accommodation Score		--	Bicycle Accommodation Score			--

Step 2B: Alternative Selection

Rankings Inclusion		Yes/No	Comment
At-Grade Non-Roundabout Intersections?		Yes	
Traffic Signal		Yes	
Two-Way Stop Control		Yes	
All-Way Stop Control		Yes	
Continuous Green T		Yes	
Quadrant Roadway	S-W	No	No Nearby Quadrant Roadway
	N-E	No	No Nearby Quadrant Roadway
	S-E	No	No Nearby Quadrant Roadway
	N-W	No	No Nearby Quadrant Roadway
Partial Displaced Left Turn		No	3-Leg Intersection
Displaced Left Turn		No	3-Leg Intersection
Signalized Restricted Crossing U-Turn		Yes	
Unsignalized Restricted Crossing U-Turn		Yes	
Median U-Turn		Yes	
Partial Median U-Turn		Yes	
Bowtie		Yes	
Signalized ThruCut		Yes	
Unsignalized ThruCut		Yes	
Roundabouts?		Yes	
50 ICD Miniroundabout		Yes	
75 ICD Miniroundabout		Yes	
1x1		Yes	
1NS x 2EW		No	1x1 Roundabout Only
2NS x 1EW		No	1x1 Roundabout Only
2x2		No	1x1 Roundabout Only
Ramp Terminal Intersections?		No	
Diamond			
Partial Cloverleaf A			
Partial Cloverleaf B			
Displaced Left Turn Interchange			
Diverging Diamond			
Single Point Diamond			

Continue to Step 3 Step 3

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) PM Design Year (2048)
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard S
Date	March 19, 2024
Analysis Type	At-Grade Intersections and Interchanges

Number of Lanes for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		0	1	1		1	1	0		0	0	0		1	0	1
Two-Way Stop Control	N-S		0	1	1		1	1	0		0	0	0		1	0	1
All-Way Stop Control	FULL		0	1	1		1	1	0		0	0	0		1	0	1
Continuous Green T	E			1	1		1	1							1		1
Signalized Restricted Crossing U-Turn	N-S	1	0	1	1	1	1	1	0				0				1
Unsignalized Restricted Crossing U-Turn	N-S	1	0	1	1	1	1	1	0				0				1
Median U-Turn	N-S	1		1	1	1		1	1			0	0			0	1
Partial Median U-Turn	N-S	1		1	1	1		1	1		0	0	0		1	0	1
Signalized ThruCut	N-S		0	1	1		1	1	0		0		0		1		1
Unsignalized ThruCut	N-S		0	1	1		1	1	0		0		0		1		1
Bowtie	N-S			1	1			1	1			0	0			0	1

For shared lanes, enter "0" in L or R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Number of Lanes for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) PM Design Year (2048)
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard S
Date	March 19, 2024
Analysis Type	At-Grade Intersections and Interchanges

Volume Echo with Shared Lane Adjustment for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		0	744	226		30	922	0		0	0	0		172	0	23
Two-Way Stop Control	N-S		0	744	226		30	922	0		0	0	0		172	0	23
All-Way Stop Control	FULL		0	744	226		30	922	0		0	0	0		172	0	23
Continuous Green T	E			744	226		30	922							172		172
Signalized Restricted Crossing U-Turn	N-S	0	0	744	226	0	30	922	0				0				23
Unsignalized Restricted Crossing U-Turn	N-S	0	0	744	226	0	30	922	0				0				23
Median U-Turn	N-S	0		744	226	0		922	0			0	0			0	23
Partial Median U-Turn	N-S	0		744	226	0		922	0		0	0	0		172	0	23
Signalized ThruCut	N-S		0	744	226		30	922	0		0		0		172		23
Unsignalized ThruCut	N-S		0	744	226		30	922	0		0		0		172		23
Bowtie	N-S		0	744	226		30	922	0			232	0			172	23

Capacity Analysis for Planning of Junctions

Results Worksheet

Project Name	Chuluota Road (CR 419) ICE Evaluation	***Estimated Volume-to-Capacity Ratio***			
Project Number	No-build (2-lane) PM Design Year (2048)	**Number of Configurations**			
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard S	**< 0.750**	**0.750 - 0.875**	**0.875 - 1.00**	**≥ 1.00**
Date	March 19, 2024	**8**	**1**	**0**	**5**

Results for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Zone 1 (North)		Zone 2 (South)		Zone 3 (East)		Zone 4 (West)		Zone 5 (Center)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			
Traffic Signal	FULL									1103	0.63	0.63		
Two-Way Stop Control	N-S									--	2.17	2.17		
All-Way Stop Control	FULL									2117	1.41	1.41		
Continuous Green T	E									957	0.55	0.55		
Signalized Restricted Crossing U-Turn	N-S	1167	*0.65*	970	*0.54*	973	*0.54*	1094	*0.61*			0.65		
Unsignalized Restricted Crossing U-Turn	N-S	952	*0.29*	970	*0.00*	744	*0.47*	1094	*0.00*			0.47		
Median U-Turn	N-S	1167	*0.65*	1008	*0.56*					1181	0.66	0.66		
Partial Median U-Turn	N-S	952	*0.53*	1008	*0.56*					1133	0.65	0.65		
Bowtie	N-S	256	0.19	202	0.15	195	0.14	0	0.00	949	0.53	0.53		
Signalized ThruCut	N-S									1103	0.63	0.63		
Unsignalized ThruCut	N-S									--	2.20	2.20		

Capacity Analysis for Planning of Junctions

Results Worksheet

Results for Roundabouts

TYPE OF ROUNDABOUT	Zone 1 (North)			Zone 3 (East)			Zone 2 (South)			Zone 4 (West)			Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3			
50 ICD	1.11			-0.08			0.96			0.73			1.11		
75 ICD	1.09			-0.57			0.95			0.57			1.09		
1 X 1	0.83			0.00			0.73			0.30			0.83		

Results for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Zone 1 (Rt Mrg)		Zone 2 (Lt Mrg)		Zone 3 (Ctr. 1)		Zone 4 (Ctr. 2)		Zone 5 (Lt Mrg)		Zone 6 (Rt Mrg)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			

TYPE OF INTERSECTION	Overall V/C Ratio	V/C Ranking	Pedestrian Accommodation Score	Bicycle Accommodation Score
Unsignalized Restricted Crossing U-Turn N-S	0.47	1	--	--
Bowtie N-S	0.53	2	--	--
Continuous Green T E	0.55	3	--	--
Traffic Signal	0.63	4	--	--
Signalized ThruCut N-S	0.63	4	--	--
Signalized Restricted Crossing U-Turn N-S	0.65	6	--	--
Partial Median U-Turn N-S	0.65	6	--	--
Median U-Turn N-S	0.66	8	--	--
1 X 1	0.83	9	--	--
75 ICD	1.09	10	--	--

Capacity Analysis for Planning of Junctions

Input Worksheet 1

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) AM Opening Year (2028)
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard S
Date	March 19, 2024
Number of Legs	3
Which leg is the minor street?	E

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	0	0	0	0	3.48%	0.00%
Westbound	0	192	0	41	3.48%	0.00%
Southbound	0	12	619	0	3.48%	0.00%
Northbound	0	0	528	71	3.48%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone		**C3R-Suburban Residential**	
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Equivalent Passenger Car Volume

	Volume (Veh/hr)			
	U-Turn	**Left**	**Thru**	**Right**
Eastbound	0	0	0	0
Westbound	0	199	0	42
Southbound	0	12	641	0
Northbound	0	0	546	73

Notes:	
Left-Turn Adjustment Factor	*Conversion of left-turning vehicles to equivalent through vehicles*
Right-turn Adjustment Factor	*Conversion of right-turning vehicles to equivalent through vehicles*
U-turn Adjustment Factor	*Conversion of U-turning vehicles to equivalent through vehicles*
Truck to PCE Factor	*1 truck = X Passenger Car Equivalents*
Critical Lane Volume Sum Limit	*Saturation Value for Critical Lane Volume Sum at an intersection*

Capacity Analysis for Planning of Junctions

Step 2A: Base Conditions Analysis

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) AM Opening Year (2028)
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard S
Date	March 19, 2024
Which leg is the minor street?	E

Existing Intersection Configuration	*Traffic Signal*

Number of Lanes for Existing Configuration
(Can be edited in "3- Alt Num Lanes Input" as needed)

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		0	2	1		1	2	0		0	0	0		1	0	1

Results for Existing Configuration

TYPE OF		Sheet	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	
Overall v/c Ratio	0.30	Pedestrian Accommodation Score	--		Bicycle Accommodation Score			--

Step 2B: Alternative Selection

Rankings Inclusion		Yes/No	Comment
At-Grade Non-Roundabout Intersections?		Yes	
Traffic Signal		Yes	
Two-Way Stop Control		Yes	
All-Way Stop Control		Yes	
Continuous Green T		Yes	
Quadrant Roadway	S-W	No	No Nearby Quadrant Roadway
	N-E	No	No Nearby Quadrant Roadway
	S-E	No	No Nearby Quadrant Roadway
	N-W	No	No Nearby Quadrant Roadway
Partial Displaced Left Turn		No	3-Leg Intersection
Displaced Left Turn		No	3-Leg Intersection
Signalized Restricted Crossing U-Turn		Yes	
Unsignalized Restricted Crossing U-Turn		Yes	
Median U-Turn		Yes	
Partial Median U-Turn		Yes	
Bowtie		Yes	
Signalized ThruCut		Yes	
Unsignalized ThruCut		Yes	
Roundabouts?		Yes	
50 ICD Miniroundabout		Yes	
75 ICD Miniroundabout		Yes	
1x1		No	2x1 Roundabout Only
1NS x 2EW		No	2x1 Roundabout Only
2NS x 1EW		Yes	
2x2		No	2x1 Roundabout Only
Ramp Terminal Intersections?		No	
Diamond			
Partial Cloverleaf A			
Partial Cloverleaf B			
Displaced Left Turn Interchange			
Diverging Diamond			
Single Point Diamond			

Continue to Step 3 Step 3

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) AM Opening Year (2028)
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard S
Date	March 19, 2024
Analysis Type	At-Grade Intersections and Interchanges

Number of Lanes for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		0	2	1		1	2	0		0	0	0		1	0	1
Two-Way Stop Control	N-S		0	2	1		1	2	0		0	0	0		1	0	1
All-Way Stop Control	FULL		0	2	1		1	2	0		0	0	0		1	0	1
Continuous Green T	E			2	1		1	2							1		1
Signalized Restricted Crossing U-Turn	N-S	1	0	2	1	1	1	2	0				0				2
Unsignalized Restricted Crossing U-Turn	N-S	1	0	2	1	1	1	2	0				0				2
Median U-Turn	N-S	1		2	1	1		2	1			0	0			0	1
Partial Median U-Turn	N-S	1		2	1	1		2	1		0	0	0		1	0	1
Signalized ThruCut	N-S		0	2	1		1	2	0		0		0		1		1
Unsignalized ThruCut	N-S		0	2	1		1	2	0		0		0		1		1
Bowtie	N-S			2	1			2	1			0	0			0	1

For shared lanes, enter "0" in L or R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Number of Lanes for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) AM Opening Year (2028)
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard S
Date	March 19, 2024
Analysis Type	At-Grade Intersections and Interchanges

Volume Echo with Shared Lane Adjustment for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		0	546	73		12	641	0		0	0	0		199	0	42
Two-Way Stop Control	N-S		0	546	73		12	641	0		0	0	0		199	0	42
All-Way Stop Control	FULL		0	546	73		12	641	0		0	0	0		199	0	42
Continuous Green T	E			546	73		12	641							199		199
Signalized Restricted Crossing U-Turn	N-S	0	0	546	73	0	12	641	0				0				42
Unsignalized Restricted Crossing U-Turn	N-S	0	0	546	73	0	12	641	0				0				42
Median U-Turn	N-S	0		546	73	0		641	0			0	0			0	42
Partial Median U-Turn	N-S	0		546	73	0		641	0		0	0	0		199	0	42
Signalized ThruCut	N-S		0	546	73		12	641	0		0		0		199		42
Unsignalized ThruCut	N-S		0	546	73		12	641	0		0		0		199		42
Bowtie	N-S		0	546	73		12	641	0			246	0			199	42

Capacity Analysis for Planning of Junctions

Results Worksheet

Project Name	Chuluota Road (CR 419) ICE Evaluation	***Estimated Volume-to-Capacity Ratio***			
Project Number	Build (4-lane) AM Opening Year (2028)	**Number of Configurations**			
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard S	**< 0.750**	**0.750 - 0.875**	**0.875 - 1.00**	**≥ 1.00**
Date	March 19, 2024	**9**	**3**	**0**	**2**

Results for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Zone 1 (North)		Zone 2 (South)		Zone 3 (East)		Zone 4 (West)		Zone 5 (Center)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			
Traffic Signal	FULL									530	0.30	0.30		
Two-Way Stop Control	N-S									--	0.76	0.76		
All-Way Stop Control	FULL									1513	1.01	1.01		
Continuous Green T	E									495	0.28	0.28		
Signalized Restricted Crossing U-Turn	N-S	575	*0.32*	310	*0.17*	415	*0.23*	420	*0.23*			0.32		
Unsignalized Restricted Crossing U-Turn	N-S	653	*0.26*	619	*0.00*	546	*0.50*	840	*0.00*			0.50		
Median U-Turn	N-S	575	*0.32*	325	*0.18*					610	0.34	0.34		
Partial Median U-Turn	N-S	327	*0.18*	325	*0.18*					536	0.31	0.31		
Bowtie	N-S	79	0.06	199	0.14	199	0.15	0	0.00	370	0.21	0.21		
Signalized ThruCut	N-S									530	0.30	0.30		
Unsignalized ThruCut	N-S									--	1.24	1.24		

Capacity Analysis for Planning of Junctions

Results Worksheet

Results for Roundabouts

TYPE OF ROUNDABOUT	Zone 1 (North)			Zone 3 (East)			Zone 2 (South)			Zone 4 (West)			Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3			
50 ICD	0.79			0.05			0.60			0.52			0.79		
75 ICD	0.77			0.05			0.60			0.46			0.77		
2NS X 1EW	0.28	0.30		0.00			0.22	0.24		0.28			0.30		

Results for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Zone 1 (Rt Mrg)		Zone 2 (Lt Mrg)		Zone 3 (Ctr. 1)		Zone 4 (Ctr. 2)		Zone 5 (Lt Mrg)		Zone 6 (Rt Mrg)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			

TYPE OF INTERSECTION	Overall V/C Ratio	V/C Ranking	Pedestrian Accommodation Score	Bicycle Accommodation Score
Bowtie N-S	0.21	1	--	--
Continuous Green T E	0.28	2	--	--
2NS X 1EW	0.30	3	--	--
Traffic Signal	0.30	4	--	--
Signalized ThruCut N-S	0.30	4	--	--
Partial Median U-Turn N-S	0.31	6	--	--
Signalized Restricted Crossing U-Turn N-S	0.32	7	--	--
Median U-Turn N-S	0.34	8	--	--
Unsignalized Restricted Crossing U-Turn N-S	0.50	9	--	--
Two-Way Stop Control N-S	0.76	10	--	--

Capacity Analysis for Planning of Junctions

Input Worksheet 1

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) AM Interim Year (2038)
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard S
Date	March 19, 2024
Number of Legs	3
Which leg is the minor street?	E

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	0	0	0	0	3.48%	0.00%
Westbound	0	208	0	44	3.48%	0.00%
Southbound	0	13	824	0	3.48%	0.00%
Northbound	0	0	690	78	3.48%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone		**C3R-Suburban Residential**	
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Equivalent Passenger Car Volume

	Volume (Veh/hr)			
	U-Turn	**Left**	**Thru**	**Right**
Eastbound	0	0	0	0
Westbound	0	215	0	46
Southbound	0	13	853	0
Northbound	0	0	714	81

Notes:	
Left-Turn Adjustment Factor	*Conversion of left-turning vehicles to equivalent through vehicles*
Right-turn Adjustment Factor	*Conversion of right-turning vehicles to equivalent through vehicles*
U-turn Adjustment Factor	*Conversion of U-turning vehicles to equivalent through vehicles*
Truck to PCE Factor	*1 truck = X Passenger Car Equivalents*
Critical Lane Volume Sum Limit	*Saturation Value for Critical Lane Volume Sum at an intersection*

Capacity Analysis for Planning of Junctions

Step 2A: Base Conditions Analysis

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) AM Interim Year (2038)
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard S
Date	March 19, 2024
Which leg is the minor street?	E

Existing Intersection Configuration	*Traffic Signal*

Number of Lanes for Existing Configuration
(Can be edited in "3- Alt Num Lanes Input" as needed)

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	**FULL**		0	2	1		1	2	0		0	0	0		1	0	1

Results for Existing Configuration

TYPE OF		Sheet	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	
Overall v/c Ratio	0.37	Pedestrian Accommodation Score	--		Bicycle Accommodation Score			--

Step 2B: Alternative Selection

Rankings Inclusion		Yes/No	Comment
At-Grade Non-Roundabout Intersections?		Yes	
Traffic Signal		Yes	
Two-Way Stop Control		Yes	
All-Way Stop Control		Yes	
Continuous Green T		Yes	
Quadrant Roadway	S-W	No	No Nearby Quadrant Roadway
	N-E	No	No Nearby Quadrant Roadway
	S-E	No	No Nearby Quadrant Roadway
	N-W	No	No Nearby Quadrant Roadway
Partial Displaced Left Turn		No	3-Leg Intersection
Displaced Left Turn		No	3-Leg Intersection
Signalized Restricted Crossing U-Turn		Yes	
Unsignalized Restricted Crossing U-Turn		Yes	
Median U-Turn		Yes	
Partial Median U-Turn		Yes	
Bowtie		Yes	
Signalized ThruCut		Yes	
Unsignalized ThruCut		Yes	
Roundabouts?		Yes	
50 ICD Miniroundabout		Yes	
75 ICD Miniroundabout		Yes	
1x1		No	2x1 Roundabout Only
1NS x 2EW		No	2x1 Roundabout Only
2NS x 1EW		Yes	
2x2		No	2x1 Roundabout Only
Ramp Terminal Intersections?		No	
Diamond			
Partial Cloverleaf A			
Partial Cloverleaf B			
Displaced Left Turn Interchange			
Diverging Diamond			
Single Point Diamond			

Continue to Step 3 Step 3

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) AM Interim Year (2038)
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard S
Date	March 19, 2024
Analysis Type	At-Grade Intersections and Interchanges

Number of Lanes for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		0	2	1		1	2	0		0	0	0		1	0	1
Two-Way Stop Control	N-S		0	2	1		1	2	0		0	0	0		1	0	1
All-Way Stop Control	FULL		0	2	1		1	2	0		0	0	0		1	0	1
Continuous Green T	E			2	1		1	2							1		1
Signalized Restricted Crossing U-Turn	N-S	1	0	2	1	1	1	2	0				0				2
Unsignalized Restricted Crossing U-Turn	N-S	1	0	2	1	1	1	2	0				0				2
Median U-Turn	N-S	1		2	1	1		2	1			0	0			0	1
Partial Median U-Turn	N-S	1		2	1	1		2	1		0	0	0		1	0	1
Signalized ThruCut	N-S		0	2	1		1	2	0		0		0		1		1
Unsignalized ThruCut	N-S		0	2	1		1	2	0		0		0		1		1
Bowtie	N-S			2	1			2	1			0	0			0	1

For shared lanes, enter "0" in L or R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Number of Lanes for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) AM Interim Year (2038)
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard S
Date	March 19, 2024
Analysis Type	At-Grade Intersections and Interchanges

Volume Echo with Shared Lane Adjustment for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		0	714	81		13	853	0		0	0	0		215	0	46
Two-Way Stop Control	N-S		0	714	81		13	853	0		0	0	0		215	0	46
All-Way Stop Control	FULL		0	714	81		13	853	0		0	0	0		215	0	46
Continuous Green T	E			714	81		13	853							215		215
Signalized Restricted Crossing U-Turn	N-S	0	0	714	81	0	13	853	0				0				46
Unsignalized Restricted Crossing U-Turn	N-S	0	0	714	81	0	13	853	0				0				46
Median U-Turn	N-S	0		714	81	0		853	0			0	0			0	46
Partial Median U-Turn	N-S	0		714	81	0		853	0		0	0	0		215	0	46
Signalized ThruCut	N-S		0	714	81		13	853	0		0		0		215		46
Unsignalized ThruCut	N-S		0	714	81		13	853	0		0		0		215		46
Bowtie	N-S		0	714	81		13	853	0			266	0			215	46

Capacity Analysis for Planning of Junctions

Results Worksheet

Project Name	Chuluota Road (CR 419) ICE Evaluation	***Estimated Volume-to-Capacity Ratio***			
Project Number	Build (4-lane) AM Interim Year (2038)	**Number of Configurations**			
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard S	**< 0.750**	**0.750 - 0.875**	**0.875 - 1.00**	**≥ 1.00**
Date	March 19, 2024	**9**	**0**	**0**	**5**

Results for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Zone 1 (North)		Zone 2 (South)		Zone 3 (East)		Zone 4 (West)		Zone 5 (Center)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			
Traffic Signal	FULL									653	0.37	0.37		
Two-Way Stop Control	N-S									--	1.26	1.26		
All-Way Stop Control	FULL									1922	1.28	1.28		
Continuous Green T	E									597	0.34	0.34		
Signalized Restricted Crossing U-Turn	N-S	702	*0.39*	398	*0.22*	511	*0.28*	534	*0.30*			0.39		
Unsignalized Restricted Crossing U-Turn	N-S	866	*0.34*	795	*0.00*	714	*0.70*	1068	*0.00*			0.70		
Median U-Turn	N-S	702	*0.39*	414	*0.23*					740	0.41	0.41		
Partial Median U-Turn	N-S	433	*0.24*	414	*0.23*					659	0.38	0.38		
Bowtie	N-S	88	0.06	215	0.15	215	0.16	0	0.00	481	0.27	0.27		
Signalized ThruCut	N-S									653	0.37	0.37		
Unsignalized ThruCut	N-S									--	2.43	2.43		

Capacity Analysis for Planning of Junctions

Results Worksheet

Results for Roundabouts

TYPE OF ROUNDABOUT	Zone 1 (North)			Zone 3 (East)			Zone 2 (South)			Zone 4 (West)			Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3			
50 ICD	1.07			-0.15			0.77			0.88			1.07		
75 ICD	1.04			0.53			0.77			0.71			1.04		
2NS X 1EW	0.38	0.40		0.00			0.29	0.31		0.35			0.40		

Results for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Zone 1 (Rt Mrg)		Zone 2 (Lt Mrg)		Zone 3 (Ctr. 1)		Zone 4 (Ctr. 2)		Zone 5 (Lt Mrg)		Zone 6 (Rt Mrg)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			

TYPE OF INTERSECTION	Overall V/C Ratio	V/C Ranking	Pedestrian Accommodation Score	Bicycle Accommodation Score
Bowtie N-S	0.27	1	--	--
Continuous Green T E	0.34	2	--	--
Traffic Signal	0.37	3	--	--
Signalized ThruCut N-S	0.37	3	--	--
Partial Median U-Turn N-S	0.38	5	--	--
Signalized Restricted Crossing U-Turn N-S	0.39	6	--	--
2NS X 1EW	0.40	7	--	--
Median U-Turn N-S	0.41	8	--	--
Unsignalized Restricted Crossing U-Turn N-S	0.70	9	--	--
75 ICD	1.04	10	--	--

Capacity Analysis for Planning of Junctions

Input Worksheet 1

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) AM Design Year (2048)
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard S
Date	March 19, 2024
Number of Legs	3
Which leg is the minor street?	E

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	0	0	0	0	3.48%	0.00%
Westbound	0	225	0	48	3.48%	0.00%
Southbound	0	14	1030	0	3.48%	0.00%
Northbound	0	0	851	84	3.48%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone		**C3R-Suburban Residential**	
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Equivalent Passenger Car Volume

	Volume (Veh/hr)			
	U-Turn	**Left**	**Thru**	**Right**
Eastbound	0	0	0	0
Westbound	0	233	0	50
Southbound	0	14	1066	0
Northbound	0	0	881	87

Notes:	
Left-Turn Adjustment Factor	*Conversion of left-turning vehicles to equivalent through vehicles*
Right-turn Adjustment Factor	*Conversion of right-turning vehicles to equivalent through vehicles*
U-turn Adjustment Factor	*Conversion of U-turning vehicles to equivalent through vehicles*
Truck to PCE Factor	*1 truck = X Passenger Car Equivalents*
Critical Lane Volume Sum Limit	*Saturation Value for Critical Lane Volume Sum at an intersection*

Capacity Analysis for Planning of Junctions

Step 2A: Base Conditions Analysis

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) AM Design Year (2048)
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard S
Date	March 19, 2024
Which leg is the minor street?	E

Existing Intersection Configuration	*Traffic Signal*

Number of Lanes for Existing Configuration
(Can be edited in "3- Alt Num Lanes Input" as needed)

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	**FULL**		0	2	1		1	2	0		0	0	0		1	0	1

Results for Existing Configuration

TYPE OF		Sheet	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	
Overall v/c Ratio	0.44	Pedestrian Accommodation Score	--		Bicycle Accommodation Score			--

Step 2B: Alternative Selection

Rankings Inclusion		Yes/No	Comment
At-Grade Non-Roundabout Intersections?		Yes	
Traffic Signal		Yes	
Two-Way Stop Control		Yes	
All-Way Stop Control		Yes	
Continuous Green T		Yes	
Quadrant Roadway	S-W	No	No Nearby Quadrant Roadway
	N-E	No	No Nearby Quadrant Roadway
	S-E	No	No Nearby Quadrant Roadway
	N-W	No	No Nearby Quadrant Roadway
Partial Displaced Left Turn		No	3-Leg Intersection
Displaced Left Turn		No	3-Leg Intersection
Signalized Restricted Crossing U-Turn		Yes	
Unsignalized Restricted Crossing U-Turn		Yes	
Median U-Turn		Yes	
Partial Median U-Turn		Yes	
Bowtie		Yes	
Signalized ThruCut		Yes	
Unsignalized ThruCut		Yes	
Roundabouts?		Yes	
50 ICD Miniroundabout		Yes	
75 ICD Miniroundabout		Yes	
1x1		No	2x1 Roundabout Only
1NS x 2EW		No	2x1 Roundabout Only
2NS x 1EW		Yes	
2x2		No	2x1 Roundabout Only
Ramp Terminal Intersections?		No	
Diamond			
Partial Cloverleaf A			
Partial Cloverleaf B			
Displaced Left Turn Interchange			
Diverging Diamond			
Single Point Diamond			

Continue to Step 3 Step 3

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) AM Design Year (2048)
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard S
Date	March 19, 2024
Analysis Type	At-Grade Intersections and Interchanges

Number of Lanes for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		0	2	1		1	2	0		0	0	0		1	0	1
Two-Way Stop Control	N-S		0	2	1		1	2	0		0	0	0		1	0	1
All-Way Stop Control	FULL		0	2	1		1	2	0		0	0	0		1	0	1
Continuous Green T	E			2	1		1	2							1		1
Signalized Restricted Crossing U-Turn	N-S	1	0	2	1	1	1	2	0				0				2
Unsignalized Restricted Crossing U-Turn	N-S	1	0	2	1	1	1	2	0				0				2
Median U-Turn	N-S	1		2	1	1		2	1			0	0			0	1
Partial Median U-Turn	N-S	1		2	1	1		2	1		0	0	0		1	0	1
Signalized ThruCut	N-S		0	2	1		1	2	0		0		0		1		1
Unsignalized ThruCut	N-S		0	2	1		1	2	0		0		0		1		1
Bowtie	N-S			2	1			2	1			0	0			0	1

For shared lanes, enter "0" in L or R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Number of Lanes for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) AM Design Year (2048)
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard S
Date	March 19, 2024
Analysis Type	At-Grade Intersections and Interchanges

Volume Echo with Shared Lane Adjustment for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		0	881	87		14	1066	0		0	0	0		233	0	50
Two-Way Stop Control	N-S		0	881	87		14	1066	0		0	0	0		233	0	50
All-Way Stop Control	FULL		0	881	87		14	1066	0		0	0	0		233	0	50
Continuous Green T	E			881	87		14	1066							233		233
Signalized Restricted Crossing U-Turn	N-S	0	0	881	87	0	14	1066	0				0				50
Unsignalized Restricted Crossing U-Turn	N-S	0	0	881	87	0	14	1066	0				0				50
Median U-Turn	N-S	0		881	87	0		1066	0			0	0			0	50
Partial Median U-Turn	N-S	0		881	87	0		1066	0		0	0	0		233	0	50
Signalized ThruCut	N-S		0	881	87		14	1066	0		0		0		233		50
Unsignalized ThruCut	N-S		0	881	87		14	1066	0		0		0		233		50
Bowtie	N-S		0	881	87		14	1066	0			288	0			233	50

Capacity Analysis for Planning of Junctions

Results Worksheet

Project Name	Chuluota Road (CR 419) ICE Evaluation	***Estimated Volume-to-Capacity Ratio***			
Project Number	Build (4-lane) AM Design Year (2048)	**Number of Configurations**			
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard S	**< 0.750**	**0.750 - 0.875**	**0.875 - 1.00**	**≥ 1.00**
Date	March 19, 2024	**8**	**0**	**1**	**5**

Results for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Zone 1 (North)		Zone 2 (South)		Zone 3 (East)		Zone 4 (West)		Zone 5 (Center)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			
Traffic Signal	FULL									778	0.44	0.44		
Two-Way Stop Control	N-S									--	2.09	2.09		
All-Way Stop Control	FULL									2331	1.55	1.55		
Continuous Green T	E									701	0.40	0.40		
Signalized Restricted Crossing U-Turn	N-S	831	*0.46*	484	*0.27*	607	*0.34*	650	*0.36*			0.46		
Unsignalized Restricted Crossing U-Turn	N-S	1080	*0.45*	968	*0.00*	881	0.99	1299	*0.00*			0.99		
Median U-Turn	N-S	831	*0.46*	502	*0.28*					873	0.48	0.48		
Partial Median U-Turn	N-S	540	*0.30*	502	*0.28*					785	0.45	0.45		
Bowtie	N-S	94	0.07	233	0.16	233	0.17	0	0.00	592	0.33	0.33		
Signalized ThruCut	N-S									778	0.44	0.44		
Unsignalized ThruCut	N-S									--	4.81	4.81		

Capacity Analysis for Planning of Junctions

Results Worksheet

Results for Roundabouts

TYPE OF ROUNDABOUT	Zone 1 (North)			Zone 3 (East)			Zone 2 (South)			Zone 4 (West)			Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3			
50 ICD	1.36			-0.03			0.94			2.21			2.21		
75 ICD	1.32			-0.06			0.93			1.32			1.32		
2NS X 1EW	0.48	0.51		0.00			0.35	0.38		0.43			0.51		

Results for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Zone 1 (Rt Mrg)		Zone 2 (Lt Mrg)		Zone 3 (Ctr. 1)		Zone 4 (Ctr. 2)		Zone 5 (Lt Mrg)		Zone 6 (Rt Mrg)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			

TYPE OF INTERSECTION	Overall V/C Ratio	V/C Ranking	Pedestrian Accommodation Score	Bicycle Accommodation Score
Bowtie N-S	0.33	1	--	--
Continuous Green T E	0.40	2	--	--
Traffic Signal	0.44	3	--	--
Signalized ThruCut N-S	0.44	3	--	--
Partial Median U-Turn N-S	0.45	5	--	--
Signalized Restricted Crossing U-Turn N-S	0.46	6	--	--
Median U-Turn N-S	0.48	7	--	--
2NS X 1EW	0.51	8	--	--
Unsignalized Restricted Crossing U-Turn N-S	0.99	9	--	--
75 ICD	1.32	10	--	--

Capacity Analysis for Planning of Junctions

Input Worksheet 1

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) PM Opening Year (2028)
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard S
Date	March 19, 2024
Number of Legs	3
Which leg is the minor street?	E

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	0	0	0	0	3.48%	0.00%
Westbound	0	158	0	21	3.48%	0.00%
Southbound	0	28	726	0	3.48%	0.00%
Northbound	0	0	603	207	3.48%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone		**C3R-Suburban Residential**	
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Equivalent Passenger Car Volume

	Volume (Veh/hr)			
	U-Turn	**Left**	**Thru**	**Right**
Eastbound	0	0	0	0
Westbound	0	163	0	22
Southbound	0	29	751	0
Northbound	0	0	624	214

Notes:	
Left-Turn Adjustment Factor	*Conversion of left-turning vehicles to equivalent through vehicles*
Right-turn Adjustment Factor	*Conversion of right-turning vehicles to equivalent through vehicles*
U-turn Adjustment Factor	*Conversion of U-turning vehicles to equivalent through vehicles*
Truck to PCE Factor	*1 truck = X Passenger Car Equivalents*
Critical Lane Volume Sum Limit	*Saturation Value for Critical Lane Volume Sum at an intersection*

Capacity Analysis for Planning of Junctions

Step 2A: Base Conditions Analysis

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) PM Opening Year (2028)
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard S
Date	March 19, 2024
Which leg is the minor street?	E

Existing Intersection Configuration	*Traffic Signal*

Number of Lanes for Existing Configuration
(Can be edited in "3- Alt Num Lanes Input" as needed)

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		0	2	1		1	2	0		0	0	0		1	0	1

Results for Existing Configuration

TYPE OF		Sheet	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	
Overall v/c Ratio	0.31	Pedestrian Accommodation Score	--		Bicycle Accommodation Score			--

Step 2B: Alternative Selection

Rankings Inclusion		Yes/No	Comment
At-Grade Non-Roundabout Intersections?		Yes	
Traffic Signal		Yes	
Two-Way Stop Control		Yes	
All-Way Stop Control		Yes	
Continuous Green T		Yes	
Quadrant Roadway	S-W	No	No Nearby Quadrant Roadway
	N-E	No	No Nearby Quadrant Roadway
	S-E	No	No Nearby Quadrant Roadway
	N-W	No	No Nearby Quadrant Roadway
Partial Displaced Left Turn		No	3-Leg Intersection
Displaced Left Turn		No	3-Leg Intersection
Signalized Restricted Crossing U-Turn		Yes	
Unsignalized Restricted Crossing U-Turn		Yes	
Median U-Turn		Yes	
Partial Median U-Turn		Yes	
Bowtie		Yes	
Signalized ThruCut		Yes	
Unsignalized ThruCut		Yes	
Roundabouts?		Yes	
50 ICD Miniroundabout		Yes	
75 ICD Miniroundabout		Yes	
1x1		No	2x1 Roundabout Only
1NS x 2EW		No	2x1 Roundabout Only
2NS x 1EW		Yes	
2x2		No	2x1 Roundabout Only
Ramp Terminal Intersections?		No	
Diamond			
Partial Cloverleaf A			
Partial Cloverleaf B			
Displaced Left Turn Interchange			
Diverging Diamond			
Single Point Diamond			

Continue to Step 3 Step 3

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) PM Opening Year (2028)
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard S
Date	March 19, 2024
Analysis Type	At-Grade Intersections and Interchanges

Number of Lanes for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		0	2	1		1	2	0		0	0	0		1	0	1
Two-Way Stop Control	N-S		0	2	1		1	2	0		0	0	0		1	0	1
All-Way Stop Control	FULL		0	2	1		1	2	0		0	0	0		1	0	1
Continuous Green T	E			2	1		1	2							1		1
Signalized Restricted Crossing U-Turn	N-S	1	0	2	1	1	1	2	0				0				2
Unsignalized Restricted Crossing U-Turn	N-S	1	0	2	1	1	1	2	0				0				2
Median U-Turn	N-S	1		2	1	1		2	1			0	0			0	1
Partial Median U-Turn	N-S	1		2	1	1		2	1		0	0	0		1	0	1
Signalized ThruCut	N-S		0	2	1		1	2	0		0		0		1		1
Unsignalized ThruCut	N-S		0	2	1		1	2	0		0		0		1		1
Bowtie	N-S			2	1			2	1			0	0			0	1

For shared lanes, enter "0" in L or R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Number of Lanes for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) PM Opening Year (2028)
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard S
Date	March 19, 2024
Analysis Type	At-Grade Intersections and Interchanges

Volume Echo with Shared Lane Adjustment for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		0	624	214		29	751	0		0	0	0		163	0	22
Two-Way Stop Control	N-S		0	624	214		29	751	0		0	0	0		163	0	22
All-Way Stop Control	FULL		0	624	214		29	751	0		0	0	0		163	0	22
Continuous Green T	E			624	214		29	751							163		163
Signalized Restricted Crossing U-Turn	N-S	0	0	624	214	0	29	751	0				0				22
Unsignalized Restricted Crossing U-Turn	N-S	0	0	624	214	0	29	751	0				0				22
Median U-Turn	N-S	0		624	214	0		751	0			0	0			0	22
Partial Median U-Turn	N-S	0		624	214	0		751	0		0	0	0		163	0	22
Signalized ThruCut	N-S		0	624	214		29	751	0		0		0		163		22
Unsignalized ThruCut	N-S		0	624	214		29	751	0		0		0		163		22
Bowtie	N-S		0	624	214		29	751	0			221	0			163	22

Capacity Analysis for Planning of Junctions

Results Worksheet

Project Name	Chuluota Road (CR 419) ICE Evaluation	***Estimated Volume-to-Capacity Ratio***			
Project Number	Build (4-lane) PM Opening Year (2028)	**Number of Configurations**			
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard S	**< 0.750**	**0.750 - 0.875**	**0.875 - 1.00**	**≥ 1.00**
Date	March 19, 2024	**9**	**0**	**3**	**2**

Results for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Zone 1 (North)		Zone 2 (South)		Zone 3 (East)		Zone 4 (West)		Zone 5 (Center)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			
Traffic Signal	FULL									547	0.31	0.31		
Two-Way Stop Control	N-S									--	0.91	0.91		
All-Way Stop Control	FULL									1803	1.20	1.20		
Continuous Green T	E									514	0.29	0.29		
Signalized Restricted Crossing U-Turn	N-S	594	*0.33*	419	*0.23*	421	*0.23*	457	*0.25*			0.33		
Unsignalized Restricted Crossing U-Turn	N-S	780	*0.24*	838	*0.00*	624	*0.44*	914	*0.00*			0.44		
Median U-Turn	N-S	594	*0.33*	455	*0.25*					608	0.34	0.34		
Partial Median U-Turn	N-S	390	*0.22*	455	*0.25*					562	0.32	0.32		
Bowtie	N-S	229	0.16	163	0.11	163	0.12	0	0.00	402	0.22	0.22		
Signalized ThruCut	N-S									548	0.31	0.31		
Unsignalized ThruCut	N-S									--	1.63	1.63		

Capacity Analysis for Planning of Junctions

Results Worksheet

Results for Roundabouts

TYPE OF ROUNDABOUT	Zone 1 (North)			Zone 3 (East)			Zone 2 (South)			Zone 4 (West)			Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3			
50 ICD	0.90			*0.11*			0.83			*0.48*			0.90		
75 ICD	0.89			*0.07*			0.82			*0.41*			0.89		
2NS X 1EW	*0.33*	*0.34*		*0.00*			*0.31*	0.33		*0.23*			0.34		

Results for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Zone 1 (Rt Mrg)		Zone 2 (Lt Mrg)		Zone 3 (Ctr. 1)		Zone 4 (Ctr. 2)		Zone 5 (Lt Mrg)		Zone 6 (Rt Mrg)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			

TYPE OF INTERSECTION	Overall V/C Ratio	V/C Ranking	Pedestrian Accommodation Score	Bicycle Accommodation Score
Bowtie N-S	0.22	1	--	--
Continuous Green T E	0.29	2	--	--
Traffic Signal	0.31	3	--	--
Signalized ThruCut N-S	0.31	3	--	--
Partial Median U-Turn N-S	0.32	5	--	--
Signalized Restricted Crossing U-Turn N-S	0.33	6	--	--
Median U-Turn N-S	0.34	7	--	--
2NS X 1EW	0.34	8	--	--
Unsignalized Restricted Crossing U-Turn N-S	0.44	9	--	--
75 ICD	0.89	10	--	--

Capacity Analysis for Planning of Junctions

Input Worksheet 1

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) PM Interim Year (2038)
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard S
Date	March 19, 2024
Number of Legs	3
Which leg is the minor street?	E

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	0	0	0	0	3.48%	0.00%
Westbound	0	171	0	23	3.48%	0.00%
Southbound	0	30	991	0	3.48%	0.00%
Northbound	0	0	788	225	3.48%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone		**C3R-Suburban Residential**	
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Equivalent Passenger Car Volume

	Volume (Veh/hr)			
	U-Turn	**Left**	**Thru**	**Right**
Eastbound	0	0	0	0
Westbound	0	177	0	24
Southbound	0	31	1025	0
Northbound	0	0	815	233

Notes:	
Left-Turn Adjustment Factor	*Conversion of left-turning vehicles to equivalent through vehicles*
Right-turn Adjustment Factor	*Conversion of right-turning vehicles to equivalent through vehicles*
U-turn Adjustment Factor	*Conversion of U-turning vehicles to equivalent through vehicles*
Truck to PCE Factor	*1 truck = X Passenger Car Equivalents*
Critical Lane Volume Sum Limit	*Saturation Value for Critical Lane Volume Sum at an intersection*

Capacity Analysis for Planning of Junctions

Step 2A: Base Conditions Analysis

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) PM Interim Year (2038)
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard S
Date	March 19, 2024
Which leg is the minor street?	E

Existing Intersection Configuration	*Traffic Signal*

Number of Lanes for Existing Configuration
(Can be edited in "3- Alt Num Lanes Input" as needed)

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	**FULL**		0	2	1		1	2	0		0	0	0		1	0	1

Results for Existing Configuration

TYPE OF		Sheet	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	
Overall v/c Ratio	0.40	Pedestrian Accommodation Score	--		Bicycle Accommodation Score			--

Step 2B: Alternative Selection

Rankings Inclusion		Yes/No	Comment
At-Grade Non-Roundabout Intersections?		Yes	
Traffic Signal		Yes	
Two-Way Stop Control		Yes	
All-Way Stop Control		Yes	
Continuous Green T		Yes	
Quadrant Roadway	S-W	No	No Nearby Quadrant Roadway
	N-E	No	No Nearby Quadrant Roadway
	S-E	No	No Nearby Quadrant Roadway
	N-W	No	No Nearby Quadrant Roadway
Partial Displaced Left Turn		No	3-Leg Intersection
Displaced Left Turn		No	3-Leg Intersection
Signalized Restricted Crossing U-Turn		Yes	
Unsignalized Restricted Crossing U-Turn		Yes	
Median U-Turn		Yes	
Partial Median U-Turn		Yes	
Bowtie		Yes	
Signalized ThruCut		Yes	
Unsignalized ThruCut		Yes	
Roundabouts?		Yes	
50 ICD Miniroundabout		Yes	
75 ICD Miniroundabout		Yes	
1x1		No	2x1 Roundabout Only
1NS x 2EW		No	2x1 Roundabout Only
2NS x 1EW		Yes	
2x2		No	2x1 Roundabout Only
Ramp Terminal Intersections?		No	
Diamond			
Partial Cloverleaf A			
Partial Cloverleaf B			
Displaced Left Turn Interchange			
Diverging Diamond			
Single Point Diamond			

Continue to Step 3 Step 3

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) PM Interim Year (2038)
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard S
Date	March 19, 2024
Analysis Type	At-Grade Intersections and Interchanges

Number of Lanes for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		0	2	1		1	2	0		0	0	0		1	0	1
Two-Way Stop Control	N-S		0	2	1		1	2	0		0	0	0		1	0	1
All-Way Stop Control	FULL		0	2	1		1	2	0		0	0	0		1	0	1
Continuous Green T	E			2	1		1	2							1		1
Signalized Restricted Crossing U-Turn	N-S	1	0	2	1	1	1	2	0				0				2
Unsignalized Restricted Crossing U-Turn	N-S	1	0	2	1	1	1	2	0				0				2
Median U-Turn	N-S	1		2	1	1		2	1			0	0			0	1
Partial Median U-Turn	N-S	1		2	1	1		2	1		0	0	0		1	0	1
Signalized ThruCut	N-S		0	2	1		1	2	0		0		0		1		1
Unsignalized ThruCut	N-S		0	2	1		1	2	0		0		0		1		1
Bowtie	N-S			2	1			2	1			0	0			0	1

For shared lanes, enter "0" in L or R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Number of Lanes for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) PM Interim Year (2038)
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard S
Date	March 19, 2024
Analysis Type	At-Grade Intersections and Interchanges

Volume Echo with Shared Lane Adjustment for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		0	815	233		31	1025	0		0	0	0		177	0	24
Two-Way Stop Control	N-S		0	815	233		31	1025	0		0	0	0		177	0	24
All-Way Stop Control	FULL		0	815	233		31	1025	0		0	0	0		177	0	24
Continuous Green T	E			815	233		31	1025							177		177
Signalized Restricted Crossing U-Turn	N-S	0	0	815	233	0	31	1025	0				0				24
Unsignalized Restricted Crossing U-Turn	N-S	0	0	815	233	0	31	1025	0				0				24
Median U-Turn	N-S	0		815	233	0		1025	0			0	0			0	24
Partial Median U-Turn	N-S	0		815	233	0		1025	0		0	0	0		177	0	24
Signalized ThruCut	N-S		0	815	233		31	1025	0		0		0		177		24
Unsignalized ThruCut	N-S		0	815	233		31	1025	0		0		0		177		24
Bowtie	N-S		0	815	233		31	1025	0			239	0			177	24

Capacity Analysis for Planning of Junctions

Results Worksheet

Project Name	Chuluota Road (CR 419) ICE Evaluation	***Estimated Volume-to-Capacity Ratio***			
Project Number	Build (4-lane) PM Interim Year (2038)	**Number of Configurations**			
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard S	**< 0.750**	**0.750 - 0.875**	**0.875 - 1.00**	**≥ 1.00**
Date	March 19, 2024	**9**	**0**	**0**	**5**

Results for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Zone 1 (North)		Zone 2 (South)		Zone 3 (East)		Zone 4 (West)		Zone 5 (Center)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			
Traffic Signal	FULL									699	0.40	0.40		
Two-Way Stop Control	N-S									--	1.67	1.67		
All-Way Stop Control	FULL									2305	1.54	1.54		
Continuous Green T	E									626	0.36	0.36		
Signalized Restricted Crossing U-Turn	N-S	749	*0.42*	524	*0.29*	526	*0.29*	601	*0.33*			0.42		
Unsignalized Restricted Crossing U-Turn	N-S	1056	*0.33*	1048	*0.00*	815	*0.63*	1202	*0.00*			0.63		
Median U-Turn	N-S	749	*0.42*	563	*0.31*					764	0.42	0.42		
Partial Median U-Turn	N-S	528	*0.29*	563	*0.31*					714	0.41	0.41		
Bowtie	N-S	249	0.18	177	0.12	177	0.13	0	0.00	541	0.30	0.30		
Signalized ThruCut	N-S									699	0.40	0.40		
Unsignalized ThruCut	N-S									--	3.77	3.77		

Capacity Analysis for Planning of Junctions

Results Worksheet

Results for Roundabouts

TYPE OF ROUNDABOUT	Zone 1 (North)			Zone 3 (East)			Zone 2 (South)			Zone 4 (West)			Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3			
50 ICD	1.24			-0.04			1.04			1.04			1.24		
75 ICD	1.22			-0.09			1.03			0.73			1.22		
2NS X 1EW	0.45	0.47		0.00			0.39	0.41		0.29			0.47		

Results for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Zone 1 (Rt Mrg)		Zone 2 (Lt Mrg)		Zone 3 (Ctr. 1)		Zone 4 (Ctr. 2)		Zone 5 (Lt Mrg)		Zone 6 (Rt Mrg)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			

TYPE OF INTERSECTION	Overall V/C Ratio	V/C Ranking	Pedestrian Accommodation Score	Bicycle Accommodation Score
Bowtie N-S	0.30	1	--	--
Continuous Green T E	0.36	2	--	--
Traffic Signal	0.40	3	--	--
Signalized ThruCut N-S	0.40	3	--	--
Partial Median U-Turn N-S	0.41	5	--	--
Signalized Restricted Crossing U-Turn N-S	0.42	6	--	--
Median U-Turn N-S	0.42	6	--	--
2NS X 1EW	0.47	8	--	--
Unsignalized Restricted Crossing U-Turn N-S	0.63	9	--	--
75 ICD	1.22	10	--	--

Capacity Analysis for Planning of Junctions

Input Worksheet 1

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) PM Design Year (2048)
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard S
Date	March 19, 2024
Number of Legs	3
Which leg is the minor street?	E

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	0	0	0	0	3.48%	0.00%
Westbound	0	185	0	25	3.48%	0.00%
Southbound	0	33	1256	0	3.48%	0.00%
Northbound	0	0	973	243	3.48%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone		**C3R-Suburban Residential**	
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Equivalent Passenger Car Volume

	Volume (Veh/hr)			
	U-Turn	**Left**	**Thru**	**Right**
Eastbound	0	0	0	0
Westbound	0	191	0	26
Southbound	0	34	1300	0
Northbound	0	0	1007	251

Notes:	
Left-Turn Adjustment Factor	*Conversion of left-turning vehicles to equivalent through vehicles*
Right-turn Adjustment Factor	*Conversion of right-turning vehicles to equivalent through vehicles*
U-turn Adjustment Factor	*Conversion of U-turning vehicles to equivalent through vehicles*
Truck to PCE Factor	*1 truck = X Passenger Car Equivalents*
Critical Lane Volume Sum Limit	*Saturation Value for Critical Lane Volume Sum at an intersection*

Capacity Analysis for Planning of Junctions

Step 2A: Base Conditions Analysis

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) PM Design Year (2048)
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard S
Date	March 19, 2024
Which leg is the minor street?	E

Existing Intersection Configuration	*Traffic Signal*

Number of Lanes for Existing Configuration
(Can be edited in "3- Alt Num Lanes Input" as needed)

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		0	2	1		1	2	0		0	0	0		1	0	1

Results for Existing Configuration

TYPE OF		Sheet	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	
Overall v/c Ratio	0.49	Pedestrian Accommodation Score	--		Bicycle Accommodation Score			--

Step 2B: Alternative Selection

Rankings Inclusion		Yes/No	Comment
At-Grade Non-Roundabout Intersections?		Yes	
Traffic Signal		Yes	
Two-Way Stop Control		Yes	
All-Way Stop Control		Yes	
Continuous Green T		Yes	
Quadrant Roadway	S-W	No	No Nearby Quadrant Roadway
	N-E	No	No Nearby Quadrant Roadway
	S-E	No	No Nearby Quadrant Roadway
	N-W	No	No Nearby Quadrant Roadway
Partial Displaced Left Turn		No	3-Leg Intersection
Displaced Left Turn		No	3-Leg Intersection
Signalized Restricted Crossing U-Turn		Yes	
Unsignalized Restricted Crossing U-Turn		Yes	
Median U-Turn		Yes	
Partial Median U-Turn		Yes	
Bowtie		Yes	
Signalized ThruCut		Yes	
Unsignalized ThruCut		Yes	
Roundabouts?		Yes	
50 ICD Miniroundabout		Yes	
75 ICD Miniroundabout		Yes	
1x1		No	2x1 Roundabout Only
1NS x 2EW		No	2x1 Roundabout Only
2NS x 1EW		Yes	
2x2		No	2x1 Roundabout Only
Ramp Terminal Intersections?		No	
Diamond			
Partial Cloverleaf A			
Partial Cloverleaf B			
Displaced Left Turn Interchange			
Diverging Diamond			
Single Point Diamond			

Continue to Step 3 Step 3

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) PM Design Year (2048)
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard S
Date	March 19, 2024
Analysis Type	At-Grade Intersections and Interchanges

Number of Lanes for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		0	2	1		1	2	0		0	0	0		1	0	1
Two-Way Stop Control	N-S		0	2	1		1	2	0		0	0	0		1	0	1
All-Way Stop Control	FULL		0	2	1		1	2	0		0	0	0		1	0	1
Continuous Green T	E			2	1		1	2							1		1
Signalized Restricted Crossing U-Turn	N-S	1	0	2	1	1	1	2	0				0				2
Unsignalized Restricted Crossing U-Turn	N-S	1	0	2	1	1	1	2	0				0				2
Median U-Turn	N-S	1		2	1	1		2	1			0	0			0	1
Partial Median U-Turn	N-S	1		2	1	1		2	1		0	0	0		1	0	1
Signalized ThruCut	N-S		0	2	1		1	2	0		0		0		1		1
Unsignalized ThruCut	N-S		0	2	1		1	2	0		0		0		1		1
Bowtie	N-S			2	1			2	1			0	0			0	1

For shared lanes, enter "0" in L or R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Number of Lanes for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) PM Design Year (2048)
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard S
Date	March 19, 2024
Analysis Type	At-Grade Intersections and Interchanges

Volume Echo with Shared Lane Adjustment for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		0	1007	251		34	1300	0		0	0	0		191	0	26
Two-Way Stop Control	N-S		0	1007	251		34	1300	0		0	0	0		191	0	26
All-Way Stop Control	FULL		0	1007	251		34	1300	0		0	0	0		191	0	26
Continuous Green T	E			1007	251		34	1300							191		191
Signalized Restricted Crossing U-Turn	N-S	0	0	1007	251	0	34	1300	0				0				26
Unsignalized Restricted Crossing U-Turn	N-S	0	0	1007	251	0	34	1300	0				0				26
Median U-Turn	N-S	0		1007	251	0		1300	0			0	0			0	26
Partial Median U-Turn	N-S	0		1007	251	0		1300	0		0	0	0		191	0	26
Signalized ThruCut	N-S		0	1007	251		34	1300	0		0		0		191		26
Unsignalized ThruCut	N-S		0	1007	251		34	1300	0		0		0		191		26
Bowtie	N-S		0	1007	251		34	1300	0			259	0			191	26

Capacity Analysis for Planning of Junctions

Results Worksheet

Project Name	Chuluota Road (CR 419) ICE Evaluation	***Estimated Volume-to-Capacity Ratio***			
Project Number	Build (4-lane) PM Design Year (2048)	**Number of Configurations**			
Location	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard S	**< 0.750**	**0.750 - 0.875**	**0.875 - 1.00**	**≥ 1.00**
Date	March 19, 2024	**8**	**0**	**1**	**5**

Results for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Zone 1 (North)		Zone 2 (South)		Zone 3 (East)		Zone 4 (West)		Zone 5 (Center)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			
Traffic Signal	FULL									851	0.49	0.49		
Two-Way Stop Control	N-S									--	3.12	3.12		
All-Way Stop Control	FULL									2809	1.87	1.87		
Continuous Green T	E									740	0.42	0.42		
Signalized Restricted Crossing U-Turn	N-S	906	*0.50*	629	*0.35*	631	*0.35*	746	*0.41*			0.50		
Unsignalized Restricted Crossing U-Turn	N-S	1334	*0.47*	1258	*0.00*	1007	0.92	1491	*0.00*			0.92		
Median U-Turn	N-S	906	*0.50*	672	*0.37*					922	0.51	0.51		
Partial Median U-Turn	N-S	667	*0.37*	672	*0.37*					868	0.50	0.50		
Bowtie	N-S	268	0.19	191	0.13	191	0.14	0	0.00	681	0.38	0.38		
Signalized ThruCut	N-S									851	0.49	0.49		
Unsignalized ThruCut	N-S									--	8.88	8.88		

Capacity Analysis for Planning of Junctions

Results Worksheet

Results for Roundabouts

TYPE OF ROUNDABOUT	Zone 1 (North)			Zone 3 (East)			Zone 2 (South)			Zone 4 (West)			Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3			
50 ICD	1.60			-0.02			1.25			#####			1.60		
75 ICD	1.56			-0.03			1.24			2.28			2.28		
2NS X 1EW	0.57	0.60		0.00			0.47	0.50		0.37			0.60		

Results for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Zone 1 (Rt Mrg)		Zone 2 (Lt Mrg)		Zone 3 (Ctr. 1)		Zone 4 (Ctr. 2)		Zone 5 (Lt Mrg)		Zone 6 (Rt Mrg)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			

TYPE OF INTERSECTION	Overall V/C Ratio	V/C Ranking	Pedestrian Accommodation Score	Bicycle Accommodation Score
Bowtie N-S	0.38	1	--	--
Continuous Green T E	0.42	2	--	--
Traffic Signal	0.49	3	--	--
Signalized ThruCut N-S	0.49	3	--	--
Signalized Restricted Crossing U-Turn N-S	0.50	5	--	--
Partial Median U-Turn N-S	0.50	5	--	--
Median U-Turn N-S	0.51	7	--	--
2NS X 1EW	0.60	8	--	--
Unsignalized Restricted Crossing U-Turn N-S	0.92	9	--	--
50 ICD	1.60	10	--	--

Table 1, Cypress Lake Glen Boulevard S Cap-x Results

Build Type	Year	Peak Hour	Intersection Control Rank 1 (V/C Ratio)	Intersection Control Rank 2 (V/C Ratio)	Intersection Control Rank 3 (V/C Ratio)	Intersection Control Rank 4 (V/C Ratio)	Intersection Control Rank 5 (V/C Ratio)	Intersection Control Rank 6 (V/C Ratio)	Intersection Control Rank 7 (V/C Ratio)	Intersection Control Rank 8 (V/C Ratio)	Intersection Control Rank 9 (V/C Ratio)	Intersection Control Rank 10 (V/C Ratio)
No-Build (2-lane)	2028	AM	Bowtie N-S (0.34)	Continuous Green T (0.40)	Unsignalized RCUT N-S (0.40)	Traffic Signal (0.44)	Partial MUT N-S (0.44)	Signalized ThruCut N-S (0.44)	Signalized RCUT N-S (0.45)	MUT N-S (0.47)	1 X 1 Roundabout (0.51)	75 ICD Mini-Roundabout (0.67)
	2038		Bowtie N-S (0.40)	Continuous Green T (0.45)	Unsignalized RCUT N-S (0.47)	Traffic Signal (0.50)	Signalized ThruCut N-S (0.50)	Partial MUT N-S (0.51)	Signalized RCUT N-S (0.52)	MUT N-S (0.54)	1 X 1 Roundabout (0.61)	75 ICD Mini-Roundabout (0.81)
	2048		Bowtie N-S (0.46)	Continuous Green T (0.50)	Unsignalized RCUT N-S (0.54)	Traffic Signal (0.57)	Partial MUT N-S (0.57)	Signalized ThruCut N-S (0.57)	Signalized RCUT N-S (0.58)	MUT N-S (0.60)	1 X 1 Roundabout (0.71)	75 ICD Mini-Roundabout (0.94)
	2028	PM	Unsignalized RCUT N-S (0.34)	Bowtie N-S (0.38)	Continuous Green T (0.43)	Traffic Signal (0.47)	Signalized ThruCut N-S (0.47)	Partial MUT N-S (0.48)	Signalized RCUT N-S (0.49)	MUT N-S (0.50)	1 X 1 Roundabout (0.59)	75 ICD Mini-Roundabout (0.77)
	2038		Unsignalized RCUT N-S (0.40)	Bowtie N-S (0.45)	Continuous Green T (0.49)	Traffic Signal (0.55)	Signalized ThruCut N-S (0.55)	Signalized RCUT N-S (0.57)	Partial MUT N-S (0.57)	MUT N-S (0.58)	1 X 1 Roundabout (0.71)	75 ICD Mini-Roundabout (0.93)
	2048		Unsignalized RCUT N-S (0.47)	Bowtie N-S (0.53)	Continuous Green T (0.55)	Traffic Signal (0.63)	Signalized ThruCut N-S (0.63)	Signalized RCUT N-S (0.65)	Partial MUT N-S (0.65)	MUT N-S (0.66)	1 X 1 Roundabout (0.83)	75 ICD Mini-Roundabout (1.09)
Build (4-lane)	2028	AM	Bowtie N-S (0.21)	Continuous Green T (0.28)	2NS X 1EW Roundabout (0.30)	Traffic Signal (0.30)	Signalized ThruCut N-S (0.30)	Partial MUT N-S (0.31)	Signalized RCUT N-S (0.32)	MUT N-S (0.34)	Unsignalized RCUT N-S (0.50)	TWSC (0.76)
	2038		Bowtie N-S (0.27)	Continuous Green T (0.34)	Traffic Signal (0.37)	Signalized ThruCut N-S (0.37)	Partial MUT N-S (0.38)	Signalized RCUT N-S (0.39)	2NS X 1EW Roundabout (0.40)	MUT N-S (0.41)	Unsignalized RCUT N-S (0.70)	75 ICD Mini-Roundabout (1.04)
	2048		Bowtie N-S (0.33)	Continuous Green T (0.40)	Traffic Signal (0.44)	Signalized ThruCut N-S (0.44)	Partial MUT N-S (0.45)	Signalized RCUT N-S (0.46)	MUT N-S (0.48)	2NS X 1EW Roundabout (0.51)	Unsignalized RCUT N-S (0.99)	75 ICD Mini-Roundabout (1.32)
	2028	PM	Bowtie N-S (0.22)	Continuous Green T (0.29)	Traffic Signal (0.31)	Signalized ThruCut N-S (0.31)	Partial MUT N-S (0.32)	Signalized RCUT N-S (0.33)	MUT N-S (0.34)	2NS X 1EW Roundabout (0.34)	Unsignalized RCUT N-S (0.44)	75 ICD Mini-Roundabout (0.89)
	2038		Bowtie N-S (0.30)	Continuous Green T (0.36)	Traffic Signal (0.40)	Signalized ThruCut N-S (0.40)	Partial MUT N-S (0.41)	Signalized RCUT N-S (0.42)	MUT N-S (0.42)	2NS X 1EW Roundabout (0.47)	Unsignalized RCUT N-S (0.63)	75 ICD Mini-Roundabout (1.22)
	2048		Bowtie N-S (0.38)	Continuous Green T (0.42)	Traffic Signal (0.49)	Signalized ThruCut N-S (0.49)	Signalized RCUT N-S (0.50)	Partial MUT N-S (0.50)	MUT N-S (0.51)	2NS X 1EW Roundabout (0.60)	Unsignalized RCUT N-S (0.92)	50 ICD Mini-Roundabout (1.60)

Greyed out cells indicate that the intersection control type may not be viable due to right-of-way, cost, or other factors

V/C Ratio Legend	
	< 0.750
	0.750 - 0.875
	0.875 - 1.00
	≥ 1.00

SPICE WORKSHEETS

Florida Department of Transportation
Safety Performance for Intersection Control Evaluation Tool

Results

Summary of crash prediction results for each alternative

Project Information

Project Name:	Chuluota Road (CR 419) ICE Evaluation	**Intersection Type**	At-Grade Intersection
Intersection:	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard S	**Opening Year**	2028
Agency:	Orange County	**Design Year**	0
Project Reference:	No-Build (2-lane) Opening Year (2028)	**Facility Type**	On Rural Two Lane Highway
City:	Orlando	**Number of Legs**	3-leg
State:	FL	**1-Way/2-Way**	
Date:	1/31/2024	**# of Major Street Lanes (both directions)**	
Analyst:	JMT	**Major Street Approach Speed**	

Crash Prediction Summary

Control Strategy	Crash Type	Opening Year	Design Year	Total Project Life Cycle	Crash Prediction Rank	AADT Within SPF Prediction Range?		Source of Prediction	SSI Score		
						(Open Year)	(Design Year)		Opening Year	Design Year	Rank
Traffic Signal	Total	3.05	--	--	7	Yes	Yes	Uncalibrated SPF w/ EB	98		6
	Fatal & Injury	1.14	--	--							
Minor Road Stop	Total	3.31	--	--	8	Yes	Yes	Calibrated SPF	95		7
	Fatal & Injury	1.37	--	--							
All Way Stop	Total	No SPF	--	--	--	No	Yes	Uncalibrated SPF w/ EB	100		2
	Fatal & Injury	No SPF	--	--							
1-lane Roundabout	Total	0.89	--	--	1	Yes	Yes	Uncalibrated SPF	100		1
	Fatal & Injury	0.25	--	--							
Median U-Turn (MUT)	Total	1.92	--	--	5	N/A	N/A	CMF	--		--
	Fatal & Injury	0.86	--	--							
Signalized RCUT	Total	3.22	--	--	2	Yes	Yes	Uncalibrated SPF	99		3
	Fatal & Injury	0.66	--	--							
Unsignalized RCUT	Total	3.26	--	--	3	Yes	Yes	Uncalibrated SPF	99		4
	Fatal & Injury	0.77	--	--							
Signalized Thru-Cut	Total	No SPF	--	--	--	N/A	N/A	N/A	--		--
	Fatal & Injury	No SPF	--	--							
Unsignalized Thru-Cut	Total	No SPF	--	--	--	N/A	N/A	N/A	--		--
	Fatal & Injury	No SPF	--	--							
Bowtie	Total	No SPF	--	--	--	N/A	N/A	N/A	--	--	--
	Fatal & Injury	No SPF	--	--							
Continuous Green-T Intersection	Total	2.92	--	--	6	N/A	N/A	CMF	99		5
	Fatal & Injury	0.97	--	--							
Jughandle	Total	2.25	--	--	4	N/A	N/A	CMF	--		--
	Fatal & Injury	0.84	--	--							
Other 1*	Total	No SPF	--	--	--	N/A	N/A	CMF	--		--
	Fatal & Injury	No SPF	--	--							
Other 2*	Total	No SPF	--	--	--	N/A	N/A	CMF	--		--
	Fatal & Injury	No SPF	--	--							
			--	--							
			--	--							

Control Strategy Selection and Inputs

Specify the Facility Level Inputs and the Control Strategies to be included in the SPICE Analysis.

Intersection Type	At-Grade Intersection
Analysis Year	Opening Year Only
Opening Year	2028
Design Year	
Facility Type	On Rural Two Lane Highway
Number of Legs	3-leg
1-Way/2-Way	
# of Major Street Lanes (both directions)	
Major Street Approach Speed	
Opening Year - Major Road AADT	15,850
Opening Year - Minor Road AADT	3,600
Design Year - Major Road AADT	
Design Year - Minor Road AADT	

For more information on how to determine these values, see the "Definitions" worksheet

Control Strategy	Include	Base Intersection		
Traffic Signal	Yes	--		
Traffic Signal (Alternative Configuration)	No	--		
Minor Road Stop Control	Yes	--		
All Way Stop Control	Yes	--	No SPF Available	No SPF
1-Lane Roundabout	Yes	--		
2-Lane Roundabout	No	--		
Displaced Left Turn (DLT)	No	Traffic Signal		
Median U-Turn (MUT)	Yes	Traffic Signal		
Signalized Restricted Crossing U-Turn (RCUT)	Yes	--		
Unsignalized Restricted Crossing U-Turn (RCUT)	Yes	--		
Signalized Thru-Cut*	Yes	--	*SSI Only, No Crash Prediction Available	
Unsignalized Thru-Cut*	Yes	--	*SSI Only, No Crash Prediction Available	
Bowtie*	Yes	--	*SSI Only, No Crash Prediction Available	
Continuous Green-T Intersection	Yes	Traffic Signal		
Jughandle	Yes	Traffic Signal		
Other 1*		Traffic Signal	*Please Select	
Other 2*		Minor Road Stop	*Please Select	

Safe System for Intersection (SSI) Inputs

Specify the geomtric, exposure, severity, and conflicting traffic complexity inputs required for an SSI analysis.

1. Roadway Geometry	Lanes
Major number thru lanes (one direction)	1
Minor number thru lanes (one direction)	0

Major Street Designation	
Select major street direction	N-S
Median Presence on Major Road	No
Median Presence on Minor Road	Yes

	Required Inputs
	Default Available, Override Optional
	Planning-Level Default Input
	Computed Value, Override Optional
	Computed Value - No Override
	Disabled Cell (Often based on input selections)

2. Complete the "Exposure" inputs. These inputs will apply to all interesections selected for analysis.
3. Complete the "Severity" inputs
4. Complete the "Conflicting Traffic Complexity" inputs

2. Exposure - All Intersections

Average Daily Traffic (veh/day)	Open	Design
Major	15,850	
Minor	3,600	

ADT Directional Split	
Major	0.50
Minor	0.50

Nonmotorized Total ADBP (ped-bike/day)	Activity Level	ADBP Value (ped-
Open Year Total Intersection NM	Low (20)	20
Design Year Total Intersection NM		

(or overwrite ped movement ADBPs below)

Nonmotorized Movement ADBP (ped-bike/day)	Open	Design
Major NM 1 (NM mvmt crossing Maj1)	7	
Major NM 2	7	
Minor NM 1	7	
~~Minor NM 2~~	~~0~~	

Are turning movement ADT values are available?	No	If "Yes", input values in Table 2-A
Are peak hour turning movement counts available?	Yes	If "Yes", input values in Table 2-B

If no turning movment volumes or counts are available, a user can optionally override the planning-level default turning movment proportions in Table 2-C

Table 2-A: Turning Movement (vol/day)

	Open	Design
Major Thru 1	6629.107	
~~Major Left Turn 1~~	~~0~~	
Major Right Turn 1	1295.893	
Major Thru 2	7693.464	
Major Left Turn 2	231.5361	
~~Major Right Turn 2~~	~~0~~	
~~Minor Thru 1~~	~~580.1038~~	
Minor Left Turn 1	1068.089	
Minor Right Turn 1	151.8072	
~~Minor Thru 2~~	~~0~~	
~~Minor Left Turn 2~~	~~0~~	
~~Minor Right Turn 2~~	~~0~~	

Table 2-B: Turning Movement Counts (Optional)

	Mvmt	AM Peak	AM %	PM Peak	PM %	Avg %
Major Thru 1	NBT	470	0.735524257	538	0.589266	0.662395
~~Major Left Turn 1~~	~~NBL~~	~~100~~	~~0.156494523~~	~~175~~	~~0.191676~~	~~0.174085~~
Major Right Turn 1	NBR	69	0.107981221	200	0.219058	0.16352
Major Thru 2	SBT	546	0.93814433	631	0.923865	0.931005
Major Left Turn 2	SBL	11	0.018900344	27	0.039531	0.029216
~~Major Right Turn 2~~	~~SBR~~	~~25~~	~~0.042955326~~	~~25~~	~~0.036603~~	~~0.039779~~
~~Minor Thru 1~~	~~EBT~~	~~100~~	~~0.307692308~~	~~75~~	~~0.301205~~	~~0.304449~~
Minor Left Turn 1	EBL	186	0.572307692	153	0.614458	0.593383
Minor Right Turn 1	EBR	39	0.12	21	0.084337	0.102169
~~Minor Thru 2~~	~~WBT~~	~~75~~	~~0.428571429~~	~~100~~	~~0.5~~	~~0.464286~~
~~Minor Left Turn 2~~	~~WBL~~	~~50~~	~~0.285714286~~	~~50~~	~~0.25~~	~~0.267857~~
~~Minor Right Turn 2~~	~~WBR~~	~~50~~	~~0.285714286~~	~~50~~	~~0.25~~	~~0.267857~~

Table 2-C: Turning Proportions (optional)

	Decimal
Major Thru 1	0.836480364
~~Major Left Turn 1~~	~~0~~
Major Right Turn 1	0.163519636
Major Thru 2	0.970784089
Major Left Turn 2	0.029215911
~~Major Right Turn 2~~	~~0~~
~~Minor Thru 1~~	~~0.322279889~~
Minor Left Turn 1	0.593382762
Minor Right Turn 1	0.084337349
~~Minor Thru 2~~	~~0~~
~~Minor Left Turn 2~~	~~0~~
~~Minor Right Turn 2~~	~~0~~

3. Severity

Vehicle Speeds	mph
Major Posted Speed Limit	50
Minor Posted Speed Limit	35
Major thru	50
Major left	20
Major right	15
Minor thru	29.75
Minor left	20
Minor right	15
Stop near	15
Stop far	25
Signal near	15
Signal far	25

4. Conflicting Traffic Complexity

Traffic Control	Decimal
Base Traffic Control Adjustment Value (BTCAV) for permitted	1
Base Traffic Control Adjustment Value (BTCAV) for protected/permitted	0.85
Base Traffic Control Adjustment Value (BTCAV) for protected	0.01
Base Traffic Control Adjustment Value (BTCAV) for stop-controlled	0.45
Weight, f, for permitted	0.5
Weight, f, for protected/permitted	0.5
Weight, f, for protected	0.5
Weight, f, for stop-controlled	0.5
Major LT signal phasing (drop-down)	Protected/Permitted
Minor LT signal phasing (drop-down)	Protected
Exclusive Pedestrian phasing (drop-down)	No

Historical Crash Data Input

Note: In order to use Empirical Bayes (EB), the historical intersection type must be a traffic signal or a minor road stop. Additionally, this alternative must be selected to be included in the analysis, and the historical intersection specified below. Up to 10 years of historical data can be used to perform the EB adjustment.

Is historical crash data available? Yes

Number of years available: 5 (Up to 10)

Historical Intx Type: 3SG

First Year Data is available: 2016

Historical Crash Counts		Year										
		2016	2017	2018	2019	2020	--	--	--	--	--	Total
Combined	Total	2	3	3	7	8	--	--	--	--	--	23
	Fatal/Injury	1	2	0	1	4						8
	PDO	1	1	3	6	4						15
Single-Vehicle	Total											
	Fatal/Injury											
	PDO											
Multiple-Vehicle	Total											
	Fatal/Injury											
	PDO											
Veh-Ped	Fatal/Injury	0	0	0	0	0						0
Veh-Bike	Fatal/Injury	0	0	1	0	0						1
Total	All	2	3	4	7	8	--	--	--	--	--	24

Florida Department of Transportation
Safety Performance for Intersection Control Evaluation Tool

Results

Summary of crash prediction results for each alternative

Project Information

Project Name:	Chuluota Road (CR 419) ICE Evaluation	**Intersection Type**	At-Grade Intersection
Intersection:	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard S	**Opening Year**	2038
Agency:	Orange County	**Design Year**	0
Project Reference:	No-Build (2-lane) Interim Year (2038)	**Facility Type**	On Rural Two Lane Highway
City:	Orlando	**Number of Legs**	3-leg
State:	FL	**1-Way/2-Way**	
Date:	1/31/2024	**# of Major Street Lanes (both directions)**	
Analyst:	JMT	**Major Street Approach Speed**	

Crash Prediction Summary

Control Strategy	Crash Type	Opening Year	Design Year	Total Project Life Cycle	Crash Prediction Rank	AADT Within SPF Prediction Range?		Source of Prediction	SSI Score		
						(Open Year)	(Design Year)		Opening Year	Design Year	Rank
Traffic Signal	Total	3.24	--	--	7	Yes	Yes	Uncalibrated SPF w/ EB	97		6
	Fatal & Injury	1.21	--	--							
Minor Road Stop	Total	3.91	--	--	8	Yes	Yes	Calibrated SPF	93		7
	Fatal & Injury	1.62	--	--							
All Way Stop	Total	No SPF	--	--	--	No	Yes	Uncalibrated SPF w/ EB	99		2
	Fatal & Injury	No SPF	--	--							
1-lane Roundabout	Total	0.98	--	--	1	No	Yes	Uncalibrated SPF	100		1
	Fatal & Injury	0.29	--	--							
Median U-Turn (MUT)	Total	2.04	--	--	5	N/A	N/A	CMF	--		--
	Fatal & Injury	0.92	--	--							
Signalized RCUT	Total	3.98	--	--	2	Yes	Yes	Uncalibrated SPF	99		3
	Fatal & Injury	0.81	--	--							
Unsignalized RCUT	Total	3.55	--	--	3	Yes	Yes	Uncalibrated SPF	98		4
	Fatal & Injury	0.86	--	--							
Signalized Thru-Cut	Total	No SPF	--	--	--	N/A	N/A	N/A	--		--
	Fatal & Injury	No SPF	--	--							
Unsignalized Thru-Cut	Total	No SPF	--	--	--	N/A	N/A	N/A	--		--
	Fatal & Injury	No SPF	--	--							
Bowtie	Total	No SPF	--	--	--	N/A	N/A	N/A	--	--	--
	Fatal & Injury	No SPF	--	--							
Continuous Green-T Intersection	Total	3.11	--	--	6	N/A	N/A	CMF	98		5
	Fatal & Injury	1.03	--	--							
Jughandle	Total	2.40	--	--	4	N/A	N/A	CMF	--		--
	Fatal & Injury	0.89	--	--							
Other 1*	Total	No SPF	--	--	--	N/A	N/A	CMF	--		--
	Fatal & Injury	No SPF	--	--							
Other 2*	Total	No SPF	--	--	--	N/A	N/A	CMF	--		--
	Fatal & Injury	No SPF	--	--							
			--	--							
			--	--							

Control Strategy Selection and Inputs

Specify the Facility Level Inputs and the Control Strategies to be included in the SPICE Analysis.

Intersection Type	At-Grade Intersection
Analysis Year	Opening Year Only
Opening Year	2038
Design Year	
Facility Type	On Rural Two Lane Highway
Number of Legs	3-leg
1-Way/2-Way	
# of Major Street Lanes (both directions)	
Major Street Approach Speed	
Opening Year - Major Road AADT	18,600
Opening Year - Minor Road AADT	3,900
Design Year - Major Road AADT	
Design Year - Minor Road AADT	

For more information on how to determine these values, see the "Definitions" worksheet

Control Strategy	Include	Base Intersection		
Traffic Signal	Yes	--		
Traffic Signal (Alternative Configuration)	No	--		
Minor Road Stop Control	Yes	--		
All Way Stop Control	Yes	--	No SPF Available	No SPF
1-Lane Roundabout	Yes	--	Opening Year AADT Outside of SPF Development Range	
2-Lane Roundabout	No	--		
Displaced Left Turn (DLT)	No	Traffic Signal		
Median U-Turn (MUT)	Yes	Traffic Signal		
Signalized Restricted Crossing U-Turn (RCUT)	Yes	--		
Unsignalized Restricted Crossing U-Turn (RCUT)	Yes	--		
Signalized Thru-Cut*	Yes	--	*SSI Only, No Crash Prediction Available*	
Unsignalized Thru-Cut*	Yes	--	*SSI Only, No Crash Prediction Available*	
Bowtie*	Yes	--	*SSI Only, No Crash Prediction Available*	
Continuous Green-T Intersection	Yes	Traffic Signal		
Jughandle	Yes	Traffic Signal		
Other 1*		Traffic Signal	*Please Select*	
Other 2*		Minor Road Stop	*Please Select*	

Safe System for Intersection (SSI) Inputs

Specify the geomtric, exposure, severity, and conflicting traffic complexity inputs required for an SSI analysis.

1. Roadway Geometry	Lanes
Major number thru lanes (one direction)	1
Minor number thru lanes (one direction)	0

Major Street Designation	
Select major street direction	N-S
Median Presence on Major Road	No
Median Presence on Minor Road	Yes

	Required Inputs
	Default Available, Override Optional
	Planning-Level Default Input
	Computed Value, Override Optional
	Computed Value - No Override
	Disabled Cell (Often based on input selections)

2. Complete the "Exposure" inputs. These inputs will apply to all interesections selected for analysis.
3. Complete the "Severity" inputs
4. Complete the "Conflicting Traffic Complexity" inputs

2. Exposure - All Intersections

Average Daily Traffic (veh/day)	Open	Design
Major	18,600	
Minor	3,900	

ADT Directional Split	
Major	0.50
Minor	0.50

Nonmotorized Total ADBP (ped-bike/day)	Activity Level	ADBP Value (ped-
Open Year Total Intersection NM	Low (20)	20
Design Year Total Intersection NM		

(or overwrite ped movement ADBPs below)

Nonmotorized Movement ADBP (ped-bike/day)	Open	Design
Major NM 1 (NM mvmt crossing Maj1)	7	
Major NM 2	7	
Minor NM 1	7	
~~Minor NM 2~~	~~0~~	

Are turning movement ADT values are available?	No	If "Yes", input values in Table 2-A
Are peak hour turning movement counts available?	Yes	If "Yes", input values in Table 2-B

If no turning movment volumes or counts are available, a user can optionally override the planning-level default turning movment proportions in Table 2-C

Table 2-A: Turning Movement (vol/day)

	Open	Design
Major Thru 1	7875.962	
~~Major Left Turn 1~~	~~0~~	
Major Right Turn 1	1424.038	
Major Thru 2	9058.47	
Major Left Turn 2	241.5298	
~~Major Right Turn 2~~	~~0~~	
~~Minor Thru 1~~	~~612.2286~~	
Minor Left Turn 1	1170.193	
Minor Right Turn 1	167.5781	
~~Minor Thru 2~~	~~0~~	
~~Minor Left Turn 2~~	~~0~~	
~~Minor Right Turn 2~~	~~0~~	

Table 2-B: Turning Movement Counts (Optional)

	Mvmt	AM Peak	AM %	PM Peak	PM %	Avg %
Major Thru 1	NBT	550	0.761772853	628	0.620553	0.691163
~~Major Left Turn 1~~	~~NBL~~	~~100~~	~~0.138504155~~	~~175~~	~~0.172925~~	~~0.155715~~
Major Right Turn 1	NBR	72	0.099722992	209	0.206522	0.153122
Major Thru 2	SBT	647	0.945906433	761	0.934889	0.940398
Major Left Turn 2	SBL	12	0.01754386	28	0.034398	0.025971
~~Major Right Turn 2~~	~~SBR~~	~~25~~	~~0.036549708~~	~~25~~	~~0.030713~~	~~0.033631~~
~~Minor Thru 1~~	~~EBT~~	~~100~~	~~0.298507463~~	~~75~~	~~0.292969~~	~~0.295738~~
Minor Left Turn 1	EBL	194	0.579104478	159	0.621094	0.600099
Minor Right Turn 1	EBR	41	0.12238806	22	0.085938	0.104163
~~Minor Thru 2~~	~~WBT~~	~~75~~	~~0.428571429~~	~~100~~	~~0.5~~	~~0.464286~~
~~Minor Left Turn 2~~	~~WBL~~	~~50~~	~~0.285714286~~	~~50~~	~~0.25~~	~~0.267857~~
~~Minor Right Turn 2~~	~~WBR~~	~~50~~	~~0.285714286~~	~~50~~	~~0.25~~	~~0.267857~~

Table 2-C: Turning Proportions (optional)

	Decimal
Major Thru 1	0.846877635
~~Major Left Turn 1~~	~~0~~
Major Right Turn 1	0.153122365
Major Thru 2	0.974029053
Major Left Turn 2	0.025970947
~~Major Right Turn 2~~	~~0~~
~~Minor Thru 1~~	~~0.313963386~~
Minor Left Turn 1	0.600099114
Minor Right Turn 1	0.0859375
~~Minor Thru 2~~	~~0~~
~~Minor Left Turn 2~~	~~0~~
~~Minor Right Turn 2~~	~~0~~

3. Severity

Vehicle Speeds	mph
Major Posted Speed Limit	50
Minor Posted Speed Limit	35
Major thru	50
Major left	20
Major right	15
Minor thru	29.75
Minor left	20
Minor right	15
Stop near	15
Stop far	25
Signal near	15
Signal far	25

4. Conflicting Traffic Complexity

Traffic Control	Decimal
Base Traffic Control Adjustment Value (BTCAV) for permitted	1
Base Traffic Control Adjustment Value (BTCAV) for protected/permitted	0.85
Base Traffic Control Adjustment Value (BTCAV) for protected	0.01
Base Traffic Control Adjustment Value (BTCAV) for stop-controlled	0.45
Weight, f, for permitted	0.5
Weight, f, for protected/permitted	0.5
Weight, f, for protected	0.5
Weight, f, for stop-controlled	0.5
Major LT signal phasing (drop-down)	Protected/Permitted
Minor LT signal phasing (drop-down)	Protected
Exclusive Pedestrian phasing (drop-down)	No

Historical Crash Data Input

Note: In order to use Empirical Bayes (EB), the historical intersection type must be a traffic signal or a minor road stop. Additionally, this alternative must be selected to be included in the analysis, and the historical intersection specified below. Up to 10 years of historical data can be used to perform the EB adjustment.

Is historical crash data available? Yes

Number of years available: 5 (Up to 10)

Historical Intx Type: 3SG

First Year Data is available: 2016

Historical Crash Counts		Year										
		2016	2017	2018	2019	2020	--	--	--	--	--	Total
Combined	Total	2	3	3	7	8	--	--	--	--	--	23
	Fatal/Injury	1	2	0	1	4						8
	PDO	1	1	3	6	4						15
Single-Vehicle	Total											
	Fatal/Injury											
	PDO											
Multiple-Vehicle	Total											
	Fatal/Injury											
	PDO											
Veh-Ped	Fatal/Injury	0	0	0	0	0						0
Veh-Bike	Fatal/Injury	0	0	1	0	0						1
Total	All	2	3	4	7	8	--	--	--	--	--	24

Florida Department of Transportation
Safety Performance for Intersection Control Evaluation Tool

Results

Summary of crash prediction results for each alternative

Project Information

Project Name:	Chuluota Road (CR 419) ICE Evaluation	**Intersection Type**	At-Grade Intersection
Intersection:	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard S	**Opening Year**	2048
Agency:	Orange County	**Design Year**	0
Project Reference:	No-Build (2-lane) Design Year (2048)	**Facility Type**	On Rural Two Lane Highway
City:	Orlando	**Number of Legs**	3-leg
State:	FL	**1-Way/2-Way**	
Date:	1/31/2024	**# of Major Street Lanes (both directions)**	
Analyst:	JMT	**Major Street Approach Speed**	

Crash Prediction Summary

Control Strategy	Crash Type	Opening Year	Design Year	Total Project Life Cycle	Crash Prediction Rank	AADT Within SPF Prediction Range?		Source of Prediction	SSI Score		
						(Open Year)	(Design Year)		Opening Year	Design Year	Rank
Traffic Signal	Total	3.41	--	--	7	Yes	Yes	Uncalibrated SPF w/ EB	97		6
	Fatal & Injury	1.27	--	--							
Minor Road Stop	Total	4.46	--	--	8	No	Yes	Calibrated SPF	92		7
	Fatal & Injury	1.85	--	--							
All Way Stop	Total	No SPF	--	--	--	No	Yes	Uncalibrated SPF w/ EB	99		2
	Fatal & Injury	No SPF	--	--							
1-lane Roundabout	Total	1.06	--	--	1	No	Yes	Uncalibrated SPF	100		1
	Fatal & Injury	0.33	--	--							
Median U-Turn (MUT)	Total	2.15	--	--	4	N/A	N/A	CMF	--		--
	Fatal & Injury	0.97	--	--							
Signalized RCUT	Total	4.74	--	--	5	Yes	Yes	Uncalibrated SPF	99		3
	Fatal & Injury	0.97	--	--							
Unsignalized RCUT	Total	3.83	--	--	2	Yes	Yes	Uncalibrated SPF	98		4
	Fatal & Injury	0.94	--	--							
Signalized Thru-Cut	Total	No SPF	--	--	--	N/A	N/A	N/A	--		--
	Fatal & Injury	No SPF	--	--							
Unsignalized Thru-Cut	Total	No SPF	--	--	--	N/A	N/A	N/A	--		--
	Fatal & Injury	No SPF	--	--							
Bowtie	Total	No SPF	--	--	--	N/A	N/A	N/A	--	--	--
	Fatal & Injury	No SPF	--	--							
Continuous Green-T Intersection	Total	3.27	--	--	6	N/A	N/A	CMF	98		5
	Fatal & Injury	1.08	--	--							
Jughandle	Total	2.52	--	--	3	N/A	N/A	CMF	--		--
	Fatal & Injury	0.94	--	--							
Other 1*	Total	No SPF	--	--	--	N/A	N/A	CMF	--		--
	Fatal & Injury	No SPF	--	--							
Other 2*	Total	No SPF	--	--	--	N/A	N/A	CMF	--		--
	Fatal & Injury	No SPF	--	--							
			--	--							
			--	--							

Control Strategy Selection and Inputs

Specify the Facility Level Inputs and the Control Strategies to be included in the SPICE Analysis.

Intersection Type	At-Grade Intersection	
Analysis Year	Opening Year Only	
Opening Year	2048	
Design Year		
Facility Type	On Rural Two Lane Highway	For more information on how to determine these values, see the "Definitions" worksheet
Number of Legs	3-leg	
1-Way/2-Way		
# of Major Street Lanes (both directions)		
Major Street Approach Speed		
Opening Year - Major Road AADT	21,350	
Opening Year - Minor Road AADT	4,100	
Design Year - Major Road AADT		
Design Year - Minor Road AADT		

Control Strategy	**Include**	**Base Intersection**		
Traffic Signal	Yes	--		
Traffic Signal (Alternative Configuration)	No	--		
Minor Road Stop Control	Yes	--	Opening Year AADT Outside of SPF Development Range	
All Way Stop Control	Yes	--	No SPF Available	No SPF
1-Lane Roundabout	Yes	--	Opening Year AADT Outside of SPF Development Range	
2-Lane Roundabout	No	--		
Displaced Left Turn (DLT)	No	Traffic Signal		
Median U-Turn (MUT)	Yes	Traffic Signal		
Signalized Restricted Crossing U-Turn (RCUT)	Yes	--		
Unsignalized Restricted Crossing U-Turn (RCUT)	Yes	--		
Signalized Thru-Cut*	Yes	--	*SSI Only, No Crash Prediction Available	
Unsignalized Thru-Cut*	Yes	--	*SSI Only, No Crash Prediction Available	
Bowtie*	Yes	--	*SSI Only, No Crash Prediction Available	
Continuous Green-T Intersection	Yes	Traffic Signal		
Jughandle	Yes	Traffic Signal		
Other 1*		Traffic Signal	*Please Select	
Other 2*		Minor Road Stop	*Please Select	

Safe System for Intersection (SSI) Inputs

Specify the geomtric, exposure, severity, and conflicting traffic complexity inputs required for an SSI analysis.

1. Roadway Geometry	Lanes
Major number thru lanes (one direction)	1
Minor number thru lanes (one direction)	0

Major Street Designation	
Select major street direction	N-S
Median Presence on Major Road	No
Median Presence on Minor Road	Yes

	Required Inputs
	Default Available, Override Optional
	Planning-Level Default Input
	Computed Value, Override Optional
	Computed Value - No Override
	Disabled Cell (Often based on input selections)

2. Complete the "Exposure" inputs. These inputs will apply to all interesections selected for analysis.
3. Complete the "Severity" inputs
4. Complete the "Conflicting Traffic Complexity" inputs

2. Exposure - All Intersections

Average Daily Traffic (veh/day)	Open	Design
Major	21,350	
Minor	4,100	

ADT Directional Split	
Major	0.50
Minor	0.50

Nonmotorized Total ADBP (ped-bike/day)	Activity Level	ADBP Value (ped-
Open Year Total Intersection NM	Low (20)	20
Design Year Total Intersection NM		

(or overwrite ped movement ADBPs below)

Nonmotorized Movement ADBP (ped-bike/day)	Open	Design
Major NM 1 (NM mvmt crossing Maj1)	7	
Major NM 2	7	
Minor NM 1	7	
~~Minor NM 2~~	~~0~~	

Are turning movement ADT values are available?	No	If "Yes", input values in Table 2-A
Are peak hour turning movement counts available?	Yes	If "Yes", input values in Table 2-B

If no turning movment volumes or counts are available, a user can optionally override the planning-level default turning movment proportions in Table 2-C

Table 2-A: Turning Movement (vol/day)

	Open	Design
Major Thru 1	9130.718	
~~Major Left Turn 1~~	~~0~~	
Major Right Turn 1	1544.282	
Major Thru 2	10429.51	
Major Left Turn 2	245.4927	
~~Major Right Turn 2~~	~~0~~	
~~Minor Thru 1~~	~~631.414~~	
Minor Left Turn 1	1247.103	
Minor Right Turn 1	171.4829	
~~Minor Thru 2~~	~~0~~	
~~Minor Left Turn 2~~	~~0~~	
~~Minor Right Turn 2~~	~~0~~	

Table 2-B: Turning Movement Counts (Optional)

	Mvmt	AM Peak	AM %	PM Peak	PM %	Avg %
Major Thru 1	NBT	629	0.782338308	719	0.646583	0.714461
~~Major Left Turn 1~~	~~NBL~~	~~100~~	~~0.124378109~~	~~175~~	~~0.157374~~	~~0.140876~~
Major Right Turn 1	NBR	75	0.093283582	218	0.196043	0.144663
Major Thru 2	SBT	747	0.952806122	891	0.942857	0.947832
Major Left Turn 2	SBL	12	0.015306122	29	0.030688	0.022997
~~Major Right Turn 2~~	~~SBR~~	~~25~~	~~0.031887755~~	~~25~~	~~0.026455~~	~~0.029171~~
~~Minor Thru 1~~	~~EBT~~	~~100~~	~~0.289855072~~	~~75~~	~~0.285171~~	~~0.287513~~
Minor Left Turn 1	EBL	202	0.585507246	166	0.631179	0.608343
Minor Right Turn 1	EBR	43	0.124637681	22	0.08365	0.104144
~~Minor Thru 2~~	~~WBT~~	~~75~~	~~0.428571429~~	~~100~~	~~0.5~~	~~0.464286~~
~~Minor Left Turn 2~~	~~WBL~~	~~50~~	~~0.285714286~~	~~50~~	~~0.25~~	~~0.267857~~
~~Minor Right Turn 2~~	~~WBR~~	~~50~~	~~0.285714286~~	~~50~~	~~0.25~~	~~0.267857~~

Table 2-C: Turning Proportions (optional)

	Decimal
Major Thru 1	0.855336626
~~Major Left Turn 1~~	~~0~~
Major Right Turn 1	0.144663374
Major Thru 2	0.977003023
Major Left Turn 2	0.022996977
~~Major Right Turn 2~~	~~0~~
~~Minor Thru 1~~	~~0.308006833~~
Minor Left Turn 1	0.608342977
Minor Right Turn 1	0.08365019
~~Minor Thru 2~~	~~0~~
~~Minor Left Turn 2~~	~~0~~
~~Minor Right Turn 2~~	~~0~~

3. Severity

Vehicle Speeds	mph
Major Posted Speed Limit	50
Minor Posted Speed Limit	35
Major thru	50
Major left	20
Major right	15
Minor thru	29.75
Minor left	20
Minor right	15
Stop near	15
Stop far	25
Signal near	15
Signal far	25

4. Conflicting Traffic Complexity

Traffic Control	Decimal
Base Traffic Control Adjustment Value (BTCAV) for permitted	1
Base Traffic Control Adjustment Value (BTCAV) for protected/permitted	0.85
Base Traffic Control Adjustment Value (BTCAV) for protected	0.01
Base Traffic Control Adjustment Value (BTCAV) for stop-controlled	0.45
Weight, f, for permitted	0.5
Weight, f, for protected/permitted	0.5
Weight, f, for protected	0.5
Weight, f, for stop-controlled	0.5
Major LT signal phasing (drop-down)	Protected/Permitted
Minor LT signal phasing (drop-down)	Protected
Exclusive Pedestrian phasing (drop-down)	No

Historical Crash Data Input

Note: In order to use Empirical Bayes (EB), the historical intersection type must be a traffic signal or a minor road stop. Additionally, this alternative must be selected to be included in the analysis, and the historical intersection specified below. Up to 10 years of historical data can be used to perform the EB adjustment.

Is historical crash data available? Yes

Number of years available: 5 (Up to 10)

Historical Intx Type: 3SG

First Year Data is available: 2016

Historical Crash Counts		Year										
		2016	2017	2018	2019	2020	--	--	--	--	--	Total
Combined	Total	2	3	3	7	8	--	--	--	--	--	23
	Fatal/Injury	1	2	0	1	4						8
	PDO	1	1	3	6	4						15
Single-Vehicle	Total											
	Fatal/Injury											
	PDO											
Multiple-Vehicle	Total											
	Fatal/Injury											
	PDO											
Veh-Ped	Fatal/Injury	0	0	0	0	0						0
Veh-Bike	Fatal/Injury	0	0	1	0	0						1
Total	All	2	3	4	7	8	--	--	--	--	--	24

Florida Department of Transportation
Safety Performance for Intersection Control Evaluation Tool

Results

Summary of crash prediction results for each alternative

Project Information

Project Name:	Chuluota Road (CR 419) ICE Evaluation	**Intersection Type**	At-Grade Intersection
Intersection:	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard S	**Opening Year**	2028
Agency:	Orange County	**Design Year**	0
Project Reference:	Build (4-lane) Opening Year (2028)	**Facility Type**	On Rural Two Lane Highway
City:	Orlando	**Number of Legs**	3-leg
State:	FL	**1-Way/2-Way**	
Date:	1/31/2024	**# of Major Street Lanes (both directions)**	
Analyst:	JMT	**Major Street Approach Speed**	

Crash Prediction Summary

Control Strategy	Crash Type	Opening Year	Design Year	Total Project Life Cycle	Crash Prediction Rank	AADT Within SPF Prediction Range? (Open Year)	AADT Within SPF Prediction Range? (Design Year)	Source of Prediction	SSI Score: Opening Year	SSI Score: Design Year	SSI Score: Rank
Traffic Signal	Total	3.17	--	--	7	Yes	Yes	Uncalibrated SPF w/ EB	96		6
	Fatal & Injury	1.18	--	--							
Minor Road Stop	Total	3.64	--	--	8	Yes	Yes	Calibrated SPF	90		7
	Fatal & Injury	1.51	--	--							
All Way Stop	Total	No SPF	--	--	--	No	Yes	Uncalibrated SPF w/ EB	99		2
	Fatal & Injury	No SPF	--	--							
2-lane Roundabout	Total	4.11	--	--	4	Yes	Yes	Uncalibrated SPF	99		1
	Fatal & Injury	0.88	--	--							
Median U-Turn (MUT)	Total	1.99	--	--	5	N/A	N/A	CMF	--		--
	Fatal & Injury	0.90	--	--							
Signalized RCUT	Total	3.67	--	--	1	Yes	Yes	Uncalibrated SPF	98		4
	Fatal & Injury	0.74	--	--							
Unsignalized RCUT	Total	3.40	--	--	2	Yes	Yes	Uncalibrated SPF	98		5
	Fatal & Injury	0.83	--	--							
Signalized Thru-Cut	Total	No SPF	--	--	--	N/A	N/A	N/A	--		--
	Fatal & Injury	No SPF	--	--							
Unsignalized Thru-Cut	Total	No SPF	--	--	--	N/A	N/A	N/A	--		--
	Fatal & Injury	No SPF	--	--							
Bowtie	Total	No SPF	--	--	--	N/A	N/A	N/A	--	--	--
	Fatal & Injury	No SPF	--	--							
Continuous Green-T Intersection	Total	3.04	--	--	6	N/A	N/A	CMF	98		3
	Fatal & Injury	1.00	--	--							
Jughandle	Total	2.34	--	--	3	N/A	N/A	CMF	--		--
	Fatal & Injury	0.87	--	--							
Other 1*	Total	No SPF	--	--	--	N/A	N/A	CMF	--		--
	Fatal & Injury	No SPF	--	--							
Other 2*	Total	No SPF	--	--	--	N/A	N/A	CMF	--		--
	Fatal & Injury	No SPF	--	--							
			--	--							
			--	--							

Control Strategy Selection and Inputs

Specify the Facility Level Inputs and the Control Strategies to be included in the SPICE Analysis.

Intersection Type	At-Grade Intersection
Analysis Year	Opening Year Only
Opening Year	2028
Design Year	
Facility Type	On Rural Two Lane Highway
Number of Legs	3-leg
1-Way/2-Way	
# of Major Street Lanes (both directions)	
Major Street Approach Speed	
Opening Year - Major Road AADT	17,850
Opening Year - Minor Road AADT	3,600
Design Year - Major Road AADT	
Design Year - Minor Road AADT	

For more information on how to determine these values, see the "Definitions" worksheet

Control Strategy	Include	Base Intersection		
Traffic Signal	Yes	--		
Traffic Signal (Alternative Configuration)	No	--		
Minor Road Stop Control	Yes	--		
All Way Stop Control	Yes	--	No SPF Available	No SPF
1-Lane Roundabout	No	--	Opening Year AADT Outside of SPF Development Range	
2-Lane Roundabout	Yes	--		
Displaced Left Turn (DLT)	No	Traffic Signal		
Median U-Turn (MUT)	Yes	Traffic Signal		
Signalized Restricted Crossing U-Turn (RCUT)	Yes	--		
Unsignalized Restricted Crossing U-Turn (RCUT)	Yes	--		
Signalized Thru-Cut*	Yes	--	*SSI Only, No Crash Prediction Available	
Unsignalized Thru-Cut*	Yes	--	*SSI Only, No Crash Prediction Available	
Bowtie*	Yes	--	*SSI Only, No Crash Prediction Available	
Continuous Green-T Intersection	Yes	Traffic Signal		
Jughandle	Yes	Traffic Signal		
Other 1*		Traffic Signal	*Please Select	
Other 2*		Minor Road Stop	*Please Select	

Safe System for Intersection (SSI) Inputs

Specify the geomtric, exposure, severity, and conflicting traffic complexity inputs required for an SSI analysis.

1. Roadway Geometry	Lanes
Major number thru lanes (one direction)	2
Minor number thru lanes (one direction)	0

Major Street Designation	
Select major street direction	N-S
Median Presence on Major Road	No
Median Presence on Minor Road	Yes

	Required Inputs
	Default Available, Override Optional
	Planning-Level Default Input
	Computed Value, Override Optional
	Computed Value - No Override
	Disabled Cell (Often based on input selections)

2. Complete the "Exposure" inputs. These inputs will apply to all interesections selected for analysis.
3. Complete the "Severity" inputs
4. Complete the "Conflicting Traffic Complexity" inputs

2. Exposure - All Intersections

Average Daily Traffic (veh/day)	Open	Design
Major	17,850	
Minor	3,600	

ADT Directional Split	
Major	0.50
Minor	0.50

Nonmotorized Total ADBP (ped-bike/day)	Activity Level	ADBP Value (ped-
Open Year Total Intersection NM	Low (20)	20
Design Year Total Intersection NM		

(or overwrite ped movement ADBPs below)

Nonmotorized Movement ADBP (ped-bike/day)	Open	Design
Major NM 1 (NM mvmt crossing Maj1)	7	
Major NM 2	7	
Minor NM 1	7	
~~Minor NM 2~~	~~0~~	

Are turning movement ADT values are available?	No	If "Yes", input values in Table 2-A
Are peak hour turning movement counts available?	Yes	If "Yes", input values in Table 2-B

If no turning movment volumes or counts are available, a user can optionally override the planning-level default turning movment proportions in Table 2-C

Table 2-A: Turning Movement (vol/day)

	Open	Design
Major Thru 1	7533.923	
~~Major Left Turn 1~~	~~0~~	
Major Right Turn 1	1391.077	
Major Thru 2	8682.971	
Major Left Turn 2	242.029	
~~Major Right Turn 2~~	~~0~~	
~~Minor Thru 1~~	~~572.4197~~	
Minor Left Turn 1	1078.761	
Minor Right Turn 1	148.8189	
~~Minor Thru 2~~	~~0~~	
~~Minor Left Turn 2~~	~~0~~	
~~Minor Right Turn 2~~	~~0~~	

Table 2-B: Turning Movement Counts (Optional)

	Mvmt	AM Peak	AM %	PM Peak	PM %	Avg %
Major Thru 1	NBT	528	0.755364807	603	0.612183	0.683774
~~Major Left Turn 1~~	~~NBL~~	~~100~~	~~0.143061516~~	~~175~~	~~0.177665~~	~~0.160363~~
Major Right Turn 1	NBR	71	0.101573677	207	0.210152	0.155863
Major Thru 2	SBT	619	0.943597561	726	0.931964	0.937781
Major Left Turn 2	SBL	12	0.018292683	28	0.035944	0.027118
~~Major Right Turn 2~~	~~SBR~~	~~25~~	~~0.038109756~~	~~25~~	~~0.032092~~	~~0.035101~~
~~Minor Thru 1~~	~~EBT~~	~~100~~	~~0.3003003~~	~~75~~	~~0.295276~~	~~0.297788~~
Minor Left Turn 1	EBL	192	0.576576577	158	0.622047	0.599312
Minor Right Turn 1	EBR	41	0.123123123	21	0.082677	0.1029
~~Minor Thru 2~~	~~WBT~~	~~75~~	~~0.428571429~~	~~100~~	~~0.5~~	~~0.464286~~
~~Minor Left Turn 2~~	~~WBL~~	~~50~~	~~0.285714286~~	~~50~~	~~0.25~~	~~0.267857~~
~~Minor Right Turn 2~~	~~WBR~~	~~50~~	~~0.285714286~~	~~50~~	~~0.25~~	~~0.267857~~

Table 2-C: Turning Proportions (optional)

	Decimal
Major Thru 1	0.84413702
~~Major Left Turn 1~~	~~0~~
Major Right Turn 1	0.15586298
Major Thru 2	0.9728819
Major Left Turn 2	0.0271181
~~Major Right Turn 2~~	~~0~~
~~Minor Thru 1~~	~~0.318010924~~
Minor Left Turn 1	0.59931191
Minor Right Turn 1	0.082677165
~~Minor Thru 2~~	~~0~~
~~Minor Left Turn 2~~	~~0~~
~~Minor Right Turn 2~~	~~0~~

3. Severity

Vehicle Speeds	mph
Major Posted Speed Limit	50
Minor Posted Speed Limit	35
Major thru	50
Major left	20
Major right	15
Minor thru	29.75
Minor left	20
Minor right	15
Stop near	15
Stop far	25
Signal near	15
Signal far	25

4. Conflicting Traffic Complexity

Traffic Control	Decimal
Base Traffic Control Adjustment Value (BTCAV) for permitted	1
Base Traffic Control Adjustment Value (BTCAV) for protected/permitted	0.85
Base Traffic Control Adjustment Value (BTCAV) for protected	0.01
Base Traffic Control Adjustment Value (BTCAV) for stop-controlled	0.45
Weight, f, for permitted	0.5
Weight, f, for protected/permitted	0.5
Weight, f, for protected	0.5
Weight, f, for stop-controlled	0.5
Major LT signal phasing (drop-down)	Protected/Permitted
Minor LT signal phasing (drop-down)	Protected
Exclusive Pedestrian phasing (drop-down)	No

Historical Crash Data Input

Note: In order to use Empirical Bayes (EB), the historical intersection type must be a traffic signal or a minor road stop. Additionally, this alternative must be selected to be included in the analysis, and the historical intersection specified below. Up to 10 years of historical data can be used to perform the EB adjustment.

Is historical crash data available? Yes

Number of years available: 5 (Up to 10)

Historical Intx Type: 3SG

First Year Data is available: 2016

Historical Crash Counts		Year										
		2016	2017	2018	2019	2020	--	--	--	--	--	Total
Combined	Total	2	3	3	7	8	--	--	--	--	--	23
	Fatal/Injury	1	2	0	1	4						8
	PDO	1	1	3	6	4						15
Single-Vehicle	Total											
	Fatal/Injury											
	PDO											
Multiple-Vehicle	Total											
	Fatal/Injury											
	PDO											
Veh-Ped	Fatal/Injury	0	0	0	0	0						0
Veh-Bike	Fatal/Injury	0	0	1	0	0						1
Total	All	2	3	4	7	8	--	--	--	--	--	24

Florida Department of Transportation
Safety Performance for Intersection Control Evaluation Tool

Results

Summary of crash prediction results for each alternative

Project Information

Project Name:	Chuluota Road (CR 419) ICE Evaluation	**Intersection Type**	At-Grade Intersection
Intersection:	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard S	**Opening Year**	2038
Agency:	Orange County	**Design Year**	0
Project Reference:	Build (4-lane) Interim Year (2038)	**Facility Type**	On Rural Two Lane Highway
City:	Orlando	**Number of Legs**	3-leg
State:	FL	**1-Way/2-Way**	
Date:	1/31/2024	**# of Major Street Lanes (both directions)**	
Analyst:	JMT	**Major Street Approach Speed**	

Crash Prediction Summary

Control Strategy	Crash Type	Opening Year	Design Year	Total Project Life Cycle	Crash Prediction Rank	AADT Within SPF Prediction Range? (Open Year)	AADT Within SPF Prediction Range? (Design Year)	Source of Prediction	SSI Score: Opening Year	SSI Score: Design Year	SSI Score: Rank
Traffic Signal	Total	3.48	--	--	7	Yes	Yes	Uncalibrated SPF w/ EB	94		6
	Fatal & Injury	1.30	--	--							
Minor Road Stop	Total	4.68	--	--	8	No	Yes	Calibrated SPF	85		7
	Fatal & Injury	1.94	--	--							
All Way Stop	Total	No SPF	--	--	--	No	Yes	Uncalibrated SPF w/ EB	99		2
	Fatal & Injury	No SPF	--	--							
2-lane Roundabout	Total	5.37	--	--	6	No	Yes	Uncalibrated SPF	99		1
	Fatal & Injury	1.20	--	--							
Median U-Turn (MUT)	Total	2.19	--	--	3	N/A	N/A	CMF	--		--
	Fatal & Injury	0.99	--	--							
Signalized RCUT	Total	5.13	--	--	4	Yes	Yes	Uncalibrated SPF	97		4
	Fatal & Injury	1.04	--	--							
Unsignalized RCUT	Total	3.92	--	--	2	Yes	Yes	Uncalibrated SPF	97		5
	Fatal & Injury	0.98	--	--							
Signalized Thru-Cut	Total	No SPF	--	--	--	N/A	N/A	N/A	--		--
	Fatal & Injury	No SPF	--	--							
Unsignalized Thru-Cut	Total	No SPF	--	--	--	N/A	N/A	N/A	--		--
	Fatal & Injury	No SPF	--	--							
Bowtie	Total	No SPF	--	--	--	N/A	N/A	N/A	--	--	--
	Fatal & Injury	No SPF	--	--							
Continuous Green-T Intersection	Total	3.34	--	--	5	N/A	N/A	CMF	98		3
	Fatal & Injury	1.10	--	--							
Jughandle	Total	2.58	--	--	1	N/A	N/A	CMF	--		--
	Fatal & Injury	0.96	--	--							
Other 1*	Total	No SPF	--	--	--	N/A	N/A	CMF	--		--
	Fatal & Injury	No SPF	--	--							
Other 2*	Total	No SPF	--	--	--	N/A	N/A	CMF	--		--
	Fatal & Injury	No SPF	--	--							
			--	--							
			--	--							

Control Strategy Selection and Inputs

Specify the Facility Level Inputs and the Control Strategies to be included in the SPICE Analysis.

Intersection Type	At-Grade Intersection	
Analysis Year	Opening Year Only	
Opening Year	2038	
Design Year		
Facility Type	On Rural Two Lane Highway	For more information on how to determine these values, see the "Definitions" worksheet
Number of Legs	3-leg	
1-Way/2-Way		
# of Major Street Lanes (both directions)		
Major Street Approach Speed		
Opening Year - Major Road AADT	23,400	
Opening Year - Minor Road AADT	3,900	
Design Year - Major Road AADT		
Design Year - Minor Road AADT		

Control Strategy	**Include**	**Base Intersection**		
Traffic Signal	Yes	--		
Traffic Signal (Alternative Configuration)	No	--		
Minor Road Stop Control	Yes	--	Opening Year AADT Outside of SPF Development Range	
All Way Stop Control	Yes	--	No SPF Available	No SPF
1-Lane Roundabout	No	--	Opening Year AADT Outside of SPF Development Range	
2-Lane Roundabout	Yes	--	Opening Year AADT Outside of SPF Development Range	
Displaced Left Turn (DLT)	No	Traffic Signal		
Median U-Turn (MUT)	Yes	Traffic Signal		
Signalized Restricted Crossing U-Turn (RCUT)	Yes	--		
Unsignalized Restricted Crossing U-Turn (RCUT)	Yes	--		
Signalized Thru-Cut*	Yes	--	*SSI Only, No Crash Prediction Available	
Unsignalized Thru-Cut*	Yes	--	*SSI Only, No Crash Prediction Available	
Bowtie*	Yes	--	*SSI Only, No Crash Prediction Available	
Continuous Green-T Intersection	Yes	Traffic Signal		
Jughandle	Yes	Traffic Signal		
Other 1*		Traffic Signal	*Please Select	
Other 2*		Minor Road Stop	*Please Select	

Safe System for Intersection (SSI) Inputs

Specify the geomtric, exposure, severity, and conflicting traffic complexity inputs required for an SSI analysis.

1. Roadway Geometry	Lanes
Major number thru lanes (one direction)	2
Minor number thru lanes (one direction)	0

Major Street Designation	
Select major street direction	N-S
Median Presence on Major Road	No
Median Presence on Minor Road	Yes

	Required Inputs
	Default Available, Override Optional
	Planning-Level Default Input
	Computed Value, Override Optional
	Computed Value - No Override
	Disabled Cell (Often based on input selections)

2. Complete the "Exposure" inputs. These inputs will apply to all interesections selected for analysis.
3. Complete the "Severity" inputs
4. Complete the "Conflicting Traffic Complexity" inputs

2. Exposure - All Intersections

Average Daily Traffic (veh/day)	Open	Design
Major	23,400	
Minor	3,900	

ADT Directional Split	
Major	0.50
Minor	0.50

Nonmotorized Total ADBP (ped-bike/day)	Activity Level	ADBP Value (ped-
Open Year Total Intersection NM	Low (20)	20
Design Year Total Intersection NM		

(or overwrite ped movement ADBPs below)

Nonmotorized Movement ADBP (ped-bike/day)	Open	Design
Major NM 1 (NM mvmt crossing Maj1)	7	
Major NM 2	7	
Minor NM 1	7	
~~Minor NM 2~~	~~0~~	

Are turning movement ADT values are available?	No	If "Yes", input values in Table 2-A
Are peak hour turning movement counts available?	Yes	If "Yes", input values in Table 2-B

If no turning movment volumes or counts are available, a user can optionally override the planning-level default turning movment proportions in Table 2-C

Table 2-A: Turning Movement (vol/day)

	Open	Design
Major Thru 1	10066.35	
~~Major Left Turn 1~~	~~0~~	
Major Right Turn 1	1633.646	
Major Thru 2	11443.99	
Major Left Turn 2	256.0071	
~~Major Right Turn 2~~	~~0~~	
~~Minor Thru 1~~	~~587.3395~~	
Minor Left Turn 1	1195.932	
Minor Right Turn 1	166.7286	
~~Minor Thru 2~~	~~0~~	
~~Minor Left Turn 2~~	~~0~~	
~~Minor Right Turn 2~~	~~0~~	

Table 2-B: Turning Movement Counts (Optional)

	Mvmt	AM Peak	AM %	PM Peak	PM %	Avg %
Major Thru 1	NBT	690	0.794930876	788	0.6633	0.729115
~~Major Left Turn 1~~	~~NBL~~	~~100~~	~~0.115207373~~	~~175~~	~~0.147306~~	~~0.131257~~
Major Right Turn 1	NBR	78	0.089861751	225	0.189394	0.139628
Major Thru 2	SBT	824	0.955916473	991	0.947419	0.951668
Major Left Turn 2	SBL	13	0.015081206	30	0.028681	0.021881
~~Major Right Turn 2~~	~~SBR~~	~~25~~	~~0.02900232~~	~~25~~	~~0.023901~~	~~0.026451~~
~~Minor Thru 1~~	~~EBT~~	~~100~~	~~0.284090909~~	~~75~~	~~0.27881~~	~~0.281451~~
Minor Left Turn 1	EBL	208	0.590909091	171	0.635688	0.613298
Minor Right Turn 1	EBR	44	0.125	23	0.085502	0.105251
~~Minor Thru 2~~	~~WBT~~	~~75~~	~~0.428571429~~	~~100~~	~~0.5~~	~~0.464286~~
~~Minor Left Turn 2~~	~~WBL~~	~~50~~	~~0.285714286~~	~~50~~	~~0.25~~	~~0.267857~~
~~Minor Right Turn 2~~	~~WBR~~	~~50~~	~~0.285714286~~	~~50~~	~~0.25~~	~~0.267857~~

Table 2-C: Turning Proportions (optional)

	Decimal
Major Thru 1	0.860372155
~~Major Left Turn 1~~	~~0~~
Major Right Turn 1	0.139627845
Major Thru 2	0.978119053
Major Left Turn 2	0.021880947
~~Major Right Turn 2~~	~~0~~
~~Minor Thru 1~~	~~0.30119973~~
Minor Left Turn 1	0.613298412
Minor Right Turn 1	0.085501859
~~Minor Thru 2~~	~~0~~
~~Minor Left Turn 2~~	~~0~~
~~Minor Right Turn 2~~	~~0~~

3. Severity

Vehicle Speeds	mph
Major Posted Speed Limit	50
Minor Posted Speed Limit	35
Major thru	50
Major left	20
Major right	15
Minor thru	29.75
Minor left	20
Minor right	15
Stop near	15
Stop far	25
Signal near	15
Signal far	25

4. Conflicting Traffic Complexity

Traffic Control	Decimal
Base Traffic Control Adjustment Value (BTCAV) for permitted	1
Base Traffic Control Adjustment Value (BTCAV) for protected/permitted	0.85
Base Traffic Control Adjustment Value (BTCAV) for protected	0.01
Base Traffic Control Adjustment Value (BTCAV) for stop-controlled	0.45
Weight, f, for permitted	0.5
Weight, f, for protected/permitted	0.5
Weight, f, for protected	0.5
Weight, f, for stop-controlled	0.5
Major LT signal phasing (drop-down)	Protected/Permitted
Minor LT signal phasing (drop-down)	Protected
Exclusive Pedestrian phasing (drop-down)	No

Historical Crash Data Input

Note: In order to use Empirical Bayes (EB), the historical intersection type must be a traffic signal or a minor road stop. Additionally, this alternative must be selected to be included in the analysis, and the historical intersection specified below. Up to 10 years of historical data can be used to perform the EB adjustment.

Is historical crash data available? Yes

Number of years available: 5 (Up to 10)

Historical Intx Type: 3SG

First Year Data is available: 2016

Historical Crash Counts		Year										
		2016	2017	2018	2019	2020	--	--	--	--	--	Total
Combined	Total	2	3	3	7	8	--	--	--	--	--	23
	Fatal/Injury	1	2	0	1	4						8
	PDO	1	1	3	6	4						15
Single-Vehicle	Total											
	Fatal/Injury											
	PDO											
Multiple-Vehicle	Total											
	Fatal/Injury											
	PDO											
Veh-Ped	Fatal/Injury	0	0	0	0	0						0
Veh-Bike	Fatal/Injury	0	0	1	0	0						1
Total	All	2	3	4	7	8	--	--	--	--	--	24

Florida Department of Transportation
Safety Performance for Intersection Control Evaluation Tool

Results

Summary of crash prediction results for each alternative

Project Information

Project Name:	Chuluota Road (CR 419) ICE Evaluation	**Intersection Type**	At-Grade Intersection
Intersection:	Chuluota Road (CR 419) at Cypress Lake Glen Boulevard S	**Opening Year**	2048
Agency:	Orange County	**Design Year**	0
Project Reference:	Build (4-lane) Design Year (2048)	**Facility Type**	On Rural Two Lane Highway
City:	Orlando	**Number of Legs**	3-leg
State:	FL	**1-Way/2-Way**	
Date:	1/31/2024	**# of Major Street Lanes (both directions)**	
Analyst:	JMT	**Major Street Approach Speed**	

Crash Prediction Summary

Control Strategy	Crash Type	Opening Year	Design Year	Total Project Life Cycle	Crash Prediction Rank	AADT Within SPF Prediction Range?		Source of Prediction	SSI Score		
						(Open Year)	(Design Year)		Opening Year	Design Year	Rank
Traffic Signal	Total	3.73	--	--	6	No	Yes	Uncalibrated SPF w/ EB	92		6
	Fatal & Injury	1.39	--	--							
Minor Road Stop	Total	5.68	--	--	8	No	Yes	Calibrated SPF	81		7
	Fatal & Injury	2.36	--	--							
All Way Stop	Total	No SPF	--	--	--	No	Yes	Uncalibrated SPF w/ EB	98		2
	Fatal & Injury	No SPF	--	--							
2-lane Roundabout	Total	6.65	--	--	7	No	Yes	Uncalibrated SPF	99		1
	Fatal & Injury	1.54	--	--							
Median U-Turn (MUT)	Total	2.35	--	--	2	N/A	N/A	CMF	--		--
	Fatal & Injury	1.06	--	--							
Signalized RCUT	Total	6.64	--	--	5	Yes	Yes	Uncalibrated SPF	97		4
	Fatal & Injury	1.35	--	--							
Unsignalized RCUT	Total	4.49	--	--	3	Yes	Yes	Uncalibrated SPF	96		5
	Fatal & Injury	1.13	--	--							
Signalized Thru-Cut	Total	No SPF	--	--	--	N/A	N/A	N/A	--		--
	Fatal & Injury	No SPF	--	--							
Unsignalized Thru-Cut	Total	No SPF	--	--	--	N/A	N/A	N/A	--		--
	Fatal & Injury	No SPF	--	--							
Bowtie	Total	No SPF	--	--	--	N/A	N/A	N/A	--	--	--
	Fatal & Injury	No SPF	--	--							
Continuous Green-T Intersection	Total	3.58	--	--	4	N/A	N/A	CMF	97		3
	Fatal & Injury	1.18	--	--							
Jughandle	Total	2.76	--	--	1	N/A	N/A	CMF	--		--
	Fatal & Injury	1.03	--	--							
Other 1*	Total	No SPF	--	--	--	N/A	N/A	CMF	--		--
	Fatal & Injury	No SPF	--	--							
Other 2*	Total	No SPF	--	--	--	N/A	N/A	CMF	--		--
	Fatal & Injury	No SPF	--	--							
			--	--							
			--	--							

Control Strategy Selection and Inputs

Specify the Facility Level Inputs and the Control Strategies to be included in the SPICE Analysis.

Intersection Type	At-Grade Intersection	
Analysis Year	Opening Year Only	
Opening Year	2048	
Design Year		
Facility Type	On Rural Two Lane Highway	For more information on how to determine these values, see the "Definitions" worksheet
Number of Legs	3-leg	
1-Way/2-Way		
# of Major Street Lanes (both directions)		
Major Street Approach Speed		
Opening Year - Major Road AADT	29,000	
Opening Year - Minor Road AADT	4,100	
Design Year - Major Road AADT		
Design Year - Minor Road AADT		

Control Strategy	**Include**	**Base Intersection**		
Traffic Signal	Yes	--	Opening Year AADT Outside of SPF Development Range	
Traffic Signal (Alternative Configuration)	No	--	Opening Year AADT Outside of SPF Development Range	
Minor Road Stop Control	Yes	--	Opening Year AADT Outside of SPF Development Range	
All Way Stop Control	Yes	--	No SPF Available	No SPF
1-Lane Roundabout	No	--	Opening Year AADT Outside of SPF Development Range	
2-Lane Roundabout	Yes	--	Opening Year AADT Outside of SPF Development Range	
Displaced Left Turn (DLT)	No	Traffic Signal		
Median U-Turn (MUT)	Yes	Traffic Signal		
Signalized Restricted Crossing U-Turn (RCUT)	Yes	--		
Unsignalized Restricted Crossing U-Turn (RCUT)	Yes	--		
Signalized Thru-Cut*	Yes	--	*SSI Only, No Crash Prediction Available	
Unsignalized Thru-Cut*	Yes	--	*SSI Only, No Crash Prediction Available	
Bowtie*	Yes	--	*SSI Only, No Crash Prediction Available	
Continuous Green-T Intersection	Yes	Traffic Signal		
Jughandle	Yes	Traffic Signal		
Other 1*		Traffic Signal	*Please Select	
Other 2*		Minor Road Stop	*Please Select	

Safe System for Intersection (SSI) Inputs

Specify the geomtric, exposure, severity, and conflicting traffic complexity inputs required for an SSI analysis.

1. Roadway Geometry	Lanes
Major number thru lanes (one direction)	2
Minor number thru lanes (one direction)	0

Major Street Designation	
Select major street direction	N-S
Median Presence on Major Road	No
Median Presence on Minor Road	Yes

	Required Inputs
	Default Available, Override Optional
	Planning-Level Default Input
	Computed Value, Override Optional
	Computed Value - No Override
	Disabled Cell (Often based on input selections)

2. Complete the "Exposure" inputs. These inputs will apply to all interesections selected for analysis.
3. Complete the "Severity" inputs
4. Complete the "Conflicting Traffic Complexity" inputs

2. Exposure - All Intersections

Average Daily Traffic (veh/day)	Open	Design
Major	29,000	
Minor	4,100	

ADT Directional Split	
Major	0.50
Minor	0.50

Nonmotorized Total ADBP (ped-bike/day)	Activity Level	ADBP Value (ped-
Open Year Total Intersection NM	Low (20)	20
Design Year Total Intersection NM		

(or overwrite ped movement ADBPs below)

Nonmotorized Movement ADBP (ped-bike/day)	Open	Design
Major NM 1 (NM mvmt crossing Maj1)	7	
Major NM 2	7	
Minor NM 1	7	
~~Minor NM 2~~	~~0~~	

Are turning movement ADT values are available?	No	If "Yes", input values in Table 2-A
Are peak hour turning movement counts available?	Yes	If "Yes", input values in Table 2-B

If no turning movment volumes or counts are available, a user can optionally override the planning-level default turning movment proportions in Table 2-C

Table 2-A: Turning Movement (vol/day)

	Open	Design
Major Thru 1	12645.06	
~~Major Left Turn 1~~	~~0~~	
Major Right Turn 1	1854.941	
Major Thru 2	14222.97	
Major Left Turn 2	277.0262	
~~Major Right Turn 2~~	~~0~~	
~~Minor Thru 1~~	~~586.527~~	
Minor Left Turn 1	1283.648	
Minor Right Turn 1	179.8246	
~~Minor Thru 2~~	~~0~~	
~~Minor Left Turn 2~~	~~0~~	
~~Minor Right Turn 2~~	~~0~~	

Table 2-B: Turning Movement Counts (Optional)

	Mvmt	AM Peak	AM %	PM Peak	PM %	Avg %
Major Thru 1	NBT	851	0.822222222	973	0.699497	0.760859
~~Major Left Turn 1~~	~~NBL~~	~~100~~	~~0.096618357~~	~~175~~	~~0.125809~~	~~0.111214~~
Major Right Turn 1	NBR	84	0.08115942	243	0.174694	0.127927
Major Thru 2	SBT	1030	0.963517306	1256	0.95586	0.959689
Major Left Turn 2	SBL	14	0.013096352	33	0.025114	0.019105
~~Major Right Turn 2~~	~~SBR~~	~~25~~	~~0.023386342~~	~~25~~	~~0.019026~~	~~0.021206~~
~~Minor Thru 1~~	~~EBT~~	~~100~~	~~0.268096515~~	~~75~~	~~0.263158~~	~~0.265627~~
Minor Left Turn 1	EBL	225	0.603217158	185	0.649123	0.62617
Minor Right Turn 1	EBR	48	0.128686327	25	0.087719	0.108203
~~Minor Thru 2~~	~~WBT~~	~~75~~	~~0.428571429~~	~~100~~	~~0.5~~	~~0.464286~~
~~Minor Left Turn 2~~	~~WBL~~	~~50~~	~~0.285714286~~	~~50~~	~~0.25~~	~~0.267857~~
~~Minor Right Turn 2~~	~~WBR~~	~~50~~	~~0.285714286~~	~~50~~	~~0.25~~	~~0.267857~~

Table 2-C: Turning Proportions (optional)

	Decimal
Major Thru 1	0.872073058
~~Major Left Turn 1~~	~~0~~
Major Right Turn 1	0.127926942
Major Thru 2	0.980894747
Major Left Turn 2	0.019105253
~~Major Right Turn 2~~	~~0~~
~~Minor Thru 1~~	~~0.286110719~~
Minor Left Turn 1	0.626169983
Minor Right Turn 1	0.087719298
~~Minor Thru 2~~	~~0~~
~~Minor Left Turn 2~~	~~0~~
~~Minor Right Turn 2~~	~~0~~

3. Severity

Vehicle Speeds	mph
Major Posted Speed Limit	50
Minor Posted Speed Limit	35
Major thru	50
Major left	20
Major right	15
Minor thru	29.75
Minor left	20
Minor right	15
Stop near	15
Stop far	25
Signal near	15
Signal far	25

4. Conflicting Traffic Complexity

Traffic Control	Decimal
Base Traffic Control Adjustment Value (BTCAV) for permitted	1
Base Traffic Control Adjustment Value (BTCAV) for protected/permitted	0.85
Base Traffic Control Adjustment Value (BTCAV) for protected	0.01
Base Traffic Control Adjustment Value (BTCAV) for stop-controlled	0.45
Weight, f, for permitted	0.5
Weight, f, for protected/permitted	0.5
Weight, f, for protected	0.5
Weight, f, for stop-controlled	0.5
Major LT signal phasing (drop-down)	Protected/Permitted
Minor LT signal phasing (drop-down)	Protected
Exclusive Pedestrian phasing (drop-down)	No

Historical Crash Data Input

Note: In order to use Empirical Bayes (EB), the historical intersection type must be a traffic signal or a minor road stop. Additionally, this alternative must be selected to be included in the analysis, and the historical intersection specified below. Up to 10 years of historical data can be used to perform the EB adjustment.

Is historical crash data available? Yes

Number of years available: 5 (Up to 10)

Historical Intx Type: 3SG

First Year Data is available: 2016

Historical Crash Counts		Year										
		2016	2017	2018	2019	2020	--	--	--	--	--	Total
Combined	Total	2	3	3	7	8	--	--	--	--	--	23
	Fatal/Injury	1	2	0	1	4						8
	PDO	1	1	3	6	4						15
Single-Vehicle	Total											
	Fatal/Injury											
	PDO											
Multiple-Vehicle	Total											
	Fatal/Injury											
	PDO											
Veh-Ped	Fatal/Injury	0	0	0	0	0						0
Veh-Bike	Fatal/Injury	0	0	1	0	0						1
Total	All	2	3	4	7	8	--	--	--	--	--	24

Table 2, Cypress Lake Glen Boulevard S SPICE Results - Crash Prediction

Build Type	Year	Intersection Control Rank 1 (Fatal & Injury Crashes)	Intersection Control Rank 2 (Fatal & Injury Crashes)	Intersection Control Rank 3 (Fatal & Injury Crashes)	Intersection Control Rank 4 (Fatal & Injury Crashes)	Intersection Control Rank 5 (Fatal & Injury Crashes)	Intersection Control Rank 6 (Fatal & Injury Crashes)	Intersection Control Rank 7 (Fatal & Injury Crashes)	Intersection Control Rank 8 (Fatal & Injury Crashes)	Intersection Control Rank 9 (Fatal & Injury Crashes)	Intersection Control Rank 10 (Fatal & Injury Crashes)
No-Build (2-lane)	2028	1 Lane Roundabout (0.25)	Signalized RCUT N-S (0.66)	Unsignalized RCUT N-S (0.77)	Jughandle (0.84)	MUT N-S (0.86)	Continuous Green T (0.97)	Traffic Signal (1.14)	TWSC (1.37)	Bowtie N-S (No SPF)	Signalized ThruCut N-S (No SPF)
	2038	1 Lane Roundabout (0.29)	Signalized RCUT N-S (0.81)	Unsignalized RCUT N-S (0.86)	Jughandle (0.89)	MUT N-S (0.92)	Continuous Green T (1.03)	Traffic Signal (1.21)	TWSC (1.62)	Bowtie N-S (No SPF)	Signalized ThruCut N-S (No SPF)
	2048	1 Lane Roundabout (0.33)	Unsignalized RCUT N-S (0.94)	Jughandle (0.94)	MUT N-S (0.97)	Signalized RCUT N-S (0.97)	Continuous Green T (1.08)	Traffic Signal (1.27)	TWSC (1.85)	Bowtie N-S (No SPF)	Signalized ThruCut N-S (No SPF)
Build (4-lane)	2028	Signalized RCUT N-S (0.74)	Unsignalized RCUT N-S (0.83)	Jughandle (0.87)	2 Lane Roundabout (0.88)	MUT N-S (0.90)	Continuous Green T (1.00)	Traffic Signal (1.18)	TWSC (1.51)	Bowtie N-S (No SPF)	Signalized ThruCut N-S (No SPF)
	2038	Jughandle (0.96)	Unsignalized RCUT N-S (0.98)	MUT N-S (0.99)	Signalized RCUT N-S (1.04)	Continuous Green T (1.10)	2 Lane Roundabout (1.20)	Traffic Signal (1.30)	TWSC (1.94)	Bowtie N-S (No SPF)	Signalized ThruCut N-S (No SPF)
	2048	Jughandle (1.03)	MUT N-S (1.06)	Unsignalized RCUT N-S (1.13)	Continuous Green T (1.18)	Signalized RCUT N-S (1.35)	Traffic Signal (1.39)	2 Lane Roundabout (1.54)	TWSC (2.36)	Bowtie N-S (No SPF)	Signalized ThruCut N-S (No SPF)

Greyed out cells indicate that the intersection control type may not be viable due to right-of-way, cost, or other factors

Table 3, Cypress Lake Glen Boulevard S SPICE Results - SSI Score

Build Type	Year	Intersection Control Rank 1 (SSI Score)	Intersection Control Rank 2 (SSI Score)	Intersection Control Rank 3 (SSI Score)	Intersection Control Rank 4 (SSI Score)	Intersection Control Rank 5 (SSI Score)	Intersection Control Rank 6 (SSI Score)	Intersection Control Rank 7 (SSI Score)	Intersection Control Rank 8 (SSI Score)	Intersection Control Rank 9 (SSI Score)	Intersection Control Rank 10 (SSI Score)
No-Build (2-lane)	2028	1 Lane Roundabout (100)	AWSC (100)	Signalized RCUT N-S (99)	Unsignalized RCUT N-S (99)	Continuous Green T (99)	Traffic Signal (98)	TWSC (95)	Bowtie N-S (N/A)	Unsignalized ThruCut N-S (N/A)	Jughandle (N/A)
	2038	1 Lane Roundabout (100)	AWSC (99)	Signalized RCUT N-S (99)	Unsignalized RCUT N-S (98)	Continuous Green T (98)	Traffic Signal (97)	TWSC (93)	Bowtie N-S (N/A)	Unsignalized ThruCut N-S (N/A)	Jughandle (N/A)
	2048	1 Lane Roundabout (100)	AWSC (99)	Signalized RCUT N-S (99)	Unsignalized RCUT N-S (98)	Continuous Green T (98)	Traffic Signal (97)	TWSC (92)	Bowtie N-S (N/A)	Unsignalized ThruCut N-S (N/A)	Jughandle (N/A)
Build (4-lane)	2028	2 Lane Roundabout (99)	AWSC (99)	Continuous Green T (98)	Signalized RCUT N-S (98)	Unsignalized RCUT N-S (98)	Traffic Signal (96)	TWSC (90)	Bowtie N-S (N/A)	Unsignalized ThruCut N-S (N/A)	Jughandle (N/A)
	2038	2 Lane Roundabout (99)	AWSC (99)	Continuous Green T (98)	Signalized RCUT N-S (97)	Unsignalized RCUT N-S (97)	Traffic Signal (94)	TWSC (85)	Bowtie N-S (N/A)	Unsignalized ThruCut N-S (N/A)	Jughandle (N/A)
	2048	2 Lane Roundabout (99)	AWSC (98)	Continuous Green T (97)	Signalized RCUT N-S (97)	Unsignalized RCUT N-S (96)	Traffic Signal (92)	TWSC (81)	Bowtie N-S (N/A)	Unsignalized ThruCut N-S (N/A)	Jughandle (N/A)

Greyed out cells indicate that the intersection control type may not be viable due to right-of-way, cost, or other factors

SSI Legend	
	90-100
	80-89
	70-79
	< 70

CORNER SCHOOL
DRIVE & SCHOOLVIEW
WAY

CAP-X WORKSHEETS

Capacity Analysis for Planning of Junctions

Input Worksheet 1

Project Name	Chuloata Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) AM Opening Year (2028)
Location	Corner School Drive at Schoolview Way
Date	March 19, 2024
Number of Legs	3
Which leg is the minor street?	E

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	0	7	0	3	3.48%	0.00%
Westbound	0	0	0	0	3.48%	0.00%
Southbound	0	5	30	0	3.48%	0.00%
Northbound	0	0	21	36	3.48%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone		**C3R-Suburban Residential**	
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Equivalent Passenger Car Volume

	Volume (Veh/hr)			
	U-Turn	**Left**	**Thru**	**Right**
Eastbound	0	7	0	3
Westbound	0	0	0	0
Southbound	0	5	31	0
Northbound	0	0	22	37

Notes:	
Left-Turn Adjustment Factor	*Conversion of left-turning vehicles to equivalent through vehicles*
Right-turn Adjustment Factor	*Conversion of right-turning vehicles to equivalent through vehicles*
U-turn Adjustment Factor	*Conversion of U-turning vehicles to equivalent through vehicles*
Truck to PCE Factor	*1 truck = X Passenger Car Equivalents*
Critical Lane Volume Sum Limit	*Saturation Value for Critical Lane Volume Sum at an intersection*

Capacity Analysis for Planning of Junctions

Step 2A: Base Conditions Analysis

Project Name	Chuloata Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) AM Opening Year (2028)
Location	Corner School Drive at Schoolview Way
Date	March 19, 2024
Which leg is the minor street?	E

Existing Intersection Configuration	*All-Way Stop Control*

Number of Lanes for Existing Configuration
(Can be edited in "3- Alt Num Lanes Input" as needed)

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
All-Way Stop Control	FULL		0	1	0		0	1	0		1	0	1		0	0	0

Results for Existing Configuration

TYPE OF		Sheet	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	
Overall v/c Ratio	0.07	Pedestrian Accommodation Score	--		Bicycle Accommodation Score			--

Step 2B: Alternative Selection

Rankings Inclusion		Yes/No	Comment
At-Grade Non-Roundabout Intersections?		Yes	
Traffic Signal		Yes	
Two-Way Stop Control		Yes	
All-Way Stop Control		Yes	
Continuous Green T		Yes	
Quadrant Roadway	S-W	No	No Nearby Quadrant Roadway
	N-E	No	No Nearby Quadrant Roadway
	S-E	No	No Nearby Quadrant Roadway
	N-W	No	No Nearby Quadrant Roadway
Partial Displaced Left Turn		No	3-leg Intersection
Displaced Left Turn		No	3-leg Intersection
Signalized Restricted Crossing U-Turn		Yes	
Unsignalized Restricted Crossing U-Turn		Yes	
Median U-Turn		Yes	
Partial Median U-Turn		Yes	
Bowtie		Yes	
Signalized ThruCut		Yes	
Unsignalized ThruCut		Yes	
Roundabouts?		Yes	
50 ICD Miniroundabout		Yes	
75 ICD Miniroundabout		Yes	
1x1		Yes	
1NS x 2EW		No	1x1 Roundabout Only
2NS x 1EW		No	1x1 Roundabout Only
2x2		No	1x1 Roundabout Only
Ramp Terminal Intersections?		No	
Diamond			
Partial Cloverleaf A			
Partial Cloverleaf B			
Displaced Left Turn Interchange			
Diverging Diamond			
Single Point Diamond			

Continue to Step 3 Step 3

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuloata Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) AM Opening Year (2028)
Location	Corner School Drive at Schoolview Way
Date	March 19, 2024
Analysis Type	At-Grade Intersections and Interchanges

Number of Lanes for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		0	1	0		0	1	0		1	0	1		0	0	0
Two-Way Stop Control	N-S		0	1	0		0	1	0		1	0	1		0	0	0
All-Way Stop Control	FULL		0	1	0		0	1	0		1	0	1		0	0	0
Continuous Green T	E			1	1		1	1							1		1
Signalized Restricted Crossing U-Turn	N-S	1	0	1	0	1	0	1	0				1				0
Unsignalized Restricted Crossing U-Turn	N-S	1	0	1	0	1	0	1	0				1				0
Median U-Turn	N-S	1		1	0	1		1	0			0	1			0	0
Partial Median U-Turn	N-S	1		1	0	1		1	0		1	0	1		0	0	0
Signalized ThruCut	N-S		0	1	0		0	1	0		1		1		0		0
Unsignalized ThruCut	N-S		0	1	0		0	1	0		1		1		0		0
Bowtie	N-S			1	0			1	0			1	1			0	0

For shared lanes, enter "0" in L or R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Number of Lanes for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuloata Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) AM Opening Year (2028)
Location	Corner School Drive at Schoolview Way
Date	March 19, 2024
Analysis Type	At-Grade Intersections and Interchanges

Volume Echo with Shared Lane Adjustment for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		0	59	0		0	36	0		7	0	3		0	0	0
Two-Way Stop Control	N-S		0	59	0		0	36	0		7	0	3		0	0	0
All-Way Stop Control	FULL		0	59	0		0	36	0		7	0	3		0	0	0
Continuous Green T	E			22	37		5	31							0		0
Signalized Restricted Crossing U-Turn	N-S	0	0	59	0	0	0	36	0				3				0
Unsignalized Restricted Crossing U-Turn	N-S	0	0	59	0	0	0	36	0				3				0
Median U-Turn	N-S	0		59	0	0		31	0			0	3			0	0
Partial Median U-Turn	N-S	0		59	0	0		31	0		7	0	3		0	0	0
Signalized ThruCut	N-S		0	66	0		0	36	0		7		3		0		0
Unsignalized ThruCut	N-S		0	59	0		0	36	0		7		3		0		0
Bowtie	N-S		0	66	0		0	36	0			12	3			8	0

Capacity Analysis for Planning of Junctions

Results Worksheet

		Estimated Volume-to-Capacity Ratio			
Project Name	Chuloata Road (CR 419) ICE Evaluation	**Number of Configurations**			
Project Number	No-build (2-lane) AM Opening Year (2028)	**< 0.750**	**0.750 - 0.875**	**0.875 - 1.00**	**≥ 1.00**
Location	Corner School Drive at Schoolview Way	**14**	**0**	**0**	**0**
Date	March 19, 2024				

Results for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Zone 1 (North)		Zone 2 (South)		Zone 3 (East)		Zone 4 (West)		Zone 5 (Center)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			
Traffic Signal	FULL									66	0.04	0.04		
Two-Way Stop Control	N-S									--	0.03	0.03		
All-Way Stop Control	FULL									105	0.07	0.07		
Continuous Green T	E									27	0.02	0.02		
Signalized Restricted Crossing U-Turn	N-S	36	*0.02*	68	*0.04*	49	*0.03*	43	*0.02*			0.04		
Unsignalized Restricted Crossing U-Turn	N-S	36	*0.00*	59	*0.01*	66	*0.00*	31	*0.01*			0.01		
Median U-Turn	N-S	36	*0.02*	74	*0.04*					71	0.04	0.04		
Partial Median U-Turn	N-S	36	*0.02*	65	*0.04*					66	0.04	0.04		
Bowtie	N-S	49	0.04	5	0.00	0	0.00	10	0.01	78	0.04	0.04		
Signalized ThruCut	N-S									73	0.04	0.04		
Unsignalized ThruCut	N-S									--	0.03	0.03		

Capacity Analysis for Planning of Junctions

Results Worksheet

Results for Roundabouts

TYPE OF ROUNDABOUT	Zone 1 (North)			Zone 3 (East)			Zone 2 (South)			Zone 4 (West)			Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3			
50 ICD	*0.04*			*0.02*			*0.06*			*0.00*			0.06		
75 ICD	*0.04*			*0.02*			*0.06*			*0.00*			0.06		
1 X 1	*0.03*			*0.01*			*0.04*			*0.00*			0.04		

Results for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Zone 1 (Rt Mrg)		Zone 2 (Lt Mrg)		Zone 3 (Ctr. 1)		Zone 4 (Ctr. 2)		Zone 5 (Lt Mrg)		Zone 6 (Rt Mrg)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			

TYPE OF INTERSECTION	Overall V/C Ratio	V/C Ranking	Pedestrian Accommodation Score	Bicycle Accommodation Score
Unsignalized Restricted Crossing U-Turn N-S	0.01	1	--	--
Continuous Green T E	0.02	2	--	--
Two-Way Stop Control N-S	0.03	3	--	--
Unsignalized ThruCut N-S	0.03	3	--	--
Traffic Signal	0.04	5	--	--
Signalized Restricted Crossing U-Turn N-S	0.04	5	--	--
Median U-Turn N-S	0.04	5	--	--
1 X 1	0.04	5	--	--
Partial Median U-Turn N-S	0.04	5	--	--
Signalized ThruCut N-S	0.04	5	--	--

Capacity Analysis for Planning of Junctions

Input Worksheet 1

Project Name	Chuloata Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) AM Interim Year (2038)
Location	Corner School Drive at Schoolview Way
Date	March 19, 2024
Number of Legs	3
Which leg is the minor street?	E

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	0	8	0	3	3.48%	0.00%
Westbound	0	0	0	0	3.48%	0.00%
Southbound	0	6	33	0	3.48%	0.00%
Northbound	0	0	23	37	3.48%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone		**C3R-Suburban Residential**	
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Equivalent Passenger Car Volume

	Volume (Veh/hr)			
	U-Turn	**Left**	**Thru**	**Right**
Eastbound	0	8	0	3
Westbound	0	0	0	0
Southbound	0	6	34	0
Northbound	0	0	24	38

Notes:	
Left-Turn Adjustment Factor	*Conversion of left-turning vehicles to equivalent through vehicles*
Right-turn Adjustment Factor	*Conversion of right-turning vehicles to equivalent through vehicles*
U-turn Adjustment Factor	*Conversion of U-turning vehicles to equivalent through vehicles*
Truck to PCE Factor	*1 truck = X Passenger Car Equivalents*
Critical Lane Volume Sum Limit	*Saturation Value for Critical Lane Volume Sum at an intersection*

Capacity Analysis for Planning of Junctions

Step 2A: Base Conditions Analysis

Project Name	Chuloata Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) AM Interim Year (2038)
Location	Corner School Drive at Schoolview Way
Date	March 19, 2024
Which leg is the minor street?	E

Existing Intersection Configuration	*All-Way Stop Control*

Number of Lanes for Existing Configuration
(Can be edited in "3- Alt Num Lanes Input" as needed)

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
All-Way Stop Control	FULL		0	1	0		0	1	0		1	0	1		0	0	0

Results for Existing Configuration

TYPE OF		Sheet	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	
Overall v/c Ratio	0.08	Pedestrian Accommodation Score	--		Bicycle Accommodation Score			--

Step 2B: Alternative Selection

Rankings Inclusion		Yes/No	Comment
At-Grade Non-Roundabout Intersections?		Yes	
Traffic Signal		Yes	
Two-Way Stop Control		Yes	
All-Way Stop Control		Yes	
Continuous Green T		Yes	
Quadrant Roadway	S-W	No	No Nearby Quadrant Roadway
	N-E	No	No Nearby Quadrant Roadway
	S-E	No	No Nearby Quadrant Roadway
	N-W	No	No Nearby Quadrant Roadway
Partial Displaced Left Turn		No	3-leg Intersection
Displaced Left Turn		No	3-leg Intersection
Signalized Restricted Crossing U-Turn		Yes	
Unsignalized Restricted Crossing U-Turn		Yes	
Median U-Turn		Yes	
Partial Median U-Turn		Yes	
Bowtie		Yes	
Signalized ThruCut		Yes	
Unsignalized ThruCut		Yes	
Roundabouts?		Yes	
50 ICD Miniroundabout		Yes	
75 ICD Miniroundabout		Yes	
1x1		Yes	
1NS x 2EW		No	1x1 Roundabout Only
2NS x 1EW		No	1x1 Roundabout Only
2x2		No	1x1 Roundabout Only
Ramp Terminal Intersections?		No	
Diamond			
Partial Cloverleaf A			
Partial Cloverleaf B			
Displaced Left Turn Interchange			
Diverging Diamond			
Single Point Diamond			

Continue to Step 3 Step 3

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuloata Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) AM Interim Year (2038)
Location	Corner School Drive at Schoolview Way
Date	March 19, 2024
Analysis Type	At-Grade Intersections and Interchanges

Number of Lanes for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		0	1	0		0	1	0		1	0	1		0	0	0
Two-Way Stop Control	N-S		0	1	0		0	1	0		1	0	1		0	0	0
All-Way Stop Control	FULL		0	1	0		0	1	0		1	0	1		0	0	0
Continuous Green T	E			1	1		1	1							1		1
Signalized Restricted Crossing U-Turn	N-S	1	0	1	0	1	0	1	0				1				0
Unsignalized Restricted Crossing U-Turn	N-S	1	0	1	0	1	0	1	0				1				0
Median U-Turn	N-S	1		1	0	1		1	0			0	1			0	0
Partial Median U-Turn	N-S	1		1	0	1		1	0		1	0	1		0	0	0
Signalized ThruCut	N-S		0	1	0		0	1	0		1		1		0		0
Unsignalized ThruCut	N-S		0	1	0		0	1	0		1		1		0		0
Bowtie	N-S			1	0			1	0			1	1			0	0

For shared lanes, enter "0" in L or R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Number of Lanes for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuloata Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) AM Interim Year (2038)
Location	Corner School Drive at Schoolview Way
Date	March 19, 2024
Analysis Type	At-Grade Intersections and Interchanges

Volume Echo with Shared Lane Adjustment for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		0	62	0		0	40	0		8	0	3		0	0	0
Two-Way Stop Control	N-S		0	62	0		0	40	0		8	0	3		0	0	0
All-Way Stop Control	FULL		0	62	0		0	40	0		8	0	3		0	0	0
Continuous Green T	E			24	38		6	34							0		0
Signalized Restricted Crossing U-Turn	N-S	0	0	62	0	0	0	40	0				3				0
Unsignalized Restricted Crossing U-Turn	N-S	0	0	62	0	0	0	40	0				3				0
Median U-Turn	N-S	0		62	0	0		34	0			0	3			0	0
Partial Median U-Turn	N-S	0		62	0	0		34	0		8	0	3		0	0	0
Signalized ThruCut	N-S		0	69	0		0	40	0		8		3		0		0
Unsignalized ThruCut	N-S		0	62	0		0	40	0		8		3		0		0
Bowtie	N-S		0	69	0		0	40	0			14	3			9	0

Capacity Analysis for Planning of Junctions

Results Worksheet

		Estimated Volume-to-Capacity Ratio			
Project Name	Chuloata Road (CR 419) ICE Evaluation	**Number of Configurations**			
Project Number	No-build (2-lane) AM Interim Year (2038)	**< 0.750**	**0.750 - 0.875**	**0.875 - 1.00**	**≥ 1.00**
Location	Corner School Drive at Schoolview Way	**14**	**0**	**0**	**0**
Date	March 19, 2024				

Results for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Zone 1 (North)		Zone 2 (South)		Zone 3 (East)		Zone 4 (West)		Zone 5 (Center)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			
Traffic Signal	FULL									70	0.04	0.04		
Two-Way Stop Control	N-S									--	0.03	0.03		
All-Way Stop Control	FULL									113	0.08	0.08		
Continuous Green T	E									30	0.02	0.02		
Signalized Restricted Crossing U-Turn	N-S	40	*0.02*	72	*0.04*	51	*0.03*	47	*0.03*			0.04		
Unsignalized Restricted Crossing U-Turn	N-S	40	*0.00*	62	*0.01*	70	*0.00*	34	*0.01*			0.01		
Median U-Turn	N-S	40	*0.02*	80	*0.04*					75	0.04	0.04		
Partial Median U-Turn	N-S	40	*0.02*	70	*0.04*					70	0.04	0.04		
Bowtie	N-S	52	0.04	6	0.00	0	0.00	11	0.01	83	0.05	0.05		
Signalized ThruCut	N-S									77	0.04	0.04		
Unsignalized ThruCut	N-S									--	0.03	0.03		

Capacity Analysis for Planning of Junctions

Results Worksheet

Results for Roundabouts

TYPE OF ROUNDABOUT	Zone 1 (North)			Zone 3 (East)			Zone 2 (South)			Zone 4 (West)			Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3			
50 ICD	*0.04*			*0.02*			*0.06*			*0.00*			0.06		
75 ICD	*0.04*			*0.02*			*0.06*			*0.00*			0.06		
1 X 1	*0.03*			*0.01*			*0.05*			*0.00*			0.05		

Results for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Zone 1 (Rt Mrg)		Zone 2 (Lt Mrg)		Zone 3 (Ctr. 1)		Zone 4 (Ctr. 2)		Zone 5 (Lt Mrg)		Zone 6 (Rt Mrg)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			

TYPE OF INTERSECTION	Overall V/C Ratio	V/C Ranking	Pedestrian Accommodation Score	Bicycle Accommodation Score
Unsignalized Restricted Crossing U-Turn N-S	0.01	1	--	--
Continuous Green T E	0.02	2	--	--
Two-Way Stop Control N-S	0.03	3	--	--
Unsignalized ThruCut N-S	0.03	3	--	--
Traffic Signal	0.04	5	--	--
Signalized Restricted Crossing U-Turn N-S	0.04	5	--	--
Median U-Turn N-S	0.04	5	--	--
Partial Median U-Turn N-S	0.04	5	--	--
Signalized ThruCut N-S	0.04	5	--	--
1 X 1	0.05	10	--	--

Capacity Analysis for Planning of Junctions

Input Worksheet 1

Project Name	Chuloata Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) AM Design Year (2048)
Location	Corner School Drive at Schoolview Way
Date	March 19, 2024
Number of Legs	3
Which leg is the minor street?	E

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	0	9	0	4	3.48%	0.00%
Westbound	0	0	0	0	3.48%	0.00%
Southbound	0	6	36	0	3.48%	0.00%
Northbound	0	0	25	38	3.48%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone		**C3R-Suburban Residential**	
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Equivalent Passenger Car Volume

	Volume (Veh/hr)			
	U-Turn	**Left**	**Thru**	**Right**
Eastbound	0	9	0	4
Westbound	0	0	0	0
Southbound	0	6	37	0
Northbound	0	0	26	39

Notes:	
Left-Turn Adjustment Factor	*Conversion of left-turning vehicles to equivalent through vehicles*
Right-turn Adjustment Factor	*Conversion of right-turning vehicles to equivalent through vehicles*
U-turn Adjustment Factor	*Conversion of U-turning vehicles to equivalent through vehicles*
Truck to PCE Factor	*1 truck = X Passenger Car Equivalents*
Critical Lane Volume Sum Limit	*Saturation Value for Critical Lane Volume Sum at an intersection*

Capacity Analysis for Planning of Junctions

Step 2A: Base Conditions Analysis

Project Name	Chuloata Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) AM Design Year (2048)
Location	Corner School Drive at Schoolview Way
Date	March 19, 2024
Which leg is the minor street?	E

Existing Intersection Configuration	*All-Way Stop Control*

Number of Lanes for Existing Configuration
(Can be edited in "3- Alt Num Lanes Input" as needed)

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
All-Way Stop Control	FULL		0	1	0		0	1	0		1	0	1		0	0	0

Results for Existing Configuration

TYPE OF	Sheet	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	
Overall v/c Ratio	**0.08**	**Pedestrian Accommodation Score**		**--**	**Bicycle Accommodation Score**		**--**

Step 2B: Alternative Selection

Rankings Inclusion		Yes/No	Comment
At-Grade Non-Roundabout Intersections?		Yes	
Traffic Signal		Yes	
Two-Way Stop Control		Yes	
All-Way Stop Control		Yes	
Continuous Green T		Yes	
Quadrant Roadway	S-W	No	No Nearby Quadrant Roadway
	N-E	No	No Nearby Quadrant Roadway
	S-E	No	No Nearby Quadrant Roadway
	N-W	No	No Nearby Quadrant Roadway
Partial Displaced Left Turn		No	3-leg Intersection
Displaced Left Turn		No	3-leg Intersection
Signalized Restricted Crossing U-Turn		Yes	
Unsignalized Restricted Crossing U-Turn		Yes	
Median U-Turn		Yes	
Partial Median U-Turn		Yes	
Bowtie		Yes	
Signalized ThruCut		Yes	
Unsignalized ThruCut		Yes	
Roundabouts?		Yes	
50 ICD Miniroundabout		Yes	
75 ICD Miniroundabout		Yes	
1x1		Yes	
1NS x 2EW		No	1x1 Roundabout Only
2NS x 1EW		No	1x1 Roundabout Only
2x2		No	1x1 Roundabout Only
Ramp Terminal Intersections?		No	
Diamond			
Partial Cloverleaf A			
Partial Cloverleaf B			
Displaced Left Turn Interchange			
Diverging Diamond			
Single Point Diamond			

Continue to Step 3 Step 3

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuloata Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) AM Design Year (2048)
Location	Corner School Drive at Schoolview Way
Date	March 19, 2024
Analysis Type	At-Grade Intersections and Interchanges

Number of Lanes for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		0	1	0		0	1	0		1	0	1		0	0	0
Two-Way Stop Control	N-S		0	1	0		0	1	0		1	0	1		0	0	0
All-Way Stop Control	FULL		0	1	0		0	1	0		1	0	1		0	0	0
Continuous Green T	E			1	1		1	1							1		1
Signalized Restricted Crossing U-Turn	N-S	1	0	1	0	1	0	1	0				1				0
Unsignalized Restricted Crossing U-Turn	N-S	1	0	1	0	1	0	1	0				1				0
Median U-Turn	N-S	1		1	0	1		1	0			0	1			0	0
Partial Median U-Turn	N-S	1		1	0	1		1	0		1	0	1		0	0	0
Signalized ThruCut	N-S		0	1	0		0	1	0		1		1		0		0
Unsignalized ThruCut	N-S		0	1	0		0	1	0		1		1		0		0
Bowtie	N-S			1	0			1	0			1	1			0	0

For shared lanes, enter "0" in L or R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Number of Lanes for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuloata Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) AM Design Year (2048)
Location	Corner School Drive at Schoolview Way
Date	March 19, 2024
Analysis Type	At-Grade Intersections and Interchanges

Volume Echo with Shared Lane Adjustment for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		0	65	0		0	43	0		9	0	4		0	0	0
Two-Way Stop Control	N-S		0	65	0		0	43	0		9	0	4		0	0	0
All-Way Stop Control	FULL		0	65	0		0	43	0		9	0	4		0	0	0
Continuous Green T	E			26	39		6	37							0		0
Signalized Restricted Crossing U-Turn	N-S	0	0	65	0	0	0	43	0				4				0
Unsignalized Restricted Crossing U-Turn	N-S	0	0	65	0	0	0	43	0				4				0
Median U-Turn	N-S	0		65	0	0		37	0			0	4			0	0
Partial Median U-Turn	N-S	0		65	0	0		37	0		9	0	4		0	0	0
Signalized ThruCut	N-S		0	72	0		0	43	0		9		4		0		0
Unsignalized ThruCut	N-S		0	65	0		0	43	0		9		4		0		0
Bowtie	N-S		0	72	0		0	43	0			15	4			11	0

Capacity Analysis for Planning of Junctions

Results Worksheet

Project Name	Chuloata Road (CR 419) ICE Evaluation	***Estimated Volume-to-Capacity Ratio***			
Project Number	No-build (2-lane) AM Design Year (2048)	**Number of Configurations**			
Location	Corner School Drive at Schoolview Way	**< 0.750**	**0.750 - 0.875**	**0.875 - 1.00**	**≥ 1.00**
Date	March 19, 2024	**14**	**0**	**0**	**0**

Results for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Zone 1 (North)		Zone 2 (South)		Zone 3 (East)		Zone 4 (West)		Zone 5 (Center)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			
Traffic Signal	FULL									74	0.04	0.04		
Two-Way Stop Control	N-S									--	0.04	0.04		
All-Way Stop Control	FULL									121	0.08	0.08		
Continuous Green T	E									32	0.02	0.02		
Signalized Restricted Crossing U-Turn	N-S	43	*0.02*	76	*0.04*	52	*0.03*	52	*0.03*			0.04		
Unsignalized Restricted Crossing U-Turn	N-S	43	*0.00*	65	*0.01*	74	*0.00*	37	*0.01*			0.01		
Median U-Turn	N-S	43	*0.02*	84	*0.05*					80	0.04	0.05		
Partial Median U-Turn	N-S	43	*0.02*	73	*0.04*					74	0.04	0.04		
Bowtie	N-S	54	0.04	6	0.00	0	0.00	13	0.01	87	0.05	0.05		
Signalized ThruCut	N-S									81	0.05	0.05		
Unsignalized ThruCut	N-S									--	0.04	0.04		

Capacity Analysis for Planning of Junctions

Results Worksheet

Results for Roundabouts

TYPE OF ROUNDABOUT	Zone 1 (North)			Zone 3 (East)			Zone 2 (South)			Zone 4 (West)			Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3			
50 ICD	*0.04*			*0.02*			*0.06*			*0.00*			0.06		
75 ICD	*0.04*			*0.02*			*0.06*			*0.00*			0.06		
1 X 1	*0.03*			*0.01*			*0.05*			*0.00*			0.05		

Results for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Zone 1 (Rt Mrg)		Zone 2 (Lt Mrg)		Zone 3 (Ctr. 1)		Zone 4 (Ctr. 2)		Zone 5 (Lt Mrg)		Zone 6 (Rt Mrg)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			

TYPE OF INTERSECTION	Overall V/C Ratio	V/C Ranking	Pedestrian Accommodation Score	Bicycle Accommodation Score
Unsignalized Restricted Crossing U-Turn N-S	0.01	1	--	--
Continuous Green T E	0.02	2	--	--
Two-Way Stop Control N-S	0.04	3	--	--
Unsignalized ThruCut N-S	0.04	3	--	--
Traffic Signal	0.04	5	--	--
Signalized Restricted Crossing U-Turn N-S	0.04	5	--	--
Partial Median U-Turn N-S	0.04	5	--	--
1 X 1	0.05	8	--	--
Median U-Turn N-S	0.05	9	--	--
Signalized ThruCut N-S	0.05	9	--	--

Capacity Analysis for Planning of Junctions

Input Worksheet 1

Project Name	Chuloata Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) PM Opening Year (2028)
Location	Corner School Drive at Schoolview Way
Date	March 19, 2024
Number of Legs	3
Which leg is the minor street?	E

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	0	40	0	9	3.48%	0.00%
Westbound	0	0	0	0	3.48%	0.00%
Southbound	0	6	17	0	3.48%	0.00%
Northbound	0	0	73	89	3.48%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone		**C3R-Suburban Residential**	
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Equivalent Passenger Car Volume

	Volume (Veh/hr)			
	U-Turn	**Left**	**Thru**	**Right**
Eastbound	0	41	0	9
Westbound	0	0	0	0
Southbound	0	6	18	0
Northbound	0	0	76	92

Notes:	
Left-Turn Adjustment Factor	*Conversion of left-turning vehicles to equivalent through vehicles*
Right-turn Adjustment Factor	*Conversion of right-turning vehicles to equivalent through vehicles*
U-turn Adjustment Factor	*Conversion of U-turning vehicles to equivalent through vehicles*
Truck to PCE Factor	*1 truck = X Passenger Car Equivalents*
Critical Lane Volume Sum Limit	*Saturation Value for Critical Lane Volume Sum at an intersection*

Capacity Analysis for Planning of Junctions

Step 2A: Base Conditions Analysis

Project Name	Chuloata Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) PM Opening Year (2028)
Location	Corner School Drive at Schoolview Way
Date	March 19, 2024
Which leg is the minor street?	E

Existing Intersection Configuration	*All-Way Stop Control*

Number of Lanes for Existing Configuration
(Can be edited in "3- Alt Num Lanes Input" as needed)

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
All-Way Stop Control	FULL		0	1	0		0	1	0		1	0	1		0	0	0

Results for Existing Configuration

TYPE OF		Sheet	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	
Overall v/c Ratio	0.16	Pedestrian Accommodation Score	--		Bicycle Accommodation Score			--

Step 2B: Alternative Selection

Rankings Inclusion		Yes/No	Comment
At-Grade Non-Roundabout Intersections?		Yes	
Traffic Signal		Yes	
Two-Way Stop Control		Yes	
All-Way Stop Control		Yes	
Continuous Green T		Yes	
Quadrant Roadway	S-W	No	No Nearby Quadrant Roadway
	N-E	No	No Nearby Quadrant Roadway
	S-E	No	No Nearby Quadrant Roadway
	N-W	No	No Nearby Quadrant Roadway
Partial Displaced Left Turn		No	3-leg Intersection
Displaced Left Turn		No	3-leg Intersection
Signalized Restricted Crossing U-Turn		Yes	
Unsignalized Restricted Crossing U-Turn		Yes	
Median U-Turn		Yes	
Partial Median U-Turn		Yes	
Bowtie		Yes	
Signalized ThruCut		Yes	
Unsignalized ThruCut		Yes	
Roundabouts?		Yes	
50 ICD Miniroundabout		Yes	
75 ICD Miniroundabout		Yes	
1x1		Yes	
1NS x 2EW		No	1x1 Roundabout Only
2NS x 1EW		No	1x1 Roundabout Only
2x2		No	1x1 Roundabout Only
Ramp Terminal Intersections?		No	
Diamond			
Partial Cloverleaf A			
Partial Cloverleaf B			
Displaced Left Turn Interchange			
Diverging Diamond			
Single Point Diamond			

Continue to Step 3 Step 3

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuloata Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) PM Opening Year (2028)
Location	Corner School Drive at Schoolview Way
Date	March 19, 2024
Analysis Type	At-Grade Intersections and Interchanges

Number of Lanes for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		0	1	0		0	1	0		1	0	1		0	0	0
Two-Way Stop Control	N-S		0	1	0		0	1	0		1	0	1		0	0	0
All-Way Stop Control	FULL		0	1	0		0	1	0		1	0	1		0	0	0
Continuous Green T	E			1	1		1	1							1		1
Signalized Restricted Crossing U-Turn	N-S	1	0	1	0	1	0	1	0				1				0
Unsignalized Restricted Crossing U-Turn	N-S	1	0	1	0	1	0	1	0				1				0
Median U-Turn	N-S	1		1	0	1		1	0			0	1			0	0
Partial Median U-Turn	N-S	1		1	0	1		1	0		1	0	1		0	0	0
Signalized ThruCut	N-S		0	1	0		0	1	0		1		1		0		0
Unsignalized ThruCut	N-S		0	1	0		0	1	0		1		1		0		0
Bowtie	N-S			1	0			1	0			1	1			0	0

For shared lanes, enter "0" in L or R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Number of Lanes for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuloata Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) PM Opening Year (2028)
Location	Corner School Drive at Schoolview Way
Date	March 19, 2024
Analysis Type	At-Grade Intersections and Interchanges

Volume Echo with Shared Lane Adjustment for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		0	168	0		0	24	0		41	0	9		0	0	0
Two-Way Stop Control	N-S		0	168	0		0	24	0		41	0	9		0	0	0
All-Way Stop Control	FULL		0	168	0		0	24	0		41	0	9		0	0	0
Continuous Green T	E			76	92		6	18							0		0
Signalized Restricted Crossing U-Turn	N-S	0	0	168	0	0	0	24	0				9				0
Unsignalized Restricted Crossing U-Turn	N-S	0	0	168	0	0	0	24	0				9				0
Median U-Turn	N-S	0		168	0	0		18	0			0	9			0	0
Partial Median U-Turn	N-S	0		168	0	0		18	0		41	0	9		0	0	0
Signalized ThruCut	N-S		0	184	0		0	24	0		41		9		0		0
Unsignalized ThruCut	N-S		0	168	0		0	24	0		41		9		0		0
Bowtie	N-S		0	184	0		0	24	0			47	9			48	0

Capacity Analysis for Planning of Junctions

Results Worksheet

Project Name	Chuloata Road (CR 419) ICE Evaluation	***Estimated Volume-to-Capacity Ratio***			
Project Number	No-build (2-lane) PM Opening Year (2028)	**Number of Configurations**			
Location	Corner School Drive at Schoolview Way	**< 0.750**	**0.750 - 0.875**	**0.875 - 1.00**	**≥ 1.00**
Date	March 19, 2024	**14**	**0**	**0**	**0**

Results for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Zone 1 (North)		Zone 2 (South)		Zone 3 (East)		Zone 4 (West)		Zone 5 (Center)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			
Traffic Signal	FULL									211	0.12	0.12		
Two-Way Stop Control	N-S									--	0.09	0.09		
All-Way Stop Control	FULL									242	0.16	0.16		
Continuous Green T	E									82	0.05	0.05		
Signalized Restricted Crossing U-Turn	N-S	24	*0.01*	219	*0.12*	123	*0.07*	77	*0.04*			0.12		
Unsignalized Restricted Crossing U-Turn	N-S	24	*0.00*	168	*0.03*	209	*0.00*	18	*0.05*			0.05		
Median U-Turn	N-S	24	*0.01*	227	*0.13*					227	0.13	0.13		
Partial Median U-Turn	N-S	24	*0.01*	176	*0.10*					211	0.12	0.12		
Bowtie	N-S	139	0.10	6	0.00	0	0.00	50	0.04	231	0.13	0.13		
Signalized ThruCut	N-S									227	0.13	0.13		
Unsignalized ThruCut	N-S									--	0.09	0.09		

Capacity Analysis for Planning of Junctions

Results Worksheet

Results for Roundabouts

TYPE OF ROUNDABOUT	Zone 1 (North)			Zone 3 (East)			Zone 2 (South)			Zone 4 (West)			Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3			
50 ICD	*0.02*			*0.06*			*0.17*			*0.00*			0.17		
75 ICD	*0.02*			*0.06*			*0.17*			*0.00*			0.17		
1 X 1	*0.02*			*0.04*			*0.13*			*0.00*			0.13		

Results for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Zone 1 (Rt Mrg)		Zone 2 (Lt Mrg)		Zone 3 (Ctr. 1)		Zone 4 (Ctr. 2)		Zone 5 (Lt Mrg)		Zone 6 (Rt Mrg)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			

TYPE OF INTERSECTION	Overall V/C Ratio	V/C Ranking	Pedestrian Accommodation Score	Bicycle Accommodation Score
Unsignalized Restricted Crossing U-Turn N-S	0.05	1	--	--
Continuous Green T E	0.05	2	--	--
Two-Way Stop Control N-S	0.09	3	--	--
Unsignalized ThruCut N-S	0.09	3	--	--
Traffic Signal	0.12	5	--	--
Signalized Restricted Crossing U-Turn N-S	0.12	5	--	--
Partial Median U-Turn N-S	0.12	5	--	--
1 X 1	0.13	8	--	--
Median U-Turn N-S	0.13	9	--	--
Signalized ThruCut N-S	0.13	9	--	--

Capacity Analysis for Planning of Junctions

Input Worksheet 1

Project Name	Chuloata Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) PM Interim Year (2038)
Location	Corner School Drive at Schoolview Way
Date	March 19, 2024
Number of Legs	3
Which leg is the minor street?	E

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	0	46	0	10	3.48%	0.00%
Westbound	0	0	0	0	3.48%	0.00%
Southbound	0	7	18	0	3.48%	0.00%
Northbound	0	0	80	100	3.48%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone		**C3R-Suburban Residential**	
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Equivalent Passenger Car Volume

	Volume (Veh/hr)			
	U-Turn	**Left**	**Thru**	**Right**
Eastbound	0	48	0	10
Westbound	0	0	0	0
Southbound	0	7	19	0
Northbound	0	0	83	103

Notes:	
Left-Turn Adjustment Factor	*Conversion of left-turning vehicles to equivalent through vehicles*
Right-turn Adjustment Factor	*Conversion of right-turning vehicles to equivalent through vehicles*
U-turn Adjustment Factor	*Conversion of U-turning vehicles to equivalent through vehicles*
Truck to PCE Factor	*1 truck = X Passenger Car Equivalents*
Critical Lane Volume Sum Limit	*Saturation Value for Critical Lane Volume Sum at an intersection*

Capacity Analysis for Planning of Junctions

Step 2A: Base Conditions Analysis

Project Name	Chuloata Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) PM Interim Year (2038)
Location	Corner School Drive at Schoolview Way
Date	March 19, 2024
Which leg is the minor street?	E

Existing Intersection Configuration	*All-Way Stop Control*

Number of Lanes for Existing Configuration
(Can be edited in "3- Alt Num Lanes Input" as needed)

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
All-Way Stop Control	FULL		0	1	0		0	1	0		1	0	1		0	0	0

Results for Existing Configuration

TYPE OF	Sheet	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	
Overall v/c Ratio	0.18	Pedestrian Accommodation Score	--	Bicycle Accommodation Score	--		

Step 2B: Alternative Selection

Rankings Inclusion		Yes/No	Comment
At-Grade Non-Roundabout Intersections?		Yes	
Traffic Signal		Yes	
Two-Way Stop Control		Yes	
All-Way Stop Control		Yes	
Continuous Green T		Yes	
Quadrant Roadway	S-W	No	No Nearby Quadrant Roadway
	N-E	No	No Nearby Quadrant Roadway
	S-E	No	No Nearby Quadrant Roadway
	N-W	No	No Nearby Quadrant Roadway
Partial Displaced Left Turn		No	3-leg Intersection
Displaced Left Turn		No	3-leg Intersection
Signalized Restricted Crossing U-Turn		Yes	
Unsignalized Restricted Crossing U-Turn		Yes	
Median U-Turn		Yes	
Partial Median U-Turn		Yes	
Bowtie		Yes	
Signalized ThruCut		Yes	
Unsignalized ThruCut		Yes	
Roundabouts?		Yes	
50 ICD Miniroundabout		Yes	
75 ICD Miniroundabout		Yes	
1x1		Yes	
1NS x 2EW		No	1x1 Roundabout Only
2NS x 1EW		No	1x1 Roundabout Only
2x2		No	1x1 Roundabout Only
Ramp Terminal Intersections?		No	
Diamond			
Partial Cloverleaf A			
Partial Cloverleaf B			
Displaced Left Turn Interchange			
Diverging Diamond			
Single Point Diamond			

Continue to Step 3 Step 3

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuloata Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) PM Interim Year (2038)
Location	Corner School Drive at Schoolview Way
Date	March 19, 2024
Analysis Type	At-Grade Intersections and Interchanges

Number of Lanes for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		0	1	0		0	1	0		1	0	1		0	0	0
Two-Way Stop Control	N-S		0	1	0		0	1	0		1	0	1		0	0	0
All-Way Stop Control	FULL		0	1	0		0	1	0		1	0	1		0	0	0
Continuous Green T	E			1	1		1	1							1		1
Signalized Restricted Crossing U-Turn	N-S	1	0	1	0	1	0	1	0				1				0
Unsignalized Restricted Crossing U-Turn	N-S	1	0	1	0	1	0	1	0				1				0
Median U-Turn	N-S	1		1	0	1		1	0			0	1			0	0
Partial Median U-Turn	N-S	1		1	0	1		1	0		1	0	1		0	0	0
Signalized ThruCut	N-S		0	1	0		0	1	0		1		1		0		0
Unsignalized ThruCut	N-S		0	1	0		0	1	0		1		1		0		0
Bowtie	N-S			1	0			1	0			1	1			0	0

For shared lanes, enter "0" in L or R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Number of Lanes for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuloata Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) PM Interim Year (2038)
Location	Corner School Drive at Schoolview Way
Date	March 19, 2024
Analysis Type	At-Grade Intersections and Interchanges

Volume Echo with Shared Lane Adjustment for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		0	186	0		0	26	0		48	0	10		0	0	0
Two-Way Stop Control	N-S		0	186	0		0	26	0		48	0	10		0	0	0
All-Way Stop Control	FULL		0	186	0		0	26	0		48	0	10		0	0	0
Continuous Green T	E			83	103		7	19							0		0
Signalized Restricted Crossing U-Turn	N-S	0	0	186	0	0	0	26	0				10				0
Unsignalized Restricted Crossing U-Turn	N-S	0	0	186	0	0	0	26	0				10				0
Median U-Turn	N-S	0		186	0	0		19	0			0	10			0	0
Partial Median U-Turn	N-S	0		186	0	0		19	0		48	0	10		0	0	0
Signalized ThruCut	N-S		0	204	0		0	26	0		48		10		0		0
Unsignalized ThruCut	N-S		0	186	0		0	26	0		48		10		0		0
Bowtie	N-S		0	204	0		0	26	0			55	10			56	0

Capacity Analysis for Planning of Junctions

Results Worksheet

Project Name	Chuloata Road (CR 419) ICE Evaluation	***Estimated Volume-to-Capacity Ratio***			
Project Number	No-build (2-lane) PM Interim Year (2038)	**Number of Configurations**			
Location	Corner School Drive at Schoolview Way	**< 0.750**	**0.750 - 0.875**	**0.875 - 1.00**	**≥ 1.00**
Date	March 19, 2024	**14**	**0**	**0**	**0**

Results for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Zone 1 (North)		Zone 2 (South)		Zone 3 (East)		Zone 4 (West)		Zone 5 (Center)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			
Traffic Signal	FULL									237	0.14	0.14		
Two-Way Stop Control	N-S									--	0.10	0.10		
All-Way Stop Control	FULL									270	0.18	0.18		
Continuous Green T	E									90	0.05	0.05		
Signalized Restricted Crossing U-Turn	N-S	26	*0.01*	246	*0.14*	138	*0.08*	87	*0.05*			0.14		
Unsignalized Restricted Crossing U-Turn	N-S	26	*0.00*	186	*0.04*	234	*0.01*	19	*0.05*			0.05		
Median U-Turn	N-S	26	*0.01*	255	*0.14*					254	0.14	0.14		
Partial Median U-Turn	N-S	26	*0.01*	195	*0.11*					237	0.14	0.14		
Bowtie	N-S	158	0.11	7	0.01	0	0.00	58	0.04	259	0.14	0.14		
Signalized ThruCut	N-S									255	0.15	0.15		
Unsignalized ThruCut	N-S									--	0.10	0.10		

Capacity Analysis for Planning of Junctions

Results Worksheet

Results for Roundabouts

TYPE OF ROUNDABOUT	Zone 1 (North)			Zone 3 (East)			Zone 2 (South)			Zone 4 (West)			Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3			
50 ICD	*0.03*			*0.07*			*0.19*			*0.00*			0.19		
75 ICD	*0.03*			*0.07*			*0.19*			*0.00*			0.19		
1 X 1	*0.02*			*0.04*			*0.14*			*0.00*			0.14		

Results for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Zone 1 (Rt Mrg)		Zone 2 (Lt Mrg)		Zone 3 (Ctr. 1)		Zone 4 (Ctr. 2)		Zone 5 (Lt Mrg)		Zone 6 (Rt Mrg)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			

TYPE OF INTERSECTION	Overall V/C Ratio	V/C Ranking	Pedestrian Accommodation Score	Bicycle Accommodation Score
Continuous Green T E	0.05	1	--	--
Unsignalized Restricted Crossing U-Turn N-S	0.05	2	--	--
Two-Way Stop Control N-S	0.10	3	--	--
Unsignalized ThruCut N-S	0.10	3	--	--
Traffic Signal	0.14	5	--	--
Signalized Restricted Crossing U-Turn N-S	0.14	5	--	--
Median U-Turn N-S	0.14	5	--	--
Partial Median U-Turn N-S	0.14	5	--	--
1 X 1	0.14	5	--	--
Bowtie N-S	0.14	10	--	--

Capacity Analysis for Planning of Junctions

Input Worksheet 1

Project Name	Chuloata Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) PM Design Year (2048)
Location	Corner School Drive at Schoolview Way
Date	March 19, 2024
Number of Legs	3
Which leg is the minor street?	E

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	0	51	0	11	3.48%	0.00%
Westbound	0	0	0	0	3.48%	0.00%
Southbound	0	7	20	0	3.48%	0.00%
Northbound	0	0	76	110	3.48%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone		**C3R-Suburban Residential**	
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Equivalent Passenger Car Volume

	Volume (Veh/hr)			
	U-Turn	**Left**	**Thru**	**Right**
Eastbound	0	53	0	11
Westbound	0	0	0	0
Southbound	0	7	21	0
Northbound	0	0	79	114

Notes:	
Left-Turn Adjustment Factor	*Conversion of left-turning vehicles to equivalent through vehicles*
Right-turn Adjustment Factor	*Conversion of right-turning vehicles to equivalent through vehicles*
U-turn Adjustment Factor	*Conversion of U-turning vehicles to equivalent through vehicles*
Truck to PCE Factor	*1 truck = X Passenger Car Equivalents*
Critical Lane Volume Sum Limit	*Saturation Value for Critical Lane Volume Sum at an intersection*

Capacity Analysis for Planning of Junctions

Step 2A: Base Conditions Analysis

Project Name	Chuloata Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) PM Design Year (2048)
Location	Corner School Drive at Schoolview Way
Date	March 19, 2024
Which leg is the minor street?	E

Existing Intersection Configuration	*All-Way Stop Control*

Number of Lanes for Existing Configuration
(Can be edited in "3- Alt Num Lanes Input" as needed)

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
All-Way Stop Control	FULL		0	1	0		0	1	0		1	0	1		0	0	0

Results for Existing Configuration

TYPE OF	Sheet	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	
Overall v/c Ratio	**0.19**	**Pedestrian Accommodation Score**		**--**	**Bicycle Accommodation Score**		**--**

Step 2B: Alternative Selection

Rankings Inclusion		Yes/No	Comment
At-Grade Non-Roundabout Intersections?		Yes	
Traffic Signal		Yes	
Two-Way Stop Control		Yes	
All-Way Stop Control		Yes	
Continuous Green T		Yes	
Quadrant Roadway	S-W	No	No Nearby Quadrant Roadway
	N-E	No	No Nearby Quadrant Roadway
	S-E	No	No Nearby Quadrant Roadway
	N-W	No	No Nearby Quadrant Roadway
Partial Displaced Left Turn		No	3-leg Intersection
Displaced Left Turn		No	3-leg Intersection
Signalized Restricted Crossing U-Turn		Yes	
Unsignalized Restricted Crossing U-Turn		Yes	
Median U-Turn		Yes	
Partial Median U-Turn		Yes	
Bowtie		Yes	
Signalized ThruCut		Yes	
Unsignalized ThruCut		Yes	
Roundabouts?		Yes	
50 ICD Miniroundabout		Yes	
75 ICD Miniroundabout		Yes	
1x1		Yes	
1NS x 2EW		No	1x1 Roundabout Only
2NS x 1EW		No	1x1 Roundabout Only
2x2		No	1x1 Roundabout Only
Ramp Terminal Intersections?		No	
Diamond			
Partial Cloverleaf A			
Partial Cloverleaf B			
Displaced Left Turn Interchange			
Diverging Diamond			
Single Point Diamond			

Continue to Step 3 → Step 3

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuloata Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) PM Design Year (2048)
Location	Corner School Drive at Schoolview Way
Date	March 19, 2024
Analysis Type	At-Grade Intersections and Interchanges

Number of Lanes for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		0	1	0		0	1	0		1	0	1		0	0	0
Two-Way Stop Control	N-S		0	1	0		0	1	0		1	0	1		0	0	0
All-Way Stop Control	FULL		0	1	0		0	1	0		1	0	1		0	0	0
Continuous Green T	E			1	1		1	1							1		1
Signalized Restricted Crossing U-Turn	N-S	1	0	1	0	1	0	1	0				1				0
Unsignalized Restricted Crossing U-Turn	N-S	1	0	1	0	1	0	1	0				1				0
Median U-Turn	N-S	1		1	0	1		1	0			0	1			0	0
Partial Median U-Turn	N-S	1		1	0	1		1	0		1	0	1		0	0	0
Signalized ThruCut	N-S		0	1	0		0	1	0		1		1		0		0
Unsignalized ThruCut	N-S		0	1	0		0	1	0		1		1		0		0
Bowtie	N-S			1	0			1	0			1	1			0	0

For shared lanes, enter "0" in L or R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Number of Lanes for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuloata Road (CR 419) ICE Evaluation
Project Number	No-build (2-lane) PM Design Year (2048)
Location	Corner School Drive at Schoolview Way
Date	March 19, 2024
Analysis Type	At-Grade Intersections and Interchanges

Volume Echo with Shared Lane Adjustment for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		0	193	0		0	28	0		53	0	11		0	0	0
Two-Way Stop Control	N-S		0	193	0		0	28	0		53	0	11		0	0	0
All-Way Stop Control	FULL		0	193	0		0	28	0		53	0	11		0	0	0
Continuous Green T	E			79	114		7	21							0		0
Signalized Restricted Crossing U-Turn	N-S	0	0	193	0	0	0	28	0				11				0
Unsignalized Restricted Crossing U-Turn	N-S	0	0	193	0	0	0	28	0				11				0
Median U-Turn	N-S	0		193	0	0		21	0			0	11			0	0
Partial Median U-Turn	N-S	0		193	0	0		21	0		53	0	11		0	0	0
Signalized ThruCut	N-S		0	213	0		0	28	0		53		11		0		0
Unsignalized ThruCut	N-S		0	193	0		0	28	0		53		11		0		0
Bowtie	N-S		0	213	0		0	28	0			60	11			62	0

Capacity Analysis for Planning of Junctions

Results Worksheet

Project Name	Chuloata Road (CR 419) ICE Evaluation	***Estimated Volume-to-Capacity Ratio***			
Project Number	No-build (2-lane) PM Design Year (2048)	**Number of Configurations**			
Location	Corner School Drive at Schoolview Way	**< 0.750**	**0.750 - 0.875**	**0.875 - 1.00**	**≥ 1.00**
Date	March 19, 2024	**14**	**0**	**0**	**0**

Results for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Zone 1 (North)		Zone 2 (South)		Zone 3 (East)		Zone 4 (West)		Zone 5 (Center)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			
Traffic Signal	FULL									249	0.14	0.14		
Two-Way Stop Control	N-S									--	0.11	0.11		
All-Way Stop Control	FULL									285	0.19	0.19		
Continuous Green T	E									86	0.05	0.05		
Signalized Restricted Crossing U-Turn	N-S	28	*0.02*	259	*0.14*	141	*0.08*	96	*0.05*			0.14		
Unsignalized Restricted Crossing U-Turn	N-S	28	*0.00*	193	*0.05*	246	*0.01*	21	*0.06*			0.06		
Median U-Turn	N-S	28	*0.02*	268	*0.15*					268	0.15	0.15		
Partial Median U-Turn	N-S	28	*0.02*	202	*0.11*					249	0.14	0.14		
Bowtie	N-S	174	0.13	7	0.01	0	0.00	64	0.05	273	0.15	0.15		
Signalized ThruCut	N-S									269	0.15	0.15		
Unsignalized ThruCut	N-S									--	0.11	0.11		

Capacity Analysis for Planning of Junctions

Results Worksheet

Results for Roundabouts

TYPE OF ROUNDABOUT	Zone 1 (North)			Zone 3 (East)			Zone 2 (South)			Zone 4 (West)			Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3			
50 ICD	*0.03*			*0.07*			*0.20*			*0.00*			0.20		
75 ICD	*0.03*			*0.07*			*0.19*			*0.00*			0.19		
1 X 1	*0.02*			*0.05*			*0.15*			*0.00*			0.15		

Results for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Zone 1 (Rt Mrg)		Zone 2 (Lt Mrg)		Zone 3 (Ctr. 1)		Zone 4 (Ctr. 2)		Zone 5 (Lt Mrg)		Zone 6 (Rt Mrg)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			

TYPE OF INTERSECTION	Overall V/C Ratio	V/C Ranking	Pedestrian Accommodation Score	Bicycle Accommodation Score
Continuous Green T E	0.05	1	--	--
Unsignalized Restricted Crossing U-Turn N-S	0.06	2	--	--
Two-Way Stop Control N-S	0.11	3	--	--
Unsignalized ThruCut N-S	0.11	3	--	--
Traffic Signal	0.14	5	--	--
Signalized Restricted Crossing U-Turn N-S	0.14	5	--	--
Partial Median U-Turn N-S	0.14	5	--	--
Median U-Turn N-S	0.15	8	--	--
1 X 1	0.15	8	--	--
Signalized ThruCut N-S	0.15	8	--	--

Capacity Analysis for Planning of Junctions

Input Worksheet 1

Project Name	Chuloata Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) AM Opening Year (2028)
Location	Corner School Drive at Schoolview Way
Date	March 19, 2024
Number of Legs	3
Which leg is the minor street?	E

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	0	51	0	3	3.48%	0.00%
Westbound	0	0	0	0	3.48%	0.00%
Southbound	0	5	30	0	3.48%	0.00%
Northbound	0	0	21	38	3.48%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone		**C3R-Suburban Residential**	
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Equivalent Passenger Car Volume

	Volume (Veh/hr)			
	U-Turn	**Left**	**Thru**	**Right**
Eastbound	0	53	0	3
Westbound	0	0	0	0
Southbound	0	5	31	0
Northbound	0	0	22	39

Notes:	
Left-Turn Adjustment Factor	*Conversion of left-turning vehicles to equivalent through vehicles*
Right-turn Adjustment Factor	*Conversion of right-turning vehicles to equivalent through vehicles*
U-turn Adjustment Factor	*Conversion of U-turning vehicles to equivalent through vehicles*
Truck to PCE Factor	*1 truck = X Passenger Car Equivalents*
Critical Lane Volume Sum Limit	*Saturation Value for Critical Lane Volume Sum at an intersection*

Capacity Analysis for Planning of Junctions

Step 2A: Base Conditions Analysis

Project Name	Chuloata Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) AM Opening Year (2028)
Location	Corner School Drive at Schoolview Way
Date	March 19, 2024
Which leg is the minor street?	E

Existing Intersection Configuration	*All-Way Stop Control*

Number of Lanes for Existing Configuration
(Can be edited in "3- Alt Num Lanes Input" as needed)

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
All-Way Stop Control	FULL		0	1	0		0	1	0		1	0	1		0	0	0

Results for Existing Configuration

TYPE OF		Sheet	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	
Overall v/c Ratio	0.10	Pedestrian Accommodation Score	--		Bicycle Accommodation Score			--

Step 2B: Alternative Selection

Rankings Inclusion		Yes/No	Comment
At-Grade Non-Roundabout Intersections?		Yes	
Traffic Signal		Yes	
Two-Way Stop Control		Yes	
All-Way Stop Control		Yes	
Continuous Green T		Yes	
Quadrant Roadway	S-W	No	No Nearby Quadrant Roadway
	N-E	No	No Nearby Quadrant Roadway
	S-E	No	No Nearby Quadrant Roadway
	N-W	No	No Nearby Quadrant Roadway
Partial Displaced Left Turn		No	3-leg Intersection
Displaced Left Turn		No	3-leg Intersection
Signalized Restricted Crossing U-Turn		Yes	
Unsignalized Restricted Crossing U-Turn		Yes	
Median U-Turn		Yes	
Partial Median U-Turn		Yes	
Bowtie		Yes	
Signalized ThruCut		Yes	
Unsignalized ThruCut		Yes	
Roundabouts?		Yes	
50 ICD Miniroundabout		Yes	
75 ICD Miniroundabout		Yes	
1x1		Yes	
1NS x 2EW		No	1x1 Roundabout Only
2NS x 1EW		No	1x1 Roundabout Only
2x2		No	1x1 Roundabout Only
Ramp Terminal Intersections?		No	
Diamond			
Partial Cloverleaf A			
Partial Cloverleaf B			
Displaced Left Turn Interchange			
Diverging Diamond			
Single Point Diamond			

Continue to Step 3 Step 3

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuloata Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) AM Opening Year (2028)
Location	Corner School Drive at Schoolview Way
Date	March 19, 2024
Analysis Type	At-Grade Intersections and Interchanges

Number of Lanes for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		0	1	0		0	1	0		1	0	1		0	0	0
Two-Way Stop Control	N-S		0	1	0		0	1	0		1	0	1		0	0	0
All-Way Stop Control	FULL		0	1	0		0	1	0		1	0	1		0	0	0
Continuous Green T	E			1	1		1	1							1		1
Signalized Restricted Crossing U-Turn	N-S	1	0	1	0	1	0	1	0				1				0
Unsignalized Restricted Crossing U-Turn	N-S	1	0	1	0	1	0	1	0				1				0
Median U-Turn	N-S	1		1	0	1		1	0			0	1			0	0
Partial Median U-Turn	N-S	1		1	0	1		1	0		1	0	1		0	0	0
Signalized ThruCut	N-S		0	1	0		0	1	0		1		1		0		0
Unsignalized ThruCut	N-S		0	1	0		0	1	0		1		1		0		0
Bowtie	N-S			1	0			1	0			1	1			0	0

For shared lanes, enter "0" in L or R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Number of Lanes for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuloata Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) AM Opening Year (2028)
Location	Corner School Drive at Schoolview Way
Date	March 19, 2024
Analysis Type	At-Grade Intersections and Interchanges

Volume Echo with Shared Lane Adjustment for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		0	61	0		0	36	0		53	0	3		0	0	0
Two-Way Stop Control	N-S		0	61	0		0	36	0		53	0	3		0	0	0
All-Way Stop Control	FULL		0	61	0		0	36	0		53	0	3		0	0	0
Continuous Green T	E			22	39		5	31							0		0
Signalized Restricted Crossing U-Turn	N-S	0	0	61	0	0	0	36	0				3				0
Unsignalized Restricted Crossing U-Turn	N-S	0	0	61	0	0	0	36	0				3				0
Median U-Turn	N-S	0		61	0	0		31	0			0	3			0	0
Partial Median U-Turn	N-S	0		61	0	0		31	0		53	0	3		0	0	0
Signalized ThruCut	N-S		0	68	0		0	36	0		53		3		0		0
Unsignalized ThruCut	N-S		0	61	0		0	36	0		53		3		0		0
Bowtie	N-S		0	68	0		0	36	0			58	3			62	0

Capacity Analysis for Planning of Junctions

Results Worksheet

Project Name	Chuloata Road (CR 419) ICE Evaluation	***Estimated Volume-to-Capacity Ratio***			
Project Number	Build (4-lane) AM Opening Year (2028)	**Number of Configurations**			
Location	Corner School Drive at Schoolview Way	**< 0.750**	**0.750 - 0.875**	**0.875 - 1.00**	**≥ 1.00**
Date	March 19, 2024	**14**	**0**	**0**	**0**

Results for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Zone 1 (North)		Zone 2 (South)		Zone 3 (East)		Zone 4 (West)		Zone 5 (Center)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			
Traffic Signal	FULL									117	0.07	0.07		
Two-Way Stop Control	N-S									--	0.06	0.06		
All-Way Stop Control	FULL									153	0.10	0.10		
Continuous Green T	E									27	0.02	0.02		
Signalized Restricted Crossing U-Turn	N-S	36	*0.02*	127	*0.07*	80	*0.04*	97	*0.05*			0.07		
Unsignalized Restricted Crossing U-Turn	N-S	36	*0.00*	61	*0.04*	114	*0.00*	31	*0.05*			0.05		
Median U-Turn	N-S	36	*0.02*	134	*0.07*					127	0.07	0.07		
Partial Median U-Turn	N-S	36	*0.02*	67	*0.04*					117	0.07	0.07		
Bowtie	N-S	97	0.07	5	0.00	0	0.00	56	0.04	126	0.07	0.07		
Signalized ThruCut	N-S									124	0.07	0.07		
Unsignalized ThruCut	N-S									--	0.06	0.06		

Capacity Analysis for Planning of Junctions

Results Worksheet

Results for Roundabouts

TYPE OF ROUNDABOUT	Zone 1 (North)			Zone 3 (East)			Zone 2 (South)			Zone 4 (West)			Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3			
50 ICD	*0.04*			*0.06*			*0.06*			*0.00*			0.06		
75 ICD	*0.04*			*0.07*			*0.06*			*0.00*			0.07		
1 X 1	*0.03*			*0.04*			*0.05*			*0.00*			0.05		

Results for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Zone 1 (Rt Mrg)		Zone 2 (Lt Mrg)		Zone 3 (Ctr. 1)		Zone 4 (Ctr. 2)		Zone 5 (Lt Mrg)		Zone 6 (Rt Mrg)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			

TYPE OF INTERSECTION	Overall V/C Ratio	V/C Ranking	Pedestrian Accommodation Score	Bicycle Accommodation Score
Continuous Green T E	0.02	1	--	--
1 X 1	0.05	2	--	--
Unsignalized Restricted Crossing U-Turn N-S	0.05	3	--	--
Two-Way Stop Control N-S	0.06	4	--	--
Unsignalized ThruCut N-S	0.06	5	--	--
50 ICD	0.06	6	--	--
75 ICD	0.07	7	--	--
Traffic Signal	0.07	8	--	--
Bowtie N-S	0.07	8	--	--
Signalized Restricted Crossing U-Turn N-S	0.07	8	--	--

Capacity Analysis for Planning of Junctions

Input Worksheet 1

Project Name	Chuloata Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) AM Interim Year (2038)
Location	Corner School Drive at Schoolview Way
Date	March 19, 2024
Number of Legs	3
Which leg is the minor street?	E

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	0	55	0	3	3.48%	0.00%
Westbound	0	0	0	0	3.48%	0.00%
Southbound	0	6	33	0	3.48%	0.00%
Northbound	0	0	23	40	3.48%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone		**C3R-Suburban Residential**	
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Equivalent Passenger Car Volume

	Volume (Veh/hr)			
	U-Turn	**Left**	**Thru**	**Right**
Eastbound	0	57	0	3
Westbound	0	0	0	0
Southbound	0	6	34	0
Northbound	0	0	24	41

Notes:	
Left-Turn Adjustment Factor	*Conversion of left-turning vehicles to equivalent through vehicles*
Right-turn Adjustment Factor	*Conversion of right-turning vehicles to equivalent through vehicles*
U-turn Adjustment Factor	*Conversion of U-turning vehicles to equivalent through vehicles*
Truck to PCE Factor	*1 truck = X Passenger Car Equivalents*
Critical Lane Volume Sum Limit	*Saturation Value for Critical Lane Volume Sum at an intersection*

Capacity Analysis for Planning of Junctions

Step 2A: Base Conditions Analysis

Project Name	Chuloata Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) AM Interim Year (2038)
Location	Corner School Drive at Schoolview Way
Date	March 19, 2024
Which leg is the minor street?	E

Existing Intersection Configuration	*All-Way Stop Control*

Number of Lanes for Existing Configuration
(Can be edited in "3- Alt Num Lanes Input" as needed)

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
All-Way Stop Control	FULL		0	1	0		0	1	0		1	0	1		0	0	0

Results for Existing Configuration

TYPE OF	Sheet	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	
Overall v/c Ratio	0.11	Pedestrian Accommodation Score	--	Bicycle Accommodation Score	--		

Step 2B: Alternative Selection

Rankings Inclusion		Yes/No	Comment
At-Grade Non-Roundabout Intersections?		Yes	
Traffic Signal		Yes	
Two-Way Stop Control		Yes	
All-Way Stop Control		Yes	
Continuous Green T		Yes	
Quadrant Roadway	S-W	No	No Nearby Quadrant Roadway
	N-E	No	No Nearby Quadrant Roadway
	S-E	No	No Nearby Quadrant Roadway
	N-W	No	No Nearby Quadrant Roadway
Partial Displaced Left Turn		No	3-leg Intersection
Displaced Left Turn		No	3-leg Intersection
Signalized Restricted Crossing U-Turn		Yes	
Unsignalized Restricted Crossing U-Turn		Yes	
Median U-Turn		Yes	
Partial Median U-Turn		Yes	
Bowtie		Yes	
Signalized ThruCut		Yes	
Unsignalized ThruCut		Yes	
Roundabouts?		Yes	
50 ICD Miniroundabout		Yes	
75 ICD Miniroundabout		Yes	
1x1		Yes	
1NS x 2EW		No	1x1 Roundabout Only
2NS x 1EW		No	1x1 Roundabout Only
2x2		No	1x1 Roundabout Only
Ramp Terminal Intersections?		No	
Diamond			
Partial Cloverleaf A			
Partial Cloverleaf B			
Displaced Left Turn Interchange			
Diverging Diamond			
Single Point Diamond			

Continue to Step 3 Step 3

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuloata Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) AM Interim Year (2038)
Location	Corner School Drive at Schoolview Way
Date	March 19, 2024
Analysis Type	At-Grade Intersections and Interchanges

Number of Lanes for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		0	1	0		0	1	0		1	0	1		0	0	0
Two-Way Stop Control	N-S		0	1	0		0	1	0		1	0	1		0	0	0
All-Way Stop Control	FULL		0	1	0		0	1	0		1	0	1		0	0	0
Continuous Green T	E			1	1		1	1							1		1
Signalized Restricted Crossing U-Turn	N-S	1	0	1	0	1	0	1	0				1				0
Unsignalized Restricted Crossing U-Turn	N-S	1	0	1	0	1	0	1	0				1				0
Median U-Turn	N-S	1		1	0	1		1	0			0	1			0	0
Partial Median U-Turn	N-S	1		1	0	1		1	0		1	0	1		0	0	0
Signalized ThruCut	N-S		0	1	0		0	1	0		1		1		0		0
Unsignalized ThruCut	N-S		0	1	0		0	1	0		1		1		0		0
Bowtie	N-S			1	0			1	0			1	1			0	0

For shared lanes, enter "0" in L or R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Number of Lanes for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuloata Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) AM Interim Year (2038)
Location	Corner School Drive at Schoolview Way
Date	March 19, 2024
Analysis Type	At-Grade Intersections and Interchanges

Volume Echo with Shared Lane Adjustment for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		0	65	0		0	40	0		57	0	3		0	0	0
Two-Way Stop Control	N-S		0	65	0		0	40	0		57	0	3		0	0	0
All-Way Stop Control	FULL		0	65	0		0	40	0		57	0	3		0	0	0
Continuous Green T	E			24	41		6	34							0		0
Signalized Restricted Crossing U-Turn	N-S	0	0	65	0	0	0	40	0				3				0
Unsignalized Restricted Crossing U-Turn	N-S	0	0	65	0	0	0	40	0				3				0
Median U-Turn	N-S	0		65	0	0		34	0			0	3			0	0
Partial Median U-Turn	N-S	0		65	0	0		34	0		57	0	3		0	0	0
Signalized ThruCut	N-S		0	72	0		0	40	0		57		3		0		0
Unsignalized ThruCut	N-S		0	65	0		0	40	0		57		3		0		0
Bowtie	N-S		0	72	0		0	40	0			63	3			67	0

Capacity Analysis for Planning of Junctions

Results Worksheet

		Estimated Volume-to-Capacity Ratio			
Project Name	Chuloata Road (CR 419) ICE Evaluation	**Number of Configurations**			
Project Number	Build (4-lane) AM Interim Year (2038)	**< 0.750**	**0.750 - 0.875**	**0.875 - 1.00**	**≥ 1.00**
Location	Corner School Drive at Schoolview Way	**14**	**0**	**0**	**0**
Date	March 19, 2024				

Results for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Zone 1 (North)		Zone 2 (South)		Zone 3 (East)		Zone 4 (West)		Zone 5 (Center)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			
Traffic Signal	FULL									125	0.07	0.07		
Two-Way Stop Control	N-S									--	0.06	0.06		
All-Way Stop Control	FULL									165	0.11	0.11		
Continuous Green T	E									30	0.02	0.02		
Signalized Restricted Crossing U-Turn	N-S	40	*0.02*	136	*0.08*	87	*0.05*	105	*0.06*			0.08		
Unsignalized Restricted Crossing U-Turn	N-S	40	*0.00*	65	*0.04*	122	*0.00*	34	*0.06*			0.06		
Median U-Turn	N-S	40	*0.02*	144	*0.08*					136	0.08	0.08		
Partial Median U-Turn	N-S	40	*0.02*	73	*0.04*					125	0.07	0.07		
Bowtie	N-S	104	0.08	6	0.00	0	0.00	60	0.04	135	0.08	0.08		
Signalized ThruCut	N-S									132	0.08	0.08		
Unsignalized ThruCut	N-S									--	0.06	0.06		

Capacity Analysis for Planning of Junctions

Results Worksheet

Results for Roundabouts

TYPE OF ROUNDABOUT	Zone 1 (North)			Zone 3 (East)			Zone 2 (South)			Zone 4 (West)			Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3			
50 ICD	*0.04*			*0.07*			*0.07*			*0.00*			0.07		
75 ICD	*0.04*			*0.07*			*0.07*			*0.00*			0.07		
1 X 1	*0.03*			*0.05*			*0.05*			*0.00*			0.05		

Results for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Zone 1 (Rt Mrg)		Zone 2 (Lt Mrg)		Zone 3 (Ctr. 1)		Zone 4 (Ctr. 2)		Zone 5 (Lt Mrg)		Zone 6 (Rt Mrg)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			

TYPE OF INTERSECTION	Overall V/C Ratio	V/C Ranking	Pedestrian Accommodation Score	Bicycle Accommodation Score
Continuous Green T E	0.02	1	--	--
1 X 1	0.05	2	--	--
Unsignalized Restricted Crossing U-Turn N-S	0.06	3	--	--
Two-Way Stop Control N-S	0.06	4	--	--
Unsignalized ThruCut N-S	0.06	5	--	--
50 ICD	0.07	6	--	--
Traffic Signal	0.07	7	--	--
75 ICD	0.07	7	--	--
Partial Median U-Turn N-S	0.07	9	--	--
Signalized Restricted Crossing U-Turn N-S	0.08	10	--	--

Capacity Analysis for Planning of Junctions

Input Worksheet 1

Project Name	Chuloata Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) AM Design Year (2048)
Location	Corner School Drive at Schoolview Way
Date	March 19, 2024
Number of Legs	3
Which leg is the minor street?	E

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	0	59	0	4	3.48%	0.00%
Westbound	0	0	0	0	3.48%	0.00%
Southbound	0	6	36	0	3.48%	0.00%
Northbound	0	0	25	44	3.48%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone		**C3R-Suburban Residential**	
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Equivalent Passenger Car Volume

	Volume (Veh/hr)			
	U-Turn	**Left**	**Thru**	**Right**
Eastbound	0	61	0	4
Westbound	0	0	0	0
Southbound	0	6	37	0
Northbound	0	0	26	46

Notes:	
Left-Turn Adjustment Factor	*Conversion of left-turning vehicles to equivalent through vehicles*
Right-turn Adjustment Factor	*Conversion of right-turning vehicles to equivalent through vehicles*
U-turn Adjustment Factor	*Conversion of U-turning vehicles to equivalent through vehicles*
Truck to PCE Factor	*1 truck = X Passenger Car Equivalents*
Critical Lane Volume Sum Limit	*Saturation Value for Critical Lane Volume Sum at an intersection*

Capacity Analysis for Planning of Junctions

Step 2A: Base Conditions Analysis

Project Name	Chuloata Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) AM Design Year (2048)
Location	Corner School Drive at Schoolview Way
Date	March 19, 2024
Which leg is the minor street?	E

Existing Intersection Configuration	*All-Way Stop Control*

Number of Lanes for Existing Configuration
(Can be edited in "3- Alt Num Lanes Input" as needed)

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
All-Way Stop Control	FULL		0	1	0		0	1	0		1	0	1		0	0	0

Results for Existing Configuration

TYPE OF	Sheet	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	
Overall v/c Ratio	0.12	Pedestrian Accommodation Score	--	Bicycle Accommodation Score	--		

Step 2B: Alternative Selection

Rankings Inclusion		Yes/No	Comment
At-Grade Non-Roundabout Intersections?		Yes	
Traffic Signal		Yes	
Two-Way Stop Control		Yes	
All-Way Stop Control		Yes	
Continuous Green T		Yes	
Quadrant Roadway	S-W	No	No Nearby Quadrant Roadway
	N-E	No	No Nearby Quadrant Roadway
	S-E	No	No Nearby Quadrant Roadway
	N-W	No	No Nearby Quadrant Roadway
Partial Displaced Left Turn		No	3-leg Intersection
Displaced Left Turn		No	3-leg Intersection
Signalized Restricted Crossing U-Turn		Yes	
Unsignalized Restricted Crossing U-Turn		Yes	
Median U-Turn		Yes	
Partial Median U-Turn		Yes	
Bowtie		Yes	
Signalized ThruCut		Yes	
Unsignalized ThruCut		Yes	
Roundabouts?		Yes	
50 ICD Miniroundabout		Yes	
75 ICD Miniroundabout		Yes	
1x1		Yes	
1NS x 2EW		No	1x1 Roundabout Only
2NS x 1EW		No	1x1 Roundabout Only
2x2		No	1x1 Roundabout Only
Ramp Terminal Intersections?		No	
Diamond			
Partial Cloverleaf A			
Partial Cloverleaf B			
Displaced Left Turn Interchange			
Diverging Diamond			
Single Point Diamond			

Continue to Step 3 Step 3

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuloata Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) AM Design Year (2048)
Location	Corner School Drive at Schoolview Way
Date	March 19, 2024
Analysis Type	At-Grade Intersections and Interchanges

Number of Lanes for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		0	1	0		0	1	0		1	0	1		0	0	0
Two-Way Stop Control	N-S		0	1	0		0	1	0		1	0	1		0	0	0
All-Way Stop Control	FULL		0	1	0		0	1	0		1	0	1		0	0	0
Continuous Green T	E			1	1		1	1							1		1
Signalized Restricted Crossing U-Turn	N-S	1	0	1	0	1	0	1	0				1				0
Unsignalized Restricted Crossing U-Turn	N-S	1	0	1	0	1	0	1	0				1				0
Median U-Turn	N-S	1		1	0	1		1	0			0	1			0	0
Partial Median U-Turn	N-S	1		1	0	1		1	0		1	0	1		0	0	0
Signalized ThruCut	N-S		0	1	0		0	1	0		1		1		0		0
Unsignalized ThruCut	N-S		0	1	0		0	1	0		1		1		0		0
Bowtie	N-S			1	0			1	0			1	1			0	0

For shared lanes, enter "0" in L or R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Number of Lanes for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuloata Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) AM Design Year (2048)
Location	Corner School Drive at Schoolview Way
Date	March 19, 2024
Analysis Type	At-Grade Intersections and Interchanges

Volume Echo with Shared Lane Adjustment for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		0	72	0		0	43	0		61	0	4		0	0	0
Two-Way Stop Control	N-S		0	72	0		0	43	0		61	0	4		0	0	0
All-Way Stop Control	FULL		0	72	0		0	43	0		61	0	4		0	0	0
Continuous Green T	E			26	46		6	37							0		0
Signalized Restricted Crossing U-Turn	N-S	0	0	72	0	0	0	43	0				4				0
Unsignalized Restricted Crossing U-Turn	N-S	0	0	72	0	0	0	43	0				4				0
Median U-Turn	N-S	0		72	0	0		37	0			0	4			0	0
Partial Median U-Turn	N-S	0		72	0	0		37	0		61	0	4		0	0	0
Signalized ThruCut	N-S		0	80	0		0	43	0		61		4		0		0
Unsignalized ThruCut	N-S		0	72	0		0	43	0		61		4		0		0
Bowtie	N-S		0	80	0		0	43	0			67	4			72	0

Capacity Analysis for Planning of Junctions

Results Worksheet

Project Name	Chuloata Road (CR 419) ICE Evaluation	***Estimated Volume-to-Capacity Ratio***			
Project Number	Build (4-lane) AM Design Year (2048)	**Number of Configurations**			
Location	Corner School Drive at Schoolview Way	**< 0.750**	**0.750 - 0.875**	**0.875 - 1.00**	**≥ 1.00**
Date	March 19, 2024	**14**	**0**	**0**	**0**

Results for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Zone 1 (North)		Zone 2 (South)		Zone 3 (East)		Zone 4 (West)		Zone 5 (Center)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			
Traffic Signal	FULL									136	0.08	0.08		
Two-Way Stop Control	N-S									--	0.07	0.07		
All-Way Stop Control	FULL									180	0.12	0.12		
Continuous Green T	E									32	0.02	0.02		
Signalized Restricted Crossing U-Turn	N-S	43	*0.02*	148	*0.08*	93	*0.05*	113	*0.06*			0.08		
Unsignalized Restricted Crossing U-Turn	N-S	43	*0.00*	72	*0.05*	133	*0.00*	37	*0.06*			0.06		
Median U-Turn	N-S	43	*0.02*	156	*0.09*					148	0.08	0.09		
Partial Median U-Turn	N-S	43	*0.02*	80	*0.04*					136	0.08	0.08		
Bowtie	N-S	113	0.08	6	0.00	0	0.00	65	0.05	147	0.08	0.08		
Signalized ThruCut	N-S									144	0.08	0.08		
Unsignalized ThruCut	N-S									--	0.07	0.07		

Capacity Analysis for Planning of Junctions

Results Worksheet

Results for Roundabouts

TYPE OF ROUNDABOUT	Zone 1 (North)			Zone 3 (East)			Zone 2 (South)			Zone 4 (West)			Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3			
50 ICD	*0.04*			*0.07*			*0.07*			*0.00*			0.07		
75 ICD	*0.04*			*0.08*			*0.07*			*0.00*			0.08		
1 X 1	*0.03*			*0.05*			*0.06*			*0.00*			0.06		

Results for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Zone 1 (Rt Mrg)		Zone 2 (Lt Mrg)		Zone 3 (Ctr. 1)		Zone 4 (Ctr. 2)		Zone 5 (Lt Mrg)		Zone 6 (Rt Mrg)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			

TYPE OF INTERSECTION	Overall V/C Ratio	V/C Ranking	Pedestrian Accommodation Score	Bicycle Accommodation Score
Continuous Green T E	0.02	1	--	--
1 X 1	0.06	2	--	--
Unsignalized Restricted Crossing U-Turn N-S	0.06	3	--	--
Two-Way Stop Control N-S	0.07	4	--	--
Unsignalized ThruCut N-S	0.07	5	--	--
50 ICD	0.07	6	--	--
75 ICD	0.08	7	--	--
Traffic Signal	0.08	8	--	--
Bowtie N-S	0.08	8	--	--
Signalized Restricted Crossing U-Turn N-S	0.08	8	--	--

Capacity Analysis for Planning of Junctions

Input Worksheet 1

Project Name	Chuloata Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) PM Opening Year (2028)
Location	Corner School Drive at Schoolview Way
Date	March 19, 2024
Number of Legs	3
Which leg is the minor street?	E

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	0	52	0	9	3.48%	0.00%
Westbound	0	0	0	0	3.48%	0.00%
Southbound	0	6	23	0	3.48%	0.00%
Northbound	0	0	64	100	3.48%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone		**C3R-Suburban Residential**	
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Equivalent Passenger Car Volume

	Volume (Veh/hr)			
	U-Turn	**Left**	**Thru**	**Right**
Eastbound	0	54	0	9
Westbound	0	0	0	0
Southbound	0	6	24	0
Northbound	0	0	66	103

Notes:	
Left-Turn Adjustment Factor	*Conversion of left-turning vehicles to equivalent through vehicles*
Right-turn Adjustment Factor	*Conversion of right-turning vehicles to equivalent through vehicles*
U-turn Adjustment Factor	*Conversion of U-turning vehicles to equivalent through vehicles*
Truck to PCE Factor	*1 truck = X Passenger Car Equivalents*
Critical Lane Volume Sum Limit	*Saturation Value for Critical Lane Volume Sum at an intersection*

Capacity Analysis for Planning of Junctions

Step 2A: Base Conditions Analysis

Project Name	Chuloata Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) PM Opening Year (2028)
Location	Corner School Drive at Schoolview Way
Date	March 19, 2024
Which leg is the minor street?	E

Existing Intersection Configuration	*All-Way Stop Control*

Number of Lanes for Existing Configuration
(Can be edited in "3- Alt Num Lanes Input" as needed)

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
All-Way Stop Control	FULL		0	1	0		0	1	0		1	0	1		0	0	0

Results for Existing Configuration

TYPE OF		Sheet	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	
Overall v/c Ratio	0.17	Pedestrian Accommodation Score	--		Bicycle Accommodation Score			--

Step 2B: Alternative Selection

Rankings Inclusion		Yes/No	Comment
At-Grade Non-Roundabout Intersections?		Yes	
Traffic Signal		Yes	
Two-Way Stop Control		Yes	
All-Way Stop Control		Yes	
Continuous Green T		Yes	
Quadrant Roadway	S-W	No	No Nearby Quadrant Roadway
	N-E	No	No Nearby Quadrant Roadway
	S-E	No	No Nearby Quadrant Roadway
	N-W	No	No Nearby Quadrant Roadway
Partial Displaced Left Turn		No	3-leg Intersection
Displaced Left Turn		No	3-leg Intersection
Signalized Restricted Crossing U-Turn		Yes	
Unsignalized Restricted Crossing U-Turn		Yes	
Median U-Turn		Yes	
Partial Median U-Turn		Yes	
Bowtie		Yes	
Signalized ThruCut		Yes	
Unsignalized ThruCut		Yes	
Roundabouts?		Yes	
50 ICD Miniroundabout		Yes	
75 ICD Miniroundabout		Yes	
1x1		Yes	
1NS x 2EW		No	1x1 Roundabout Only
2NS x 1EW		No	1x1 Roundabout Only
2x2		No	1x1 Roundabout Only
Ramp Terminal Intersections?		No	
Diamond			
Partial Cloverleaf A			
Partial Cloverleaf B			
Displaced Left Turn Interchange			
Diverging Diamond			
Single Point Diamond			

Continue to Step 3 Step 3

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuloata Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) PM Opening Year (2028)
Location	Corner School Drive at Schoolview Way
Date	March 19, 2024
Analysis Type	At-Grade Intersections and Interchanges

Number of Lanes for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		0	1	0		0	1	0		1	0	1		0	0	0
Two-Way Stop Control	N-S		0	1	0		0	1	0		1	0	1		0	0	0
All-Way Stop Control	FULL		0	1	0		0	1	0		1	0	1		0	0	0
Continuous Green T	E			1	1		1	1							1		1
Signalized Restricted Crossing U-Turn	N-S	1	0	1	0	1	0	1	0				1				0
Unsignalized Restricted Crossing U-Turn	N-S	1	0	1	0	1	0	1	0				1				0
Median U-Turn	N-S	1		1	0	1		1	0			0	1			0	0
Partial Median U-Turn	N-S	1		1	0	1		1	0		1	0	1		0	0	0
Signalized ThruCut	N-S		0	1	0		0	1	0		1		1		0		0
Unsignalized ThruCut	N-S		0	1	0		0	1	0		1		1		0		0
Bowtie	N-S			1	0			1	0			1	1			0	0

For shared lanes, enter "0" in L or R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Number of Lanes for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuloata Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) PM Opening Year (2028)
Location	Corner School Drive at Schoolview Way
Date	March 19, 2024
Analysis Type	At-Grade Intersections and Interchanges

Volume Echo with Shared Lane Adjustment for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		0	169	0		0	30	0		54	0	9		0	0	0
Two-Way Stop Control	N-S		0	169	0		0	30	0		54	0	9		0	0	0
All-Way Stop Control	FULL		0	169	0		0	30	0		54	0	9		0	0	0
Continuous Green T	E			66	103		6	24							0		0
Signalized Restricted Crossing U-Turn	N-S	0	0	169	0	0	0	30	0				9				0
Unsignalized Restricted Crossing U-Turn	N-S	0	0	169	0	0	0	30	0				9				0
Median U-Turn	N-S	0		169	0	0		24	0			0	9			0	0
Partial Median U-Turn	N-S	0		169	0	0		24	0		54	0	9		0	0	0
Signalized ThruCut	N-S		0	187	0		0	30	0		54		9		0		0
Unsignalized ThruCut	N-S		0	169	0		0	30	0		54		9		0		0
Bowtie	N-S		0	187	0		0	30	0			60	9			64	0

Capacity Analysis for Planning of Junctions

Results Worksheet

Project Name	Chuloata Road (CR 419) ICE Evaluation	***Estimated Volume-to-Capacity Ratio***			
Project Number	Build (4-lane) PM Opening Year (2028)	**Number of Configurations**			
Location	Corner School Drive at Schoolview Way	**< 0.750**	**0.750 - 0.875**	**0.875 - 1.00**	**≥ 1.00**
Date	March 19, 2024	**14**	**0**	**0**	**0**

Results for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Zone 1 (North)		Zone 2 (South)		Zone 3 (East)		Zone 4 (West)		Zone 5 (Center)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			
Traffic Signal	FULL									226	0.13	0.13		
Two-Way Stop Control	N-S									--	0.09	0.09		
All-Way Stop Control	FULL									262	0.17	0.17		
Continuous Green T	E									72	0.04	0.04		
Signalized Restricted Crossing U-Turn	N-S	30	*0.02*	237	*0.13*	127	*0.07*	98	*0.05*			0.13		
Unsignalized Restricted Crossing U-Turn	N-S	30	*0.00*	169	*0.05*	223	*0.00*	24	*0.06*			0.06		
Median U-Turn	N-S	30	*0.02*	244	*0.14*					243	0.14	0.14		
Partial Median U-Turn	N-S	30	*0.02*	177	*0.10*					226	0.13	0.13		
Bowtie	N-S	163	0.12	6	0.00	0	0.00	63	0.05	247	0.14	0.14		
Signalized ThruCut	N-S									244	0.14	0.14		
Unsignalized ThruCut	N-S									--	0.09	0.09		

Capacity Analysis for Planning of Junctions

Results Worksheet

Results for Roundabouts

TYPE OF ROUNDABOUT	Zone 1 (North)			Zone 3 (East)			Zone 2 (South)			Zone 4 (West)			Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3			
50 ICD	*0.03*			*0.07*			*0.17*			*0.00*			0.17		
75 ICD	*0.03*			*0.07*			*0.17*			*0.00*			0.17		
1 X 1	*0.02*			*0.05*			*0.13*			*0.00*			0.13		

Results for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Zone 1 (Rt Mrg)		Zone 2 (Lt Mrg)		Zone 3 (Ctr. 1)		Zone 4 (Ctr. 2)		Zone 5 (Lt Mrg)		Zone 6 (Rt Mrg)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			

TYPE OF INTERSECTION	Overall V/C Ratio	V/C Ranking	Pedestrian Accommodation Score	Bicycle Accommodation Score
Continuous Green T E	0.04	1	--	--
Unsignalized Restricted Crossing U-Turn N-S	0.06	2	--	--
Two-Way Stop Control N-S	0.09	3	--	--
Unsignalized ThruCut N-S	0.09	3	--	--
Traffic Signal	0.13	5	--	--
1 X 1	0.13	5	--	--
Signalized Restricted Crossing U-Turn N-S	0.13	5	--	--
Partial Median U-Turn N-S	0.13	8	--	--
Median U-Turn N-S	0.14	9	--	--
Signalized ThruCut N-S	0.14	9	--	--

Capacity Analysis for Planning of Junctions

Input Worksheet 1

Project Name	Chuloata Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) PM Interim Year (2038)
Location	Corner School Drive at Schoolview Way
Date	March 19, 2024
Number of Legs	3
Which leg is the minor street?	E

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	0	63	0	10	3.48%	0.00%
Westbound	0	0	0	0	3.48%	0.00%
Southbound	0	7	25	0	3.48%	0.00%
Northbound	0	0	70	120	3.48%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone		**C3R-Suburban Residential**	
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Equivalent Passenger Car Volume

	Volume (Veh/hr)			
	U-Turn	**Left**	**Thru**	**Right**
Eastbound	0	65	0	10
Westbound	0	0	0	0
Southbound	0	7	26	0
Northbound	0	0	72	124

Notes:	
Left-Turn Adjustment Factor	*Conversion of left-turning vehicles to equivalent through vehicles*
Right-turn Adjustment Factor	*Conversion of right-turning vehicles to equivalent through vehicles*
U-turn Adjustment Factor	*Conversion of U-turning vehicles to equivalent through vehicles*
Truck to PCE Factor	*1 truck = X Passenger Car Equivalents*
Critical Lane Volume Sum Limit	*Saturation Value for Critical Lane Volume Sum at an intersection*

Capacity Analysis for Planning of Junctions

Step 2A: Base Conditions Analysis

Project Name	Chuloata Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) PM Interim Year (2038)
Location	Corner School Drive at Schoolview Way
Date	March 19, 2024
Which leg is the minor street?	E

Existing Intersection Configuration	*All-Way Stop Control*

Number of Lanes for Existing Configuration
(Can be edited in "3- Alt Num Lanes Input" as needed)

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
All-Way Stop Control	FULL		0	1	0		0	1	0		1	0	1		0	0	0

Results for Existing Configuration

TYPE OF		Sheet	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	
Overall v/c Ratio	0.20	Pedestrian Accommodation Score	--		Bicycle Accommodation Score			--

Step 2B: Alternative Selection

Rankings Inclusion		Yes/No	Comment
At-Grade Non-Roundabout Intersections?		Yes	
Traffic Signal		Yes	
Two-Way Stop Control		Yes	
All-Way Stop Control		Yes	
Continuous Green T		Yes	
Quadrant Roadway	S-W	No	No Nearby Quadrant Roadway
	N-E	No	No Nearby Quadrant Roadway
	S-E	No	No Nearby Quadrant Roadway
	N-W	No	No Nearby Quadrant Roadway
Partial Displaced Left Turn		No	3-leg Intersection
Displaced Left Turn		No	3-leg Intersection
Signalized Restricted Crossing U-Turn		Yes	
Unsignalized Restricted Crossing U-Turn		Yes	
Median U-Turn		Yes	
Partial Median U-Turn		Yes	
Bowtie		Yes	
Signalized ThruCut		Yes	
Unsignalized ThruCut		Yes	
Roundabouts?		Yes	
50 ICD Miniroundabout		Yes	
75 ICD Miniroundabout		Yes	
1x1		Yes	
1NS x 2EW		No	1x1 Roundabout Only
2NS x 1EW		No	1x1 Roundabout Only
2x2		No	1x1 Roundabout Only
Ramp Terminal Intersections?		No	
Diamond			
Partial Cloverleaf A			
Partial Cloverleaf B			
Displaced Left Turn Interchange			
Diverging Diamond			
Single Point Diamond			

Continue to Step 3 Step 3

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuloata Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) PM Interim Year (2038)
Location	Corner School Drive at Schoolview Way
Date	March 19, 2024
Analysis Type	At-Grade Intersections and Interchanges

Number of Lanes for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		0	1	0		0	1	0		1	0	1		0	0	0
Two-Way Stop Control	N-S		0	1	0		0	1	0		1	0	1		0	0	0
All-Way Stop Control	FULL		0	1	0		0	1	0		1	0	1		0	0	0
Continuous Green T	E			1	1		1	1							1		1
Signalized Restricted Crossing U-Turn	N-S	1	0	1	0	1	0	1	0				1				0
Unsignalized Restricted Crossing U-Turn	N-S	1	0	1	0	1	0	1	0				1				0
Median U-Turn	N-S	1		1	0	1		1	0			0	1			0	0
Partial Median U-Turn	N-S	1		1	0	1		1	0		1	0	1		0	0	0
Signalized ThruCut	N-S		0	1	0		0	1	0		1		1		0		0
Unsignalized ThruCut	N-S		0	1	0		0	1	0		1		1		0		0
Bowtie	N-S			1	0			1	0			1	1			0	0

For shared lanes, enter "0" in L or R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Number of Lanes for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuloata Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) PM Interim Year (2038)
Location	Corner School Drive at Schoolview Way
Date	March 19, 2024
Analysis Type	At-Grade Intersections and Interchanges

Volume Echo with Shared Lane Adjustment for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		0	196	0		0	33	0		65	0	10		0	0	0
Two-Way Stop Control	N-S		0	196	0		0	33	0		65	0	10		0	0	0
All-Way Stop Control	FULL		0	196	0		0	33	0		65	0	10		0	0	0
Continuous Green T	E			72	124		7	26							0		0
Signalized Restricted Crossing U-Turn	N-S	0	0	196	0	0	0	33	0				10				0
Unsignalized Restricted Crossing U-Turn	N-S	0	0	196	0	0	0	33	0				10				0
Median U-Turn	N-S	0		196	0	0		26	0			0	10			0	0
Partial Median U-Turn	N-S	0		196	0	0		26	0		65	0	10		0	0	0
Signalized ThruCut	N-S		0	218	0		0	33	0		65		10		0		0
Unsignalized ThruCut	N-S		0	196	0		0	33	0		65		10		0		0
Bowtie	N-S		0	218	0		0	33	0			72	10			76	0

Capacity Analysis for Planning of Junctions

Results Worksheet

Project Name	Chuloata Road (CR 419) ICE Evaluation	***Estimated Volume-to-Capacity Ratio***			
Project Number	Build (4-lane) PM Interim Year (2038)	**Number of Configurations**			
Location	Corner School Drive at Schoolview Way	**< 0.750**	**0.750 - 0.875**	**0.875 - 1.00**	**≥ 1.00**
Date	March 19, 2024	**14**	**0**	**0**	**0**

Results for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Zone 1 (North)		Zone 2 (South)		Zone 3 (East)		Zone 4 (West)		Zone 5 (Center)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			
Traffic Signal	FULL									264	0.15	0.15		
Two-Way Stop Control	N-S									--	0.11	0.11		
All-Way Stop Control	FULL									304	0.20	0.20		
Continuous Green T	E									79	0.05	0.05		
Signalized Restricted Crossing U-Turn	N-S	33	*0.02*	277	*0.15*	153	*0.09*	114	*0.06*			0.15		
Unsignalized Restricted Crossing U-Turn	N-S	33	*0.00*	196	*0.06*	261	*0.01*	26	*0.07*			0.07		
Median U-Turn	N-S	33	*0.02*	286	*0.16*					284	0.16	0.16		
Partial Median U-Turn	N-S	33	*0.02*	205	*0.11*					264	0.15	0.15		
Bowtie	N-S	196	0.14	7	0.01	0	0.00	75	0.05	290	0.16	0.16		
Signalized ThruCut	N-S									286	0.16	0.16		
Unsignalized ThruCut	N-S									--	0.11	0.11		

Capacity Analysis for Planning of Junctions

Results Worksheet

Results for Roundabouts

TYPE OF ROUNDABOUT	Zone 1 (North)			Zone 3 (East)			Zone 2 (South)			Zone 4 (West)			Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3			
50 ICD	*0.03*			*0.08*			*0.20*			*0.00*			0.20		
75 ICD	*0.03*			*0.09*			*0.20*			*0.00*			0.20		
1 X 1	*0.02*			*0.06*			*0.15*			*0.00*			0.15		

Results for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Zone 1 (Rt Mrg)		Zone 2 (Lt Mrg)		Zone 3 (Ctr. 1)		Zone 4 (Ctr. 2)		Zone 5 (Lt Mrg)		Zone 6 (Rt Mrg)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			

TYPE OF INTERSECTION	Overall V/C Ratio	V/C Ranking	Pedestrian Accommodation Score	Bicycle Accommodation Score
Continuous Green T E	0.05	1	--	--
Unsignalized Restricted Crossing U-Turn N-S	0.07	2	--	--
Two-Way Stop Control N-S	0.11	3	--	--
Unsignalized ThruCut N-S	0.11	3	--	--
Traffic Signal	0.15	5	--	--
Signalized Restricted Crossing U-Turn N-S	0.15	5	--	--
Partial Median U-Turn N-S	0.15	5	--	--
1 X 1	0.15	8	--	--
Median U-Turn N-S	0.16	9	--	--
Signalized ThruCut N-S	0.16	9	--	--

Capacity Analysis for Planning of Junctions

Input Worksheet 1

Project Name	Chuloata Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) PM Design Year (2048)
Location	Corner School Drive at Schoolview Way
Date	March 19, 2024
Number of Legs	3
Which leg is the minor street?	E

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	0	76	0	11	3.48%	0.00%
Westbound	0	0	0	0	3.48%	0.00%
Southbound	0	7	27	0	3.48%	0.00%
Northbound	0	0	76	143	3.48%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone		**C3R-Suburban Residential**	
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Equivalent Passenger Car Volume

	Volume (Veh/hr)			
	U-Turn	**Left**	**Thru**	**Right**
Eastbound	0	79	0	11
Westbound	0	0	0	0
Southbound	0	7	28	0
Northbound	0	0	79	148

Notes:	
Left-Turn Adjustment Factor	*Conversion of left-turning vehicles to equivalent through vehicles*
Right-turn Adjustment Factor	*Conversion of right-turning vehicles to equivalent through vehicles*
U-turn Adjustment Factor	*Conversion of U-turning vehicles to equivalent through vehicles*
Truck to PCE Factor	*1 truck = X Passenger Car Equivalents*
Critical Lane Volume Sum Limit	*Saturation Value for Critical Lane Volume Sum at an intersection*

Capacity Analysis for Planning of Junctions

Step 2A: Base Conditions Analysis

Project Name	Chuloata Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) PM Design Year (2048)
Location	Corner School Drive at Schoolview Way
Date	March 19, 2024
Which leg is the minor street?	E

Existing Intersection Configuration	*All-Way Stop Control*

Number of Lanes for Existing Configuration
(Can be edited in "3- Alt Num Lanes Input" as needed)

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
All-Way Stop Control	FULL		0	1	0		0	1	0		1	0	1		0	0	0

Results for Existing Configuration

TYPE OF	Sheet	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	
Overall v/c Ratio	0.23	Pedestrian Accommodation Score	--	Bicycle Accommodation Score	--		

Step 2B: Alternative Selection

Rankings Inclusion		Yes/No	Comment
At-Grade Non-Roundabout Intersections?		Yes	
Traffic Signal		Yes	
Two-Way Stop Control		Yes	
All-Way Stop Control		Yes	
Continuous Green T		Yes	
Quadrant Roadway	S-W	No	No Nearby Quadrant Roadway
	N-E	No	No Nearby Quadrant Roadway
	S-E	No	No Nearby Quadrant Roadway
	N-W	No	No Nearby Quadrant Roadway
Partial Displaced Left Turn		No	3-leg Intersection
Displaced Left Turn		No	3-leg Intersection
Signalized Restricted Crossing U-Turn		Yes	
Unsignalized Restricted Crossing U-Turn		Yes	
Median U-Turn		Yes	
Partial Median U-Turn		Yes	
Bowtie		Yes	
Signalized ThruCut		Yes	
Unsignalized ThruCut		Yes	
Roundabouts?		Yes	
50 ICD Miniroundabout		Yes	
75 ICD Miniroundabout		Yes	
1x1		Yes	
1NS x 2EW		No	1x1 Roundabout Only
2NS x 1EW		No	1x1 Roundabout Only
2x2		No	1x1 Roundabout Only
Ramp Terminal Intersections?		No	
Diamond			
Partial Cloverleaf A			
Partial Cloverleaf B			
Displaced Left Turn Interchange			
Diverging Diamond			
Single Point Diamond			

Continue to Step 3 Step 3

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuloata Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) PM Design Year (2048)
Location	Corner School Drive at Schoolview Way
Date	March 19, 2024
Analysis Type	At-Grade Intersections and Interchanges

Number of Lanes for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		0	1	0		0	1	0		1	0	1		0	0	0
Two-Way Stop Control	N-S		0	1	0		0	1	0		1	0	1		0	0	0
All-Way Stop Control	FULL		0	1	0		0	1	0		1	0	1		0	0	0
Continuous Green T	E			1	1		1	1							1		1
Signalized Restricted Crossing U-Turn	N-S	1	0	1	0	1	0	1	0				1				0
Unsignalized Restricted Crossing U-Turn	N-S	1	0	1	0	1	0	1	0				1				0
Median U-Turn	N-S	1		1	0	1		1	0			0	1			0	0
Partial Median U-Turn	N-S	1		1	0	1		1	0		1	0	1		0	0	0
Signalized ThruCut	N-S		0	1	0		0	1	0		1		1		0		0
Unsignalized ThruCut	N-S		0	1	0		0	1	0		1		1		0		0
Bowtie	N-S			1	0			1	0			1	1			0	0

For shared lanes, enter "0" in L or R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Number of Lanes for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuloata Road (CR 419) ICE Evaluation
Project Number	Build (4-lane) PM Design Year (2048)
Location	Corner School Drive at Schoolview Way
Date	March 19, 2024
Analysis Type	At-Grade Intersections and Interchanges

Volume Echo with Shared Lane Adjustment for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		0	227	0		0	35	0		79	0	11		0	0	0
Two-Way Stop Control	N-S		0	227	0		0	35	0		79	0	11		0	0	0
All-Way Stop Control	FULL		0	227	0		0	35	0		79	0	11		0	0	0
Continuous Green T	E			79	148		7	28							0		0
Signalized Restricted Crossing U-Turn	N-S	0	0	227	0	0	0	35	0				11				0
Unsignalized Restricted Crossing U-Turn	N-S	0	0	227	0	0	0	35	0				11				0
Median U-Turn	N-S	0		227	0	0		28	0			0	11			0	0
Partial Median U-Turn	N-S	0		227	0	0		28	0		79	0	11		0	0	0
Signalized ThruCut	N-S		0	253	0		0	35	0		79		11		0		0
Unsignalized ThruCut	N-S		0	227	0		0	35	0		79		11		0		0
Bowtie	N-S		0	253	0		0	35	0			86	11			93	0

Capacity Analysis for Planning of Junctions

Results Worksheet

Project Name	Chuloata Road (CR 419) ICE Evaluation	***Estimated Volume-to-Capacity Ratio***			
Project Number	Build (4-lane) PM Design Year (2048)	**Number of Configurations**			
Location	Corner School Drive at Schoolview Way	**< 0.750**	**0.750 - 0.875**	**0.875 - 1.00**	**≥ 1.00**
Date	March 19, 2024	**14**	**0**	**0**	**0**

Results for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Zone 1 (North)		Zone 2 (South)		Zone 3 (East)		Zone 4 (West)		Zone 5 (Center)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			
Traffic Signal	FULL									310	0.18	0.18		
Two-Way Stop Control	N-S									--	0.13	0.13		
All-Way Stop Control	FULL									352	0.23	0.23		
Continuous Green T	E									86	0.05	0.05		
Signalized Restricted Crossing U-Turn	N-S	35	*0.02*	326	*0.18*	181	*0.10*	134	*0.07*			0.18		
Unsignalized Restricted Crossing U-Turn	N-S	35	*0.00*	227	*0.07*	306	*0.01*	28	*0.09*			0.09		
Median U-Turn	N-S	35	*0.02*	335	*0.19*					333	0.18	0.19		
Partial Median U-Turn	N-S	35	*0.02*	236	*0.13*					310	0.18	0.18		
Bowtie	N-S	234	0.17	7	0.01	0	0.00	90	0.07	339	0.19	0.19		
Signalized ThruCut	N-S									336	0.19	0.19		
Unsignalized ThruCut	N-S									--	0.13	0.13		

Capacity Analysis for Planning of Junctions

Results Worksheet

Results for Roundabouts

TYPE OF ROUNDABOUT	Zone 1 (North)			Zone 3 (East)			Zone 2 (South)			Zone 4 (West)			Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3			
50 ICD	*0.03*			*0.10*			*0.24*			*0.00*			0.24		
75 ICD	*0.03*			*0.10*			*0.23*			*0.00*			0.23		
1 X 1	*0.03*			*0.07*			*0.18*			*0.00*			0.18		

Results for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Zone 1 (Rt Mrg)		Zone 2 (Lt Mrg)		Zone 3 (Ctr. 1)		Zone 4 (Ctr. 2)		Zone 5 (Lt Mrg)		Zone 6 (Rt Mrg)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			

TYPE OF INTERSECTION	Overall V/C Ratio	V/C Ranking	Pedestrian Accommodation Score	Bicycle Accommodation Score
Continuous Green T E	0.05	1	--	--
Unsignalized Restricted Crossing U-Turn N-S	0.09	2	--	--
Two-Way Stop Control N-S	0.13	3	--	--
Unsignalized ThruCut N-S	0.13	3	--	--
Traffic Signal	0.18	5	--	--
1 X 1	0.18	5	--	--
Signalized Restricted Crossing U-Turn N-S	0.18	5	--	--
Partial Median U-Turn N-S	0.18	8	--	--
Median U-Turn N-S	0.19	9	--	--
Signalized ThruCut N-S	0.19	9	--	--

Table 1, Corner School Drive & Schoolview Way Cap-x Results

Build Type	Year	Peak Hour	Intersection Control Rank 1 (V/C Ratio)	Intersection Control Rank 2 (V/C Ratio)	Intersection Control Rank 3 (V/C Ratio)	Intersection Control Rank 4 (V/C Ratio)	Intersection Control Rank 5 (V/C Ratio)	Intersection Control Rank 6 (V/C Ratio)	Intersection Control Rank 7 (V/C Ratio)	Intersection Control Rank 8 (V/C Ratio)	Intersection Control Rank 9 (V/C Ratio)	Intersection Control Rank 10 (V/C Ratio)
No-Build (2-lane)	2028	AM	Unsignalized RCUT N-S (0.01)	Continuous Green T (0.02)	TWSC (0.03)	Unsignalized ThruCut N-S (0.03)	Traffic Signal (0.04)	Signalized RCUT N-S (0.04)	1 X 1 Roundabout (0.04)	MUT N-S (0.04)	Partial MUT N-S (0.04)	Signalized ThruCut N-S (0.04)
	2038		Unsignalized RCUT N-S (0.01)	Continuous Green T (0.02)	TWSC (0.03)	Unsignalized ThruCut N-S (0.03)	Traffic Signal (0.04)	Signalized RCUT N-S (0.04)	MUT N-S (0.04)	Partial MUT N-S (0.04)	Signalized ThruCut N-S (0.04)	1 X 1 Roundabout (0.05)
	2048		Unsignalized RCUT N-S (0.01)	Continuous Green T (0.02)	TWSC (0.04)	Unsignalized ThruCut N-S (0.04)	Traffic Signal (0.04)	Signalized RCUT N-S (0.04)	Partial MUT N-S (0.04)	1 X 1 Roundabout (0.05)	MUT N-S (0.05)	Signalized ThruCut N-S (0.05)
	2028	PM	Unsignalized RCUT N-S (0.05)	Continuous Green T (0.05)	TWSC (0.09)	Unsignalized ThruCut N-S (0.09)	Traffic Signal (0.12)	Signalized RCUT N-S (0.12)	Partial MUT N-S (0.12)	1 X 1 Roundabout (0.13)	MUT N-S (0.13)	Signalized ThruCut N-S (0.13)
	2038		Continuous Green T (0.05)	Unsignalized RCUT N-S (0.05)	TWSC (0.10)	Unsignalized ThruCut N-S (0.10)	Traffic Signal (0.14)	Signalized RCUT N-S (0.14)	MUT N-S (0.14)	Partial MUT N-S (0.14)	1 X 1 Roundabout (0.14)	Bowtie N-S (0.14)
	2048		Continuous Green T (0.05)	Unsignalized RCUT N-S (0.06)	TWSC (0.11)	Unsignalized ThruCut N-S (0.11)	Traffic Signal (0.14)	Signalized RCUT N-S (0.14)	Partial MUT N-S (0.14)	MUT N-S (0.15)	1 X 1 Roundabout (0.15)	Signalized ThruCut N-S (0.15)
Build (4-lane)	2028	AM	Continuous Green T (0.02)	1 X 1 Roundabout (0.05)	Unsignalized RCUT N-S (0.05)	TWSC (0.06)	Unsignalized ThruCut N-S (0.06)	50 ICD Mini-Roundabout (0.06)	75 ICD Mini-Roundabout (0.07)	Traffic Signal (0.07)	Bowtie N-S (0.07)	Signalized RCUT N-S (0.07)
	2038		Continuous Green T (0.02)	1 X 1 Roundabout (0.05)	Unsignalized RCUT N-S (0.06)	TWSC (0.06)	Unsignalized ThruCut N-S (0.06)	50 ICD Mini-Roundabout (0.07)	Traffic Signal (0.07)	75 ICD Mini-Roundabout (0.07)	Partial MUT N-S (0.07)	Signalized RCUT N-S (0.08)
	2048		Continuous Green T (0.02)	1 X 1 Roundabout (0.06)	Unsignalized RCUT N-S (0.06)	TWSC (0.07)	Unsignalized ThruCut N-S (0.07)	50 ICD Mini-Roundabout (0.07)	75 ICD Mini-Roundabout (0.08)	Traffic Signal (0.08)	Bowtie N-S (0.08)	Signalized RCUT N-S (0.08)
	2028	PM	Continuous Green T (0.04)	Unsignalized RCUT N-S (0.06)	TWSC (0.09)	Unsignalized ThruCut N-S (0.09)	Traffic Signal (0.13)	1 X 1 Roundabout (0.13)	Signalized RCUT N-S (0.13)	Partial MUT N-S (0.13)	MUT N-S (0.14)	Signalized ThruCut N-S (0.14)
	2038		Continuous Green T (0.05)	Unsignalized RCUT N-S (0.07)	TWSC (0.11)	Unsignalized ThruCut N-S (0.11)	Traffic Signal (0.15)	Signalized RCUT N-S (0.15)	Partial MUT N-S (0.15)	1 X 1 Roundabout (0.15)	MUT N-S (0.16)	Signalized ThruCut N-S (0.16)
	2048		Continuous Green T (0.05)	Unsignalized RCUT N-S (0.09)	TWSC (0.13)	Unsignalized ThruCut N-S (0.13)	Traffic Signal (0.18)	1 X 1 Roundabout (0.18)	Signalized RCUT N-S (0.18)	Partial MUT N-S (0.18)	MUT N-S (0.19)	Signalized ThruCut N-S (0.19)

Greyed out cells indicate that the intersection control type may not be viable due to right-of-way, cost, or other factors

V/C Ratio Legend	
	< 0.750
	0.750 - 0.875
	0.875 - 1.00
	≥ 1.00

SPICE WORKSHEETS

Florida Department of Transportation
Safety Performance for Intersection Control Evaluation Tool

Results

Summary of crash prediction results for each alternative

Project Information

Project Name:	Chuluota Road (CR 419) ICE Evaluation	**Intersection Type**	At-Grade Intersection
Intersection:	Corner School Drive and Schoolview Way	**Opening Year**	2028
Agency:	Orange County	**Design Year**	0
Project Reference:	No-Build (2-lane) Opening Year (2028)	**Facility Type**	On Rural Two Lane Highway
City:	Orlando	**Number of Legs**	3-leg
State:	FL	**1-Way/2-Way**	
Date:	2/27/2024	**# of Major Street Lanes (both directions)**	
Analyst:	JMT	**Major Street Approach Speed**	

Crash Prediction Summary

Control Strategy	Crash Type	Opening Year	Design Year	Total Project Life Cycle	Crash Prediction Rank	AADT Within SPF Prediction Range?		Source of Prediction	SSI Score		
						(Open Year)	(Design Year)		Opening Year	Design Year	Rank
Traffic Signal	Total	0.54	--	--	7	Yes	Yes	Uncalibrated SPF	100		4
	Fatal & Injury	0.20	--	--							
Minor Road Stop	Total	0.54	--	--	8	Yes	Yes	Calibrated SPF w/ EB	100		7
	Fatal & Injury	0.22	--	--							
All Way Stop	Total	No SPF	--	--	--	No	Yes	Uncalibrated SPF w/ EB	100		5
	Fatal & Injury	No SPF	--	--							
1-lane Roundabout	Total	0.27	--	--	2	Yes	Yes	Uncalibrated SPF	100		6
	Fatal & Injury	0.03	--	--							
Median U-Turn (MUT)	Total	0.34	--	--	4	N/A	N/A	CMF	--		--
	Fatal & Injury	0.15	--	--							
Signalized RCUT	Total	0.15	--	--	1	No	Yes	Uncalibrated SPF	100		2
	Fatal & Injury	0.02	--	--							
Unsignalized RCUT	Total	1.26	--	--	5	No	Yes	Uncalibrated SPF	100		3
	Fatal & Injury	0.17	--	--							
Signalized Thru-Cut	Total	No SPF	--	--	--	N/A	N/A	N/A	--		--
	Fatal & Injury	No SPF	--	--							
Unsignalized Thru-Cut	Total	No SPF	--	--	--	N/A	N/A	N/A	--		--
	Fatal & Injury	No SPF	--	--							
Bowtie	Total	No SPF	--	--	--	N/A	N/A	N/A	--	--	--
	Fatal & Injury	No SPF	--	--							
Continuous Green-T Intersection	Total	0.52	--	--	6	N/A	N/A	CMF	100		1
	Fatal & Injury	0.17	--	--							
Jughandle	Total	0.40	--	--	3	N/A	N/A	CMF	--		--
	Fatal & Injury	0.15	--	--							
Other 1*	Total	No SPF	--	--	--	N/A	N/A	CMF	--		--
	Fatal & Injury	No SPF	--	--							
Other 2*	Total	No SPF	--	--	--	N/A	N/A	CMF	--		--
	Fatal & Injury	No SPF	--	--							
			--	--							
			--	--							

Control Strategy Selection and Inputs

Specify the Facility Level Inputs and the Control Strategies to be included in the SPICE Analysis.

Intersection Type	At-Grade Intersection	
Analysis Year	Opening Year Only	
Opening Year	2028	
Design Year		
Facility Type	On Rural Two Lane Highway	For more information on how to determine these values, see the "Definitions" worksheet
Number of Legs	3-leg	
1-Way/2-Way		
# of Major Street Lanes (both directions)		
Major Street Approach Speed		
Opening Year - Major Road AADT	2,055	
Opening Year - Minor Road AADT	544	
Design Year - Major Road AADT		
Design Year - Minor Road AADT		

Control Strategy	**Include**	**Base Intersection**		
Traffic Signal	Yes	--		
Traffic Signal (Alternative Configuration)	No	--		
Minor Road Stop Control	Yes	--		
All Way Stop Control	Yes	--	No SPF Available	No SPF
1-Lane Roundabout	Yes	--		
2-Lane Roundabout	No	--		
Displaced Left Turn (DLT)	No	Traffic Signal		
Median U-Turn (MUT)	Yes	Traffic Signal		
Signalized Restricted Crossing U-Turn (RCUT)	Yes	--	Opening Year AADT Outside of SPF Development Range	
Unsignalized Restricted Crossing U-Turn (RCUT)	Yes	--	Opening Year AADT Outside of SPF Development Range	
Signalized Thru-Cut*	Yes	--	*SSI Only, No Crash Prediction Available	
Unsignalized Thru-Cut*	Yes	--	*SSI Only, No Crash Prediction Available	
Bowtie*	Yes	--	*SSI Only, No Crash Prediction Available	
Continuous Green-T Intersection	Yes	Traffic Signal		
Jughandle	Yes	Traffic Signal		
Other 1*		Traffic Signal	*Please Select	
Other 2*		Minor Road Stop	*Please Select	

Safe System for Intersection (SSI) Inputs

Specify the geomtric, exposure, severity, and conflicting traffic complexity inputs required for an SSI analysis.

1. Roadway Geometry	Lanes
Major number thru lanes (one direction)	1
Minor number thru lanes (one direction)	0

Major Street Designation	
Select major street direction	N-S
Median Presence on Major Road	No
Median Presence on Minor Road	Yes

	Required Inputs
	Default Available, Override Optional
	Planning-Level Default Input
	Computed Value, Override Optional
	Computed Value - No Override
	Disabled Cell (Often based on input selections)

2. Complete the "Exposure" inputs. These inputs will apply to all interesections selected for analysis.
3. Complete the "Severity" inputs
4. Complete the "Conflicting Traffic Complexity" inputs

2. Exposure - All Intersections

Average Daily Traffic (veh/day)	Open	Design
Major	2,055	
Minor	544	

ADT Directional Split	
Major	0.50
Minor	0.50

Nonmotorized Total ADBP (ped-bike/day)	Activity Level	ADBP Value (ped-
Open Year Total Intersection NM	Low (20)	20
Design Year Total Intersection NM		

(or overwrite ped movement ADBPs below)

Nonmotorized Movement ADBP (ped-bike/day)	Open	Design
Major NM 1 (NM mvmt crossing Maj1)	7	
Major NM 2	7	
Minor NM 1	7	
~~Minor NM 2~~	~~0~~	

Are turning movement ADT values are available?	No	If "Yes", input values in Table 2-A
Are peak hour turning movement counts available?	Yes	If "Yes", input values in Table 2-B

If no turning movment volumes or counts are available, a user can optionally override the planning-level default turning movment proportions in Table 2-C

Table 2-A: Turning Movement (vol/day)

	Open	Design
Major Thru 1	774.0187	
~~Major Left Turn 1~~	~~0~~	
Major Right Turn 1	253.4813	
Major Thru 2	920.4688	
Major Left Turn 2	107.0313	
~~Major Right Turn 2~~	~~0~~	
~~Minor Thru 1~~	~~199.7326~~	
Minor Left Turn 1	52.52551	
Minor Right Turn 1	19.74194	
~~Minor Thru 2~~	~~0~~	
~~Minor Left Turn 2~~	~~0~~	
~~Minor Right Turn 2~~	~~0~~	

Table 2-B: Turning Movement Counts (Optional)

	Mvmt	AM Peak	AM %	PM Peak	PM %	Avg %
Major Thru 1	NBT	21	0.133757962	73	0.216617	0.175188
~~Major Left Turn 1~~	~~NBL~~	~~100~~	~~0.636942675~~	~~175~~	~~0.519288~~	~~0.578115~~
Major Right Turn 1	NBR	36	0.229299363	89	0.264095	0.246697
Major Thru 2	SBT	30	0.5	17	0.354167	0.427083
Major Left Turn 2	SBL	5	0.083333333	6	0.125	0.104167
~~Major Right Turn 2~~	~~SBR~~	~~25~~	~~0.416666667~~	~~25~~	~~0.520833~~	~~0.46875~~
~~Minor Thru 1~~	~~EBT~~	~~100~~	~~0.909090909~~	~~75~~	~~0.604839~~	~~0.756965~~
Minor Left Turn 1	EBL	7	0.063636364	40	0.322581	0.193109
Minor Right Turn 1	EBR	3	0.027272727	9	0.072581	0.049927
~~Minor Thru 2~~	~~WBT~~	~~75~~	~~0.428571429~~	~~100~~	~~0.5~~	~~0.464286~~
~~Minor Left Turn 2~~	~~WBL~~	~~50~~	~~0.285714286~~	~~50~~	~~0.25~~	~~0.267857~~
~~Minor Right Turn 2~~	~~WBR~~	~~50~~	~~0.285714286~~	~~50~~	~~0.25~~	~~0.267857~~

Table 2-C: Turning Proportions (optional)

	Decimal
Major Thru 1	0.753302841
~~Major Left Turn 1~~	~~0~~
Major Right Turn 1	0.246697159
Major Thru 2	0.895833333
Major Left Turn 2	0.104166667
~~Major Right Turn 2~~	~~0~~
~~Minor Thru 1~~	~~0.73431085~~
Minor Left Turn 1	0.193108504
Minor Right Turn 1	0.072580645
~~Minor Thru 2~~	~~0~~
~~Minor Left Turn 2~~	~~0~~
~~Minor Right Turn 2~~	~~0~~

3. Severity

Vehicle Speeds	mph
Major Posted Speed Limit	25
Minor Posted Speed Limit	25
Major thru	25
Major left	20
Major right	15
Minor thru	21.25
Minor left	20
Minor right	15
Stop near	15
Stop far	25
Signal near	15
Signal far	25

4. Conflicting Traffic Complexity

Traffic Control	Decimal
Base Traffic Control Adjustment Value (BTCAV) for permitted	1
Base Traffic Control Adjustment Value (BTCAV) for protected/permitted	0.85
Base Traffic Control Adjustment Value (BTCAV) for protected	0.01
Base Traffic Control Adjustment Value (BTCAV) for stop-controlled	0.45
Weight, f, for permitted	0.5
Weight, f, for protected/permitted	0.5
Weight, f, for protected	0.5
Weight, f, for stop-controlled	0.5
Major LT signal phasing (drop-down)	Protected
Minor LT signal phasing (drop-down)	Protected
Exclusive Pedestrian phasing (drop-down)	No

Historical Crash Data Input

Note: In order to use Empirical Bayes (EB), the historical intersection type must be a traffic signal or a minor road stop. Additionally, this alternative must be selected to be included in the analysis, and the historical intersection specified below. Up to 10 years of historical data can be used to perform the EB adjustment.

Is historical crash data available?	Yes		
Number of years available:	5	(Up to 10)	First Year Data is available: 2016
Historical Intx Type:	3ST		

Historical Crash Counts		Year										
		2016	2017	2018	2019	2020	--	--	--	--	--	Total
Combined	Total	0	0	0	0	1	--	--	--	--	--	1
	Fatal/Injury	0	0	0	0	1						1
	PDO	0	0	0	0	0						0
Single-Vehicle	Total											
	Fatal/Injury											
	PDO											
Multiple-Vehicle	Total											
	Fatal/Injury											
	PDO											
Veh-Ped	Fatal/Injury	0	0	0	0	0						0
Veh-Bike	Fatal/Injury	0	0	0	0	0						0
Total	All	0	0	0	0	1	--	--	--	--	--	1

Florida Department of Transportation
Safety Performance for Intersection Control Evaluation Tool

Results

Summary of crash prediction results for each alternative

Project Information

Project Name:	Chuluota Road (CR 419) ICE Evaluation	**Intersection Type**	At-Grade Intersection
Intersection:	Corner School Drive and Schoolview Way	**Opening Year**	2038
Agency:	Orange County	**Design Year**	0
Project Reference:	No-Build (2-lane) Interim Year (2038)	**Facility Type**	On Rural Two Lane Highway
City:	Orlando	**Number of Legs**	3-leg
State:	FL	**1-Way/2-Way**	
Date:	2/27/2024	**# of Major Street Lanes (both directions)**	
Analyst:	JMT	**Major Street Approach Speed**	

Crash Prediction Summary

Control Strategy	Crash Type	Opening Year	Design Year	Total Project Life Cycle	Crash Prediction Rank	AADT Within SPF Prediction Range? (Open Year)	AADT Within SPF Prediction Range? (Design Year)	Source of Prediction	SSI Score: Opening Year	SSI Score: Design Year	SSI Score: Rank
Traffic Signal	Total	0.59	--	--	7	Yes	Yes	Uncalibrated SPF	100		4
	Fatal & Injury	0.22	--	--							
Minor Road Stop	Total	0.63	--	--	8	Yes	Yes	Calibrated SPF w/ EB	100		7
	Fatal & Injury	0.26	--	--							
All Way Stop	Total	No SPF	--	--	--	No	Yes	Uncalibrated SPF w/ EB	100		5
	Fatal & Injury	No SPF	--	--							
1-lane Roundabout	Total	0.29	--	--	2	Yes	Yes	Uncalibrated SPF	100		6
	Fatal & Injury	0.03	--	--							
Median U-Turn (MUT)	Total	0.37	--	--	4	N/A	N/A	CMF	--		--
	Fatal & Injury	0.17	--	--							
Signalized RCUT	Total	0.18	--	--	1	No	Yes	Uncalibrated SPF	100		2
	Fatal & Injury	0.03	--	--							
Unsignalized RCUT	Total	1.33	--	--	5	No	Yes	Uncalibrated SPF	100		3
	Fatal & Injury	0.18	--	--							
Signalized Thru-Cut	Total	No SPF	--	--	--	N/A	N/A	N/A	--		--
	Fatal & Injury	No SPF	--	--							
Unsignalized Thru-Cut	Total	No SPF	--	--	--	N/A	N/A	N/A	--		--
	Fatal & Injury	No SPF	--	--							
Bowtie	Total	No SPF	--	--	--	N/A	N/A	N/A	--	--	--
	Fatal & Injury	No SPF	--	--							
Continuous Green-T Intersection	Total	0.57	--	--	6	N/A	N/A	CMF	100		1
	Fatal & Injury	0.19	--	--							
Jughandle	Total	0.44	--	--	3	N/A	N/A	CMF	--		--
	Fatal & Injury	0.16	--	--							
Other 1*	Total	No SPF	--	--	--	N/A	N/A	CMF	--		--
	Fatal & Injury	No SPF	--	--							
Other 2*	Total	No SPF	--	--	--	N/A	N/A	CMF	--		--
	Fatal & Injury	No SPF	--	--							
			--	--							
			--	--							

Control Strategy Selection and Inputs

Specify the Facility Level Inputs and the Control Strategies to be included in the SPICE Analysis.

Intersection Type	At-Grade Intersection	
Analysis Year	Opening Year Only	
Opening Year	2038	
Design Year		
Facility Type	On Rural Two Lane Highway	For more information on how to determine these values, see the "Definitions" worksheet
Number of Legs	3-leg	
1-Way/2-Way		
# of Major Street Lanes (both directions)		
Major Street Approach Speed		
Opening Year - Major Road AADT	2,278	
Opening Year - Minor Road AADT	622	
Design Year - Major Road AADT		
Design Year - Minor Road AADT		

Control Strategy	**Include**	**Base Intersection**		
Traffic Signal	Yes	--		
Traffic Signal (Alternative Configuration)	No	--		
Minor Road Stop Control	Yes	--		
All Way Stop Control	Yes	--	No SPF Available	No SPF
1-Lane Roundabout	Yes	--		
2-Lane Roundabout	No	--		
Displaced Left Turn (DLT)	No	Traffic Signal		
Median U-Turn (MUT)	Yes	Traffic Signal		
Signalized Restricted Crossing U-Turn (RCUT)	Yes	--	Opening Year AADT Outside of SPF Development Range	
Unsignalized Restricted Crossing U-Turn (RCUT)	Yes	--	Opening Year AADT Outside of SPF Development Range	
Signalized Thru-Cut*	Yes	--	*SSI Only, No Crash Prediction Available	
Unsignalized Thru-Cut*	Yes	--	*SSI Only, No Crash Prediction Available	
Bowtie*	Yes	--	*SSI Only, No Crash Prediction Available	
Continuous Green-T Intersection	Yes	Traffic Signal		
Jughandle	Yes	Traffic Signal		
Other 1*		Traffic Signal	*Please Select	
Other 2*		Minor Road Stop	*Please Select	

Safe System for Intersection (SSI) Inputs

Specify the geomtric, exposure, severity, and conflicting traffic complexity inputs required for an SSI analysis.

1. Roadway Geometry	Lanes
Major number thru lanes (one direction)	1
Minor number thru lanes (one direction)	0

Major Street Designation	
Select major street direction	N-S
Median Presence on Major Road	No
Median Presence on Minor Road	Yes

	Required Inputs
	Default Available, Override Optional
	Planning-Level Default Input
	Computed Value, Override Optional
	Computed Value - No Override
	Disabled Cell (Often based on input selections)

2. Complete the "Exposure" inputs. These inputs will apply to all interesections selected for analysis.
3. Complete the "Severity" inputs
4. Complete the "Conflicting Traffic Complexity" inputs

2. Exposure - All Intersections

Average Daily Traffic (veh/day)	Open	Design
Major	2,278	
Minor	622	

ADT Directional Split	
Major	0.50
Minor	0.50

Nonmotorized Total ADBP (ped-bike/day)	Activity Level	ADBP Value (ped-
Open Year Total Intersection NM	Low (20)	20
Design Year Total Intersection NM		

(or overwrite ped movement ADBPs below)

Nonmotorized Movement ADBP (ped-bike/day)	Open	Design
Major NM 1 (NM mvmt crossing Maj1)	7	
Major NM 2	7	
Minor NM 1	7	
~~Minor NM 2~~	~~0~~	

Are turning movement ADT values are available?	No	If "Yes", input values in Table 2-A
Are peak hour turning movement counts available?	Yes	If "Yes", input values in Table 2-B

If no turning movment volumes or counts are available, a user can optionally override the planning-level default turning movment proportions in Table 2-C

Table 2-A: Turning Movement (vol/day)

	Open	Design
Major Thru 1	846.8806	
~~Major Left Turn 1~~	~~0~~	
Major Right Turn 1	292.1194	
Major Thru 2	1005.879	
Major Left Turn 2	133.1206	
~~Major Right Turn 2~~	~~0~~	
~~Minor Thru 1~~	~~221.4493~~	
Minor Left Turn 1	65.81026	
Minor Right Turn 1	23.74046	
~~Minor Thru 2~~	~~0~~	
~~Minor Left Turn 2~~	~~0~~	
~~Minor Right Turn 2~~	~~0~~	

Table 2-B: Turning Movement Counts (Optional)

	Mvmt	AM Peak	AM %	PM Peak	PM %	Avg %
Major Thru 1	NBT	23	0.14375	80	0.225352	0.184551
~~Major Left Turn 1~~	~~NBL~~	~~100~~	~~0.625~~	~~175~~	~~0.492958~~	~~0.558979~~
Major Right Turn 1	NBR	37	0.23125	100	0.28169	0.25647
Major Thru 2	SBT	33	0.515625	18	0.36	0.437813
Major Left Turn 2	SBL	6	0.09375	7	0.14	0.116875
~~Major Right Turn 2~~	~~SBR~~	~~25~~	~~0.390625~~	~~25~~	~~0.5~~	~~0.445313~~
~~Minor Thru 1~~	~~EBT~~	~~100~~	~~0.900900901~~	~~75~~	~~0.572519~~	~~0.73671~~
Minor Left Turn 1	EBL	8	0.072072072	46	0.351145	0.211609
Minor Right Turn 1	EBR	3	0.027027027	10	0.076336	0.051681
~~Minor Thru 2~~	~~WBT~~	~~75~~	~~0.428571429~~	~~100~~	~~0.5~~	~~0.464286~~
~~Minor Left Turn 2~~	~~WBL~~	~~50~~	~~0.285714286~~	~~50~~	~~0.25~~	~~0.267857~~
~~Minor Right Turn 2~~	~~WBR~~	~~50~~	~~0.285714286~~	~~50~~	~~0.25~~	~~0.267857~~

Table 2-C: Turning Proportions (optional)

	Decimal
Major Thru 1	0.74352993
~~Major Left Turn 1~~	~~0~~
Major Right Turn 1	0.25647007
Major Thru 2	0.883125
Major Left Turn 2	0.116875
~~Major Right Turn 2~~	~~0~~
~~Minor Thru 1~~	~~0.712055567~~
Minor Left Turn 1	0.211608555
Minor Right Turn 1	0.076335878
~~Minor Thru 2~~	~~0~~
~~Minor Left Turn 2~~	~~0~~
~~Minor Right Turn 2~~	~~0~~

3. Severity

Vehicle Speeds	mph
Major Posted Speed Limit	25
Minor Posted Speed Limit	25
Major thru	25
Major left	20
Major right	15
Minor thru	21.25
Minor left	20
Minor right	15
Stop near	15
Stop far	25
Signal near	15
Signal far	25

4. Conflicting Traffic Complexity

Traffic Control	Decimal
Base Traffic Control Adjustment Value (BTCAV) for permitted	1
Base Traffic Control Adjustment Value (BTCAV) for protected/permitted	0.85
Base Traffic Control Adjustment Value (BTCAV) for protected	0.01
Base Traffic Control Adjustment Value (BTCAV) for stop-controlled	0.45
Weight, f, for permitted	0.5
Weight, f, for protected/permitted	0.5
Weight, f, for protected	0.5
Weight, f, for stop-controlled	0.5
Major LT signal phasing (drop-down)	Protected
Minor LT signal phasing (drop-down)	Protected
Exclusive Pedestrian phasing (drop-down)	No

Historical Crash Data Input

Note: In order to use Empirical Bayes (EB), the historical intersection type must be a traffic signal or a minor road stop. Additionally, this alternative must be selected to be included in the analysis, and the historical intersection specified below. Up to 10 years of historical data can be used to perform the EB adjustment.

Is historical crash data available?	Yes		
Number of years available:	5	(Up to 10)	First Year Data is available: 2016
Historical Intx Type:	3ST		

Historical Crash Counts		Year										
		2016	2017	2018	2019	2020	--	--	--	--	--	Total
Combined	Total	0	0	0	0	1	--	--	--	--	--	1
	Fatal/Injury	0	0	0	0	1						1
	PDO	0	0	0	0	0						0
Single-Vehicle	Total											
	Fatal/Injury											
	PDO											
Multiple-Vehicle	Total											
	Fatal/Injury											
	PDO											
Veh-Ped	Fatal/Injury	0	0	0	0	0						0
Veh-Bike	Fatal/Injury	0	0	0	0	0						0
Total	All	0	0	0	0	1	--	--	--	--	--	1

Florida Department of Transportation
Safety Performance for Intersection Control Evaluation Tool

Results

Summary of crash prediction results for each alternative

Project Information

Project Name:	Chuluota Road (CR 419) ICE Evaluation	**Intersection Type**	At-Grade Intersection
Intersection:	Corner School Drive and Schoolview Way	**Opening Year**	2048
Agency:	Orange County	**Design Year**	0
Project Reference:	No-Build (2-lane) Design Year (2048)	**Facility Type**	On Rural Two Lane Highway
City:	Orlando	**Number of Legs**	3-leg
State:	FL	**1-Way/2-Way**	
Date:	2/27/2024	**# of Major Street Lanes (both directions)**	
Analyst:	JMT	**Major Street Approach Speed**	

Crash Prediction Summary

Control Strategy	Crash Type	Opening Year	Design Year	Total Project Life Cycle	Crash Prediction Rank	AADT Within SPF Prediction Range?		Source of Prediction	SSI Score		
						(Open Year)	(Design Year)		Opening Year	Design Year	Rank
Traffic Signal	Total	0.62	--	--	7	Yes	Yes	Uncalibrated SPF	100		4
	Fatal & Injury	0.23	--	--							
Minor Road Stop	Total	0.68	--	--	8	Yes	Yes	Calibrated SPF w/ EB	100		7
	Fatal & Injury	0.28	--	--							
All Way Stop	Total	No SPF	--	--	--	No	Yes	Uncalibrated SPF w/ EB	100		5
	Fatal & Injury	No SPF	--	--							
1-lane Roundabout	Total	0.29	--	--	2	Yes	Yes	Uncalibrated SPF	100		6
	Fatal & Injury	0.03	--	--							
Median U-Turn (MUT)	Total	0.39	--	--	4	N/A	N/A	CMF	--		--
	Fatal & Injury	0.18	--	--							
Signalized RCUT	Total	0.19	--	--	1	No	Yes	Uncalibrated SPF	100		2
	Fatal & Injury	0.03	--	--							
Unsignalized RCUT	Total	1.38	--	--	5	No	Yes	Uncalibrated SPF	100		3
	Fatal & Injury	0.19	--	--							
Signalized Thru-Cut	Total	No SPF	--	--	--	N/A	N/A	N/A	--		--
	Fatal & Injury	No SPF	--	--							
Unsignalized Thru-Cut	Total	No SPF	--	--	--	N/A	N/A	N/A	--		--
	Fatal & Injury	No SPF	--	--							
Bowtie	Total	No SPF	--	--	--	N/A	N/A	N/A	--	--	--
	Fatal & Injury	No SPF	--	--							
Continuous Green-T Intersection	Total	0.60	--	--	6	N/A	N/A	CMF	100		1
	Fatal & Injury	0.20	--	--							
Jughandle	Total	0.46	--	--	3	N/A	N/A	CMF	--		--
	Fatal & Injury	0.17	--	--							
Other 1*	Total	No SPF	--	--	--	N/A	N/A	CMF	--		--
	Fatal & Injury	No SPF	--	--							
Other 2*	Total	No SPF	--	--	--	N/A	N/A	CMF	--		--
	Fatal & Injury	No SPF	--	--							
			--	--							
			--	--							

Control Strategy Selection and Inputs

Specify the Facility Level Inputs and the Control Strategies to be included in the SPICE Analysis.

Intersection Type	At-Grade Intersection
Analysis Year	Opening Year Only
Opening Year	2048
Design Year	
Facility Type	On Rural Two Lane Highway
Number of Legs	3-leg
1-Way/2-Way	
# of Major Street Lanes (both directions)	
Major Street Approach Speed	
Opening Year - Major Road AADT	2,367
Opening Year - Minor Road AADT	689
Design Year - Major Road AADT	
Design Year - Minor Road AADT	

For more information on how to determine these values, see the "Definitions" worksheet

Control Strategy	Include	Base Intersection		
Traffic Signal	Yes	--		
Traffic Signal (Alternative Configuration)	No	--		
Minor Road Stop Control	Yes	--		
All Way Stop Control	Yes	--	No SPF Available	No SPF
1-Lane Roundabout	Yes	--		
2-Lane Roundabout	No	--		
Displaced Left Turn (DLT)	No	Traffic Signal		
Median U-Turn (MUT)	Yes	Traffic Signal		
Signalized Restricted Crossing U-Turn (RCUT)	Yes	--	Opening Year AADT Outside of SPF Development Range	
Unsignalized Restricted Crossing U-Turn (RCUT)	Yes	--	Opening Year AADT Outside of SPF Development Range	
Signalized Thru-Cut*	Yes	--	*SSI Only, No Crash Prediction Available	
Unsignalized Thru-Cut*	Yes	--	*SSI Only, No Crash Prediction Available	
Bowtie*	Yes	--	*SSI Only, No Crash Prediction Available	
Continuous Green-T Intersection	Yes	Traffic Signal		
Jughandle	Yes	Traffic Signal		
Other 1*		Traffic Signal	*Please Select	
Other 2*		Minor Road Stop	*Please Select	

Safe System for Intersection (SSI) Inputs

Specify the geomtric, exposure, severity, and conflicting traffic complexity inputs required for an SSI analysis.

1. Roadway Geometry	Lanes
Major number thru lanes (one direction)	1
Minor number thru lanes (one direction)	0

Major Street Designation	
Select major street direction	N-S
Median Presence on Major Road	No
Median Presence on Minor Road	Yes

	Required Inputs
	Default Available, Override Optional
	Planning-Level Default Input
	Computed Value, Override Optional
	Computed Value - No Override
	Disabled Cell (Often based on input selections)

2. Complete the **"Exposure"** inputs. These inputs will apply to all interesections selected for analysis.
3. Complete the **"Severity"** inputs
4. Complete the **"Conflicting Traffic Complexity"** inputs

2. Exposure - All Intersections

Average Daily Traffic (veh/day)	Open	Design
Major	2,367	
Minor	689	

ADT Directional Split	
Major	0.50
Minor	0.50

Nonmotorized Total ADBP (ped-bike/day)	Activity Level	ADBP Value (ped-
Open Year Total Intersection NM	Low (20)	20
Design Year Total Intersection NM		

(or overwrite ped movement ADBPs below)

Nonmotorized Movement ADBP (ped-bike/day)	Open	Design
Major NM 1 (NM mvmt crossing Maj1)	7	
Major NM 2	7	
Minor NM 1	7	
~~Minor NM 2~~	~~0~~	

Are turning movement ADT values are available?	No	If "Yes", input values in **Table 2-A**
Are peak hour turning movement counts available?	Yes	If "Yes", input values in **Table 2-B**

If no turning movment volumes or counts are available, a user can optionally override the planning-level default turning movment proportions in **Table 2-C**

Table 2-A: Turning Movement (vol/day)

	Open	Design
Major Thru 1	865.2344	
~~Major Left Turn 1~~	~~0~~	
Major Right Turn 1	318.2656	
Major Thru 2	1050.849	
Major Left Turn 2	132.6512	
~~Major Right Turn 2~~	~~0~~	
~~Minor Thru 1~~	~~238.9981~~	
Minor Left Turn 1	77.84129	
Minor Right Turn 1	27.66058	
~~Minor Thru 2~~	~~0~~	
~~Minor Left Turn 2~~	~~0~~	
~~Minor Right Turn 2~~	~~0~~	

Table 2-B: Turning Movement Counts (Optional)

	Mvmt	AM Peak	AM %	PM Peak	PM %	Avg %
Major Thru 1	NBT	25	0.153374233	76	0.210526	0.18195
~~Major Left Turn 1~~	~~NBL~~	~~100~~	~~0.613496933~~	~~175~~	~~0.484765~~	~~0.549131~~
Major Right Turn 1	NBR	38	0.233128834	110	0.304709	0.268919
Major Thru 2	SBT	36	0.537313433	20	0.384615	0.460964
Major Left Turn 2	SBL	6	0.089552239	7	0.134615	0.112084
~~Major Right Turn 2~~	~~SBR~~	~~25~~	~~0.373134328~~	~~25~~	~~0.480769~~	~~0.426952~~
~~Minor Thru 1~~	~~EBT~~	~~100~~	~~0.884955752~~	~~75~~	~~0.547445~~	~~0.716201~~
Minor Left Turn 1	EBL	9	0.079646018	51	0.372263	0.225954
Minor Right Turn 1	EBR	4	0.03539823	11	0.080292	0.057845
~~Minor Thru 2~~	~~WBT~~	~~75~~	~~0.428571429~~	~~100~~	~~0.5~~	~~0.464286~~
~~Minor Left Turn 2~~	~~WBL~~	~~50~~	~~0.285714286~~	~~50~~	~~0.25~~	~~0.267857~~
~~Minor Right Turn 2~~	~~WBR~~	~~50~~	~~0.285714286~~	~~50~~	~~0.25~~	~~0.267857~~

Table 2-C: Turning Proportions (optional)

	Decimal
Major Thru 1	0.731081012
~~Major Left Turn 1~~	~~0~~
Major Right Turn 1	0.268918988
Major Thru 2	0.887916188
Major Left Turn 2	0.112083812
~~Major Right Turn 2~~	~~0~~
~~Minor Thru 1~~	~~0.693753633~~
Minor Left Turn 1	0.225954396
Minor Right Turn 1	0.080291971
~~Minor Thru 2~~	~~0~~
~~Minor Left Turn 2~~	~~0~~
~~Minor Right Turn 2~~	~~0~~

3. Severity

Vehicle Speeds	mph
Major Posted Speed Limit	25
Minor Posted Speed Limit	25
Major thru	25
Major left	20
Major right	15
Minor thru	21.25
Minor left	20
Minor right	15
Stop near	15
Stop far	25
Signal near	15
Signal far	25

4. Conflicting Traffic Complexity

Traffic Control	Decimal
Base Traffic Control Adjustment Value (BTCAV) for permitted	1
Base Traffic Control Adjustment Value (BTCAV) for protected/permitted	0.85
Base Traffic Control Adjustment Value (BTCAV) for protected	0.01
Base Traffic Control Adjustment Value (BTCAV) for stop-controlled	0.45
Weight, f, for permitted	0.5
Weight, f, for protected/permitted	0.5
Weight, f, for protected	0.5
Weight, f, for stop-controlled	0.5
Major LT signal phasing (drop-down)	Protected
Minor LT signal phasing (drop-down)	Protected
Exclusive Pedestrian phasing (drop-down)	No

Historical Crash Data Input

Note: In order to use Empirical Bayes (EB), the historical intersection type must be a traffic signal or a minor road stop. Additionally, this alternative must be selected to be included in the analysis, and the historical intersection specified below. Up to 10 years of historical data can be used to perform the EB adjustment.

Is historical crash data available?	Yes		
Number of years available:	5	(Up to 10)	First Year Data is available: 2016
Historical Intx Type:	3ST		

Historical Crash Counts		Year										
		2016	2017	2018	2019	2020	--	--	--	--	--	Total
Combined	Total	0	0	0	0	1	--	--	--	--	--	1
	Fatal/Injury	0	0	0	0	1						1
	PDO	0	0	0	0	0						0
Single-Vehicle	Total											
	Fatal/Injury											
	PDO											
Multiple-Vehicle	Total											
	Fatal/Injury											
	PDO											
Veh-Ped	Fatal/Injury	0	0	0	0	0						0
Veh-Bike	Fatal/Injury	0	0	0	0	0						0
Total	All	0	0	0	0	1	--	--	--	--	--	1

Florida Department of Transportation
Safety Performance for Intersection Control Evaluation Tool

Results

Summary of crash prediction results for each alternative

Project Information

Project Name:	Chuluota Road (CR 419) ICE Evaluation	**Intersection Type**	At-Grade Intersection
Intersection:	Corner School Drive and Schoolview Way	**Opening Year**	2028
Agency:	Orange County	**Design Year**	0
Project Reference:	Build (4-lane) Opening Year (2028)	**Facility Type**	On Rural Two Lane Highway
City:	Orlando	**Number of Legs**	3-leg
State:	FL	**1-Way/2-Way**	
Date:	2/27/2024	**# of Major Street Lanes (both directions)**	
Analyst:	JMT	**Major Street Approach Speed**	

Crash Prediction Summary

Control Strategy	Crash Type	Opening Year	Design Year	Total Project Life Cycle	Crash Prediction Rank	AADT Within SPF Prediction Range?		Source of Prediction	SSI Score		
						(Open Year)	(Design Year)		Opening Year	Design Year	Rank
Traffic Signal	Total	0.59	--	--	7	Yes	Yes	Uncalibrated SPF	100		4
	Fatal & Injury	0.22	--	--							
Minor Road Stop	Total	0.62	--	--	8	Yes	Yes	Calibrated SPF w/ EB	100		7
	Fatal & Injury	0.26	--	--							
All Way Stop	Total	No SPF	--	--	--	No	Yes	Uncalibrated SPF w/ EB	100		5
	Fatal & Injury	No SPF	--	--							
1-lane Roundabout	Total	0.28	--	--	2	Yes	Yes	Uncalibrated SPF	100		6
	Fatal & Injury	0.03	--	--							
Median U-Turn (MUT)	Total	0.37	--	--	4	N/A	N/A	CMF	--		--
	Fatal & Injury	0.17	--	--							
Signalized RCUT	Total	0.17	--	--	1	No	Yes	Uncalibrated SPF	100		2
	Fatal & Injury	0.03	--	--							
Unsignalized RCUT	Total	1.36	--	--	5	No	Yes	Uncalibrated SPF	100		3
	Fatal & Injury	0.18	--	--							
Signalized Thru-Cut	Total	No SPF	--	--	--	N/A	N/A	N/A	--		--
	Fatal & Injury	No SPF	--	--							
Unsignalized Thru-Cut	Total	No SPF	--	--	--	N/A	N/A	N/A	--		--
	Fatal & Injury	No SPF	--	--							
Bowtie	Total	No SPF	--	--	--	N/A	N/A	N/A	--	--	--
	Fatal & Injury	No SPF	--	--							
Continuous Green-T Intersection	Total	0.56	--	--	6	N/A	N/A	CMF	100		1
	Fatal & Injury	0.19	--	--							
Jughandle	Total	0.43	--	--	3	N/A	N/A	CMF	--		--
	Fatal & Injury	0.16	--	--							
Other 1*	Total	No SPF	--	--	--	N/A	N/A	CMF	--		--
	Fatal & Injury	No SPF	--	--							
Other 2*	Total	No SPF	--	--	--	N/A	N/A	CMF	--		--
	Fatal & Injury	No SPF	--	--							
			--	--							
			--	--							

Control Strategy Selection and Inputs

Specify the Facility Level Inputs and the Control Strategies to be included in the SPICE Analysis.

Intersection Type	At-Grade Intersection	
Analysis Year	Opening Year Only	
Opening Year	2028	
Design Year		
Facility Type	On Rural Two Lane Highway	For more information on how to determine these values, see the "Definitions" worksheet
Number of Legs	3-leg	
1-Way/2-Way		
# of Major Street Lanes (both directions)		
Major Street Approach Speed		
Opening Year - Major Road AADT	2,144	
Opening Year - Minor Road AADT	678	
Design Year - Major Road AADT		
Design Year - Minor Road AADT		

Control Strategy	**Include**	**Base Intersection**		
Traffic Signal	Yes	--		
Traffic Signal (Alternative Configuration)	No	--		
Minor Road Stop Control	Yes	--		
All Way Stop Control	Yes	--	No SPF Available	No SPF
1-Lane Roundabout	Yes	--		
2-Lane Roundabout	No	--		
Displaced Left Turn (DLT)	No	Traffic Signal		
Median U-Turn (MUT)	Yes	Traffic Signal		
Signalized Restricted Crossing U-Turn (RCUT)	Yes	--	Opening Year AADT Outside of SPF Development Range	
Unsignalized Restricted Crossing U-Turn (RCUT)	Yes	--	Opening Year AADT Outside of SPF Development Range	
Signalized Thru-Cut*	Yes	--	*SSI Only, No Crash Prediction Available	
Unsignalized Thru-Cut*	Yes	--	*SSI Only, No Crash Prediction Available	
Bowtie*	Yes	--	*SSI Only, No Crash Prediction Available	
Continuous Green-T Intersection	Yes	Traffic Signal		
Jughandle	Yes	Traffic Signal		
Other 1*		Traffic Signal	*Please Select	
Other 2*		Minor Road Stop	*Please Select	

Safe System for Intersection (SSI) Inputs

Specify the geomtric, exposure, severity, and conflicting traffic complexity inputs required for an SSI analysis.

1. Roadway Geometry	Lanes
Major number thru lanes (one direction)	1
Minor number thru lanes (one direction)	0

Major Street Designation	
Select major street direction	N-S
Median Presence on Major Road	No
Median Presence on Minor Road	Yes

	Required Inputs
	Default Available, Override Optional
	Planning-Level Default Input
	Computed Value, Override Optional
	Computed Value - No Override
	Disabled Cell (Often based on input selections)

2. Complete the "Exposure" inputs. These inputs will apply to all interesections selected for analysis.
3. Complete the "Severity" inputs
4. Complete the "Conflicting Traffic Complexity" inputs

2. Exposure - All Intersections

Average Daily Traffic (veh/day)	Open	Design
Major	2,144	
Minor	678	

ADT Directional Split	
Major	0.50
Minor	0.50

Nonmotorized Total ADBP (ped-bike/day)	Activity Level	ADBP Value (ped-
Open Year Total Intersection NM	Low (20)	20
Design Year Total Intersection NM		

(or overwrite ped movement ADBPs below)

Nonmotorized Movement ADBP (ped-bike/day)	Open	Design
Major NM 1 (NM mvmt crossing Maj1)	7	
Major NM 2	7	
Minor NM 1	7	
~~Minor NM 2~~	~~0~~	

Are turning movement ADT values are available?	No	If "Yes", input values in Table 2-A
Are peak hour turning movement counts available?	Yes	If "Yes", input values in Table 2-B

If no turning movment volumes or counts are available, a user can optionally override the planning-level default turning movment proportions in Table 2-C

Table 2-A: Turning Movement (vol/day)

	Open	Design
Major Thru 1	785.7873	
~~Major Left Turn 1~~	~~0~~	
Major Right Turn 1	286.2127	
Major Thru 2	967.7778	
Major Left Turn 2	104.2222	
~~Major Right Turn 2~~	~~0~~	
~~Minor Thru 1~~	~~195.6242~~	
Minor Left Turn 1	120.9419	
Minor Right Turn 1	22.43382	
~~Minor Thru 2~~	~~0~~	
~~Minor Left Turn 2~~	~~0~~	
~~Minor Right Turn 2~~	~~0~~	

Table 2-B: Turning Movement Counts (Optional)

	Mvmt	AM Peak	AM %	PM Peak	PM %	Avg %
Major Thru 1	NBT	21	0.132075472	64	0.188791	0.160433
~~Major Left Turn 1~~	~~NBL~~	~~100~~	~~0.628930818~~	~~175~~	~~0.516224~~	~~0.572578~~
Major Right Turn 1	NBR	38	0.238993711	100	0.294985	0.266989
Major Thru 2	SBT	30	0.5	23	0.425926	0.462963
Major Left Turn 2	SBL	5	0.083333333	6	0.111111	0.097222
~~Major Right Turn 2~~	~~SBR~~	~~25~~	~~0.416666667~~	~~25~~	~~0.462963~~	~~0.439815~~
~~Minor Thru 1~~	~~EBT~~	~~100~~	~~0.649350649~~	~~75~~	~~0.551471~~	~~0.600411~~
Minor Left Turn 1	EBL	51	0.331168831	52	0.382353	0.356761
Minor Right Turn 1	EBR	3	0.019480519	9	0.066176	0.042828
~~Minor Thru 2~~	~~WBT~~	~~75~~	~~0.428571429~~	~~100~~	~~0.5~~	~~0.464286~~
~~Minor Left Turn 2~~	~~WBL~~	~~50~~	~~0.285714286~~	~~50~~	~~0.25~~	~~0.267857~~
~~Minor Right Turn 2~~	~~WBR~~	~~50~~	~~0.285714286~~	~~50~~	~~0.25~~	~~0.267857~~

Table 2-C: Turning Proportions (optional)

	Decimal
Major Thru 1	0.733010519
~~Major Left Turn 1~~	~~0~~
Major Right Turn 1	0.266989481
Major Thru 2	0.902777778
Major Left Turn 2	0.097222222
~~Major Right Turn 2~~	~~0~~
~~Minor Thru 1~~	~~0.577062643~~
Minor Left Turn 1	0.356760886
Minor Right Turn 1	0.066176471
~~Minor Thru 2~~	~~0~~
~~Minor Left Turn 2~~	~~0~~
~~Minor Right Turn 2~~	~~0~~

3. Severity

Vehicle Speeds	mph
Major Posted Speed Limit	25
Minor Posted Speed Limit	25
Major thru	25
Major left	20
Major right	15
Minor thru	21.25
Minor left	20
Minor right	15
Stop near	15
Stop far	25
Signal near	15
Signal far	25

4. Conflicting Traffic Complexity

Traffic Control	Decimal
Base Traffic Control Adjustment Value (BTCAV) for permitted	1
Base Traffic Control Adjustment Value (BTCAV) for protected/permitted	0.85
Base Traffic Control Adjustment Value (BTCAV) for protected	0.01
Base Traffic Control Adjustment Value (BTCAV) for stop-controlled	0.45
Weight, f, for permitted	0.5
Weight, f, for protected/permitted	0.5
Weight, f, for protected	0.5
Weight, f, for stop-controlled	0.5
Major LT signal phasing (drop-down)	Protected
Minor LT signal phasing (drop-down)	Protected
Exclusive Pedestrian phasing (drop-down)	No

Historical Crash Data Input

Note: In order to use Empirical Bayes (EB), the historical intersection type must be a traffic signal or a minor road stop. Additionally, this alternative must be selected to be included in the analysis, and the historical intersection specified below. Up to 10 years of historical data can be used to perform the EB adjustment.

Is historical crash data available?	Yes		
Number of years available:	5	(Up to 10)	First Year Data is available: 2016
Historical Intx Type:	3ST		

Historical Crash Counts		Year										
		2016	2017	2018	2019	2020	--	--	--	--	--	Total
Combined	Total	0	0	0	0	1	--	--	--	--	--	1
	Fatal/Injury	0	0	0	0	1						1
	PDO	0	0	0	0	0						0
Single-Vehicle	Total											
	Fatal/Injury											
	PDO											
Multiple-Vehicle	Total											
	Fatal/Injury											
	PDO											
Veh-Ped	Fatal/Injury	0	0	0	0	0						0
Veh-Bike	Fatal/Injury	0	0	0	0	0						0
Total	All	0	0	0	0	1	--	--	--	--	--	1

Florida Department of Transportation
Safety Performance for Intersection Control Evaluation Tool

Results

Summary of crash prediction results for each alternative

Project Information

Project Name:	Chuluota Road (CR 419) ICE Evaluation	**Intersection Type**	At-Grade Intersection
Intersection:	Corner School Drive and Schoolview Way	**Opening Year**	2038
Agency:	Orange County	**Design Year**	0
Project Reference:	Build (4-lane) Interim Year (2038)	**Facility Type**	On Rural Two Lane Highway
City:	Orlando	**Number of Legs**	3-leg
State:	FL	**1-Way/2-Way**	
Date:	2/27/2024	**# of Major Street Lanes (both directions)**	
Analyst:	JMT	**Major Street Approach Speed**	

Crash Prediction Summary

Control Strategy	Crash Type	Opening Year	Design Year	Total Project Life Cycle	Crash Prediction Rank	AADT Within SPF Prediction Range?		Source of Prediction	SSI Score		
						(Open Year)	(Design Year)		Opening Year	Design Year	Rank
Traffic Signal	Total	0.66	--	--	7	Yes	Yes	Uncalibrated SPF	100		4
	Fatal & Injury	0.25	--	--							
Minor Road Stop	Total	0.76	--	--	8	Yes	Yes	Calibrated SPF w/ EB	100		7
	Fatal & Injury	0.32	--	--							
All Way Stop	Total	No SPF	--	--	--	No	Yes	Uncalibrated SPF w/ EB	100		5
	Fatal & Injury	No SPF	--	--							
1-lane Roundabout	Total	0.31	--	--	1	Yes	Yes	Uncalibrated SPF	100		6
	Fatal & Injury	0.04	--	--							
Median U-Turn (MUT)	Total	0.41	--	--	4	N/A	N/A	CMF	--		--
	Fatal & Injury	0.19	--	--							
Signalized RCUT	Total	0.22	--	--	2	No	Yes	Uncalibrated SPF	100		2
	Fatal & Injury	0.04	--	--							
Unsignalized RCUT	Total	1.46	--	--	5	No	Yes	Uncalibrated SPF	100		3
	Fatal & Injury	0.20	--	--							
Signalized Thru-Cut	Total	No SPF	--	--	--	N/A	N/A	N/A	--		--
	Fatal & Injury	No SPF	--	--							
Unsignalized Thru-Cut	Total	No SPF	--	--	--	N/A	N/A	N/A	--		--
	Fatal & Injury	No SPF	--	--							
Bowtie	Total	No SPF	--	--	--	N/A	N/A	N/A	--	--	--
	Fatal & Injury	No SPF	--	--							
Continuous Green-T Intersection	Total	0.63	--	--	6	N/A	N/A	CMF	100		1
	Fatal & Injury	0.21	--	--							
Jughandle	Total	0.49	--	--	3	N/A	N/A	CMF	--		--
	Fatal & Injury	0.18	--	--							
Other 1*	Total	No SPF	--	--	--	N/A	N/A	CMF	--		--
	Fatal & Injury	No SPF	--	--							
Other 2*	Total	No SPF	--	--	--	N/A	N/A	CMF	--		--
	Fatal & Injury	No SPF	--	--							
			--	--							
			--	--							

Control Strategy Selection and Inputs

Specify the Facility Level Inputs and the Control Strategies to be included in the SPICE Analysis.

Intersection Type	At-Grade Intersection	
Analysis Year	Opening Year Only	
Opening Year	2038	
Design Year		
Facility Type	On Rural Two Lane Highway	For more information on how to determine these values, see the "Definitions" worksheet
Number of Legs	3-leg	
1-Way/2-Way		
# of Major Street Lanes (both directions)		
Major Street Approach Speed		
Opening Year - Major Road AADT	2,467	
Opening Year - Minor Road AADT	811	
Design Year - Major Road AADT		
Design Year - Minor Road AADT		

Control Strategy	**Include**	**Base Intersection**		
Traffic Signal	Yes	--		
Traffic Signal (Alternative Configuration)	No	--		
Minor Road Stop Control	Yes	--		
All Way Stop Control	Yes	--	No SPF Available	No SPF
1-Lane Roundabout	Yes	--		
2-Lane Roundabout	No	--		
Displaced Left Turn (DLT)	No	Traffic Signal		
Median U-Turn (MUT)	Yes	Traffic Signal		
Signalized Restricted Crossing U-Turn (RCUT)	Yes	--	Opening Year AADT Outside of SPF Development Range	
Unsignalized Restricted Crossing U-Turn (RCUT)	Yes	--	Opening Year AADT Outside of SPF Development Range	
Signalized Thru-Cut*	Yes	--	*SSI Only, No Crash Prediction Available	
Unsignalized Thru-Cut*	Yes	--	*SSI Only, No Crash Prediction Available	
Bowtie*	Yes	--	*SSI Only, No Crash Prediction Available	
Continuous Green-T Intersection	Yes	Traffic Signal		
Jughandle	Yes	Traffic Signal		
Other 1*		Traffic Signal	*Please Select	
Other 2*		Minor Road Stop	*Please Select	

Safe System for Intersection (SSI) Inputs

Specify the geomtric, exposure, severity, and conflicting traffic complexity inputs required for an SSI analysis.

1. Roadway Geometry	Lanes
Major number thru lanes (one direction)	1
Minor number thru lanes (one direction)	0

Major Street Designation	
Select major street direction	N-S
Median Presence on Major Road	No
Median Presence on Minor Road	Yes

	Required Inputs
	Default Available, Override Optional
	Planning-Level Default Input
	Computed Value, Override Optional
	Computed Value - No Override
	Disabled Cell (Often based on input selections)

2. Complete the "Exposure" inputs. These inputs will apply to all interesections selected for analysis.
3. Complete the "Severity" inputs
4. Complete the "Conflicting Traffic Complexity" inputs

2. Exposure - All Intersections

Average Daily Traffic (veh/day)	Open	Design
Major	2,467	
Minor	811	

ADT Directional Split	
Major	0.50
Minor	0.50

Nonmotorized Total ADBP (ped-bike/day)	Activity Level	ADBP Value (ped-
Open Year Total Intersection NM	Low (20)	20
Design Year Total Intersection NM		

(or overwrite ped movement ADBPs below)

Nonmotorized Movement ADBP (ped-bike/day)	Open	Design
Major NM 1 (NM mvmt crossing Maj1)	7	
Major NM 2	7	
Minor NM 1	7	
~~Minor NM 2~~	~~0~~	

Are turning movement ADT values are available?	No	If "Yes", input values in Table 2-A
Are peak hour turning movement counts available?	Yes	If "Yes", input values in Table 2-B

If no turning movment volumes or counts are available, a user can optionally override the planning-level default turning movment proportions in Table 2-C

Table 2-A: Turning Movement (vol/day)

	Open	Design
Major Thru 1	879.3832	
~~Major Left Turn 1~~	~~0~~	
Major Right Turn 1	354.1168	
Major Thru 2	1099.938	
Major Left Turn 2	133.5615	
~~Major Right Turn 2~~	~~0~~	
~~Minor Thru 1~~	~~221.2181~~	
Minor Left Turn 1	156.8833	
Minor Right Turn 1	27.39865	
~~Minor Thru 2~~	~~0~~	
~~Minor Left Turn 2~~	~~0~~	
~~Minor Right Turn 2~~	~~0~~	

Table 2-B: Turning Movement Counts (Optional)

	Mvmt	AM Peak	AM %	PM Peak	PM %	Avg %
Major Thru 1	NBT	23	0.141104294	70	0.191781	0.166443
~~Major Left Turn 1~~	~~NBL~~	~~100~~	~~0.613496933~~	~~175~~	~~0.479452~~	~~0.546474~~
Major Right Turn 1	NBR	40	0.245398773	120	0.328767	0.287083
Major Thru 2	SBT	33	0.515625	25	0.438596	0.477111
Major Left Turn 2	SBL	6	0.09375	7	0.122807	0.108279
~~Major Right Turn 2~~	~~SBR~~	~~25~~	~~0.390625~~	~~25~~	~~0.438596~~	~~0.414611~~
~~Minor Thru 1~~	~~EBT~~	~~100~~	~~0.632911392~~	~~75~~	~~0.506757~~	~~0.569834~~
Minor Left Turn 1	EBL	55	0.348101266	63	0.425676	0.386888
Minor Right Turn 1	EBR	3	0.018987342	10	0.067568	0.043277
~~Minor Thru 2~~	~~WBT~~	~~75~~	~~0.428571429~~	~~100~~	~~0.5~~	~~0.464286~~
~~Minor Left Turn 2~~	~~WBL~~	~~50~~	~~0.285714286~~	~~50~~	~~0.25~~	~~0.267857~~
~~Minor Right Turn 2~~	~~WBR~~	~~50~~	~~0.285714286~~	~~50~~	~~0.25~~	~~0.267857~~

Table 2-C: Turning Proportions (optional)

	Decimal
Major Thru 1	0.712917052
~~Major Left Turn 1~~	~~0~~
Major Right Turn 1	0.287082948
Major Thru 2	0.891721491
Major Left Turn 2	0.108278509
~~Major Right Turn 2~~	~~0~~
~~Minor Thru 1~~	~~0.545543962~~
Minor Left Turn 1	0.386888471
Minor Right Turn 1	0.067567568
~~Minor Thru 2~~	~~0~~
~~Minor Left Turn 2~~	~~0~~
~~Minor Right Turn 2~~	~~0~~

3. Severity

Vehicle Speeds	mph
Major Posted Speed Limit	25
Minor Posted Speed Limit	25
Major thru	25
Major left	20
Major right	15
Minor thru	21.25
Minor left	20
Minor right	15
Stop near	15
Stop far	25
Signal near	15
Signal far	25

4. Conflicting Traffic Complexity

Traffic Control	Decimal
Base Traffic Control Adjustment Value (BTCAV) for permitted	1
Base Traffic Control Adjustment Value (BTCAV) for protected/permitted	0.85
Base Traffic Control Adjustment Value (BTCAV) for protected	0.01
Base Traffic Control Adjustment Value (BTCAV) for stop-controlled	0.45
Weight, f, for permitted	0.5
Weight, f, for protected/permitted	0.5
Weight, f, for protected	0.5
Weight, f, for stop-controlled	0.5
Major LT signal phasing (drop-down)	Protected
Minor LT signal phasing (drop-down)	Protected
Exclusive Pedestrian phasing (drop-down)	No

Historical Crash Data Input

Note: In order to use Empirical Bayes (EB), the historical intersection type must be a traffic signal or a minor road stop. Additionally, this alternative must be selected to be included in the analysis, and the historical intersection specified below. Up to 10 years of historical data can be used to perform the EB adjustment.

Is historical crash data available?	Yes		
Number of years available:	5	(Up to 10)	First Year Data is available: 2016
Historical Intx Type:	3ST		

Historical Crash Counts		Year										
		2016	2017	2018	2019	2020	--	--	--	--	--	Total
Combined	Total	0	0	0	0	1	--	--	--	--	--	1
	Fatal/Injury	0	0	0	0	1						1
	PDO	0	0	0	0	0						0
Single-Vehicle	Total											
	Fatal/Injury											
	PDO											
Multiple-Vehicle	Total											
	Fatal/Injury											
	PDO											
Veh-Ped	Fatal/Injury	0	0	0	0	0						0
Veh-Bike	Fatal/Injury	0	0	0	0	0						0
Total	All	0	0	0	0	1	--	--	--	--	--	1

Florida Department of Transportation
Safety Performance for Intersection Control Evaluation Tool

Results

Summary of crash prediction results for each alternative

Project Information

Project Name:	Chuluota Road (CR 419) ICE Evaluation	**Intersection Type**	At-Grade Intersection
Intersection:	Corner School Drive and Schoolview Way	**Opening Year**	2048
Agency:	Orange County	**Design Year**	0
Project Reference:	Build (4-lane) Design Year (2048)	**Facility Type**	On Rural Two Lane Highway
City:	Orlando	**Number of Legs**	3-leg
State:	FL	**1-Way/2-Way**	
Date:	2/27/2024	**# of Major Street Lanes (both directions)**	
Analyst:	JMT	**Major Street Approach Speed**	

Crash Prediction Summary

Control Strategy	Crash Type	Opening Year	Design Year	Total Project Life Cycle	Crash Prediction Rank	AADT Within SPF Prediction Range?		Source of Prediction	SSI Score		
						(Open Year)	(Design Year)		Opening Year	Design Year	Rank
Traffic Signal	Total	0.74	--	--	7	Yes	Yes	Uncalibrated SPF	100		4
	Fatal & Injury	0.27	--	--							
Minor Road Stop	Total	0.92	--	--	8	Yes	Yes	Calibrated SPF w/ EB	100		7
	Fatal & Injury	0.38	--	--							
All Way Stop	Total	No SPF	--	--	--	No	Yes	Uncalibrated SPF w/ EB	100		5
	Fatal & Injury	No SPF	--	--							
1-lane Roundabout	Total	0.33	--	--	1	Yes	Yes	Uncalibrated SPF	100		6
	Fatal & Injury	0.04	--	--							
Median U-Turn (MUT)	Total	0.46	--	--	4	N/A	N/A	CMF	--		--
	Fatal & Injury	0.21	--	--							
Signalized RCUT	Total	0.27	--	--	2	No	Yes	Uncalibrated SPF	100		2
	Fatal & Injury	0.05	--	--							
Unsignalized RCUT	Total	1.57	--	--	5	No	Yes	Uncalibrated SPF	100		3
	Fatal & Injury	0.22	--	--							
Signalized Thru-Cut	Total	No SPF	--	--	--	N/A	N/A	N/A	--		--
	Fatal & Injury	No SPF	--	--							
Unsignalized Thru-Cut	Total	No SPF	--	--	--	N/A	N/A	N/A	--		--
	Fatal & Injury	No SPF	--	--							
Bowtie	Total	No SPF	--	--	--	N/A	N/A	N/A	--	--	--
	Fatal & Injury	No SPF	--	--							
Continuous Green-T Intersection	Total	0.71	--	--	6	N/A	N/A	CMF	100		1
	Fatal & Injury	0.23	--	--							
Jughandle	Total	0.54	--	--	3	N/A	N/A	CMF	--		--
	Fatal & Injury	0.20	--	--							
Other 1*	Total	No SPF	--	--	--	N/A	N/A	CMF	--		--
	Fatal & Injury	No SPF	--	--							
Other 2*	Total	No SPF	--	--	--	N/A	N/A	CMF	--		--
	Fatal & Injury	No SPF	--	--							
			--	--							
			--	--							

Control Strategy Selection and Inputs

Specify the Facility Level Inputs and the Control Strategies to be included in the SPICE Analysis.

Intersection Type	At-Grade Intersection
Analysis Year	Opening Year Only
Opening Year	2048
Design Year	
Facility Type	On Rural Two Lane Highway
Number of Legs	3-leg
1-Way/2-Way	
# of Major Street Lanes (both directions)	
Major Street Approach Speed	
Opening Year - Major Road AADT	2,811
Opening Year - Minor Road AADT	967
Design Year - Major Road AADT	
Design Year - Minor Road AADT	

For more information on how to determine these values, see the "Definitions" worksheet

Control Strategy	Include	Base Intersection		
Traffic Signal	Yes	--		
Traffic Signal (Alternative Configuration)	No	--		
Minor Road Stop Control	Yes	--		
All Way Stop Control	Yes	--	No SPF Available	No SPF
1-Lane Roundabout	Yes	--		
2-Lane Roundabout	No	--		
Displaced Left Turn (DLT)	No	Traffic Signal		
Median U-Turn (MUT)	Yes	Traffic Signal		
Signalized Restricted Crossing U-Turn (RCUT)	Yes	--	Opening Year AADT Outside of SPF Development Range	
Unsignalized Restricted Crossing U-Turn (RCUT)	Yes	--	Opening Year AADT Outside of SPF Development Range	
Signalized Thru-Cut*	Yes	--	*SSI Only, No Crash Prediction Available	
Unsignalized Thru-Cut*	Yes	--	*SSI Only, No Crash Prediction Available	
Bowtie*	Yes	--	*SSI Only, No Crash Prediction Available	
Continuous Green-T Intersection	Yes	Traffic Signal		
Jughandle	Yes	Traffic Signal		
Other 1*		Traffic Signal	*Please Select	
Other 2*		Minor Road Stop	*Please Select	

Safe System for Intersection (SSI) Inputs

Specify the geomtric, exposure, severity, and conflicting traffic complexity inputs required for an SSI analysis.

1. Roadway Geometry	Lanes
Major number thru lanes (one direction)	1
Minor number thru lanes (one direction)	0

Major Street Designation	
Select major street direction	N-S
Median Presence on Major Road	No
Median Presence on Minor Road	Yes

	Required Inputs
	Default Available, Override Optional
	Planning-Level Default Input
	Computed Value, Override Optional
	Computed Value - No Override
	Disabled Cell (Often based on input selections)

2. Complete the "Exposure" inputs. These inputs will apply to all interesections selected for analysis.
3. Complete the "Severity" inputs
4. Complete the "Conflicting Traffic Complexity" inputs

2. Exposure - All Intersections

Average Daily Traffic (veh/day)	Open	Design
Major	2,811	
Minor	967	

ADT Directional Split	
Major	0.50
Minor	0.50

Nonmotorized Total ADBP (ped-bike/day)	Activity Level	ADBP Value (ped-
Open Year Total Intersection NM	Low (20)	20
Design Year Total Intersection NM		

(or overwrite ped movement ADBPs below)

Nonmotorized Movement ADBP (ped-bike/day)	Open	Design
Major NM 1 (NM mvmt crossing Maj1)	7	
Major NM 2	7	
Minor NM 1	7	
~~Minor NM 2~~	~~0~~	

Are turning movement ADT values are available?	No	If "Yes", input values in Table 2-A
Are peak hour turning movement counts available?	Yes	If "Yes", input values in Table 2-B

If no turning movment volumes or counts are available, a user can optionally override the planning-level default turning movment proportions in Table 2-C

Table 2-A: Turning Movement (vol/day)

	Open	Design
Major Thru 1	967.4765	
~~Major Left Turn 1~~	~~0~~	
Major Right Turn 1	438.0235	
Major Thru 2	1259.19	
Major Left Turn 2	146.31	
~~Major Right Turn 2~~	~~0~~	
~~Minor Thru 1~~	~~249.7516~~	
Minor Left Turn 1	200.9182	
Minor Right Turn 1	32.83025	
~~Minor Thru 2~~	~~0~~	
~~Minor Left Turn 2~~	~~0~~	
~~Minor Right Turn 2~~	~~0~~	

Table 2-B: Turning Movement Counts (Optional)

	Mvmt	AM Peak	AM %	PM Peak	PM %	Avg %
Major Thru 1	NBT	25	0.147928994	76	0.192893	0.170411
~~Major Left Turn 1~~	~~NBL~~	~~100~~	~~0.591715976~~	~~175~~	~~0.444162~~	~~0.517939~~
Major Right Turn 1	NBR	44	0.26035503	143	0.362944	0.31165
Major Thru 2	SBT	36	0.537313433	27	0.457627	0.49747
Major Left Turn 2	SBL	6	0.089552239	7	0.118644	0.104098
~~Major Right Turn 2~~	~~SBR~~	~~25~~	~~0.373134328~~	~~25~~	~~0.423729~~	~~0.398432~~
~~Minor Thru 1~~	~~EBT~~	~~100~~	~~0.613496933~~	~~75~~	~~0.462963~~	~~0.53823~~
Minor Left Turn 1	EBL	59	0.36196319	76	0.469136	0.415549
Minor Right Turn 1	EBR	4	0.024539877	11	0.067901	0.046221
~~Minor Thru 2~~	~~WBT~~	~~75~~	~~0.428571429~~	~~100~~	~~0.5~~	~~0.464286~~
~~Minor Left Turn 2~~	~~WBL~~	~~50~~	~~0.285714286~~	~~50~~	~~0.25~~	~~0.267857~~
~~Minor Right Turn 2~~	~~WBR~~	~~50~~	~~0.285714286~~	~~50~~	~~0.25~~	~~0.267857~~

Table 2-C: Turning Proportions (optional)

	Decimal
Major Thru 1	0.688350404
~~Major Left Turn 1~~	~~0~~
Major Right Turn 1	0.311649596
Major Thru 2	0.895901847
Major Left Turn 2	0.104098153
~~Major Right Turn 2~~	~~0~~
~~Minor Thru 1~~	~~0.516549269~~
Minor Left Turn 1	0.415549496
Minor Right Turn 1	0.067901235
~~Minor Thru 2~~	~~0~~
~~Minor Left Turn 2~~	~~0~~
~~Minor Right Turn 2~~	~~0~~

3. Severity

Vehicle Speeds	mph
Major Posted Speed Limit	25
Minor Posted Speed Limit	25
Major thru	25
Major left	20
Major right	15
Minor thru	21.25
Minor left	20
Minor right	15
Stop near	15
Stop far	25
Signal near	15
Signal far	25

4. Conflicting Traffic Complexity

Traffic Control	Decimal
Base Traffic Control Adjustment Value (BTCAV) for permitted	1
Base Traffic Control Adjustment Value (BTCAV) for protected/permitted	0.85
Base Traffic Control Adjustment Value (BTCAV) for protected	0.01
Base Traffic Control Adjustment Value (BTCAV) for stop-controlled	0.45
Weight, f, for permitted	0.5
Weight, f, for protected/permitted	0.5
Weight, f, for protected	0.5
Weight, f, for stop-controlled	0.5
Major LT signal phasing (drop-down)	Protected
Minor LT signal phasing (drop-down)	Protected
Exclusive Pedestrian phasing (drop-down)	No

Historical Crash Data Input

Note: In order to use Empirical Bayes (EB), the historical intersection type must be a traffic signal or a minor road stop. Additionally, this alternative must be selected to be included in the analysis, and the historical intersection specified below. Up to 10 years of historical data can be used to perform the EB adjustment.

Is historical crash data available?	Yes		
Number of years available:	5	(Up to 10)	First Year Data is available: 2016
Historical Intx Type:	3ST		

Historical Crash Counts		Year										
		2016	2017	2018	2019	2020	--	--	--	--	--	Total
Combined	Total	0	0	0	0	1	--	--	--	--	--	1
	Fatal/Injury	0	0	0	0	1						1
	PDO	0	0	0	0	0						0
Single-Vehicle	Total											
	Fatal/Injury											
	PDO											
Multiple-Vehicle	Total											
	Fatal/Injury											
	PDO											
Veh-Ped	Fatal/Injury	0	0	0	0	0						0
Veh-Bike	Fatal/Injury	0	0	0	0	0						0
Total	All	0	0	0	0	1	--	--	--	--	--	1

Table 2, Corner School Drive & Schoolview Way SPICE Results - Crash Prediction

Build Type	Year	Intersection Control Rank 1 (Fatal & Injury Crashes)	Intersection Control Rank 2 (Fatal & Injury Crashes)	Intersection Control Rank 3 (Fatal & Injury Crashes)	Intersection Control Rank 4 (Fatal & Injury Crashes)	Intersection Control Rank 5 (Fatal & Injury Crashes)	Intersection Control Rank 6 (Fatal & Injury Crashes)	Intersection Control Rank 7 (Fatal & Injury Crashes)	Intersection Control Rank 8 (Fatal & Injury Crashes)	Intersection Control Rank 9 (Fatal & Injury Crashes)	Intersection Control Rank 10 (Fatal & Injury Crashes)
No-Build (2-lane)	2028	Signalized RCUT N-S (0.02)	1 Lane Roundabout (0.03)	Jughandle (0.15)	MUT N-S (0.15)	Unsignalized RCUT N-S (0.17)	Continuous Green T (0.17)	Traffic Signal (0.20)	TWSC (0.22)	AWSC (No SPF)	Bowtie N-S (No SPF)
	2038	Signalized RCUT N-S (0.03)	1 Lane Roundabout (0.03)	Jughandle (0.16)	MUT N-S (0.17)	Unsignalized RCUT N-S (0.18)	Continuous Green T (0.19)	Traffic Signal (0.22)	TWSC (0.26)	AWSC (No SPF)	Bowtie N-S (No SPF)
	2048	Signalized RCUT N-S (0.03)	1 Lane Roundabout (0.03)	Jughandle (0.17)	MUT N-S (0.18)	Unsignalized RCUT N-S (0.19)	Continuous Green T (0.20)	Traffic Signal (0.23)	TWSC (0.28)	AWSC (No SPF)	Bowtie N-S (No SPF)
Build (4-lane)	2028	Signalized RCUT N-S (0.03)	1 Lane Roundabout (0.03)	Jughandle (0.16)	MUT N-S (0.17)	Unsignalized RCUT N-S (0.18)	Continuous Green T (0.19)	Traffic Signal (0.22)	TWSC (0.26)	AWSC (No SPF)	Bowtie N-S (No SPF)
	2038	1 Lane Roundabout (0.04)	Signalized RCUT N-S (0.04)	Jughandle (0.18)	MUT N-S (0.19)	Unsignalized RCUT N-S (0.20)	Continuous Green T (0.21)	Traffic Signal (0.25)	TWSC (0.32)	AWSC (No SPF)	Bowtie N-S (No SPF)
	2048	1 Lane Roundabout (0.04)	Signalized RCUT N-S (0.05)	Jughandle (0.20)	MUT N-S (0.21)	Unsignalized RCUT N-S (0.22)	Continuous Green T (0.23)	Traffic Signal (0.27)	TWSC (0.38)	AWSC (No SPF)	Bowtie N-S (No SPF)

Greyed out cells indicate that the intersection control type may not be viable due to right-of-way, cost, or other factors

Table 3, Corner School Drive & Schoolview Way SPICE Results - SSI Score

Build Type	Year	Intersection Control Rank 1 (SSI Score)	Intersection Control Rank 2 (SSI Score)	Intersection Control Rank 3 (SSI Score)	Intersection Control Rank 4 (SSI Score)	Intersection Control Rank 5 (SSI Score)	Intersection Control Rank 6 (SSI Score)	Intersection Control Rank 7 (SSI Score)	Intersection Control Rank 8 (SSI Score)	Intersection Control Rank 9 (SSI Score)	Intersection Control Rank 10 (SSI Score)
No-Build (2-lane)	2028	Continuous Green T (100)	Signalized RCUT N-S (100)	Unsignalized RCUT N-S (100)	Traffic Signal (100)	AWSC (100)	1 Lane Roundabout (100)	TWSC (100)	MUT N-S (N/A)	Bowtie N-S (N/A)	Jughandle (N/A)
	2038	Continuous Green T (100)	Signalized RCUT N-S (100)	Unsignalized RCUT N-S (100)	Traffic Signal (100)	AWSC (100)	1 Lane Roundabout (100)	TWSC (100)	MUT N-S (N/A)	Bowtie N-S (N/A)	Jughandle (N/A)
	2048	Continuous Green T (100)	Signalized RCUT N-S (100)	Unsignalized RCUT N-S (100)	Traffic Signal (100)	AWSC (100)	1 Lane Roundabout (100)	TWSC (100)	MUT N-S (N/A)	Bowtie N-S (N/A)	Jughandle (N/A)
Build (4-lane)	2028	Continuous Green T (100)	Signalized RCUT N-S (100)	Unsignalized RCUT N-S (100)	Traffic Signal (100)	AWSC (100)	1 Lane Roundabout (100)	TWSC (100)	MUT N-S (N/A)	Bowtie N-S (N/A)	Jughandle (N/A)
	2038	Continuous Green T (100)	Signalized RCUT N-S (100)	Unsignalized RCUT N-S (100)	Traffic Signal (100)	AWSC (100)	1 Lane Roundabout (100)	TWSC (100)	MUT N-S (N/A)	Bowtie N-S (N/A)	Jughandle (N/A)
	2048	Continuous Green T (100)	Signalized RCUT N-S (100)	Unsignalized RCUT N-S (100)	Traffic Signal (100)	AWSC (100)	1 Lane Roundabout (100)	TWSC (100)	MUT N-S (N/A)	Bowtie N-S (N/A)	Jughandle (N/A)

Greyed out cells indicate that the intersection control type may not be viable due to right-of-way, cost, or other factors

SSI Legend	
	90-100
	80-89
	70-79
	< 70

CHULUOTA ROAD & SCHOOLVIEW WAY/CYPRESS LAKE GLEN BOULEVARD S

CAP-X WORKSHEETS

Capacity Analysis for Planning of Junctions

Input Worksheet 1

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build A (Close Schoolview) AM Opening Year (2028)
Location	Chuluota Road at Schoolview Way Relocation
Date	March 19, 2024
Number of Legs	4
Major Street Direction	North-South

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	0	30	5	8	3.48%	0.00%
Westbound	0	192	8	41	3.48%	0.00%
Southbound	0	12	619	43	3.48%	0.00%
Northbound	0	3	528	71	3.48%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone		**C3R-Suburban Residential**	
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Equivalent Passenger Car Volume

	Volume (Veh/hr)			
	U-Turn	**Left**	**Thru**	**Right**
Eastbound	0	31	5	8
Westbound	0	199	8	42
Southbound	0	12	641	44
Northbound	0	3	546	73

Notes:	
Left-Turn Adjustment Factor	*Conversion of left-turning vehicles to equivalent through vehicles*
Right-turn Adjustment Factor	*Conversion of right-turning vehicles to equivalent through vehicles*
U-turn Adjustment Factor	*Conversion of U-turning vehicles to equivalent through vehicles*
Truck to PCE Factor	*1 truck = X Passenger Car Equivalents*
Critical Lane Volume Sum Limit	*Saturation Value for Critical Lane Volume Sum at an intersection*

Capacity Analysis for Planning of Junctions

Step 2A: Base Conditions Analysis

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build A (Close Schoolview) AM Opening Year (2028)
Location	Chuluota Road at Schoolview Way Relocation
Date	March 19, 2024
Major Street Direction	North-South

Existing Intersection Configuration	*Traffic Signal*

Number of Lanes for Existing Configuration
(Can be edited in "3- Alt Num Lanes Input" as needed)

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		1	2	1		1	2	1		1	1	0		1	1	0

Results for Existing Configuration

TYPE OF	Sheet	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	

Overall v/c Ratio	0.32	Pedestrian Accommodation Score	4.79	Bicycle Accommodation Score	4.49

Step 2B: Alternative Selection

Rankings Inclusion		Yes/No	Comment
At-Grade Non-Roundabout Intersections?		Yes	
Traffic Signal		Yes	
Two-Way Stop Control		Yes	
All-Way Stop Control		Yes	
Continuous Green T		No	4-Leg Intersection
Quadrant Roadway	S-W	No	No Nearby Quadrant Roadway
	N-E	No	No Nearby Quadrant Roadway
	S-E	No	No Nearby Quadrant Roadway
	N-W	No	No Nearby Quadrant Roadway
Partial Displaced Left Turn		Yes	
Displaced Left Turn		Yes	
Signalized Restricted Crossing U-Turn		Yes	
Unsignalized Restricted Crossing U-Turn		Yes	
Median U-Turn		Yes	
Partial Median U-Turn		Yes	
Bowtie		Yes	
Signalized ThruCut		Yes	
Unsignalized ThruCut		Yes	
Roundabouts?		Yes	
50 ICD Miniroundabout		Yes	
75 ICD Miniroundabout		Yes	
1x1		No	2x1 Roundabout Only
1NS x 2EW		No	2x1 Roundabout Only
2NS x 1EW		Yes	
2x2		No	2x1 Roundabout Only
Ramp Terminal Intersections?		No	
Diamond			
Partial Cloverleaf A			
Partial Cloverleaf B			
Displaced Left Turn Interchange			
Diverging Diamond			
Single Point Diamond			

Continue to Step 3 Step 3

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build A (Close Schoolview) AM Opening Year (2028)
Location	Chuluota Road at Schoolview Way Relocation
Date	March 19, 2024
Analysis Type	At-Grade Intersections and Interchanges

Number of Lanes for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		1	2	1		1	2	1		1	1	0		1	1	0
Two-Way Stop Control	N-S		1	2	1		1	2	1		1	1	0		1	1	0
All-Way Stop Control	FULL		1	2	1		1	2	1		1	1	0		1	1	0
Partial Displaced Left Turn	N-S		1	2	1		1	2	1		1	1	0		1	1	0
Displaced Left Turn	FULL		1	2	1		1	2	1		1	1	1		1	1	1
Signalized Restricted Crossing U-Turn	N-S	2	1	2	1	2	1	2	1				2				2
Unsignalized Restricted Crossing U-Turn	N-S	2	1	2	1	2	1	2	1				2				2
Median U-Turn	N-S	1		2	1	1		2	1			1	1			1	1
Partial Median U-Turn	N-S	1		2	1	1		2	1		1	1	0		1	1	0
Signalized ThruCut	N-S		1	2	1		1	2	1		1		1		1		1
Unsignalized ThruCut	N-S		1	2	1		1	2	1		1		1		1		1
Bowtie	N-S			2	1			2	1			1	1			1	1

For shared lanes, enter "0" in L or R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Number of Lanes for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build A (Close Schoolview) AM Opening Year (2028)
Location	Chuluota Road at Schoolview Way Relocation
Date	March 19, 2024
Analysis Type	At-Grade Intersections and Interchanges

Volume Echo with Shared Lane Adjustment for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		3	546	73		12	641	44		31	13	0		199	50	0
Two-Way Stop Control	N-S		3	546	73		12	641	44		31	13	0		199	50	0
All-Way Stop Control	FULL		3	546	73		12	641	44		31	13	0		199	50	0
Partial Displaced Left Turn	N-S		3	546	73		12	641	44		31	13	0		199	50	0
Displaced Left Turn	FULL		3	546	73		12	641	44		31	5	8		199	8	42
Signalized Restricted Crossing U-Turn	N-S	0	3	546	73	0	12	641	44				8				42
Unsignalized Restricted Crossing U-Turn	N-S	0	3	546	73	0	12	641	44				8				42
Median U-Turn	N-S	0		546	73	0		641	44			5	8			8	42
Partial Median U-Turn	N-S	0		546	73	0		641	44		31	13	0		199	50	0
Signalized ThruCut	N-S		3	546	73		12	641	44		34		11		203		46
Unsignalized ThruCut	N-S		3	546	73		12	641	44		34		11		203		46
Bowtie	N-S		3	546	73		12	641	44			48	207			210	73

Capacity Analysis for Planning of Junctions

Results Worksheet

Project Name	Chuluota Road (CR 419) ICE Evaluation	***Estimated Volume-to-Capacity Ratio***			
Project Number	Build A (Close Schoolview) AM Opening Year (2028)	**Number of Configurations**			
Location	Chuluota Road at Schoolview Way Relocation	**< 0.750**	**0.750 - 0.875**	**0.875 - 1.00**	**≥ 1.00**
Date	March 19, 2024	**10**	**2**	**2**	**1**

Results for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Zone 1 (North)		Zone 2 (South)		Zone 3 (East)		Zone 4 (West)		Zone 5 (Center)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			
Traffic Signal	FULL									546	0.32	0.32	4.79	4.49
Two-Way Stop Control	N-S									--	0.99	0.99	2.65	3.75
All-Way Stop Control	FULL									1612	0.90	0.90	3.62	4.49
Partial Displaced Left Turn	N-S	322	*0.18*	427	*0.24*					543	0.31	0.31	2.86	3.16
Displaced Left Turn	FULL	301	*0.17*	423	*0.24*	226	*0.13*	44	*0.02*	530	0.29	0.29	3.01	3.16
Signalized Restricted Crossing U-Turn	N-S	478	*0.27*	334	*0.19*	435	*0.24*	446	*0.25*			0.27	2.94	4.08
Unsignalized Restricted Crossing U-Turn	N-S	697	*0.28*	622	*0.05*	577	*0.55*	840	*0.14*			0.55	2.62	3.00
Median U-Turn	N-S	601	*0.33*	365	*0.20*					610	0.34	0.34	3.00	4.49
Partial Median U-Turn	N-S	352	*0.20*	326	*0.18*					549	0.31	0.31	2.91	4.49
Bowtie	N-S	113	0.08	249	0.18	249	0.18	11	0.01	565	0.31	0.31	4.70	4.49
Signalized ThruCut	N-S									547	0.31	0.31	4.86	4.49
Unsignalized ThruCut	N-S									--	1.67	1.67	4.18	4.17

Capacity Analysis for Planning of Junctions

Results Worksheet

Results for Roundabouts

TYPE OF ROUNDABOUT	Zone 1 (North)			Zone 3 (East)			Zone 2 (South)			Zone 4 (West)			Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3			
50 ICD	0.86			*0.31*			*0.63*			*0.58*			0.86	5.36	4.62
75 ICD	0.83			*0.24*			*0.62*			*0.50*			0.83	5.36	4.62
2NS X 1EW	*0.31*	*0.33*		*0.07*			*0.24*	0.25		*0.30*			0.33	4.97	4.54

Results for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Zone 1 (Rt Mrg)		Zone 2 (Lt Mrg)		Zone 3 (Ctr. 1)		Zone 4 (Ctr. 2)		Zone 5 (Lt Mrg)		Zone 6 (Rt Mrg)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			

TYPE OF INTERSECTION	Overall V/C Ratio	V/C Ranking	Pedestrian Accommodation Score	Bicycle Accommodation Score
Signalized Restricted Crossing U-Turn N-S	0.27	1	2.94	4.08
Displaced Left Turn	0.29	2	3.01	3.16
Partial Displaced Left Turn N-S	0.31	3	2.86	3.16
Partial Median U-Turn N-S	0.31	3	2.91	4.49
Signalized ThruCut N-S	0.31	3	4.86	4.49
Bowtie N-S	0.31	3	4.70	4.49
Traffic Signal	0.32	7	4.79	4.49
2NS X 1EW	0.33	8	4.97	4.54
Median U-Turn N-S	0.34	9	3.00	4.49
Unsignalized Restricted Crossing U-Turn N-S	0.55	10	2.62	3.00

Capacity Analysis for Planning of Junctions

Input Worksheet 1

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build A (Close Schoolview) AM Interim Year (2038)
Location	Chuluota Road at Schoolview Way Relocation
Date	March 19, 2024
Number of Legs	4
Major Street Direction	North-South

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	0	32	6	8	3.48%	0.00%
Westbound	0	208	8	44	3.48%	0.00%
Southbound	0	13	760	46	3.48%	0.00%
Northbound	0	4	690	78	3.48%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone		**C3R-Suburban Residential**	
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Equivalent Passenger Car Volume

	Volume (Veh/hr)			
	U-Turn	**Left**	**Thru**	**Right**
Eastbound	0	33	6	8
Westbound	0	215	8	46
Southbound	0	13	786	48
Northbound	0	4	714	81

Notes:	
Left-Turn Adjustment Factor	*Conversion of left-turning vehicles to equivalent through vehicles*
Right-turn Adjustment Factor	*Conversion of right-turning vehicles to equivalent through vehicles*
U-turn Adjustment Factor	*Conversion of U-turning vehicles to equivalent through vehicles*
Truck to PCE Factor	*1 truck = X Passenger Car Equivalents*
Critical Lane Volume Sum Limit	*Saturation Value for Critical Lane Volume Sum at an intersection*

Capacity Analysis for Planning of Junctions

Step 2A: Base Conditions Analysis

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build A (Close Schoolview) AM Interim Year (2038)
Location	Chuluota Road at Schoolview Way Relocation
Date	March 19, 2024
Major Street Direction	North-South

Existing Intersection Configuration	*Traffic Signal*

Number of Lanes for Existing Configuration
(Can be edited in "3- Alt Num Lanes Input" as needed)

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		1	2	1		1	2	1		1	1	0		1	1	0

Results for Existing Configuration

TYPE OF	Sheet	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	

Overall v/c Ratio	0.38	Pedestrian Accommodation Score	4.79	Bicycle Accommodation Score	4.49

Step 2B: Alternative Selection

Rankings Inclusion		Yes/No	Comment
At-Grade Non-Roundabout Intersections?		Yes	
Traffic Signal		Yes	
Two-Way Stop Control		Yes	
All-Way Stop Control		Yes	
Continuous Green T		No	4-leg Intersection
Quadrant Roadway	S-W	No	No Nearby Quadrant Roadway
	N-E	No	No Nearby Quadrant Roadway
	S-E	No	No Nearby Quadrant Roadway
	N-W	No	No Nearby Quadrant Roadway
Partial Displaced Left Turn		Yes	
Displaced Left Turn		Yes	
Signalized Restricted Crossing U-Turn		Yes	
Unsignalized Restricted Crossing U-Turn		Yes	
Median U-Turn		Yes	
Partial Median U-Turn		Yes	
Bowtie		Yes	
Signalized ThruCut		Yes	
Unsignalized ThruCut		Yes	
Roundabouts?		Yes	
50 ICD Miniroundabout		Yes	
75 ICD Miniroundabout		Yes	
1x1		No	2x1 Roundabout Only
1NS x 2EW		No	2x1 Roundabout Only
2NS x 1EW		Yes	
2x2		No	2x1 Roundabout Only
Ramp Terminal Intersections?		No	
Diamond			
Partial Cloverleaf A			
Partial Cloverleaf B			
Displaced Left Turn Interchange			
Diverging Diamond			
Single Point Diamond			

Continue to Step 3 Step 3

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build A (Close Schoolview) AM Interim Year (2038)
Location	Chuluota Road at Schoolview Way Relocation
Date	March 19, 2024
Analysis Type	At-Grade Intersections and Interchanges

Number of Lanes for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		1	2	1		1	2	1		1	1	0		1	1	0
Two-Way Stop Control	N-S		1	2	1		1	2	1		1	1	0		1	1	0
All-Way Stop Control	FULL		1	2	1		1	2	1		1	1	0		1	1	0
Partial Displaced Left Turn	N-S		1	2	1		1	2	1		1	1	0		1	1	0
Displaced Left Turn	FULL		1	2	1		1	2	1		1	1	1		1	1	1
Signalized Restricted Crossing U-Turn	N-S	2	1	2	1	2	1	2	1				2				2
Unsignalized Restricted Crossing U-Turn	N-S	2	1	2	1	2	1	2	1				2				2
Median U-Turn	N-S	1		2	1	1		2	1			1	1			1	1
Partial Median U-Turn	N-S	1		2	1	1		2	1		1	1	0		1	1	0
Signalized ThruCut	N-S		1	2	1		1	2	1		1		1		1		1
Unsignalized ThruCut	N-S		1	2	1		1	2	1		1		1		1		1
Bowtie	N-S			2	1			2	1			1	1			1	1

For shared lanes, enter "0" in L or R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Number of Lanes for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build A (Close Schoolview) AM Interim Year (2038)
Location	Chuluota Road at Schoolview Way Relocation
Date	March 19, 2024
Analysis Type	At-Grade Intersections and Interchanges

Volume Echo with Shared Lane Adjustment for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		4	714	81		13	786	48		33	14	0		215	54	0
Two-Way Stop Control	N-S		4	714	81		13	786	48		33	14	0		215	54	0
All-Way Stop Control	FULL		4	714	81		13	786	48		33	14	0		215	54	0
Partial Displaced Left Turn	N-S		4	714	81		13	786	48		33	14	0		215	54	0
Displaced Left Turn	FULL		4	714	81		13	786	48		33	6	8		215	8	46
Signalized Restricted Crossing U-Turn	N-S	0	4	714	81	0	13	786	48				8				46
Unsignalized Restricted Crossing U-Turn	N-S	0	4	714	81	0	13	786	48				8				46
Median U-Turn	N-S	0		714	81	0		786	48			6	8			8	46
Partial Median U-Turn	N-S	0		714	81	0		786	48		33	14	0		215	54	0
Signalized ThruCut	N-S		4	714	81		13	786	48		36		11		219		50
Unsignalized ThruCut	N-S		4	714	81		13	786	48		36		11		219		50
Bowtie	N-S		4	714	81		13	786	48			52	223			227	79

Capacity Analysis for Planning of Junctions

Results Worksheet

Project Name	Chuluota Road (CR 419) ICE Evaluation	***Estimated Volume-to-Capacity Ratio***			
Project Number	Build A (Close Schoolview) AM Interim Year (2038)	**Number of Configurations**			
Location	Chuluota Road at Schoolview Way Relocation	**< 0.750**	**0.750 - 0.875**	**0.875 - 1.00**	**≥ 1.00**
Date	March 19, 2024	**9**	**1**	**0**	**5**

Results for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Zone 1 (North)		Zone 2 (South)		Zone 3 (East)		Zone 4 (West)		Zone 5 (Center)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			
Traffic Signal	FULL									638	0.38	0.38	4.79	4.49
Two-Way Stop Control	N-S									--	1.73	1.73	2.65	3.75
All-Way Stop Control	FULL									1962	1.09	1.09	3.62	4.49
Partial Displaced Left Turn	N-S	410	*0.23*	509	*0.28*					633	0.36	0.36	2.86	3.16
Displaced Left Turn	FULL	387	*0.22*	505	*0.28*	245	*0.14*	47	*0.03*	619	0.34	0.34	3.01	3.16
Signalized Restricted Crossing U-Turn	N-S	563	*0.31*	424	*0.24*	532	*0.30*	528	*0.29*			0.31	2.94	4.08
Unsignalized Restricted Crossing U-Turn	N-S	847	*0.35*	799	*0.06*	747	0.76	1001	*0.20*			0.76	2.62	3.00
Median U-Turn	N-S	697	*0.39*	457	*0.25*					707	0.39	0.39	3.00	4.49
Partial Median U-Turn	N-S	429	*0.24*	416	*0.23*					640	0.37	0.37	2.91	4.49
Bowtie	N-S	124	0.09	269	0.19	269	0.20	11	0.01	655	0.36	0.36	4.70	4.49
Signalized ThruCut	N-S									636	0.36	0.36	4.86	4.49
Unsignalized ThruCut	N-S									--	3.16	3.16	4.18	4.17

Capacity Analysis for Planning of Junctions

Results Worksheet

Results for Roundabouts

TYPE OF ROUNDABOUT	Zone 1 (North)			Zone 3 (East)			Zone 2 (South)			Zone 4 (West)			Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3			
50 ICD	1.06			7.25			0.81			1.04			7.25	5.36	4.62
75 ICD	1.03			*0.71*			0.80			0.80			1.03	5.36	4.62
2NS X 1EW	*0.38*	*0.40*		*0.08*			*0.31*	0.33		*0.38*			0.40	4.97	4.54

Results for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Zone 1 (Rt Mrg)		Zone 2 (Lt Mrg)		Zone 3 (Ctr. 1)		Zone 4 (Ctr. 2)		Zone 5 (Lt Mrg)		Zone 6 (Rt Mrg)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			

TYPE OF INTERSECTION	Overall V/C Ratio	V/C Ranking	Pedestrian Accommodation Score	Bicycle Accommodation Score
Signalized Restricted Crossing U-Turn N-S	0.31	1	2.94	4.08
Displaced Left Turn	0.34	2	3.01	3.16
Partial Displaced Left Turn N-S	0.36	3	2.86	3.16
Signalized ThruCut N-S	0.36	3	4.86	4.49
Bowtie N-S	0.36	3	4.70	4.49
Partial Median U-Turn N-S	0.37	6	2.91	4.49
Traffic Signal	0.38	7	4.79	4.49
Median U-Turn N-S	0.39	8	3.00	4.49
2NS X 1EW	0.40	9	4.97	4.54
Unsignalized Restricted Crossing U-Turn N-S	0.76	10	2.62	3.00

Capacity Analysis for Planning of Junctions

Input Worksheet 1

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build A (Close Schoolview) AM Design Year (2048)
Location	Chuluota Road at Schoolview Way Relocation
Date	March 19, 2024
Number of Legs	4
Major Street Direction	North-South

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	0	35	6	9	3.48%	0.00%
Westbound	0	225	9	48	3.48%	0.00%
Southbound	0	14	927	50	3.48%	0.00%
Northbound	0	4	850	84	3.48%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone		**C3R-Suburban Residential**	
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Equivalent Passenger Car Volume

	Volume (Veh/hr)			
	U-Turn	**Left**	**Thru**	**Right**
Eastbound	0	36	6	9
Westbound	0	233	9	50
Southbound	0	14	959	52
Northbound	0	4	880	87

Notes:	
Left-Turn Adjustment Factor	*Conversion of left-turning vehicles to equivalent through vehicles*
Right-turn Adjustment Factor	*Conversion of right-turning vehicles to equivalent through vehicles*
U-turn Adjustment Factor	*Conversion of U-turning vehicles to equivalent through vehicles*
Truck to PCE Factor	*1 truck = X Passenger Car Equivalents*
Critical Lane Volume Sum Limit	*Saturation Value for Critical Lane Volume Sum at an intersection*

Capacity Analysis for Planning of Junctions

Step 2A: Base Conditions Analysis

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build A (Close Schoolview) AM Design Year (2048)
Location	Chuluota Road at Schoolview Way Relocation
Date	March 19, 2024
Major Street Direction	North-South

Existing Intersection Configuration	*Traffic Signal*

Number of Lanes for Existing Configuration
(Can be edited in "3- Alt Num Lanes Input" as needed)

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		1	2	1		1	2	1		1	1	0		1	1	0

Results for Existing Configuration

TYPE OF	Sheet	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	

Overall v/c Ratio	0.44	Pedestrian Accommodation Score	4.79	Bicycle Accommodation Score	4.49

Step 2B: Alternative Selection

Rankings Inclusion		Yes/No	Comment
At-Grade Non-Roundabout Intersections?		Yes	
Traffic Signal		Yes	
Two-Way Stop Control		Yes	
All-Way Stop Control		Yes	
Continuous Green T		No	4-leg Intersection
Quadrant Roadway	S-W	No	No Nearby Quadrant Roadway
	N-E	No	No Nearby Quadrant Roadway
	S-E	No	No Nearby Quadrant Roadway
	N-W	No	No Nearby Quadrant Roadway
Partial Displaced Left Turn		Yes	
Displaced Left Turn		Yes	
Signalized Restricted Crossing U-Turn		Yes	
Unsignalized Restricted Crossing U-Turn		Yes	
Median U-Turn		Yes	
Partial Median U-Turn		Yes	
Bowtie		Yes	
Signalized ThruCut		Yes	
Unsignalized ThruCut		Yes	
Roundabouts?		Yes	
50 ICD Miniroundabout		Yes	
75 ICD Miniroundabout		Yes	
1x1		No	2x1 Roundabout Only
1NS x 2EW		No	2x1 Roundabout Only
2NS x 1EW		Yes	
2x2		No	2x1 Roundabout Only
Ramp Terminal Intersections?		No	
Diamond			
Partial Cloverleaf A			
Partial Cloverleaf B			
Displaced Left Turn Interchange			
Diverging Diamond			
Single Point Diamond			

Continue to Step 3 Step 3

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build A (Close Schoolview) AM Design Year (2048)
Location	Chuluota Road at Schoolview Way Relocation
Date	March 19, 2024
Analysis Type	At-Grade Intersections and Interchanges

Number of Lanes for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		1	2	1		1	2	1		1	1	0		1	1	0
Two-Way Stop Control	N-S		1	2	1		1	2	1		1	1	0		1	1	0
All-Way Stop Control	FULL		1	2	1		1	2	1		1	1	0		1	1	0
Partial Displaced Left Turn	N-S		1	2	1		1	2	1		1	1	0		1	1	0
Displaced Left Turn	FULL		1	2	1		1	2	1		1	1	1		1	1	1
Signalized Restricted Crossing U-Turn	N-S	2	1	2	1	2	1	2	1				2				2
Unsignalized Restricted Crossing U-Turn	N-S	2	1	2	1	2	1	2	1				2				2
Median U-Turn	N-S	1		2	1	1		2	1			1	1			1	1
Partial Median U-Turn	N-S	1		2	1	1		2	1		1	1	0		1	1	0
Signalized ThruCut	N-S		1	2	1		1	2	1		1		1		1		1
Unsignalized ThruCut	N-S		1	2	1		1	2	1		1		1		1		1
Bowtie	N-S			2	1			2	1			1	1			1	1

For shared lanes, enter "0" in L or R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Number of Lanes for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build A (Close Schoolview) AM Design Year (2048)
Location	Chuluota Road at Schoolview Way Relocation
Date	March 19, 2024
Analysis Type	At-Grade Intersections and Interchanges

Volume Echo with Shared Lane Adjustment for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		4	880	87		14	959	52		36	15	0		233	59	0
Two-Way Stop Control	N-S		4	880	87		14	959	52		36	15	0		233	59	0
All-Way Stop Control	FULL		4	880	87		14	959	52		36	15	0		233	59	0
Partial Displaced Left Turn	N-S		4	880	87		14	959	52		36	15	0		233	59	0
Displaced Left Turn	FULL		4	880	87		14	959	52		36	6	9		233	9	50
Signalized Restricted Crossing U-Turn	N-S	0	4	880	87	0	14	959	52				9				50
Unsignalized Restricted Crossing U-Turn	N-S	0	4	880	87	0	14	959	52				9				50
Median U-Turn	N-S	0		880	87	0		959	52			6	9			9	50
Partial Median U-Turn	N-S	0		880	87	0		959	52		36	15	0		233	59	0
Signalized ThruCut	N-S		4	880	87		14	959	52		39		12		238		55
Unsignalized ThruCut	N-S		4	880	87		14	959	52		39		12		238		55
Bowtie	N-S		4	880	87		14	959	52			56	242			246	86

Capacity Analysis for Planning of Junctions

Results Worksheet

Project Name	Chuluota Road (CR 419) ICE Evaluation	***Estimated Volume-to-Capacity Ratio***			
Project Number	Build A (Close Schoolview) AM Design Year (2048)	**Number of Configurations**			
Location	Chuluota Road at Schoolview Way Relocation	**< 0.750**	**0.750 - 0.875**	**0.875 - 1.00**	**≥ 1.00**
Date	March 19, 2024	**9**	**0**	**0**	**6**

Results for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Zone 1 (North)		Zone 2 (South)		Zone 3 (East)		Zone 4 (West)		Zone 5 (Center)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			
Traffic Signal	FULL									744	0.44	0.44	4.79	4.49
Two-Way Stop Control	N-S									--	3.23	3.23	2.65	3.75
All-Way Stop Control	FULL									2339	1.30	1.30	3.62	4.49
Partial Displaced Left Turn	N-S	498	0.28	605	0.34					740	0.42	0.42	2.86	3.16
Displaced Left Turn	FULL	473	0.26	600	0.33	265	0.15	51	0.03	725	0.40	0.40	3.01	3.16
Signalized Restricted Crossing U-Turn	N-S	664	0.37	512	0.28	630	0.35	626	0.35			0.37	2.94	4.08
Unsignalized Restricted Crossing U-Turn	N-S	1025	0.44	971	0.07	916	1.07	1192	0.29			1.07	2.62	3.00
Median U-Turn	N-S	809	0.45	548	0.30					819	0.46	0.46	3.00	4.49
Partial Median U-Turn	N-S	518	0.29	503	0.28					747	0.43	0.43	2.91	4.49
Bowtie	N-S	133	0.09	292	0.21	292	0.21	12	0.01	765	0.43	0.43	4.70	4.49
Signalized ThruCut	N-S									744	0.43	0.43	4.86	4.49
Unsignalized ThruCut	N-S									--	6.31	6.31	4.18	4.17

Capacity Analysis for Planning of Junctions

Results Worksheet

Results for Roundabouts

TYPE OF ROUNDABOUT	Zone 1 (North)			Zone 3 (East)			Zone 2 (South)			Zone 4 (West)			Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3			
50 ICD	1.32			-0.32			0.98			3.32			3.32	5.36	4.62
75 ICD	1.28			-0.65			0.97			1.65			1.65	5.36	4.62
2NS X 1EW	0.47	0.50		0.11			0.37	0.40		0.47			0.50	4.97	4.54

Results for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Zone 1 (Rt Mrg)		Zone 2 (Lt Mrg)		Zone 3 (Ctr. 1)		Zone 4 (Ctr. 2)		Zone 5 (Lt Mrg)		Zone 6 (Rt Mrg)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			

TYPE OF INTERSECTION	Overall V/C Ratio	V/C Ranking	Pedestrian Accommodation Score	Bicycle Accommodation Score
Signalized Restricted Crossing U-Turn N-S	0.37	1	2.94	4.08
Displaced Left Turn	0.40	2	3.01	3.16
Partial Displaced Left Turn N-S	0.42	3	2.86	3.16
Partial Median U-Turn N-S	0.43	4	2.91	4.49
Signalized ThruCut N-S	0.43	4	4.86	4.49
Bowtie N-S	0.43	4	4.70	4.49
Traffic Signal	0.44	7	4.79	4.49
Median U-Turn N-S	0.46	8	3.00	4.49
2NS X 1EW	0.50	9	4.97	4.54
Unsignalized Restricted Crossing U-Turn N-S	1.07	10	2.62	3.00

Capacity Analysis for Planning of Junctions

Input Worksheet 1

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build A (Close Schoolview) PM Opening Year (2028)
Location	Chuluota Road at Schoolview Way Relocation
Date	March 19, 2024
Number of Legs	4
Major Street Direction	North-South

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	0	79	12	14	3.48%	0.00%
Westbound	0	158	7	21	3.48%	0.00%
Southbound	0	28	726	44	3.48%	0.00%
Northbound	0	10	603	207	3.48%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone		**C3R-Suburban Residential**	
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Equivalent Passenger Car Volume

	Volume (Veh/hr)			
	U-Turn	**Left**	**Thru**	**Right**
Eastbound	0	82	12	14
Westbound	0	163	7	22
Southbound	0	29	751	46
Northbound	0	10	624	214

Notes:	
Left-Turn Adjustment Factor	*Conversion of left-turning vehicles to equivalent through vehicles*
Right-turn Adjustment Factor	*Conversion of right-turning vehicles to equivalent through vehicles*
U-turn Adjustment Factor	*Conversion of U-turning vehicles to equivalent through vehicles*
Truck to PCE Factor	*1 truck = X Passenger Car Equivalents*
Critical Lane Volume Sum Limit	*Saturation Value for Critical Lane Volume Sum at an intersection*

Capacity Analysis for Planning of Junctions

Step 2A: Base Conditions Analysis

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build A (Close Schoolview) PM Opening Year (2028)
Location	Chuluota Road at Schoolview Way Relocation
Date	March 19, 2024
Major Street Direction	North-South

Existing Intersection Configuration	*Traffic Signal*

Number of Lanes for Existing Configuration
(Can be edited in "3- Alt Num Lanes Input" as needed)

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		1	2	1		1	2	1		1	1	0		1	1	0

Results for Existing Configuration

TYPE OF	Sheet	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	

Overall v/c Ratio	0.34	Pedestrian Accommodation Score	4.79	Bicycle Accommodation Score	4.49

Step 2B: Alternative Selection

Rankings Inclusion		Yes/No	Comment
At-Grade Non-Roundabout Intersections?		Yes	
Traffic Signal		Yes	
Two-Way Stop Control		Yes	
All-Way Stop Control		Yes	
Continuous Green T		No	4-leg Intersection
Quadrant Roadway	S-W	No	No Nearby Quadrant Roadway
	N-E	No	No Nearby Quadrant Roadway
	S-E	No	No Nearby Quadrant Roadway
	N-W	No	No Nearby Quadrant Roadway
Partial Displaced Left Turn		Yes	
Displaced Left Turn		Yes	
Signalized Restricted Crossing U-Turn		Yes	
Unsignalized Restricted Crossing U-Turn		Yes	
Median U-Turn		Yes	
Partial Median U-Turn		Yes	
Bowtie		Yes	
Signalized ThruCut		Yes	
Unsignalized ThruCut		Yes	
Roundabouts?		Yes	
50 ICD Miniroundabout		Yes	
75 ICD Miniroundabout		Yes	
1x1		No	2x1 Roundabout Only
1NS x 2EW		No	2x1 Roundabout Only
2NS x 1EW		Yes	
2x2		No	2x1 Roundabout Only
Ramp Terminal Intersections?		No	
Diamond			
Partial Cloverleaf A			
Partial Cloverleaf B			
Displaced Left Turn Interchange			
Diverging Diamond			
Single Point Diamond			

Continue to Step 3 Step 3

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build A (Close Schoolview) PM Opening Year (2028)
Location	Chuluota Road at Schoolview Way Relocation
Date	March 19, 2024
Analysis Type	At-Grade Intersections and Interchanges

Number of Lanes for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		1	2	1		1	2	1		1	1	0		1	1	0
Two-Way Stop Control	N-S		1	2	1		1	2	1		1	1	0		1	1	0
All-Way Stop Control	FULL		1	2	1		1	2	1		1	1	0		1	1	0
Partial Displaced Left Turn	N-S		1	2	1		1	2	1		1	1	0		1	1	0
Displaced Left Turn	FULL		1	2	1		1	2	1		1	1	1		1	1	1
Signalized Restricted Crossing U-Turn	N-S	2	1	2	1	2	1	2	1				2				2
Unsignalized Restricted Crossing U-Turn	N-S	2	1	2	1	2	1	2	1				2				2
Median U-Turn	N-S	1		2	1	1		2	1			1	1			1	1
Partial Median U-Turn	N-S	1		2	1	1		2	1		1	1	0		1	1	0
Signalized ThruCut	N-S		1	2	1		1	2	1		1		1		1		1
Unsignalized ThruCut	N-S		1	2	1		1	2	1		1		1		1		1
Bowtie	N-S			2	1			2	1			1	1			1	1

For shared lanes, enter "0" in L or R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Number of Lanes for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build A (Close Schoolview) PM Opening Year (2028)
Location	Chuluota Road at Schoolview Way Relocation
Date	March 19, 2024
Analysis Type	At-Grade Intersections and Interchanges

Volume Echo with Shared Lane Adjustment for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		10	624	214		29	751	46		82	26	0		163	29	0
Two-Way Stop Control	N-S		10	624	214		29	751	46		82	26	0		163	29	0
All-Way Stop Control	FULL		10	624	214		29	751	46		82	26	0		163	29	0
Partial Displaced Left Turn	N-S		10	624	214		29	751	46		82	26	0		163	29	0
Displaced Left Turn	FULL		10	624	214		29	751	46		82	12	14		163	7	22
Signalized Restricted Crossing U-Turn	N-S	0	10	624	214	0	29	751	46				14				22
Unsignalized Restricted Crossing U-Turn	N-S	0	10	624	214	0	29	751	46				14				22
Median U-Turn	N-S	0		624	214	0		751	46			12	14			7	22
Partial Median U-Turn	N-S	0		624	214	0		751	46		82	26	0		163	29	0
Signalized ThruCut	N-S		10	624	214		29	751	46		88		20		167		26
Unsignalized ThruCut	N-S		10	624	214		29	751	46		88		20		167		26
Bowtie	N-S		10	624	214		29	751	46			123	177			180	104

Capacity Analysis for Planning of Junctions

Results Worksheet

Project Name	Chuluota Road (CR 419) ICE Evaluation	***Estimated Volume-to-Capacity Ratio***			
Project Number	Build A (Close Schoolview) PM Opening Year (2028)	**Number of Configurations**			
Location	Chuluota Road at Schoolview Way Relocation	**< 0.750**	**0.750 - 0.875**	**0.875 - 1.00**	**≥ 1.00**
Date	March 19, 2024	**10**	**0**	**1**	**4**

Results for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Zone 1 (North)		Zone 2 (South)		Zone 3 (East)		Zone 4 (West)		Zone 5 (Center)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			
Traffic Signal	FULL									584	0.34	0.34	4.79	4.49
Two-Way Stop Control	N-S									--	1.56	1.56	2.65	3.75
All-Way Stop Control	FULL									1974	1.10	1.10	3.62	4.49
Partial Displaced Left Turn	N-S	395	*0.22*	475	*0.26*					573	0.33	0.33	2.86	3.16
Displaced Left Turn	FULL	384	*0.21*	468	*0.26*	213	*0.12*	103	*0.06*	547	0.30	0.30	3.01	3.16
Signalized Restricted Crossing U-Turn	N-S	519	*0.29*	483	*0.27*	466	*0.26*	521	*0.29*			0.29	2.91	4.08
Unsignalized Restricted Crossing U-Turn	N-S	826	*0.26*	848	*0.15*	706	*0.51*	914	*0.40*			0.51	2.62	3.00
Median U-Turn	N-S	629	*0.35*	563	*0.31*					608	0.34	0.35	3.00	4.49
Partial Median U-Turn	N-S	426	*0.24*	460	*0.26*					588	0.34	0.34	2.89	4.49
Bowtie	N-S	317	0.22	218	0.15	192	0.15	20	0.02	584	0.32	0.32	4.70	4.49
Signalized ThruCut	N-S									574	0.33	0.33	4.86	4.49
Unsignalized ThruCut	N-S									--	2.47	2.47	4.18	4.17

Capacity Analysis for Planning of Junctions

Results Worksheet

Results for Roundabouts

TYPE OF ROUNDABOUT	Zone 1 (North)			Zone 3 (East)			Zone 2 (South)			Zone 4 (West)			Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3			
50 ICD	0.98			1.46			0.92			*0.65*			1.46	5.35	4.62
75 ICD	0.96			0.80			0.91			*0.52*			0.96	5.35	4.62
2NS X 1EW	*0.36*	*0.38*		*0.18*			*0.35*	0.37		*0.26*			0.38	4.97	4.54

Results for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Zone 1 (Rt Mrg)		Zone 2 (Lt Mrg)		Zone 3 (Ctr. 1)		Zone 4 (Ctr. 2)		Zone 5 (Lt Mrg)		Zone 6 (Rt Mrg)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			

TYPE OF INTERSECTION	Overall V/C Ratio	V/C Ranking	Pedestrian Accommodation Score	Bicycle Accommodation Score
Signalized Restricted Crossing U-Turn N-S	0.29	1	2.91	4.08
Displaced Left Turn	0.30	2	3.01	3.16
Bowtie N-S	0.32	3	4.70	4.49
Partial Displaced Left Turn N-S	0.33	4	2.86	3.16
Signalized ThruCut N-S	0.33	4	4.86	4.49
Traffic Signal	0.34	6	4.79	4.49
Partial Median U-Turn N-S	0.34	6	2.89	4.49
Median U-Turn N-S	0.35	8	3.00	4.49
2NS X 1EW	0.38	9	4.97	4.54
Unsignalized Restricted Crossing U-Turn N-S	0.51	10	2.62	3.00

Capacity Analysis for Planning of Junctions

Input Worksheet 1

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build A (Close Schoolview) PM Interim Year (2038)
Location	Chuluota Road at Schoolview Way Relocation
Date	March 19, 2024
Number of Legs	4
Major Street Direction	North-South

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	0	99	13	15	3.48%	0.00%
Westbound	0	171	7	23	3.48%	0.00%
Southbound	0	30	991	56	3.48%	0.00%
Northbound	0	10	788	225	3.48%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone		**C3R-Suburban Residential**	
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Equivalent Passenger Car Volume

	Volume (Veh/hr)			
	U-Turn	**Left**	**Thru**	**Right**
Eastbound	0	102	13	16
Westbound	0	177	7	24
Southbound	0	31	1025	58
Northbound	0	10	815	233

Notes:	
Left-Turn Adjustment Factor	*Conversion of left-turning vehicles to equivalent through vehicles*
Right-turn Adjustment Factor	*Conversion of right-turning vehicles to equivalent through vehicles*
U-turn Adjustment Factor	*Conversion of U-turning vehicles to equivalent through vehicles*
Truck to PCE Factor	*1 truck = X Passenger Car Equivalents*
Critical Lane Volume Sum Limit	*Saturation Value for Critical Lane Volume Sum at an intersection*

Capacity Analysis for Planning of Junctions

Step 2A: Base Conditions Analysis

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build A (Close Schoolview) PM Interim Year (2038)
Location	Chuluota Road at Schoolview Way Relocation
Date	March 19, 2024
Major Street Direction	North-South

Existing Intersection Configuration	*Traffic Signal*

Number of Lanes for Existing Configuration
(Can be edited in "3- Alt Num Lanes Input" as needed)

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	**FULL**		1	2	1		1	2	1		1	1	0		1	1	0

Results for Existing Configuration

TYPE OF	Sheet	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	

Overall v/c Ratio	0.43	Pedestrian Accommodation Score	4.79	Bicycle Accommodation Score	4.49

Step 2B: Alternative Selection

Rankings Inclusion		Yes/No	Comment
At-Grade Non-Roundabout Intersections?		Yes	
Traffic Signal		Yes	
Two-Way Stop Control		Yes	
All-Way Stop Control		Yes	
Continuous Green T		No	4-leg Intersection
Quadrant Roadway	S-W	No	No Nearby Quadrant Roadway
	N-E	No	No Nearby Quadrant Roadway
	S-E	No	No Nearby Quadrant Roadway
	N-W	No	No Nearby Quadrant Roadway
Partial Displaced Left Turn		Yes	
Displaced Left Turn		Yes	
Signalized Restricted Crossing U-Turn		Yes	
Unsignalized Restricted Crossing U-Turn		Yes	
Median U-Turn		Yes	
Partial Median U-Turn		Yes	
Bowtie		Yes	
Signalized ThruCut		Yes	
Unsignalized ThruCut		Yes	
Roundabouts?		Yes	
50 ICD Miniroundabout		Yes	
75 ICD Miniroundabout		Yes	
1x1		No	2x1 Roundabout Only
1NS x 2EW		No	2x1 Roundabout Only
2NS x 1EW		Yes	
2x2		No	2x1 Roundabout Only
Ramp Terminal Intersections?		No	
Diamond			
Partial Cloverleaf A			
Partial Cloverleaf B			
Displaced Left Turn Interchange			
Diverging Diamond			
Single Point Diamond			

Continue to Step 3 Step 3

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build A (Close Schoolview) PM Interim Year (2038)
Location	Chuluota Road at Schoolview Way Relocation
Date	March 19, 2024
Analysis Type	At-Grade Intersections and Interchanges

Number of Lanes for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		1	2	1		1	2	1		1	1	0		1	1	0
Two-Way Stop Control	N-S		1	2	1		1	2	1		1	1	0		1	1	0
All-Way Stop Control	FULL		1	2	1		1	2	1		1	1	0		1	1	0
Partial Displaced Left Turn	N-S		1	2	1		1	2	1		1	1	0		1	1	0
Displaced Left Turn	FULL		1	2	1		1	2	1		1	1	1		1	1	1
Signalized Restricted Crossing U-Turn	N-S	2	1	2	1	2	1	2	1				2				2
Unsignalized Restricted Crossing U-Turn	N-S	2	1	2	1	2	1	2	1				2				2
Median U-Turn	N-S	1		2	1	1		2	1			1	1			1	1
Partial Median U-Turn	N-S	1		2	1	1		2	1		1	1	0		1	1	0
Signalized ThruCut	N-S		1	2	1		1	2	1		1		1		1		1
Unsignalized ThruCut	N-S		1	2	1		1	2	1		1		1		1		1
Bowtie	N-S			2	1			2	1			1	1			1	1

For shared lanes, enter "0" in L or R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Number of Lanes for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build A (Close Schoolview) PM Interim Year (2038)
Location	Chuluota Road at Schoolview Way Relocation
Date	March 19, 2024
Analysis Type	At-Grade Intersections and Interchanges

Volume Echo with Shared Lane Adjustment for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		10	815	233		31	1025	58		102	29	0		177	31	0
Two-Way Stop Control	N-S		10	815	233		31	1025	58		102	29	0		177	31	0
All-Way Stop Control	FULL		10	815	233		31	1025	58		102	29	0		177	31	0
Partial Displaced Left Turn	N-S		10	815	233		31	1025	58		102	29	0		177	31	0
Displaced Left Turn	FULL		10	815	233		31	1025	58		102	13	16		177	7	24
Signalized Restricted Crossing U-Turn	N-S	0	10	815	233	0	31	1025	58				16				24
Unsignalized Restricted Crossing U-Turn	N-S	0	10	815	233	0	31	1025	58				16				24
Median U-Turn	N-S	0		815	233	0		1025	58			13	16			7	24
Partial Median U-Turn	N-S	0		815	233	0		1025	58		102	29	0		177	31	0
Signalized ThruCut	N-S		10	815	233		31	1025	58		109		23		181		28
Unsignalized ThruCut	N-S		10	815	233		31	1025	58		109		23		181		28
Bowtie	N-S		10	815	233		31	1025	58			146	193			194	126

Capacity Analysis for Planning of Junctions

Results Worksheet

Project Name	Chuluota Road (CR 419) ICE Evaluation	***Estimated Volume-to-Capacity Ratio***			
Project Number	Build A (Close Schoolview) PM Interim Year (2038)	**Number of Configurations**			
Location	Chuluota Road at Schoolview Way Relocation	**< 0.750**	**0.750 - 0.875**	**0.875 - 1.00**	**≥ 1.00**
Date	March 19, 2024	**9**	**1**	**0**	**5**

Results for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Zone 1 (North)		Zone 2 (South)		Zone 3 (East)		Zone 4 (West)		Zone 5 (Center)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			
Traffic Signal	FULL									739	0.43	0.43	4.79	4.49
Two-Way Stop Control	N-S									--	5.15	5.15	2.60	3.75
All-Way Stop Control	FULL									2511	1.40	1.40	3.62	4.49
Partial Displaced Left Turn	N-S	503	*0.28*	620	*0.34*					728	0.42	0.42	2.85	3.16
Displaced Left Turn	FULL	491	*0.27*	612	*0.34*	230	*0.13*	124	*0.07*	699	0.39	0.39	3.00	3.16
Signalized Restricted Crossing U-Turn	N-S	672	*0.37*	601	*0.33*	581	*0.32*	678	*0.38*			0.38	2.91	4.08
Unsignalized Restricted Crossing U-Turn	N-S	1114	*0.37*	1058	*0.22*	917	0.77	1202	0.75			0.77	2.62	3.00
Median U-Turn	N-S	791	*0.44*	695	*0.39*					764	0.42	0.44	3.00	4.49
Partial Median U-Turn	N-S	570	*0.32*	568	*0.32*					743	0.42	0.42	2.89	4.49
Bowtie	N-S	357	0.25	244	0.17	208	0.16	23	0.02	740	0.41	0.41	4.70	4.41
Signalized ThruCut	N-S									729	0.42	0.42	4.86	4.49
Unsignalized ThruCut	N-S									--	6.38	6.38	4.14	4.17

Capacity Analysis for Planning of Junctions

Results Worksheet

Results for Roundabouts

TYPE OF ROUNDABOUT	Zone 1 (North)			Zone 3 (East)			Zone 2 (South)			Zone 4 (West)			Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3			
50 ICD	1.34			-0.66			1.18			2.62			2.62	5.35	4.62
75 ICD	1.31			-1.17			1.16			1.23			1.31	5.35	4.62
2NS X 1EW	0.49	0.52		0.28			0.44	0.47		0.34			0.52	4.97	4.54

Results for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Zone 1 (Rt Mrg)		Zone 2 (Lt Mrg)		Zone 3 (Ctr. 1)		Zone 4 (Ctr. 2)		Zone 5 (Lt Mrg)		Zone 6 (Rt Mrg)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			

TYPE OF INTERSECTION	Overall V/C Ratio	V/C Ranking	Pedestrian Accommodation Score	Bicycle Accommodation Score
Signalized Restricted Crossing U-Turn N-S	0.38	1	2.91	4.08
Displaced Left Turn	0.39	2	3.00	3.16
Bowtie N-S	0.41	3	4.70	4.41
Partial Displaced Left Turn N-S	0.42	4	2.85	3.16
Partial Median U-Turn N-S	0.42	4	2.89	4.49
Signalized ThruCut N-S	0.42	4	4.86	4.49
Traffic Signal	0.43	7	4.79	4.49
Median U-Turn N-S	0.44	8	3.00	4.49
2NS X 1EW	0.52	9	4.97	4.54
Unsignalized Restricted Crossing U-Turn N-S	0.77	10	2.62	3.00

Capacity Analysis for Planning of Junctions

Input Worksheet 1

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build A (Close Schoolview) PM Design Year (2048)
Location	Chuluota Road at Schoolview Way Relocation
Date	March 19, 2024
Number of Legs	4
Major Street Direction	North-South

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	0	120	14	16	3.48%	0.00%
Westbound	0	185	8	25	3.48%	0.00%
Southbound	0	33	1256	68	3.48%	0.00%
Northbound	0	11	973	243	3.48%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone		**C3R-Suburban Residential**	
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Equivalent Passenger Car Volume

	Volume (Veh/hr)			
	U-Turn	**Left**	**Thru**	**Right**
Eastbound	0	124	14	17
Westbound	0	191	8	26
Southbound	0	34	1300	70
Northbound	0	11	1007	251

Notes:	
Left-Turn Adjustment Factor	*Conversion of left-turning vehicles to equivalent through vehicles*
Right-turn Adjustment Factor	*Conversion of right-turning vehicles to equivalent through vehicles*
U-turn Adjustment Factor	*Conversion of U-turning vehicles to equivalent through vehicles*
Truck to PCE Factor	*1 truck = X Passenger Car Equivalents*
Critical Lane Volume Sum Limit	*Saturation Value for Critical Lane Volume Sum at an intersection*

Capacity Analysis for Planning of Junctions

Step 2A: Base Conditions Analysis

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build A (Close Schoolview) PM Design Year (2048)
Location	Chuluota Road at Schoolview Way Relocation
Date	March 19, 2024
Major Street Direction	North-South

Existing Intersection Configuration	*Traffic Signal*

Number of Lanes for Existing Configuration
(Can be edited in "3- Alt Num Lanes Input" as needed)

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	**FULL**		1	2	1		1	2	1		1	1	0		1	1	0

Results for Existing Configuration

TYPE OF	Sheet	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	

Overall v/c Ratio	0.53	Pedestrian Accommodation Score	4.79	Bicycle Accommodation Score	4.49

Step 2B: Alternative Selection

Rankings Inclusion		Yes/No	Comment
At-Grade Non-Roundabout Intersections?		Yes	
Traffic Signal		Yes	
Two-Way Stop Control		Yes	
All-Way Stop Control		Yes	
Continuous Green T		No	4-leg Intersection
Quadrant Roadway	S-W	No	No Nearby Quadrant Roadway
	N-E	No	No Nearby Quadrant Roadway
	S-E	No	No Nearby Quadrant Roadway
	N-W	No	No Nearby Quadrant Roadway
Partial Displaced Left Turn		Yes	
Displaced Left Turn		Yes	
Signalized Restricted Crossing U-Turn		Yes	
Unsignalized Restricted Crossing U-Turn		Yes	
Median U-Turn		Yes	
Partial Median U-Turn		Yes	
Bowtie		Yes	
Signalized ThruCut		Yes	
Unsignalized ThruCut		Yes	
Roundabouts?		Yes	
50 ICD Miniroundabout		Yes	
75 ICD Miniroundabout		Yes	
1x1		No	2x1 Roundabout Only
1NS x 2EW		No	2x1 Roundabout Only
2NS x 1EW		Yes	
2x2		No	2x1 Roundabout Only
Ramp Terminal Intersections?		No	
Diamond			
Partial Cloverleaf A			
Partial Cloverleaf B			
Displaced Left Turn Interchange			
Diverging Diamond			
Single Point Diamond			

Continue to Step 3 Step 3

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build A (Close Schoolview) PM Design Year (2048)
Location	Chuluota Road at Schoolview Way Relocation
Date	March 19, 2024
Analysis Type	At-Grade Intersections and Interchanges

Number of Lanes for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		1	2	1		1	2	1		1	1	0		1	1	0
Two-Way Stop Control	N-S		1	2	1		1	2	1		1	1	0		1	1	0
All-Way Stop Control	FULL		1	2	1		1	2	1		1	1	0		1	1	0
Partial Displaced Left Turn	N-S		1	2	1		1	2	1		1	1	0		1	1	0
Displaced Left Turn	FULL		1	2	1		1	2	1		1	1	1		1	1	1
Signalized Restricted Crossing U-Turn	N-S	2	1	2	1	2	1	2	1				2				2
Unsignalized Restricted Crossing U-Turn	N-S	2	1	2	1	2	1	2	1				2				2
Median U-Turn	N-S	1		2	1	1		2	1			1	1			1	1
Partial Median U-Turn	N-S	1		2	1	1		2	1		1	1	0		1	1	0
Signalized ThruCut	N-S		1	2	1		1	2	1		1		1		1		1
Unsignalized ThruCut	N-S		1	2	1		1	2	1		1		1		1		1
Bowtie	N-S			2	1			2	1			1	1			1	1

For shared lanes, enter "0" in L or R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Number of Lanes for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build A (Close Schoolview) PM Design Year (2048)
Location	Chuluota Road at Schoolview Way Relocation
Date	March 19, 2024
Analysis Type	At-Grade Intersections and Interchanges

Volume Echo with Shared Lane Adjustment for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		11	1007	251		34	1300	70		124	31	0		191	34	0
Two-Way Stop Control	N-S		11	1007	251		34	1300	70		124	31	0		191	34	0
All-Way Stop Control	FULL		11	1007	251		34	1300	70		124	31	0		191	34	0
Partial Displaced Left Turn	N-S		11	1007	251		34	1300	70		124	31	0		191	34	0
Displaced Left Turn	FULL		11	1007	251		34	1300	70		124	14	17		191	8	26
Signalized Restricted Crossing U-Turn	N-S	0	11	1007	251	0	34	1300	70				17				26
Unsignalized Restricted Crossing U-Turn	N-S	0	11	1007	251	0	34	1300	70				17				26
Median U-Turn	N-S	0		1007	251	0		1300	70			14	17			8	26
Partial Median U-Turn	N-S	0		1007	251	0		1300	70		124	31	0		191	34	0
Signalized ThruCut	N-S		11	1007	251		34	1300	70		131		24		195		30
Unsignalized ThruCut	N-S		11	1007	251		34	1300	70		131		24		195		30
Bowtie	N-S		11	1007	251		34	1300	70			172	208			210	150

Capacity Analysis for Planning of Junctions

Results Worksheet

Project Name	Chuluota Road (CR 419) ICE Evaluation	***Estimated Volume-to-Capacity Ratio***			
Project Number	Build A (Close Schoolview) PM Design Year (2048)	**Number of Configurations**			
Location	Chuluota Road at Schoolview Way Relocation	**< 0.750**	**0.750 - 0.875**	**0.875 - 1.00**	**≥ 1.00**
Date	March 19, 2024	**9**	**0**	**0**	**6**

Results for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Zone 1 (North)		Zone 2 (South)		Zone 3 (East)		Zone 4 (West)		Zone 5 (Center)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			
Traffic Signal	FULL									894	0.53	0.53	4.79	4.49
Two-Way Stop Control	N-S									--	>10	>10	2.55	3.75
All-Way Stop Control	FULL									3053	1.70	1.70	3.62	4.49
Partial Displaced Left Turn	N-S	614	*0.34*	766	*0.43*					882	0.50	0.50	2.85	3.16
Displaced Left Turn	FULL	601	*0.33*	757	*0.42*	249	*0.14*	150	*0.08*	851	0.47	0.47	3.00	3.16
Signalized Restricted Crossing U-Turn	N-S	826	*0.46*	721	*0.40*	698	*0.39*	837	*0.46*			0.46	2.91	4.08
Unsignalized Restricted Crossing U-Turn	N-S	1404	*0.52*	1269	*0.32*	1131	1.15	1491	1.40			1.40	2.62	3.00
Median U-Turn	N-S	955	*0.53*	832	*0.46*					922	0.51	0.53	3.00	4.49
Partial Median U-Turn	N-S	716	*0.40*	677	*0.38*					899	0.51	0.51	2.87	4.49
Bowtie	N-S	399	0.28	271	0.19	225	0.18	24	0.02	895	0.50	0.50	4.70	4.33
Signalized ThruCut	N-S									884	0.51	0.51	4.86	4.49
Unsignalized ThruCut	N-S									--	17.03	17.03	4.14	4.17

Capacity Analysis for Planning of Junctions

Results Worksheet

Results for Roundabouts

TYPE OF ROUNDABOUT	Zone 1 (North)			Zone 3 (East)			Zone 2 (South)			Zone 4 (West)			Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3			
50 ICD	1.72			-0.32			1.46			-1.64			1.72	5.32	4.62
75 ICD	1.68			-0.42			1.43			-7.22			1.68	5.32	4.62
2NS X 1EW	0.62	0.66		0.42			0.54	0.58		0.44			0.66	4.93	4.54

Results for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Zone 1 (Rt Mrg)		Zone 2 (Lt Mrg)		Zone 3 (Ctr. 1)		Zone 4 (Ctr. 2)		Zone 5 (Lt Mrg)		Zone 6 (Rt Mrg)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			

TYPE OF INTERSECTION	Overall V/C Ratio	V/C Ranking	Pedestrian Accommodation Score	Bicycle Accommodation Score
Signalized Restricted Crossing U-Turn N-S	0.46	1	2.91	4.08
Displaced Left Turn	0.47	2	3.00	3.16
Partial Displaced Left Turn N-S	0.50	3	2.85	3.16
Bowtie N-S	0.50	3	4.70	4.33
Partial Median U-Turn N-S	0.51	5	2.87	4.49
Signalized ThruCut N-S	0.51	5	4.86	4.49
Traffic Signal	0.53	7	4.79	4.49
Median U-Turn N-S	0.53	7	3.00	4.49
2NS X 1EW	0.66	9	4.93	4.54
Unsignalized Restricted Crossing U-Turn N-S	1.40	10	2.62	3.00

Capacity Analysis for Planning of Junctions

Input Worksheet 1

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build B (Schoolview RI-RO) AM Opening Year (2028)
Location	Chuluota Road at Schoolview Way Relocation
Date	March 19, 2024
Number of Legs	4
Major Street Direction	North-South

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	0	30	5	0	3.48%	0.00%
Westbound	0	192	8	41	3.48%	0.00%
Southbound	0	12	654	8	3.48%	0.00%
Northbound	0	3	528	71	3.48%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone		**C3R-Suburban Residential**	
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Equivalent Passenger Car Volume

	Volume (Veh/hr)			
	U-Turn	**Left**	**Thru**	**Right**
Eastbound	0	31	5	0
Westbound	0	199	8	42
Southbound	0	12	677	8
Northbound	0	3	546	73

Notes:	
Left-Turn Adjustment Factor	*Conversion of left-turning vehicles to equivalent through vehicles*
Right-turn Adjustment Factor	*Conversion of right-turning vehicles to equivalent through vehicles*
U-turn Adjustment Factor	*Conversion of U-turning vehicles to equivalent through vehicles*
Truck to PCE Factor	*1 truck = X Passenger Car Equivalents*
Critical Lane Volume Sum Limit	*Saturation Value for Critical Lane Volume Sum at an intersection*

Capacity Analysis for Planning of Junctions

Step 2A: Base Conditions Analysis

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build B (Schoolview RI-RO) AM Opening Year (2028)
Location	Chuluota Road at Schoolview Way Relocation
Date	March 19, 2024
Major Street Direction	North-South

Existing Intersection Configuration	*Traffic Signal*

Number of Lanes for Existing Configuration
(Can be edited in "3- Alt Num Lanes Input" as needed)

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		1	2	1		1	2	1		1	1	0		1	1	0

Results for Existing Configuration

TYPE OF	Sheet	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	

Overall v/c Ratio	0.33	Pedestrian Accommodation Score	4.79	Bicycle Accommodation Score	4.49

Step 2B: Alternative Selection

Rankings Inclusion		Yes/No	Comment
At-Grade Non-Roundabout Intersections?		Yes	
Traffic Signal		Yes	
Two-Way Stop Control		Yes	
All-Way Stop Control		Yes	
Continuous Green T		No	4-leg Intersection
Quadrant Roadway	S-W	No	No Nearby Quadrant Roadway
	N-E	No	No Nearby Quadrant Roadway
	S-E	No	No Nearby Quadrant Roadway
	N-W	No	No Nearby Quadrant Roadway
Partial Displaced Left Turn		Yes	
Displaced Left Turn		Yes	
Signalized Restricted Crossing U-Turn		Yes	
Unsignalized Restricted Crossing U-Turn		Yes	
Median U-Turn		Yes	
Partial Median U-Turn		Yes	
Bowtie		Yes	
Signalized ThruCut		Yes	
Unsignalized ThruCut		Yes	
Roundabouts?		Yes	
50 ICD Miniroundabout		Yes	
75 ICD Miniroundabout		Yes	
1x1		No	2x1 Roundabout Only
1NS x 2EW		No	2x1 Roundabout Only
2NS x 1EW		Yes	2x1 Roundabout Only
2x2		No	2x1 Roundabout Only
Ramp Terminal Intersections?		No	
Diamond			
Partial Cloverleaf A			
Partial Cloverleaf B			
Displaced Left Turn Interchange			
Diverging Diamond			
Single Point Diamond			

Continue to Step 3 Step 3

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build B (Schoolview RI-RO) AM Opening Year (2028)
Location	Chuluota Road at Schoolview Way Relocation
Date	March 19, 2024
Analysis Type	At-Grade Intersections and Interchanges

Number of Lanes for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		1	2	1		1	2	1		1	1	0		1	1	0
Two-Way Stop Control	N-S		1	2	1		1	2	1		1	1	0		1	1	0
All-Way Stop Control	FULL		1	2	1		1	2	1		1	1	0		1	1	0
Partial Displaced Left Turn	N-S		1	2	1		1	2	1		1	1	0		1	1	0
Displaced Left Turn	FULL		1	2	1		1	2	1		1	1	1		1	1	1
Signalized Restricted Crossing U-Turn	N-S	2	1	2	1	2	1	2	1				2				2
Unsignalized Restricted Crossing U-Turn	N-S	2	1	2	1	2	1	2	1				2				2
Median U-Turn	N-S	1		2	1	1		2	1			1	1			1	1
Partial Median U-Turn	N-S	1		2	1	1		2	1		1	1	0		1	1	0
Signalized ThruCut	N-S		1	2	1		1	2	1		1		1		1		1
Unsignalized ThruCut	N-S		1	2	1		1	2	1		1		1		1		1
Bowtie	N-S			2	1			2	1			1	1			1	1

For shared lanes, enter "0" in L or R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Number of Lanes for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build B (Schoolview RI-RO) AM Opening Year (2028)
Location	Chuluota Road at Schoolview Way Relocation
Date	March 19, 2024
Analysis Type	At-Grade Intersections and Interchanges

Volume Echo with Shared Lane Adjustment for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		3	546	73		12	677	8		31	5	0		199	50	0
Two-Way Stop Control	N-S		3	546	73		12	677	8		31	5	0		199	50	0
All-Way Stop Control	FULL		3	546	73		12	677	8		31	5	0		199	50	0
Partial Displaced Left Turn	N-S		3	546	73		12	677	8		31	5	0		199	50	0
Displaced Left Turn	FULL		3	546	73		12	677	8		31	5	0		199	8	42
Signalized Restricted Crossing U-Turn	N-S	0	3	546	73	0	12	677	8				0				42
Unsignalized Restricted Crossing U-Turn	N-S	0	3	546	73	0	12	677	8				0				42
Median U-Turn	N-S	0		546	73	0		677	8			5	0			8	42
Partial Median U-Turn	N-S	0		546	73	0		677	8		31	5	0		199	50	0
Signalized ThruCut	N-S		3	546	73		12	677	8		34		3		203		46
Unsignalized ThruCut	N-S		3	546	73		12	677	8		34		3		203		46
Bowtie	N-S		3	546	73		12	677	8			48	199			210	73

Capacity Analysis for Planning of Junctions

Results Worksheet

Project Name	Chuluota Road (CR 419) ICE Evaluation	***Estimated Volume-to-Capacity Ratio***			
Project Number	Build B (Schoolview RI-RO) AM Opening Year (2028)	**Number of Configurations**			
Location	Chuluota Road at Schoolview Way Relocation	**< 0.750**	**0.750 - 0.875**	**0.875 - 1.00**	**≥ 1.00**
Date	March 19, 2024	**10**	**2**	**2**	**1**

Results for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Zone 1 (North)		Zone 2 (South)		Zone 3 (East)		Zone 4 (West)		Zone 5 (Center)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			
Traffic Signal	FULL									556	0.33	0.33	4.79	4.49
Two-Way Stop Control	N-S									--	0.98	0.98	2.65	3.75
All-Way Stop Control	FULL									1604	0.89	0.89	3.62	4.49
Partial Displaced Left Turn	N-S	322	0.18	441	0.25					553	0.32	0.32	2.86	3.16
Displaced Left Turn	FULL	301	0.17	441	0.25	226	0.13	44	0.02	548	0.30	0.30	3.01	3.16
Signalized Restricted Crossing U-Turn	N-S	478	0.27	334	0.19	435	0.24	459	0.26			0.27	2.94	4.08
Unsignalized Restricted Crossing U-Turn	N-S	697	0.28	622	0.05	577	0.55	876	0.12			0.55	2.62	3.00
Median U-Turn	N-S	601	0.33	365	0.20					628	0.35	0.35	3.00	4.49
Partial Median U-Turn	N-S	352	0.20	326	0.18					559	0.32	0.32	2.91	4.49
Bowtie	N-S	113	0.08	213	0.15	249	0.18	3	0.00	573	0.32	0.32	4.70	4.49
Signalized ThruCut	N-S									556	0.32	0.32	4.86	4.49
Unsignalized ThruCut	N-S									--	1.74	1.74	4.18	4.17

Capacity Analysis for Planning of Junctions

Results Worksheet

Results for Roundabouts

TYPE OF ROUNDABOUT	Zone 1 (North)			Zone 3 (East)			Zone 2 (South)			Zone 4 (West)			Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3			
50 ICD	0.86			*0.33*			*0.63*			*0.58*			0.86	5.36	4.62
75 ICD	0.83			*0.23*			*0.62*			*0.50*			0.83	5.36	4.62
2NS X 1EW	*0.31*	*0.33*		*0.06*			*0.24*	0.25		*0.30*			0.33	4.97	4.54

Results for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Zone 1 (Rt Mrg)		Zone 2 (Lt Mrg)		Zone 3 (Ctr. 1)		Zone 4 (Ctr. 2)		Zone 5 (Lt Mrg)		Zone 6 (Rt Mrg)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			

TYPE OF INTERSECTION	Overall V/C Ratio	V/C Ranking	Pedestrian Accommodation Score	Bicycle Accommodation Score
Signalized Restricted Crossing U-Turn N-S	0.27	1	2.94	4.08
Displaced Left Turn	0.30	2	3.01	3.16
Partial Displaced Left Turn N-S	0.32	3	2.86	3.16
Partial Median U-Turn N-S	0.32	3	2.91	4.49
Signalized ThruCut N-S	0.32	3	4.86	4.49
Bowtie N-S	0.32	3	4.70	4.49
2NS X 1EW	0.33	7	4.97	4.54
Traffic Signal	0.33	8	4.79	4.49
Median U-Turn N-S	0.35	9	3.00	4.49
Unsignalized Restricted Crossing U-Turn N-S	0.55	10	2.62	3.00

Capacity Analysis for Planning of Junctions

Input Worksheet 1

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build B (Schoolview RI-RO) AM Interim Year (2038)
Location	Chuluota Road at Schoolview Way Relocation
Date	March 19, 2024
Number of Legs	4
Major Street Direction	North-South

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	0	32	6	0	3.48%	0.00%
Westbound	0	208	8	44	3.48%	0.00%
Southbound	0	13	798	8	3.48%	0.00%
Northbound	0	4	689	78	3.48%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone		**C3R-Suburban Residential**	
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Equivalent Passenger Car Volume

	Volume (Veh/hr)			
	U-Turn	**Left**	**Thru**	**Right**
Eastbound	0	33	6	0
Westbound	0	215	8	46
Southbound	0	13	826	8
Northbound	0	4	713	81

Notes:	
Left-Turn Adjustment Factor	*Conversion of left-turning vehicles to equivalent through vehicles*
Right-turn Adjustment Factor	*Conversion of right-turning vehicles to equivalent through vehicles*
U-turn Adjustment Factor	*Conversion of U-turning vehicles to equivalent through vehicles*
Truck to PCE Factor	*1 truck = X Passenger Car Equivalents*
Critical Lane Volume Sum Limit	*Saturation Value for Critical Lane Volume Sum at an intersection*

Capacity Analysis for Planning of Junctions

Step 2A: Base Conditions Analysis

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build B (Schoolview RI-RO) AM Interim Year (2038)
Location	Chuluota Road at Schoolview Way Relocation
Date	March 19, 2024
Major Street Direction	North-South

Existing Intersection Configuration	*Traffic Signal*

Number of Lanes for Existing Configuration
(Can be edited in "3- Alt Num Lanes Input" as needed)

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		1	2	1		1	2	1		1	1	0		1	1	0

Results for Existing Configuration

TYPE OF	Sheet	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	

Overall v/c Ratio	0.38	Pedestrian Accommodation Score	4.79	Bicycle Accommodation Score	4.49

Step 2B: Alternative Selection

Rankings Inclusion		Yes/No	Comment
At-Grade Non-Roundabout Intersections?		Yes	
Traffic Signal		Yes	
Two-Way Stop Control		Yes	
All-Way Stop Control		Yes	
Continuous Green T		No	4-leg Intersection
Quadrant Roadway	S-W	No	No Nearby Quadrant Roadway
	N-E	No	No Nearby Quadrant Roadway
	S-E	No	No Nearby Quadrant Roadway
	N-W	No	No Nearby Quadrant Roadway
Partial Displaced Left Turn		Yes	
Displaced Left Turn		Yes	
Signalized Restricted Crossing U-Turn		Yes	
Unsignalized Restricted Crossing U-Turn		Yes	
Median U-Turn		Yes	
Partial Median U-Turn		Yes	
Bowtie		Yes	
Signalized ThruCut		Yes	
Unsignalized ThruCut		Yes	
Roundabouts?		Yes	
50 ICD Miniroundabout		Yes	
75 ICD Miniroundabout		Yes	
1x1		No	2x1 Roundabout Only
1NS x 2EW		No	2x1 Roundabout Only
2NS x 1EW		Yes	
2x2		No	2x1 Roundabout Only
Ramp Terminal Intersections?		No	
Diamond			
Partial Cloverleaf A			
Partial Cloverleaf B			
Displaced Left Turn Interchange			
Diverging Diamond			
Single Point Diamond			

Continue to Step 3 Step 3

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build B (Schoolview RI-RO) AM Interim Year (2038)
Location	Chuluota Road at Schoolview Way Relocation
Date	March 19, 2024
Analysis Type	At-Grade Intersections and Interchanges

Number of Lanes for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		1	2	1		1	2	1		1	1	0		1	1	0
Two-Way Stop Control	N-S		1	2	1		1	2	1		1	1	0		1	1	0
All-Way Stop Control	FULL		1	2	1		1	2	1		1	1	0		1	1	0
Partial Displaced Left Turn	N-S		1	2	1		1	2	1		1	1	0		1	1	0
Displaced Left Turn	FULL		1	2	1		1	2	1		1	1	1		1	1	1
Signalized Restricted Crossing U-Turn	N-S	2	1	2	1	2	1	2	1				2				2
Unsignalized Restricted Crossing U-Turn	N-S	2	1	2	1	2	1	2	1				2				2
Median U-Turn	N-S	1		2	1	1		2	1			1	1			1	1
Partial Median U-Turn	N-S	1		2	1	1		2	1		1	1	0		1	1	0
Signalized ThruCut	N-S		1	2	1		1	2	1		1		1		1		1
Unsignalized ThruCut	N-S		1	2	1		1	2	1		1		1		1		1
Bowtie	N-S			2	1			2	1			1	1			1	1

For shared lanes, enter "0" in L or R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Number of Lanes for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build B (Schoolview RI-RO) AM Interim Year (2038)
Location	Chuluota Road at Schoolview Way Relocation
Date	March 19, 2024
Analysis Type	At-Grade Intersections and Interchanges

Volume Echo with Shared Lane Adjustment for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		4	713	81		13	826	8		33	6	0		215	54	0
Two-Way Stop Control	N-S		4	713	81		13	826	8		33	6	0		215	54	0
All-Way Stop Control	FULL		4	713	81		13	826	8		33	6	0		215	54	0
Partial Displaced Left Turn	N-S		4	713	81		13	826	8		33	6	0		215	54	0
Displaced Left Turn	FULL		4	713	81		13	826	8		33	6	0		215	8	46
Signalized Restricted Crossing U-Turn	N-S	0	4	713	81	0	13	826	8				0				46
Unsignalized Restricted Crossing U-Turn	N-S	0	4	713	81	0	13	826	8				0				46
Median U-Turn	N-S	0		713	81	0		826	8			6	0			8	46
Partial Median U-Turn	N-S	0		713	81	0		826	8		33	6	0		215	54	0
Signalized ThruCut	N-S		4	713	81		13	826	8		36		3		219		50
Unsignalized ThruCut	N-S		4	713	81		13	826	8		36		3		219		50
Bowtie	N-S		4	713	81		13	826	8			52	215			227	79

Capacity Analysis for Planning of Junctions

Results Worksheet

Project Name	Chuluota Road (CR 419) ICE Evaluation	***Estimated Volume-to-Capacity Ratio***			
Project Number	Build B (Schoolview RI-RO) AM Interim Year (2038)	**Number of Configurations**			
Location	Chuluota Road at Schoolview Way Relocation	**< 0.750**	**0.750 - 0.875**	**0.875 - 1.00**	**≥ 1.00**
Date	March 19, 2024	**9**	**1**	**0**	**5**

Results for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Zone 1 (North)		Zone 2 (South)		Zone 3 (East)		Zone 4 (West)		Zone 5 (Center)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			
Traffic Signal	FULL									650	0.38	0.38	4.79	4.49
Two-Way Stop Control	N-S									--	1.66	1.66	2.65	3.75
All-Way Stop Control	FULL									1953	1.09	1.09	3.62	4.49
Partial Displaced Left Turn	N-S	410	0.23	525	0.29					645	0.37	0.37	2.86	3.16
Displaced Left Turn	FULL	387	0.21	525	0.29	245	0.14	47	0.03	639	0.36	0.36	3.01	3.16
Signalized Restricted Crossing U-Turn	N-S	563	0.31	423	0.24	531	0.30	543	0.30			0.31	2.94	4.08
Unsignalized Restricted Crossing U-Turn	N-S	847	0.35	798	0.06	746	0.76	1041	0.17			0.76	2.62	3.00
Median U-Turn	N-S	697	0.39	457	0.25					727	0.40	0.40	3.00	4.49
Partial Median U-Turn	N-S	429	0.24	415	0.23					652	0.37	0.37	2.91	4.49
Bowtie	N-S	124	0.09	229	0.16	269	0.20	3	0.00	666	0.37	0.37	4.70	4.49
Signalized ThruCut	N-S									648	0.37	0.37	4.86	4.49
Unsignalized ThruCut	N-S									--	3.31	3.31	4.18	4.17

Capacity Analysis for Planning of Junctions

Results Worksheet

Results for Roundabouts

TYPE OF ROUNDABOUT	Zone 1 (North)			Zone 3 (East)			Zone 2 (South)			Zone 4 (West)			Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3			
50 ICD	1.06			-1.49			0.81			1.03			1.06	5.36	4.62
75 ICD	1.03			1.10			0.80			0.80			1.10	5.36	4.62
2NS X 1EW	0.38	0.40		0.07			0.31	0.33		0.38			0.40	4.97	4.54

Results for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Zone 1 (Rt Mrg)		Zone 2 (Lt Mrg)		Zone 3 (Ctr. 1)		Zone 4 (Ctr. 2)		Zone 5 (Lt Mrg)		Zone 6 (Rt Mrg)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			

TYPE OF INTERSECTION	Overall V/C Ratio	V/C Ranking	Pedestrian Accommodation Score	Bicycle Accommodation Score
Signalized Restricted Crossing U-Turn N-S	0.31	1	2.94	4.08
Displaced Left Turn	0.36	2	3.01	3.16
Partial Displaced Left Turn N-S	0.37	3	2.86	3.16
Partial Median U-Turn N-S	0.37	3	2.91	4.49
Signalized ThruCut N-S	0.37	3	4.86	4.49
Bowtie N-S	0.37	3	4.70	4.49
Traffic Signal	0.38	7	4.79	4.49
Median U-Turn N-S	0.40	8	3.00	4.49
2NS X 1EW	0.40	9	4.97	4.54
Unsignalized Restricted Crossing U-Turn N-S	0.76	10	2.62	3.00

Capacity Analysis for Planning of Junctions

Input Worksheet 1

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build B (Schoolview RI-RO) AM Design Year (2048)
Location	Chuluota Road at Schoolview Way Relocation
Date	March 19, 2024
Number of Legs	4
Major Street Direction	North-South

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	0	35	6	0	3.48%	0.00%
Westbound	0	225	9	48	3.48%	0.00%
Southbound	0	14	968	9	3.48%	0.00%
Northbound	0	4	850	84	3.48%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone		**C3R-Suburban Residential**	
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Equivalent Passenger Car Volume

	Volume (Veh/hr)			
	U-Turn	**Left**	**Thru**	**Right**
Eastbound	0	36	6	0
Westbound	0	233	9	50
Southbound	0	14	1002	9
Northbound	0	4	880	87

Notes:	
Left-Turn Adjustment Factor	*Conversion of left-turning vehicles to equivalent through vehicles*
Right-turn Adjustment Factor	*Conversion of right-turning vehicles to equivalent through vehicles*
U-turn Adjustment Factor	*Conversion of U-turning vehicles to equivalent through vehicles*
Truck to PCE Factor	*1 truck = X Passenger Car Equivalents*
Critical Lane Volume Sum Limit	*Saturation Value for Critical Lane Volume Sum at an intersection*

Capacity Analysis for Planning of Junctions

Step 2A: Base Conditions Analysis

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build B (Schoolview RI-RO) AM Design Year (2048)
Location	Chuluota Road at Schoolview Way Relocation
Date	March 19, 2024
Major Street Direction	North-South

Existing Intersection Configuration	*Traffic Signal*

Number of Lanes for Existing Configuration
(Can be edited in "3- Alt Num Lanes Input" as needed)

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		1	2	1		1	2	1		1	1	0		1	1	0

Results for Existing Configuration

TYPE OF	Sheet	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	

Overall v/c Ratio	0.45	Pedestrian Accommodation Score	4.79	Bicycle Accommodation Score	4.49

Step 2B: Alternative Selection

Rankings Inclusion		Yes/No	Comment
At-Grade Non-Roundabout Intersections?		Yes	
Traffic Signal		Yes	
Two-Way Stop Control		Yes	
All-Way Stop Control		Yes	
Continuous Green T		No	4-leg Intersection
Quadrant Roadway	S-W	No	No Nearby Quadrant Roadway
	N-E	No	No Nearby Quadrant Roadway
	S-E	No	No Nearby Quadrant Roadway
	N-W	No	No Nearby Quadrant Roadway
Partial Displaced Left Turn		Yes	
Displaced Left Turn		Yes	
Signalized Restricted Crossing U-Turn		Yes	
Unsignalized Restricted Crossing U-Turn		Yes	
Median U-Turn		Yes	
Partial Median U-Turn		Yes	
Bowtie		Yes	
Signalized ThruCut		Yes	
Unsignalized ThruCut		Yes	
Roundabouts?		Yes	
50 ICD Miniroundabout		Yes	
75 ICD Miniroundabout		Yes	
1x1		No	2x1 Roundabout Only
1NS x 2EW		No	2x1 Roundabout Only
2NS x 1EW		Yes	
2x2		No	2x1 Roundabout Only
Ramp Terminal Intersections?		No	
Diamond			
Partial Cloverleaf A			
Partial Cloverleaf B			
Displaced Left Turn Interchange			
Diverging Diamond			
Single Point Diamond			

Continue to Step 3 Step 3

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build B (Schoolview RI-RO) AM Design Year (2048)
Location	Chuluota Road at Schoolview Way Relocation
Date	March 19, 2024
Analysis Type	At-Grade Intersections and Interchanges

Number of Lanes for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		1	2	1		1	2	1		1	1	0		1	1	0
Two-Way Stop Control	N-S		1	2	1		1	2	1		1	1	0		1	1	0
All-Way Stop Control	FULL		1	2	1		1	2	1		1	1	0		1	1	0
Partial Displaced Left Turn	N-S		1	2	1		1	2	1		1	1	0		1	1	0
Displaced Left Turn	FULL		1	2	1		1	2	1		1	1	1		1	1	1
Signalized Restricted Crossing U-Turn	N-S	2	1	2	1	2	1	2	1				2				2
Unsignalized Restricted Crossing U-Turn	N-S	2	1	2	1	2	1	2	1				2				2
Median U-Turn	N-S	1		2	1	1		2	1			1	1			1	1
Partial Median U-Turn	N-S	1		2	1	1		2	1		1	1	0		1	1	0
Signalized ThruCut	N-S		1	2	1		1	2	1		1		1		1		1
Unsignalized ThruCut	N-S		1	2	1		1	2	1		1		1		1		1
Bowtie	N-S			2	1			2	1			1	1			1	1

For shared lanes, enter "0" in L or R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Number of Lanes for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build B (Schoolview RI-RO) AM Design Year (2048)
Location	Chuluota Road at Schoolview Way Relocation
Date	March 19, 2024
Analysis Type	At-Grade Intersections and Interchanges

Volume Echo with Shared Lane Adjustment for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		4	880	87		14	1002	9		36	6	0		233	59	0
Two-Way Stop Control	N-S		4	880	87		14	1002	9		36	6	0		233	59	0
All-Way Stop Control	FULL		4	880	87		14	1002	9		36	6	0		233	59	0
Partial Displaced Left Turn	N-S		4	880	87		14	1002	9		36	6	0		233	59	0
Displaced Left Turn	FULL		4	880	87		14	1002	9		36	6	0		233	9	50
Signalized Restricted Crossing U-Turn	N-S	0	4	880	87	0	14	1002	9				0				50
Unsignalized Restricted Crossing U-Turn	N-S	0	4	880	87	0	14	1002	9				0				50
Median U-Turn	N-S	0		880	87	0		1002	9			6	0			9	50
Partial Median U-Turn	N-S	0		880	87	0		1002	9		36	6	0		233	59	0
Signalized ThruCut	N-S		4	880	87		14	1002	9		39		3		238		55
Unsignalized ThruCut	N-S		4	880	87		14	1002	9		39		3		238		55
Bowtie	N-S		4	880	87		14	1002	9			56	233			246	86

Capacity Analysis for Planning of Junctions

Results Worksheet

Project Name	Chuluota Road (CR 419) ICE Evaluation	***Estimated Volume-to-Capacity Ratio***			
Project Number	Build B (Schoolview RI-RO) AM Design Year (2048)	**Number of Configurations**			
Location	Chuluota Road at Schoolview Way Relocation	**< 0.750**	**0.750 - 0.875**	**0.875 - 1.00**	**≥ 1.00**
Date	March 19, 2024	**9**	**0**	**0**	**6**

Results for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Zone 1 (North)		Zone 2 (South)		Zone 3 (East)		Zone 4 (West)		Zone 5 (Center)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			
Traffic Signal	FULL									757	0.45	0.45	4.79	4.49
Two-Way Stop Control	N-S									--	2.92	2.92	2.65	3.75
All-Way Stop Control	FULL									2330	1.29	1.29	3.62	4.49
Partial Displaced Left Turn	N-S	498	0.28	622	0.35					752	0.43	0.43	2.86	3.16
Displaced Left Turn	FULL	473	0.26	622	0.35	265	0.15	51	0.03	746	0.41	0.41	3.01	3.16
Signalized Restricted Crossing U-Turn	N-S	664	0.37	512	0.28	630	0.35	642	0.36			0.37	2.94	4.08
Unsignalized Restricted Crossing U-Turn	N-S	1025	0.44	971	0.07	916	1.07	1235	0.25			1.07	2.62	3.00
Median U-Turn	N-S	809	0.45	548	0.30					841	0.47	0.47	3.00	4.49
Partial Median U-Turn	N-S	518	0.29	503	0.28					759	0.43	0.43	2.91	4.49
Bowtie	N-S	133	0.09	249	0.18	292	0.21	3	0.00	775	0.43	0.43	4.70	4.49
Signalized ThruCut	N-S									755	0.43	0.43	4.86	4.49
Unsignalized ThruCut	N-S									--	6.63	6.63	4.18	4.17

Capacity Analysis for Planning of Junctions

Results Worksheet

Results for Roundabouts

TYPE OF ROUNDABOUT	Zone 1 (North)			Zone 3 (East)			Zone 2 (South)			Zone 4 (West)			Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3			
50 ICD	1.32			-0.22			0.98			3.32			3.32	5.36	4.62
75 ICD	1.28			-0.39			0.97			1.65			1.65	5.36	4.62
2NS X 1EW	0.47	0.50		0.09			0.37	0.40		0.47			0.50	4.97	4.54

Results for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Zone 1 (Rt Mrg)		Zone 2 (Lt Mrg)		Zone 3 (Ctr. 1)		Zone 4 (Ctr. 2)		Zone 5 (Lt Mrg)		Zone 6 (Rt Mrg)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			

TYPE OF INTERSECTION	Overall V/C Ratio	V/C Ranking	Pedestrian Accommodation Score	Bicycle Accommodation Score
Signalized Restricted Crossing U-Turn N-S	0.37	1	2.94	4.08
Displaced Left Turn	0.41	2	3.01	3.16
Partial Displaced Left Turn N-S	0.43	3	2.86	3.16
Partial Median U-Turn N-S	0.43	3	2.91	4.49
Signalized ThruCut N-S	0.43	3	4.86	4.49
Bowtie N-S	0.43	3	4.70	4.49
Traffic Signal	0.45	7	4.79	4.49
Median U-Turn N-S	0.47	8	3.00	4.49
2NS X 1EW	0.50	9	4.97	4.54
Unsignalized Restricted Crossing U-Turn N-S	1.07	10	2.62	3.00

Capacity Analysis for Planning of Junctions

Input Worksheet 1

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build B (Schoolview RI-RO) PM Opening Year (2028)
Location	Chuluota Road at Schoolview Way Relocation
Date	March 19, 2024
Number of Legs	4
Major Street Direction	North-South

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	0	79	12	0	3.48%	0.00%
Westbound	0	158	7	21	3.48%	0.00%
Southbound	0	28	758	12	3.48%	0.00%
Northbound	0	10	603	207	3.48%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor	**Suggested = 2.00**	2.00
FDOT Context Zone	**C3R-Suburban Residential**	
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Equivalent Passenger Car Volume

	Volume (Veh/hr)			
	U-Turn	**Left**	**Thru**	**Right**
Eastbound	0	82	12	0
Westbound	0	163	7	22
Southbound	0	29	784	12
Northbound	0	10	624	214

Notes:	
Left-Turn Adjustment Factor	*Conversion of left-turning vehicles to equivalent through vehicles*
Right-turn Adjustment Factor	*Conversion of right-turning vehicles to equivalent through vehicles*
U-turn Adjustment Factor	*Conversion of U-turning vehicles to equivalent through vehicles*
Truck to PCE Factor	*1 truck = X Passenger Car Equivalents*
Critical Lane Volume Sum Limit	*Saturation Value for Critical Lane Volume Sum at an intersection*

Capacity Analysis for Planning of Junctions

Step 2A: Base Conditions Analysis

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build B (Schoolview RI-RO) PM Opening Year (2028)
Location	Chuluota Road at Schoolview Way Relocation
Date	March 19, 2024
Major Street Direction	North-South

Existing Intersection Configuration	*Traffic Signal*

Number of Lanes for Existing Configuration
(Can be edited in "3- Alt Num Lanes Input" as needed)

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		1	2	1		1	2	1		1	1	0		1	1	0

Results for Existing Configuration

TYPE OF		Sheet	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	
Overall v/c Ratio	0.35	Pedestrian Accommodation Score		4.79	Bicycle Accommodation Score			4.49

Step 2B: Alternative Selection

Rankings Inclusion		Yes/No	Comment
At-Grade Non-Roundabout Intersections?		Yes	
Traffic Signal		Yes	
Two-Way Stop Control		Yes	
All-Way Stop Control		Yes	
Continuous Green T		No	4-leg Intersection
Quadrant Roadway	S-W	No	No Nearby Quadrant Roadway
	N-E	No	No Nearby Quadrant Roadway
	S-E	No	No Nearby Quadrant Roadway
	N-W	No	No Nearby Quadrant Roadway
Partial Displaced Left Turn		Yes	
Displaced Left Turn		Yes	
Signalized Restricted Crossing U-Turn		Yes	
Unsignalized Restricted Crossing U-Turn		Yes	
Median U-Turn		Yes	
Partial Median U-Turn		Yes	
Bowtie		Yes	
Signalized ThruCut		Yes	
Unsignalized ThruCut		Yes	
Roundabouts?		Yes	
50 ICD Miniroundabout		Yes	
75 ICD Miniroundabout		Yes	
1x1		No	2x1 Roundabout Only
1NS x 2EW		No	2x1 Roundabout Only
2NS x 1EW		Yes	
2x2		No	2x1 Roundabout Only
Ramp Terminal Intersections?		No	
Diamond			
Partial Cloverleaf A			
Partial Cloverleaf B			
Displaced Left Turn Interchange			
Diverging Diamond			
Single Point Diamond			

Continue to Step 3 Step 3

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build B (Schoolview RI-RO) PM Opening Year (2028)
Location	Chuluota Road at Schoolview Way Relocation
Date	March 19, 2024
Analysis Type	At-Grade Intersections and Interchanges

Number of Lanes for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		1	2	1		1	2	1		1	1	0		1	1	0
Two-Way Stop Control	N-S		1	2	1		1	2	1		1	1	0		1	1	0
All-Way Stop Control	FULL		1	2	1		1	2	1		1	1	0		1	1	0
Partial Displaced Left Turn	N-S		1	2	1		1	2	1		1	1	0		1	1	0
Displaced Left Turn	FULL		1	2	1		1	2	1		1	1	1		1	1	1
Signalized Restricted Crossing U-Turn	N-S	2	1	2	1	2	1	2	1				2				2
Unsignalized Restricted Crossing U-Turn	N-S	2	1	2	1	2	1	2	1				2				2
Median U-Turn	N-S	1		2	1	1		2	1			1	1			1	1
Partial Median U-Turn	N-S	1		2	1	1		2	1		1	1	0		1	1	0
Signalized ThruCut	N-S		1	2	1		1	2	1		1		1		1		1
Unsignalized ThruCut	N-S		1	2	1		1	2	1		1		1		1		1
Bowtie	N-S			2	1			2	1			1	1			1	1

For shared lanes, enter "0" in L or R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Number of Lanes for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build B (Schoolview RI-RO) PM Opening Year (2028)
Location	Chuluota Road at Schoolview Way Relocation
Date	March 19, 2024
Analysis Type	At-Grade Intersections and Interchanges

Volume Echo with Shared Lane Adjustment for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		10	624	214		29	784	12		82	12	0		163	29	0
Two-Way Stop Control	N-S		10	624	214		29	784	12		82	12	0		163	29	0
All-Way Stop Control	FULL		10	624	214		29	784	12		82	12	0		163	29	0
Partial Displaced Left Turn	N-S		10	624	214		29	784	12		82	12	0		163	29	0
Displaced Left Turn	FULL		10	624	214		29	784	12		82	12	0		163	7	22
Signalized Restricted Crossing U-Turn	N-S	0	10	624	214	0	29	784	12				0				22
Unsignalized Restricted Crossing U-Turn	N-S	0	10	624	214	0	29	784	12				0				22
Median U-Turn	N-S	0		624	214	0		784	12			12	0			7	22
Partial Median U-Turn	N-S	0		624	214	0		784	12		82	12	0		163	29	0
Signalized ThruCut	N-S		10	624	214		29	784	12		88		6		167		26
Unsignalized ThruCut	N-S		10	624	214		29	784	12		88		6		167		26
Bowtie	N-S		10	624	214		29	784	12			123	163			180	104

Capacity Analysis for Planning of Junctions

Results Worksheet

Project Name	Chuluota Road (CR 419) ICE Evaluation	***Estimated Volume-to-Capacity Ratio***			
Project Number	Build B (Schoolview RI-RO) PM Opening Year (2028)	**Number of Configurations**			
Location	Chuluota Road at Schoolview Way Relocation	**< 0.750**	**0.750 - 0.875**	**0.875 - 1.00**	**≥ 1.00**
Date	March 19, 2024	**10**	**0**	**1**	**4**

Results for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Zone 1 (North)		Zone 2 (South)		Zone 3 (East)		Zone 4 (West)		Zone 5 (Center)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			
Traffic Signal	FULL									587	0.35	0.35	4.79	4.49
Two-Way Stop Control	N-S									--	1.38	1.38	2.65	3.75
All-Way Stop Control	FULL									1959	1.09	1.09	3.62	4.49
Partial Displaced Left Turn	N-S	395	*0.22*	484	*0.27*					576	0.33	0.33	2.86	3.16
Displaced Left Turn	FULL	384	*0.21*	484	*0.27*	213	*0.12*	103	*0.06*	564	0.31	0.31	3.01	3.16
Signalized Restricted Crossing U-Turn	N-S	519	*0.29*	483	*0.27*	466	*0.26*	529	*0.29*			0.29	2.91	4.08
Unsignalized Restricted Crossing U-Turn	N-S	825	*0.26*	848	*0.15*	706	*0.51*	947	*0.36*			0.51	2.62	3.00
Median U-Turn	N-S	629	*0.35*	563	*0.31*					624	0.35	0.35	3.00	4.49
Partial Median U-Turn	N-S	425	*0.24*	460	*0.26*					590	0.34	0.34	2.89	4.49
Bowtie	N-S	317	0.22	184	0.13	192	0.15	6	0.00	584	0.32	0.32	4.70	4.49
Signalized ThruCut	N-S									578	0.33	0.33	4.86	4.49
Unsignalized ThruCut	N-S									--	2.52	2.52	4.18	4.17

Capacity Analysis for Planning of Junctions

Results Worksheet

Results for Roundabouts

TYPE OF ROUNDABOUT	Zone 1 (North)			Zone 3 (East)			Zone 2 (South)			Zone 4 (West)			Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3			
50 ICD	0.98			2.21			0.92			0.65			2.21	5.35	4.62
75 ICD	0.96			0.89			0.91			0.52			0.96	5.35	4.62
2NS X 1EW	0.36	0.38		0.16			0.35	0.37		0.26			0.38	4.97	4.54

Results for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Zone 1 (Rt Mrg)		Zone 2 (Lt Mrg)		Zone 3 (Ctr. 1)		Zone 4 (Ctr. 2)		Zone 5 (Lt Mrg)		Zone 6 (Rt Mrg)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			

TYPE OF INTERSECTION	Overall V/C Ratio	V/C Ranking	Pedestrian Accommodation Score	Bicycle Accommodation Score
Signalized Restricted Crossing U-Turn N-S	0.29	1	2.91	4.08
Displaced Left Turn	0.31	2	3.01	3.16
Bowtie N-S	0.32	3	4.70	4.49
Partial Displaced Left Turn N-S	0.33	4	2.86	3.16
Signalized ThruCut N-S	0.33	4	4.86	4.49
Partial Median U-Turn N-S	0.34	6	2.89	4.49
Traffic Signal	0.35	7	4.79	4.49
Median U-Turn N-S	0.35	7	3.00	4.49
2NS X 1EW	0.38	9	4.97	4.54
Unsignalized Restricted Crossing U-Turn N-S	0.51	10	2.62	3.00

Capacity Analysis for Planning of Junctions

Input Worksheet 1

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build B (Schoolview RI-RO) PM Interim Year (2038)
Location	Chuluota Road at Schoolview Way Relocation
Date	March 19, 2024
Number of Legs	4
Major Street Direction	North-South

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	0	99	13	0	3.48%	0.00%
Westbound	0	171	7	23	3.48%	0.00%
Southbound	0	30	1033	14	3.48%	0.00%
Northbound	0	10	788	225	3.48%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone		**C3R-Suburban Residential**	
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Equivalent Passenger Car Volume

	Volume (Veh/hr)			
	U-Turn	**Left**	**Thru**	**Right**
Eastbound	0	102	13	0
Westbound	0	177	7	24
Southbound	0	31	1069	14
Northbound	0	10	815	233

Notes:	
Left-Turn Adjustment Factor	*Conversion of left-turning vehicles to equivalent through vehicles*
Right-turn Adjustment Factor	*Conversion of right-turning vehicles to equivalent through vehicles*
U-turn Adjustment Factor	*Conversion of U-turning vehicles to equivalent through vehicles*
Truck to PCE Factor	*1 truck = X Passenger Car Equivalents*
Critical Lane Volume Sum Limit	*Saturation Value for Critical Lane Volume Sum at an intersection*

Capacity Analysis for Planning of Junctions

Step 2A: Base Conditions Analysis

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build B (Schoolview RI-RO) PM Interim Year (2038)
Location	Chuluota Road at Schoolview Way Relocation
Date	March 19, 2024
Major Street Direction	North-South

Existing Intersection Configuration	*Traffic Signal*

Number of Lanes for Existing Configuration
(Can be edited in "3- Alt Num Lanes Input" as needed)

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		1	2	1		1	2	1		1	1	0		1	1	0

Results for Existing Configuration

TYPE OF	Sheet	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	

Overall v/c Ratio	0.44	Pedestrian Accommodation Score	4.79	Bicycle Accommodation Score	4.49

Step 2B: Alternative Selection

Rankings Inclusion		Yes/No	Comment
At-Grade Non-Roundabout Intersections?		Yes	
Traffic Signal		Yes	
Two-Way Stop Control		Yes	
All-Way Stop Control		Yes	
Continuous Green T		No	4-leg Intersection
Quadrant Roadway	S-W	No	No Nearby Quadrant Roadway
	N-E	No	No Nearby Quadrant Roadway
	S-E	No	No Nearby Quadrant Roadway
	N-W	No	No Nearby Quadrant Roadway
Partial Displaced Left Turn		Yes	
Displaced Left Turn		Yes	
Signalized Restricted Crossing U-Turn		Yes	
Unsignalized Restricted Crossing U-Turn		Yes	
Median U-Turn		Yes	
Partial Median U-Turn		Yes	
Bowtie		Yes	
Signalized ThruCut		Yes	
Unsignalized ThruCut		Yes	
Roundabouts?		Yes	
50 ICD Miniroundabout		Yes	
75 ICD Miniroundabout		Yes	
1x1		No	2x1 Roundabout Only
1NS x 2EW		No	2x1 Roundabout Only
2NS x 1EW		Yes	
2x2		No	2x1 Roundabout Only
Ramp Terminal Intersections?		No	
Diamond			
Partial Cloverleaf A			
Partial Cloverleaf B			
Displaced Left Turn Interchange			
Diverging Diamond			
Single Point Diamond			

Continue to Step 3 Step 3

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build B (Schoolview RI-RO) PM Interim Year (2038)
Location	Chuluota Road at Schoolview Way Relocation
Date	March 19, 2024
Analysis Type	At-Grade Intersections and Interchanges

Number of Lanes for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		1	2	1		1	2	1		1	1	0		1	1	0
Two-Way Stop Control	N-S		1	2	1		1	2	1		1	1	0		1	1	0
All-Way Stop Control	FULL		1	2	1		1	2	1		1	1	0		1	1	0
Partial Displaced Left Turn	N-S		1	2	1		1	2	1		1	1	0		1	1	0
Displaced Left Turn	FULL		1	2	1		1	2	1		1	1	1		1	1	1
Signalized Restricted Crossing U-Turn	N-S	2	1	2	1	2	1	2	1				2				2
Unsignalized Restricted Crossing U-Turn	N-S	2	1	2	1	2	1	2	1				2				2
Median U-Turn	N-S	1		2	1	1		2	1			1	1			1	1
Partial Median U-Turn	N-S	1		2	1	1		2	1		1	1	0		1	1	0
Signalized ThruCut	N-S		1	2	1		1	2	1		1		1		1		1
Unsignalized ThruCut	N-S		1	2	1		1	2	1		1		1		1		1
Bowtie	N-S			2	1			2	1			1	1			1	1

For shared lanes, enter "0" in L or R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Number of Lanes for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build B (Schoolview RI-RO) PM Interim Year (2038)
Location	Chuluota Road at Schoolview Way Relocation
Date	March 19, 2024
Analysis Type	At-Grade Intersections and Interchanges

Volume Echo with Shared Lane Adjustment for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		10	815	233		31	1069	14		102	13	0		177	31	0
Two-Way Stop Control	N-S		10	815	233		31	1069	14		102	13	0		177	31	0
All-Way Stop Control	FULL		10	815	233		31	1069	14		102	13	0		177	31	0
Partial Displaced Left Turn	N-S		10	815	233		31	1069	14		102	13	0		177	31	0
Displaced Left Turn	FULL		10	815	233		31	1069	14		102	13	0		177	7	24
Signalized Restricted Crossing U-Turn	N-S	0	10	815	233	0	31	1069	14				0				24
Unsignalized Restricted Crossing U-Turn	N-S	0	10	815	233	0	31	1069	14				0				24
Median U-Turn	N-S	0		815	233	0		1069	14			13	0			7	24
Partial Median U-Turn	N-S	0		815	233	0		1069	14		102	13	0		177	31	0
Signalized ThruCut	N-S		10	815	233		31	1069	14		109		7		181		28
Unsignalized ThruCut	N-S		10	815	233		31	1069	14		109		7		181		28
Bowtie	N-S		10	815	233		31	1069	14			146	177			194	126

Capacity Analysis for Planning of Junctions

Results Worksheet

Project Name	Chuluota Road (CR 419) ICE Evaluation	***Estimated Volume-to-Capacity Ratio***			
Project Number	Build B (Schoolview RI-RO) PM Interim Year (2038)	**Number of Configurations**			
Location	Chuluota Road at Schoolview Way Relocation	**< 0.750**	**0.750 - 0.875**	**0.875 - 1.00**	**≥ 1.00**
Date	March 19, 2024	**9**	**1**	**0**	**5**

Results for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Zone 1 (North)		Zone 2 (South)		Zone 3 (East)		Zone 4 (West)		Zone 5 (Center)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			
Traffic Signal	FULL									745	0.44	0.44	4.79	4.49
Two-Way Stop Control	N-S									--	3.26	3.26	2.60	3.75
All-Way Stop Control	FULL									2495	1.39	1.39	3.62	4.49
Partial Displaced Left Turn	N-S	503	*0.28*	634	*0.35*					734	0.42	0.42	2.85	3.16
Displaced Left Turn	FULL	491	*0.27*	634	*0.35*	230	*0.13*	124	*0.07*	721	0.40	0.40	3.00	3.16
Signalized Restricted Crossing U-Turn	N-S	672	*0.37*	601	*0.33*	581	*0.32*	691	*0.38*			0.38	2.91	4.08
Unsignalized Restricted Crossing U-Turn	N-S	1114	*0.37*	1058	*0.22*	917	0.77	1246	*0.71*			0.77	2.62	3.00
Median U-Turn	N-S	791	*0.44*	695	*0.39*					786	0.44	0.44	3.00	4.49
Partial Median U-Turn	N-S	570	*0.32*	568	*0.32*					749	0.43	0.43	2.89	4.49
Bowtie	N-S	357	0.25	200	0.14	208	0.16	7	0.01	743	0.41	0.41	4.70	4.41
Signalized ThruCut	N-S									735	0.42	0.42	4.86	4.49
Unsignalized ThruCut	N-S									--	6.57	6.57	4.14	4.17

Capacity Analysis for Planning of Junctions

Results Worksheet

Results for Roundabouts

TYPE OF ROUNDABOUT	Zone 1 (North)			Zone 3 (East)			Zone 2 (South)			Zone 4 (West)			Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3			
50 ICD	1.34			-0.48			1.18			2.62			2.62	5.35	4.62
75 ICD	1.31			-0.78			1.16			1.23			1.31	5.35	4.62
2NS X 1EW	0.49	0.52		0.25			0.44	0.47		0.34			0.52	4.97	4.54

Results for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Zone 1 (Rt Mrg)		Zone 2 (Lt Mrg)		Zone 3 (Ctr. 1)		Zone 4 (Ctr. 2)		Zone 5 (Lt Mrg)		Zone 6 (Rt Mrg)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			

TYPE OF INTERSECTION	Overall V/C Ratio	V/C Ranking	Pedestrian Accommodation Score	Bicycle Accommodation Score
Signalized Restricted Crossing U-Turn N-S	0.38	1	2.91	4.08
Displaced Left Turn	0.40	2	3.00	3.16
Bowtie N-S	0.41	3	4.70	4.41
Partial Displaced Left Turn N-S	0.42	4	2.85	3.16
Signalized ThruCut N-S	0.42	4	4.86	4.49
Partial Median U-Turn N-S	0.43	6	2.89	4.49
Traffic Signal	0.44	7	4.79	4.49
Median U-Turn N-S	0.44	7	3.00	4.49
2NS X 1EW	0.52	9	4.97	4.54
Unsignalized Restricted Crossing U-Turn N-S	0.77	10	2.62	3.00

Capacity Analysis for Planning of Junctions

Input Worksheet 1

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build B (Schoolview RI-RO) PM Design Year (2048)
Location	Chuluota Road at Schoolview Way Relocation
Date	March 19, 2024
Number of Legs	4
Major Street Direction	North-South

Traffic Volume Demand

	Volume (Veh/hr)				Percent (%)	
	U-Turn	**Left**	**Thru**	**Right**	Heavy Vehicles	Volume Growth
Eastbound	0	120	14	0	3.48%	0.00%
Westbound	0	185	8	25	3.48%	0.00%
Southbound	0	33	1309	15	3.48%	0.00%
Northbound	0	11	973	243	3.48%	0.00%
Adjustment Factor	0.80	0.95		0.85		
Suggested	**0.80**	**0.95**		**0.85**		

Truck to PCE Factor		**Suggested = 2.00**	2.00
FDOT Context Zone		**C3R-Suburban Residential**	
Critical Lane Volume Threshold	2-phase signal	**Suggested = 1800**	**1800**
	3-phase signal	**Suggested = 1750**	**1750**
	4-phase signal	**Suggested = 1700**	**1700**

Equivalent Passenger Car Volume

	Volume (Veh/hr)			
	U-Turn	**Left**	**Thru**	**Right**
Eastbound	0	124	14	0
Westbound	0	191	8	26
Southbound	0	34	1355	16
Northbound	0	11	1007	251

Notes:	
Left-Turn Adjustment Factor	*Conversion of left-turning vehicles to equivalent through vehicles*
Right-turn Adjustment Factor	*Conversion of right-turning vehicles to equivalent through vehicles*
U-turn Adjustment Factor	*Conversion of U-turning vehicles to equivalent through vehicles*
Truck to PCE Factor	*1 truck = X Passenger Car Equivalents*
Critical Lane Volume Sum Limit	*Saturation Value for Critical Lane Volume Sum at an intersection*

Capacity Analysis for Planning of Junctions

Step 2A: Base Conditions Analysis

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build B (Schoolview RI-RO) PM Design Year (2048)
Location	Chuluota Road at Schoolview Way Relocation
Date	March 19, 2024
Major Street Direction	North-South

Existing Intersection Configuration	*Traffic Signal*

Number of Lanes for Existing Configuration
(Can be edited in "3- Alt Num Lanes Input" as needed)

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		1	2	1		1	2	1		1	1	0		1	1	0

Results for Existing Configuration

TYPE OF	Sheet	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	

Overall v/c Ratio	0.53	Pedestrian Accommodation Score	4.79	Bicycle Accommodation Score	4.49

Step 2B: Alternative Selection

Rankings Inclusion		Yes/No	Comment
At-Grade Non-Roundabout Intersections?		Yes	
Traffic Signal		Yes	
Two-Way Stop Control		Yes	
All-Way Stop Control		Yes	
Continuous Green T		No	4-leg Intersection
Quadrant Roadway	S-W	No	No Nearby Quadrant Roadway
	N-E	No	No Nearby Quadrant Roadway
	S-E	No	No Nearby Quadrant Roadway
	N-W	No	No Nearby Quadrant Roadway
Partial Displaced Left Turn		Yes	
Displaced Left Turn		Yes	
Signalized Restricted Crossing U-Turn		Yes	
Unsignalized Restricted Crossing U-Turn		Yes	
Median U-Turn		Yes	
Partial Median U-Turn		Yes	
Bowtie		Yes	
Signalized ThruCut		Yes	
Unsignalized ThruCut		Yes	
Roundabouts?		Yes	
50 ICD Miniroundabout		Yes	
75 ICD Miniroundabout		Yes	
1x1		No	2x1 Roundabout Only
1NS x 2EW		No	2x1 Roundabout Only
2NS x 1EW		Yes	
2x2		No	2x1 Roundabout Only
Ramp Terminal Intersections?		No	
Diamond			
Partial Cloverleaf A			
Partial Cloverleaf B			
Displaced Left Turn Interchange			
Diverging Diamond			
Single Point Diamond			

Continue to Step 3 Step 3

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build B (Schoolview RI-RO) PM Design Year (2048)
Location	Chuluota Road at Schoolview Way Relocation
Date	March 19, 2024
Analysis Type	At-Grade Intersections and Interchanges

Number of Lanes for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		1	2	1		1	2	1		1	1	0		1	1	0
Two-Way Stop Control	N-S		1	2	1		1	2	1		1	1	0		1	1	0
All-Way Stop Control	FULL		1	2	1		1	2	1		1	1	0		1	1	0
Partial Displaced Left Turn	N-S		1	2	1		1	2	1		1	1	0		1	1	0
Displaced Left Turn	FULL		1	2	1		1	2	1		1	1	1		1	1	1
Signalized Restricted Crossing U-Turn	N-S	2	1	2	1	2	1	2	1				2				2
Unsignalized Restricted Crossing U-Turn	N-S	2	1	2	1	2	1	2	1				2				2
Median U-Turn	N-S	1		2	1	1		2	1			1	1			1	1
Partial Median U-Turn	N-S	1		2	1	1		2	1		1	1	0		1	1	0
Signalized ThruCut	N-S		1	2	1		1	2	1		1		1		1		1
Unsignalized ThruCut	N-S		1	2	1		1	2	1		1		1		1		1
Bowtie	N-S			2	1			2	1			1	1			1	1

For shared lanes, enter "0" in L or R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Number of Lanes for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R

Capacity Analysis for Planning of Junctions

Input Worksheet 2

Project Name	Chuluota Road (CR 419) ICE Evaluation
Project Number	Build B (Schoolview RI-RO) PM Design Year (2048)
Location	Chuluota Road at Schoolview Way Relocation
Date	March 19, 2024
Analysis Type	At-Grade Intersections and Interchanges

Volume Echo with Shared Lane Adjustment for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Northbound				Southbound				Eastbound				Westbound			
		U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Traffic Signal	FULL		11	1007	251		34	1355	16		124	14	0		191	34	0
Two-Way Stop Control	N-S		11	1007	251		34	1355	16		124	14	0		191	34	0
All-Way Stop Control	FULL		11	1007	251		34	1355	16		124	14	0		191	34	0
Partial Displaced Left Turn	N-S		11	1007	251		34	1355	16		124	14	0		191	34	0
Displaced Left Turn	FULL		11	1007	251		34	1355	16		124	14	0		191	8	26
Signalized Restricted Crossing U-Turn	N-S	0	11	1007	251	0	34	1355	16				0				26
Unsignalized Restricted Crossing U-Turn	N-S	0	11	1007	251	0	34	1355	16				0				26
Median U-Turn	N-S	0		1007	251	0		1355	16			14	0			8	26
Partial Median U-Turn	N-S	0		1007	251	0		1355	16		124	14	0		191	34	0
Signalized ThruCut	N-S		11	1007	251		34	1355	16		131		7		195		30
Unsignalized ThruCut	N-S		11	1007	251		34	1355	16		131		7		195		30
Bowtie	N-S		11	1007	251		34	1355	16			172	191			210	150

Capacity Analysis for Planning of Junctions

Results Worksheet

Project Name	Chuluota Road (CR 419) ICE Evaluation	***Estimated Volume-to-Capacity Ratio***			
Project Number	Build B (Schoolview RI-RO) PM Design Year (2048)	**Number of Configurations**			
Location	Chuluota Road at Schoolview Way Relocation	**< 0.750**	**0.750 - 0.875**	**0.875 - 1.00**	**≥ 1.00**
Date	March 19, 2024	**9**	**0**	**0**	**6**

Results for Non-roundabout Intersections

TYPE OF INTERSECTION	Sheet	Zone 1 (North)		Zone 2 (South)		Zone 3 (East)		Zone 4 (West)		Zone 5 (Center)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			
Traffic Signal	FULL									905	0.53	0.53	4.79	4.49
Two-Way Stop Control	N-S									--	>10	>10	2.60	3.75
All-Way Stop Control	FULL									3037	1.69	1.69	3.62	4.49
Partial Displaced Left Turn	N-S	614	*0.34*	785	*0.44*					893	0.51	0.51	2.85	3.16
Displaced Left Turn	FULL	601	*0.33*	785	*0.44*	249	*0.14*	150	*0.08*	879	0.49	0.49	3.00	3.16
Signalized Restricted Crossing U-Turn	N-S	827	*0.46*	721	*0.40*	698	*0.39*	854	*0.47*			0.47	2.91	4.08
Unsignalized Restricted Crossing U-Turn	N-S	1405	*0.52*	1269	*0.32*	1131	1.15	1546	1.36			1.36	2.62	3.00
Median U-Turn	N-S	955	*0.53*	832	*0.46*					950	0.53	0.53	3.00	4.49
Partial Median U-Turn	N-S	716	*0.40*	677	*0.38*					910	0.52	0.52	2.87	4.49
Bowtie	N-S	399	0.28	217	0.15	225	0.18	7	0.01	903	0.50	0.50	4.70	4.41
Signalized ThruCut	N-S									894	0.51	0.51	4.86	4.49
Unsignalized ThruCut	N-S									--	17.69	17.69	4.14	4.17

Capacity Analysis for Planning of Junctions

Results Worksheet

Results for Roundabouts

TYPE OF ROUNDABOUT	Zone 1 (North)			Zone 3 (East)			Zone 2 (South)			Zone 4 (West)			Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3			
50 ICD	1.72			-0.26			1.46			-1.64			1.72	5.32	4.62
75 ICD	1.68			-0.34			1.43			-7.22			1.68	5.32	4.62
2NS X 1EW	0.62	0.66		0.39			0.54	0.58		0.44			0.66	4.93	4.54

Results for Ramp Terminal Intersections

TYPE OF RAMP TERMINAL INTERSECTION	Sheet	Zone 1 (Rt Mrg)		Zone 2 (Lt Mrg)		Zone 3 (Ctr. 1)		Zone 4 (Ctr. 2)		Zone 5 (Lt Mrg)		Zone 6 (Rt Mrg)		Overall v/c Ratio	Pedestrian Accom. Score	Bicycle Accom. Score
		CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C	CLV	V/C			

TYPE OF INTERSECTION	Overall V/C Ratio	V/C Ranking	Pedestrian Accommodation Score	Bicycle Accommodation Score
Signalized Restricted Crossing U-Turn N-S	0.47	1	2.91	4.08
Displaced Left Turn	0.49	2	3.00	3.16
Bowtie N-S	0.50	3	4.70	4.41
Partial Displaced Left Turn N-S	0.51	4	2.85	3.16
Signalized ThruCut N-S	0.51	4	4.86	4.49
Partial Median U-Turn N-S	0.52	6	2.87	4.49
Traffic Signal	0.53	7	4.79	4.49
Median U-Turn N-S	0.53	7	3.00	4.49
2NS X 1EW	0.66	9	4.93	4.54
Unsignalized Restricted Crossing U-Turn N-S	1.36	10	2.62	3.00

Table 1, Schoolview Way Relocation/Cypress Lake Glen Boulevard S Cap-x Results

Build Type	Year	Peak Hour	Intersection Control Rank 1 (V/C Ratio)	Intersection Control Rank 2 (V/C Ratio)	Intersection Control Rank 3 (V/C Ratio)	Intersection Control Rank 4 (V/C Ratio)	Intersection Control Rank 5 (V/C Ratio)	Intersection Control Rank 6 (V/C Ratio)	Intersection Control Rank 7 (V/C Ratio)	Intersection Control Rank 8 (V/C Ratio)	Intersection Control Rank 9 (V/C Ratio)	Intersection Control Rank 10 (V/C Ratio)
Build A (Leg Removal)	2028	AM	Signalized RCUT N-S (0.27)	DLT (0.29)	Partial DLT N-S (0.31)	Partial MUT N-S (0.31)	Signalized ThruCut N-S (0.31)	Bowtie N-S (0.31)	Traffic Signal (0.32)	2NS X 1EW Roundabout (0.33)	MUT N-S (0.34)	Unsignalized RCUT N-S (0.55)
	2038		Signalized RCUT N-S (0.31)	DLT (0.34)	Partial DLT N-S (0.36)	Signalized ThruCut N-S (0.36)	Bowtie N-S (0.36)	Partial MUT N-S (0.37)	Traffic Signal (0.38)	MUT N-S (0.39)	2NS X 1EW Roundabout (0.40)	Unsignalized RCUT N-S (0.76)
	2048		Signalized RCUT N-S (0.37)	DLT (0.40)	Partial DLT N-S (0.42)	Partial MUT N-S (0.43)	Signalized ThruCut N-S (0.43)	Bowtie N-S (0.43)	Traffic Signal (0.44)	MUT N-S (0.46)	2NS X 1EW Roundabout (0.50)	Unsignalized RCUT N-S (1.07)
	2028	PM	Signalized RCUT N-S (0.29)	DLT (0.30)	Bowtie N-S (0.32)	Partial DLT N-S (0.33)	Signalized ThruCut N-S (0.33)	Traffic Signal (0.34)	Partial MUT N-S (0.34)	MUT N-S (0.35)	2NS X 1EW Roundabout (0.38)	Unsignalized RCUT N-S (0.51)
	2038		Signalized RCUT N-S (0.38)	DLT (0.39)	Bowtie N-S (0.41)	Partial DLT N-S (0.42)	Partial MUT N-S (0.42)	Signalized ThruCut N-S (0.42)	Traffic Signal (0.43)	MUT N-S (0.44)	2NS X 1EW Roundabout (0.52)	Unsignalized RCUT N-S (0.77)
	2048		Signalized RCUT N-S (0.46)	DLT (0.47)	Partial DLT N-S (0.50)	Bowtie N-S (0.50)	Partial MUT N-S (0.51)	Signalized ThruCut N-S (0.51)	Traffic Signal (0.53)	MUT N-S (0.53)	2NS X 1EW Roundabout (0.66)	Unsignalized RCUT N-S (1.40)
Build B (Leg RI-RO)	2028	AM	Signalized RCUT N-S (0.27)	DLT (0.30)	Partial DLT N-S (0.32)	Partial MUT N-S (0.32)	Signalized ThruCut N-S (0.32)	Bowtie N-S (0.32)	2NS X 1EW Roundabout (0.33)	Traffic Signal (0.33)	MUT N-S (0.35)	Unsignalized RCUT N-S (0.55)
	2038		Signalized RCUT N-S (0.31)	DLT (0.36)	Partial DLT N-S (0.37)	Partial MUT N-S (0.37)	Signalized ThruCut N-S (0.37)	Bowtie N-S (0.37)	Traffic Signal (0.38)	MUT N-S (0.40)	2NS X 1EW Roundabout (0.40)	Unsignalized RCUT N-S (0.76)
	2048		Signalized RCUT N-S (0.37)	DLT (0.41)	Partial DLT N-S (0.43)	Partial MUT N-S (0.43)	Signalized ThruCut N-S (0.43)	Bowtie N-S (0.43)	Traffic Signal (0.45)	MUT N-S (0.47)	2NS X 1EW Roundabout (0.50)	Unsignalized RCUT N-S (1.07)
	2028	PM	Signalized RCUT N-S (0.29)	DLT (0.31)	Bowtie N-S (0.32)	Partial DLT N-S (0.33)	Signalized ThruCut N-S (0.33)	Partial MUT N-S (0.34)	Traffic Signal (0.35)	MUT N-S (0.35)	2NS X 1EW Roundabout (0.38)	Unsignalized RCUT N-S (0.51)
	2038		Signalized RCUT N-S (0.38)	DLT (0.40)	Bowtie N-S (0.41)	Partial DLT N-S (0.42)	Signalized ThruCut N-S (0.42)	Partial MUT N-S (0.43)	Traffic Signal (0.44)	MUT N-S (0.44)	2NS X 1EW Roundabout (0.52)	Unsignalized RCUT N-S (0.77)
	2048		Signalized RCUT N-S (0.47)	DLT (0.49)	Bowtie N-S (0.50)	Partial DLT N-S (0.51)	Signalized ThruCut N-S (0.51)	Partial MUT N-S (0.52)	Traffic Signal (0.53)	MUT N-S (0.53)	2NS X 1EW Roundabout (0.66)	Unsignalized RCUT N-S (1.36)

Greyed out cells indicate that the intersection control type may not be viable due to right-of-way, cost, or other factors

V/C Ratio Legend	
	< 0.750
	0.750 - 0.875
	0.875 - 1.00
	≥ 1.00

SPICE WORKSHEETS

Florida Department of Transportation
Safety Performance for Intersection Control Evaluation Tool

Results

Summary of crash prediction results for each alternative

Project Information

Project Name:	Chuluota Road (CR 419)	**Intersection Type**	At-Grade Intersection
Intersection:	Chuluota Road (CR 419) at Schoolview Way Relocation	**Opening Year**	2028
Agency:	Orange County	**Design Year**	0
Project Reference:	Build A (Close Schoolview) Opening Year (2028)	**Facility Type**	On Rural Two Lane Highway
City:	Orlando	**Number of Legs**	4-leg
State:	FL	**1-Way/2-Way**	
Date:	2/28/2024	**# of Major Street Lanes (both directions)**	
Analyst:	JMT	**Major Street Approach Speed**	

Crash Prediction Summary

Control Strategy	Crash Type	Opening Year	Design Year	Total Project Life Cycle	Crash Prediction Rank	AADT Within SPF Prediction Range? (Open Year)	AADT Within SPF Prediction Range? (Design Year)	Source of Prediction	SSI Score: Opening Year	SSI Score: Design Year	SSI Score: Rank
Traffic Signal	Total	4.13	--	--	9	Yes	Yes	Calibrated SPF w/ EB	97		5
	Fatal & Injury	1.41	--	--							
Minor Road Stop	Total	2.45	--	--	4	No	Yes	Calibrated SPF	95		8
	Fatal & Injury	1.05	--	--							
All Way Stop	Total	3.95	--	--	6	No	Yes	Uncalibrated SPF w/ EB	99		2
	Fatal & Injury	1.09	--	--							
2-lane Roundabout	Total	5.27	--	--	7	Yes	Yes	Uncalibrated SPF	99		1
	Fatal & Injury	1.12	--	--							
Displaced Left Turn (DLT)	Total	3.64	--	--	8	N/A	N/A	CMF	90		11
	Fatal & Injury	1.24	--	--							
Median U-Turn (MUT)	Total	2.60	--	--	5	N/A	N/A	CMF	99		3
	Fatal & Injury	1.07	--	--							
Signalized RCUT	Total	3.53	--	--	1	Yes	Yes	Uncalibrated SPF	97		4
	Fatal & Injury	0.70	--	--							
Unsignalized RCUT	Total	3.28	--	--	2	Yes	Yes	Uncalibrated SPF	96		7
	Fatal & Injury	0.82	--	--							
Signalized Thru-Cut	Total	No SPF	--	--	--	N/A	N/A	N/A	93		9
	Fatal & Injury	No SPF	--	--							
Unsignalized Thru-Cut	Total	No SPF	--	--	--	N/A	N/A	N/A	90		12
	Fatal & Injury	No SPF	--	--							
Bowtie	Total	No SPF	--	--	--	N/A	N/A	N/A	92	####	10
	Fatal & Injury	No SPF	--	--							
Jughandle	Total	3.06	--	--	3	N/A	N/A	CMF	96		6
	Fatal & Injury	1.04	--	--							
Other 1*	Total	No SPF	--	--	--	N/A	N/A	CMF	--		--
	Fatal & Injury	No SPF	--	--							
Other 2*	Total	No SPF	--	--	--	N/A	N/A	CMF	--		--
	Fatal & Injury	No SPF	--	--							
			--	--							
			--	--							

Control Strategy Selection and Inputs

Specify the Facility Level Inputs and the Control Strategies to be included in the SPICE Analysis.

Intersection Type	At-Grade Intersection	
Analysis Year	Opening Year Only	
Opening Year	2028	
Design Year		
Facility Type	On Rural Two Lane Highway	For more information on how to determine these values, see the "Definitions" worksheet
Number of Legs	4-leg	
1-Way/2-Way		
# of Major Street Lanes (both directions)		
Major Street Approach Speed		
Opening Year - Major Road AADT	17,978	
Opening Year - Minor Road AADT	3,233	
Design Year - Major Road AADT		
Design Year - Minor Road AADT		

Control Strategy	**Include**	**Base Intersection**	
Traffic Signal	Yes	--	
Traffic Signal (Alternative Configuration)	No	--	
Minor Road Stop Control	Yes	--	Opening Year AADT Outside of SPF Development Range
All Way Stop Control	Yes	--	Opening Year AADT Outside of SPF Development Range
1-Lane Roundabout	No	--	
2-Lane Roundabout	Yes	--	
Displaced Left Turn (DLT)	Yes	Traffic Signal	
Median U-Turn (MUT)	Yes	Traffic Signal	
Signalized Restricted Crossing U-Turn (RCUT)	Yes	--	
Unsignalized Restricted Crossing U-Turn (RCUT)	Yes	--	
Signalized Thru-Cut*	Yes	--	**SSI Only, No Crash Prediction Available*
Unsignalized Thru-Cut*	Yes	--	**SSI Only, No Crash Prediction Available*
Bowtie*	Yes	--	**SSI Only, No Crash Prediction Available*
Continuous Green-T Intersection	No	Traffic Signal	
Jughandle	Yes	Traffic Signal	
Other 1*		Traffic Signal	**Please Select*
Other 2*		Minor Road Stop	**Please Select*

Safe System for Intersection (SSI) Inputs

Specify the geomtric, exposure, severity, and conflicting traffic complexity inputs required for an SSI analysis.

1. Roadway Geometry	Lanes
Major number thru lanes (one direction)	2
Minor number thru lanes (one direction)	1

Major Street Designation	
Select major street direction	N-S
Median Presence on Major Road	No
Median Presence on Minor Road	Yes

	Required Inputs
	Default Available, Override Optional
	Planning-Level Default Input
	Computed Value, Override Optional
	Computed Value - No Override
	Disabled Cell (Often based on input selections)

2. Complete the **"Exposure"** inputs. These inputs will apply to all interesections selected for analysis.
3. Complete the **"Severity"** inputs
4. Complete the **"Conflicting Traffic Complexity"** inputs

2. Exposure - All Intersections

Average Daily Traffic (veh/day)	Open	Design
Major	17,978	
Minor	3,233	

ADT Directional Split	
Major	0.50
Minor	0.50

Nonmotorized Total ADBP (ped-bike/day)	Activity Level	ADBP Value (ped-
Open Year Total Intersection NM	Low (20)	20
Design Year Total Intersection NM		

(or overwrite ped movement ADBPs below)

Nonmotorized Movement ADBP (ped-bike/day)	Open	Design
Major NM 1 (NM mvmt crossing Maj1)	5	
Major NM 2	5	
Minor NM 1	5	
Minor NM 2	5	

Are turning movement ADT values are available? **No** If "Yes", input values in **Table 2-A**
Are peak hour turning movement counts available? **Yes** If "Yes", input values in **Table 2-B**
If no turning movment volumes or counts are available, a user can optionally override the planning-level default turning movment proportions in **Table 2-C**

Table 2-A: Turning Movement (vol/day)

	Open	Design
Major Thru 1	7247.122	
Major Left Turn 1	77.20882	
Major Right Turn 1	1664.669	
Major Thru 2	8255.643	
Major Left Turn 2	237.7225	
Major Right Turn 2	495.6341	
Minor Thru 1	228.9594	
Minor Left Turn 1	1172.007	
Minor Right Turn 1	215.5333	
Minor Thru 2	-1044.49	
Minor Left Turn 2	1330.495	
Minor Right Turn 2	1330.495	

Table 2-B: Turning Movement Counts (Optional)

	Mvmt	AM Peak	AM %	PM Peak	PM %	Avg %
Major Thru 1	NBT	528	0.877076412	603	0.735366	0.806221
Major Left Turn 1	NBL	3	0.004983389	10	0.012195	0.008589
Major Right Turn 1	NBR	71	0.117940199	207	0.252439	0.18519
Major Thru 2	SBT	619	0.918397626	726	0.909774	0.914086
Major Left Turn 2	SBL	12	0.017804154	28	0.035088	0.026446
Major Right Turn 2	SBR	43	0.06379822	44	0.055138	0.059468
Minor Thru 1	EBT	5	0.11627907	12	0.114286	0.115282
Minor Left Turn 1	EBL	30	0.697674419	79	0.752381	0.725028
Minor Right Turn 1	EBR	8	0.186046512	14	0.133333	0.15969
Minor Thru 2	WBT	8	0.033195021	7	0.037634	0.035415
Minor Left Turn 2	WBL	192	0.796680498	158	0.849462	0.823071
Minor Right Turn 2	WBR	41	0.170124481	21	0.112903	0.141514

Table 2-C: Turning Proportions (optional)

	Decimal
Major Thru 1	0.806221133
Major Left Turn 1	0.008589255
Major Right Turn 1	0.185189612
Major Thru 2	0.918416219
Major Left Turn 2	0.026445937
Major Right Turn 2	0.055137845
Minor Thru 1	0.141638981
Minor Left Turn 1	0.725027685
Minor Right Turn 1	0.133333333
Minor Thru 2	-0.646142864
Minor Left Turn 2	0.823071432
Minor Right Turn 2	0.823071432

3. Severity

Vehicle Speeds	mph
Major Posted Speed Limit	50
Minor Posted Speed Limit	35
Major thru	50
Major left	20
Major right	15
Minor thru	29.75
Minor left	20
Minor right	15
Stop near	15
Stop far	25
Signal near	15
Signal far	25

4. Conflicting Traffic Complexity

Traffic Control	Decimal
Base Traffic Control Adjustment Value (BTCAV) for permitted	1
Base Traffic Control Adjustment Value (BTCAV) for protected/permitted	0.85
Base Traffic Control Adjustment Value (BTCAV) for protected	0.01
Base Traffic Control Adjustment Value (BTCAV) for stop-controlled	0.45
Weight, f, for permitted	0.5
Weight, f, for protected/permitted	0.5
Weight, f, for protected	0.5
Weight, f, for stop-controlled	0.5
Major LT signal phasing (drop-down)	Protected/Permitted
Minor LT signal phasing (drop-down)	Protected/Permitted
Exclusive Pedestrian phasing (drop-down)	No

Historical Crash Data Input

Note: In order to use Empirical Bayes (EB), the historical intersection type must be a traffic signal or a minor road stop. Additionally, this alternative must be selected to be included in the analysis, and the historical intersection specified below. Up to 10 years of historical data can be used to perform the EB adjustment.

Is historical crash data available? Yes

Number of years available: 5 (Up to 10)

Historical Intx Type: 3SG

First Year Data is available: 2016

Historical Crash Counts		Year										
		2016	2017	2018	2019	2020	--	--	--	--	--	Total
Combined	Total	2	3	3	7	8	--	--	--	--	--	23
	Fatal/Injury	1	2	0	1	4						8
	PDO	1	1	3	6	4						15
Single-Vehicle	Total											
	Fatal/Injury											
	PDO											
Multiple-Vehicle	Total											
	Fatal/Injury											
	PDO											
Veh-Ped	Fatal/Injury	0	0	0	0	0						0
Veh-Bike	Fatal/Injury	0	0	1	0	0						1
Total	All	2	3	4	7	8	--	--	--	--	--	24

Florida Department of Transportation
Safety Performance for Intersection Control Evaluation Tool

Results

Summary of crash prediction results for each alternative

Project Information

Project Name:	Chuluota Road (CR 419)	**Intersection Type**	At-Grade Intersection
Intersection:	Chuluota Road (CR 419) at Schoolview Way Relocation	**Opening Year**	2038
Agency:	Orange County	**Design Year**	0
Project Reference:	Build A (Close Schoolview) Interim Year (2038)	**Facility Type**	On Rural Two Lane Highway
City:	Orlando	**Number of Legs**	4-leg
State:	FL	**1-Way/2-Way**	
Date:	2/28/2024	**# of Major Street Lanes (both directions)**	
Analyst:	JMT	**Major Street Approach Speed**	

Crash Prediction Summary

Control Strategy	Crash Type	Opening Year	Design Year	Total Project Life Cycle	Crash Prediction Rank	AADT Within SPF Prediction Range? (Open Year)	AADT Within SPF Prediction Range? (Design Year)	Source of Prediction	SSI Score: Opening Year	SSI Score: Design Year	SSI Score: Rank
Traffic Signal	Total	4.48	--	--	9	Yes	Yes	Calibrated SPF w/ EB	95		5
	Fatal & Injury	1.52	--	--							
Minor Road Stop	Total	3.08	--	--	5	No	Yes	Calibrated SPF	93		8
	Fatal & Injury	1.33	--	--							
All Way Stop	Total	5.17	--	--	7	No	Yes	Uncalibrated SPF w/ EB	99		2
	Fatal & Injury	1.42	--	--							
2-lane Roundabout	Total	6.97	--	--	8	Yes	Yes	Uncalibrated SPF	99		1
	Fatal & Injury	1.52	--	--							
Displaced Left Turn (DLT)	Total	3.94	--	--	6	N/A	N/A	CMF	86		11
	Fatal & Injury	1.34	--	--							
Median U-Turn (MUT)	Total	2.82	--	--	4	N/A	N/A	CMF	98		3
	Fatal & Injury	1.16	--	--							
Signalized RCUT	Total	4.96	--	--	2	Yes	Yes	Uncalibrated SPF	96		4
	Fatal & Injury	1.00	--	--							
Unsignalized RCUT	Total	3.83	--	--	1	Yes	Yes	Uncalibrated SPF	94		7
	Fatal & Injury	0.97	--	--							
Signalized Thru-Cut	Total	No SPF	--	--	--	N/A	N/A	N/A	89		9
	Fatal & Injury	No SPF	--	--							
Unsignalized Thru-Cut	Total	No SPF	--	--	--	N/A	N/A	N/A	85		12
	Fatal & Injury	No SPF	--	--							
Bowtie	Total	No SPF	--	--	--	N/A	N/A	N/A	88	####	10
	Fatal & Injury	No SPF	--	--							
Jughandle	Total	3.32	--	--	3	N/A	N/A	CMF	95		6
	Fatal & Injury	1.13	--	--							
Other 1*	Total	No SPF	--	--	--	N/A	N/A	CMF	--		--
	Fatal & Injury	No SPF	--	--							
Other 2*	Total	No SPF	--	--	--	N/A	N/A	CMF	--		--
	Fatal & Injury	No SPF	--	--							
			--	--							
			--	--							

Control Strategy Selection and Inputs

Specify the Facility Level Inputs and the Control Strategies to be included in the SPICE Analysis.

Intersection Type	At-Grade Intersection	
Analysis Year	Opening Year Only	
Opening Year	2038	
Design Year		
Facility Type	On Rural Two Lane Highway	For more information on how to determine these values, see the "Definitions" worksheet
Number of Legs	4-leg	
1-Way/2-Way		
# of Major Street Lanes (both directions)		
Major Street Approach Speed		
Opening Year - Major Road AADT	23,333	
Opening Year - Minor Road AADT	3,644	
Design Year - Major Road AADT		
Design Year - Minor Road AADT		

Control Strategy	**Include**	**Base Intersection**	
Traffic Signal	Yes	--	
Traffic Signal (Alternative Configuration)	No	--	
Minor Road Stop Control	Yes	--	Opening Year AADT Outside of SPF Development Range
All Way Stop Control	Yes	--	Opening Year AADT Outside of SPF Development Range
1-Lane Roundabout	No	--	Opening Year AADT Outside of SPF Development Range
2-Lane Roundabout	Yes	--	
Displaced Left Turn (DLT)	Yes	Traffic Signal	
Median U-Turn (MUT)	Yes	Traffic Signal	
Signalized Restricted Crossing U-Turn (RCUT)	Yes	--	
Unsignalized Restricted Crossing U-Turn (RCUT)	Yes	--	
Signalized Thru-Cut*	Yes	--	**SSI Only, No Crash Prediction Available*
Unsignalized Thru-Cut*	Yes	--	**SSI Only, No Crash Prediction Available*
Bowtie*	Yes	--	**SSI Only, No Crash Prediction Available*
Continuous Green-T Intersection	No	Traffic Signal	
Jughandle	Yes	Traffic Signal	
Other 1*		Traffic Signal	**Please Select*
Other 2*		Minor Road Stop	**Please Select*

Safe System for Intersection (SSI) Inputs

Specify the geomtric, exposure, severity, and conflicting traffic complexity inputs required for an SSI analysis.

1. Roadway Geometry	Lanes
Major number thru lanes (one direction)	2
Minor number thru lanes (one direction)	1

Major Street Designation	
Select major street direction	N-S
Median Presence on Major Road	No
Median Presence on Minor Road	Yes

	Required Inputs
	Default Available, Override Optional
	Planning-Level Default Input
	Computed Value, Override Optional
	Computed Value - No Override
	Disabled Cell (Often based on input selections)

2. Complete the "Exposure" inputs. These inputs will apply to all interesections selected for analysis.
3. Complete the "Severity" inputs
4. Complete the "Conflicting Traffic Complexity" inputs

2. Exposure - All Intersections

Average Daily Traffic (veh/day)	Open	Design
Major	23,333	
Minor	3,644	

ADT Directional Split	
Major	0.50
Minor	0.50

Nonmotorized Total ADBP (ped-bike/day)	Activity Level	ADBP Value (ped-
Open Year Total Intersection NM	Low (20)	20
Design Year Total Intersection NM		

(or overwrite ped movement ADBPs below)

Nonmotorized Movement ADBP (ped-bike/day)	Open	Design
Major NM 1 (NM mvmt crossing Maj1)	5	
Major NM 2	5	
Minor NM 1	5	
Minor NM 2	5	

Are turning movement ADT values are available?	No	If "Yes", input values in Table 2-A
Are peak hour turning movement counts available?	Yes	If "Yes", input values in Table 2-B

If no turning movment volumes or counts are available, a user can optionally override the planning-level default turning movment proportions in Table 2-C

Table 2-A: Turning Movement (vol/day)

	Open	Design
Major Thru 1	9706.912	
Major Left Turn 1	87.24511	
Major Right Turn 1	1872.343	
Major Thru 2	10804.81	
Major Left Turn 2	255.0773	
Major Right Turn 2	606.6147	
Minor Thru 1	262.9144	
Minor Left Turn 1	1343.889	
Minor Right Turn 1	215.1969	
Minor Thru 2	-1185.66	
Minor Left Turn 2	1503.83	
Minor Right Turn 2	1503.83	

Table 2-B: Turning Movement Counts (Optional)

	Mvmt	AM Peak	AM %	PM Peak	PM %	Avg %
Major Thru 1	NBT	690	0.893782383	788	0.770283	0.832033
Major Left Turn 1	NBL	4	0.005181347	10	0.009775	0.007478
Major Right Turn 1	NBR	78	0.101036269	225	0.219941	0.160489
Major Thru 2	SBT	760	0.927960928	991	0.920149	0.924055
Major Left Turn 2	SBL	13	0.015873016	30	0.027855	0.021864
Major Right Turn 2	SBR	46	0.056166056	56	0.051996	0.054081
Minor Thru 1	EBT	6	0.130434783	13	0.102362	0.116398
Minor Left Turn 1	EBL	32	0.695652174	99	0.779528	0.73759
Minor Right Turn 1	EBR	8	0.173913043	15	0.11811	0.146012
Minor Thru 2	WBT	8	0.030769231	7	0.034826	0.032798
Minor Left Turn 2	WBL	208	0.8	171	0.850746	0.825373
Minor Right Turn 2	WBR	44	0.169230769	23	0.114428	0.141829

Table 2-C: Turning Proportions (optional)

	Decimal
Major Thru 1	0.832032932
Major Left Turn 1	0.007478259
Major Right Turn 1	0.160488809
Major Thru 2	0.926139629
Major Left Turn 2	0.021864085
Major Right Turn 2	0.051996286
Minor Thru 1	0.144299897
Minor Left Turn 1	0.737589866
Minor Right Turn 1	0.118110236
Minor Thru 2	-0.650746269
Minor Left Turn 2	0.825373134
Minor Right Turn 2	0.825373134

3. Severity

Vehicle Speeds	mph
Major Posted Speed Limit	50
Minor Posted Speed Limit	35
Major thru	50
Major left	20
Major right	15
Minor thru	29.75
Minor left	20
Minor right	15
Stop near	15
Stop far	25
Signal near	15
Signal far	25

4. Conflicting Traffic Complexity

Traffic Control	Decimal
Base Traffic Control Adjustment Value (BTCAV) for permitted	1
Base Traffic Control Adjustment Value (BTCAV) for protected/permitted	0.85
Base Traffic Control Adjustment Value (BTCAV) for protected	0.01
Base Traffic Control Adjustment Value (BTCAV) for stop-controlled	0.45
Weight, f, for permitted	0.5
Weight, f, for protected/permitted	0.5
Weight, f, for protected	0.5
Weight, f, for stop-controlled	0.5
Major LT signal phasing (drop-down)	Protected/Permitted
Minor LT signal phasing (drop-down)	Protected/Permitted
Exclusive Pedestrian phasing (drop-down)	No

Historical Crash Data Input

Note: In order to use Empirical Bayes (EB), the historical intersection type must be a traffic signal or a minor road stop. Additionally, this alternative must be selected to be included in the analysis, and the historical intersection specified below. Up to 10 years of historical data can be used to perform the EB adjustment.

Is historical crash data available? Yes

Number of years available: 5 (Up to 10)

Historical Intx Type: 3SG

First Year Data is available: 2016

Historical Crash Counts		Year										
		2016	2017	2018	2019	2020	--	--	--	--	--	Total
Combined	Total	2	3	3	7	8	--	--	--	--	--	23
	Fatal/Injury	1	2	0	1	4						8
	PDO	1	1	3	6	4						15
Single-Vehicle	Total											
	Fatal/Injury											
	PDO											
Multiple-Vehicle	Total											
	Fatal/Injury											
	PDO											
Veh-Ped	Fatal/Injury	0	0	0	0	0						0
Veh-Bike	Fatal/Injury	0	0	1	0	0						1
Total	All	2	3	4	7	8	--	--	--	--	--	24

Florida Department of Transportation
Safety Performance for Intersection Control Evaluation Tool

Results

Summary of crash prediction results for each alternative

Project Information

Project Name:	Chuluota Road (CR 419)	**Intersection Type**	At-Grade Intersection
Intersection:	Chuluota Road (CR 419) at Schoolview Way Relocation	**Opening Year**	2048
Agency:	Orange County	**Design Year**	0
Project Reference:	Build A (Close Schoolview) Design Year (2048)	**Facility Type**	On Rural Two Lane Highway
City:	Orlando	**Number of Legs**	4-leg
State:	FL	**1-Way/2-Way**	
Date:	2/28/2024	**# of Major Street Lanes (both directions)**	
Analyst:	JMT	**Major Street Approach Speed**	

Crash Prediction Summary

Control Strategy	Crash Type	Opening Year	Design Year	Total Project Life Cycle	Crash Prediction Rank	AADT Within SPF Prediction Range? (Open Year)	AADT Within SPF Prediction Range? (Design Year)	Source of Prediction	SSI Score: Opening Year	SSI Score: Design Year	SSI Score: Rank
Traffic Signal	Total	4.76	--	--	7	No	Yes	Calibrated SPF w/ EB	93		5
	Fatal & Injury	1.62	--	--							
Minor Road Stop	Total	3.74	--	--	6	No	Yes	Calibrated SPF	91		8
	Fatal & Injury	1.61	--	--							
All Way Stop	Total	6.44	--	--	8	No	Yes	Uncalibrated SPF w/ EB	99		2
	Fatal & Injury	1.77	--	--							
2-lane Roundabout	Total	8.74	--	--	9	No	Yes	Uncalibrated SPF	99		1
	Fatal & Injury	1.95	--	--							
Displaced Left Turn (DLT)	Total	4.19	--	--	5	N/A	N/A	CMF	81		11
	Fatal & Injury	1.42	--	--							
Median U-Turn (MUT)	Total	3.00	--	--	3	N/A	N/A	CMF	97		3
	Fatal & Injury	1.23	--	--							
Signalized RCUT	Total	6.56	--	--	4	Yes	Yes	Uncalibrated SPF	94		4
	Fatal & Injury	1.33	--	--							
Unsignalized RCUT	Total	4.46	--	--	1	Yes	Yes	Uncalibrated SPF	92		7
	Fatal & Injury	1.12	--	--							
Signalized Thru-Cut	Total	No SPF	--	--	--	N/A	N/A	N/A	85		9
	Fatal & Injury	No SPF	--	--							
Unsignalized Thru-Cut	Total	No SPF	--	--	--	N/A	N/A	N/A	80		12
	Fatal & Injury	No SPF	--	--							
Bowtie	Total	No SPF	--	--	--	N/A	N/A	N/A	84	####	10
	Fatal & Injury	No SPF	--	--							
Jughandle	Total	3.52	--	--	2	N/A	N/A	CMF	93		6
	Fatal & Injury	1.20	--	--							
Other 1*	Total	No SPF	--	--	--	N/A	N/A	CMF	--		--
	Fatal & Injury	No SPF	--	--							
Other 2*	Total	No SPF	--	--	--	N/A	N/A	CMF	--		--
	Fatal & Injury	No SPF	--	--							
			--	--							
			--	--							

Control Strategy Selection and Inputs

Specify the Facility Level Inputs and the Control Strategies to be included in the SPICE Analysis.

Intersection Type	At-Grade Intersection	
Analysis Year	Opening Year Only	
Opening Year	2048	
Design Year		
Facility Type	On Rural Two Lane Highway	For more information on how to determine these values, see the "Definitions" worksheet
Number of Legs	4-leg	
1-Way/2-Way		
# of Major Street Lanes (both directions)		
Major Street Approach Speed		
Opening Year - Major Road AADT	28,711	
Opening Year - Minor Road AADT	4,089	
Design Year - Major Road AADT		
Design Year - Minor Road AADT		

Control Strategy	**Include**	**Base Intersection**		
Traffic Signal	Yes	--	Opening Year AADT Outside of SPF Development Range	
Traffic Signal (Alternative Configuration)	No	--	Opening Year AADT Outside of SPF Development Range	
Minor Road Stop Control	Yes	--	Opening Year AADT Outside of SPF Development Range	
All Way Stop Control	Yes	--	Opening Year AADT Outside of SPF Development Range	
1-Lane Roundabout	No	--	Opening Year AADT Outside of SPF Development Range	
2-Lane Roundabout	Yes	--	Opening Year AADT Outside of SPF Development Range	
Displaced Left Turn (DLT)	Yes	Traffic Signal		
Median U-Turn (MUT)	Yes	Traffic Signal		
Signalized Restricted Crossing U-Turn (RCUT)	Yes	--		
Unsignalized Restricted Crossing U-Turn (RCUT)	Yes	--		
Signalized Thru-Cut*	Yes	--	*SSI Only, No Crash Prediction Available	
Unsignalized Thru-Cut*	Yes	--	*SSI Only, No Crash Prediction Available	
Bowtie*	Yes	--	*SSI Only, No Crash Prediction Available	
Continuous Green-T Intersection	No	Traffic Signal		
Jughandle	Yes	Traffic Signal		
Other 1*		Traffic Signal	*Please Select	
Other 2*		Minor Road Stop	*Please Select	

Safe System for Intersection (SSI) Inputs

Specify the geomtric, exposure, severity, and conflicting traffic complexity inputs required for an SSI analysis.

1. Roadway Geometry	Lanes
Major number thru lanes (one direction)	2
Minor number thru lanes (one direction)	1

Major Street Designation	
Select major street direction	N-S
Median Presence on Major Road	No
Median Presence on Minor Road	Yes

	Required Inputs
	Default Available, Override Optional
	Planning-Level Default Input
	Computed Value, Override Optional
	Computed Value - No Override
	Disabled Cell (Often based on input selections)

2. Complete the "Exposure" inputs. These inputs will apply to all interesections selected for analysis.
3. Complete the "Severity" inputs
4. Complete the "Conflicting Traffic Complexity" inputs

2. Exposure - All Intersections

Average Daily Traffic (veh/day)	Open	Design
Major	28,711	
Minor	4,089	

ADT Directional Split	
Major	0.50
Minor	0.50

Nonmotorized Total ADBP (ped-bike/day)	Activity Level	ADBP Value (ped-
Open Year Total Intersection NM	Low (20)	20
Design Year Total Intersection NM		

(or overwrite ped movement ADBPs below)

Nonmotorized Movement ADBP (ped-bike/day)	Open	Design
Major NM 1 (NM mvmt crossing Maj1)	5	
Major NM 2	5	
Minor NM 1	5	
Minor NM 2	5	

Are turning movement ADT values are available?	No	If "Yes", input values in Table 2-A
Are peak hour turning movement counts available?	Yes	If "Yes", input values in Table 2-B

If no turning movment volumes or counts are available, a user can optionally override the planning-level default turning movment proportions in Table 2-C

Table 2-A: Turning Movement (vol/day)

	Open	Design
Major Thru 1	12196.25	
Major Left Turn 1	94.95695	
Major Right Turn 1	2064.294	
Major Thru 2	13360.19	
Major Left Turn 2	275.9521	
Major Right Turn 2	719.3618	
Minor Thru 1	293.045	
Minor Left Turn 1	1533.375	
Minor Right Turn 1	218.08	
Minor Thru 2	-1321.761	
Minor Left Turn 2	1683.131	
Minor Right Turn 2	1683.131	

Table 2-B: Turning Movement Counts (Optional)

	Mvmt	AM Peak	AM %	PM Peak	PM %	Avg %
Major Thru 1	NBT	850	0.906183369	973	0.792991	0.849587
Major Left Turn 1	NBL	4	0.004264392	11	0.008965	0.006615
Major Right Turn 1	NBR	84	0.089552239	243	0.198044	0.143798
Major Thru 2	SBT	927	0.935418769	1256	0.925571	0.930495
Major Left Turn 2	SBL	14	0.014127144	33	0.024318	0.019223
Major Right Turn 2	SBR	50	0.050454087	68	0.050111	0.050282
Minor Thru 1	EBT	6	0.12	14	0.093333	0.106667
Minor Left Turn 1	EBL	35	0.7	120	0.8	0.75
Minor Right Turn 1	EBR	9	0.18	16	0.106667	0.143333
Minor Thru 2	WBT	9	0.031914894	8	0.036697	0.034306
Minor Left Turn 2	WBL	225	0.79787234	185	0.848624	0.823248
Minor Right Turn 2	WBR	48	0.170212766	25	0.114679	0.142446

Table 2-C: Turning Proportions (optional)

	Decimal
Major Thru 1	0.849587202
Major Left Turn 1	0.006614674
Major Right Turn 1	0.143798124
Major Thru 2	0.930666715
Major Left Turn 2	0.019222747
Major Right Turn 2	0.050110538
Minor Thru 1	0.143333333
Minor Left Turn 1	0.75
Minor Right Turn 1	0.106666667
Minor Thru 2	-0.646496194
Minor Left Turn 2	0.823248097
Minor Right Turn 2	0.823248097

3. Severity

Vehicle Speeds	mph
Major Posted Speed Limit	50
Minor Posted Speed Limit	35
Major thru	50
Major left	20
Major right	15
Minor thru	29.75
Minor left	20
Minor right	15
Stop near	15
Stop far	25
Signal near	15
Signal far	25

4. Conflicting Traffic Complexity

Traffic Control	Decimal
Base Traffic Control Adjustment Value (BTCAV) for permitted	1
Base Traffic Control Adjustment Value (BTCAV) for protected/permitted	0.85
Base Traffic Control Adjustment Value (BTCAV) for protected	0.01
Base Traffic Control Adjustment Value (BTCAV) for stop-controlled	0.45
Weight, f, for permitted	0.5
Weight, f, for protected/permitted	0.5
Weight, f, for protected	0.5
Weight, f, for stop-controlled	0.5
Major LT signal phasing (drop-down)	Protected/Permitted
Minor LT signal phasing (drop-down)	Protected/Permitted
Exclusive Pedestrian phasing (drop-down)	No

Historical Crash Data Input

Note: In order to use Empirical Bayes (EB), the historical intersection type must be a traffic signal or a minor road stop. Additionally, this alternative must be selected to be included in the analysis, and the historical intersection specified below. Up to 10 years of historical data can be used to perform the EB adjustment.

Is historical crash data available? Yes

Number of years available: 5 (Up to 10)

Historical Intx Type: 3SG

First Year Data is available: 2016

Historical Crash Counts		Year										
		2016	2017	2018	2019	2020	--	--	--	--	--	Total
Combined	Total	2	3	3	7	8	--	--	--	--	--	23
	Fatal/Injury	1	2	0	1	4						8
	PDO	1	1	3	6	4						15
Single-Vehicle	Total											
	Fatal/Injury											
	PDO											
Multiple-Vehicle	Total											
	Fatal/Injury											
	PDO											
Veh-Ped	Fatal/Injury	0	0	0	0	0						0
Veh-Bike	Fatal/Injury	0	0	1	0	0						1
Total	All	2	3	4	7	8	--	--	--	--	--	24

Florida Department of Transportation
Safety Performance for Intersection Control Evaluation Tool

Results

Summary of crash prediction results for each alternative

Project Information

Project Name:	Chuluota Road (CR 419)	**Intersection Type**	At-Grade Intersection
Intersection:	Chuluota Road (CR 419) at Schoolview Way Relocation	**Opening Year**	2028
Agency:	Orange County	**Design Year**	0
Project Reference:	Build B (Schoolview RI-RO) Opening Year (2028)	**Facility Type**	On Rural Two Lane Highway
City:	Orlando	**Number of Legs**	4-leg
State:	FL	**1-Way/2-Way**	
Date:	2/28/2024	**# of Major Street Lanes (both directions)**	
Analyst:	JMT	**Major Street Approach Speed**	

Crash Prediction Summary

Control Strategy	Crash Type	Opening Year	Design Year	Total Project Life Cycle	Crash Prediction Rank	AADT Within SPF Prediction Range? (Open Year)	AADT Within SPF Prediction Range? (Design Year)	Source of Prediction	SSI Score: Opening Year	SSI Score: Design Year	SSI Score: Rank
Traffic Signal	Total	4.11	--	--	9	Yes	Yes	Calibrated SPF w/ EB	98		4
	Fatal & Injury	1.40	--	--							
Minor Road Stop	Total	2.37	--	--	3	No	Yes	Calibrated SPF	97		7
	Fatal & Injury	1.02	--	--							
All Way Stop	Total	3.92	--	--	6	No	Yes	Uncalibrated SPF w/ EB	99		2
	Fatal & Injury	1.08	--	--							
2-lane Roundabout	Total	5.22	--	--	7	Yes	Yes	Uncalibrated SPF	100		1
	Fatal & Injury	1.11	--	--							
Displaced Left Turn (DLT)	Total	3.62	--	--	8	N/A	N/A	CMF	91		11
	Fatal & Injury	1.23	--	--							
Median U-Turn (MUT)	Total	2.59	--	--	5	N/A	N/A	CMF	99		3
	Fatal & Injury	1.06	--	--							
Signalized RCUT	Total	3.46	--	--	1	Yes	Yes	Uncalibrated SPF	97		6
	Fatal & Injury	0.68	--	--							
Unsignalized RCUT	Total	3.23	--	--	2	Yes	Yes	Uncalibrated SPF	96		8
	Fatal & Injury	0.81	--	--							
Signalized Thru-Cut	Total	No SPF	--	--	--	N/A	N/A	N/A	93		9
	Fatal & Injury	No SPF	--	--							
Unsignalized Thru-Cut	Total	No SPF	--	--	--	N/A	N/A	N/A	89		12
	Fatal & Injury	No SPF	--	--							
Bowtie	Total	No SPF	--	--	--	N/A	N/A	N/A	93	####	10
	Fatal & Injury	No SPF	--	--							
Jughandle	Total	3.04	--	--	4	N/A	N/A	CMF	97		5
	Fatal & Injury	1.04	--	--							
Other 1*	Total	No SPF	--	--	--	N/A	N/A	CMF	--		--
	Fatal & Injury	No SPF	--	--							
Other 2*	Total	No SPF	--	--	--	N/A	N/A	CMF	--		--
	Fatal & Injury	No SPF	--	--							
			--	--							
			--	--							

Control Strategy Selection and Inputs

Specify the Facility Level Inputs and the Control Strategies to be included in the SPICE Analysis.

Intersection Type	At-Grade Intersection	
Analysis Year	Opening Year Only	
Opening Year	2028	
Design Year		
Facility Type	On Rural Two Lane Highway	For more information on how to determine these values, see the "Definitions" worksheet
Number of Legs	4-leg	
1-Way/2-Way		
# of Major Street Lanes (both directions)		
Major Street Approach Speed		
Opening Year - Major Road AADT	17,978	
Opening Year - Minor Road AADT	3,078	
Design Year - Major Road AADT		
Design Year - Minor Road AADT		

Control Strategy	**Include**	**Base Intersection**	
Traffic Signal	Yes	--	
Traffic Signal (Alternative Configuration)	No	--	
Minor Road Stop Control	Yes	--	Opening Year AADT Outside of SPF Development Range
All Way Stop Control	Yes	--	Opening Year AADT Outside of SPF Development Range
1-Lane Roundabout	No	--	
2-Lane Roundabout	Yes	--	
Displaced Left Turn (DLT)	Yes	Traffic Signal	
Median U-Turn (MUT)	Yes	Traffic Signal	
Signalized Restricted Crossing U-Turn (RCUT)	Yes	--	
Unsignalized Restricted Crossing U-Turn (RCUT)	Yes	--	
Signalized Thru-Cut*	Yes	--	**SSI Only, No Crash Prediction Available*
Unsignalized Thru-Cut*	Yes	--	**SSI Only, No Crash Prediction Available*
Bowtie*	Yes	--	**SSI Only, No Crash Prediction Available*
Continuous Green-T Intersection	No	Traffic Signal	
Jughandle	Yes	Traffic Signal	
Other 1*		Traffic Signal	**Please Select*
Other 2*		Minor Road Stop	**Please Select*

Safe System for Intersection (SSI) Inputs

Specify the geomtric, exposure, severity, and conflicting traffic complexity inputs required for an SSI analysis.

1. Roadway Geometry	Lanes
Major number thru lanes (one direction)	2
Minor number thru lanes (one direction)	1

Major Street Designation	
Select major street direction	N-S
Median Presence on Major Road	No
Median Presence on Minor Road	Yes

	Required Inputs
	Default Available, Override Optional
	Planning-Level Default Input
	Computed Value, Override Optional
	Computed Value - No Override
	Disabled Cell (Often based on input selections)

2. Complete the "Exposure" inputs. These inputs will apply to all interesections selected for analysis.
3. Complete the "Severity" inputs
4. Complete the "Conflicting Traffic Complexity" inputs

2. Exposure - All Intersections

Average Daily Traffic (veh/day)	Open	Design
Major	17,978	
Minor	3,078	

ADT Directional Split	
Major	0.50
Minor	0.50

Nonmotorized Total ADBP (ped-bike/day)	Activity Level	ADBP Value (ped-
Open Year Total Intersection NM	Low (20)	20
Design Year Total Intersection NM		

(or overwrite ped movement ADBPs below)

Nonmotorized Movement ADBP (ped-bike/day)	Open	Design
Major NM 1 (NM mvmt crossing Maj1)	5	
Major NM 2	5	
Minor NM 1	5	
Minor NM 2	5	

Are turning movement ADT values are available?	No
Are peak hour turning movement counts available?	Yes

If "Yes", input values in Table 2-A
If "Yes", input values in Table 2-B

If no turning movment volumes or counts are available, a user can optionally override the planning-level default turning movment proportions in Table 2-C

Table 2-A: Turning Movement (vol/day)

	Open	Design
Major Thru 1	7247.122	
Major Left Turn 1	77.20882	
Major Right Turn 1	1664.669	
Major Thru 2	8616.105	
Major Left Turn 2	237.7225	
Major Right Turn 2	135.1729	
Minor Thru 1	-173.3489	
Minor Left Turn 1	1327.599	
Minor Right Turn 1	384.75	
Minor Thru 2	-994.4139	
Minor Left Turn 2	1266.707	
Minor Right Turn 2	1266.707	

Table 2-B: Turning Movement Counts (Optional)

	Mvmt	AM Peak	AM %	PM Peak	PM %	Avg %
Major Thru 1	NBT	528	0.877076412	603	0.735366	0.806221
Major Left Turn 1	NBL	3	0.004983389	10	0.012195	0.008589
Major Right Turn 1	NBR	71	0.117940199	207	0.252439	0.18519
Major Thru 2	SBT	654	0.970326409	758	0.949875	0.960101
Major Left Turn 2	SBL	12	0.017804154	28	0.035088	0.026446
Major Right Turn 2	SBR	8	0.011869436	12	0.015038	0.013454
Minor Thru 1	EBT	5	0.142857143	12	0.131868	0.137363
Minor Left Turn 1	EBL	30	0.857142857	79	0.868132	0.862637
Minor Right Turn 1	EBR	0	0	0	0	0
Minor Thru 2	WBT	8	0.033195021	7	0.037634	0.035415
Minor Left Turn 2	WBL	192	0.796680498	158	0.849462	0.823071
Minor Right Turn 2	WBR	41	0.170124481	21	0.112903	0.141514

Table 2-C: Turning Proportions (optional)

	Decimal
Major Thru 1	0.806221133
Major Left Turn 1	0.008589255
Major Right Turn 1	0.185189612
Major Thru 2	0.958516469
Major Left Turn 2	0.026445937
Major Right Turn 2	0.015037594
Minor Thru 1	-0.112637363
Minor Left Turn 1	0.862637363
Minor Right Turn 1	0.25
Minor Thru 2	-0.646142864
Minor Left Turn 2	0.823071432
Minor Right Turn 2	0.823071432

3. Severity

Vehicle Speeds	mph
Major Posted Speed Limit	50
Minor Posted Speed Limit	35
Major thru	50
Major left	20
Major right	15
Minor thru	29.75
Minor left	20
Minor right	15
Stop near	15
Stop far	25
Signal near	15
Signal far	25

4. Conflicting Traffic Complexity

Traffic Control	Decimal
Base Traffic Control Adjustment Value (BTCAV) for permitted	1
Base Traffic Control Adjustment Value (BTCAV) for protected/permitted	0.85
Base Traffic Control Adjustment Value (BTCAV) for protected	0.01
Base Traffic Control Adjustment Value (BTCAV) for stop-controlled	0.45
Weight, f, for permitted	0.5
Weight, f, for protected/permitted	0.5
Weight, f, for protected	0.5
Weight, f, for stop-controlled	0.5
Major LT signal phasing (drop-down)	Protected/Permitted
Minor LT signal phasing (drop-down)	Protected/Permitted
Exclusive Pedestrian phasing (drop-down)	No

Historical Crash Data Input

Note: In order to use Empirical Bayes (EB), the historical intersection type must be a traffic signal or a minor road stop. Additionally, this alternative must be selected to be included in the analysis, and the historical intersection specified below. Up to 10 years of historical data can be used to perform the EB adjustment.

Is historical crash data available? Yes

Number of years available: 5 (Up to 10)

Historical Intx Type: 3SG

First Year Data is available: 2016

Historical Crash Counts		Year										
		2016	2017	2018	2019	2020	--	--	--	--	--	Total
Combined	Total	2	3	3	7	8	--	--	--	--	--	23
	Fatal/Injury	1	2	0	1	4						8
	PDO	1	1	3	6	4						15
Single-Vehicle	Total											
	Fatal/Injury											
	PDO											
Multiple-Vehicle	Total											
	Fatal/Injury											
	PDO											
Veh-Ped	Fatal/Injury	0	0	0	0	0						0
Veh-Bike	Fatal/Injury	0	0	1	0	0						1
Total	All	2	3	4	7	8	--	--	--	--	--	24

Florida Department of Transportation
Safety Performance for Intersection Control Evaluation Tool

Results

Summary of crash prediction results for each alternative

Project Information

Project Name:	Chuluota Road (CR 419)	**Intersection Type**	At-Grade Intersection
Intersection:	Chuluota Road (CR 419) at Schoolview Way Relocation	**Opening Year**	2038
Agency:	Orange County	**Design Year**	0
Project Reference:	Build B (Schoolview RI-RO) Interim Year (2038)	**Facility Type**	On Rural Two Lane Highway
City:	Orlando	**Number of Legs**	4-leg
State:	FL	**1-Way/2-Way**	
Date:	2/28/2024	**# of Major Street Lanes (both directions)**	
Analyst:	JMT	**Major Street Approach Speed**	

Crash Prediction Summary

Control Strategy	Crash Type	Opening Year	Design Year	Total Project Life Cycle	Crash Prediction Rank	AADT Within SPF Prediction Range? (Open Year)	AADT Within SPF Prediction Range? (Design Year)	Source of Prediction	SSI Score: Opening Year	SSI Score: Design Year	SSI Score: Rank
Traffic Signal	Total	4.46	--	--	9	Yes	Yes	Calibrated SPF w/ EB	97		4
	Fatal & Injury	1.52	--	--							
Minor Road Stop	Total	2.99	--	--	5	No	Yes	Calibrated SPF	95		7
	Fatal & Injury	1.29	--	--							
All Way Stop	Total	5.13	--	--	7	No	Yes	Uncalibrated SPF w/ EB	99		2
	Fatal & Injury	1.41	--	--							
2-lane Roundabout	Total	6.92	--	--	8	Yes	Yes	Uncalibrated SPF	99		1
	Fatal & Injury	1.51	--	--							
Displaced Left Turn (DLT)	Total	3.93	--	--	6	N/A	N/A	CMF	87		11
	Fatal & Injury	1.34	--	--							
Median U-Turn (MUT)	Total	2.81	--	--	4	N/A	N/A	CMF	99		3
	Fatal & Injury	1.15	--	--							
Signalized RCUT	Total	4.87	--	--	2	Yes	Yes	Uncalibrated SPF	96		6
	Fatal & Injury	0.97	--	--							
Unsignalized RCUT	Total	3.76	--	--	1	Yes	Yes	Uncalibrated SPF	94		8
	Fatal & Injury	0.97	--	--							
Signalized Thru-Cut	Total	No SPF	--	--	--	N/A	N/A	N/A	89		9
	Fatal & Injury	No SPF	--	--							
Unsignalized Thru-Cut	Total	No SPF	--	--	--	N/A	N/A	N/A	85		12
	Fatal & Injury	No SPF	--	--							
Bowtie	Total	No SPF	--	--	--	N/A	N/A	N/A	89	####	10
	Fatal & Injury	No SPF	--	--							
Jughandle	Total	3.30	--	--	3	N/A	N/A	CMF	96		5
	Fatal & Injury	1.12	--	--							
Other 1*	Total	No SPF	--	--	--	N/A	N/A	CMF	--		--
	Fatal & Injury	No SPF	--	--							
Other 2*	Total	No SPF	--	--	--	N/A	N/A	CMF	--		--
	Fatal & Injury	No SPF	--	--							
			--	--							
			--	--							

Control Strategy Selection and Inputs

Specify the Facility Level Inputs and the Control Strategies to be included in the SPICE Analysis.

Intersection Type	At-Grade Intersection	
Analysis Year	Opening Year Only	
Opening Year	2038	
Design Year		
Facility Type	On Rural Two Lane Highway	For more information on how to determine these values, see the "Definitions" worksheet
Number of Legs	4-leg	
1-Way/2-Way		
# of Major Street Lanes (both directions)		
Major Street Approach Speed		
Opening Year - Major Road AADT	23,333	
Opening Year - Minor Road AADT	3,478	
Design Year - Major Road AADT		
Design Year - Minor Road AADT		

Control Strategy	**Include**	**Base Intersection**	
Traffic Signal	Yes	--	
Traffic Signal (Alternative Configuration)	No	--	
Minor Road Stop Control	Yes	--	Opening Year AADT Outside of SPF Development Range
All Way Stop Control	Yes	--	Opening Year AADT Outside of SPF Development Range
1-Lane Roundabout	No	--	Opening Year AADT Outside of SPF Development Range
2-Lane Roundabout	Yes	--	
Displaced Left Turn (DLT)	Yes	Traffic Signal	
Median U-Turn (MUT)	Yes	Traffic Signal	
Signalized Restricted Crossing U-Turn (RCUT)	Yes	--	
Unsignalized Restricted Crossing U-Turn (RCUT)	Yes	--	
Signalized Thru-Cut*	Yes	--	**SSI Only, No Crash Prediction Available*
Unsignalized Thru-Cut*	Yes	--	**SSI Only, No Crash Prediction Available*
Bowtie*	Yes	--	**SSI Only, No Crash Prediction Available*
Continuous Green-T Intersection	No	Traffic Signal	
Jughandle	Yes	Traffic Signal	
Other 1*		Traffic Signal	**Please Select*
Other 2*		Minor Road Stop	**Please Select*

Safe System for Intersection (SSI) Inputs

Specify the geomtric, exposure, severity, and conflicting traffic complexity inputs required for an SSI analysis.

1. Roadway Geometry	Lanes
Major number thru lanes (one direction)	2
Minor number thru lanes (one direction)	1

Major Street Designation	
Select major street direction	N-S
Median Presence on Major Road	No
Median Presence on Minor Road	Yes

	Required Inputs
	Default Available, Override Optional
	Planning-Level Default Input
	Computed Value, Override Optional
	Computed Value - No Override
	Disabled Cell (Often based on input selections)

2. Complete the **"Exposure"** inputs. These inputs will apply to all interesections selected for analysis.
3. Complete the **"Severity"** inputs
4. Complete the **"Conflicting Traffic Complexity"** inputs

2. Exposure - All Intersections

Average Daily Traffic (veh/day)	Open	Design
Major	23,333	
Minor	3,478	

ADT Directional Split	
Major	0.50
Minor	0.50

Nonmotorized Total ADBP (ped-bike/day)	Activity Level	ADBP Value (ped-
Open Year Total Intersection NM	Low (20)	20
Design Year Total Intersection NM		

(or overwrite ped movement ADBPs below)

Nonmotorized Movement ADBP (ped-bike/day)	Open	Design
Major NM 1 (NM mvmt crossing Maj1)	5	
Major NM 2	5	
Minor NM 1	5	
Minor NM 2	5	

Are turning movement ADT values are available?	No
Are peak hour turning movement counts available?	Yes

If "Yes", input values in **Table 2-A**
If "Yes", input values in **Table 2-B**

If no turning movment volumes or counts are available, a user can optionally override the planning-level default turning movment proportions in **Table 2-C**

Table 2-A: Turning Movement (vol/day)

	Open	Design
Major Thru 1	9706.109	
Major Left Turn 1	87.28431	
Major Right Turn 1	1873.107	
Major Thru 2	11259.77	
Major Left Turn 2	255.0773	
Major Right Turn 2	151.6537	
Minor Thru 1	-196.5364	
Minor Left Turn 1	1500.786	
Minor Right Turn 1	434.75	
Minor Thru 2	-1131.648	
Minor Left Turn 2	1435.324	
Minor Right Turn 2	1435.324	

Table 2-B: Turning Movement Counts (Optional)

	Mvmt	AM Peak	AM %	PM Peak	PM %	Avg %
Major Thru 1	NBT	689	0.893644617	788	0.770283	0.831964
Major Left Turn 1	NBL	4	0.005188067	10	0.009775	0.007482
Major Right Turn 1	NBR	78	0.101167315	225	0.219941	0.160554
Major Thru 2	SBT	798	0.974358974	1033	0.959146	0.966752
Major Left Turn 2	SBL	13	0.015873016	30	0.027855	0.021864
Major Right Turn 2	SBR	8	0.00976801	14	0.012999	0.011384
Minor Thru 1	EBT	6	0.157894737	13	0.116071	0.136983
Minor Left Turn 1	EBL	32	0.842105263	99	0.883929	0.863017
Minor Right Turn 1	EBR	0	0	0	0	0
Minor Thru 2	WBT	8	0.030769231	7	0.034826	0.032798
Minor Left Turn 2	WBL	208	0.8	171	0.850746	0.825373
Minor Right Turn 2	WBR	44	0.169230769	23	0.114428	0.141829

Table 2-C: Turning Proportions (optional)

	Decimal
Major Thru 1	0.831964049
Major Left Turn 1	0.007481619
Major Right Turn 1	0.160554332
Major Thru 2	0.965136844
Major Left Turn 2	0.021864085
Major Right Turn 2	0.012999071
Minor Thru 1	-0.113016917
Minor Left Turn 1	0.863016917
Minor Right Turn 1	0.25
Minor Thru 2	-0.650746269
Minor Left Turn 2	0.825373134
Minor Right Turn 2	0.825373134

3. Severity

Vehicle Speeds	mph
Major Posted Speed Limit	50
Minor Posted Speed Limit	35
Major thru	50
Major left	20
Major right	15
Minor thru	29.75
Minor left	20
Minor right	15
Stop near	15
Stop far	25
Signal near	15
Signal far	25

4. Conflicting Traffic Complexity

Traffic Control	Decimal
Base Traffic Control Adjustment Value (BTCAV) for permitted	1
Base Traffic Control Adjustment Value (BTCAV) for protected/permitted	0.85
Base Traffic Control Adjustment Value (BTCAV) for protected	0.01
Base Traffic Control Adjustment Value (BTCAV) for stop-controlled	0.45
Weight, f, for permitted	0.5
Weight, f, for protected/permitted	0.5
Weight, f, for protected	0.5
Weight, f, for stop-controlled	0.5
Major LT signal phasing (drop-down)	Protected/Permitted
Minor LT signal phasing (drop-down)	Protected/Permitted
Exclusive Pedestrian phasing (drop-down)	No

Historical Crash Data Input

Note: In order to use Empirical Bayes (EB), the historical intersection type must be a traffic signal or a minor road stop. Additionally, this alternative must be selected to be included in the analysis, and the historical intersection specified below. Up to 10 years of historical data can be used to perform the EB adjustment.

Is historical crash data available? Yes

Number of years available: 5 (Up to 10)

Historical Intx Type: 3SG

First Year Data is available: 2016

Historical Crash Counts		Year										
		2016	2017	2018	2019	2020	--	--	--	--	--	Total
Combined	Total	2	3	3	7	8	--	--	--	--	--	23
	Fatal/Injury	1	2	0	1	4						8
	PDO	1	1	3	6	4						15
Single-Vehicle	Total											
	Fatal/Injury											
	PDO											
Multiple-Vehicle	Total											
	Fatal/Injury											
	PDO											
Veh-Ped	Fatal/Injury	0	0	0	0	0						0
Veh-Bike	Fatal/Injury	0	0	1	0	0						1
Total	All	2	3	4	7	8	--	--	--	--	--	24

Florida Department of Transportation
Safety Performance for Intersection Control Evaluation Tool

Results

Summary of crash prediction results for each alternative

Project Information

Project Name:	Chuluota Road (CR 419)	**Intersection Type**	At-Grade Intersection
Intersection:	Chuluota Road (CR 419) at Schoolview Way Relocation	**Opening Year**	2028
Agency:	Orange County	**Design Year**	0
Project Reference:	Build B (Schoolview RI-RO) Design Year (2048)	**Facility Type**	On Rural Two Lane Highway
City:	Orlando	**Number of Legs**	4-leg
State:	FL	**1-Way/2-Way**	
Date:	2/28/2024	**# of Major Street Lanes (both directions)**	
Analyst:	JMT	**Major Street Approach Speed**	

Crash Prediction Summary

Control Strategy	Crash Type	Opening Year	Design Year	Total Project Life Cycle	Crash Prediction Rank	AADT Within SPF Prediction Range? (Open Year)	AADT Within SPF Prediction Range? (Design Year)	Source of Prediction	SSI Score: Opening Year	SSI Score: Design Year	SSI Score: Rank
Traffic Signal	Total	4.74	--	--	7	No	Yes	Calibrated SPF w/ EB	96		4
	Fatal & Injury	1.61	--	--							
Minor Road Stop	Total	3.64	--	--	6	No	Yes	Calibrated SPF	94		7
	Fatal & Injury	1.57	--	--							
All Way Stop	Total	6.40	--	--	8	No	Yes	Uncalibrated SPF w/ EB	99		2
	Fatal & Injury	1.76	--	--							
2-lane Roundabout	Total	8.69	--	--	9	No	Yes	Uncalibrated SPF	99		1
	Fatal & Injury	1.94	--	--							
Displaced Left Turn (DLT)	Total	4.18	--	--	5	N/A	N/A	CMF	83		11
	Fatal & Injury	1.42	--	--							
Median U-Turn (MUT)	Total	2.99	--	--	3	N/A	N/A	CMF	99		3
	Fatal & Injury	1.23	--	--							
Signalized RCUT	Total	6.44	--	--	4	Yes	Yes	Uncalibrated SPF	95		6
	Fatal & Injury	1.30	--	--							
Unsignalized RCUT	Total	4.39	--	--	1	Yes	Yes	Uncalibrated SPF	93		8
	Fatal & Injury	1.11	--	--							
Signalized Thru-Cut	Total	No SPF	--	--	--	N/A	N/A	N/A	85		10
	Fatal & Injury	No SPF	--	--							
Unsignalized Thru-Cut	Total	No SPF	--	--	--	N/A	N/A	N/A	80		12
	Fatal & Injury	No SPF	--	--							
Bowtie	Total	No SPF	--	--	--	N/A	N/A	N/A	86	####	9
	Fatal & Injury	No SPF	--	--							
Jughandle	Total	3.51	--	--	2	N/A	N/A	CMF	95		5
	Fatal & Injury	1.19	--	--							
Other 1*	Total	No SPF	--	--	--	N/A	N/A	CMF	--		--
	Fatal & Injury	No SPF	--	--							
Other 2*	Total	No SPF	--	--	--	N/A	N/A	CMF	--		--
	Fatal & Injury	No SPF	--	--							
			--	--							
			--	--							

Control Strategy Selection and Inputs

Specify the Facility Level Inputs and the Control Strategies to be included in the SPICE Analysis.

Intersection Type	At-Grade Intersection	
Analysis Year	Opening Year Only	
Opening Year	2028	
Design Year		
Facility Type	On Rural Two Lane Highway	For more information on how to determine these values, see the "Definitions" worksheet
Number of Legs	4-leg	
1-Way/2-Way		
# of Major Street Lanes (both directions)		
Major Street Approach Speed		
Opening Year - Major Road AADT	28,711	
Opening Year - Minor Road AADT	3,911	
Design Year - Major Road AADT		
Design Year - Minor Road AADT		

Control Strategy	**Include**	**Base Intersection**		
Traffic Signal	Yes	--	Opening Year AADT Outside of SPF Development Range	
Traffic Signal (Alternative Configuration)	No	--	Opening Year AADT Outside of SPF Development Range	
Minor Road Stop Control	Yes	--	Opening Year AADT Outside of SPF Development Range	
All Way Stop Control	Yes	--	Opening Year AADT Outside of SPF Development Range	
1-Lane Roundabout	No	--	Opening Year AADT Outside of SPF Development Range	
2-Lane Roundabout	Yes	--	Opening Year AADT Outside of SPF Development Range	
Displaced Left Turn (DLT)	Yes	Traffic Signal		
Median U-Turn (MUT)	Yes	Traffic Signal		
Signalized Restricted Crossing U-Turn (RCUT)	Yes	--		
Unsignalized Restricted Crossing U-Turn (RCUT)	Yes	--		
Signalized Thru-Cut*	Yes	--	*SSI Only, No Crash Prediction Available	
Unsignalized Thru-Cut*	Yes	--	*SSI Only, No Crash Prediction Available	
Bowtie*	Yes	--	*SSI Only, No Crash Prediction Available	
Continuous Green-T Intersection	No	Traffic Signal		
Jughandle	Yes	Traffic Signal		
Other 1*		Traffic Signal	*Please Select	
Other 2*		Minor Road Stop	*Please Select	

Safe System for Intersection (SSI) Inputs

Specify the geomtric, exposure, severity, and conflicting traffic complexity inputs required for an SSI analysis.

1. Roadway Geometry	Lanes
Major number thru lanes (one direction)	2
Minor number thru lanes (one direction)	1

Major Street Designation	
Select major street direction	N-S
Median Presence on Major Road	No
Median Presence on Minor Road	Yes

	Required Inputs
	Default Available, Override Optional
	Planning-Level Default Input
	Computed Value, Override Optional
	Computed Value - No Override
	Disabled Cell (Often based on input selections)

2. Complete the "Exposure" inputs. These inputs will apply to all interesections selected for analysis.
3. Complete the "Severity" inputs
4. Complete the "Conflicting Traffic Complexity" inputs

2. Exposure - All Intersections

Average Daily Traffic (veh/day)	Open	Design
Major	28,711	
Minor	3,911	

ADT Directional Split	
Major	0.50
Minor	0.50

Nonmotorized Total ADBP (ped-bike/day)	Activity Level	ADBP Value (ped-
Open Year Total Intersection NM	Low (20)	20
Design Year Total Intersection NM		

(or overwrite ped movement ADBPs below)

Nonmotorized Movement ADBP (ped-bike/day)	Open	Design
Major NM 1 (NM mvmt crossing Maj1)	5	
Major NM 2	5	
Minor NM 1	5	
Minor NM 2	5	

Are turning movement ADT values are available?	No
Are peak hour turning movement counts available?	Yes

If "Yes", input values in Table 2-A
If "Yes", input values in Table 2-B

If no turning movment volumes or counts are available, a user can optionally override the planning-level default turning movment proportions in Table 2-C

Table 2-A: Turning Movement (vol/day)

	Open	Design
Major Thru 1	12196.25	
Major Left Turn 1	94.95695	
Major Right Turn 1	2064.294	
Major Thru 2	13920.87	
Major Left Turn 2	275.9521	
Major Right Turn 2	158.6828	
Minor Thru 1	-243.6366	
Minor Left Turn 1	1710.262	
Minor Right Turn 1	488.875	
Minor Thru 2	-1264.223	
Minor Left Turn 2	1609.862	
Minor Right Turn 2	1609.862	

Table 2-B: Turning Movement Counts (Optional)

	Mvmt	AM Peak	AM %	PM Peak	PM %	Avg %
Major Thru 1	NBT	850	0.906183369	973	0.792991	0.849587
Major Left Turn 1	NBL	4	0.004264392	11	0.008965	0.006615
Major Right Turn 1	NBR	84	0.089552239	243	0.198044	0.143798
Major Thru 2	SBT	968	0.97679112	1309	0.964628	0.970709
Major Left Turn 2	SBL	14	0.014127144	33	0.024318	0.019223
Major Right Turn 2	SBR	9	0.009081736	15	0.011054	0.010068
Minor Thru 1	EBT	6	0.146341463	14	0.104478	0.12541
Minor Left Turn 1	EBL	35	0.853658537	120	0.895522	0.87459
Minor Right Turn 1	EBR	0	0	0	0	0
Minor Thru 2	WBT	9	0.031914894	8	0.036697	0.034306
Minor Left Turn 2	WBL	225	0.79787234	185	0.848624	0.823248
Minor Right Turn 2	WBR	48	0.170212766	25	0.114679	0.142446

Table 2-C: Turning Proportions (optional)

	Decimal
Major Thru 1	0.849587202
Major Left Turn 1	0.006614674
Major Right Turn 1	0.143798124
Major Thru 2	0.969723458
Major Left Turn 2	0.019222747
Major Right Turn 2	0.011053795
Minor Thru 1	-0.124590462
Minor Left Turn 1	0.874590462
Minor Right Turn 1	0.25
Minor Thru 2	-0.646496194
Minor Left Turn 2	0.823248097
Minor Right Turn 2	0.823248097

3. Severity

Vehicle Speeds	mph
Major Posted Speed Limit	50
Minor Posted Speed Limit	35
Major thru	50
Major left	20
Major right	15
Minor thru	29.75
Minor left	20
Minor right	15
Stop near	15
Stop far	25
Signal near	15
Signal far	25

4. Conflicting Traffic Complexity

Traffic Control	Decimal
Base Traffic Control Adjustment Value (BTCAV) for permitted	1
Base Traffic Control Adjustment Value (BTCAV) for protected/permitted	0.85
Base Traffic Control Adjustment Value (BTCAV) for protected	0.01
Base Traffic Control Adjustment Value (BTCAV) for stop-controlled	0.45
Weight, f, for permitted	0.5
Weight, f, for protected/permitted	0.5
Weight, f, for protected	0.5
Weight, f, for stop-controlled	0.5
Major LT signal phasing (drop-down)	Protected/Permitted
Minor LT signal phasing (drop-down)	Protected/Permitted
Exclusive Pedestrian phasing (drop-down)	No

Historical Crash Data Input

Note: In order to use Empirical Bayes (EB), the historical intersection type must be a traffic signal or a minor road stop. Additionally, this alternative must be selected to be included in the analysis, and the historical intersection specified below. Up to 10 years of historical data can be used to perform the EB adjustment.

Is historical crash data available? Yes

Number of years available: 5 (Up to 10)

Historical Intx Type: 3SG

First Year Data is available: 2016

Historical Crash Counts		Year										
		2016	2017	2018	2019	2020	--	--	--	--	--	Total
Combined	Total	2	3	3	7	8	--	--	--	--	--	23
	Fatal/Injury	1	2	0	1	4						8
	PDO	1	1	3	6	4						15
Single-Vehicle	Total											
	Fatal/Injury											
	PDO											
Multiple-Vehicle	Total											
	Fatal/Injury											
	PDO											
Veh-Ped	Fatal/Injury	0	0	0	0	0						0
Veh-Bike	Fatal/Injury	0	0	1	0	0						1
Total	All	2	3	4	7	8	--	--	--	--	--	24

Table 2, Schoolview Way Relocation/Cypress Lake Glen Boulevard S SPICE Results - Crash Prediction

Build Type	Year	Intersection Control Rank 1 (Fatal & Injury Crashes)	Intersection Control Rank 2 (Fatal & Injury Crashes)	Intersection Control Rank 3 (Fatal & Injury Crashes)	Intersection Control Rank 4 (Fatal & Injury Crashes)	Intersection Control Rank 5 (Fatal & Injury Crashes)	Intersection Control Rank 6 (Fatal & Injury Crashes)	Intersection Control Rank 7 (Fatal & Injury Crashes)	Intersection Control Rank 8 (Fatal & Injury Crashes)	Intersection Control Rank 9 (Fatal & Injury Crashes)	Intersection Control Rank 10 (Fatal & Injury Crashes)
Build A (Leg Removal)	2028	Signalized RCUT N-S (0.70)	Unsignalized RCUT N-S (0.82)	Jughandle (1.04)	TWSC (1.05)	MUT N-S (1.07)	AWSC (1.09)	2 Lane Roundabout (1.12)	DLT (1.24)	Traffic Signal (1.41)	Bowtie N-S (No SPF)
	2038	Unsignalized RCUT N-S (0.97)	Signalized RCUT N-S (1.00)	Jughandle (1.13)	MUT N-S (1.16)	TWSC (1.33)	DLT (1.34)	AWSC (1.42)	2 Lane Roundabout (1.52)	Traffic Signal (1.52)	Bowtie N-S (No SPF)
	2048	Unsignalized RCUT N-S (1.12)	Jughandle (1.20)	MUT N-S (1.23)	Signalized RCUT N-S (1.33)	DLT (1.42)	TWSC (1.61)	Traffic Signal (1.62)	AWSC (1.77)	2 Lane Roundabout (1.95)	Bowtie N-S (No SPF)
Build B (Leg RI-RO)	2028	Signalized RCUT N-S (0.68)	Unsignalized RCUT N-S (0.81)	TWSC (1.02)	Jughandle (1.04)	MUT N-S (1.06)	AWSC (1.08)	2 Lane Roundabout (1.11)	DLT (1.23)	Traffic Signal (1.40)	Bowtie N-S (No SPF)
	2038	Unsignalized RCUT N-S (0.97)	Signalized RCUT N-S (0.97)	Jughandle (1.12)	MUT N-S (1.15)	TWSC (1.29)	DLT (1.34)	AWSC (1.41)	2 Lane Roundabout (1.51)	Traffic Signal (1.52)	Bowtie N-S (No SPF)
	2048	Unsignalized RCUT N-S (1.11)	Jughandle (1.19)	MUT N-S (1.23)	Signalized RCUT N-S (1.30)	DLT (1.42)	TWSC (1.57)	Traffic Signal (1.61)	AWSC (1.76)	2 Lane Roundabout (1.94)	Bowtie N-S (No SPF)

Greyed out cells indicate that the intersection control type may not be viable due to right-of-way, cost, or other factors

Table 3, Schoolview Way Relocation/Cypress Lake Glen Boulevard S SPICE Results - SSI Score

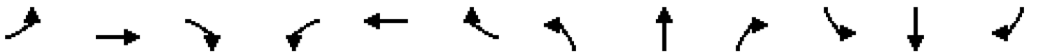
Build Type	Year	Intersection Control Rank 1 (SSI Score)	Intersection Control Rank 2 (SSI Score)	Intersection Control Rank 3 (SSI Score)	Intersection Control Rank 4 (SSI Score)	Intersection Control Rank 5 (SSI Score)	Intersection Control Rank 6 (SSI Score)	Intersection Control Rank 7 (SSI Score)	Intersection Control Rank 8 (SSI Score)	Intersection Control Rank 9 (SSI Score)	Intersection Control Rank 10 (SSI Score)
Build A (Leg Removal)	2028	2 Lane Roundabout (99)	AWSC (99)	MUT N-S (99)	Signalized RCUT N-S (97)	Traffic Signal (97)	Jughandle (96)	Unsignalized RCUT N-S (96)	TWSC (95)	Signalized ThruCut N-S (93)	Bowtie N-S (92)
	2038	2 Lane Roundabout (99)	AWSC (99)	MUT N-S (98)	Signalized RCUT N-S (96)	Traffic Signal (95)	Jughandle (95)	Unsignalized RCUT N-S (94)	TWSC (93)	Signalized ThruCut N-S (89)	Bowtie N-S (88)
	2048	2 Lane Roundabout (99)	AWSC (99)	MUT N-S (97)	Signalized RCUT N-S (94)	Traffic Signal (93)	Jughandle (93)	Unsignalized RCUT N-S (92)	TWSC (91)	Signalized ThruCut N-S (85)	Bowtie N-S (84)
Build B (Leg RI-RO)	2028	2 Lane Roundabout (100)	AWSC (99)	MUT N-S (99)	Traffic Signal (98)	Jughandle (97)	Signalized RCUT N-S (97)	TWSC (97)	Unsignalized RCUT N-S (96)	Signalized ThruCut N-S (93)	Bowtie N-S (93)
	2038	2 Lane Roundabout (99)	AWSC (99)	MUT N-S (99)	Traffic Signal (97)	Jughandle (96)	Signalized RCUT N-S (96)	TWSC (95)	Unsignalized RCUT N-S (94)	Signalized ThruCut N-S (89)	Bowtie N-S (89)
	2048	2 Lane Roundabout (99)	AWSC (99)	MUT N-S (99)	Traffic Signal (96)	Jughandle (95)	Signalized RCUT N-S (95)	TWSC (94)	Unsignalized RCUT N-S (93)	Bowtie N-S (86)	Signalized ThruCut N-S (85)

Greyed out cells indicate that the intersection control type may not be viable due to right-of-way, cost, or other factors

SSI Legend	
	90-100
	80-89
	70-79
	< 70

APPENDIX D – STAGE 2 ICE ANALYSIS

CHULUOTA ROAD & LAKE PICKETT ROAD



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	69	60	182	115	146	9	238	494	89	4	460	245
Future Volume (vph)	69	60	182	115	146	9	238	494	89	4	460	245
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	75		0	100		0	465		425	400		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.887			0.992				0.850		0.948	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1752	1636	0	1752	1830	0	1752	1845	1568	1752	1749	0
Flt Permitted	0.543			0.292			0.090			0.368		
Satd. Flow (perm)	1002	1636	0	539	1830	0	166	1845	1568	679	1749	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		134			3				184		32	
Link Speed (mph)		45			45			50			50	
Link Distance (ft)		743			754			1072			892	
Travel Time (s)		11.3			11.4			14.6			12.2	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Adj. Flow (vph)	73	63	192	121	154	9	251	520	94	4	484	258
Shared Lane Traffic (%)												
Lane Group Flow (vph)	73	255	0	121	163	0	251	520	94	4	742	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	D.P+P	NA	
Protected Phases	3	8		7	4		1	6		5	2	

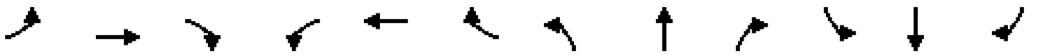
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	8			4			6		6	6		
Detector Phase	3	8		7	4		1	6	6	5	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	16.0	16.0	5.0	16.0	
Minimum Split (s)	11.8	24.8		11.0	24.0		12.1	25.1	25.1	12.1	25.1	
Total Split (s)	11.9	24.9		11.0	24.0		17.7	52.0	52.0	12.1	46.4	
Total Split (%)	11.9%	24.9%		11.0%	24.0%		17.7%	52.0%	52.0%	12.1%	46.4%	
Maximum Green (s)	5.1	18.1		5.0	18.0		10.6	44.9	44.9	5.0	39.3	
Yellow Time (s)	4.8	4.8		4.0	4.0		5.1	5.1	5.1	5.1	5.1	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.8	6.8		6.0	6.0		7.1	7.1	7.1	7.1	7.1	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	None		None	None		None	Min	Min	None	Min	
Walk Time (s)		7.0			7.0			7.0	7.0		7.0	
Flash Don't Walk (s)		11.0			11.0			11.0	11.0		11.0	
Pedestrian Calls (#/hr)		0			0			0	0		0	
Act Effct Green (s)	17.9	12.8		19.2	15.3		56.8	54.8	54.8	55.8	39.4	
Actuated g/C Ratio	0.19	0.13		0.20	0.16		0.60	0.58	0.58	0.59	0.42	
v/c Ratio	0.32	0.76		0.70	0.55		0.91	0.49	0.10	0.01	1.00	
Control Delay (s/veh)	31.4	33.4		52.1	44.4		58.9	15.7	0.2	9.3	61.1	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	31.4	33.4		52.1	44.4		58.9	15.7	0.2	9.3	61.1	
LOS	C	C		D	D		E	B	A	A	E	
Approach Delay (s/veh)		32.9			47.7			26.5			60.9	
Approach LOS		C			D			C			E	
90th %ile Green (s)	5.1	18.1		5.0	18.0		10.6	44.9	44.9	5.0	39.3	
90th %ile Term Code	Max	Max		Max	Max		Max	Hold	Hold	Max	Max	
70th %ile Green (s)	5.1	16.3		5.0	16.2		10.6	57.0	57.0	0.0	39.3	
70th %ile Term Code	Max	Gap		Max	Hold		Max	Hold	Hold	Skip	Max	
50th %ile Green (s)	5.1	13.7		5.0	13.6		10.6	57.0	57.0	0.0	39.3	
50th %ile Term Code	Max	Hold		Max	Gap		Max	Hold	Hold	Skip	Max	
30th %ile Green (s)	5.1	11.5		5.0	11.4		10.6	57.0	57.0	0.0	39.3	
30th %ile Term Code	Max	Hold		Max	Gap		Max	Hold	Hold	Skip	Max	
10th %ile Green (s)	0.0	5.5		5.0	17.3		10.6	57.0	57.0	0.0	39.3	
10th %ile Term Code	Skip	Gap		Max	Hold		Max	Hold	Hold	Skip	Max	
Stops (vph)	53	114		100	137		128	290	0	3	561	
Fuel Used(gal)	1	4		3	4		6	9	1	0	21	
CO Emissions (g/hr)	100	296		212	270		450	656	43	5	1494	
NOx Emissions (g/hr)	19	58		41	53		88	128	8	1	291	
VOC Emissions (g/hr)	23	69		49	63		104	152	10	1	346	
Dilemma Vehicles (#)	0	11		0	7		0	21	0	0	34	
Queue Length 50th (ft)	34	69		58	93		98	164	0	1	~434	
Queue Length 95th (ft)	69	155		#121	158		#266	360	0	6	#735	
Internal Link Dist (ft)		663			674			992			812	
Turn Bay Length (ft)	75			100			465		425	400		
Base Capacity (vph)	230	421		173	350		276	1065	983	455	744	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	
Reduced v/c Ratio	0.32	0.61		0.70	0.47		0.91	0.49	0.10	0.01	1.00	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 94.9			
Natural Cycle: 100			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 1.00			
Intersection Signal Delay (s/veh): 41.7		Intersection LOS: D	
Intersection Capacity Utilization 95.6%		ICU Level of Service F	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 100			
70th %ile Actuated Cycle: 98.2			
50th %ile Actuated Cycle: 95.6			
30th %ile Actuated Cycle: 93.4			
10th %ile Actuated Cycle: 87.4			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 3: Chuluota Rd & Lake Pickett Rd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	69	60	182	115	146	9	238	494	89	4	460	245
Future Volume (veh/h)	69	60	182	115	146	9	238	494	89	4	460	245
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	73	63	192	121	154	9	251	520	94	4	484	258
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	263	70	214	186	295	17	261	924	783	324	451	241
Arrive On Green	0.05	0.17	0.17	0.05	0.17	0.17	0.11	0.50	0.50	0.01	0.40	0.40
Sat Flow, veh/h	1767	404	1230	1767	1736	101	1767	1856	1572	1767	1139	607
Grp Volume(v), veh/h	73	0	255	121	0	163	251	520	94	4	0	742
Grp Sat Flow(s),veh/h/ln	1767	0	1634	1767	0	1837	1767	1856	1572	1767	0	1746
Q Serve(g_s), s	3.3	0.0	15.1	5.0	0.0	8.0	9.9	19.4	3.2	0.1	0.0	39.3
Cycle Q Clear(g_c), s	3.3	0.0	15.1	5.0	0.0	8.0	9.9	19.4	3.2	0.1	0.0	39.3
Prop In Lane	1.00		0.75	1.00		0.06	1.00		1.00	1.00		0.35
Lane Grp Cap(c), veh/h	263	0	285	186	0	312	261	924	783	324	0	692
V/C Ratio(X)	0.28	0.00	0.90	0.65	0.00	0.52	0.96	0.56	0.12	0.01	0.00	1.07
Avail Cap(c_a), veh/h	271	0	298	186	0	333	261	924	783	404	0	692
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	32.1	0.0	40.1	35.1	0.0	37.5	28.9	17.4	13.3	14.2	0.0	29.9
Incr Delay (d2), s/veh	0.6	0.0	26.8	7.8	0.0	1.4	44.5	0.8	0.1	0.0	0.0	55.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	0.0	7.9	2.7	0.0	3.6	7.0	7.4	1.0	0.0	0.0	25.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	32.7	0.0	66.8	43.0	0.0	38.9	73.4	18.2	13.4	14.2	0.0	85.2
LnGrp LOS	C		E	D		D	E	B	B	B		F
Approach Vol, veh/h		328			284			865			746	
Approach Delay, s/veh		59.2			40.6			33.7			84.8	
Approach LOS		E			D			C			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.7	46.4	11.4	23.6	7.6	56.5	11.0	24.1
Change Period (Y+Rc), s	7.1	7.1	6.8	* 6.8	7.1	7.1	6.0	6.8
Max Green Setting (Gmax), s	10.6	39.3	5.1	* 18	5.0	44.9	5.0	18.1
Max Q Clear Time (g_c+I1), s	11.9	41.3	5.3	10.0	2.1	21.4	7.0	17.1
Green Ext Time (p_c), s	0.0	0.0	0.0	0.4	0.0	3.2	0.0	0.1

Intersection Summary	
HCM 7th Control Delay, s/veh	55.5
HCM 7th LOS	E

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	207	162	308	69	72	6	138	513	130	20	574	142
Future Volume (vph)	207	162	308	69	72	6	138	513	130	20	574	142
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	75		0	100		0	465		425	400		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.902			0.989				0.850		0.970	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1752	1664	0	1752	1824	0	1752	1845	1568	1752	1789	0
Flt Permitted	0.508			0.217			0.069			0.300		
Satd. Flow (perm)	937	1664	0	400	1824	0	127	1845	1568	553	1789	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		71			3				199		12	
Link Speed (mph)		45			45			50			50	
Link Distance (ft)		743			754			1072			892	
Travel Time (s)		11.3			11.4			14.6			12.2	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Adj. Flow (vph)	218	171	324	73	76	6	145	540	137	21	604	149
Shared Lane Traffic (%)												
Lane Group Flow (vph)	218	495	0	73	82	0	145	540	137	21	753	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	D.P+P	NA	
Protected Phases	3	8		7	4		1	6		5	2	

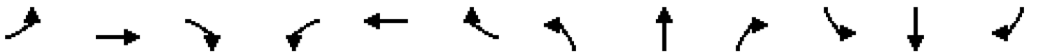
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	8			4			6		6	6		
Detector Phase	3	8		7	4		1	6	6	5	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	16.0	16.0	5.0	16.0	
Minimum Split (s)	11.8	24.8		11.0	24.0		12.1	25.1	25.1	12.1	25.1	
Total Split (s)	22.6	41.0		11.0	29.4		15.5	65.9	65.9	12.1	62.5	
Total Split (%)	17.4%	31.5%		8.5%	22.6%		11.9%	50.7%	50.7%	9.3%	48.1%	
Maximum Green (s)	15.8	34.2		5.0	23.4		8.4	58.8	58.8	5.0	55.4	
Yellow Time (s)	4.8	4.8		4.0	4.0		5.1	5.1	5.1	5.1	5.1	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.8	6.8		6.0	6.0		7.1	7.1	7.1	7.1	7.1	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	None		None	None		None	Min	Min	None	Min	
Walk Time (s)		7.0			7.0			7.0	7.0		7.0	
Flash Don't Walk (s)		11.0			11.0			11.0	11.0		11.0	
Pedestrian Calls (#/hr)		0			0			0	0		0	
Act Effct Green (s)	42.9	34.3		23.4	19.9		67.6	62.7	62.7	65.6	54.2	
Actuated g/C Ratio	0.34	0.27		0.18	0.16		0.53	0.50	0.50	0.52	0.43	
v/c Ratio	0.49	0.98		0.57	0.28		0.83	0.59	0.16	0.06	0.97	
Control Delay (s/veh)	36.0	76.7		50.4	47.2		61.2	27.9	0.9	14.3	62.4	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	36.0	76.7		50.4	47.2		61.2	27.9	0.9	14.3	62.4	
LOS	D	E		D	D		E	C	A	B	E	
Approach Delay (s/veh)		64.3			48.7			29.3			61.1	
Approach LOS		E			D			C			E	
90th %ile Green (s)	15.8	34.2		5.0	23.4		8.4	58.8	58.8	5.0	55.4	
90th %ile Term Code	Max	Max		Max	Hold		Max	Hold	Hold	Max	Max	
70th %ile Green (s)	15.8	34.2		5.0	23.4		8.4	58.8	58.8	5.0	55.4	
70th %ile Term Code	Max	Max		Max	Hold		Max	Hold	Hold	Max	Max	
50th %ile Green (s)	15.8	34.2		5.0	23.4		8.4	58.8	58.8	5.0	55.4	
50th %ile Term Code	Max	Max		Max	Hold		Max	Hold	Hold	Max	Max	
30th %ile Green (s)	15.0	34.2		5.0	24.2		8.4	70.9	70.9	0.0	55.4	
30th %ile Term Code	Gap	Max		Max	Hold		Max	Hold	Hold	Skip	Max	
10th %ile Green (s)	34.2	34.2		0.0	0.0		8.4	64.9	64.9	0.0	49.4	
10th %ile Term Code	Hold	Max		Skip	Skip		Max	Hold	Hold	Skip	Gap	
Stops (vph)	151	354		57	63		73	366	2	10	611	
Fuel Used(gal)	4	14		2	2		4	12	1	0	23	
CO Emissions (g/hr)	307	979		123	134		264	841	66	23	1574	
NOx Emissions (g/hr)	60	191		24	26		51	164	13	4	306	
VOC Emissions (g/hr)	71	227		28	31		61	195	15	5	365	
Dilemma Vehicles (#)	0	17		0	3		0	16	0	0	26	
Queue Length 50th (ft)	136	~379		41	58		70	346	0	8	609	
Queue Length 95th (ft)	207	#611		77	107		#192	473	7	21	#885	
Internal Link Dist (ft)		663			674			992			812	
Turn Bay Length (ft)	75			100			465		425	400		
Base Capacity (vph)	445	503		127	342		175	913	877	334	792	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	
Reduced v/c Ratio	0.49	0.98		0.57	0.24		0.83	0.59	0.16	0.06	0.95	

Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 126.6			
Natural Cycle: 130			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.98			
Intersection Signal Delay (s/veh): 50.6		Intersection LOS: D	
Intersection Capacity Utilization 100.6%		ICU Level of Service G	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 130			
70th %ile Actuated Cycle: 130			
50th %ile Actuated Cycle: 130			
30th %ile Actuated Cycle: 130			
10th %ile Actuated Cycle: 113			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 3: Chuluota Rd & Lake Pickett Rd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	207	162	308	69	72	6	138	513	130	20	574	142
Future Volume (veh/h)	207	162	308	69	72	6	138	513	130	20	574	142
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	218	171	324	73	76	6	145	540	137	21	604	149
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	445	151	287	124	312	25	172	869	736	281	615	152
Arrive On Green	0.11	0.26	0.26	0.04	0.18	0.18	0.06	0.47	0.47	0.02	0.43	0.43
Sat Flow, veh/h	1767	573	1087	1767	1697	134	1767	1856	1572	1767	1437	355
Grp Volume(v), veh/h	218	0	495	73	0	82	145	540	137	21	0	753
Grp Sat Flow(s),veh/h/ln	1767	0	1660	1767	0	1831	1767	1856	1572	1767	0	1792
Q Serve(g_s), s	12.5	0.0	34.2	4.3	0.0	5.0	5.9	28.3	6.6	0.8	0.0	53.7
Cycle Q Clear(g_c), s	12.5	0.0	34.2	4.3	0.0	5.0	5.9	28.3	6.6	0.8	0.0	53.7
Prop In Lane	1.00		0.65	1.00		0.07	1.00		1.00	1.00		0.20
Lane Grp Cap(c), veh/h	445	0	438	124	0	337	172	869	736	281	0	767
V/C Ratio(X)	0.49	0.00	1.13	0.59	0.00	0.24	0.84	0.62	0.19	0.07	0.00	0.98
Avail Cap(c_a), veh/h	461	0	438	124	0	337	179	869	736	313	0	767
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	35.2	0.0	47.6	43.0	0.0	45.2	30.2	25.8	20.1	20.3	0.0	36.6
Incr Delay (d2), s/veh	0.8	0.0	83.1	7.2	0.0	0.4	27.8	1.4	0.1	0.1	0.0	28.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.4	0.0	23.8	2.1	0.0	2.2	3.6	12.0	2.4	0.3	0.0	27.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	36.0	0.0	130.8	50.2	0.0	45.5	58.0	27.2	20.2	20.4	0.0	64.6
LnGrp LOS	D		F	D		D	E	C	C	C		E
Approach Vol, veh/h		713			155			822			774	
Approach Delay, s/veh		101.8			47.7			31.5			63.4	
Approach LOS		F			D			C			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.0	62.5	21.4	30.6	9.8	67.7	11.0	41.0
Change Period (Y+Rc), s	7.1	7.1	6.8	* 6.8	7.1	7.1	6.0	6.8
Max Green Setting (Gmax), s	8.4	55.4	15.8	* 23	5.0	58.8	5.0	34.2
Max Q Clear Time (g_c+I1), s	7.9	55.7	14.5	7.0	2.8	30.3	6.3	36.2
Green Ext Time (p_c), s	0.0	0.0	0.1	0.3	0.0	3.6	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	62.9
HCM 7th LOS	E

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Intersection Delay, s/veh	23.9
Intersection LOS	C

Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	328	284	865	746
Demand Flow Rate, veh/h	338	293	892	769
Vehicles Circulating, veh/h	628	870	144	543
Vehicles Exiting, veh/h	684	69	624	620
Ped Vol Crossing Leg, #/h	1	1	1	1
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	7.9	15.9	11.5	48.4
Approach LOS	A	C	B	E

Lane	Left	Bypass	Left	Left	Bypass	Left
Designated Moves	LT	R	LTR	LT	R	LTR
Assumed Moves	LT		LTR	LT		LTR
RT Channelized		Yield			Yield	
Lane Util	1.000		1.000	1.000		1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976	4.976	4.976
A (Intercept)	1380	1380	1380	1380	1380	1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3	1.02e-3	1.02e-3	1.02e-3
Entry Flow, veh/h	140	198	293	795	97	769
Cap Entry Lane, veh/h	727	730	568	1191	1286	793
Entry HV Adj Factor	0.972	0.971	0.971	0.970	0.971	0.971
Flow Entry, veh/h	136	192	284	771	94	746
Cap Entry, veh/h	707	709	551	1156	1248	770
V/C Ratio	0.193	0.271	0.516	0.667	0.075	0.970
Control Delay, s/veh	7.3	8.3	15.9	12.5	3.5	48.4
LOS	A	A	C	B	A	E
95th %tile Queue, veh	1	1	3	5	0	15

MOVEMENT SUMMARY

Site: 101 [Chuluota Rd at Lake Pickett Rd AM Design (2048) No-Build (2-lane) Roundabout (Site Folder: General)]

Roundabout 2048 NB AM

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] ft	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed mph
South: Chuluota Rd NB															
3	L2	All MCs	251	3.5	251	3.5	0.522	13.0	LOS B	4.8	124.0	0.50	0.54	0.50	38.1
8	T1	All MCs	520	3.5	520	3.5	0.522	6.2	LOS A	4.8	124.0	0.50	0.54	0.50	39.2
18	R2	All MCs	94	3.5	94	3.5	0.060	5.3	LOS A	0.4	9.0	0.22	0.49	0.22	41.3
Approach			864	3.5	864	3.5	0.522	8.1	LOS A	4.8	124.0	0.47	0.53	0.47	39.1
East: Lake Pickett Rd WB															
1	L2	All MCs	121	3.5	121	3.5	0.449	19.3	LOS B	3.6	91.9	0.92	0.82	1.03	32.7
6	T1	All MCs	154	3.5	154	3.5	0.449	12.6	LOS B	3.6	91.9	0.92	0.82	1.03	33.6
16	R2	All MCs	9	3.5	9	3.5	0.449	12.6	LOS B	3.6	91.9	0.92	0.82	1.03	33.2
Approach			284	3.5	284	3.5	0.449	15.5	LOS B	3.6	91.9	0.92	0.82	1.03	33.2
North: Chuluota Rd SB															
7	L2	All MCs	4	3.5	4	3.5	0.852	26.4	LOS C	15.0	384.5	1.00	1.08	1.67	32.7
4	T1	All MCs	484	3.5	484	3.5	0.852	19.7	LOS B	15.0	384.5	1.00	1.08	1.67	33.6
14	R2	All MCs	258	3.5	258	3.5	0.852	19.5	LOS B	15.0	384.5	1.00	1.08	1.67	33.2
Approach			746	3.5	746	3.5	0.852	19.6	LOS B	15.0	384.5	1.00	1.08	1.67	33.4
West: Lake Pickett Rd EB															
5	L2	All MCs	73	3.5	73	3.5	0.140	13.9	LOS B	1.0	25.9	0.74	0.67	0.74	34.6
2	T1	All MCs	63	3.5	63	3.5	0.140	7.2	LOS A	1.0	25.9	0.74	0.67	0.74	35.5
12	R2	All MCs	192	3.5	192	3.5	0.196	7.2	LOS A	1.5	37.3	0.76	0.65	0.76	37.0
Approach			327	3.5	327	3.5	0.196	8.7	LOS A	1.5	37.3	0.75	0.66	0.75	36.1
All Vehicles			2222	3.5	2222	3.5	0.852	13.0	LOS B	15.0	384.5	0.75	0.77	0.99	35.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA HCM.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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Intersection	
Intersection Delay, s/veh	17.4
Intersection LOS	C

Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	713	155	822	774
Demand Flow Rate, veh/h	735	159	846	797
Vehicles Circulating, veh/h	719	930	423	302
Vehicles Exiting, veh/h	380	198	697	787
Ped Vol Crossing Leg, #/h	1	1	1	1
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	15.1	11.3	18.6	19.5
Approach LOS	C	B	C	C

Lane	Left	Bypass	Left	Left	Bypass	Left
Designated Moves	LT	R	LTR	LT	R	LTR
Assumed Moves	LT		LTR	LT		LTR
RT Channelized		Yield			Yield	
Lane Util	1.000		1.000	1.000		1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976	4.976	4.976
A (Intercept)	1380	1380	1380	1380	1380	1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3	1.02e-3	1.02e-3	1.02e-3
Entry Flow, veh/h	401	334	159	705	141	797
Cap Entry Lane, veh/h	663	678	534	896	1128	1014
Entry HV Adj Factor	0.970	0.971	0.973	0.971	0.971	0.971
Flow Entry, veh/h	389	324	155	685	137	774
Cap Entry, veh/h	643	658	520	871	1095	985
V/C Ratio	0.605	0.492	0.297	0.787	0.125	0.786
Control Delay, s/veh	16.8	13.1	11.3	21.5	4.4	19.5
LOS	C	B	B	C	A	C
95th %tile Queue, veh	4	3	1	8	0	8

MOVEMENT SUMMARY

Site: 101 [Chuluota Rd at Lake Pickett Rd PM Design (2048) No-Build (2-lane) Roundabout (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

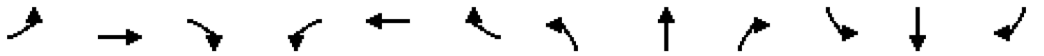
New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] ft	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed mph
South: Chuluota Rd NB															
3	L2	All MCs	145	3.5	145	3.5	0.585	15.1	LOS B	5.8	150.0	0.82	0.68	0.86	37.1
8	T1	All MCs	540	3.5	540	3.5	0.585	8.3	LOS A	5.8	150.0	0.82	0.68	0.86	38.2
18	R2	All MCs	137	3.5	137	3.5	0.097	5.8	LOS A	0.6	15.3	0.39	0.52	0.39	40.7
Approach			822	3.5	822	3.5	0.585	9.1	LOS A	5.8	150.0	0.75	0.65	0.78	38.4
East: Lake Pickett Rd WB															
1	L2	All MCs	73	3.5	73	3.5	0.282	18.3	LOS B	2.0	51.9	0.91	0.78	0.91	33.1
6	T1	All MCs	76	3.5	76	3.5	0.282	11.6	LOS B	2.0	51.9	0.91	0.78	0.91	33.9
16	R2	All MCs	6	3.5	6	3.5	0.282	11.6	LOS B	2.0	51.9	0.91	0.78	0.91	33.6
Approach			155	3.5	155	3.5	0.282	14.8	LOS B	2.0	51.9	0.91	0.78	0.91	33.5
North: Chuluota Rd SB															
7	L2	All MCs	21	3.5	21	3.5	0.718	16.8	LOS B	8.8	226.6	0.83	0.70	0.96	37.6
4	T1	All MCs	604	3.5	604	3.5	0.718	10.0	LOS B	8.8	226.6	0.83	0.70	0.96	38.7
14	R2	All MCs	149	3.5	149	3.5	0.718	9.8	LOS A	8.8	226.6	0.83	0.70	0.96	38.2
Approach			775	3.5	775	3.5	0.718	10.2	LOS B	8.8	226.6	0.83	0.70	0.96	38.6
West: Lake Pickett Rd EB															
5	L2	All MCs	218	3.5	218	3.5	0.435	15.2	LOS B	3.7	94.5	0.90	0.73	0.90	33.9
2	T1	All MCs	171	3.5	171	3.5	0.435	8.5	LOS A	3.7	94.5	0.90	0.73	0.90	34.8
12	R2	All MCs	324	3.5	324	3.5	0.354	8.1	LOS A	2.9	73.6	0.86	0.69	0.86	36.8
Approach			713	3.5	713	3.5	0.435	10.4	LOS B	3.7	94.5	0.88	0.71	0.88	35.4
All Vehicles			2464	3.5	2464	3.5	0.718	10.2	LOS B	8.8	226.6	0.82	0.69	0.87	37.2

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA HCM.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑	↱		↑	↱		↑	↱		↑	↱
Traffic Volume (vph)	0	133	297	0	499	78	0	494	327	0	460	249
Future Volume (vph)	0	133	297	0	499	78	0	494	327	0	460	249
Ideal Flow (vphpl)	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950
Storage Length (ft)	0		200	0		200	0		400	0		400
Storage Lanes	0		1	0		1	0		1	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected												
Satd. Flow (prot)	0	1912	1625	0	1912	1625	0	1912	1625	0	1912	1625
Flt Permitted												
Satd. Flow (perm)	0	1912	1625	0	1912	1625	0	1912	1625	0	1912	1625
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			*60			*60			*60			*60
Link Speed (mph)		50			50			55			55	
Link Distance (ft)		990			1052			1271			1196	
Travel Time (s)		13.5			14.3			15.8			14.8	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	140	313	0	525	82	0	520	344	0	484	262
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	140	313	0	525	82	0	520	344	0	484	262
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2	1		2	1		2	1		2	1
Detector Template		Thru	Right		Thru	Right		Thru	Right		Thru	Right
Leading Detector (ft)		100	20		100	20		100	20		100	20
Trailing Detector (ft)		0	0		0	0		0	0		0	0
Detector 1 Position(ft)		0	0		0	0		0	0		0	0
Detector 1 Size(ft)		6	20		6	20		6	20		6	20
Detector 1 Type		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Queue (s)		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Delay (s)		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type		NA	Perm		NA	Perm		NA	Perm		NA	Perm
Protected Phases		8			4			6			2	
Permitted Phases			8			4			6			2



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase		8	8		4	4		6	6		2	2
Switch Phase												
Minimum Initial (s)		5.0	5.0		5.0	5.0		16.0	16.0		16.0	16.0
Minimum Split (s)		29.0	29.0		29.0	29.0		25.0	25.0		25.0	25.0
Total Split (s)		33.0	33.0		33.0	33.0		42.0	42.0		42.0	42.0
Total Split (%)		44.0%	44.0%		44.0%	44.0%		56.0%	56.0%		56.0%	56.0%
Maximum Green (s)		26.0	26.0		26.0	26.0		35.0	35.0		35.0	35.0
Yellow Time (s)		5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0
All-Red Time (s)		2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Total Lost Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0
Recall Mode		None	None		None	None		Min	Min		Min	Min
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Don't Walk (s)		11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	0
Act Effct Green (s)		20.6	20.6		20.6	20.6		23.6	23.6		23.6	23.6
Actuated g/C Ratio		0.35	0.35		0.35	0.35		0.40	0.40		0.40	0.40
v/c Ratio		0.21	0.51		0.78	0.13		0.68	0.50		0.63	0.38
Control Delay (s/veh)		15.7	16.5		28.2	7.4		20.0	13.9		18.8	11.6
Queue Delay		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Total Delay (s/veh)		15.7	16.5		28.2	7.4		20.0	13.9		18.8	11.6
LOS		B	B		C	A		C	B		B	B
Approach Delay (s/veh)		16.2			25.4			17.6			16.3	
Approach LOS		B			C			B			B	
90th %ile Green (s)		26.0	26.0		26.0	26.0		35.0	35.0		35.0	35.0
90th %ile Term Code		Hold	Hold		Max	Max		Max	Max		Hold	Hold
70th %ile Green (s)		26.0	26.0		26.0	26.0		28.0	28.0		28.0	28.0
70th %ile Term Code		Hold	Hold		Max	Max		Gap	Gap		Hold	Hold
50th %ile Green (s)		22.4	22.4		22.4	22.4		23.3	23.3		23.3	23.3
50th %ile Term Code		Hold	Hold		Gap	Gap		Gap	Gap		Hold	Hold
30th %ile Green (s)		17.0	17.0		17.0	17.0		17.8	17.8		17.8	17.8
30th %ile Term Code		Hold	Hold		Gap	Gap		Gap	Gap		Hold	Hold
10th %ile Green (s)		12.8	12.8		12.8	12.8		16.0	16.0		16.0	16.0
10th %ile Term Code		Hold	Hold		Gap	Gap		Min	Min		Min	Min
Stops (vph)		83	174		396	23		368	182		333	117
Fuel Used(gal)		3	6		12	1		13	7		11	5
CO Emissions (g/hr)		177	387		858	69		897	485		799	325
NOx Emissions (g/hr)		34	75		167	13		174	94		155	63
VOC Emissions (g/hr)		41	90		199	16		208	112		185	75
Dilemma Vehicles (#)		8	0		36	0		36	0		33	0
Queue Length 50th (ft)		33	65		158	5		151	73		137	49
Queue Length 95th (ft)		85	165		#371	34		262	147		239	104
Internal Link Dist (ft)		910			972			1191			1116	
Turn Bay Length (ft)			200			200			400			400
Base Capacity (vph)		881	781		881	781		1186	1031		1186	1031
Starvation Cap Reductn		0	0		0	0		0	0		0	0

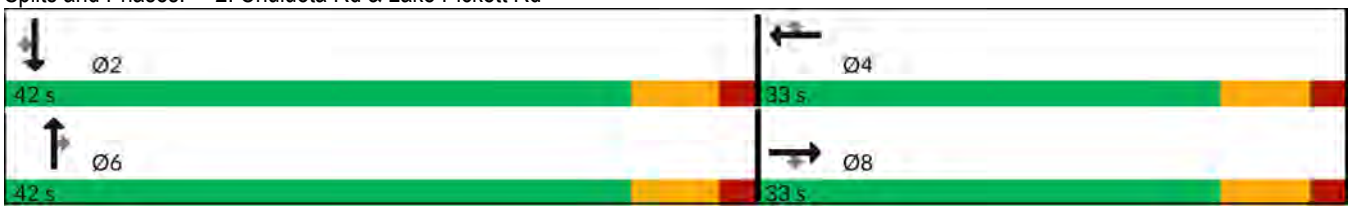
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn		0	0		0	0		0	0		0	0
Storage Cap Reductn		0	0		0	0		0	0		0	0
Reduced v/c Ratio		0.16	0.40		0.60	0.10		0.44	0.33		0.41	0.25

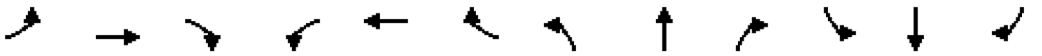
Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 58.9			
Natural Cycle: 60			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.78			
Intersection Signal Delay (s/veh): 18.8		Intersection LOS: B	
Intersection Capacity Utilization 62.6%		ICU Level of Service B	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 75			
70th %ile Actuated Cycle: 68			
50th %ile Actuated Cycle: 59.7			
30th %ile Actuated Cycle: 48.8			
10th %ile Actuated Cycle: 42.8			

* User Entered Value

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 2: Chuluota Rd & Lake Pickett Rd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑	↱		↑	↱		↑	↱		↑	↱
Traffic Volume (veh/h)	0	133	297	0	499	78	0	494	327	0	460	249
Future Volume (veh/h)	0	133	297	0	499	78	0	494	327	0	460	249
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	0	1920	1920	0	1920	1920	0	1920	1920	0	1920	1920
Adj Flow Rate, veh/h	0	140	313	0	525	82	0	520	344	0	484	262
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	2	2	0	2	2	0	2	2	0	2	2
Cap, veh/h	0	659	558	0	659	558	0	696	590	0	696	590
Arrive On Green	0.00	0.34	0.34	0.00	0.34	0.34	0.00	0.36	0.36	0.00	0.36	0.36
Sat Flow, veh/h	0	1920	1627	0	1920	1627	0	1920	1627	0	1920	1627
Grp Volume(v), veh/h	0	140	313	0	525	82	0	520	344	0	484	262
Grp Sat Flow(s),veh/h/ln	0	1920	1627	0	1920	1627	0	1920	1627	0	1920	1627
Q Serve(g_s), s	0.0	2.5	7.4	0.0	11.8	1.7	0.0	11.3	8.1	0.0	10.2	5.8
Cycle Q Clear(g_c), s	0.0	2.5	7.4	0.0	11.8	1.7	0.0	11.3	8.1	0.0	10.2	5.8
Prop In Lane	0.00		1.00	0.00		1.00	0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h	0	659	558	0	659	558	0	696	590	0	696	590
V/C Ratio(X)	0.00	0.21	0.56	0.00	0.80	0.15	0.00	0.75	0.58	0.00	0.70	0.44
Avail Cap(c_a), veh/h	0	1049	889	0	1049	889	0	1412	1197	0	1412	1197
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	11.1	12.7	0.0	14.1	10.8	0.0	13.3	12.3	0.0	12.9	11.5
Incr Delay (d2), s/veh	0.0	0.2	0.9	0.0	2.3	0.1	0.0	1.6	0.9	0.0	1.3	0.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.8	2.0	0.0	3.9	0.4	0.0	3.5	2.1	0.0	3.1	1.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	11.2	13.6	0.0	16.4	10.9	0.0	14.9	13.2	0.0	14.2	12.0
LnGrp LOS		B	B		B	B		B	B		B	B
Approach Vol, veh/h		453			607			864			746	
Approach Delay, s/veh		12.9			15.7			14.2			13.4	
Approach LOS		B			B			B			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		24.2		23.3		24.2		23.3				
Change Period (Y+Rc), s		7.0		7.0		7.0		7.0				
Max Green Setting (Gmax), s		35.0		26.0		35.0		26.0				
Max Q Clear Time (g_c+I1), s		12.2		13.8		13.3		9.4				
Green Ext Time (p_c), s		3.4		2.6		4.0		1.5				

Intersection Summary												
HCM 7th Control Delay, s/veh			14.1									
HCM 7th LOS			B									

Intersection	
Intersection Delay, s/veh	6.2
Intersection LOS	A

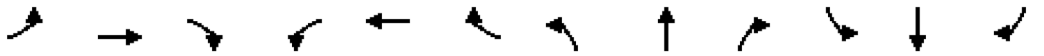
Approach	EB	WB	NB	SB
Entry Lanes	1	1	0	0
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	484	284	0	0
Demand Flow Rate, veh/h	493	290	0	0
Vehicles Circulating, veh/h	0	329	493	619
Vehicles Exiting, veh/h	619	164	0	0
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	5.9	6.7	0.0	0.0
Approach LOS	A	A	-	-

Lane	Left	Left
Designated Moves	LT	T
Assumed Moves	LT	T
RT Channelized		
Lane Util	1.000	1.000
Follow-Up Headway, s	2.609	2.609
Critical Headway, s	4.976	4.976
A (Intercept)	1380	1380
B (Slope)	1.02e-3	1.02e-3
Entry Flow, veh/h	493	290
Cap Entry Lane, veh/h	1380	987
Entry HV Adj Factor	0.980	0.980
Flow Entry, veh/h	483	284
Cap Entry, veh/h	1353	967
V/C Ratio	0.357	0.294
Control Delay, s/veh	5.9	6.7
LOS	A	A
95th %tile Queue, veh	2	1

Intersection	
Intersection Delay, s/veh	8.1
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	1	1	0	0
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	327	787	0	0
Demand Flow Rate, veh/h	334	803	0	0
Vehicles Circulating, veh/h	128	0	462	803
Vehicles Exiting, veh/h	675	462	0	0
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	5.6	9.2	0.0	0.0
Approach LOS	A	A	-	-

Lane	Left	Left
Designated Moves	T	LT
Assumed Moves	T	LT
RT Channelized		
Lane Util	1.000	1.000
Follow-Up Headway, s	2.609	2.609
Critical Headway, s	4.976	4.976
A (Intercept)	1380	1380
B (Slope)	1.02e-3	1.02e-3
Entry Flow, veh/h	334	803
Cap Entry Lane, veh/h	1211	1380
Entry HV Adj Factor	0.980	0.980
Flow Entry, veh/h	327	787
Cap Entry, veh/h	1187	1353
V/C Ratio	0.276	0.582
Control Delay, s/veh	5.6	9.2
LOS	A	A
95th %tile Queue, veh	1	4



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑	↱		↑	↱		↑	↱		↑	↱
Traffic Volume (vph)	0	389	377	0	279	213	0	513	268	0	574	162
Future Volume (vph)	0	389	377	0	279	213	0	513	268	0	574	162
Ideal Flow (vphpl)	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950
Storage Length (ft)	0		200	0		200	0		400	0		400
Storage Lanes	0		1	0		1	0		1	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected												
Satd. Flow (prot)	0	1912	1625	0	1912	1625	0	1912	1625	0	1912	1625
Flt Permitted												
Satd. Flow (perm)	0	1912	1625	0	1912	1625	0	1912	1625	0	1912	1625
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			*60			*60			*60			*60
Link Speed (mph)		50			50			55			55	
Link Distance (ft)		990			1052			1271			1196	
Travel Time (s)		13.5			14.3			15.8			14.8	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	409	397	0	294	224	0	540	282	0	604	171
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	409	397	0	294	224	0	540	282	0	604	171
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2	1		2	1		2	1		2	1
Detector Template		Thru	Right		Thru	Right		Thru	Right		Thru	Right
Leading Detector (ft)		100	20		100	20		100	20		100	20
Trailing Detector (ft)		0	0		0	0		0	0		0	0
Detector 1 Position(ft)		0	0		0	0		0	0		0	0
Detector 1 Size(ft)		6	20		6	20		6	20		6	20
Detector 1 Type		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Queue (s)		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Delay (s)		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type		NA	Perm		NA	Perm		NA	Perm		NA	Perm
Protected Phases		8			4			6			2	
Permitted Phases			8			4			6			2



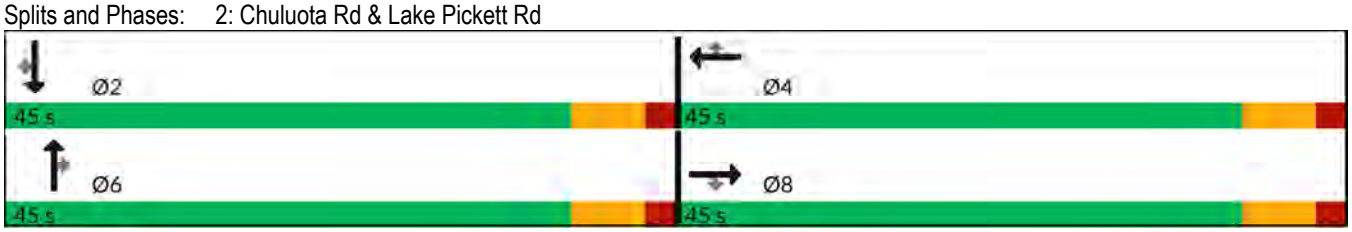
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase		8	8		4	4		6	6		2	2
Switch Phase												
Minimum Initial (s)		5.0	5.0		5.0	5.0		16.0	16.0		16.0	16.0
Minimum Split (s)		29.0	29.0		29.0	29.0		25.0	25.0		25.0	25.0
Total Split (s)		45.0	45.0		45.0	45.0		45.0	45.0		45.0	45.0
Total Split (%)		50.0%	50.0%		50.0%	50.0%		50.0%	50.0%		50.0%	50.0%
Maximum Green (s)		38.0	38.0		38.0	38.0		38.0	38.0		38.0	38.0
Yellow Time (s)		5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0
All-Red Time (s)		2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Total Lost Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0
Recall Mode		None	None		None	None		Min	Min		Min	Min
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Don't Walk (s)		11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	0
Act Effct Green (s)		21.0	21.0		21.0	21.0		25.6	25.6		25.6	25.6
Actuated g/C Ratio		0.34	0.34		0.34	0.34		0.42	0.42		0.42	0.42
v/c Ratio		0.63	0.67		0.45	0.38		0.68	0.40		0.76	0.24
Control Delay (s/veh)		22.4	21.4		18.9	13.8		20.8	12.6		23.8	9.9
Queue Delay		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Total Delay (s/veh)		22.4	21.4		18.9	13.8		20.8	12.6		23.8	9.9
LOS		C	C		B	B		C	B		C	A
Approach Delay (s/veh)		21.9			16.7			18.0			20.7	
Approach LOS		C			B			B			C	
90th %ile Green (s)		35.0	35.0		35.0	35.0		38.0	38.0		38.0	38.0
90th %ile Term Code		Gap	Gap		Hold	Hold		Max	Max		Max	Max
70th %ile Green (s)		26.3	26.3		26.3	26.3		31.5	31.5		31.5	31.5
70th %ile Term Code		Gap	Gap		Hold	Hold		Hold	Hold		Gap	Gap
50th %ile Green (s)		20.7	20.7		20.7	20.7		24.4	24.4		24.4	24.4
50th %ile Term Code		Gap	Gap		Hold	Hold		Hold	Hold		Gap	Gap
30th %ile Green (s)		15.9	15.9		15.9	15.9		19.5	19.5		19.5	19.5
30th %ile Term Code		Gap	Gap		Hold	Hold		Hold	Hold		Gap	Gap
10th %ile Green (s)		10.8	10.8		10.8	10.8		16.0	16.0		16.0	16.0
10th %ile Term Code		Gap	Gap		Hold	Hold		Min	Min		Min	Min
Stops (vph)		289	247		190	102		380	129		449	63
Fuel Used(gal)		9	8		6	4		13	5		15	3
CO Emissions (g/hr)		605	545		409	251		934	367		1081	190
NOx Emissions (g/hr)		118	106		80	49		182	71		210	37
VOC Emissions (g/hr)		140	126		95	58		217	85		251	44
Dilemma Vehicles (#)		25	0		17	0		36	0		41	0
Queue Length 50th (ft)		117	97		78	41		150	51		176	24
Queue Length 95th (ft)		253	231		176	112		335	139		392	76
Internal Link Dist (ft)		910			972			1191			1116	
Turn Bay Length (ft)			200			200			400			400
Base Capacity (vph)		1265	1095		1265	1095		1265	1095		1265	1095
Starvation Cap Reductn		0	0		0	0		0	0		0	0

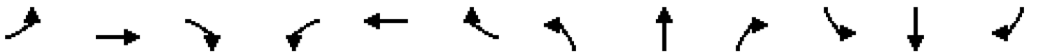
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn		0	0		0	0		0	0		0	0
Storage Cap Reductn		0	0		0	0		0	0		0	0
Reduced v/c Ratio		0.32	0.36		0.23	0.20		0.43	0.26		0.48	0.16

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 61.6			
Natural Cycle: 60			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.76			
Intersection Signal Delay (s/veh): 19.6		Intersection LOS: B	
Intersection Capacity Utilization 63.8%		ICU Level of Service B	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 87			
70th %ile Actuated Cycle: 71.8			
50th %ile Actuated Cycle: 59.1			
30th %ile Actuated Cycle: 49.4			
10th %ile Actuated Cycle: 40.8			

* User Entered Value

Splits and Phases: 2: Chuluota Rd & Lake Pickett Rd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑	↱		↑	↱		↑	↱		↑	↱
Traffic Volume (veh/h)	0	389	377	0	279	213	0	513	268	0	574	162
Future Volume (veh/h)	0	389	377	0	279	213	0	513	268	0	574	162
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	0	1920	1920	0	1920	1920	0	1920	1920	0	1920	1920
Adj Flow Rate, veh/h	0	409	397	0	294	224	0	540	282	0	604	171
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	2	2	0	2	2	0	2	2	0	2	2
Cap, veh/h	0	631	534	0	631	534	0	758	643	0	758	643
Arrive On Green	0.00	0.33	0.33	0.00	0.33	0.33	0.00	0.39	0.39	0.00	0.39	0.39
Sat Flow, veh/h	0	1920	1627	0	1920	1627	0	1920	1627	0	1920	1627
Grp Volume(v), veh/h	0	409	397	0	294	224	0	540	282	0	604	171
Grp Sat Flow(s),veh/h/ln	0	1920	1627	0	1920	1627	0	1920	1627	0	1920	1627
Q Serve(g_s), s	0.0	9.2	11.0	0.0	6.1	5.4	0.0	12.0	6.4	0.0	14.1	3.6
Cycle Q Clear(g_c), s	0.0	9.2	11.0	0.0	6.1	5.4	0.0	12.0	6.4	0.0	14.1	3.6
Prop In Lane	0.00		1.00	0.00		1.00	0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h	0	631	534	0	631	534	0	758	643	0	758	643
V/C Ratio(X)	0.00	0.65	0.74	0.00	0.47	0.42	0.00	0.71	0.44	0.00	0.80	0.27
Avail Cap(c_a), veh/h	0	1441	1221	0	1441	1221	0	1441	1221	0	1441	1221
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	14.5	15.1	0.0	13.5	13.2	0.0	12.9	11.2	0.0	13.5	10.4
Incr Delay (d2), s/veh	0.0	1.1	2.1	0.0	0.5	0.5	0.0	1.3	0.5	0.0	2.0	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	3.1	3.3	0.0	2.0	1.5	0.0	3.6	1.6	0.0	4.4	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	15.6	17.2	0.0	14.0	13.8	0.0	14.1	11.7	0.0	15.5	10.6
LnGrp LOS		B	B		B	B		B	B		B	B
Approach Vol, veh/h		806			518			822			775	
Approach Delay, s/veh		16.4			13.9			13.3			14.4	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	27.0	23.6	27.0	23.6
Change Period (Y+Rc), s	7.0	7.0	7.0	7.0
Max Green Setting (Gmax), s	38.0	38.0	38.0	38.0
Max Q Clear Time (g_c+I1), s	16.1	8.1	14.0	13.0
Green Ext Time (p_c), s	3.9	2.3	4.0	3.7

Intersection Summary	
HCM 7th Control Delay, s/veh	14.6
HCM 7th LOS	B

Intersection	
Intersection Delay, s/veh	7.5
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	1	1	0	0
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	691	155	0	0
Demand Flow Rate, veh/h	705	158	0	0
Vehicles Circulating, veh/h	0	370	705	528
Vehicles Exiting, veh/h	528	335	0	0
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	8.0	5.5	0.0	0.0
Approach LOS	A	A	-	-

Lane	Left	Left
Designated Moves	LT	T
Assumed Moves	LT	T
RT Channelized		
Lane Util	1.000	1.000
Follow-Up Headway, s	2.609	2.609
Critical Headway, s	4.976	4.976
A (Intercept)	1380	1380
B (Slope)	1.02e-3	1.02e-3
Entry Flow, veh/h	705	158
Cap Entry Lane, veh/h	1380	946
Entry HV Adj Factor	0.980	0.980
Flow Entry, veh/h	691	155
Cap Entry, veh/h	1353	928
V/C Ratio	0.511	0.167
Control Delay, s/veh	8.0	5.5
LOS	A	A
95th %tile Queue, veh	3	1

Intersection	
Intersection Delay, s/veh	8.2
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	1	1	0	0
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	713	465	0	0
Demand Flow Rate, veh/h	727	474	0	0
Vehicles Circulating, veh/h	96	0	823	474
Vehicles Exiting, veh/h	378	823	0	0
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	9.8	5.8	0.0	0.0
Approach LOS	A	A	-	-

Lane	Left	Left
Designated Moves	T	LT
Assumed Moves	T	LT
RT Channelized		
Lane Util	1.000	1.000
Follow-Up Headway, s	2.609	2.609
Critical Headway, s	4.976	4.976
A (Intercept)	1380	1380
B (Slope)	1.02e-3	1.02e-3
Entry Flow, veh/h	727	474
Cap Entry Lane, veh/h	1251	1380
Entry HV Adj Factor	0.980	0.980
Flow Entry, veh/h	713	465
Cap Entry, veh/h	1227	1353
V/C Ratio	0.581	0.344
Control Delay, s/veh	9.8	5.8
LOS	A	A
95th %tile Queue, veh	4	2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	94	81	248	156	198	12	324	680	121	6	689	333
Future Volume (vph)	94	81	248	156	198	12	324	680	121	6	689	333
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	75		300	100		0	465		425	400		400
Storage Lanes	1		1	1		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt		0.921	0.850		0.991				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1752	1614	1490	1752	1828	0	1752	3505	1568	1752	3505	1568
Flt Permitted	0.467			0.552			0.196			0.327		
Satd. Flow (perm)	861	1614	1490	1018	1828	0	362	3505	1568	603	3505	1568
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		55	295		3				205			351
Link Speed (mph)		45			45			50			50	
Link Distance (ft)		743			754			1072			892	
Travel Time (s)		11.3			11.4			14.6			12.2	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Adj. Flow (vph)	99	85	261	164	208	13	341	716	127	6	725	351
Shared Lane Traffic (%)			36%									
Lane Group Flow (vph)	99	179	167	164	221	0	341	716	127	6	725	351
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100		20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6		20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	Perm	D.P+P	NA	Perm
Protected Phases	3	8		7	4		1	6		5	2	

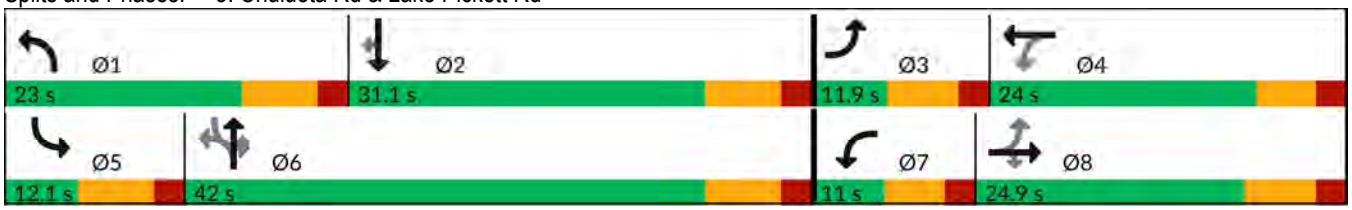


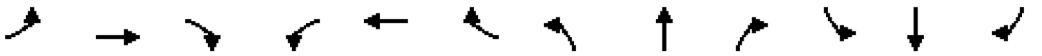
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	8		8	4			6		6	6		2
Detector Phase	3	8	8	7	4		1	6	6	5	2	2
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	16.0	16.0	5.0	16.0	16.0
Minimum Split (s)	11.8	24.8	24.8	11.0	24.0		12.1	25.1	25.1	12.1	25.1	25.1
Total Split (s)	11.9	24.9	24.9	11.0	24.0		23.0	42.0	42.0	12.1	31.1	31.1
Total Split (%)	13.2%	27.7%	27.7%	12.2%	26.7%		25.6%	46.7%	46.7%	13.4%	34.6%	34.6%
Maximum Green (s)	5.1	18.1	18.1	5.0	18.0		15.9	34.9	34.9	5.0	24.0	24.0
Yellow Time (s)	4.8	4.8	4.8	4.0	4.0		5.1	5.1	5.1	5.1	5.1	5.1
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.8	6.8	6.8	6.0	6.0		7.1	7.1	7.1	7.1	7.1	7.1
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None		None	Min	Min	None	Min	Min
Walk Time (s)		7.0	7.0		7.0			7.0	7.0		7.0	7.0
Flash Don't Walk (s)		11.0	11.0		11.0			11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)		0	0		0			0	0		0	0
Act Effct Green (s)	19.0	13.8	13.8	20.5	16.7		43.4	41.2	41.2	42.1	21.8	21.8
Actuated g/C Ratio	0.23	0.17	0.17	0.25	0.20		0.53	0.50	0.50	0.51	0.26	0.26
v/c Ratio	0.39	0.57	0.34	0.55	0.59		0.79	0.41	0.14	0.02	0.78	0.52
Control Delay (s/veh)	27.6	29.6	1.8	32.3	39.0		28.9	15.2	0.7	10.5	35.8	6.2
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	27.6	29.6	1.8	32.3	39.0		28.9	15.2	0.7	10.5	35.8	6.2
LOS	C	C	A	C	D		C	B	A	B	D	A
Approach Delay (s/veh)		18.7			36.1			17.6			26.1	
Approach LOS		B			D			B			C	
90th %ile Green (s)	5.1	18.1	18.1	5.0	18.0		15.9	34.9	34.9	5.0	24.0	24.0
90th %ile Term Code	Max	Max	Max	Max	Max		Max	Hold	Hold	Max	Max	Max
70th %ile Green (s)	5.1	18.1	18.1	5.0	18.0		15.9	47.0	47.0	0.0	24.0	24.0
70th %ile Term Code	Max	Hold	Hold	Max	Max		Max	Hold	Hold	Skip	Max	Max
50th %ile Green (s)	5.1	15.7	15.7	5.0	15.6		15.9	47.0	47.0	0.0	24.0	24.0
50th %ile Term Code	Max	Hold	Hold	Max	Gap		Max	Hold	Hold	Skip	Max	Max
30th %ile Green (s)	5.1	12.9	12.9	5.0	12.8		14.1	42.6	42.6	0.0	21.4	21.4
30th %ile Term Code	Max	Hold	Hold	Max	Gap		Gap	Hold	Hold	Skip	Gap	Gap
10th %ile Green (s)	0.0	6.1	6.1	5.0	17.9		10.6	33.7	33.7	0.0	16.0	16.0
10th %ile Term Code	Skip	Gap	Gap	Max	Hold		Gap	Hold	Hold	Skip	Min	Min
Stops (vph)	71	103	0	142	182		181	407	2	5	608	37
Fuel Used(gal)	2	3	1	4	5		7	13	1	0	18	3
CO Emissions (g/hr)	130	218	58	249	347		481	907	61	9	1276	201
NOx Emissions (g/hr)	25	42	11	48	67		94	176	12	2	248	39
VOC Emissions (g/hr)	30	51	13	58	80		112	210	14	2	296	47
Dilemma Vehicles (#)	0	9	0	0	11		0	34	0	0	38	0
Queue Length 50th (ft)	40	65	0	68	114		102	114	0	1	192	0
Queue Length 95th (ft)	78	132	0	118	188		#237	215	5	7	267	64
Internal Link Dist (ft)		663			674			992			812	
Turn Bay Length (ft)	75		300	100			465		425	400		400
Base Capacity (vph)	254	402	561	298	407		462	1763	890	378	1035	710

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.39	0.45	0.30	0.55	0.54		0.74	0.41	0.14	0.02	0.70	0.49

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 82.5			
Natural Cycle: 80			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.79			
Intersection Signal Delay (s/veh): 23.0		Intersection LOS: C	
Intersection Capacity Utilization 77.5%		ICU Level of Service D	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 90			
70th %ile Actuated Cycle: 90			
50th %ile Actuated Cycle: 87.6			
30th %ile Actuated Cycle: 80.4			
10th %ile Actuated Cycle: 64.7			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 3: Chuluota Rd & Lake Pickett Rd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	94	81	248	156	198	12	324	680	121	6	689	333
Future Volume (veh/h)	94	81	248	156	198	12	324	680	121	6	689	333
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	99	217	173	164	208	13	341	716	127	6	725	351
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	243	296	250	253	258	16	418	1490	665	285	953	425
Arrive On Green	0.06	0.16	0.16	0.06	0.15	0.15	0.16	0.42	0.42	0.01	0.27	0.27
Sat Flow, veh/h	1767	1856	1572	1767	1728	108	1767	3526	1572	1767	3526	1572
Grp Volume(v), veh/h	99	217	173	164	0	221	341	716	127	6	725	351
Grp Sat Flow(s),veh/h/ln	1767	1856	1572	1767	0	1836	1767	1763	1572	1767	1763	1572
Q Serve(g_s), s	3.6	8.7	8.1	5.0	0.0	9.1	10.1	11.5	4.0	0.2	14.7	16.4
Cycle Q Clear(g_c), s	3.6	8.7	8.1	5.0	0.0	9.1	10.1	11.5	4.0	0.2	14.7	16.4
Prop In Lane	1.00		1.00	1.00		0.06	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	243	296	250	253	0	274	418	1490	665	285	953	425
V/C Ratio(X)	0.41	0.73	0.69	0.65	0.00	0.81	0.82	0.48	0.19	0.02	0.76	0.83
Avail Cap(c_a), veh/h	246	430	365	253	0	424	495	1577	703	384	1084	484
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.2	31.2	31.0	28.7	0.0	32.1	17.3	16.3	14.1	13.5	26.2	26.7
Incr Delay (d2), s/veh	1.1	3.6	3.4	5.7	0.0	6.4	8.8	0.2	0.1	0.0	2.8	10.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	3.9	3.1	2.8	0.0	4.2	4.4	4.0	1.3	0.1	5.9	6.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	27.3	34.9	34.4	34.4	0.0	38.5	26.2	16.6	14.3	13.6	29.0	36.9
LnGrp LOS	C	C	C	C		D	C	B	B	B	C	D
Approach Vol, veh/h		489			385			1184			1082	
Approach Delay, s/veh		33.1			36.7			19.1			31.5	
Approach LOS		C			D			B			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.6	28.2	11.8	18.4	7.7	40.1	11.0	19.2
Change Period (Y+Rc), s	7.1	7.1	6.8	* 6.8	7.1	7.1	6.0	6.8
Max Green Setting (Gmax), s	15.9	24.0	5.1	* 18	5.0	34.9	5.0	18.1
Max Q Clear Time (g_c+I1), s	12.1	18.4	5.6	11.1	2.2	13.5	7.0	10.7
Green Ext Time (p_c), s	0.4	2.7	0.0	0.6	0.0	4.8	0.0	1.0

Intersection Summary	
HCM 7th Control Delay, s/veh	27.7
HCM 7th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	281	220	418	94	98	9	187	734	177	27	836	193
Future Volume (vph)	281	220	418	94	98	9	187	734	177	27	836	193
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	75		300	100		0	465		425	400		400
Storage Lanes	1		1	1		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt		0.948	0.850		0.988				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1752	1661	1490	1752	1823	0	1752	3505	1568	1752	3505	1568
Flt Permitted	0.467			0.539			0.129			0.258		
Satd. Flow (perm)	861	1661	1490	994	1823	0	238	3505	1568	476	3505	1568
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		27	215		4				235			235
Link Speed (mph)		45			45			50			50	
Link Distance (ft)		743			754			1072			892	
Travel Time (s)		11.3			11.4			14.6			12.2	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Adj. Flow (vph)	296	232	440	99	103	9	197	773	186	28	880	203
Shared Lane Traffic (%)			28%									
Lane Group Flow (vph)	296	355	317	99	112	0	197	773	186	28	880	203
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100		20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6		20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	Perm	D.P+P	NA	Perm
Protected Phases	3	8		7	4		1	6		5	2	



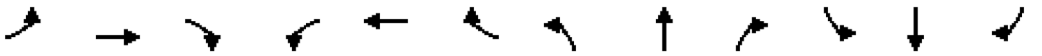
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	8		8	4			6		6	6		2
Detector Phase	3	8	8	7	4		1	6	6	5	2	2
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	16.0	16.0	5.0	16.0	16.0
Minimum Split (s)	11.8	24.8	24.8	11.0	24.0		12.1	25.1	25.1	12.1	25.1	25.1
Total Split (s)	24.6	46.0	46.0	11.0	32.4		16.3	40.9	40.9	12.1	36.7	36.7
Total Split (%)	22.4%	41.8%	41.8%	10.0%	29.5%		14.8%	37.2%	37.2%	11.0%	33.4%	33.4%
Maximum Green (s)	17.8	39.2	39.2	5.0	26.4		9.2	33.8	33.8	5.0	29.6	29.6
Yellow Time (s)	4.8	4.8	4.8	4.0	4.0		5.1	5.1	5.1	5.1	5.1	5.1
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.8	6.8	6.8	6.0	6.0		7.1	7.1	7.1	7.1	7.1	7.1
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None		None	Min	Min	None	Min	Min
Walk Time (s)		7.0	7.0		7.0			7.0	7.0		7.0	7.0
Flash Don't Walk (s)		11.0	11.0		11.0			11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)		0	0		0			0	0		0	0
Act Effct Green (s)	35.8	27.4	27.4	19.0	13.9		43.2	38.0	38.0	40.8	28.3	28.3
Actuated g/C Ratio	0.38	0.29	0.29	0.20	0.15		0.46	0.40	0.40	0.43	0.30	0.30
v/c Ratio	0.62	0.71	0.54	0.41	0.41		0.77	0.55	0.24	0.10	0.84	0.32
Control Delay (s/veh)	28.0	37.2	13.4	26.9	40.2		40.2	26.6	2.3	17.2	40.9	3.9
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	28.0	37.2	13.4	26.9	40.2		40.2	26.6	2.3	17.2	40.9	3.9
LOS	C	D	B	C	D		D	C	A	B	D	A
Approach Delay (s/veh)		26.6			33.9			25.0			33.6	
Approach LOS		C			C			C			C	
90th %ile Green (s)	17.8	37.7	37.7	5.0	24.9		9.2	33.8	33.8	5.0	29.6	29.6
90th %ile Term Code	Max	Gap	Gap	Max	Hold		Max	Max	Max	Max	Max	Max
70th %ile Green (s)	17.8	30.0	30.0	5.0	17.2		9.2	33.8	33.8	5.0	29.6	29.6
70th %ile Term Code	Max	Gap	Gap	Max	Hold		Max	Hold	Hold	Max	Max	Max
50th %ile Green (s)	17.6	24.9	24.9	5.0	12.3		9.2	33.8	33.8	5.0	29.6	29.6
50th %ile Term Code	Gap	Gap	Gap	Max	Hold		Max	Hold	Hold	Max	Max	Max
30th %ile Green (s)	15.1	21.0	21.0	5.0	10.9		9.2	45.9	45.9	0.0	29.6	29.6
30th %ile Term Code	Gap	Gap	Gap	Max	Hold		Max	Hold	Hold	Skip	Max	Max
10th %ile Green (s)	11.1	23.9	23.9	0.0	6.8		9.2	38.8	38.8	0.0	22.5	22.5
10th %ile Term Code	Gap	Hold	Hold	Skip	Gap		Max	Hold	Hold	Skip	Gap	Gap
Stops (vph)	196	270	87	73	85		100	555	7	16	717	12
Fuel Used(gal)	5	8	3	2	2		4	17	1	0	23	1
CO Emissions (g/hr)	377	527	234	132	171		303	1222	97	34	1587	100
NOx Emissions (g/hr)	73	102	46	26	33		59	238	19	7	309	19
VOC Emissions (g/hr)	87	122	54	30	40		70	283	23	8	368	23
Dilemma Vehicles (#)	0	14	0	0	4		0	33	0	0	41	0
Queue Length 50th (ft)	133	195	51	39	62		68	202	0	9	257	0
Queue Length 95th (ft)	202	301	135	71	112		#216	318	24	29	#433	37
Internal Link Dist (ft)		663			674			992			812	
Turn Bay Length (ft)	75		300	100			465		425	400		400
Base Capacity (vph)	495	712	750	240	518		257	1406	769	273	1111	657

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.60	0.50	0.42	0.41	0.22		0.77	0.55	0.24	0.10	0.79	0.31

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 94.7			
Natural Cycle: 90			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.84			
Intersection Signal Delay (s/veh): 28.8		Intersection LOS: C	
Intersection Capacity Utilization 81.3%		ICU Level of Service D	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 108.5			
70th %ile Actuated Cycle: 100.8			
50th %ile Actuated Cycle: 95.7			
30th %ile Actuated Cycle: 91.8			
10th %ile Actuated Cycle: 76.6			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 3: Chuluota Rd & Lake Pickett Rd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	281	220	418	94	98	9	187	734	177	27	836	193
Future Volume (veh/h)	281	220	418	94	98	9	187	734	177	27	836	193
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	296	388	336	99	103	9	197	773	186	28	880	203
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	476	480	406	222	242	21	279	1272	567	234	1029	459
Arrive On Green	0.16	0.26	0.26	0.06	0.14	0.14	0.10	0.36	0.36	0.03	0.29	0.29
Sat Flow, veh/h	1767	1856	1572	1767	1682	147	1767	3526	1572	1767	3526	1572
Grp Volume(v), veh/h	296	388	336	99	0	112	197	773	186	28	880	203
Grp Sat Flow(s),veh/h/ln	1767	1856	1572	1767	0	1829	1767	1763	1572	1767	1763	1572
Q Serve(g_s), s	12.3	17.8	18.3	4.3	0.0	5.1	6.8	16.3	7.8	0.9	21.4	9.5
Cycle Q Clear(g_c), s	12.3	17.8	18.3	4.3	0.0	5.1	6.8	16.3	7.8	0.9	21.4	9.5
Prop In Lane	1.00		1.00	1.00		0.08	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	476	480	406	222	0	264	279	1272	567	234	1029	459
V/C Ratio(X)	0.62	0.81	0.83	0.45	0.00	0.42	0.70	0.61	0.33	0.12	0.86	0.44
Avail Cap(c_a), veh/h	538	802	680	222	0	532	288	1314	586	282	1151	513
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.0	31.5	31.7	31.2	0.0	35.4	22.1	23.7	21.0	18.8	30.3	26.1
Incr Delay (d2), s/veh	1.8	3.3	4.3	1.4	0.0	1.1	7.4	0.8	0.3	0.2	6.0	0.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.0	7.9	6.9	1.8	0.0	2.2	3.1	6.2	2.7	0.3	9.1	3.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	26.9	34.8	36.0	32.6	0.0	36.5	29.5	24.5	21.3	19.0	36.3	26.8
LnGrp LOS	C	C	D	C		D	C	C	C	B	D	C
Approach Vol, veh/h		1020			211			1156			1111	
Approach Delay, s/veh		32.9			34.6			24.8			34.1	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.9	33.6	21.4	19.9	9.6	39.8	11.0	30.2
Change Period (Y+Rc), s	7.1	7.1	6.8	* 6.8	7.1	7.1	6.0	6.8
Max Green Setting (Gmax), s	9.2	29.6	17.8	* 26	5.0	33.8	5.0	39.2
Max Q Clear Time (g_c+I1), s	8.8	23.4	14.3	7.1	2.9	18.3	6.3	20.3
Green Ext Time (p_c), s	0.0	3.1	0.3	0.4	0.0	4.8	0.0	3.2

Intersection Summary	
HCM 7th Control Delay, s/veh	30.7
HCM 7th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Intersection Delay, s/veh	17.7
Intersection LOS	C

Approach	EB	WB	NB	SB
Entry Lanes	1	1	2	2
Conflicting Circle Lanes	2	2	2	2
Adj Approach Flow, veh/h	445	385	1184	1082
Demand Flow Rate, veh/h	459	396	1219	1115
Vehicles Circulating, veh/h	922	1190	196	734
Vehicles Exiting, veh/h	927	225	916	852
Ped Vol Crossing Leg, #/h	1	1	1	1
Ped Cap Adj	1.000	1.000	0.999	1.000
Approach Delay, s/veh	13.2	30.9	9.3	24.0
Approach LOS	B	D	A	C

Lane	Left	Bypass	Left	Left	Right	Left	Right
Designated Moves	LT	R	LTR	LT	TR	LT	TR
Assumed Moves	LT		LTR	LT	TR	LT	TR
RT Channelized		Yield					
Lane Util	1.000		1.000	0.470	0.530	0.470	0.530
Follow-Up Headway, s	2.535	2.609	2.535	2.667	2.535	2.667	2.535
Critical Headway, s	4.328	4.976	4.328	4.645	4.328	4.645	4.328
A (Intercept)	1420	1380	1420	1350	1420	1350	1420
B (Slope)	8.501e-4	1.02e-3	8.501e-4	9.199e-4	8.501e-4	9.199e-4	8.501e-4
Entry Flow, veh/h	190	269	396	573	646	524	591
Cap Entry Lane, veh/h	649	542	516	1127	1202	687	761
Entry HV Adj Factor	0.971	0.971	0.972	0.971	0.971	0.971	0.971
Flow Entry, veh/h	184	261	385	556	627	509	574
Cap Entry, veh/h	630	526	502	1093	1166	667	738
V/C Ratio	0.293	0.496	0.767	0.509	0.538	0.763	0.777
Control Delay, s/veh	9.5	15.9	30.9	9.2	9.3	24.4	23.6
LOS	A	C	D	A	A	C	C
95th %tile Queue, veh	1	3	7	3	3	7	8

MOVEMENT SUMMARY

Site: 101 [Chuluota Rd at Lake Pickett Rd AM Design (2048) Build (4-lane) Roundabout (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] ft	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed mph
South: Chuluota Rd NB															
3	L2	All MCs	341	3.5	341	3.5	0.453	12.5	LOS B	3.6	92.3	0.55	0.59	0.55	34.8
8	T1	All MCs	716	3.5	716	3.5	0.453	5.9	LOS A	3.7	96.0	0.53	0.52	0.53	36.9
18	R2	All MCs	127	3.5	127	3.5	0.453	5.6	LOS A	3.7	96.0	0.52	0.49	0.52	37.0
Approach			1184	3.5	1184	3.5	0.453	7.8	LOS A	3.7	96.0	0.53	0.54	0.53	36.3
East: Lake Pickett Rd WB															
1	L2	All MCs	164	3.5	164	3.5	0.605	18.3	LOS B	3.8	98.9	0.82	0.97	1.10	33.3
6	T1	All MCs	208	3.5	208	3.5	0.605	11.7	LOS B	3.8	98.9	0.82	0.97	1.10	34.1
16	R2	All MCs	13	3.5	13	3.5	0.605	11.5	LOS B	3.8	98.9	0.82	0.97	1.10	33.8
Approach			385	3.5	385	3.5	0.605	14.5	LOS B	3.8	98.9	0.82	0.97	1.10	33.7
North: Chuluota Rd SB															
7	L2	All MCs	6	3.5	6	3.5	0.646	21.7	LOS C	6.8	175.8	0.95	0.91	1.30	32.8
4	T1	All MCs	725	3.5	725	3.5	0.646	14.4	LOS B	7.7	197.7	0.95	0.90	1.28	33.9
14	R2	All MCs	351	3.5	351	3.5	0.646	12.8	LOS B	7.7	197.7	0.96	0.87	1.25	34.2
Approach			1082	3.5	1082	3.5	0.646	13.9	LOS B	7.7	197.7	0.95	0.89	1.27	34.0
West: Lake Pickett Rd EB															
5	L2	All MCs	99	3.5	99	3.5	0.220	13.8	LOS B	1.2	30.7	0.71	0.72	0.71	34.6
2	T1	All MCs	85	3.5	85	3.5	0.220	7.3	LOS A	1.2	30.7	0.71	0.72	0.71	35.4
12	R2	All MCs	261	3.5	261	3.5	0.310	7.1	LOS A	1.8	45.1	0.74	0.74	0.74	37.0
Approach			445	3.5	445	3.5	0.310	8.6	LOS A	1.8	45.1	0.73	0.73	0.73	36.1
All Vehicles			3097	3.5	3097	3.5	0.646	10.9	LOS B	7.7	197.7	0.74	0.74	0.89	35.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA HCM.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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Intersection	
Intersection Delay, s/veh	25.2
Intersection LOS	D

Approach	EB	WB	NB	SB
Entry Lanes	1	1	2	2
Conflicting Circle Lanes	2	2	2	2
Adj Approach Flow, veh/h	968	211	1156	1111
Demand Flow Rate, veh/h	997	217	1191	1144
Vehicles Circulating, veh/h	1037	1304	573	411
Vehicles Exiting, veh/h	518	460	1008	1110
Ped Vol Crossing Leg, #/h	1	1	1	1
Ped Cap Adj	1.000	1.000	0.999	0.999
Approach Delay, s/veh	50.0	16.8	18.3	12.3
Approach LOS	E	C	C	B

Lane	Left	Bypass	Left	Left	Right	Left	Right
Designated Moves	LT	R	LTR	LT	TR	LT	TR
Assumed Moves	LT		LTR	LT	TR	LT	TR
RT Channelized		Yield					
Lane Util	1.000		1.000	0.470	0.530	0.470	0.530
Follow-Up Headway, s	2.535	2.609	2.535	2.667	2.535	2.667	2.535
Critical Headway, s	4.328	4.976	4.328	4.645	4.328	4.645	4.328
A (Intercept)	1420	1380	1420	1350	1420	1350	1420
B (Slope)	8.501e-4	1.02e-3	8.501e-4	9.199e-4	8.501e-4	9.199e-4	8.501e-4
Entry Flow, veh/h	544	453	217	560	631	538	606
Cap Entry Lane, veh/h	588	494	469	797	873	925	1001
Entry HV Adj Factor	0.971	0.971	0.972	0.970	0.971	0.970	0.971
Flow Entry, veh/h	528	440	211	543	613	522	589
Cap Entry, veh/h	571	479	456	773	847	897	972
V/C Ratio	0.925	0.918	0.463	0.703	0.724	0.582	0.606
Control Delay, s/veh	48.0	52.4	16.8	18.4	18.2	12.4	12.2
LOS	E	F	C	C	C	B	B
95th %tile Queue, veh	12	11	2	6	6	4	4

MOVEMENT SUMMARY

Site: 101 [Chuluota Rd at Lake Pickett Rd PM Design (2048) Build (4-lane) Roundabout (Site Folder: General)]

Roundabout 2048 Bld PM

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

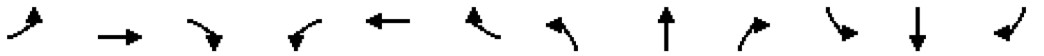
New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance

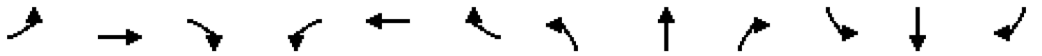
Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] ft	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed mph
South: Chuluota Rd NB															
3	L2	All MCs	197	3.5	197	3.5	0.634	18.4	LOS B	6.7	171.8	0.93	0.84	1.15	33.3
8	T1	All MCs	773	3.5	773	3.5	0.634	10.9	LOS B	7.3	187.0	0.93	0.81	1.12	35.1
18	R2	All MCs	186	3.5	186	3.5	0.634	10.0	LOS B	7.3	187.0	0.93	0.79	1.10	35.4
Approach			1156	3.5	1156	3.5	0.634	12.0	LOS B	7.3	187.0	0.93	0.81	1.12	34.8
East: Lake Pickett Rd WB															
1	L2	All MCs	99	3.5	99	3.5	0.411	17.2	LOS B	2.3	58.9	0.83	0.90	0.94	33.7
6	T1	All MCs	103	3.5	103	3.5	0.411	10.6	LOS B	2.3	58.9	0.83	0.90	0.94	34.5
16	R2	All MCs	9	3.5	9	3.5	0.411	10.4	LOS B	2.3	58.9	0.83	0.90	0.94	34.2
Approach			212	3.5	212	3.5	0.411	13.7	LOS B	2.3	58.9	0.83	0.90	0.94	34.1
North: Chuluota Rd SB															
7	L2	All MCs	28	3.5	28	3.5	0.500	14.3	LOS B	3.8	98.0	0.72	0.64	0.74	35.5
4	T1	All MCs	880	3.5	880	3.5	0.500	7.5	LOS A	4.0	102.4	0.71	0.62	0.72	36.6
14	R2	All MCs	203	3.5	203	3.5	0.500	6.9	LOS A	4.0	102.4	0.70	0.60	0.70	36.4
Approach			1112	3.5	1112	3.5	0.500	7.5	LOS A	4.0	102.4	0.71	0.62	0.72	36.5
West: Lake Pickett Rd EB															
5	L2	All MCs	296	3.5	296	3.5	0.625	16.4	LOS B	4.7	120.2	0.84	0.92	1.07	33.7
2	T1	All MCs	232	3.5	232	3.5	0.625	9.8	LOS A	4.7	120.2	0.84	0.92	1.07	34.4
12	R2	All MCs	440	3.5	440	3.5	0.512	8.3	LOS A	3.3	84.9	0.79	0.83	0.92	36.8
Approach			967	3.5	967	3.5	0.625	11.1	LOS B	4.7	120.2	0.82	0.88	1.00	35.2
All Vehicles			3446	3.5	3446	3.5	0.634	10.4	LOS B	7.3	187.0	0.82	0.77	0.95	35.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA HCM.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑	↱		↑	↱		↑	↱		↑↑	↱
Traffic Volume (vph)	0	181	404	0	678	106	0	680	445	0	689	339
Future Volume (vph)	0	181	404	0	678	106	0	680	445	0	689	339
Ideal Flow (vphpl)	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950
Storage Length (ft)	0		200	0		200	0		400	0		400
Storage Lanes	0		1	0		1	0		1	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected												
Satd. Flow (prot)	0	1912	1625	0	1912	1625	0	1912	1625	0	3632	1625
Flt Permitted												
Satd. Flow (perm)	0	1912	1625	0	1912	1625	0	1912	1625	0	3632	1625
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			*60			*60			*60			*60
Link Speed (mph)		50			50			50			50	
Link Distance (ft)		990			1052			1271			1196	
Travel Time (s)		13.5			14.3			17.3			16.3	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	191	425	0	714	112	0	716	468	0	725	357
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	191	425	0	714	112	0	716	468	0	725	357
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2	1		2	1		2	1		2	1
Detector Template		Thru	Right		Thru	Right		Thru	Right		Thru	Right
Leading Detector (ft)		100	20		100	20		100	20		100	20
Trailing Detector (ft)		0	0		0	0		0	0		0	0
Detector 1 Position(ft)		0	0		0	0		0	0		0	0
Detector 1 Size(ft)		6	20		6	20		6	20		6	20
Detector 1 Type		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Queue (s)		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Delay (s)		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type		NA	Perm		NA	Perm		NA	Perm		NA	Perm
Protected Phases		8			4			6			2	
Permitted Phases			8			4			6			2



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase		8	8		4	4		6	6		2	2
Switch Phase												
Minimum Initial (s)		5.0	5.0		5.0	5.0		16.0	16.0		16.0	16.0
Minimum Split (s)		29.0	29.0		29.0	29.0		25.0	25.0		25.0	25.0
Total Split (s)		29.0	29.0		29.0	29.0		26.0	26.0		26.0	26.0
Total Split (%)		52.7%	52.7%		52.7%	52.7%		47.3%	47.3%		47.3%	47.3%
Maximum Green (s)		22.0	22.0		22.0	22.0		19.0	19.0		19.0	19.0
Yellow Time (s)		5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0
All-Red Time (s)		2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Total Lost Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0
Recall Mode		None	None		None	None		Min	Min		Min	Min
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Don't Walk (s)		11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	0
Act Effct Green (s)		21.7	21.7		21.7	21.7		19.0	19.0		19.0	19.0
Actuated g/C Ratio		0.40	0.40		0.40	0.40		0.35	0.35		0.35	0.35
v/c Ratio		0.25	0.63		0.94	0.16		1.08	0.78		0.57	0.59
Control Delay (s/veh)		12.2	16.1		40.5	6.6		80.2	25.4		16.8	17.0
Queue Delay		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Total Delay (s/veh)		12.2	16.1		40.5	6.6		80.2	25.4		16.8	17.0
LOS		B	B		D	A		F	C		B	B
Approach Delay (s/veh)		14.9			35.9			58.5			16.9	
Approach LOS		B			D			E			B	
90th %ile Green (s)		22.0	22.0		22.0	22.0		19.0	19.0		19.0	19.0
90th %ile Term Code		Max	Max		Max	Max		Max	Max		Max	Max
70th %ile Green (s)		22.0	22.0		22.0	22.0		19.0	19.0		19.0	19.0
70th %ile Term Code		Hold	Hold		Max	Max		Max	Max		Max	Max
50th %ile Green (s)		22.0	22.0		22.0	22.0		19.0	19.0		19.0	19.0
50th %ile Term Code		Hold	Hold		Max	Max		Max	Max		Hold	Hold
30th %ile Green (s)		22.0	22.0		22.0	22.0		19.0	19.0		19.0	19.0
30th %ile Term Code		Hold	Hold		Max	Max		Max	Max		Hold	Hold
10th %ile Green (s)		20.4	20.4		20.4	20.4		19.0	19.0		19.0	19.0
10th %ile Term Code		Hold	Hold		Gap	Gap		Max	Max		Hold	Hold
Stops (vph)		112	272		547	36		542	321		527	227
Fuel Used(gal)		3	8		19	1		25	11		16	7
CO Emissions (g/hr)		231	562		1294	98		1741	756		1096	505
NOx Emissions (g/hr)		45	109		252	19		339	147		213	98
VOC Emissions (g/hr)		54	130		300	23		403	175		254	117
Dilemma Vehicles (#)		15	0		55	0		52	0		57	0
Queue Length 50th (ft)		40	89		214	10		~274	116		99	76
Queue Length 95th (ft)		77	170		#412	35		#450	#256		146	149
Internal Link Dist (ft)		910			972			1191			1116	
Turn Bay Length (ft)			200			200			400			400
Base Capacity (vph)		769	690		769	690		664	603		1262	603
Starvation Cap Reductn		0	0		0	0		0	0		0	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn		0	0		0	0		0	0		0	0
Storage Cap Reductn		0	0		0	0		0	0		0	0
Reduced v/c Ratio		0.25	0.62		0.93	0.16		1.08	0.78		0.57	0.59

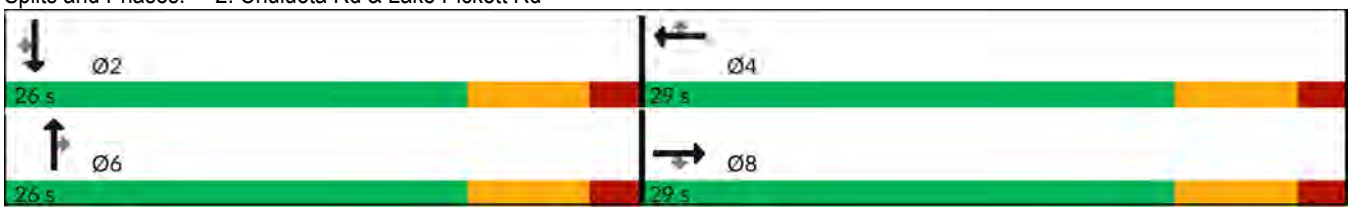
Intersection Summary			
Area Type:	Other		
Cycle Length: 55			
Actuated Cycle Length: 54.7			
Natural Cycle: 80			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 1.08			
Intersection Signal Delay (s/veh): 34.1		Intersection LOS: C	
Intersection Capacity Utilization 81.3%		ICU Level of Service D	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 55			
70th %ile Actuated Cycle: 55			
50th %ile Actuated Cycle: 55			
30th %ile Actuated Cycle: 55			
10th %ile Actuated Cycle: 53.4			

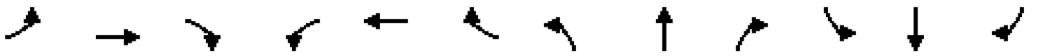
* User Entered Value

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 2: Chuluota Rd & Lake Pickett Rd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑	↱		↑	↱		↑	↱		↑↑	↱
Traffic Volume (veh/h)	0	181	404	0	678	106	0	680	445	0	689	339
Future Volume (veh/h)	0	181	404	0	678	106	0	680	445	0	689	339
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	0	1920	1920	0	1920	1920	0	1920	1920	0	1920	1920
Adj Flow Rate, veh/h	0	191	425	0	714	112	0	716	468	0	725	357
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	2	2	0	2	2	0	2	2	0	2	2
Cap, veh/h	0	763	647	0	763	647	0	666	564	0	1265	564
Arrive On Green	0.00	0.40	0.40	0.00	0.40	0.40	0.00	0.35	0.35	0.00	0.35	0.35
Sat Flow, veh/h	0	1920	1627	0	1920	1627	0	1920	1627	0	3743	1627
Grp Volume(v), veh/h	0	191	425	0	714	112	0	716	468	0	725	357
Grp Sat Flow(s),veh/h/ln	0	1920	1627	0	1920	1627	0	1920	1627	0	1824	1627
Q Serve(g_s), s	0.0	3.6	11.7	0.0	19.5	2.4	0.0	19.0	14.5	0.0	8.9	10.1
Cycle Q Clear(g_c), s	0.0	3.6	11.7	0.0	19.5	2.4	0.0	19.0	14.5	0.0	8.9	10.1
Prop In Lane	0.00		1.00	0.00		1.00	0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h	0	763	647	0	763	647	0	666	564	0	1265	564
V/C Ratio(X)	0.00	0.25	0.66	0.00	0.94	0.17	0.00	1.08	0.83	0.00	0.57	0.63
Avail Cap(c_a), veh/h	0	771	653	0	771	653	0	666	564	0	1265	564
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	11.0	13.5	0.0	15.8	10.7	0.0	17.9	16.4	0.0	14.6	15.0
Incr Delay (d2), s/veh	0.0	0.2	2.4	0.0	18.5	0.1	0.0	56.9	10.0	0.0	0.6	2.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	1.2	3.5	0.0	10.0	0.7	0.0	16.8	5.6	0.0	2.9	3.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	11.2	15.8	0.0	34.3	10.8	0.0	74.8	26.5	0.0	15.2	17.3
LnGrp LOS		B	B		C	B		F	C		B	B
Approach Vol, veh/h		616			826			1184			1082	
Approach Delay, s/veh		14.4			31.1			55.7			15.9	
Approach LOS		B			C			E			B	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	26.0	28.8	26.0	28.8
Change Period (Y+Rc), s	7.0	7.0	7.0	7.0
Max Green Setting (Gmax), s	19.0	22.0	19.0	22.0
Max Q Clear Time (g_c+I1), s	12.1	21.5	21.0	13.7
Green Ext Time (p_c), s	3.2	0.2	0.0	1.7

Intersection Summary	
HCM 7th Control Delay, s/veh	31.7
HCM 7th LOS	C

Intersection	
Intersection Delay, s/veh	8.4
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	1	1	0	0
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	659	385	0	0
Demand Flow Rate, veh/h	672	393	0	0
Vehicles Circulating, veh/h	0	449	672	842
Vehicles Exiting, veh/h	842	223	0	0
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	7.6	9.9	0.0	0.0
Approach LOS	A	A	-	-

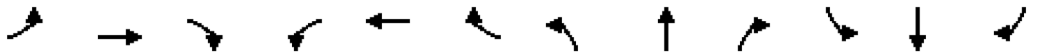
Lane	Left	Left
Designated Moves	LT	T
Assumed Moves	LT	T
RT Channelized		
Lane Util	1.000	1.000
Follow-Up Headway, s	2.609	2.609
Critical Headway, s	4.976	4.976
A (Intercept)	1380	1380
B (Slope)	1.02e-3	1.02e-3
Entry Flow, veh/h	672	393
Cap Entry Lane, veh/h	1380	873
Entry HV Adj Factor	0.980	0.980
Flow Entry, veh/h	659	385
Cap Entry, veh/h	1353	856
V/C Ratio	0.487	0.450
Control Delay, s/veh	7.6	9.9
LOS	A	A
95th %tile Queue, veh	3	2

Intersection	
Intersection Delay, s/veh	13.3
Intersection LOS	B

Approach	EB	WB	NB	SB
Entry Lanes	1	1	0	0
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	445	1071	0	0
Demand Flow Rate, veh/h	454	1092	0	0
Vehicles Circulating, veh/h	174	0	628	1092
Vehicles Exiting, veh/h	918	628	0	0
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	7.2	15.8	0.0	0.0
Approach LOS	A	C	-	-

Lane	Left	Left
Designated Moves	T	LT
Assumed Moves	T	LT
RT Channelized		
Lane Util	1.000	1.000
Follow-Up Headway, s	2.609	2.609
Critical Headway, s	4.976	4.976
A (Intercept)	1380	1380
B (Slope)	1.02e-3	1.02e-3
Entry Flow, veh/h	454	1092
Cap Entry Lane, veh/h	1155	1380
Entry HV Adj Factor	0.980	0.980
Flow Entry, veh/h	445	1071
Cap Entry, veh/h	1133	1353
V/C Ratio	0.393	0.791
Control Delay, s/veh	7.2	15.8
LOS	A	C
95th %tile Queue, veh	2	9

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑	↱		↑	↱		↑	↱		↑↑	↱
Traffic Volume (vph)	0	528	512	0	379	290	0	734	364	0	836	220
Future Volume (vph)	0	528	512	0	379	290	0	734	364	0	836	220
Ideal Flow (vphpl)	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950	1950
Storage Length (ft)	0		200	0		200	0		400	0		400
Storage Lanes	0		1	0		1	0		1	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected												
Satd. Flow (prot)	0	1912	1625	0	1912	1625	0	1912	1625	0	3632	1625
Flt Permitted												
Satd. Flow (perm)	0	1912	1625	0	1912	1625	0	1912	1625	0	3632	1625
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			*60			*60			*60			*60
Link Speed (mph)		50			50			50			50	
Link Distance (ft)		990			1052			1271			1196	
Travel Time (s)		13.5			14.3			17.3			16.3	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	556	539	0	399	305	0	773	383	0	880	232
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	556	539	0	399	305	0	773	383	0	880	232
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2	1		2	1		2	1		2	1
Detector Template		Thru	Right		Thru	Right		Thru	Right		Thru	Right
Leading Detector (ft)		100	20		100	20		100	20		100	20
Trailing Detector (ft)		0	0		0	0		0	0		0	0
Detector 1 Position(ft)		0	0		0	0		0	0		0	0
Detector 1 Size(ft)		6	20		6	20		6	20		6	20
Detector 1 Type		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Queue (s)		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Delay (s)		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type		NA	Perm		NA	Perm		NA	Perm		NA	Perm
Protected Phases		8			4			6			2	
Permitted Phases			8			4			6			2



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase		8	8		4	4		6	6		2	2
Switch Phase												
Minimum Initial (s)		5.0	5.0		5.0	5.0		16.0	16.0		16.0	16.0
Minimum Split (s)		29.0	29.0		29.0	29.0		25.0	25.0		25.0	25.0
Total Split (s)		29.0	29.0		29.0	29.0		26.0	26.0		26.0	26.0
Total Split (%)		52.7%	52.7%		52.7%	52.7%		47.3%	47.3%		47.3%	47.3%
Maximum Green (s)		22.0	22.0		22.0	22.0		19.0	19.0		19.0	19.0
Yellow Time (s)		5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0
All-Red Time (s)		2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Total Lost Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0
Recall Mode		None	None		None	None		Min	Min		Min	Min
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Don't Walk (s)		11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	0
Act Effct Green (s)		19.8	19.8		19.8	19.8		19.1	19.1		19.1	19.1
Actuated g/C Ratio		0.37	0.37		0.37	0.37		0.36	0.36		0.36	0.36
v/c Ratio		0.78	0.84		0.56	0.47		1.12	0.61		0.67	0.37
Control Delay (s/veh)		23.6	27.1		16.4	12.5		95.6	17.4		18.0	11.9
Queue Delay		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Total Delay (s/veh)		23.6	27.1		16.4	12.5		95.6	17.4		18.0	11.9
LOS		C	C		B	B		F	B		B	B
Approach Delay (s/veh)		25.3			14.7			69.7			16.7	
Approach LOS		C			B			E			B	
90th %ile Green (s)		22.0	22.0		22.0	22.0		19.0	19.0		19.0	19.0
90th %ile Term Code		Max	Max		Max	Max		Max	Max		Max	Max
70th %ile Green (s)		22.0	22.0		22.0	22.0		19.0	19.0		19.0	19.0
70th %ile Term Code		Max	Max		Hold	Hold		Max	Max		Max	Max
50th %ile Green (s)		22.0	22.0		22.0	22.0		19.0	19.0		19.0	19.0
50th %ile Term Code		Max	Max		Hold	Hold		Max	Max		Max	Max
30th %ile Green (s)		19.9	19.9		19.9	19.9		19.0	19.0		19.0	19.0
30th %ile Term Code		Gap	Gap		Hold	Hold		Max	Max		Hold	Hold
10th %ile Green (s)		13.8	13.8		13.8	13.8		19.0	19.0		19.0	19.0
10th %ile Term Code		Gap	Gap		Hold	Hold		Max	Max		Hold	Hold
Stops (vph)		427	375		276	164		565	249		665	116
Fuel Used(gal)		12	12		8	5		29	8		20	4
CO Emissions (g/hr)		867	824		561	363		2019	563		1371	279
NOx Emissions (g/hr)		169	160		109	71		393	109		267	54
VOC Emissions (g/hr)		201	191		130	84		468	130		318	65
Dilemma Vehicles (#)		46	0		31	0		56	0		74	0
Queue Length 50th (ft)		147	131		95	54		~314	85		127	40
Queue Length 95th (ft)		#259	#286		164	110		#495	164		184	88
Internal Link Dist (ft)		910			972			1191			1116	
Turn Bay Length (ft)			200			200			400			400
Base Capacity (vph)		797	713		797	713		688	623		1308	623
Starvation Cap Reductn		0	0		0	0		0	0		0	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn		0	0		0	0		0	0		0	0
Storage Cap Reductn		0	0		0	0		0	0		0	0
Reduced v/c Ratio		0.70	0.76		0.50	0.43		1.12	0.61		0.67	0.37

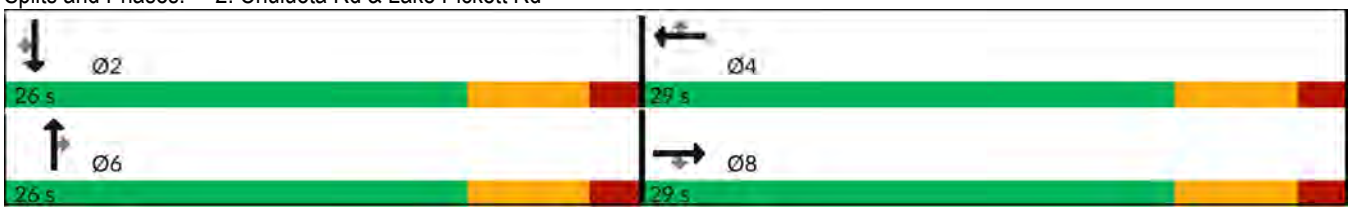
Intersection Summary			
Area Type:	Other		
Cycle Length: 55			
Actuated Cycle Length: 52.9			
Natural Cycle: 75			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 1.12			
Intersection Signal Delay (s/veh): 33.7		Intersection LOS: C	
Intersection Capacity Utilization 76.4%		ICU Level of Service D	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 55			
70th %ile Actuated Cycle: 55			
50th %ile Actuated Cycle: 55			
30th %ile Actuated Cycle: 52.9			
10th %ile Actuated Cycle: 46.8			

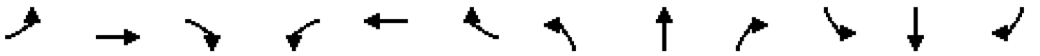
* User Entered Value

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 2: Chuluota Rd & Lake Pickett Rd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑	↱		↑	↱		↑	↱		↑↑	↱
Traffic Volume (veh/h)	0	528	512	0	379	290	0	734	364	0	836	220
Future Volume (veh/h)	0	528	512	0	379	290	0	734	364	0	836	220
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	0	1920	1920	0	1920	1920	0	1920	1920	0	1920	1920
Adj Flow Rate, veh/h	0	556	539	0	399	305	0	773	383	0	880	232
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	2	2	0	2	2	0	2	2	0	2	2
Cap, veh/h	0	729	618	0	729	618	0	686	581	0	1303	581
Arrive On Green	0.00	0.38	0.38	0.00	0.38	0.38	0.00	0.36	0.36	0.00	0.36	0.36
Sat Flow, veh/h	0	1920	1627	0	1920	1627	0	1920	1627	0	3743	1627
Grp Volume(v), veh/h	0	556	539	0	399	305	0	773	383	0	880	232
Grp Sat Flow(s),veh/h/ln	0	1920	1627	0	1920	1627	0	1920	1627	0	1824	1627
Q Serve(g_s), s	0.0	13.5	16.4	0.0	8.7	7.6	0.0	19.0	10.5	0.0	10.9	5.7
Cycle Q Clear(g_c), s	0.0	13.5	16.4	0.0	8.7	7.6	0.0	19.0	10.5	0.0	10.9	5.7
Prop In Lane	0.00		1.00	0.00		1.00	0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h	0	729	618	0	729	618	0	686	581	0	1303	581
V/C Ratio(X)	0.00	0.76	0.87	0.00	0.55	0.49	0.00	1.13	0.66	0.00	0.68	0.40
Avail Cap(c_a), veh/h	0	794	673	0	794	673	0	686	581	0	1303	581
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	14.4	15.3	0.0	12.9	12.6	0.0	17.1	14.4	0.0	14.5	12.8
Incr Delay (d2), s/veh	0.0	4.1	11.5	0.0	0.7	0.6	0.0	75.1	2.7	0.0	1.4	0.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	5.0	6.3	0.0	2.8	2.1	0.0	20.4	3.3	0.0	3.6	1.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	18.5	26.8	0.0	13.6	13.2	0.0	92.1	17.1	0.0	15.9	13.3
LnGrp LOS		B	C		B	B		F	B		B	B
Approach Vol, veh/h		1095			704			1156			1112	
Approach Delay, s/veh		22.6			13.4			67.3			15.3	
Approach LOS		C			B			E			B	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	26.0	27.2	26.0	27.2
Change Period (Y+Rc), s	7.0	7.0	7.0	7.0
Max Green Setting (Gmax), s	19.0	22.0	19.0	22.0
Max Q Clear Time (g_c+I1), s	12.9	10.7	21.0	18.4
Green Ext Time (p_c), s	3.1	2.5	0.0	1.8

Intersection Summary	
HCM 7th Control Delay, s/veh	31.7
HCM 7th LOS	C

Intersection	
Intersection Delay, s/veh	11.1
Intersection LOS	B

Approach	EB	WB	NB	SB
Entry Lanes	1	1	0	0
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	939	212	0	0
Demand Flow Rate, veh/h	958	216	0	0
Vehicles Circulating, veh/h	0	503	958	719
Vehicles Exiting, veh/h	719	455	0	0
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	11.9	7.3	0.0	0.0
Approach LOS	B	A	-	-

Lane	Left	Left
Designated Moves	LT	T
Assumed Moves	LT	T
RT Channelized		
Lane Util	1.000	1.000
Follow-Up Headway, s	2.609	2.609
Critical Headway, s	4.976	4.976
A (Intercept)	1380	1380
B (Slope)	1.02e-3	1.02e-3
Entry Flow, veh/h	958	216
Cap Entry Lane, veh/h	1380	826
Entry HV Adj Factor	0.980	0.980
Flow Entry, veh/h	939	212
Cap Entry, veh/h	1353	810
V/C Ratio	0.694	0.261
Control Delay, s/veh	11.9	7.3
LOS	B	A
95th %tile Queue, veh	6	1

Intersection	
Intersection Delay, s/veh	14.3
Intersection LOS	B

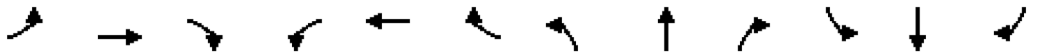
Approach	EB	WB	NB	SB
Entry Lanes	1	1	0	0
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	967	630	0	0
Demand Flow Rate, veh/h	986	643	0	0
Vehicles Circulating, veh/h	130	0	1116	643
Vehicles Exiting, veh/h	513	1116	0	0
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	18.9	7.3	0.0	0.0
Approach LOS	C	A	-	-

Lane	Left	Left
Designated Moves	T	LT
Assumed Moves	T	LT
RT Channelized		
Lane Util	1.000	1.000
Follow-Up Headway, s	2.609	2.609
Critical Headway, s	4.976	4.976
A (Intercept)	1380	1380
B (Slope)	1.02e-3	1.02e-3
Entry Flow, veh/h	986	643
Cap Entry Lane, veh/h	1209	1380
Entry HV Adj Factor	0.980	0.980
Flow Entry, veh/h	967	630
Cap Entry, veh/h	1185	1353
V/C Ratio	0.816	0.466
Control Delay, s/veh	18.9	7.3
LOS	C	A
95th %tile Queue, veh	10	3

Chuluota Road at Lake Pickett Road Design Year 2048 Operational Analysis Results													
	Build Configuration	**No-Build (2-lane)**						**Build (4-lane)**					
	Peak Time	**AM**	**PM**	**AM**	**PM**	**AM**	**PM**	**AM**	**PM**	**AM**	**PM**	**AM**	**PM**
	Intersection Control Type	**Traffic Signal**	**Traffic Signal**	**1x1 Roundabout**	**1x1 Roundabout**	**Bowtie N-S**	**Bowtie N-S**	**Traffic Signal**	**Traffic Signal**	**2x1 Roundabout**	**2x1 Roundabout**	**Bowtie N-S**	**Bowtie N-S**
	Measure of Effectiveness	**Delay (s/veh) (LOS)**	**Delay (s/veh) (LOS)**	**Delay (s/veh) (LOS)**	**Delay (s/veh) (LOS)**	**Delay (s/veh) (LOS)**	**Delay (s/veh) (LOS)**	**Delay (s/veh) (LOS)**	**Delay (s/veh) (LOS)**	**Delay (s/veh) (LOS)**	**Delay (s/veh) (LOS)**	**Delay (s/veh) (LOS)**	**Delay (s/veh) (LOS)**
Approach	Eastbound	32.9 (C)	64.3 (E)	7.9 (A)	15.1 (C)	16.2 (B)	21.9 (C)	18.7 (B)	26.6 (C)	13.2 (B)	50.0 (E)	14.9 (B)	25.3 (C)
	Westbound	47.7 (D)	48.7 (D)	15.9 (C)	11.3 (B)	25.4 (C)	16.7 (B)	36.1 (D)	33.9 (C)	30.9 (D)	16.8 (C)	35.9 (D)	14.7 (B)
	Northbound	26.5 (C)	29.3 (C)	11.5 (B)	18.6 (C)	17.6 (B)	18.0 (B)	17.6 (B)	25.0 (C)	9.3 (A)	18.3 (C)	58.5 (E)	69.7 (E)
	Southbound	60.9 (E)	61.1 (E)	48.4 (E)	19.5 (C)	16.3 (B)	20.7 (C)	26.1 (C)	33.6 (C)	24.0 (C)	12.3 (B)	16.9 (B)	16.7 (B)
	Intersection	41.7 (D)	50.6 (D)	23.9 (C)	17.4 (C)	18.8 (B)	19.6 (B)	23.0 (C)	28.8 (C)	17.7 (C)	25.2 (D)	34.1 (C)	33.7 (C)

LOS Legend	
	LOS A
	LOS B
	LOS C
	LOS D
	LOS E
	LOS F

CHULUOTA ROAD & CYPRESS LAKE GLEN BOULEVARD S/LONG BOAT LANE



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	1	9	107	2	139	3	632	97	71	637	3
Future Volume (vph)	5	1	9	107	2	139	3	632	97	71	637	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	425		350	350		0
Storage Lanes	0		0	1		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.919			0.852				0.850		0.999	
Flt Protected		0.984		0.950			0.950			0.950		
Satd. Flow (prot)	0	1668	0	1752	1572	0	1752	1845	1568	1752	1843	0
Flt Permitted		0.984		0.950			0.950			0.950		
Satd. Flow (perm)	0	1668	0	1752	1572	0	1752	1845	1568	1752	1843	0
Link Speed (mph)		35			35			50			50	
Link Distance (ft)		414			612			603			690	
Travel Time (s)		8.1			11.9			8.2			9.4	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Adj. Flow (vph)	5	1	9	113	2	146	3	665	102	75	671	3
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	15	0	113	148	0	3	665	102	75	674	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 59.8%		ICU Level of Service B	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	19.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	1	9	107	2	139	3	632	97	71	637	3
Future Vol, veh/h	5	1	9	107	2	139	3	632	97	71	637	3
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	-	-	Free	-	-	None
Storage Length	-	-	-	0	-	-	425	-	350	350	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	5	1	9	113	2	146	3	665	102	75	671	3

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1494	1493	672	1492	1495	665	674	0	-	665	0	0
Stage 1	822	822	-	672	672	-	-	-	-	-	-	-
Stage 2	673	672	-	821	823	-	-	-	-	-	-	-
Critical Hdwy	7.13	6.53	6.23	7.13	6.53	6.23	4.13	-	-	4.13	-	-
Critical Hdwy Stg 1	6.13	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.13	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.527	4.027	3.327	3.527	4.027	3.327	2.227	-	-	2.227	-	-
Pot Cap-1 Maneuver	101	123	454	~ 101	122	458	913	-	0	919	-	-
Stage 1	367	387	-	444	453	-	-	-	0	-	-	-
Stage 2	443	453	-	367	386	-	-	-	0	-	-	-
Platoon blocked, %								-			-	-
Mov Cap-1 Maneuver	62	112	454	~ 90	112	458	913	-	-	919	-	-
Mov Cap-2 Maneuver	62	112	-	~ 90	112	-	-	-	-	-	-	-
Stage 1	337	355	-	442	452	-	-	-	-	-	-	-
Stage 2	299	452	-	329	355	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	34.75	123.21	0.04	0.92
HCM LOS	D	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	913	-	137	90	439	919	-	-
HCM Lane V/C Ratio	0.003	-	0.116	1.253	0.338	0.081	-	-
HCM Control Delay (s/veh)	9	-	34.7	262.7	17.3	9.3	-	-
HCM Lane LOS	A	-	D	F	C	A	-	-
HCM 95th %tile Q(veh)	0	-	0.4	8.1	1.5	0.3	-	-

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

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	4	0	2	74	0	68	5	660	85	77	819	4
Future Volume (vph)	4	0	2	74	0	68	5	660	85	77	819	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	425		350	350		0
Storage Lanes	0		0	1		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.955			0.850				0.850		0.999	
Flt Protected		0.968		0.950			0.950			0.950		
Satd. Flow (prot)	0	1705	0	1752	1568	0	1752	1845	1568	1752	1843	0
Flt Permitted		0.968		0.950			0.950			0.950		
Satd. Flow (perm)	0	1705	0	1752	1568	0	1752	1845	1568	1752	1843	0
Link Speed (mph)		35			35			50			50	
Link Distance (ft)		414			612			603			690	
Travel Time (s)		8.1			11.9			8.2			9.4	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Adj. Flow (vph)	4	0	2	78	0	72	5	695	89	81	862	4
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	6	0	78	72	0	5	695	89	81	866	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 62.3%		ICU Level of Service B	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	14.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	0	2	74	0	68	5	660	85	77	819	4
Future Vol, veh/h	4	0	2	74	0	68	5	660	85	77	819	4
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	-	-	Free	-	-	None
Storage Length	-	-	-	0	-	-	425	-	350	350	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	4	0	2	78	0	72	5	695	89	81	862	4

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1732	1732	864	1729	1734	695	866	0	-	695	0	0
Stage 1	1026	1026	-	705	705	-	-	-	-	-	-	-
Stage 2	705	705	-	1024	1028	-	-	-	-	-	-	-
Critical Hdwy	7.13	6.53	6.23	7.13	6.53	6.23	4.13	-	-	4.13	-	-
Critical Hdwy Stg 1	6.13	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.13	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.527	4.027	3.327	3.527	4.027	3.327	2.227	-	-	2.227	-	-
Pot Cap-1 Maneuver	69	87	352	~ 69	87	441	773	-	0	896	-	-
Stage 1	282	311	-	425	437	-	-	-	0	-	-	-
Stage 2	425	437	-	283	310	-	-	-	0	-	-	-
Platoon blocked, %								-			-	-
Mov Cap-1 Maneuver	52	79	352	~ 62	79	441	773	-	-	896	-	-
Mov Cap-2 Maneuver	52	79	-	~ 62	79	-	-	-	-	-	-	-
Stage 1	256	283	-	422	434	-	-	-	-	-	-	-
Stage 2	354	434	-	256	282	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	59.25	169.55	0.07	0.81
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	773	-	73	62	441	896	-	-
HCM Lane V/C Ratio	0.007	-	0.087	1.258	0.162	0.09	-	-
HCM Control Delay (s/veh)	9.7	-	59.2	$ 311.8	14.7	9.4	-	-
HCM Lane LOS	A	-	F	F	B	A	-	-
HCM 95th %tile Q(veh)	0	-	0.3	6.5	0.6	0.3	-	-

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

Intersection	
Intersection Delay, s/veh	9.3
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	14	261	770	749
Demand Flow Rate, veh/h	14	268	793	771
Vehicles Circulating, veh/h	884	693	82	121
Vehicles Exiting, veh/h	8	77	807	690
Ped Vol Crossing Leg, #/h	1	1	1	1
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	6.4	7.8	7.8	11.3
Approach LOS	A	A	A	B

Lane	Left	Bypass	Left	Bypass	Left	Bypass	Left
Designated Moves	LT	R	LT	R	LT	R	LTR
Assumed Moves	LT		LT		LT		LTR
RT Channelized		Yield		Yield		Free	
Lane Util	1.000		1.000		1.000		1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609	2.609		2.609
Critical Headway, s	4.976	4.976	4.976	4.976	4.976		4.976
A (Intercept)	1380	1380	1380	1380	1380		1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3	1.02e-3	1.02e-3		1.02e-3
Entry Flow, veh/h	5	9	118	150	688	105	771
Cap Entry Lane, veh/h	560	606	681	683	1269	1957	1220
Entry HV Adj Factor	1.000	0.971	0.974	0.971	0.971	0.971	0.971
Flow Entry, veh/h	5	9	115	146	668	102	749
Cap Entry, veh/h	560	588	663	663	1232	1900	1184
V/C Ratio	0.009	0.015	0.173	0.220	0.542	0.054	0.632
Control Delay, s/veh	6.5	6.3	7.4	8.1	9.0	0.0	11.3
LOS	A	A	A	A	A	A	B
95th %tile Queue, veh	0	0	1	1	3	0	5

MOVEMENT SUMMARY

Site: 101 [Chuluota Rd at Cypress Lake Glen Blvd N-Long Boat Ln AM Design (2048) No-Build (2-lane) Roundabout (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Roundabout 2048 NB AM

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] ft	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed mph
South: Chuluota Rd NB															
3	L2	All MCs	3	3.5	3	3.5	0.429	11.6	LOS B	3.5	88.8	0.33	0.40	0.33	37.4
8	T1	All MCs	665	3.5	665	3.5	0.429	4.9	LOS A	3.5	88.8	0.33	0.40	0.33	38.5
18	R2	All MCs	102	3.5	102	3.5	0.063	4.6	LOS A	0.0	0.0	0.00	0.50	0.00	39.0
Approach			771	3.5	771	3.5	0.429	4.9	LOS A	3.5	88.8	0.28	0.42	0.28	38.5
East: Cypress Lake Glen Blvd N WB															
1	L2	All MCs	113	3.5	113	3.5	0.149	12.9	LOS B	0.9	22.8	0.71	0.72	0.71	28.8
6	T1	All MCs	2	3.5	2	3.5	0.149	6.5	LOS A	0.9	22.8	0.71	0.72	0.71	29.3
16	R2	All MCs	146	3.5	146	3.5	0.144	6.2	LOS A	0.9	24.3	0.70	0.62	0.70	31.4
Approach			261	3.5	261	3.5	0.149	9.1	LOS A	0.9	24.3	0.71	0.66	0.71	30.2
North: Chuluota Rd SB															
7	L2	All MCs	75	3.5	75	3.5	0.599	12.3	LOS B	6.1	155.5	0.55	0.48	0.55	36.3
4	T1	All MCs	671	3.5	671	3.5	0.599	5.5	LOS A	6.1	155.5	0.55	0.48	0.55	37.3
14	R2	All MCs	3	3.5	3	3.5	0.599	5.5	LOS A	6.1	155.5	0.55	0.48	0.55	36.9
Approach			748	3.5	748	3.5	0.599	6.2	LOS A	6.1	155.5	0.55	0.48	0.55	37.2
West: Long Boat Ln EB															
5	L2	All MCs	5	3.5	5	3.5	0.011	14.4	LOS B	0.1	1.7	0.79	0.66	0.79	28.6
2	T1	All MCs	1	3.5	1	3.5	0.011	7.9	LOS A	0.1	1.7	0.79	0.66	0.79	29.1
12	R2	All MCs	9	3.5	9	3.5	0.012	7.3	LOS A	0.1	2.1	0.81	0.58	0.81	31.0
Approach			16	3.5	16	3.5	0.012	9.7	LOS A	0.1	2.1	0.80	0.61	0.80	30.0
All Vehicles			1796	3.5	1796	3.5	0.599	6.1	LOS A	6.1	155.5	0.46	0.48	0.46	36.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA HCM.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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Intersection	
Intersection Delay, s/veh	12.1
Intersection LOS	B

Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	6	150	789	947
Demand Flow Rate, veh/h	6	154	813	975
Vehicles Circulating, veh/h	1051	725	87	85
Vehicles Exiting, veh/h	9	83	968	720
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	7.6	6.9	8.5	15.8
Approach LOS	A	A	A	C

Lane	Left	Bypass	Left	Bypass	Left	Bypass	Left
Designated Moves	LT	R	LT	R	LT	R	LTR
Assumed Moves	LT		LT		LT		LTR
RT Channelized		Yield		Yield		Free	
Lane Util	1.000		1.000		1.000		1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609	2.609		2.609
Critical Headway, s	4.976	4.976	4.976	4.976	4.976		4.976
A (Intercept)	1380	1380	1380	1380	1380		1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3	1.02e-3	1.02e-3		1.02e-3
Entry Flow, veh/h	4	2	80	74	721	92	975
Cap Entry Lane, veh/h	472	514	659	662	1263	1957	1265
Entry HV Adj Factor	1.000	0.971	0.975	0.971	0.971	0.971	0.971
Flow Entry, veh/h	4	2	78	72	700	89	947
Cap Entry, veh/h	472	499	642	643	1226	1900	1229
V/C Ratio	0.008	0.004	0.121	0.112	0.571	0.047	0.771
Control Delay, s/veh	7.7	7.3	7.0	6.9	9.6	0.0	15.8
LOS	A	A	A	A	A	A	C
95th %tile Queue, veh	0	0	0	0	4	0	8

MOVEMENT SUMMARY

Site: 101 [Chuluota Rd at Cypress Lake Glen Blvd N-Long Boat Ln PM Design (2048) No-Build (2-lane) Roundabout (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

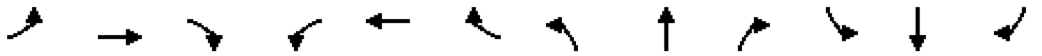
New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] ft	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed mph
South: Chuluota Rd NB															
3	L2	All MCs	5	3.5	5	3.5	0.452	12.6	LOS B	3.8	97.9	0.35	0.44	0.35	39.6
8	T1	All MCs	695	3.5	695	3.5	0.452	5.8	LOS A	3.8	97.9	0.35	0.44	0.35	40.9
18	R2	All MCs	89	3.5	89	3.5	0.055	5.3	LOS A	0.0	0.0	0.00	0.53	0.00	41.8
Approach			789	3.5	789	3.5	0.452	5.8	LOS A	3.8	97.9	0.31	0.45	0.31	40.9
East: Cypress Lake Glen Blvd N WB															
1	L2	All MCs	78	3.5	78	3.5	0.080	12.0	LOS B	0.5	13.5	0.71	0.69	0.71	29.0
6	T1	All MCs	1	3.5	1	3.5	0.080	5.5	LOS A	0.5	13.5	0.71	0.69	0.71	29.5
16	R2	All MCs	72	3.5	72	3.5	0.096	7.3	LOS A	0.6	14.6	0.71	0.66	0.71	31.0
Approach			151	3.5	151	3.5	0.096	9.7	LOS A	0.6	14.6	0.71	0.67	0.71	29.9
North: Chuluota Rd SB															
7	L2	All MCs	81	3.5	81	3.5	0.732	13.2	LOS B	10.0	257.7	0.61	0.48	0.61	38.3
4	T1	All MCs	862	3.5	862	3.5	0.732	6.5	LOS A	10.0	257.7	0.61	0.48	0.61	39.5
14	R2	All MCs	4	3.5	4	3.5	0.732	6.3	LOS A	10.0	257.7	0.61	0.48	0.61	39.0
Approach			947	3.5	947	3.5	0.732	7.0	LOS A	10.0	257.7	0.61	0.48	0.61	39.4
West: Long Boat Ln EB															
5	L2	All MCs	4	3.5	4	3.5	0.008	11.5	LOS B	0.1	1.7	0.92	0.61	0.92	22.4
2	T1	All MCs	1	3.5	1	3.5	0.008	6.4	LOS A	0.1	1.7	0.92	0.61	0.92	22.5
12	R2	All MCs	2	3.5	2	3.5	0.005	9.0	LOS A	0.0	0.8	0.89	0.58	0.89	22.7
Approach			7	3.5	7	3.5	0.008	10.1	LOS B	0.1	1.7	0.91	0.60	0.91	22.5
All Vehicles			1895	3.5	1895	3.5	0.732	6.8	LOS A	10.0	257.7	0.50	0.48	0.50	38.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA HCM.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	6	1	10	119	3	155	4	866	108	79	935	4
Future Volume (vph)	6	1	10	119	3	155	4	866	108	79	935	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	425		350	350		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	0.95
Frt		0.862			0.853				0.850		0.999	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1752	1590	0	1752	1573	0	1752	3505	1568	1752	3501	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1752	1590	0	1752	1573	0	1752	3505	1568	1752	3501	0
Link Speed (mph)		35			35			50			50	
Link Distance (ft)		414			612			603			690	
Travel Time (s)		8.1			11.9			8.2			9.4	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Adj. Flow (vph)	6	1	11	125	3	163	4	912	114	83	984	4
Shared Lane Traffic (%)												
Lane Group Flow (vph)	6	12	0	125	166	0	4	912	114	83	988	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 52.6%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	36.1

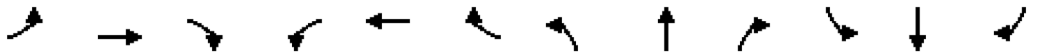
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	6	1	10	119	3	155	4	866	108	79	935	4
Future Vol, veh/h	6	1	10	119	3	155	4	866	108	79	935	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	Free	-	-	None
Storage Length	0	-	-	0	-	-	425	-	350	350	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	6	1	11	125	3	163	4	912	114	83	984	4

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1618	2073	494	1579	2075	456	988	0	-	912	0	0
Stage 1	1153	1153	-	920	920	-	-	-	-	-	-	-
Stage 2	466	920	-	659	1155	-	-	-	-	-	-	-
Critical Hdwy	7.56	6.56	6.96	7.56	6.56	6.96	4.16	-	-	4.16	-	-
Critical Hdwy Stg 1	6.56	5.56	-	6.56	5.56	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.56	5.56	-	6.56	5.56	-	-	-	-	-	-	-
Follow-up Hdwy	3.53	4.03	3.33	3.53	4.03	3.33	2.23	-	-	2.23	-	-
Pot Cap-1 Maneuver	68	53	518	~ 73	52	549	689	-	0	737	-	-
Stage 1	208	268	-	290	346	-	-	-	0	-	-	-
Stage 2	544	346	-	417	268	-	-	-	0	-	-	-
Platoon blocked, %								-			-	-
Mov Cap-1 Maneuver	40	46	518	~ 62	46	549	689	-	-	737	-	-
Mov Cap-2 Maneuver	40	46	-	~ 62	46	-	-	-	-	-	-	-
Stage 1	185	238	-	288	343	-	-	-	-	-	-	-
Stage 2	376	343	-	361	237	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	51.99	277.77	0.05	0.82
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	689	-	40	269	62	455	737	-	-
HCM Lane V/C Ratio	0.006	-	0.16	0.043	2.033	0.366	0.113	-	-
HCM Control Delay (s/veh)	10.3	-	112.5	19$	623.5	17.4	10.5	-	-
HCM Lane LOS	B	-	F	C	F	C	B	-	-
HCM 95th %tile Q(veh)	0	-	0.5	0.1	11.9	1.7	0.4	-	-

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	0	3	83	0	76	6	924	95	86	1156	5
Future Volume (vph)	5	0	3	83	0	76	6	924	95	86	1156	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	425		350	350		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	0.95
Frt		0.850			0.850				0.850		0.999	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1752	1568	0	1752	1568	0	1752	3505	1568	1752	3501	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1752	1568	0	1752	1568	0	1752	3505	1568	1752	3501	0
Link Speed (mph)		35			35			50			50	
Link Distance (ft)		414			612			603			690	
Travel Time (s)		8.1			11.9			8.2			9.4	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Adj. Flow (vph)	5	0	3	87	0	80	6	973	100	91	1217	5
Shared Lane Traffic (%)												
Lane Group Flow (vph)	5	3	0	87	80	0	6	973	100	91	1222	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 56.7%		ICU Level of Service B	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	24.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	0	3	83	0	76	6	924	95	86	1156	5
Future Vol, veh/h	5	0	3	83	0	76	6	924	95	86	1156	5
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	-	-	Free	-	-	None
Storage Length	0	-	-	0	-	-	425	-	350	350	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	5	0	3	87	0	80	6	973	100	91	1217	5

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1899	2386	611	1775	2388	486	1222	0	-	973	0	0
Stage 1	1401	1401	-	985	985	-	-	-	-	-	-	-
Stage 2	499	985	-	789	1403	-	-	-	-	-	-	-
Critical Hdwy	7.56	6.56	6.96	7.56	6.56	6.96	4.16	-	-	4.16	-	-
Critical Hdwy Stg 1	6.56	5.56	-	6.56	5.56	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.56	5.56	-	6.56	5.56	-	-	-	-	-	-	-
Follow-up Hdwy	3.53	4.03	3.33	3.53	4.03	3.33	2.23	-	-	2.23	-	-
Pot Cap-1 Maneuver	42	33	434	~ 52	33	524	561	-	0	698	-	-
Stage 1	146	203	-	264	322	-	-	-	0	-	-	-
Stage 2	520	322	-	348	203	-	-	-	0	-	-	-
Platoon blocked, %								-			-	-
Mov Cap-1 Maneuver	30	29	434	~ 44	28	524	561	-	-	698	-	-
Mov Cap-2 Maneuver	30	29	-	~ 44	28	-	-	-	-	-	-	-
Stage 1	127	177	-	261	318	-	-	-	-	-	-	-
Stage 2	435	318	-	300	177	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	96.83	$ 346.82	0.07	0.75
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	561	-	30	434	44	524	698	-	-
HCM Lane V/C Ratio	0.011	-	0.173	0.007	1.974	0.153	0.13	-	-
HCM Control Delay (s/veh)	11.5	-	146.9	13.4	$ 652.4	13.1	10.9	-	-
HCM Lane LOS	B	-	F	B	F	B	B	-	-
HCM 95th %tile Q(veh)	0	-	0.5	0	9	0.5	0.4	-	-

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

Intersection	
Intersection Delay, s/veh	7.7
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	1	1	2	2
Conflicting Circle Lanes	2	2	2	2
Adj Approach Flow, veh/h	17	291	1030	1071
Demand Flow Rate, veh/h	17	300	1060	1103
Vehicles Circulating, veh/h	1228	949	91	136
Vehicles Exiting, veh/h	11	202	1143	945
Ped Vol Crossing Leg, #/h	1	1	1	1
Ped Cap Adj	1.000	1.000	0.999	0.999
Approach Delay, s/veh	8.4	10.4	7.0	7.7
Approach LOS	A	B	A	A

Lane	Left	Bypass	Left	Bypass	Left	Right	Left	Right
Designated Moves	LT	R	LT	R	LT	TR	LT	TR
Assumed Moves	LT		LT		LT	TR	LT	TR
RT Channelized		Yield		Yield				
Lane Util	1.000		1.000		0.470	0.530	0.470	0.530
Follow-Up Headway, s	2.535	2.609	2.535	2.609	2.667	2.535	2.667	2.535
Critical Headway, s	4.328	4.976	4.328	4.976	4.645	4.328	4.645	4.328
A (Intercept)	1420	1380	1420	1380	1350	1420	1350	1420
B (Slope)	8.501e-4	1.02e-3	8.501e-4	1.02e-3	9.199e-4	8.501e-4	9.199e-4	8.501e-4
Entry Flow, veh/h	6	11	132	168	498	562	518	585
Cap Entry Lane, veh/h	500	430	634	526	1241	1314	1191	1265
Entry HV Adj Factor	1.000	0.971	0.969	0.971	0.972	0.971	0.972	0.971
Flow Entry, veh/h	6	11	128	163	484	546	504	568
Cap Entry, veh/h	500	418	614	511	1205	1275	1157	1227
V/C Ratio	0.012	0.026	0.208	0.319	0.402	0.428	0.435	0.463
Control Delay, s/veh	7.3	9.0	8.4	11.9	7.0	7.1	7.7	7.8
LOS	A	A	A	B	A	A	A	A
95th %tile Queue, veh	0	0	1	1	2	2	2	3

MOVEMENT SUMMARY

Site: 101 [Chuluota Rd at Cypress Lake Glen Blvd N-Long Boat Ln AM Design (2048) Build (4-lane) Roundabout (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] ft	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed mph
South: Chuluota Rd NB															
3	L2	All MCs	4	3.5	4	3.5	0.357	11.8	LOS B	2.5	64.1	0.33	0.42	0.33	37.1
8	T1	All MCs	912	3.5	912	3.5	0.357	5.2	LOS A	2.5	65.3	0.32	0.42	0.32	38.2
18	R2	All MCs	114	3.5	114	3.5	0.357	5.0	LOS A	2.5	65.3	0.31	0.42	0.31	37.8
Approach			1029	3.5	1029	3.5	0.357	5.2	LOS A	2.5	65.3	0.32	0.42	0.32	38.2
East: Cypress Lake Glen Blvd N WB															
1	L2	All MCs	125	3.5	125	3.5	0.168	11.7	LOS B	0.7	17.1	0.60	0.78	0.60	29.3
6	T1	All MCs	3	3.5	3	3.5	0.168	5.4	LOS A	0.7	17.1	0.60	0.78	0.60	29.7
16	R2	All MCs	163	3.5	163	3.5	0.166	5.1	LOS A	0.7	17.9	0.58	0.64	0.58	31.7
Approach			292	3.5	292	3.5	0.168	7.9	LOS A	0.7	17.9	0.59	0.70	0.59	30.5
North: Chuluota Rd SB															
7	L2	All MCs	83	3.5	83	3.5	0.388	12.1	LOS B	2.9	73.9	0.43	0.48	0.43	36.4
4	T1	All MCs	984	3.5	984	3.5	0.388	5.5	LOS A	3.0	76.1	0.41	0.46	0.41	37.6
14	R2	All MCs	4	3.5	4	3.5	0.388	5.3	LOS A	3.0	76.1	0.40	0.43	0.40	37.4
Approach			1072	3.5	1072	3.5	0.388	6.0	LOS A	3.0	76.1	0.41	0.46	0.41	37.5
West: Long Boat Ln EB															
5	L2	All MCs	6	3.5	6	3.5	0.011	12.1	LOS B	0.0	1.1	0.62	0.72	0.62	29.4
2	T1	All MCs	1	3.5	1	3.5	0.011	5.8	LOS A	0.0	1.1	0.62	0.72	0.62	29.8
12	R2	All MCs	11	3.5	11	3.5	0.012	5.2	LOS A	0.1	1.3	0.61	0.60	0.61	31.6
Approach			18	3.5	18	3.5	0.012	7.7	LOS A	0.1	1.3	0.62	0.65	0.62	30.6
All Vehicles			2411	3.5	2411	3.5	0.388	5.9	LOS A	3.0	76.1	0.39	0.47	0.39	36.7

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA HCM.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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Intersection	
Intersection Delay, s/veh	8.2
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	1	1	2	2
Conflicting Circle Lanes	2	2	2	2
Adj Approach Flow, veh/h	8	167	1079	1313
Demand Flow Rate, veh/h	8	172	1111	1353
Vehicles Circulating, veh/h	1438	1013	99	96
Vehicles Exiting, veh/h	11	197	1344	1007
Ped Vol Crossing Leg, #/h	1	1	1	1
Ped Cap Adj	1.000	1.000	0.999	0.999
Approach Delay, s/veh	9.5	8.9	7.4	8.9
Approach LOS	A	A	A	A

Lane	Left	Bypass	Left	Bypass	Left	Right	Left	Right
Designated Moves	LT	R	LT	R	LT	TR	LT	TR
Assumed Moves	LT		LT		LT	TR	LT	TR
RT Channelized		Yield		Yield				
Lane Util	1.000		1.000		0.470	0.530	0.470	0.530
Follow-Up Headway, s	2.535	2.609	2.535	2.609	2.667	2.535	2.667	2.535
Critical Headway, s	4.328	4.976	4.328	4.976	4.645	4.328	4.645	4.328
A (Intercept)	1420	1380	1420	1380	1350	1420	1350	1420
B (Slope)	8.501e-4	1.02e-3	8.501e-4	1.02e-3	9.199e-4	8.501e-4	9.199e-4	8.501e-4
Entry Flow, veh/h	5	3	90	82	522	589	636	717
Cap Entry Lane, veh/h	418	350	600	494	1232	1305	1236	1309
Entry HV Adj Factor	1.000	0.971	0.967	0.971	0.971	0.971	0.971	0.971
Flow Entry, veh/h	5	3	87	80	507	572	617	696
Cap Entry, veh/h	418	340	580	480	1196	1266	1198	1269
V/C Ratio	0.012	0.009	0.150	0.167	0.424	0.452	0.515	0.548
Control Delay, s/veh	8.8	10.7	8.0	9.8	7.3	7.4	8.7	9.0
LOS	A	B	A	A	A	A	A	A
95th %tile Queue, veh	0	0	1	1	2	2	3	3

MOVEMENT SUMMARY

Site: 101 [Chuluota Rd at Cypress Lake Glen Blvd N-Long Boat Ln PM Design (2048) Build (4-lane) Roundabout (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] ft	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed mph
South: Chuluota Rd NB															
3	L2	All MCs	6	3.5	6	3.5	0.376	11.8	LOS B	2.7	68.4	0.34	0.42	0.34	37.1
8	T1	All MCs	973	3.5	973	3.5	0.376	5.3	LOS A	2.7	69.6	0.33	0.42	0.33	38.1
18	R2	All MCs	100	3.5	100	3.5	0.376	5.1	LOS A	2.7	69.6	0.32	0.42	0.32	37.8
Approach			1079	3.5	1079	3.5	0.376	5.3	LOS A	2.7	69.6	0.33	0.42	0.33	38.1
East: Cypress Lake Glen Blvd N WB															
1	L2	All MCs	87	3.5	87	3.5	0.092	10.9	LOS B	0.4	9.6	0.57	0.75	0.57	29.3
6	T1	All MCs	1	3.5	1	3.5	0.092	4.6	LOS A	0.4	9.6	0.57	0.75	0.57	29.7
16	R2	All MCs	80	3.5	80	3.5	0.107	5.8	LOS A	0.4	10.6	0.59	0.68	0.59	31.6
Approach			168	3.5	168	3.5	0.107	8.4	LOS A	0.4	10.6	0.58	0.72	0.58	30.3
North: Chuluota Rd SB															
7	L2	All MCs	91	3.5	91	3.5	0.458	11.9	LOS B	3.8	96.6	0.39	0.46	0.39	36.5
4	T1	All MCs	1217	3.5	1217	3.5	0.458	5.3	LOS A	3.8	98.6	0.38	0.43	0.38	37.8
14	R2	All MCs	5	3.5	5	3.5	0.458	5.1	LOS A	3.8	98.6	0.37	0.42	0.37	37.5
Approach			1313	3.5	1313	3.5	0.458	5.8	LOS A	3.8	98.6	0.38	0.44	0.38	37.7
West: Long Boat Ln EB															
5	L2	All MCs	5	3.5	5	3.5	0.008	11.4	LOS B	0.0	0.8	0.65	0.68	0.65	29.5
2	T1	All MCs	1	3.5	1	3.5	0.008	5.2	LOS A	0.0	0.8	0.65	0.68	0.65	30.0
12	R2	All MCs	3	3.5	3	3.5	0.005	6.8	LOS A	0.0	0.5	0.65	0.62	0.65	31.2
Approach			9	3.5	9	3.5	0.008	9.2	LOS A	0.0	0.8	0.65	0.66	0.65	30.1
All Vehicles			2569	3.5	2569	3.5	0.458	5.8	LOS A	3.8	98.6	0.37	0.45	0.37	37.2

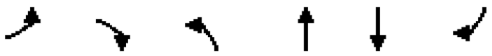
Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA HCM.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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Chuluota Road at Cypress Lake Glen Boulevard N/Long Boat Lane Design Year 2048 Operational Analysis Results									
	Build Configuration	**No-Build (2-lane)**				**Build (4-lane)**			
	Peak Time	**AM**	**PM**	**AM**	**PM**	**AM**	**PM**	**AM**	**PM**
	Intersection Control Type	**Two-Way Stop Control**	**Two-Way Stop Control**	**1x1 Roundabout**	**1x1 Roundabout**	**Two-Way Stop Control**	**Two-Way Stop Control**	**2x1 Roundabout**	**2x1 Roundabout**
	Measure of Effectiveness	**Delay (s/veh) (LOS)**	**Delay (s/veh) (LOS)**	**Delay (s/veh) (LOS)**	**Delay (s/veh) (LOS)**	**Delay (s/veh) (LOS)**	**Delay (s/veh) (LOS)**	**Delay (s/veh) (LOS)**	**Delay (s/veh) (LOS)**
Approach	Eastbound	34.8 (D)	59.3 (F)	6.4 (A)	7.6 (A)	52.0 (F)	96.8 (F)	8.4 (A)	9.5 (A)
	Westbound	123.2 (F)	169.6 (F)	7.8 (A)	6.9 (A)	277.8 (F)	346.8 (F)	10.4 (B)	8.9 (A)
	Northbound	0.0 (A)	0.1 (A)	7.8 (A)	8.5 (A)	0.1 (A)	0.1 (A)	7.0 (A)	7.4 (A)
	Southbound	0.9 (A)	0.8 (A)	11.3 (B)	15.8 (C)	0.8 (A)	0.8 (A)	7.7 (A)	8.9 (A)
	Intersection	19.7 (C)	14.7 (B)	9.3 (A)	12.1 (B)	36.1 (E)	24.3 (C)	7.7 (A)	8.2 (A)

LOS Legend	
	LOS A
	LOS B
	LOS C
	LOS D
	LOS E
	LOS F

CHULUOTA ROAD & CORNER LAKE DRIVE



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	54	49	14	675	735	22
Future Volume (vph)	54	49	14	675	735	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	325			250
Storage Lanes	1	1	1			1
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1752	1568	1752	1845	1845	1568
Flt Permitted	0.950		0.950			
Satd. Flow (perm)	1752	1568	1752	1845	1845	1568
Link Speed (mph)	25			50	50	
Link Distance (ft)	547			644	608	
Travel Time (s)	14.9			8.8	8.3	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Adj. Flow (vph)	57	52	15	711	774	23
Shared Lane Traffic (%)						
Lane Group Flow (vph)	57	52	15	711	774	23
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 48.7%		ICU Level of Service A	
Analysis Period (min) 15			

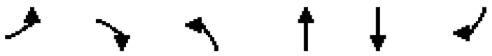
Intersection	
Int Delay, s/veh	2.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	54	49	14	675	735	22
Future Vol, veh/h	54	49	14	675	735	22
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	325	-	-	250
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	57	52	15	711	774	23

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1514	774	797	0	-	0
Stage 1	774	-	-	-	-	-
Stage 2	740	-	-	-	-	-
Critical Hdwy	6.43	6.23	4.13	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	2.227	-	-	-
Pot Cap-1 Maneuver	131	397	821	-	-	-
Stage 1	453	-	-	-	-	-
Stage 2	470	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	129	397	821	-	-	-
Mov Cap-2 Maneuver	129	-	-	-	-	-
Stage 1	445	-	-	-	-	-
Stage 2	470	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	35.33	0.19	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	821	-	129	397	-	-
HCM Lane V/C Ratio	0.018	-	0.441	0.13	-	-
HCM Control Delay (s/veh)	9.5	-	53.4	15.4	-	-
HCM Lane LOS	A	-	F	C	-	-
HCM 95th %tile Q(veh)	0.1	-	1.9	0.4	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	25	44	22	726	856	38
Future Volume (vph)	25	44	22	726	856	38
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	325			250
Storage Lanes	1	1	1			1
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1752	1568	1752	1845	1845	1568
Flt Permitted	0.950		0.950			
Satd. Flow (perm)	1752	1568	1752	1845	1845	1568
Link Speed (mph)	25			50	50	
Link Distance (ft)	547			644	608	
Travel Time (s)	14.9			8.8	8.3	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Adj. Flow (vph)	26	46	23	764	901	40
Shared Lane Traffic (%)						
Lane Group Flow (vph)	26	46	23	764	901	40
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	55.1%	ICU Level of Service	B
Analysis Period (min)	15		

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	25	44	22	726	856	38
Future Vol, veh/h	25	44	22	726	856	38
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	325	-	-	250
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	26	46	23	764	901	40

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1712	901	941	0	-	0
Stage 1	901	-	-	-	-	-
Stage 2	811	-	-	-	-	-
Critical Hdwy	6.43	6.23	4.13	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	2.227	-	-	-
Pot Cap-1 Maneuver	99	335	724	-	-	-
Stage 1	395	-	-	-	-	-
Stage 2	436	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	96	335	724	-	-	-
Mov Cap-2 Maneuver	96	-	-	-	-	-
Stage 1	382	-	-	-	-	-
Stage 2	436	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	31.5	0.3	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	724	-	96	335	-	-
HCM Lane V/C Ratio	0.032	-	0.275	0.138	-	-
HCM Control Delay (s/veh)	10.1	-	56.2	17.5	-	-
HCM Lane LOS	B	-	F	C	-	-
HCM 95th %tile Q(veh)	0.1	-	1	0.5	-	-

Intersection	
Intersection Delay, s/veh	9.2
Intersection LOS	A

Approach	EB	NB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	109	726	797
Demand Flow Rate, veh/h	113	747	821
Vehicles Circulating, veh/h	797	59	15
Vehicles Exiting, veh/h	15	797	791
Ped Vol Crossing Leg, #/h	1	0	1
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	7.2	9.5	9.2
Approach LOS	A	A	A

Lane	Left	Bypass	Left	Left	Bypass
Designated Moves	L	R	LT	T	R
Assumed Moves	L		LT	T	
RT Channelized		Yield			Free
Lane Util	1.000		1.000	1.000	
Follow-Up Headway, s	2.609	2.609	2.609	2.609	
Critical Headway, s	4.976	4.976	4.976	4.976	
A (Intercept)	1380	1380	1380	1380	
B (Slope)	1.02e-3	1.02e-3	1.02e-3	1.02e-3	
Entry Flow, veh/h	59	54	747	797	24
Cap Entry Lane, veh/h	612	612	1299	1359	1957
Entry HV Adj Factor	0.966	0.971	0.971	0.971	0.971
Flow Entry, veh/h	57	52	726	774	23
Cap Entry, veh/h	591	594	1262	1319	1900
V/C Ratio	0.096	0.088	0.575	0.587	0.012
Control Delay, s/veh	7.2	7.1	9.5	9.5	0.0
LOS	A	A	A	A	A
95th %tile Queue, veh	0	0	4	4	0

MOVEMENT SUMMARY

Site: 101 [Chuluota Rd at Corner Lake Dr AM Design (2048) No-Build (2-lane) Roundabout (Site Folder: General)]

Roundabout 2048 NB AM

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] ft	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed mph
South: Chuluota Rd NB															
3	L2	All MCs	15	3.5	15	3.5	0.543	12.7	LOS B	5.5	140.2	0.36	0.43	0.36	39.5
8	T1	All MCs	711	3.5	711	3.5	0.543	5.8	LOS A	5.5	140.2	0.36	0.43	0.36	40.8
Approach			725	3.5	725	3.5	0.543	6.0	LOS A	5.5	140.2	0.36	0.43	0.36	40.7
North: Chuluota Rd SB															
4	T1	All MCs	774	3.5	774	3.5	0.467	5.4	LOS A	4.0	102.6	0.13	0.42	0.13	42.0
14	R2	All MCs	23	3.5	23	3.5	0.014	5.3	LOS A	0.0	0.0	0.00	0.53	0.00	41.8
Approach			797	3.5	797	3.5	0.467	5.4	LOS A	4.0	102.6	0.12	0.42	0.12	42.0
West: Corner Lake Dr EB															
5	L2	All MCs	57	3.5	57	3.5	0.057	8.9	LOS A	0.4	9.3	0.70	0.66	0.70	22.7
12	R2	All MCs	52	3.5	52	3.5	0.070	5.9	LOS A	0.4	10.2	0.70	0.59	0.70	23.4
Approach			108	3.5	108	3.5	0.070	7.5	LOS A	0.4	10.2	0.70	0.63	0.70	23.0
All Vehicles			1631	3.5	1631	3.5	0.543	5.8	LOS A	5.5	140.2	0.27	0.44	0.27	39.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA HCM.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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Intersection	
Intersection Delay, s/veh	10.7
Intersection LOS	B

Approach	EB	NB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	72	787	941
Demand Flow Rate, veh/h	74	811	969
Vehicles Circulating, veh/h	928	27	24
Vehicles Exiting, veh/h	24	928	814
Ped Vol Crossing Leg, #/h	1	0	1
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	7.9	9.9	11.6
Approach LOS	A	A	B

Lane	Left	Bypass	Left	Left	Bypass
Designated Moves	L	R	LT	T	R
Assumed Moves	L		LT	T	
RT Channelized		Yield			Free
Lane Util	1.000		1.000	1.000	
Follow-Up Headway, s	2.609	2.609	2.609	2.609	
Critical Headway, s	4.976	4.976	4.976	4.976	
A (Intercept)	1380	1380	1380	1380	
B (Slope)	1.02e-3	1.02e-3	1.02e-3	1.02e-3	
Entry Flow, veh/h	27	47	811	928	41
Cap Entry Lane, veh/h	536	536	1342	1346	1957
Entry HV Adj Factor	0.963	0.971	0.971	0.971	0.971
Flow Entry, veh/h	26	46	787	901	40
Cap Entry, veh/h	516	520	1303	1307	1900
V/C Ratio	0.050	0.088	0.604	0.689	0.021
Control Delay, s/veh	7.6	8.0	9.9	12.1	0.0
LOS	A	A	A	B	A
95th %tile Queue, veh	0	0	4	6	0

MOVEMENT SUMMARY

Site: 101 [Chuluota Rd at Corner Lake Dr PM Design (2048) No-Build (2-lane) Roundabout (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

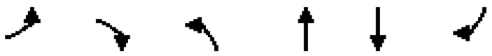
New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] ft	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed mph
South: Chuluota Rd NB															
3	L2	All MCs	23	3.5	23	3.5	0.572	12.4	LOS B	6.5	165.8	0.26	0.41	0.26	39.9
8	T1	All MCs	764	3.5	764	3.5	0.572	5.6	LOS A	6.5	165.8	0.26	0.41	0.26	41.2
Approach			787	3.5	787	3.5	0.572	5.8	LOS A	6.5	165.8	0.26	0.41	0.26	41.2
North: Chuluota Rd SB															
4	T1	All MCs	901	3.5	901	3.5	0.548	5.5	LOS A	5.1	131.2	0.18	0.41	0.18	41.7
14	R2	All MCs	40	3.5	40	3.5	0.025	5.3	LOS A	0.0	0.0	0.00	0.53	0.00	41.8
Approach			941	3.5	941	3.5	0.548	5.5	LOS A	5.1	131.2	0.17	0.42	0.17	41.7
West: Corner Lake Dr EB															
5	L2	All MCs	26	3.5	26	3.5	0.042	11.7	LOS B	0.2	6.4	0.77	0.71	0.77	22.1
12	R2	All MCs	46	3.5	46	3.5	0.053	6.0	LOS A	0.4	9.3	0.78	0.61	0.78	23.4
Approach			73	3.5	73	3.5	0.053	8.0	LOS A	0.4	9.3	0.78	0.65	0.78	22.9
All Vehicles			1801	3.5	1801	3.5	0.572	5.7	LOS A	6.5	165.8	0.24	0.43	0.24	40.2

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA HCM.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	60	55	16	918	1039	25
Future Volume (vph)	60	55	16	918	1039	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	325			250
Storage Lanes	1	1	1			1
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Frt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1752	1568	1752	3505	3505	1568
Flt Permitted	0.950		0.950			
Satd. Flow (perm)	1752	1568	1752	3505	3505	1568
Link Speed (mph)	25			50	50	
Link Distance (ft)	547			644	608	
Travel Time (s)	14.9			8.8	8.3	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Adj. Flow (vph)	63	58	17	966	1094	26
Shared Lane Traffic (%)						
Lane Group Flow (vph)	63	58	17	966	1094	26
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	38.8%	ICU Level of Service	A
Analysis Period (min)	15		

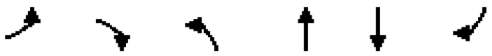
Intersection	
Int Delay, s/veh	3.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	60	55	16	918	1039	25
Future Vol, veh/h	60	55	16	918	1039	25
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	325	-	-	250
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	63	58	17	966	1094	26

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1611	547	1120	0	-	0
Stage 1	1094	-	-	-	-	-
Stage 2	517	-	-	-	-	-
Critical Hdwy	6.86	6.96	4.16	-	-	-
Critical Hdwy Stg 1	5.86	-	-	-	-	-
Critical Hdwy Stg 2	5.86	-	-	-	-	-
Follow-up Hdwy	3.53	3.33	2.23	-	-	-
Pot Cap-1 Maneuver	94	479	614	-	-	-
Stage 1	280	-	-	-	-	-
Stage 2	560	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	92	479	614	-	-	-
Mov Cap-2 Maneuver	92	-	-	-	-	-
Stage 1	273	-	-	-	-	-
Stage 2	560	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	61.22	0.19	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	614	-	92	479	-	-
HCM Lane V/C Ratio	0.027	-	0.689	0.121	-	-
HCM Control Delay (s/veh)	11	-	104.9	13.6	-	-
HCM Lane LOS	B	-	F	B	-	-
HCM 95th %tile Q(veh)	0.1	-	3.4	0.4	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	28	49	25	997	1199	43
Future Volume (vph)	28	49	25	997	1199	43
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	325			250
Storage Lanes	1	1	1			1
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Frt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1752	1568	1752	3505	3505	1568
Flt Permitted	0.950		0.950			
Satd. Flow (perm)	1752	1568	1752	3505	3505	1568
Link Speed (mph)	25			50	50	
Link Distance (ft)	547			644	608	
Travel Time (s)	14.9			8.8	8.3	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Adj. Flow (vph)	29	52	26	1049	1262	45
Shared Lane Traffic (%)						
Lane Group Flow (vph)	29	52	26	1049	1262	45
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	43.1%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	28	49	25	997	1199	43
Future Vol, veh/h	28	49	25	997	1199	43
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	325	-	-	250
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	29	52	26	1049	1262	45

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1839	631	1307	0	-	0
Stage 1	1262	-	-	-	-	-
Stage 2	577	-	-	-	-	-
Critical Hdwy	6.86	6.96	4.16	-	-	-
Critical Hdwy Stg 1	5.86	-	-	-	-	-
Critical Hdwy Stg 2	5.86	-	-	-	-	-
Follow-up Hdwy	3.53	3.33	2.23	-	-	-
Pot Cap-1 Maneuver	66	421	520	-	-	-
Stage 1	228	-	-	-	-	-
Stage 2	522	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	63	421	520	-	-	-
Mov Cap-2 Maneuver	63	-	-	-	-	-
Stage 1	216	-	-	-	-	-
Stage 2	522	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	47.66	0.3	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	520	-	63	421	-	-
HCM Lane V/C Ratio	0.051	-	0.469	0.122	-	-
HCM Control Delay (s/veh)	12.3	-	105.3	14.7	-	-
HCM Lane LOS	B	-	F	B	-	-
HCM 95th %tile Q(veh)	0.2	-	1.8	0.4	-	-

Intersection	
Intersection Delay, s/veh	6.8
Intersection LOS	A

Approach	EB	NB	SB
Entry Lanes	1	2	2
Conflicting Circle Lanes	2	2	2
Adj Approach Flow, veh/h	121	983	1120
Demand Flow Rate, veh/h	125	1013	1154
Vehicles Circulating, veh/h	1127	65	18
Vehicles Exiting, veh/h	45	1127	1060
Ped Vol Crossing Leg, #/h	1	0	1
Ped Cap Adj	1.000	1.000	0.999
Approach Delay, s/veh	9.4	6.6	6.8
Approach LOS	A	A	A

Lane	Left	Bypass	Left	Right	Left	Right
Designated Moves	L	R	LT	TR	LT	TR
Assumed Moves	L		LT	TR	LT	TR
RT Channelized		Yield				
Lane Util	1.000		0.470	0.530	0.470	0.530
Follow-Up Headway, s	2.535	2.609	2.667	2.535	2.667	2.535
Critical Headway, s	4.328	4.976	4.645	4.328	4.645	4.328
A (Intercept)	1420	1380	1350	1420	1350	1420
B (Slope)	8.501e-4	1.02e-3	9.199e-4	8.501e-4	9.199e-4	8.501e-4
Entry Flow, veh/h	65	60	476	537	542	612
Cap Entry Lane, veh/h	545	437	1271	1344	1328	1399
Entry HV Adj Factor	0.969	0.971	0.971	0.970	0.971	0.970
Flow Entry, veh/h	63	58	462	521	526	594
Cap Entry, veh/h	528	424	1234	1304	1288	1355
V/C Ratio	0.119	0.137	0.374	0.400	0.409	0.438
Control Delay, s/veh	8.3	10.5	6.5	6.6	6.8	6.9
LOS	A	B	A	A	A	A
95th %tile Queue, veh	0	0	2	2	2	2

MOVEMENT SUMMARY

Site: 101 [Chuluota Rd at Corner Lake Dr AM Design (2048) Build (4-lane) Roundabout (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] ft	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed mph
South: Chuluota Rd NB															
3	L2	All MCs	17	3.5	17	3.5	0.333	11.6	LOS B	2.4	61.8	0.28	0.41	0.28	37.5
8	T1	All MCs	966	3.5	966	3.5	0.333	4.8	LOS A	2.5	63.1	0.27	0.40	0.27	38.7
Approach			983	3.5	983	3.5	0.333	4.9	LOS A	2.5	63.1	0.27	0.40	0.27	38.6
North: Chuluota Rd SB															
4	T1	All MCs	1094	3.5	1094	3.5	0.362	4.8	LOS A	2.6	66.4	0.12	0.38	0.12	39.1
14	R2	All MCs	26	3.5	26	3.5	0.362	4.7	LOS A	2.6	66.4	0.12	0.39	0.12	38.6
Approach			1120	3.5	1120	3.5	0.362	4.8	LOS A	2.6	66.4	0.12	0.38	0.12	39.1
West: Corner Lake Dr EB															
5	L2	All MCs	63	3.5	63	3.5	0.064	7.3	LOS A	0.2	6.3	0.55	0.69	0.55	23.0
12	R2	All MCs	58	3.5	58	3.5	0.077	3.9	LOS A	0.3	7.2	0.57	0.58	0.57	23.9
Approach			121	3.5	121	3.5	0.077	5.7	LOS A	0.3	7.2	0.56	0.64	0.56	23.4
All Vehicles			2224	3.5	2224	3.5	0.362	4.9	LOS A	2.6	66.4	0.21	0.40	0.21	37.5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA HCM.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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Intersection	
Intersection Delay, s/veh	7.5
Intersection LOS	A

Approach	EB	NB	SB
Entry Lanes	1	2	2
Conflicting Circle Lanes	2	2	2
Adj Approach Flow, veh/h	81	1075	1307
Demand Flow Rate, veh/h	84	1107	1346
Vehicles Circulating, veh/h	1300	30	27
Vehicles Exiting, veh/h	73	1300	1110
Ped Vol Crossing Leg, #/h	1	0	1
Ped Cap Adj	1.000	1.000	0.999
Approach Delay, s/veh	11.2	6.7	7.9
Approach LOS	B	A	A

Lane	Left	Bypass	Left	Right	Left	Right
Designated Moves	L	R	LT	TR	LT	TR
Assumed Moves	L		LT	TR	LT	TR
RT Channelized		Yield				
Lane Util	1.000		0.470	0.530	0.470	0.530
Follow-Up Headway, s	2.535	2.609	2.667	2.535	2.667	2.535
Critical Headway, s	4.328	4.976	4.645	4.328	4.645	4.328
A (Intercept)	1420	1380	1350	1420	1350	1420
B (Slope)	8.501e-4	1.02e-3	9.199e-4	8.501e-4	9.199e-4	8.501e-4
Entry Flow, veh/h	30	54	520	587	633	713
Cap Entry Lane, veh/h	470	366	1313	1384	1317	1388
Entry HV Adj Factor	0.967	0.971	0.971	0.970	0.971	0.972
Flow Entry, veh/h	29	52	505	570	614	693
Cap Entry, veh/h	455	356	1275	1343	1277	1347
V/C Ratio	0.064	0.146	0.396	0.424	0.481	0.514
Control Delay, s/veh	8.8	12.6	6.6	6.8	7.8	8.0
LOS	A	B	A	A	A	A
95th %tile Queue, veh	0	1	2	2	3	3

MOVEMENT SUMMARY

Site: 101 [Chuluota Rd at Corner Lake Dr PM Design (2048) Build (4-lane) Roundabout (Site Folder: General)]

Roundabout 2048 Bld PM

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] ft	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed mph
South: Chuluota Rd NB															
3	L2	All MCs	26	3.5	26	3.5	0.353	11.4	LOS B	2.7	69.8	0.19	0.40	0.19	37.8
8	T1	All MCs	1049	3.5	1049	3.5	0.353	4.6	LOS A	2.8	71.1	0.18	0.39	0.18	39.0
Approach			1076	3.5	1076	3.5	0.353	4.7	LOS A	2.8	71.1	0.18	0.39	0.18	39.0
North: Chuluota Rd SB															
4	T1	All MCs	1262	3.5	1262	3.5	0.426	4.9	LOS A	3.2	82.2	0.17	0.38	0.17	38.9
14	R2	All MCs	45	3.5	45	3.5	0.426	4.7	LOS A	3.2	82.1	0.16	0.39	0.16	38.4
Approach			1307	3.5	1307	3.5	0.426	4.9	LOS A	3.2	82.2	0.17	0.38	0.17	38.9
West: Corner Lake Dr EB															
5	L2	All MCs	29	3.5	29	3.5	0.044	8.8	LOS A	0.2	4.1	0.61	0.75	0.61	22.8
12	R2	All MCs	52	3.5	52	3.5	0.055	3.3	LOS A	0.2	5.6	0.59	0.57	0.59	24.0
Approach			81	3.5	81	3.5	0.055	5.3	LOS A	0.2	5.6	0.60	0.64	0.60	23.5
All Vehicles			2464	3.5	2464	3.5	0.426	4.8	LOS A	3.2	82.2	0.19	0.39	0.19	38.1

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).
Roundabout Capacity Model: SIDRA HCM.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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Chuluota Road at Corner Lake Drive Design Year 2048 Operational Analysis Results									
	Build Configuration	**No-Build (2-lane)**				**Build (4-lane)**			
	Peak Time	**AM**	**PM**	**AM**	**PM**	**AM**	**PM**	**AM**	**PM**
	Intersection Control Type	**Two-Way Stop Control**	**Two-Way Stop Control**	**1x1 Roundabout**	**1x1 Roundabout**	**Two-Way Stop Control**	**Two-Way Stop Control**	**2x1 Roundabout**	**2x1 Roundabout**
	Measure of Effectiveness	**Delay (s/veh) (LOS)**	**Delay (s/veh) (LOS)**	**Delay (s/veh) (LOS)**	**Delay (s/veh) (LOS)**	**Delay (s/veh) (LOS)**	**Delay (s/veh) (LOS)**	**Delay (s/veh) (LOS)**	**Delay (s/veh) (LOS)**
Approach	Eastbound	35.3 (E)	31.5 (D)	7.2 (A)	7.9 (A)	62.1 (F)	47.7 (E)	9.4 (A)	11.2 (B)
	Northbound	0.2 (A)	0.3 (A)	9.5 (A)	9.9 (A)	0.2 (A)	0.3 (A)	6.6 (A)	6.7 (A)
	Southbound	0.0 (A)	0.0 (A)	9.2 (A)	11.6 (B)	0.0 (A)	0.0 (A)	6.8 (A)	7.9 (A)
	Intersection	2.4 (A)	1.4 (A)	9.2 (A)	10.7 (B)	3.4 (A)	1.7 (A)	6.8 (A)	7.5 (A)

LOS Legend	
	LOS A
	LOS B
	LOS C
	LOS D
	LOS E
	LOS F

CHULUOTA ROAD & CYPRESS LAKE GLEN BOULEVARD S



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	202	43	629	75	12	747
Future Volume (vph)	202	43	629	75	12	747
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		0	175	
Storage Lanes	1	1		1	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850		0.850		
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1752	1568	1845	1568	1752	1845
Flt Permitted	0.950				0.188	
Satd. Flow (perm)	1752	1568	1845	1568	347	1845
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)		45		79		
Link Speed (mph)	35		50			50
Link Distance (ft)	979		682			553
Travel Time (s)	19.1		9.3			7.5
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Adj. Flow (vph)	213	45	662	79	13	786
Shared Lane Traffic (%)						
Lane Group Flow (vph)	213	45	662	79	13	786
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	37		12			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Number of Detectors	1	1	2	1	1	2
Detector Template	Left	Right	Thru	Right	Left	Thru
Leading Detector (ft)	20	20	100	20	20	100
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	20	20	6	20	20	6
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94			94
Detector 2 Size(ft)			6			6
Detector 2 Type			Cl+Ex			Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)			0.0			0.0
Turn Type	Perm	Prot	NA	Perm	pm+pt	NA
Protected Phases		4	2		1	6

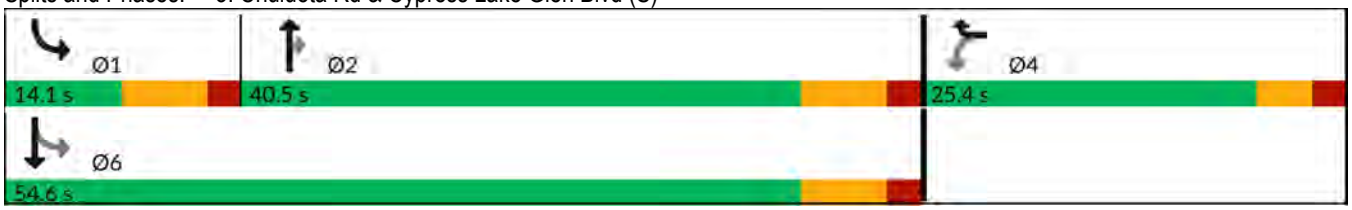


Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Permitted Phases	4	4		2	6	
Detector Phase	4	4	2	2	1	6
Switch Phase						
Minimum Initial (s)	10.0	10.0	16.0	16.0	7.0	16.0
Minimum Split (s)	25.4	25.4	37.1	37.1	14.1	37.1
Total Split (s)	25.4	25.4	40.5	40.5	14.1	54.6
Total Split (%)	31.8%	31.8%	50.6%	50.6%	17.6%	68.3%
Maximum Green (s)	20.0	20.0	33.4	33.4	7.0	47.5
Yellow Time (s)	3.4	3.4	5.1	5.1	5.1	5.1
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.4	5.4	7.1	7.1	7.1	7.1
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	Min	Min	None	Min
Walk Time (s)	7.0	7.0	7.0	7.0		7.0
Flash Don't Walk (s)	13.0	13.0	23.0	23.0		23.0
Pedestrian Calls (#/hr)	0	0	0	0		0
Act Effct Green (s)	13.3	13.3	29.1	29.1	31.1	31.1
Actuated g/C Ratio	0.23	0.23	0.51	0.51	0.54	0.54
v/c Ratio	0.52	0.11	0.71	0.10	0.04	0.79
Control Delay (s/veh)	26.6	8.6	18.6	3.6	6.6	17.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	26.6	8.6	18.6	3.6	6.6	17.5
LOS	C	A	B	A	A	B
Approach Delay (s/veh)	23.5		17.0			17.3
Approach LOS	C		B			B
90th %ile Green (s)	20.0	20.0	33.4	33.4	7.0	47.5
90th %ile Term Code	Max	Max	Max	Max	Max	Max
70th %ile Green (s)	15.2	15.2	36.5	36.5	0.0	36.5
70th %ile Term Code	Gap	Gap	Hold	Hold	Skip	Gap
50th %ile Green (s)	12.1	12.1	29.0	29.0	0.0	29.0
50th %ile Term Code	Gap	Gap	Hold	Hold	Skip	Gap
30th %ile Green (s)	10.1	10.1	22.3	22.3	0.0	22.3
30th %ile Term Code	Gap	Gap	Hold	Hold	Skip	Gap
10th %ile Green (s)	10.0	10.0	22.7	22.7	0.0	22.7
10th %ile Term Code	Min	Min	Dwell	Dwell	Skip	Dwell
Stops (vph)	162	12	415	11	6	536
Fuel Used(gal)	4	0	11	1	0	14
CO Emissions (g/hr)	261	33	802	38	11	944
NOx Emissions (g/hr)	51	6	156	7	2	184
VOC Emissions (g/hr)	61	8	186	9	2	219
Dilemma Vehicles (#)	0	0	47	0	0	57
Queue Length 50th (ft)	60	0	134	0	2	177
Queue Length 95th (ft)	156	24	#492	24	9	391
Internal Link Dist (ft)	899		602			473
Turn Bay Length (ft)					175	
Base Capacity (vph)	638	600	1140	999	366	1557

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.33	0.08	0.58	0.08	0.04	0.50

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 57.6			
Natural Cycle: 80			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.79			
Intersection Signal Delay (s/veh): 18.1		Intersection LOS: B	
Intersection Capacity Utilization 60.9%		ICU Level of Service B	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 80			
70th %ile Actuated Cycle: 64.2			
50th %ile Actuated Cycle: 53.6			
30th %ile Actuated Cycle: 44.9			
10th %ile Actuated Cycle: 45.2			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 3: Chuluota Rd & Cypress Lake Glen Blvd (S)





Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	202	43	629	75	12	747
Future Volume (veh/h)	202	43	629	75	12	747
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	213	45	662	0	13	786
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	326	290	784		255	1075
Arrive On Green	0.18	0.18	0.42	0.00	0.02	0.58
Sat Flow, veh/h	1767	1572	1856	1572	1767	1856
Grp Volume(v), veh/h	213	45	662	0	13	786
Grp Sat Flow(s),veh/h/ln	1767	1572	1856	1572	1767	1856
Q Serve(g_s), s	5.9	1.3	17.0	0.0	0.2	16.4
Cycle Q Clear(g_c), s	5.9	1.3	17.0	0.0	0.2	16.4
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	326	290	784		255	1075
V/C Ratio(X)	0.65	0.16	0.84		0.05	0.73
Avail Cap(c_a), veh/h	667	594	1170		448	1664
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	20.0	18.1	13.7	0.0	10.6	8.1
Incr Delay (d2), s/veh	2.2	0.2	3.8	0.0	0.1	1.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	0.4	5.7	0.0	0.1	3.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	22.2	18.4	17.5	0.0	10.7	9.1
LnGrp LOS	C	B	B		B	A
Approach Vol, veh/h	258		662			799
Approach Delay, s/veh	21.6		17.5			9.1
Approach LOS	C		B			A

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	8.3	29.5		15.2		37.8
Change Period (Y+Rc), s	7.1	7.1		5.4		7.1
Max Green Setting (Gmax), s	7.0	33.4		20.0		47.5
Max Q Clear Time (g_c+I1), s	2.2	19.0		7.9		18.4
Green Ext Time (p_c), s	0.0	3.4		0.6		5.5

Intersection Summary	
HCM 7th Control Delay, s/veh	14.2
HCM 7th LOS	B

Notes

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



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	166	22	719	218	29	891
Future Volume (vph)	166	22	719	218	29	891
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		0	175	
Storage Lanes	1	1		1	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850		0.850		
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1752	1568	1845	1568	1752	1845
Flt Permitted	0.950				0.158	
Satd. Flow (perm)	1752	1568	1845	1568	291	1845
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)		23		229		
Link Speed (mph)	35		50			50
Link Distance (ft)	979		682			553
Travel Time (s)	19.1		9.3			7.5
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Adj. Flow (vph)	175	23	757	229	31	938
Shared Lane Traffic (%)						
Lane Group Flow (vph)	175	23	757	229	31	938
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	37		12			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Number of Detectors	1	1	2	1	1	2
Detector Template	Left	Right	Thru	Right	Left	Thru
Leading Detector (ft)	20	20	100	20	20	100
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	20	20	6	20	20	6
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94			94
Detector 2 Size(ft)			6			6
Detector 2 Type			Cl+Ex			Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)			0.0			0.0
Turn Type	Perm	Prot	NA	Perm	pm+pt	NA
Protected Phases		4	2		1	6

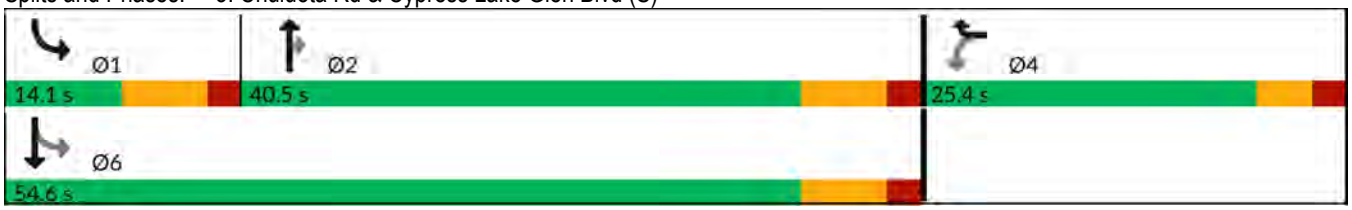


Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Permitted Phases	4	4		2	6	
Detector Phase	4	4	2	2	1	6
Switch Phase						
Minimum Initial (s)	10.0	10.0	16.0	16.0	7.0	16.0
Minimum Split (s)	25.4	25.4	37.1	37.1	14.1	37.1
Total Split (s)	25.4	25.4	40.5	40.5	14.1	54.6
Total Split (%)	31.8%	31.8%	50.6%	50.6%	17.6%	68.3%
Maximum Green (s)	20.0	20.0	33.4	33.4	7.0	47.5
Yellow Time (s)	3.4	3.4	5.1	5.1	5.1	5.1
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.4	5.4	7.1	7.1	7.1	7.1
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	Min	Min	None	Min
Walk Time (s)	7.0	7.0	7.0	7.0		7.0
Flash Don't Walk (s)	13.0	13.0	23.0	23.0		23.0
Pedestrian Calls (#/hr)	0	0	0	0		0
Act Effct Green (s)	12.8	12.8	36.4	36.4	41.3	41.3
Actuated g/C Ratio	0.19	0.19	0.54	0.54	0.62	0.62
v/c Ratio	0.52	0.07	0.75	0.24	0.09	0.82
Control Delay (s/veh)	31.0	11.4	21.8	2.8	6.1	18.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	31.0	11.4	21.8	2.8	6.1	18.3
LOS	C	B	C	A	A	B
Approach Delay (s/veh)	28.8		17.4			17.9
Approach LOS	C		B			B
90th %ile Green (s)	17.8	17.8	33.4	33.4	7.0	47.5
90th %ile Term Code	Gap	Gap	Max	Max	Max	Max
70th %ile Green (s)	14.5	14.5	33.4	33.4	7.0	47.5
70th %ile Term Code	Gap	Gap	Max	Max	Max	Max
50th %ile Green (s)	12.2	12.2	38.1	38.1	0.0	38.1
50th %ile Term Code	Gap	Gap	Hold	Hold	Skip	Gap
30th %ile Green (s)	10.0	10.0	31.6	31.6	0.0	31.6
30th %ile Term Code	Min	Min	Gap	Gap	Skip	Hold
10th %ile Green (s)	10.0	10.0	42.4	42.4	0.0	42.4
10th %ile Term Code	Min	Min	Dwell	Dwell	Skip	Dwell
Stops (vph)	140	9	481	22	11	629
Fuel Used(gal)	3	0	14	1	0	16
CO Emissions (g/hr)	229	19	957	98	21	1125
NOx Emissions (g/hr)	45	4	186	19	4	219
VOC Emissions (g/hr)	53	4	222	23	5	261
Dilemma Vehicles (#)	0	0	46	0	0	60
Queue Length 50th (ft)	60	0	167	0	4	249
Queue Length 95th (ft)	131	18	#577	37	15	#553
Internal Link Dist (ft)	899		602			473
Turn Bay Length (ft)					175	
Base Capacity (vph)	533	493	1016	966	335	1333

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.33	0.05	0.75	0.24	0.09	0.70

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 66.8			
Natural Cycle: 80			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.82			
Intersection Signal Delay (s/veh): 18.7		Intersection LOS: B	
Intersection Capacity Utilization 66.5%		ICU Level of Service C	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 77.8			
70th %ile Actuated Cycle: 74.5			
50th %ile Actuated Cycle: 62.8			
30th %ile Actuated Cycle: 54.1			
10th %ile Actuated Cycle: 64.9			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 3: Chuluota Rd & Cypress Lake Glen Blvd (S)





Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	166	22	719	218	29	891
Future Volume (veh/h)	166	22	719	218	29	891
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	175	23	757	0	31	938
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	287	255	853		266	1163
Arrive On Green	0.16	0.16	0.46	0.00	0.05	0.63
Sat Flow, veh/h	1767	1572	1856	1572	1767	1856
Grp Volume(v), veh/h	175	23	757	0	31	938
Grp Sat Flow(s),veh/h/ln	1767	1572	1856	1572	1767	1856
Q Serve(g_s), s	5.5	0.7	22.1	0.0	0.5	22.6
Cycle Q Clear(g_c), s	5.5	0.7	22.1	0.0	0.5	22.6
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	287	255	853		266	1163
V/C Ratio(X)	0.61	0.09	0.89		0.12	0.81
Avail Cap(c_a), veh/h	596	531	1046		392	1487
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	23.1	21.1	14.6	0.0	11.5	8.3
Incr Delay (d2), s/veh	2.1	0.2	8.1	0.0	0.2	2.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	0.3	8.5	0.0	0.1	5.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	25.2	21.3	22.7	0.0	11.7	11.0
LnGrp LOS	C	C	C		B	B
Approach Vol, veh/h	198		757			969
Approach Delay, s/veh	24.7		22.7			11.0
Approach LOS	C		C			B

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	9.9	34.4		15.0		44.3
Change Period (Y+Rc), s	7.1	7.1		5.4		7.1
Max Green Setting (Gmax), s	7.0	33.4		20.0		47.5
Max Q Clear Time (g_c+I1), s	2.5	24.1		7.5		24.6
Green Ext Time (p_c), s	0.0	3.2		0.4		6.8

Intersection Summary	
HCM 7th Control Delay, s/veh	17.0
HCM 7th LOS	B

Notes

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

Intersection	
Intersection Delay, s/veh	11.4
Intersection LOS	B

Approach	WB	NB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	258	741	799
Demand Flow Rate, veh/h	265	763	823
Vehicles Circulating, veh/h	682	13	219
Vehicles Exiting, veh/h	13	1029	682
Ped Vol Crossing Leg, #/h	1	1	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	8.9	7.1	16.2
Approach LOS	A	A	C

Lane	Left	Bypass	Left	Bypass	Left
Designated Moves	L	R	T	R	LT
Assumed Moves	L		T		LT
RT Channelized		Yield		Free	
Lane Util	1.000		1.000		1.000
Follow-Up Headway, s	2.609	2.609	2.609		2.609
Critical Headway, s	4.976	4.976	4.976		4.976
A (Intercept)	1380	1380	1380		1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3		1.02e-3
Entry Flow, veh/h	219	46	682	81	823
Cap Entry Lane, veh/h	688	688	1362	1957	1104
Entry HV Adj Factor	0.973	0.971	0.971	0.971	0.971
Flow Entry, veh/h	213	45	662	79	799
Cap Entry, veh/h	669	668	1322	1900	1072
V/C Ratio	0.318	0.067	0.501	0.042	0.746
Control Delay, s/veh	9.5	6.1	7.9	0.0	16.2
LOS	A	A	A	A	C
95th %tile Queue, veh	1	0	3	0	7

MOVEMENT SUMMARY

Site: 101 [Chuluota Rd at Cypress Lake Glen Blvd S AM Design (2048) No-Build (2-lane) Roundabout (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] ft	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed mph
South: Chuluota Rd NB															
8	T1	All MCs	662	3.5	662	3.5	0.400	5.4	LOS A	3.5	91.0	0.12	0.42	0.12	42.0
18	R2	All MCs	79	3.5	79	3.5	0.049	5.3	LOS A	0.0	0.0	0.00	0.53	0.00	41.8
Approach			741	3.5	741	3.5	0.400	5.4	LOS A	3.5	91.0	0.11	0.43	0.11	42.0
East: Cypress Lake Glen Blvd S WB															
1	L2	All MCs	213	3.5	213	3.5	0.196	12.0	LOS B	1.3	32.3	0.68	0.69	0.68	29.1
16	R2	All MCs	45	3.5	45	3.5	0.061	7.2	LOS A	0.3	8.3	0.65	0.64	0.65	31.0
Approach			258	3.5	258	3.5	0.196	11.2	LOS B	1.3	32.3	0.67	0.68	0.67	29.4
North: Chuluota Rd SB															
7	L2	All MCs	13	3.5	13	3.5	0.692	14.8	LOS B	7.9	202.7	0.76	0.60	0.79	37.8
4	T1	All MCs	786	3.5	786	3.5	0.692	8.0	LOS A	7.9	202.7	0.76	0.60	0.79	39.0
Approach			799	3.5	799	3.5	0.692	8.1	LOS A	7.9	202.7	0.76	0.60	0.79	39.0
All Vehicles			1798	3.5	1798	3.5	0.692	7.4	LOS A	7.9	202.7	0.48	0.54	0.49	38.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA HCM.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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Intersection	
Intersection Delay, s/veh	15.1
Intersection LOS	C

Approach	WB	NB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	198	986	969
Demand Flow Rate, veh/h	204	1016	998
Vehicles Circulating, veh/h	780	32	180
Vehicles Exiting, veh/h	32	1146	780
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	9.4	7.3	24.3
Approach LOS	A	A	C

Lane	Left	Bypass	Left	Bypass	Left
Designated Moves	L	R	T	R	LT
Assumed Moves	L		T		LT
RT Channelized		Yield		Free	
Lane Util	1.000		1.000		1.000
Follow-Up Headway, s	2.609	2.609	2.609		2.609
Critical Headway, s	4.976	4.976	4.976		4.976
A (Intercept)	1380	1380	1380		1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3		1.02e-3
Entry Flow, veh/h	180	24	780	236	998
Cap Entry Lane, veh/h	623	623	1336	1957	1148
Entry HV Adj Factor	0.972	0.971	0.971	0.971	0.971
Flow Entry, veh/h	175	23	757	229	969
Cap Entry, veh/h	606	605	1297	1900	1115
V/C Ratio	0.289	0.038	0.584	0.121	0.869
Control Delay, s/veh	9.8	6.4	9.5	0.0	24.3
LOS	A	A	A	A	C
95th %tile Queue, veh	1	0	4	0	12

MOVEMENT SUMMARY

Site: 101 [Chuluota Rd at Cypress Lake Glen Blvd S PM Design (2048) No-Build (2-lane) Roundabout (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] ft	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed mph
South: Chuluota Rd NB															
8	T1	All MCs	757	3.5	757	3.5	0.467	5.5	LOS A	4.7	119.6	0.23	0.41	0.23	41.5
18	R2	All MCs	229	3.5	229	3.5	0.142	5.3	LOS A	0.0	0.0	0.00	0.53	0.00	41.7
Approach			986	3.5	986	3.5	0.467	5.5	LOS A	4.7	119.6	0.18	0.44	0.18	41.5
East: Cypress Lake Glen Blvd S WB															
1	L2	All MCs	175	3.5	175	3.5	0.179	12.7	LOS B	1.2	31.3	0.75	0.70	0.75	28.8
16	R2	All MCs	23	3.5	23	3.5	0.034	7.9	LOS A	0.2	4.9	0.70	0.64	0.70	30.7
Approach			198	3.5	198	3.5	0.179	12.2	LOS B	1.2	31.3	0.74	0.70	0.74	29.0
North: Chuluota Rd SB															
7	L2	All MCs	31	3.5	31	3.5	0.819	16.1	LOS B	13.7	350.9	0.91	0.64	0.99	37.2
4	T1	All MCs	938	3.5	938	3.5	0.819	9.3	LOS A	13.7	350.9	0.91	0.64	0.99	38.3
Approach			968	3.5	968	3.5	0.819	9.5	LOS A	13.7	350.9	0.91	0.64	0.99	38.2
All Vehicles			2153	3.5	2153	3.5	0.819	7.9	LOS A	13.7	350.9	0.56	0.55	0.59	38.5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA HCM.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	225	48	851	84	14	1030
Future Volume (vph)	225	48	851	84	14	1030
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		200	175	
Storage Lanes	1	1		1	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt		0.850		0.850		
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1752	1568	3505	1568	1752	3505
Flt Permitted	0.950				0.194	
Satd. Flow (perm)	1752	1568	3505	1568	358	3505
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)		51		88		
Link Speed (mph)	35		50			50
Link Distance (ft)	979		682			553
Travel Time (s)	19.1		9.3			7.5
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Adj. Flow (vph)	237	51	896	88	15	1084
Shared Lane Traffic (%)						
Lane Group Flow (vph)	237	51	896	88	15	1084
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	37		12			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Number of Detectors	1	1	2	1	1	2
Detector Template	Left	Right	Thru	Right	Left	Thru
Leading Detector (ft)	20	20	100	20	20	100
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	20	20	6	20	20	6
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94			94
Detector 2 Size(ft)			6			6
Detector 2 Type			Cl+Ex			Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)			0.0			0.0
Turn Type	Perm	Prot	NA	Perm	pm+pt	NA
Protected Phases		4	2		1	6



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Permitted Phases	4	4		2	6	
Detector Phase	4	4	2	2	1	6
Switch Phase						
Minimum Initial (s)	10.0	10.0	16.0	16.0	7.0	16.0
Minimum Split (s)	25.4	25.4	37.1	37.1	14.1	37.1
Total Split (s)	26.0	26.0	39.9	39.9	14.1	54.0
Total Split (%)	32.5%	32.5%	49.9%	49.9%	17.6%	67.5%
Maximum Green (s)	20.6	20.6	32.8	32.8	7.0	46.9
Yellow Time (s)	3.4	3.4	5.1	5.1	5.1	5.1
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.4	5.4	7.1	7.1	7.1	7.1
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	Min	Min	None	Min
Walk Time (s)	7.0	7.0	7.0	7.0		7.0
Flash Don't Walk (s)	13.0	13.0	23.0	23.0		23.0
Pedestrian Calls (#/hr)	0	0	0	0		0
Act Effct Green (s)	13.3	13.3	23.9	23.9	25.7	25.7
Actuated g/C Ratio	0.25	0.25	0.46	0.46	0.49	0.49
v/c Ratio	0.53	0.12	0.56	0.12	0.04	0.63
Control Delay (s/veh)	23.9	7.6	13.2	3.8	7.1	11.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	23.9	7.6	13.2	3.8	7.1	11.4
LOS	C	A	B	A	A	B
Approach Delay (s/veh)	21.0		12.3			11.3
Approach LOS	C		B			B
90th %ile Green (s)	20.6	20.6	32.8	32.8	7.0	46.9
90th %ile Term Code	Max	Max	Max	Max	Max	Hold
70th %ile Green (s)	14.3	14.3	26.5	26.5	0.0	26.5
70th %ile Term Code	Gap	Gap	Hold	Hold	Skip	Gap
50th %ile Green (s)	11.8	11.8	21.9	21.9	0.0	21.9
50th %ile Term Code	Gap	Gap	Hold	Hold	Skip	Gap
30th %ile Green (s)	10.0	10.0	19.0	19.0	0.0	19.0
30th %ile Term Code	Min	Min	Hold	Hold	Skip	Gap
10th %ile Green (s)	10.0	10.0	17.8	17.8	0.0	17.8
10th %ile Term Code	Min	Min	Dwell	Dwell	Skip	Dwell
Stops (vph)	177	12	554	13	7	652
Fuel Used(gal)	4	1	14	1	0	16
CO Emissions (g/hr)	281	35	1011	44	12	1119
NOx Emissions (g/hr)	55	7	197	9	2	218
VOC Emissions (g/hr)	65	8	234	10	3	259
Dilemma Vehicles (#)	0	0	72	0	0	85
Queue Length 50th (ft)	54	0	80	0	2	105
Queue Length 95th (ft)	171	26	242	26	10	205
Internal Link Dist (ft)	899		602			473
Turn Bay Length (ft)				200	175	
Base Capacity (vph)	735	687	2341	1076	374	3131

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.32	0.07	0.38	0.08	0.04	0.35

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 52.3			
Natural Cycle: 80			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.63			
Intersection Signal Delay (s/veh): 12.9		Intersection LOS: B	
Intersection Capacity Utilization 51.4%		ICU Level of Service A	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 80			
70th %ile Actuated Cycle: 53.3			
50th %ile Actuated Cycle: 46.2			
30th %ile Actuated Cycle: 41.5			
10th %ile Actuated Cycle: 40.3			

Splits and Phases: 3: Chuluota Rd & Cypress Lake Glen Blvd (S)





Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	225	48	851	84	14	1030
Future Volume (veh/h)	225	48	851	84	14	1030
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	237	51	896	0	15	1084
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	355	316	1305		290	1912
Arrive On Green	0.20	0.20	0.37	0.00	0.03	0.54
Sat Flow, veh/h	1767	1572	3618	1572	1767	3618
Grp Volume(v), veh/h	237	51	896	0	15	1084
Grp Sat Flow(s),veh/h/ln	1767	1572	1763	1572	1767	1763
Q Serve(g_s), s	6.0	1.3	10.5	0.0	0.2	9.9
Cycle Q Clear(g_c), s	6.0	1.3	10.5	0.0	0.2	9.9
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	355	316	1305		290	1912
V/C Ratio(X)	0.67	0.16	0.69		0.05	0.57
Avail Cap(c_a), veh/h	747	665	2374		498	3395
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	17.9	16.1	13.0	0.0	9.4	7.4
Incr Delay (d2), s/veh	2.2	0.2	0.7	0.0	0.1	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	0.4	3.0	0.0	0.1	1.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	20.1	16.3	13.6	0.0	9.5	7.6
LnGrp LOS	C	B	B		A	A
Approach Vol, veh/h	288		896			1099
Approach Delay, s/veh	19.4		13.6			7.7
Approach LOS	B		B			A

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	8.4	25.1		15.2		33.5
Change Period (Y+Rc), s	7.1	7.1		5.4		7.1
Max Green Setting (Gmax), s	7.0	32.8		20.6		46.9
Max Q Clear Time (g_c+I1), s	2.2	12.5		8.0		11.9
Green Ext Time (p_c), s	0.0	5.6		0.7		8.3

Intersection Summary	
HCM 7th Control Delay, s/veh	11.5
HCM 7th LOS	B

Notes

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



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	185	25	973	243	33	1256
Future Volume (vph)	185	25	973	243	33	1256
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		200	175	
Storage Lanes	1	1		1	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt		0.850		0.850		
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1752	1568	3505	1568	1752	3505
Flt Permitted	0.950				0.166	
Satd. Flow (perm)	1752	1568	3505	1568	306	3505
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)		26		256		
Link Speed (mph)	35		50			50
Link Distance (ft)	979		682			553
Travel Time (s)	19.1		9.3			7.5
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Adj. Flow (vph)	195	26	1024	256	35	1322
Shared Lane Traffic (%)						
Lane Group Flow (vph)	195	26	1024	256	35	1322
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	37		12			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Number of Detectors	1	1	2	1	1	2
Detector Template	Left	Right	Thru	Right	Left	Thru
Leading Detector (ft)	20	20	100	20	20	100
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	20	20	6	20	20	6
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94			94
Detector 2 Size(ft)			6			6
Detector 2 Type			Cl+Ex			Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)			0.0			0.0
Turn Type	Perm	Prot	NA	Perm	pm+pt	NA
Protected Phases		4	2		1	6

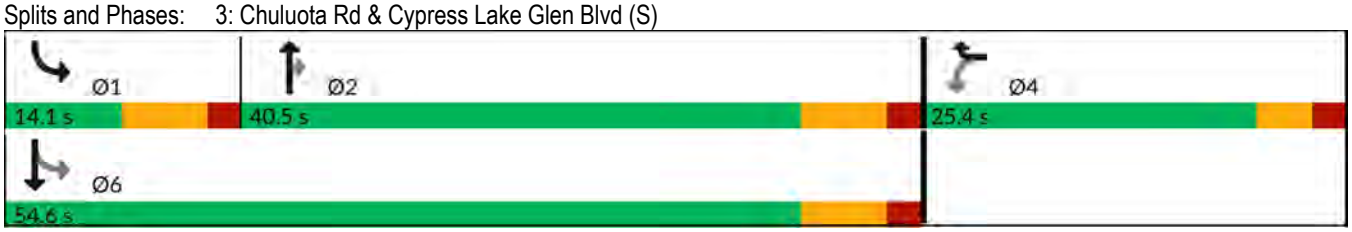


Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Permitted Phases	4	4		2	6	
Detector Phase	4	4	2	2	1	6
Switch Phase						
Minimum Initial (s)	10.0	10.0	16.0	16.0	7.0	16.0
Minimum Split (s)	25.4	25.4	37.1	37.1	14.1	37.1
Total Split (s)	25.4	25.4	40.5	40.5	14.1	54.6
Total Split (%)	31.8%	31.8%	50.6%	50.6%	17.6%	68.3%
Maximum Green (s)	20.0	20.0	33.4	33.4	7.0	47.5
Yellow Time (s)	3.4	3.4	5.1	5.1	5.1	5.1
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.4	5.4	7.1	7.1	7.1	7.1
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	Min	Min	None	Min
Walk Time (s)	7.0	7.0	7.0	7.0		7.0
Flash Don't Walk (s)	13.0	13.0	23.0	23.0		23.0
Pedestrian Calls (#/hr)	0	0	0	0		0
Act Effct Green (s)	13.5	13.5	30.1	30.1	34.6	34.6
Actuated g/C Ratio	0.22	0.22	0.49	0.49	0.57	0.57
v/c Ratio	0.51	0.07	0.59	0.28	0.10	0.67
Control Delay (s/veh)	27.9	10.7	14.8	3.0	6.7	11.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	27.9	10.7	14.8	3.0	6.7	11.2
LOS	C	B	B	A	A	B
Approach Delay (s/veh)	25.9		12.4			11.1
Approach LOS	C		B			B
90th %ile Green (s)	19.2	19.2	33.4	33.4	7.0	47.5
90th %ile Term Code	Gap	Gap	Max	Max	Max	Hold
70th %ile Green (s)	15.6	15.6	33.4	33.4	7.0	47.5
70th %ile Term Code	Gap	Gap	Max	Max	Max	Hold
50th %ile Green (s)	12.9	12.9	28.0	28.0	0.0	28.0
50th %ile Term Code	Gap	Gap	Gap	Gap	Skip	Hold
30th %ile Green (s)	10.0	10.0	22.9	22.9	0.0	22.9
30th %ile Term Code	Min	Min	Hold	Hold	Skip	Gap
10th %ile Green (s)	10.0	10.0	29.9	29.9	0.0	29.9
10th %ile Term Code	Min	Min	Dwell	Dwell	Skip	Dwell
Stops (vph)	150	10	652	23	14	772
Fuel Used(gal)	3	0	17	2	0	19
CO Emissions (g/hr)	244	21	1198	109	26	1336
NOx Emissions (g/hr)	47	4	233	21	5	260
VOC Emissions (g/hr)	56	5	278	25	6	310
Dilemma Vehicles (#)	0	0	74	0	0	89
Queue Length 50th (ft)	53	0	102	0	5	150
Queue Length 95th (ft)	144	19	279	41	17	262
Internal Link Dist (ft)	899		602			473
Turn Bay Length (ft)				200	175	
Base Capacity (vph)	600	554	2006	1007	346	2821

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.33	0.05	0.51	0.25	0.10	0.47

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 61.2			
Natural Cycle: 80			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.67			
Intersection Signal Delay (s/veh): 12.8		Intersection LOS: B	
Intersection Capacity Utilization 55.4%		ICU Level of Service B	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 79.2			
70th %ile Actuated Cycle: 75.6			
50th %ile Actuated Cycle: 53.4			
30th %ile Actuated Cycle: 45.4			
10th %ile Actuated Cycle: 52.4			

Splits and Phases: 3: Chuluota Rd & Cypress Lake Glen Blvd (S)





Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	185	25	973	243	33	1256
Future Volume (veh/h)	185	25	973	243	33	1256
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	195	26	1024	0	35	1322
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	318	283	1411		313	2066
Arrive On Green	0.18	0.18	0.40	0.00	0.05	0.59
Sat Flow, veh/h	1767	1572	3618	1572	1767	3618
Grp Volume(v), veh/h	195	26	1024	0	35	1322
Grp Sat Flow(s),veh/h/ln	1767	1572	1763	1572	1767	1763
Q Serve(g_s), s	5.4	0.7	13.1	0.0	0.6	13.3
Cycle Q Clear(g_c), s	5.4	0.7	13.1	0.0	0.6	13.3
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	318	283	1411		313	2066
V/C Ratio(X)	0.61	0.09	0.73		0.11	0.64
Avail Cap(c_a), veh/h	661	588	2203		451	3133
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	20.2	18.3	13.6	0.0	9.4	7.3
Incr Delay (d2), s/veh	1.9	0.1	0.7	0.0	0.2	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	0.3	3.8	0.0	0.1	2.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	22.1	18.4	14.3	0.0	9.5	7.7
LnGrp LOS	C	B	B		A	A
Approach Vol, veh/h	221		1024			1357
Approach Delay, s/veh	21.7		14.3			7.7
Approach LOS	C		B			A

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	9.9	28.5		15.0		38.4
Change Period (Y+Rc), s	7.1	7.1		5.4		7.1
Max Green Setting (Gmax), s	7.0	33.4		20.0		47.5
Max Q Clear Time (g_c+I1), s	2.6	15.1		7.4		15.3
Green Ext Time (p_c), s	0.0	6.3		0.5		10.8

Intersection Summary	
HCM 7th Control Delay, s/veh	11.5
HCM 7th LOS	B

Notes

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

Intersection	
Intersection Delay, s/veh	8.1
Intersection LOS	A

Approach	WB	NB	SB
Entry Lanes	1	2	2
Conflicting Circle Lanes	2	2	2
Adj Approach Flow, veh/h	288	984	1099
Demand Flow Rate, veh/h	297	1014	1132
Vehicles Circulating, veh/h	923	15	244
Vehicles Exiting, veh/h	106	1361	923
Ped Vol Crossing Leg, #/h	1	1	0
Ped Cap Adj	1.000	0.999	1.000
Approach Delay, s/veh	10.5	6.2	9.2
Approach LOS	B	A	A

Lane	Left	Bypass	Left	Right	Left	Right
Designated Moves	L	R	LT	TR	LT	TR
Assumed Moves	L		LT	TR	LT	TR
RT Channelized		Yield				
Lane Util	1.000		0.470	0.530	0.470	0.530
Follow-Up Headway, s	2.535	2.609	2.667	2.535	2.667	2.535
Critical Headway, s	4.328	4.976	4.645	4.328	4.645	4.328
A (Intercept)	1420	1380	1350	1420	1350	1420
B (Slope)	8.501e-4	1.02e-3	9.199e-4	8.501e-4	9.199e-4	8.501e-4
Entry Flow, veh/h	244	53	477	537	532	600
Cap Entry Lane, veh/h	648	538	1331	1402	1078	1154
Entry HV Adj Factor	0.971	0.971	0.970	0.971	0.971	0.971
Flow Entry, veh/h	237	51	463	522	517	583
Cap Entry, veh/h	629	523	1290	1360	1048	1121
V/C Ratio	0.377	0.098	0.359	0.383	0.493	0.520
Control Delay, s/veh	11.0	8.1	6.1	6.2	9.2	9.2
LOS	B	A	A	A	A	A
95th %tile Queue, veh	2	0	2	2	3	3

MOVEMENT SUMMARY

Site: 101 [Chuluota Rd at Cypress Lake Glen Blvd S AM Design (2048) Build (4-lane) Roundabout (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] ft	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed mph
South: Chuluota Rd NB															
8	T1	All MCs	896	3.5	896	3.5	0.318	3.8	LOS A	2.4	61.1	0.12	0.34	0.12	37.6
18	R2	All MCs	88	3.5	88	3.5	0.318	3.9	LOS A	2.4	61.1	0.11	0.34	0.11	37.2
Approach			984	3.5	984	3.5	0.318	3.8	LOS A	2.4	61.1	0.12	0.34	0.12	37.6
East: Cypress Lake Glen Blvd S WB															
1	L2	All MCs	237	3.5	237	3.5	0.225	10.9	LOS B	0.9	23.6	0.55	0.75	0.55	29.3
16	R2	All MCs	51	3.5	51	3.5	0.076	6.4	LOS A	0.3	6.8	0.55	0.67	0.55	31.4
Approach			287	3.5	287	3.5	0.225	10.1	LOS B	0.9	23.6	0.55	0.73	0.55	29.6
North: Chuluota Rd SB															
7	L2	All MCs	15	3.5	15	3.5	0.431	12.7	LOS B	3.2	82.5	0.57	0.52	0.57	35.4
4	T1	All MCs	1084	3.5	1084	3.5	0.431	5.8	LOS A	3.3	86.0	0.55	0.51	0.55	36.4
Approach			1099	3.5	1099	3.5	0.431	5.9	LOS A	3.3	86.0	0.55	0.51	0.55	36.4
All Vehicles			2371	3.5	2371	3.5	0.431	5.5	LOS A	3.3	86.0	0.37	0.47	0.37	35.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA HCM.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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Intersection	
Intersection Delay, s/veh	9.6
Intersection LOS	A

Approach	WB	NB	SB
Entry Lanes	1	2	2
Conflicting Circle Lanes	2	2	2
Adj Approach Flow, veh/h	221	1280	1357
Demand Flow Rate, veh/h	228	1319	1398
Vehicles Circulating, veh/h	1055	36	201
Vehicles Exiting, veh/h	300	1563	1055
Ped Vol Crossing Leg, #/h	1	1	0
Ped Cap Adj	1.000	0.999	1.000
Approach Delay, s/veh	11.2	7.9	10.9
Approach LOS	B	A	B

Lane	Left	Bypass	Left	Right	Left	Right
Designated Moves	L	R	LT	TR	LT	TR
Assumed Moves	L		LT	TR	LT	TR
RT Channelized		Yield				
Lane Util	1.000		0.470	0.530	0.470	0.530
Follow-Up Headway, s	2.535	2.609	2.667	2.535	2.667	2.535
Critical Headway, s	4.328	4.976	4.645	4.328	4.645	4.328
A (Intercept)	1420	1380	1350	1420	1350	1420
B (Slope)	8.501e-4	1.02e-3	9.199e-4	8.501e-4	9.199e-4	8.501e-4
Entry Flow, veh/h	201	27	620	699	657	741
Cap Entry Lane, veh/h	579	470	1306	1377	1122	1197
Entry HV Adj Factor	0.970	0.971	0.971	0.971	0.971	0.971
Flow Entry, veh/h	195	26	602	679	638	719
Cap Entry, veh/h	562	457	1266	1336	1089	1162
V/C Ratio	0.347	0.057	0.475	0.508	0.586	0.619
Control Delay, s/veh	11.5	8.6	7.8	8.0	10.8	11.1
LOS	B	A	A	A	B	B
95th %tile Queue, veh	2	0	3	3	4	5

MOVEMENT SUMMARY

Site: 101 [Chuluota Rd at Cypress Lake Glen Blvd S PM Design (2048) Build (4-lane) Roundabout (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] ft	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed mph
South: Chuluota Rd NB															
8	T1	All MCs	1024	3.5	1024	3.5	0.422	3.9	LOS A	3.6	91.7	0.22	0.35	0.22	37.2
18	R2	All MCs	256	3.5	256	3.5	0.422	4.0	LOS A	3.6	91.7	0.21	0.37	0.21	36.8
Approach			1280	3.5	1280	3.5	0.422	3.9	LOS A	3.6	91.7	0.22	0.35	0.22	37.1
East: Cypress Lake Glen Blvd S WB															
1	L2	All MCs	195	3.5	195	3.5	0.200	11.3	LOS B	0.9	22.5	0.61	0.76	0.61	29.2
16	R2	All MCs	26	3.5	26	3.5	0.042	6.8	LOS A	0.2	4.0	0.59	0.68	0.59	31.3
Approach			221	3.5	221	3.5	0.200	10.8	LOS B	0.9	22.5	0.61	0.75	0.61	29.4
North: Chuluota Rd SB															
7	L2	All MCs	35	3.5	35	3.5	0.517	12.6	LOS B	4.3	111.7	0.58	0.52	0.58	35.3
4	T1	All MCs	1322	3.5	1322	3.5	0.517	5.7	LOS A	4.5	115.8	0.56	0.50	0.56	36.3
Approach			1357	3.5	1357	3.5	0.517	5.9	LOS A	4.5	115.8	0.56	0.50	0.56	36.3
All Vehicles			2858	3.5	2858	3.5	0.517	5.4	LOS A	4.5	115.8	0.41	0.45	0.41	36.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA HCM.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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Chuluota Road at Cypress Lake Glen Boulevard S Design Year 2048 Operational Analysis Results									
	Build Configuration	**No-Build (2-lane)**				**Build (4-lane)**			
	Peak Time	**AM**	**PM**	**AM**	**PM**	**AM**	**PM**	**AM**	**PM**
	Intersection Control Type	**Traffic Signal**	**Traffic Signal**	**1x1 Roundabout**	**1x1 Roundabout**	**Traffic Signal**	**Traffic Signal**	**2x1 Roundabout**	**2x1 Roundabout**
	Measure of Effectiveness	**Delay (s/veh) (LOS)**	**Delay (s/veh) (LOS)**	**Delay (s/veh) (LOS)**	**Delay (s/veh) (LOS)**	**Delay (s/veh) (LOS)**	**Delay (s/veh) (LOS)**	**Delay (s/veh) (LOS)**	**Delay (s/veh) (LOS)**
Approach	Westbound	23.5 (C)	28.8 (C)	8.9 (A)	9.4 (A)	21.0 (C)	25.9 (C)	10.5 (B)	11.2 (B)
	Northbound	17.0 (B)	17.4 (B)	7.1 (A)	7.3 (A)	12.3 (B)	12.4 (B)	6.2 (A)	7.9 (A)
	Southbound	17.3 (B)	17.9 (B)	16.2 (C)	24.3 (C)	11.3 (B)	11.1 (B)	9.2 (A)	10.9 (B)
	Intersection	18.1 (B)	18.7 (B)	11.4 (B)	15.1 (C)	12.9 (B)	12.8 (B)	8.1 (A)	9.6 (A)

LOS Legend	
	LOS A
	LOS B
	LOS C
	LOS D
	LOS E
	LOS F

CORNER LAKE DRIVE & SCHOOLVIEW WAY



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	95	4	25	38	6	36
Future Volume (vph)	95	4	25	38	6	36
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850	0.918			
Flt Protected	0.950					0.993
Satd. Flow (prot)	1752	1568	1693	0	0	1832
Flt Permitted	0.950					0.993
Satd. Flow (perm)	1752	1568	1693	0	0	1832
Link Speed (mph)	25		25			25
Link Distance (ft)	1052		1066			774
Travel Time (s)	28.7		29.1			21.1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Adj. Flow (vph)	100	4	26	40	6	38
Shared Lane Traffic (%)						
Lane Group Flow (vph)	100	4	66	0	0	44
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Stop			Stop

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 18.9%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	8.1
Intersection LOS	A

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	95	4	25	38	6	36
Future Vol, veh/h	95	4	25	38	6	36
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	100	4	26	40	6	38
Number of Lanes	1	1	1	0	0	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	2
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	2	0
HCM Control Delay, s/veh	8.8	7.2	7.6
HCM LOS	A	A	A

Lane	NBLn1	WBLn1	WBLn2	SBLn1
Vol Left, %	0%	100%	0%	14%
Vol Thru, %	40%	0%	0%	86%
Vol Right, %	60%	0%	100%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	63	95	4	42
LT Vol	0	95	0	6
Through Vol	25	0	0	36
RT Vol	38	0	4	0
Lane Flow Rate	66	100	4	44
Geometry Grp	2	5	5	2
Degree of Util (X)	0.072	0.146	0.005	0.053
Departure Headway (Hd)	3.928	5.243	4.041	4.335
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	917	681	880	831
Service Time	1.929	2.995	1.792	2.337
HCM Lane V/C Ratio	0.072	0.147	0.005	0.053
HCM Control Delay, s/veh	7.2	8.9	6.8	7.6
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.2	0.5	0	0.2



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	51	11	76	110	7	20
Future Volume (vph)	51	11	76	110	7	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850	0.920			
Flt Protected	0.950					0.988
Satd. Flow (prot)	1752	1568	1697	0	0	1823
Flt Permitted	0.950					0.988
Satd. Flow (perm)	1752	1568	1697	0	0	1823
Link Speed (mph)	25		25			25
Link Distance (ft)	1052		1066			774
Travel Time (s)	28.7		29.1			21.1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Adj. Flow (vph)	54	12	80	116	7	21
Shared Lane Traffic (%)						
Lane Group Flow (vph)	54	12	196	0	0	28
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Stop			Stop

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 20.7%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	7.9
Intersection LOS	A

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	51	11	76	110	7	20
Future Vol, veh/h	51	11	76	110	7	20
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	54	12	80	116	7	21
Number of Lanes	1	1	1	0	0	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	2
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	2	0
HCM Control Delay, s/veh	8.4	7.8	7.5
HCM LOS	A	A	A

Lane	NBLn1	WBLn1	WBLn2	SBLn1
Vol Left, %	0%	100%	0%	26%
Vol Thru, %	41%	0%	0%	74%
Vol Right, %	59%	0%	100%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	186	51	11	27
LT Vol	0	51	0	7
Through Vol	76	0	0	20
RT Vol	110	0	11	0
Lane Flow Rate	196	54	12	28
Geometry Grp	2	5	5	2
Degree of Util (X)	0.203	0.081	0.014	0.034
Departure Headway (Hd)	3.729	5.44	4.237	4.264
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	948	654	836	825
Service Time	1.808	3.213	2.009	2.364
HCM Lane V/C Ratio	0.207	0.083	0.014	0.034
HCM Control Delay, s/veh	7.8	8.7	7.1	7.5
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.8	0.3	0	0.1



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	95	4	25	38	6	36
Future Volume (vph)	95	4	25	38	6	36
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850	0.918			
Flt Protected	0.950					0.993
Satd. Flow (prot)	1752	1568	1693	0	0	1832
Flt Permitted	0.950					0.993
Satd. Flow (perm)	1752	1568	1693	0	0	1832
Link Speed (mph)	25		25			25
Link Distance (ft)	1052		1066			774
Travel Time (s)	28.7		29.1			21.1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Adj. Flow (vph)	100	4	26	40	6	38
Shared Lane Traffic (%)						
Lane Group Flow (vph)	100	4	66	0	0	44
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 18.9%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	4.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	95	4	25	38	6	36
Future Vol, veh/h	95	4	25	38	6	36
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	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	100	4	26	40	6	38

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	97	46	0	0	66	0
Stage 1	46	-	-	-	-	-
Stage 2	51	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.13	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.227	-
Pot Cap-1 Maneuver	900	1020	-	-	1529	-
Stage 1	974	-	-	-	-	-
Stage 2	969	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	896	1020	-	-	1529	-
Mov Cap-2 Maneuver	896	-	-	-	-	-
Stage 1	974	-	-	-	-	-
Stage 2	965	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	9.48	0	1.05
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	896	1020	257	-
HCM Lane V/C Ratio	-	-	0.112	0.004	0.004	-
HCM Control Delay (s/veh)	-	-	9.5	8.5	7.4	0
HCM Lane LOS	-	-	A	A	A	A
HCM 95th %tile Q(veh)	-	-	0.4	0	0	-



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	51	11	76	110	7	20
Future Volume (vph)	51	11	76	110	7	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850	0.920			
Flt Protected	0.950					0.988
Satd. Flow (prot)	1752	1568	1697	0	0	1823
Flt Permitted	0.950					0.988
Satd. Flow (perm)	1752	1568	1697	0	0	1823
Link Speed (mph)	25		25			25
Link Distance (ft)	1052		1066			774
Travel Time (s)	28.7		29.1			21.1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Adj. Flow (vph)	54	12	80	116	7	21
Shared Lane Traffic (%)						
Lane Group Flow (vph)	54	12	196	0	0	28
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 20.7%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	2.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	51	11	76	110	7	20
Future Vol, veh/h	51	11	76	110	7	20
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	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	54	12	80	116	7	21

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	174	138	0	0	196	0
Stage 1	138	-	-	-	-	-
Stage 2	36	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.13	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.227	-
Pot Cap-1 Maneuver	814	908	-	-	1371	-
Stage 1	886	-	-	-	-	-
Stage 2	984	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	810	908	-	-	1371	-
Mov Cap-2 Maneuver	810	-	-	-	-	-
Stage 1	886	-	-	-	-	-
Stage 2	979	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	9.63	0	1.98
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	810	908	467	-
HCM Lane V/C Ratio	-	-	0.066	0.013	0.005	-
HCM Control Delay (s/veh)	-	-	9.8	9	7.6	0
HCM Lane LOS	-	-	A	A	A	A
HCM 95th %tile Q(veh)	-	-	0.2	0	0	-

Intersection	
Intersection Delay, s/veh	3.3
Intersection LOS	A

Approach	WB	NB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	104	66	44
Demand Flow Rate, veh/h	107	68	45
Vehicles Circulating, veh/h	27	6	103
Vehicles Exiting, veh/h	47	142	31
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	3.4	3.1	3.3
Approach LOS	A	A	A

Lane	Left	Left	Left
Designated Moves	LR	TR	LT
Assumed Moves	LR	TR	LT
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
A (Intercept)	1380	1380	1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3
Entry Flow, veh/h	107	68	45
Cap Entry Lane, veh/h	1342	1371	1242
Entry HV Adj Factor	0.972	0.974	0.975
Flow Entry, veh/h	104	66	44
Cap Entry, veh/h	1305	1335	1211
V/C Ratio	0.080	0.050	0.036
Control Delay, s/veh	3.4	3.1	3.3
LOS	A	A	A
95th %tile Queue, veh	0	0	0

MOVEMENT SUMMARY

Site: 101 [Corner School Drive at Schoolview Way AM Design (2048) No-Build (2-lane) Roundabout (Site Folder: General)]

Roundabout 2048 NB AM

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] ft	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed mph
South: Corner School Drive NB															
8	T1	All MCs	26	3.5	26	3.5	0.047	0.0	LOS A	0.2	6.0	0.05	0.08	0.05	24.8
18	R2	All MCs	40	3.5	40	3.5	0.047	0.7	LOS A	0.2	6.0	0.05	0.08	0.05	24.8
Approach			66	3.5	66	3.5	0.047	0.4	LOS A	0.2	6.0	0.05	0.08	0.05	24.8
East: Schoolview Way WB															
1	L2	All MCs	100	3.5	100	3.5	0.075	5.3	LOS A	0.4	9.3	0.11	0.46	0.11	23.5
16	R2	All MCs	4	3.5	4	3.5	0.075	0.8	LOS A	0.4	9.3	0.11	0.46	0.11	23.6
Approach			104	3.5	104	3.5	0.075	5.1	LOS A	0.4	9.3	0.11	0.46	0.11	23.5
North: Corner School Drive SB															
7	L2	All MCs	6	3.5	6	3.5	0.034	5.6	LOS A	0.2	4.2	0.24	0.14	0.24	24.3
4	T1	All MCs	38	3.5	38	3.5	0.034	0.4	LOS A	0.2	4.2	0.24	0.14	0.24	24.4
Approach			44	3.5	44	3.5	0.034	1.2	LOS A	0.2	4.2	0.24	0.14	0.24	24.4
All Vehicles			215	3.5	215	3.5	0.075	2.8	LOS A	0.4	9.3	0.12	0.28	0.12	24.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA HCM.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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Intersection	
Intersection Delay, s/veh	3.7
Intersection LOS	A

Approach	WB	NB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	66	196	28
Demand Flow Rate, veh/h	68	201	29
Vehicles Circulating, veh/h	82	7	56
Vehicles Exiting, veh/h	126	78	94
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	3.4	3.9	3.0
Approach LOS	A	A	A

Lane	Left	Left	Left
Designated Moves	LR	TR	LT
Assumed Moves	LR	TR	LT
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
A (Intercept)	1380	1380	1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3
Entry Flow, veh/h	68	201	29
Cap Entry Lane, veh/h	1269	1370	1303
Entry HV Adj Factor	0.971	0.973	0.978
Flow Entry, veh/h	66	196	28
Cap Entry, veh/h	1232	1333	1274
V/C Ratio	0.054	0.147	0.022
Control Delay, s/veh	3.4	3.9	3.0
LOS	A	A	A
95th %tile Queue, veh	0	1	0

MOVEMENT SUMMARY

Site: 101 [Corner School Drive at Schoolview Way PM Design (2048) No-Build (2-lane) Roundabout (Site Folder: General)]

Roundabout 2048 NB PM

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] ft	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed mph
South: Corner School Drive NB															
8	T1	All MCs	80	3.5	80	3.5	0.139	0.0	LOS A	0.7	19.0	0.06	0.08	0.06	24.8
18	R2	All MCs	116	3.5	116	3.5	0.139	0.7	LOS A	0.7	19.0	0.06	0.08	0.06	24.8
Approach			196	3.5	196	3.5	0.139	0.4	LOS A	0.7	19.0	0.06	0.08	0.06	24.8
East: Schoolview Way WB															
1	L2	All MCs	54	3.5	54	3.5	0.049	5.5	LOS A	0.2	6.0	0.21	0.44	0.21	23.5
16	R2	All MCs	12	3.5	12	3.5	0.049	1.0	LOS A	0.2	6.0	0.21	0.44	0.21	23.6
Approach			65	3.5	65	3.5	0.049	4.7	LOS A	0.2	6.0	0.21	0.44	0.21	23.5
North: Corner School Drive SB															
7	L2	All MCs	7	3.5	7	3.5	0.021	5.4	LOS A	0.1	2.6	0.17	0.18	0.17	24.2
4	T1	All MCs	21	3.5	21	3.5	0.021	0.2	LOS A	0.1	2.6	0.17	0.18	0.17	24.4
Approach			28	3.5	28	3.5	0.021	1.6	LOS A	0.1	2.6	0.17	0.18	0.17	24.4
All Vehicles			289	3.5	289	3.5	0.139	1.5	LOS A	0.7	19.0	0.11	0.17	0.11	24.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA HCM.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	59	4	25	44	6	36
Future Volume (vph)	59	4	25	44	6	36
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850	0.914			
Flt Protected	0.950					0.993
Satd. Flow (prot)	1752	1568	1686	0	0	1832
Flt Permitted	0.950					0.993
Satd. Flow (perm)	1752	1568	1686	0	0	1832
Link Speed (mph)	25		25			25
Link Distance (ft)	1052		1066			774
Travel Time (s)	28.7		29.1			21.1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Adj. Flow (vph)	62	4	26	46	6	38
Shared Lane Traffic (%)						
Lane Group Flow (vph)	62	4	72	0	0	44
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Stop			Stop

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 17.0%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	7.7
Intersection LOS	A

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	59	4	25	44	6	36
Future Vol, veh/h	59	4	25	44	6	36
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	62	4	26	46	6	38
Number of Lanes	1	1	1	0	0	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	2
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	2	0
HCM Control Delay, s/veh	8.4	7.1	7.5
HCM LOS	A	A	A

Lane	NBLn1	WBLn1	WBLn2	SBLn1
Vol Left, %	0%	100%	0%	14%
Vol Thru, %	36%	0%	0%	86%
Vol Right, %	64%	0%	100%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	69	59	4	42
LT Vol	0	59	0	6
Through Vol	25	0	0	36
RT Vol	44	0	4	0
Lane Flow Rate	73	62	4	44
Geometry Grp	2	5	5	2
Degree of Util (X)	0.075	0.091	0.005	0.051
Departure Headway (Hd)	3.716	5.254	4.052	4.15
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	949	681	879	851
Service Time	1.798	2.997	1.794	2.231
HCM Lane V/C Ratio	0.077	0.091	0.005	0.052
HCM Control Delay, s/veh	7.1	8.5	6.8	7.5
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.2	0.3	0	0.2



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	76	11	76	143	7	27
Future Volume (vph)	76	11	76	143	7	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850	0.912			
Flt Protected	0.950					0.990
Satd. Flow (prot)	1752	1568	1682	0	0	1826
Flt Permitted	0.950					0.990
Satd. Flow (perm)	1752	1568	1682	0	0	1826
Link Speed (mph)	25		25			25
Link Distance (ft)	1052		1066			774
Travel Time (s)	28.7		29.1			21.1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Adj. Flow (vph)	80	12	80	151	7	28
Shared Lane Traffic (%)						
Lane Group Flow (vph)	80	12	231	0	0	35
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Stop			Stop

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 23.7%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	8.3
Intersection LOS	A

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	76	11	76	143	7	27
Future Vol, veh/h	76	11	76	143	7	27
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	80	12	80	151	7	28
Number of Lanes	1	1	1	0	0	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	2
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	2	0
HCM Control Delay, s/veh	8.9	8.1	7.7
HCM LOS	A	A	A

Lane	NBLn1	WBLn1	WBLn2	SBLn1
Vol Left, %	0%	100%	0%	21%
Vol Thru, %	35%	0%	0%	79%
Vol Right, %	65%	0%	100%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	219	76	11	34
LT Vol	0	76	0	7
Through Vol	76	0	0	27
RT Vol	143	0	11	0
Lane Flow Rate	231	80	12	36
Geometry Grp	2	5	5	2
Degree of Util (X)	0.247	0.125	0.014	0.044
Departure Headway (Hd)	3.86	5.617	4.412	4.471
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	936	642	816	804
Service Time	1.865	3.317	2.112	2.481
HCM Lane V/C Ratio	0.247	0.125	0.015	0.045
HCM Control Delay, s/veh	8.1	9.1	7.2	7.7
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	1	0.4	0	0.1



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	59	4	25	44	6	36
Future Volume (vph)	59	4	25	44	6	36
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850	0.914			
Flt Protected	0.950					0.993
Satd. Flow (prot)	1752	1568	1686	0	0	1832
Flt Permitted	0.950					0.993
Satd. Flow (perm)	1752	1568	1686	0	0	1832
Link Speed (mph)	25		25			25
Link Distance (ft)	1052		1066			774
Travel Time (s)	28.7		29.1			21.1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Adj. Flow (vph)	62	4	26	46	6	38
Shared Lane Traffic (%)						
Lane Group Flow (vph)	62	4	72	0	0	44
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 17.0%		ICU Level of Service A	
Analysis Period (min) 15			

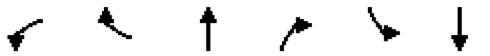
Intersection	
Int Delay, s/veh	3.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	59	4	25	44	6	36
Future Vol, veh/h	59	4	25	44	6	36
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	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	62	4	26	46	6	38

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	100	49	0	0	73	0
Stage 1	49	-	-	-	-	-
Stage 2	51	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.13	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.227	-
Pot Cap-1 Maneuver	896	1016	-	-	1521	-
Stage 1	970	-	-	-	-	-
Stage 2	969	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	892	1016	-	-	1521	-
Mov Cap-2 Maneuver	892	-	-	-	-	-
Stage 1	970	-	-	-	-	-
Stage 2	965	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	9.29	0	1.05
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	892	1016	257	-
HCM Lane V/C Ratio	-	-	0.07	0.004	0.004	-
HCM Control Delay (s/veh)	-	-	9.3	8.6	7.4	0
HCM Lane LOS	-	-	A	A	A	A
HCM 95th %tile Q(veh)	-	-	0.2	0	0	-



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	76	11	76	143	7	27
Future Volume (vph)	76	11	76	143	7	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850	0.912			
Flt Protected	0.950					0.990
Satd. Flow (prot)	1752	1568	1682	0	0	1826
Flt Permitted	0.950					0.990
Satd. Flow (perm)	1752	1568	1682	0	0	1826
Link Speed (mph)	25		25			25
Link Distance (ft)	1052		1066			774
Travel Time (s)	28.7		29.1			21.1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Adj. Flow (vph)	80	12	80	151	7	28
Shared Lane Traffic (%)						
Lane Group Flow (vph)	80	12	231	0	0	35
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 23.7%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	2.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	76	11	76	143	7	27
Future Vol, veh/h	76	11	76	143	7	27
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	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	80	12	80	151	7	28

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	198	155	0	0	231	0
Stage 1	155	-	-	-	-	-
Stage 2	43	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.13	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.227	-
Pot Cap-1 Maneuver	788	888	-	-	1331	-
Stage 1	871	-	-	-	-	-
Stage 2	977	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	784	888	-	-	1331	-
Mov Cap-2 Maneuver	784	-	-	-	-	-
Stage 1	871	-	-	-	-	-
Stage 2	971	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	9.99	0	1.59
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	784	888	371	-
HCM Lane V/C Ratio	-	-	0.102	0.013	0.006	-
HCM Control Delay (s/veh)	-	-	10.1	9.1	7.7	0
HCM Lane LOS	-	-	B	A	A	A
HCM 95th %tile Q(veh)	-	-	0.3	0	0	-

Intersection	
Intersection Delay, s/veh	3.1
Intersection LOS	A

Approach	WB	NB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	66	72	44
Demand Flow Rate, veh/h	68	74	45
Vehicles Circulating, veh/h	27	6	64
Vehicles Exiting, veh/h	53	103	31
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	3.2	3.1	3.1
Approach LOS	A	A	A

Lane	Left	Left	Left
Designated Moves	LR	TR	LT
Assumed Moves	LR	TR	LT
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
A (Intercept)	1380	1380	1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3
Entry Flow, veh/h	68	74	45
Cap Entry Lane, veh/h	1342	1371	1293
Entry HV Adj Factor	0.971	0.976	0.975
Flow Entry, veh/h	66	72	44
Cap Entry, veh/h	1303	1338	1260
V/C Ratio	0.051	0.054	0.035
Control Delay, s/veh	3.2	3.1	3.1
LOS	A	A	A
95th %tile Queue, veh	0	0	0

MOVEMENT SUMMARY

Site: 101 [Corner School Drive at Schoolview Way AM Design (2048) Build (4-lane) Roundabout (Site Folder: General)]

Roundabout 2048 Bld AM

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] ft	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed mph
South: Corner School Drive NB															
8	T1	All MCs	26	3.5	26	3.5	0.052	0.0	LOS A	0.3	6.5	0.05	0.08	0.05	24.8
18	R2	All MCs	46	3.5	46	3.5	0.052	0.7	LOS A	0.3	6.5	0.05	0.08	0.05	24.8
Approach			73	3.5	73	3.5	0.052	0.5	LOS A	0.3	6.5	0.05	0.08	0.05	24.8
East: Schoolview Way WB															
1	L2	All MCs	62	3.5	62	3.5	0.048	5.2	LOS A	0.2	5.8	0.11	0.46	0.11	23.5
16	R2	All MCs	4	3.5	4	3.5	0.048	0.8	LOS A	0.2	5.8	0.11	0.46	0.11	23.6
Approach			66	3.5	66	3.5	0.048	5.0	LOS A	0.2	5.8	0.11	0.46	0.11	23.5
North: Corner School Drive SB															
7	L2	All MCs	6	3.5	6	3.5	0.033	5.4	LOS A	0.2	4.0	0.18	0.12	0.18	24.4
4	T1	All MCs	38	3.5	38	3.5	0.033	0.3	LOS A	0.2	4.0	0.18	0.12	0.18	24.5
Approach			44	3.5	44	3.5	0.033	1.0	LOS A	0.2	4.0	0.18	0.12	0.18	24.5
All Vehicles			183	3.5	183	3.5	0.052	2.2	LOS A	0.3	6.5	0.10	0.23	0.10	24.2

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA HCM.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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Intersection	
Intersection Delay, s/veh	3.9
Intersection LOS	A

Approach	WB	NB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	92	231	35
Demand Flow Rate, veh/h	94	238	36
Vehicles Circulating, veh/h	82	7	82
Vehicles Exiting, veh/h	163	111	94
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	3.5	4.1	3.1
Approach LOS	A	A	A

Lane	Left	Left	Left
Designated Moves	LR	TR	LT
Assumed Moves	LR	TR	LT
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
A (Intercept)	1380	1380	1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3
Entry Flow, veh/h	94	238	36
Cap Entry Lane, veh/h	1269	1370	1269
Entry HV Adj Factor	0.979	0.969	0.977
Flow Entry, veh/h	92	231	35
Cap Entry, veh/h	1242	1327	1239
V/C Ratio	0.074	0.174	0.028
Control Delay, s/veh	3.5	4.1	3.1
LOS	A	A	A
95th %tile Queue, veh	0	1	0

MOVEMENT SUMMARY

Site: 101 [Corner School Drive at Schoolview Way PM Design (2048) Build (4-lane) Roundabout (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] ft	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed mph
South: Corner School Drive NB															
8	T1	All MCs	80	3.5	80	3.5	0.164	0.0	LOS A	0.9	23.2	0.06	0.09	0.06	24.8
18	R2	All MCs	151	3.5	151	3.5	0.164	0.7	LOS A	0.9	23.2	0.06	0.09	0.06	24.8
Approach			231	3.5	231	3.5	0.164	0.5	LOS A	0.9	23.2	0.06	0.09	0.06	24.8
East: Schoolview Way WB															
1	L2	All MCs	80	3.5	80	3.5	0.069	5.5	LOS A	0.3	8.6	0.22	0.45	0.22	23.5
16	R2	All MCs	12	3.5	12	3.5	0.069	1.1	LOS A	0.3	8.6	0.22	0.45	0.22	23.6
Approach			92	3.5	92	3.5	0.069	4.9	LOS A	0.3	8.6	0.22	0.45	0.22	23.5
North: Corner School Drive SB															
7	L2	All MCs	7	3.5	7	3.5	0.027	5.5	LOS A	0.1	3.4	0.22	0.16	0.22	24.2
4	T1	All MCs	28	3.5	28	3.5	0.027	0.3	LOS A	0.1	3.4	0.22	0.16	0.22	24.4
Approach			36	3.5	36	3.5	0.027	1.4	LOS A	0.1	3.4	0.22	0.16	0.22	24.4
All Vehicles			358	3.5	358	3.5	0.164	1.7	LOS A	0.9	23.2	0.12	0.19	0.12	24.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA HCM.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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Corner School Drive at Schoolview Way Design Year 2048 Operational Analysis Results													
	Build Configuration	**No-Build (2-lane)**						**Build (4-lane)**					
	Peak Time	**AM**	**PM**	**AM**	**PM**	**AM**	**PM**	**AM**	**PM**	**AM**	**PM**	**AM**	**PM**
	Intersection Control Type	**All-Way Stop Control**	**All-Way Stop Control**	**Two-Way Stop Control**	**Two-Way Stop Control**	**1x1 Roundabout**	**1x1 Roundabout**	**All-Way Stop Control**	**All-Way Stop Control**	**Two-Way Stop Control**	**Two-Way Stop Control**	**1x1 Roundabout**	**1x1 Roundabout**
	Measure of Effectiveness	**Delay (s/veh) (LOS)**	**Delay (s/veh) (LOS)**	**Delay (s/veh) (LOS)**	**Delay (s/veh) (LOS)**	**Delay (s/veh) (LOS)**	**Delay (s/veh) (LOS)**	**Delay (s/veh) (LOS)**	**Delay (s/veh) (LOS)**	**Delay (s/veh) (LOS)**	**Delay (s/veh) (LOS)**	**Delay (s/veh) (LOS)**	**Delay (s/veh) (LOS)**
Approach	Westbound	8.8 (A)	8.4 (A)	9.5 (A)	9.6 (A)	3.4 (A)	3.4 (A)	8.4 (A)	8.9 (A)	9.3 (A)	10.0 (B)	3.2 (A)	3.5 (A)
	Northbound	7.2 (A)	7.8 (A)	0.0 (A)	0.0 (A)	3.1 (A)	3.9 (A)	7.1 (A)	8.1 (A)	0.0 (A)	0.0 (A)	3.1 (A)	4.1 (A)
	Southbound	7.6 (A)	7.5 (A)	1.1 (A)	2.0 (A)	3.3 (A)	3.0 (A)	7.5 (A)	7.7 (A)	1.1 (A)	1.6 (A)	3.1 (A)	3.1 (A)
	Intersection	8.1 (A)	7.9 (A)	4.8 (A)	2.4 (A)	3.3 (A)	3.7 (A)	7.7 (A)	8.3 (A)	3.6 (A)	2.7 (A)	3.1 (A)	3.9 (A)

LOS Legend	
	LOS A
	LOS B
	LOS C
	LOS D
	LOS E
	LOS F

CHULUOTA ROAD & SCHOOLVIEW WAY/CYPRESS LAKE GLEN BOULEVARD S

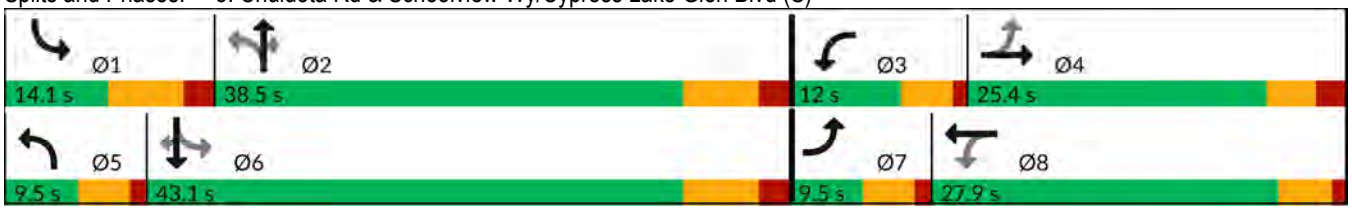
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	35	6	9	225	9	48	4	850	84	14	927	50
Future Volume (vph)	35	6	9	225	9	48	4	850	84	14	927	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	200		200	200		200
Storage Lanes	1		0	1		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt		0.910			0.872				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1752	1679	0	1752	1609	0	1752	3505	1568	1752	3505	1568
Flt Permitted				0.606			0.249			0.210		
Satd. Flow (perm)	1845	1679	0	1118	1609	0	459	3505	1568	387	3505	1568
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		9			51				138			138
Link Speed (mph)		35			35			50			50	
Link Distance (ft)		706			979			682			553	
Travel Time (s)		13.8			19.1			9.3			7.5	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Adj. Flow (vph)	37	6	9	237	9	51	4	895	88	15	976	53
Shared Lane Traffic (%)												
Lane Group Flow (vph)	37	15	0	237	60	0	4	895	88	15	976	53
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		37			37			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2	1	1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100		20	100		20	100	20	20	100	20
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	0
Detector 1 Size(ft)	20	6		20	6		20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	

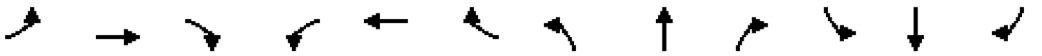
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2		2	6		6
Detector Phase	7	4		3	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	10.0		5.0	5.0		5.0	16.0	16.0	7.0	16.0	16.0
Minimum Split (s)	9.5	25.4		9.5	22.5		9.5	37.1	37.1	14.1	37.1	37.1
Total Split (s)	9.5	25.4		12.0	27.9		9.5	38.5	38.5	14.1	43.1	43.1
Total Split (%)	10.6%	28.2%		13.3%	31.0%		10.6%	42.8%	42.8%	15.7%	47.9%	47.9%
Maximum Green (s)	5.0	20.0		7.5	23.4		5.0	31.4	31.4	7.0	36.0	36.0
Yellow Time (s)	3.5	3.4		3.5	3.5		3.5	5.1	5.1	5.1	5.1	5.1
All-Red Time (s)	1.0	2.0		1.0	1.0		1.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	5.4		4.5	4.5		4.5	7.1	7.1	7.1	7.1	7.1
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None		None	None		None	Min	Min	None	Min	Min
Walk Time (s)		7.0			7.0			7.0	7.0		7.0	7.0
Flash Don't Walk (s)		13.0			11.0			23.0	23.0		23.0	23.0
Pedestrian Calls (#/hr)		0			0			0	0		0	0
Act Effct Green (s)	6.8	11.0		11.5	8.8		25.5	22.0	22.0	23.4	22.6	22.6
Actuated g/C Ratio	0.14	0.23		0.24	0.18		0.53	0.46	0.46	0.49	0.47	0.47
v/c Ratio	0.15	0.04		0.60	0.18		0.01	0.56	0.11	0.04	0.59	0.07
Control Delay (s/veh)	21.4	17.8		25.4	11.7		6.5	12.9	1.4	7.4	12.4	0.2
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	21.4	17.8		25.4	11.7		6.5	12.9	1.4	7.4	12.4	0.2
LOS	C	B		C	B		A	B	A	A	B	A
Approach Delay (s/veh)		20.3			22.6			11.8			11.7	
Approach LOS		C			C			B			B	
90th %ile Green (s)	5.0	10.0		7.5	13.4		5.0	31.4	31.4	7.0	36.0	36.0
90th %ile Term Code	Max	Min		Max	Hold		Max	Max	Max	Max	Max	Max
70th %ile Green (s)	5.0	0.0		16.3	6.8		0.0	23.1	23.1	0.0	23.1	23.1
70th %ile Term Code	Max	Skip		Hold	Gap		Skip	Hold	Hold	Skip	Gap	Gap
50th %ile Green (s)	0.0	0.0		7.5	7.5		0.0	19.8	19.8	0.0	19.8	19.8
50th %ile Term Code	Skip	Skip		Max	Hold		Skip	Hold	Hold	Skip	Gap	Gap
30th %ile Green (s)	0.0	0.0		7.5	7.5		0.0	16.0	16.0	0.0	16.0	16.0
30th %ile Term Code	Skip	Skip		Max	Hold		Skip	Min	Min	Skip	Min	Min
10th %ile Green (s)	0.0	0.0		7.3	7.3		0.0	17.2	17.2	0.0	17.2	17.2
10th %ile Term Code	Skip	Skip		Gap	Hold		Skip	Dwell	Dwell	Skip	Dwell	Dwell
Stops (vph)	30	10		175	20		3	552	4	7	601	0
Fuel Used(gal)	1	0		4	1		0	14	0	0	15	0
CO Emissions (g/hr)	39	14		284	48		5	1005	31	12	1035	12
NOx Emissions (g/hr)	8	3		55	9		1	196	6	2	201	2
VOC Emissions (g/hr)	9	3		66	11		1	233	7	3	240	3
Dilemma Vehicles (#)	0	1		0	4		0	80	0	0	88	0
Queue Length 50th (ft)	7	1		48	2		0	57	0	1	64	0
Queue Length 95th (ft)	35	20		#173	35		4	251	11	11	250	0
Internal Link Dist (ft)		626			899			602			473	
Turn Bay Length (ft)							200		200	200		200
Base Capacity (vph)	249	770		397	882		390	2509	1161	406	2859	1304

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.15	0.02		0.60	0.07		0.01	0.36	0.08	0.04	0.34	0.04

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 48.2			
Natural Cycle: 90			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.60			
Intersection Signal Delay (s/veh): 13.3		Intersection LOS: B	
Intersection Capacity Utilization 54.4%		ICU Level of Service A	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 80			
70th %ile Actuated Cycle: 51			
50th %ile Actuated Cycle: 38.9			
30th %ile Actuated Cycle: 35.1			
10th %ile Actuated Cycle: 36.1			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 3: Chuluota Rd & Schoolview Wy/Cypress Lake Glen Blvd (S)





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	35	6	9	225	9	48	4	850	84	14	927	50
Future Volume (veh/h)	35	6	9	225	9	48	4	850	84	14	927	50
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	37	6	9	237	9	51	4	895	0	15	976	53
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	363	91	137	503	53	298	215	1184		228	1401	625
Arrive On Green	0.04	0.14	0.14	0.12	0.22	0.22	0.01	0.34	0.00	0.03	0.40	0.40
Sat Flow, veh/h	1767	670	1005	1767	241	1368	1767	3526	1572	1767	3526	1572
Grp Volume(v), veh/h	37	0	15	237	0	60	4	895	0	15	976	53
Grp Sat Flow(s),veh/h/ln	1767	0	1675	1767	0	1609	1767	1763	1572	1767	1763	1572
Q Serve(g_s), s	1.1	0.0	0.5	6.9	0.0	1.9	0.1	14.2	0.0	0.3	14.5	1.3
Cycle Q Clear(g_c), s	1.1	0.0	0.5	6.9	0.0	1.9	0.1	14.2	0.0	0.3	14.5	1.3
Prop In Lane	1.00		0.60	1.00		0.85	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	363	0	229	503	0	350	215	1184		228	1401	625
V/C Ratio(X)	0.10	0.00	0.07	0.47	0.00	0.17	0.02	0.76		0.07	0.70	0.08
Avail Cap(c_a), veh/h	437	0	532	503	0	598	345	1759		379	2016	899
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.9	0.0	23.7	18.5	0.0	20.0	14.6	18.6	0.0	14.6	15.8	11.8
Incr Delay (d2), s/veh	0.1	0.0	0.1	0.7	0.0	0.2	0.0	1.1	0.0	0.1	0.6	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.2	2.7	0.0	0.7	0.0	4.9	0.0	0.1	4.7	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	22.0	0.0	23.8	19.2	0.0	20.2	14.6	19.7	0.0	14.7	16.4	11.9
LnGrp LOS	C		C	B		C	B	B		B	B	B
Approach Vol, veh/h		52			297			899			1044	
Approach Delay, s/veh		22.5			19.4			19.7			16.2	
Approach LOS		C			B			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.7	28.2	12.0	14.0	4.8	32.1	6.9	19.1
Change Period (Y+Rc), s	7.1	7.1	4.5	5.4	4.5	7.1	4.5	* 5.4
Max Green Setting (Gmax), s	7.0	31.4	7.5	20.0	5.0	36.0	5.0	* 23
Max Q Clear Time (g_c+I1), s	2.3	16.2	8.9	2.5	2.1	16.5	3.1	3.9
Green Ext Time (p_c), s	0.0	4.9	0.0	0.0	0.0	6.2	0.0	0.2

Intersection Summary	
HCM 7th Control Delay, s/veh	18.1
HCM 7th LOS	B

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

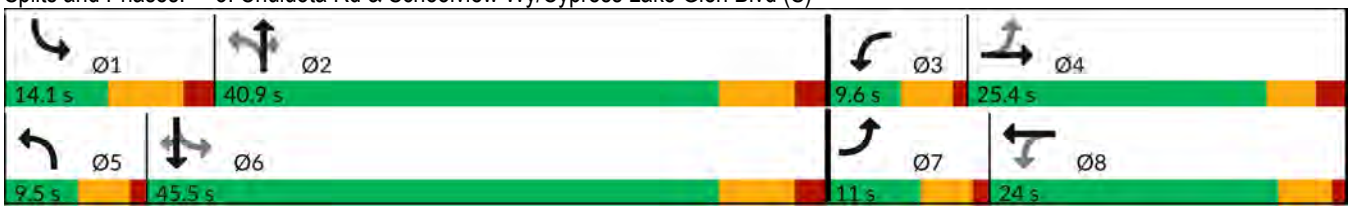
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	120	14	16	185	8	25	11	973	243	33	1256	68
Future Volume (vph)	120	14	16	185	8	25	11	973	243	33	1256	68
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	200		200	200		200
Storage Lanes	1		0	1		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt		0.920			0.885				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1752	1697	0	1752	1633	0	1752	3505	1568	1752	3505	1568
Flt Permitted				0.800			0.144			0.174		
Satd. Flow (perm)	1845	1697	0	1476	1633	0	266	3505	1568	321	3505	1568
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		17			26				256			138
Link Speed (mph)		35			35			50			50	
Link Distance (ft)		706			979			682			553	
Travel Time (s)		13.8			19.1			9.3			7.5	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Adj. Flow (vph)	126	15	17	195	8	26	12	1024	256	35	1322	72
Shared Lane Traffic (%)												
Lane Group Flow (vph)	126	32	0	195	34	0	12	1024	256	35	1322	72
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		37			37			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2	1	1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100		20	100		20	100	20	20	100	20
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	0
Detector 1 Size(ft)	20	6		20	6		20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	

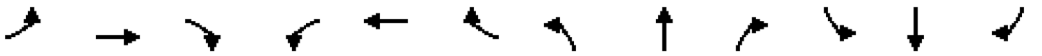
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2		2	6		6
Detector Phase	7	4		3	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	10.0		5.0	5.0		5.0	16.0	16.0	7.0	16.0	16.0
Minimum Split (s)	9.5	25.4		9.5	22.5		9.5	37.1	37.1	14.1	37.1	37.1
Total Split (s)	11.0	25.4		9.6	24.0		9.5	40.9	40.9	14.1	45.5	45.5
Total Split (%)	12.2%	28.2%		10.7%	26.7%		10.6%	45.4%	45.4%	15.7%	50.6%	50.6%
Maximum Green (s)	6.5	20.0		5.1	19.5		5.0	33.8	33.8	7.0	38.4	38.4
Yellow Time (s)	3.5	3.4		3.5	3.5		3.5	5.1	5.1	5.1	5.1	5.1
All-Red Time (s)	1.0	2.0		1.0	1.0		1.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	5.4		4.5	4.5		4.5	7.1	7.1	7.1	7.1	7.1
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None		None	None		None	Min	Min	None	Min	Min
Walk Time (s)		7.0			7.0			7.0	7.0		7.0	7.0
Flash Don't Walk (s)		13.0			11.0			23.0	23.0		23.0	23.0
Pedestrian Calls (#/hr)		0			0			0	0		0	0
Act Effct Green (s)	10.4	11.3		9.3	7.4		32.2	27.8	27.8	31.4	30.4	30.4
Actuated g/C Ratio	0.19	0.20		0.17	0.13		0.58	0.50	0.50	0.56	0.54	0.54
v/c Ratio	0.38	0.09		0.70	0.14		0.04	0.59	0.28	0.09	0.69	0.08
Control Delay (s/veh)	25.6	20.2		39.2	17.6		5.9	14.2	3.1	6.6	12.8	0.4
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	25.6	20.2		39.2	17.6		5.9	14.2	3.1	6.6	12.8	0.4
LOS	C	C		D	B		A	B	A	A	B	A
Approach Delay (s/veh)		24.5			36.0			11.9			12.0	
Approach LOS		C			D			B			B	
90th %ile Green (s)	6.5	10.0		5.1	9.5		5.0	33.8	33.8	7.0	38.4	38.4
90th %ile Term Code	Max	Min		Max	Hold		Max	Max	Max	Max	Max	Max
70th %ile Green (s)	6.5	10.0		5.1	9.5		0.0	33.8	33.8	7.0	47.9	47.9
70th %ile Term Code	Max	Min		Max	Hold		Skip	Max	Max	Max	Hold	Hold
50th %ile Green (s)	6.5	0.0		6.5	0.0		0.0	25.2	25.2	0.0	25.2	25.2
50th %ile Term Code	Max	Skip		Hold	Skip		Skip	Hold	Hold	Skip	Gap	Gap
30th %ile Green (s)	6.5	0.0		6.5	0.0		0.0	22.4	22.4	0.0	22.4	22.4
30th %ile Term Code	Max	Skip		Hold	Skip		Skip	Hold	Hold	Skip	Gap	Gap
10th %ile Green (s)	0.0	0.0		5.5	5.5		0.0	18.0	18.0	0.0	18.0	18.0
10th %ile Term Code	Skip	Skip		Hold	Hold		Skip	Hold	Hold	Skip	Gap	Gap
Stops (vph)	92	18		172	15		6	623	23	13	807	1
Fuel Used(gal)	2	0		4	0		0	17	2	0	20	0
CO Emissions (g/hr)	135	29		285	32		11	1159	109	25	1402	18
NOx Emissions (g/hr)	26	6		55	6		2	226	21	5	273	4
VOC Emissions (g/hr)	31	7		66	7		2	269	25	6	325	4
Dilemma Vehicles (#)	0	2		0	2		0	81	0	0	102	0
Queue Length 50th (ft)	29	3		47	2		1	64	0	3	94	0
Queue Length 95th (ft)	95	32		#159	29		8	282	41	17	362	3
Internal Link Dist (ft)		626			899			602			473	
Turn Bay Length (ft)							200		200	200		200
Base Capacity (vph)	331	697		278	660		303	2399	1154	383	2743	1257

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.38	0.05		0.70	0.05		0.04	0.43	0.22	0.09	0.48	0.06

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 55.8			
Natural Cycle: 90			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.70			
Intersection Signal Delay (s/veh): 14.4		Intersection LOS: B	
Intersection Capacity Utilization 61.3%		ICU Level of Service B	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 80			
70th %ile Actuated Cycle: 80			
50th %ile Actuated Cycle: 43.3			
30th %ile Actuated Cycle: 40.5			
10th %ile Actuated Cycle: 35.1			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 3: Chuluota Rd & Schoolview Wy/Cypress Lake Glen Blvd (S)





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	14	16	185	8	25	11	973	243	33	1256	68
Future Volume (veh/h)	120	14	16	185	8	25	11	973	243	33	1256	68
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	126	15	17	195	8	26	12	1024	0	35	1322	72
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	404	112	127	404	51	166	183	1368		267	1622	724
Arrive On Green	0.08	0.14	0.14	0.07	0.13	0.13	0.01	0.39	0.00	0.05	0.46	0.46
Sat Flow, veh/h	1767	794	900	1767	384	1247	1767	3526	1572	1767	3526	1572
Grp Volume(v), veh/h	126	0	32	195	0	34	12	1024	0	35	1322	72
Grp Sat Flow(s),veh/h/ln	1767	0	1694	1767	0	1631	1767	1763	1572	1767	1763	1572
Q Serve(g_s), s	4.2	0.0	1.1	5.1	0.0	1.3	0.3	17.3	0.0	0.8	22.4	1.8
Cycle Q Clear(g_c), s	4.2	0.0	1.1	5.1	0.0	1.3	0.3	17.3	0.0	0.8	22.4	1.8
Prop In Lane	1.00		0.53	1.00		0.76	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	404	0	239	404	0	217	183	1368		267	1622	724
V/C Ratio(X)	0.31	0.00	0.13	0.48	0.00	0.16	0.07	0.75		0.13	0.81	0.10
Avail Cap(c_a), veh/h	426	0	489	404	0	459	284	1721		358	1955	872
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.0	0.0	26.0	24.7	0.0	26.6	14.7	18.3	0.0	13.5	16.1	10.6
Incr Delay (d2), s/veh	0.4	0.0	0.3	0.9	0.0	0.3	0.1	1.4	0.0	0.2	2.3	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	0.0	0.5	2.8	0.0	0.5	0.1	6.0	0.0	0.3	7.5	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	23.5	0.0	26.3	25.6	0.0	26.9	14.8	19.7	0.0	13.7	18.5	10.6
LnGrp LOS	C		C	C		C	B	B		B	B	B
Approach Vol, veh/h		158			229			1036			1429	
Approach Delay, s/veh		24.0			25.8			19.6			18.0	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.5	34.0	9.6	15.2	5.5	39.0	10.1	14.6
Change Period (Y+Rc), s	7.1	7.1	4.5	5.4	4.5	7.1	4.5	* 5.4
Max Green Setting (Gmax), s	7.0	33.8	5.1	20.0	5.0	38.4	6.5	* 20
Max Q Clear Time (g_c+I1), s	2.8	19.3	7.1	3.1	2.3	24.4	6.2	3.3
Green Ext Time (p_c), s	0.0	5.6	0.0	0.1	0.0	7.4	0.0	0.1

Intersection Summary	
HCM 7th Control Delay, s/veh	19.5
HCM 7th LOS	B

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Intersection Delay, s/veh	8.2
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	1	1	2	2
Conflicting Circle Lanes	2	2	2	2
Adj Approach Flow, veh/h	52	297	987	1044
Demand Flow Rate, veh/h	53	306	1017	1075
Vehicles Circulating, veh/h	1264	964	59	257
Vehicles Exiting, veh/h	68	112	1258	960
Ped Vol Crossing Leg, #/h	1	1	1	1
Ped Cap Adj	1.000	1.000	0.999	0.999
Approach Delay, s/veh	9.1	11.3	6.5	9.0
Approach LOS	A	B	A	A

Lane	Left	Left	Bypass	Left	Right	Left	Right
Designated Moves	LTR	LT	R	LT	TR	LT	TR
Assumed Moves	LTR	LT		LT	TR	LT	TR
RT Channelized			Yield				
Lane Util	1.000	1.000		0.470	0.530	0.470	0.530
Follow-Up Headway, s	2.535	2.535	2.609	2.667	2.535	2.667	2.535
Critical Headway, s	4.328	4.328	4.976	4.645	4.328	4.645	4.328
A (Intercept)	1420	1420	1380	1350	1420	1350	1420
B (Slope)	8.501e-4	8.501e-4	1.02e-3	9.199e-4	8.501e-4	9.199e-4	8.501e-4
Entry Flow, veh/h	53	253	53	478	539	505	570
Cap Entry Lane, veh/h	485	626	518	1279	1351	1066	1141
Entry HV Adj Factor	0.978	0.971	0.971	0.971	0.971	0.971	0.970
Flow Entry, veh/h	52	246	51	464	523	491	553
Cap Entry, veh/h	474	608	503	1240	1310	1034	1107
V/C Ratio	0.109	0.404	0.101	0.374	0.400	0.474	0.500
Control Delay, s/veh	9.1	11.9	8.5	6.5	6.6	9.0	9.0
LOS	A	B	A	A	A	A	A
95th %tile Queue, veh	0	2	0	2	2	3	3

MOVEMENT SUMMARY

Site: 101 [Chuluota Rd at Schoolview Relocation-Cypress Lake Glen Blvd S AM Design (2048) Build A Roundabout (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] ft	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed mph
South: Chuluota Rd NB															
3	L2	All MCs	4	3.5	4	3.5	0.333	10.4	LOS B	2.4	61.3	0.26	0.35	0.26	36.1
8	T1	All MCs	895	3.5	895	3.5	0.333	4.0	LOS A	2.4	62.5	0.25	0.36	0.25	37.0
18	R2	All MCs	88	3.5	88	3.5	0.333	4.1	LOS A	2.4	62.5	0.25	0.36	0.25	36.7
Approach			987	3.5	987	3.5	0.333	4.0	LOS A	2.4	62.5	0.25	0.36	0.25	37.0
East: Cypress Lake Glen Blvd S WB															
1	L2	All MCs	237	3.5	237	3.5	0.247	11.1	LOS B	1.1	27.5	0.59	0.75	0.59	29.3
6	T1	All MCs	9	3.5	9	3.5	0.247	4.8	LOS A	1.1	27.5	0.59	0.75	0.59	29.8
16	R2	All MCs	51	3.5	51	3.5	0.080	6.5	LOS A	0.3	7.4	0.58	0.69	0.58	31.3
Approach			297	3.5	297	3.5	0.247	10.1	LOS B	1.1	27.5	0.59	0.74	0.59	29.6
North: Chuluota Rd SB															
7	L2	All MCs	15	3.5	15	3.5	0.418	12.9	LOS B	3.1	78.7	0.58	0.53	0.58	35.2
4	T1	All MCs	976	3.5	976	3.5	0.418	6.2	LOS A	3.2	82.4	0.56	0.52	0.56	36.1
14	R2	All MCs	53	3.5	53	3.5	0.418	5.9	LOS A	3.2	82.4	0.55	0.51	0.55	35.8
Approach			1043	3.5	1043	3.5	0.418	6.3	LOS A	3.2	82.4	0.56	0.52	0.56	36.1
West: Schoolview Way EB															
5	L2	All MCs	37	3.5	37	3.5	0.111	13.9	LOS B	0.4	11.4	0.69	0.84	0.69	29.0
2	T1	All MCs	6	3.5	6	3.5	0.111	7.7	LOS A	0.4	11.4	0.69	0.84	0.69	29.5
12	R2	All MCs	9	3.5	9	3.5	0.111	7.9	LOS A	0.4	11.4	0.69	0.84	0.69	29.3
Approach			53	3.5	53	3.5	0.111	12.1	LOS B	0.4	11.4	0.69	0.84	0.69	29.1
All Vehicles			2380	3.5	2380	3.5	0.418	6.0	LOS A	3.2	82.4	0.44	0.49	0.44	35.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA HCM.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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Intersection	
Intersection Delay, s/veh	11.8
Intersection LOS	B

Approach	EB	WB	NB	SB
Entry Lanes	1	1	2	2
Conflicting Circle Lanes	2	2	2	2
Adj Approach Flow, veh/h	158	229	1292	1429
Demand Flow Rate, veh/h	163	236	1331	1472
Vehicles Circulating, veh/h	1599	1197	181	221
Vehicles Exiting, veh/h	94	315	1581	1185
Ped Vol Crossing Leg, #/h	1	1	1	1
Ped Cap Adj	1.000	1.000	0.999	0.999
Approach Delay, s/veh	20.4	13.7	10.0	12.3
Approach LOS	C	B	A	B

Lane	Left	Left	Bypass	Left	Right	Left	Right
Designated Moves	LTR	LT	R	LT	TR	LT	TR
Assumed Moves	LTR	LT		LT	TR	LT	TR
RT Channelized			Yield				
Lane Util	1.000	1.000		0.470	0.530	0.470	0.530
Follow-Up Headway, s	2.535	2.535	2.609	2.667	2.535	2.667	2.535
Critical Headway, s	4.328	4.328	4.976	4.645	4.328	4.645	4.328
A (Intercept)	1420	1420	1380	1350	1420	1350	1420
B (Slope)	8.501e-4	8.501e-4	1.02e-3	9.199e-4	8.501e-4	9.199e-4	8.501e-4
Entry Flow, veh/h	163	209	27	626	705	692	780
Cap Entry Lane, veh/h	365	513	412	1143	1218	1102	1177
Entry HV Adj Factor	0.967	0.970	0.971	0.970	0.971	0.971	0.971
Flow Entry, veh/h	158	203	26	607	685	672	758
Cap Entry, veh/h	353	498	400	1108	1182	1068	1142
V/C Ratio	0.447	0.407	0.065	0.548	0.580	0.629	0.663
Control Delay, s/veh	20.4	14.1	9.9	9.9	10.1	12.0	12.4
LOS	C	B	A	A	B	B	B
95th %tile Queue, veh	2	2	0	3	4	5	5

MOVEMENT SUMMARY

Site: 101 [Chuluota Rd at Schoolview Relocation-Cypress Lake Glen Blvd S PM Design (2048) Build A Roundabout (Site Folder: General)]

Roundabout 2048 Bld A PM

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

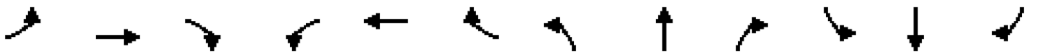
New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance

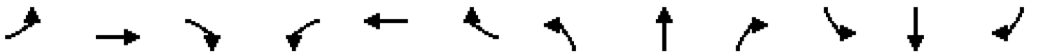
Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] ft	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed mph
South: Chuluota Rd NB															
3	L2	All MCs	12	3.5	12	3.5	0.488	11.4	LOS B	4.0	103.4	0.55	0.47	0.55	35.0
8	T1	All MCs	1024	3.5	1024	3.5	0.488	4.9	LOS A	4.2	107.1	0.53	0.46	0.53	36.0
18	R2	All MCs	256	3.5	256	3.5	0.488	4.8	LOS A	4.2	107.1	0.52	0.46	0.52	35.7
Approach			1292	3.5	1292	3.5	0.488	4.9	LOS A	4.2	107.1	0.53	0.46	0.53	35.9
East: Cypress Lake Glen Blvd S WB															
1	L2	All MCs	195	3.5	195	3.5	0.247	11.9	LOS B	1.2	32.0	0.72	0.79	0.72	29.1
6	T1	All MCs	8	3.5	8	3.5	0.247	5.7	LOS A	1.2	32.0	0.72	0.79	0.72	29.5
16	R2	All MCs	26	3.5	26	3.5	0.049	7.3	LOS A	0.2	5.1	0.67	0.74	0.67	31.0
Approach			229	3.5	229	3.5	0.247	11.1	LOS B	1.2	32.0	0.71	0.79	0.71	29.3
North: Chuluota Rd SB															
7	L2	All MCs	35	3.5	35	3.5	0.559	12.9	LOS B	4.9	126.4	0.64	0.54	0.64	34.9
4	T1	All MCs	1322	3.5	1322	3.5	0.559	6.3	LOS A	5.1	131.8	0.62	0.53	0.62	35.8
14	R2	All MCs	72	3.5	72	3.5	0.559	6.0	LOS A	5.1	131.8	0.61	0.52	0.61	35.6
Approach			1428	3.5	1428	3.5	0.559	6.4	LOS A	5.1	131.8	0.62	0.53	0.62	35.8
West: Schoolview Way EB															
5	L2	All MCs	126	3.5	126	3.5	0.419	17.8	LOS B	2.0	51.1	0.82	0.98	0.98	27.6
2	T1	All MCs	15	3.5	15	3.5	0.419	11.5	LOS B	2.0	51.1	0.82	0.98	0.98	28.0
12	R2	All MCs	17	3.5	17	3.5	0.419	11.7	LOS B	2.0	51.1	0.82	0.98	0.98	27.8
Approach			158	3.5	158	3.5	0.419	16.5	LOS B	2.0	51.1	0.82	0.98	0.98	27.6
All Vehicles			3107	3.5	3107	3.5	0.559	6.7	LOS A	5.1	131.8	0.60	0.54	0.61	34.7

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA HCM.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	35	6	0	225	9	48	4	850	84	14	968	9
Future Volume (vph)	35	6	0	225	9	48	4	850	84	14	968	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	200		200	200		200
Storage Lanes	1		0	1		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt					0.872				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1752	1845	0	1752	1609	0	1752	3505	1568	1752	3505	1568
Flt Permitted				0.606			0.229			0.212		
Satd. Flow (perm)	1845	1845	0	1118	1609	0	422	3505	1568	391	3505	1568
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					51				138			138
Link Speed (mph)		35			35			50			50	
Link Distance (ft)		706			979			682			553	
Travel Time (s)		13.8			19.1			9.3			7.5	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Adj. Flow (vph)	37	6	0	237	9	51	4	895	88	15	1019	9
Shared Lane Traffic (%)												
Lane Group Flow (vph)	37	6	0	237	60	0	4	895	88	15	1019	9
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		37			37			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2	1	1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100		20	100		20	100	20	20	100	20
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	0
Detector 1 Size(ft)	20	6		20	6		20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	

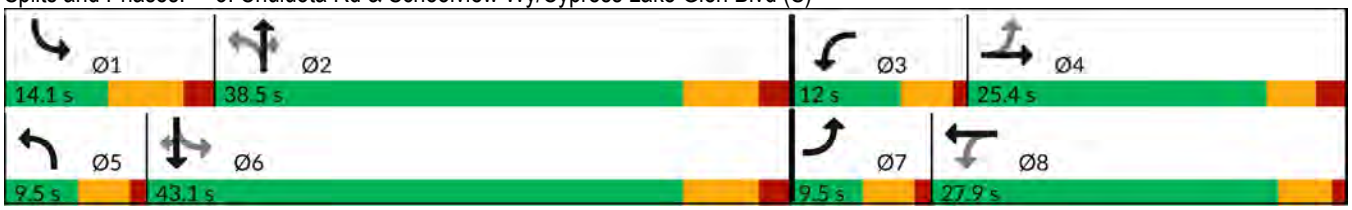


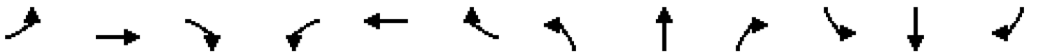
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2		2	6		6
Detector Phase	7	4		3	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	10.0		5.0	5.0		5.0	16.0	16.0	7.0	16.0	16.0
Minimum Split (s)	9.5	25.4		9.5	22.5		9.5	37.1	37.1	14.1	37.1	37.1
Total Split (s)	9.5	25.4		12.0	27.9		9.5	38.5	38.5	14.1	43.1	43.1
Total Split (%)	10.6%	28.2%		13.3%	31.0%		10.6%	42.8%	42.8%	15.7%	47.9%	47.9%
Maximum Green (s)	5.0	20.0		7.5	23.4		5.0	31.4	31.4	7.0	36.0	36.0
Yellow Time (s)	3.5	3.4		3.5	3.5		3.5	5.1	5.1	5.1	5.1	5.1
All-Red Time (s)	1.0	2.0		1.0	1.0		1.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	5.4		4.5	4.5		4.5	7.1	7.1	7.1	7.1	7.1
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None		None	None		None	Min	Min	None	Min	Min
Walk Time (s)		7.0			7.0			7.0	7.0		7.0	7.0
Flash Don't Walk (s)		13.0			11.0			23.0	23.0		23.0	23.0
Pedestrian Calls (#/hr)		0			0			0	0		0	0
Act Effct Green (s)	6.8	11.0		11.5	8.8		25.8	22.3	22.3	23.8	22.9	22.9
Actuated g/C Ratio	0.14	0.23		0.24	0.18		0.53	0.46	0.46	0.49	0.47	0.47
v/c Ratio	0.15	0.01		0.60	0.18		0.01	0.55	0.11	0.04	0.62	0.01
Control Delay (s/veh)	21.6	24.0		25.7	11.8		6.5	12.8	1.4	7.4	12.6	0.0
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	21.6	24.0		25.7	11.8		6.5	12.8	1.4	7.4	12.6	0.0
LOS	C	C		C	B		A	B	A	A	B	A
Approach Delay (s/veh)		21.9			22.9			11.8			12.4	
Approach LOS		C			C			B			B	
90th %ile Green (s)	5.0	10.0		7.5	13.4		5.0	31.4	31.4	7.0	36.0	36.0
90th %ile Term Code	Max	Min		Max	Hold		Max	Max	Max	Max	Max	Max
70th %ile Green (s)	5.0	0.0		16.3	6.8		0.0	23.9	23.9	0.0	23.9	23.9
70th %ile Term Code	Max	Skip		Hold	Gap		Skip	Hold	Hold	Skip	Gap	Gap
50th %ile Green (s)	0.0	0.0		7.5	7.5		0.0	20.5	20.5	0.0	20.5	20.5
50th %ile Term Code	Skip	Skip		Max	Hold		Skip	Hold	Hold	Skip	Gap	Gap
30th %ile Green (s)	0.0	0.0		7.5	7.5		0.0	16.0	16.0	0.0	16.0	16.0
30th %ile Term Code	Skip	Skip		Max	Hold		Skip	Min	Min	Skip	Min	Min
10th %ile Green (s)	0.0	0.0		7.3	7.3		0.0	17.2	17.2	0.0	17.2	17.2
10th %ile Term Code	Skip	Skip		Gap	Hold		Skip	Dwell	Dwell	Skip	Dwell	Dwell
Stops (vph)	30	9		175	20		3	548	4	7	636	0
Fuel Used(gal)	1	0		4	1		0	14	0	0	16	0
CO Emissions (g/hr)	39	9		286	48		5	1000	31	12	1094	2
NOx Emissions (g/hr)	8	2		56	9		1	195	6	2	213	0
VOC Emissions (g/hr)	9	2		66	11		1	232	7	3	254	1
Dilemma Vehicles (#)	0	0		0	4		0	80	0	0	91	0
Queue Length 50th (ft)	8	1		50	2		0	57	0	1	68	0
Queue Length 95th (ft)	35	14		#173	35		4	251	11	11	264	0
Internal Link Dist (ft)		626			899			602			473	
Turn Bay Length (ft)							200		200	200		200
Base Capacity (vph)	248	835		394	876		375	2492	1154	407	2840	1296

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.15	0.01		0.60	0.07		0.01	0.36	0.08	0.04	0.36	0.01

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 48.5			
Natural Cycle: 90			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.62			
Intersection Signal Delay (s/veh): 13.6		Intersection LOS: B	
Intersection Capacity Utilization 55.6%		ICU Level of Service B	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 80			
70th %ile Actuated Cycle: 51.8			
50th %ile Actuated Cycle: 39.6			
30th %ile Actuated Cycle: 35.1			
10th %ile Actuated Cycle: 36.1			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 3: Chuluota Rd & Schoolview Wy/Cypress Lake Glen Blvd (S)





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	35	6	0	225	9	48	4	850	84	14	968	9
Future Volume (veh/h)	35	6	0	225	9	48	4	850	84	14	968	9
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	37	6	0	237	9	51	4	895	0	15	1019	9
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	359	247	0	509	52	294	208	1186		229	1404	626
Arrive On Green	0.04	0.13	0.00	0.12	0.21	0.21	0.01	0.34	0.00	0.03	0.40	0.40
Sat Flow, veh/h	1767	1856	0	1767	241	1368	1767	3526	1572	1767	3526	1572
Grp Volume(v), veh/h	37	6	0	237	0	60	4	895	0	15	1019	9
Grp Sat Flow(s),veh/h/ln	1767	1856	0	1767	0	1609	1767	1763	1572	1767	1763	1572
Q Serve(g_s), s	1.1	0.2	0.0	6.9	0.0	1.9	0.1	14.1	0.0	0.3	15.3	0.2
Cycle Q Clear(g_c), s	1.1	0.2	0.0	6.9	0.0	1.9	0.1	14.1	0.0	0.3	15.3	0.2
Prop In Lane	1.00		0.00	1.00		0.85	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	359	247	0	509	0	346	208	1186		229	1404	626
V/C Ratio(X)	0.10	0.02	0.00	0.47	0.00	0.17	0.02	0.75		0.07	0.73	0.01
Avail Cap(c_a), veh/h	433	593	0	509	0	602	340	1768		381	2027	904
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.0	23.6	0.0	18.5	0.0	20.0	14.6	18.5	0.0	14.5	15.9	11.4
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.7	0.0	0.2	0.0	1.0	0.0	0.1	0.7	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.1	0.0	2.6	0.0	0.7	0.0	4.8	0.0	0.1	4.9	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	22.1	23.6	0.0	19.2	0.0	20.3	14.7	19.5	0.0	14.6	16.7	11.4
LnGrp LOS	C	C		B		C	B	B		B	B	B
Approach Vol, veh/h		43			297			899			1043	
Approach Delay, s/veh		22.3			19.4			19.5			16.6	
Approach LOS		C			B			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.7	28.2	12.0	13.7	4.8	32.0	6.9	18.9
Change Period (Y+Rc), s	7.1	7.1	4.5	5.4	4.5	7.1	4.5	* 5.4
Max Green Setting (Gmax), s	7.0	31.4	7.5	20.0	5.0	36.0	5.0	* 23
Max Q Clear Time (g_c+I1), s	2.3	16.1	8.9	2.2	2.1	17.3	3.1	3.9
Green Ext Time (p_c), s	0.0	4.9	0.0	0.0	0.0	6.3	0.0	0.2

Intersection Summary	
HCM 7th Control Delay, s/veh	18.2
HCM 7th LOS	B

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

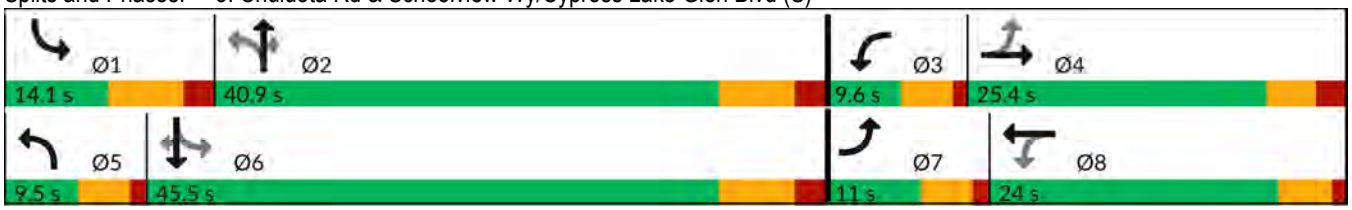
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	120	14	0	185	8	25	11	973	243	33	1309	15
Future Volume (vph)	120	14	0	185	8	25	11	973	243	33	1309	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	200		200	200		200
Storage Lanes	1		0	1		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt					0.885				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1752	1845	0	1752	1633	0	1752	3505	1568	1752	3505	1568
Flt Permitted				0.741			0.137			0.177		
Satd. Flow (perm)	1845	1845	0	1367	1633	0	253	3505	1568	327	3505	1568
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					26				256			138
Link Speed (mph)		35			35			50			50	
Link Distance (ft)		706			979			682			553	
Travel Time (s)		13.8			19.1			9.3			7.5	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Adj. Flow (vph)	126	15	0	195	8	26	12	1024	256	35	1378	16
Shared Lane Traffic (%)												
Lane Group Flow (vph)	126	15	0	195	34	0	12	1024	256	35	1378	16
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		37			37			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2	1	1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100		20	100		20	100	20	20	100	20
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	0
Detector 1 Size(ft)	20	6		20	6		20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	

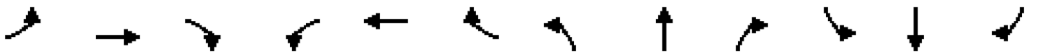
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2		2	6		6
Detector Phase	7	4		3	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	10.0		5.0	5.0		5.0	16.0	16.0	7.0	16.0	16.0
Minimum Split (s)	9.5	25.4		9.5	22.5		9.5	37.1	37.1	14.1	37.1	37.1
Total Split (s)	11.0	25.4		9.6	24.0		9.5	40.9	40.9	14.1	45.5	45.5
Total Split (%)	12.2%	28.2%		10.7%	26.7%		10.6%	45.4%	45.4%	15.7%	50.6%	50.6%
Maximum Green (s)	6.5	20.0		5.1	19.5		5.0	33.8	33.8	7.0	38.4	38.4
Yellow Time (s)	3.5	3.4		3.5	3.5		3.5	5.1	5.1	5.1	5.1	5.1
All-Red Time (s)	1.0	2.0		1.0	1.0		1.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	5.4		4.5	4.5		4.5	7.1	7.1	7.1	7.1	7.1
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None		None	None		None	Min	Min	None	Min	Min
Walk Time (s)		7.0			7.0			7.0	7.0		7.0	7.0
Flash Don't Walk (s)		13.0			11.0			23.0	23.0		23.0	23.0
Pedestrian Calls (#/hr)		0			0			0	0		0	0
Act Effct Green (s)	8.7	11.1		9.7	6.9		33.4	29.1	29.1	32.8	31.8	31.8
Actuated g/C Ratio	0.15	0.20		0.17	0.12		0.59	0.52	0.52	0.58	0.56	0.56
v/c Ratio	0.46	0.04		0.67	0.15		0.04	0.57	0.27	0.09	0.70	0.02
Control Delay (s/veh)	32.1	28.2		37.4	18.0		5.6	13.5	3.0	6.2	12.6	0.0
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	32.1	28.2		37.4	18.0		5.6	13.5	3.0	6.2	12.6	0.0
LOS	C	C		D	B		A	B	A	A	B	A
Approach Delay (s/veh)		31.6			34.5			11.4			12.3	
Approach LOS		C			C			B			B	
90th %ile Green (s)	6.5	10.0		5.1	9.5		5.0	33.8	33.8	7.0	38.4	38.4
90th %ile Term Code	Max	Min		Max	Hold		Max	Max	Max	Max	Max	Max
70th %ile Green (s)	6.5	0.0		17.7	6.7		0.0	33.8	33.8	7.0	47.9	47.9
70th %ile Term Code	Max	Skip		Hold	Gap		Skip	Max	Max	Max	Hold	Hold
50th %ile Green (s)	6.5	0.0		6.5	0.0		0.0	27.5	27.5	0.0	27.5	27.5
50th %ile Term Code	Max	Skip		Hold	Skip		Skip	Hold	Hold	Skip	Gap	Gap
30th %ile Green (s)	6.5	0.0		6.5	0.0		0.0	24.5	24.5	0.0	24.5	24.5
30th %ile Term Code	Max	Skip		Hold	Skip		Skip	Hold	Hold	Skip	Gap	Gap
10th %ile Green (s)	0.0	0.0		5.5	5.5		0.0	19.9	19.9	0.0	19.9	19.9
10th %ile Term Code	Skip	Skip		Hold	Hold		Skip	Hold	Hold	Skip	Gap	Gap
Stops (vph)	97	14		158	15		6	606	23	12	831	0
Fuel Used(gal)	2	0		4	0		0	16	2	0	21	0
CO Emissions (g/hr)	149	18		273	32		11	1132	109	24	1448	4
NOx Emissions (g/hr)	29	3		53	6		2	220	21	5	282	1
VOC Emissions (g/hr)	34	4		63	7		2	262	25	6	336	1
Dilemma Vehicles (#)	0	1		0	2		0	79	0	0	103	0
Queue Length 50th (ft)	31	3		50	2		1	64	0	3	101	0
Queue Length 95th (ft)	95	24		#167	29		8	282	41	17	387	0
Internal Link Dist (ft)		626			899			602			473	
Turn Bay Length (ft)							200		200	200		200
Base Capacity (vph)	273	722		290	639		296	2319	1124	385	2694	1237

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.46	0.02		0.67	0.05		0.04	0.44	0.23	0.09	0.51	0.01

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 56.5			
Natural Cycle: 90			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.70			
Intersection Signal Delay (s/veh): 14.5		Intersection LOS: B	
Intersection Capacity Utilization 62.8%		ICU Level of Service B	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 80			
70th %ile Actuated Cycle: 77.2			
50th %ile Actuated Cycle: 45.6			
30th %ile Actuated Cycle: 42.6			
10th %ile Actuated Cycle: 37			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 3: Chuluota Rd & Schoolview Wy/Cypress Lake Glen Blvd (S)





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	14	0	185	8	25	11	973	243	33	1309	15
Future Volume (veh/h)	120	14	0	185	8	25	11	973	243	33	1309	15
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	126	15	0	195	8	26	12	1024	0	35	1378	16
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	397	255	0	409	49	160	178	1403		272	1654	738
Arrive On Green	0.08	0.14	0.00	0.07	0.13	0.13	0.01	0.40	0.00	0.05	0.47	0.47
Sat Flow, veh/h	1767	1856	0	1767	384	1247	1767	3526	1572	1767	3526	1572
Grp Volume(v), veh/h	126	15	0	195	0	34	12	1024	0	35	1378	16
Grp Sat Flow(s),veh/h/ln	1767	1856	0	1767	0	1631	1767	1763	1572	1767	1763	1572
Q Serve(g_s), s	4.3	0.5	0.0	5.1	0.0	1.3	0.3	17.3	0.0	0.8	23.9	0.4
Cycle Q Clear(g_c), s	4.3	0.5	0.0	5.1	0.0	1.3	0.3	17.3	0.0	0.8	23.9	0.4
Prop In Lane	1.00		0.00	1.00		0.76	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	397	255	0	409	0	210	178	1403		272	1654	738
V/C Ratio(X)	0.32	0.06	0.00	0.48	0.00	0.16	0.07	0.73		0.13	0.83	0.02
Avail Cap(c_a), veh/h	416	528	0	409	0	452	278	1695		361	1925	859
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.6	26.4	0.0	25.3	0.0	27.3	14.8	18.0	0.0	13.2	16.3	10.0
Incr Delay (d2), s/veh	0.5	0.1	0.0	0.9	0.0	0.4	0.2	1.3	0.0	0.2	2.9	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	0.2	0.0	2.8	0.0	0.5	0.1	6.0	0.0	0.3	8.1	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	24.1	26.5	0.0	26.2	0.0	27.6	15.0	19.3	0.0	13.5	19.2	10.0
LnGrp LOS	C	C		C		C	B	B		B	B	B
Approach Vol, veh/h		141			229			1036			1429	
Approach Delay, s/veh		24.3			26.4			19.2			18.9	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.6	35.1	9.6	15.1	5.5	40.1	10.2	14.4
Change Period (Y+Rc), s	7.1	7.1	4.5	5.4	4.5	7.1	4.5	* 5.4
Max Green Setting (Gmax), s	7.0	33.8	5.1	20.0	5.0	38.4	6.5	* 20
Max Q Clear Time (g_c+I1), s	2.8	19.3	7.1	2.5	2.3	25.9	6.3	3.3
Green Ext Time (p_c), s	0.0	5.6	0.0	0.0	0.0	7.1	0.0	0.1

Intersection Summary	
HCM 7th Control Delay, s/veh	19.9
HCM 7th LOS	B

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Intersection Delay, s/veh	8.2
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	1	1	2	2
Conflicting Circle Lanes	2	2	2	2
Adj Approach Flow, veh/h	43	297	987	1043
Demand Flow Rate, veh/h	44	306	1017	1074
Vehicles Circulating, veh/h	1309	964	59	257
Vehicles Exiting, veh/h	22	112	1294	960
Ped Vol Crossing Leg, #/h	1	1	1	1
Ped Cap Adj	1.000	1.000	0.999	0.999
Approach Delay, s/veh	9.2	11.3	6.5	8.9
Approach LOS	A	B	A	A

Lane	Left	Left	Bypass	Left	Right	Left	Right
Designated Moves	LTR	LT	R	LT	TR	LT	TR
Assumed Moves	LTR	LT		LT	TR	LT	TR
RT Channelized			Yield				
Lane Util	1.000	1.000		0.470	0.530	0.470	0.530
Follow-Up Headway, s	2.535	2.535	2.609	2.667	2.535	2.667	2.535
Critical Headway, s	4.328	4.328	4.976	4.645	4.328	4.645	4.328
A (Intercept)	1420	1420	1380	1350	1420	1350	1420
B (Slope)	8.501e-4	8.501e-4	1.02e-3	9.199e-4	8.501e-4	9.199e-4	8.501e-4
Entry Flow, veh/h	44	253	53	478	539	505	569
Cap Entry Lane, veh/h	467	626	518	1279	1351	1066	1141
Entry HV Adj Factor	0.973	0.971	0.971	0.971	0.971	0.971	0.972
Flow Entry, veh/h	43	246	51	464	523	490	553
Cap Entry, veh/h	454	608	503	1240	1310	1034	1108
V/C Ratio	0.094	0.404	0.101	0.374	0.400	0.474	0.499
Control Delay, s/veh	9.2	11.9	8.5	6.5	6.6	9.0	8.9
LOS	A	B	A	A	A	A	A
95th %tile Queue, veh	0	2	0	2	2	3	3

MOVEMENT SUMMARY

Site: 101 [Chuluota Rd at Schoolview Relocation-Cypress Lake Glen Blvd S AM Design (2048) Build B Roundabout (Site Folder: General)]

Roundabout 2048 Bld B AM

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] ft	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed mph
South: Chuluota Rd NB															
3	L2	All MCs	4	3.5	4	3.5	0.333	10.4	LOS B	2.4	61.3	0.26	0.35	0.26	36.1
8	T1	All MCs	895	3.5	895	3.5	0.333	4.0	LOS A	2.4	62.5	0.25	0.36	0.25	37.0
18	R2	All MCs	88	3.5	88	3.5	0.333	4.1	LOS A	2.4	62.5	0.25	0.36	0.25	36.7
Approach			987	3.5	987	3.5	0.333	4.0	LOS A	2.4	62.5	0.25	0.36	0.25	37.0
East: Cypress Lake Glen Blvd S WB															
1	L2	All MCs	237	3.5	237	3.5	0.247	11.1	LOS B	1.1	27.5	0.59	0.75	0.59	29.3
6	T1	All MCs	9	3.5	9	3.5	0.247	4.8	LOS A	1.1	27.5	0.59	0.75	0.59	29.8
16	R2	All MCs	51	3.5	51	3.5	0.080	6.5	LOS A	0.3	7.4	0.58	0.69	0.58	31.3
Approach			297	3.5	297	3.5	0.247	10.1	LOS B	1.1	27.5	0.59	0.74	0.59	29.6
North: Chuluota Rd SB															
7	L2	All MCs	15	3.5	15	3.5	0.418	12.9	LOS B	3.1	78.7	0.58	0.53	0.58	35.2
4	T1	All MCs	1019	3.5	1019	3.5	0.418	6.2	LOS A	3.2	82.4	0.56	0.52	0.56	36.1
14	R2	All MCs	9	3.5	9	3.5	0.418	5.9	LOS A	3.2	82.4	0.55	0.51	0.55	35.8
Approach			1043	3.5	1043	3.5	0.418	6.3	LOS A	3.2	82.4	0.56	0.52	0.56	36.1
West: Schoolview Way EB															
5	L2	All MCs	37	3.5	37	3.5	0.096	14.0	LOS B	0.4	9.6	0.69	0.85	0.69	28.8
2	T1	All MCs	6	3.5	6	3.5	0.096	7.7	LOS A	0.4	9.6	0.69	0.85	0.69	29.2
12	R2	All MCs	1	3.5	1	3.5	0.096	8.0	LOS A	0.4	9.6	0.69	0.85	0.69	29.1
Approach			44	3.5	44	3.5	0.096	12.9	LOS B	0.4	9.6	0.69	0.85	0.69	28.8
All Vehicles			2372	3.5	2372	3.5	0.418	6.0	LOS A	3.2	82.4	0.44	0.49	0.44	35.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA HCM.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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Intersection	
Intersection Delay, s/veh	11.8
Intersection LOS	B

Approach	EB	WB	NB	SB
Entry Lanes	1	1	2	2
Conflicting Circle Lanes	2	2	2	2
Adj Approach Flow, veh/h	141	229	1292	1429
Demand Flow Rate, veh/h	145	236	1331	1471
Vehicles Circulating, veh/h	1656	1197	181	221
Vehicles Exiting, veh/h	36	315	1620	1185
Ped Vol Crossing Leg, #/h	1	1	1	1
Ped Cap Adj	1.000	1.000	0.999	0.999
Approach Delay, s/veh	20.2	13.7	10.0	12.2
Approach LOS	C	B	A	B

Lane	Left	Left	Bypass	Left	Right	Left	Right
Designated Moves	LTR	LT	R	LT	TR	LT	TR
Assumed Moves	LTR	LT		LT	TR	LT	TR
RT Channelized			Yield				
Lane Util	1.000	1.000		0.470	0.530	0.470	0.530
Follow-Up Headway, s	2.535	2.535	2.609	2.667	2.535	2.667	2.535
Critical Headway, s	4.328	4.328	4.976	4.645	4.328	4.645	4.328
A (Intercept)	1420	1420	1380	1350	1420	1350	1420
B (Slope)	8.501e-4	8.501e-4	1.02e-3	9.199e-4	8.501e-4	9.199e-4	8.501e-4
Entry Flow, veh/h	145	209	27	626	705	691	780
Cap Entry Lane, veh/h	347	513	412	1143	1218	1102	1177
Entry HV Adj Factor	0.969	0.970	0.971	0.970	0.971	0.972	0.971
Flow Entry, veh/h	141	203	26	607	685	671	757
Cap Entry, veh/h	337	498	400	1108	1182	1069	1141
V/C Ratio	0.417	0.407	0.065	0.548	0.580	0.628	0.663
Control Delay, s/veh	20.2	14.1	9.9	9.9	10.1	12.0	12.5
LOS	C	B	A	A	B	B	B
95th %tile Queue, veh	2	2	0	3	4	5	5

MOVEMENT SUMMARY

Site: 101 [Chuluota Rd at Schoolview Relocation-Cypress Lake Glen Blvd S PM Design (2048) Build B Roundabout (Site Folder: General)]

Roundabout 2048 Bld B PM

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] ft	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed mph
South: Chuluota Rd NB															
3	L2	All MCs	12	3.5	12	3.5	0.488	11.4	LOS B	4.0	103.3	0.55	0.47	0.55	35.0
8	T1	All MCs	1024	3.5	1024	3.5	0.488	4.9	LOS A	4.2	107.1	0.53	0.46	0.53	36.0
18	R2	All MCs	256	3.5	256	3.5	0.488	4.8	LOS A	4.2	107.1	0.52	0.46	0.52	35.7
Approach			1292	3.5	1292	3.5	0.488	4.9	LOS A	4.2	107.1	0.53	0.46	0.53	35.9
East: Cypress Lake Glen Blvd S WB															
1	L2	All MCs	195	3.5	195	3.5	0.247	11.9	LOS B	1.2	32.0	0.72	0.79	0.72	29.1
6	T1	All MCs	8	3.5	8	3.5	0.247	5.7	LOS A	1.2	32.0	0.72	0.79	0.72	29.5
16	R2	All MCs	26	3.5	26	3.5	0.049	7.3	LOS A	0.2	5.1	0.67	0.74	0.67	31.0
Approach			229	3.5	229	3.5	0.247	11.1	LOS B	1.2	32.0	0.71	0.79	0.71	29.3
North: Chuluota Rd SB															
7	L2	All MCs	35	3.5	35	3.5	0.559	12.9	LOS B	4.9	126.4	0.64	0.54	0.64	34.9
4	T1	All MCs	1378	3.5	1378	3.5	0.559	6.3	LOS A	5.1	131.8	0.62	0.53	0.62	35.8
14	R2	All MCs	16	3.5	16	3.5	0.559	6.0	LOS A	5.1	131.8	0.61	0.52	0.61	35.5
Approach			1428	3.5	1428	3.5	0.559	6.4	LOS A	5.1	131.8	0.62	0.53	0.62	35.8
West: Schoolview Way EB															
5	L2	All MCs	126	3.5	126	3.5	0.386	17.5	LOS B	1.8	45.3	0.82	0.97	0.95	27.5
2	T1	All MCs	15	3.5	15	3.5	0.386	11.2	LOS B	1.8	45.3	0.82	0.97	0.95	27.9
12	R2	All MCs	1	3.5	1	3.5	0.386	11.4	LOS B	1.8	45.3	0.82	0.97	0.95	27.8
Approach			142	3.5	142	3.5	0.386	16.8	LOS B	1.8	45.3	0.82	0.97	0.95	27.6
All Vehicles			3092	3.5	3092	3.5	0.559	6.6	LOS A	5.1	131.8	0.60	0.54	0.61	34.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA HCM.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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Chuluota Road at Schoolview Way Relocation/Cypress Lake Glen Boulevard S Design Year 2048 Operational Analysis Results									
	Build Configuration	**Build A (Close Schoolview)**				**Build B (Schoolview RI-RO)**			
	Peak Time	**AM**	**PM**	**AM**	**PM**	**AM**	**PM**	**AM**	**PM**
	Intersection Control Type	**Traffic Signal**	**Traffic Signal**	**2x1 Roundabout**	**2x1 Roundabout**	**Traffic Signal**	**Traffic Signal**	**2x1 Roundabout**	**2x1 Roundabout**
	Measure of Effectiveness	**Delay (s/veh) (LOS)**	**Delay (s/veh) (LOS)**	**Delay (s/veh) (LOS)**	**Delay (s/veh) (LOS)**	**Delay (s/veh) (LOS)**	**Delay (s/veh) (LOS)**	**Delay (s/veh) (LOS)**	**Delay (s/veh) (LOS)**
Approach	Eastbound	20.3 (C)	24.5 (C)	9.1 (A)	20.4 (C)	21.9 (C)	31.6 (C)	9.2 (A)	20.2 (C)
	Westbound	22.6 (C)	36.0 (D)	11.3 (B)	13.7 (B)	22.9 (C)	34.5 (C)	11.3 (B)	13.7 (B)
	Northbound	11.8 (B)	11.9 (B)	6.5 (A)	10.0 (A)	11.8 (B)	11.4 (B)	6.5 (A)	10.0 (A)
	Southbound	11.7 (B)	12.0 (B)	9.0 (A)	12.3 (B)	12.4 (B)	12.3 (B)	8.9 (A)	12.2 (B)
	Intersection	13.3 (B)	14.4 (B)	8.2 (A)	11.8 (B)	13.6 (B)	14.5 (B)	8.2 (A)	11.8 (B)

LOS Legend	
	LOS A
	LOS B
	LOS C
	LOS D
	LOS E
	LOS F

APPENDIX E – STAGE 3 ICE ANALYSIS

CHULUOTA ROAD NO-BUILD CORRIDOR ANALYSIS

Chuluota Road Existing 2-Lane Section With Alternative Intersection Concepts							
	Corridor Traffic Control Type	Existing Traffic Controls (ETC)		Roundabouts at All Intersections		ETC & Roundabouts Mixture (1)	
	Measure of Effectiveness (MOE)	Delay (s/veh)	Arterial Speed (LOS)	Delay (s/veh)	Arterial Speed (LOS)	Delay (s/veh)	Arterial Speed (LOS)
Corridor Travel Direction	Northbound	66.3	34 (C)	167.9	21 (E)	98.4	27 (D)
	Southbound	239.1	19 (E)	343.8	15 (F)	268.1	16 (F)

(1) TRAFFIC SIGNALS AT LAKE PICKETT ROAD AND CYPRESS LAKE GLEN BLVD (SOUTH), ROUNDABOUTS AT LONG BOAT LANE AND AT CORNER LAKE DRIVE

LOS Legend	
	LOS A
	LOS B
	LOS C
	LOS D
	LOS E
	LOS F

EXISTING TRAFFIC CONTROLS

Summary of All Intervals

Run Number	1	2	3	4	5	6	7
Start Time	6:45	6:45	6:45	6:45	6:45	6:45	6:45
End Time	8:00	8:00	8:00	8:00	8:00	8:00	8:00
Total Time (min)	75	75	75	75	75	75	75
Time Recorded (min)	60	60	60	60	60	60	60
# of Intervals	3	3	3	3	3	3	3
# of Recorded Intervals	2	2	2	2	2	2	2
Vehs Entered	2978	3028	2967	3015	2975	2921	2957
Vehs Exited	2890	2929	2869	2887	2928	2901	2895
Starting Vehs	163	227	179	181	169	220	163
Ending Vehs	251	326	277	309	216	240	225
Travel Distance (mi)	4726	4681	4662	4651	4682	4649	4585
Travel Time (hr)	207.6	270.5	261.6	283.0	193.7	240.4	188.2
Total Delay (hr)	111.2	174.8	166.0	187.7	98.1	145.3	94.1
Total Stops	4671	4598	4931	4878	4334	5134	4282
Fuel Used (gal)	177.8	191.0	185.7	191.3	173.9	183.3	169.8

Summary of All Intervals

Run Number	8	9	10	Avg
Start Time	6:45	6:45	6:45	6:45
End Time	8:00	8:00	8:00	8:00
Total Time (min)	75	75	75	75
Time Recorded (min)	60	60	60	60
# of Intervals	3	3	3	3
# of Recorded Intervals	2	2	2	2
Vehs Entered	2984	2928	3015	2980
Vehs Exited	2942	2885	2975	2910
Starting Vehs	204	166	176	183
Ending Vehs	246	209	216	248
Travel Distance (mi)	4717	4668	4672	4669
Travel Time (hr)	251.6	217.7	187.9	230.2
Total Delay (hr)	155.3	122.5	92.1	134.7
Total Stops	5038	4850	4224	4693
Fuel Used (gal)	187.9	178.2	173.3	181.2

Interval #0 Information Seeding

Start Time	6:45
End Time	7:00
Total Time (min)	15
Volumes adjusted by PHF.	
No data recorded this interval.	

Interval #1 Information Period 1

Start Time	7:00
End Time	7:15
Total Time (min)	15

Volumes adjusted by PHF.

Run Number	1	2	3	4	5	6	7
Vehs Entered	766	765	783	826	771	775	772
Vehs Exited	731	720	719	751	741	770	745
Starting Vehs	163	227	179	181	169	220	163
Ending Vehs	198	272	243	256	199	225	190
Travel Distance (mi)	1195	1202	1185	1250	1178	1238	1184
Travel Time (hr)	48.2	59.1	55.1	55.8	44.5	59.2	44.3
Total Delay (hr)	23.9	34.9	30.8	30.4	20.3	33.9	19.9
Total Stops	1091	1311	1204	1217	1004	1302	998
Fuel Used (gal)	44.2	46.9	44.6	47.1	42.4	47.7	42.7

Interval #1 Information Period 1

Start Time	7:00
End Time	7:15
Total Time (min)	15

Volumes adjusted by PHF.

Run Number	8	9	10	Avg
Vehs Entered	787	774	759	777
Vehs Exited	738	692	769	739
Starting Vehs	204	166	176	183
Ending Vehs	253	248	166	224
Travel Distance (mi)	1205	1176	1179	1199
Travel Time (hr)	57.1	51.2	46.4	52.1
Total Delay (hr)	32.6	27.4	22.3	27.6
Total Stops	1353	1104	1074	1165
Fuel Used (gal)	46.4	43.8	43.6	44.9

Interval #2 Information Period 2

Start Time	7:15
End Time	8:00
Total Time (min)	45

Volumes adjusted by Anti PHF.

Run Number	1	2	3	4	5	6	7
Vehs Entered	2212	2263	2184	2189	2204	2146	2185
Vehs Exited	2159	2209	2150	2136	2187	2131	2150
Starting Vehs	198	272	243	256	199	225	190
Ending Vehs	251	326	277	309	216	240	225
Travel Distance (mi)	3531	3479	3477	3400	3504	3411	3402
Travel Time (hr)	159.4	211.4	206.4	227.2	149.2	181.2	143.8
Total Delay (hr)	87.3	139.9	135.2	157.4	77.7	111.4	74.2
Total Stops	3580	3287	3727	3661	3330	3832	3284
Fuel Used (gal)	133.5	144.1	141.1	144.1	131.5	135.6	127.2

Interval #2 Information Period 2

Start Time	7:15
End Time	8:00
Total Time (min)	45

Volumes adjusted by Anti PHF.

Run Number	8	9	10	Avg
Vehs Entered	2197	2154	2256	2199
Vehs Exited	2204	2193	2206	2172
Starting Vehs	253	248	166	224
Ending Vehs	246	209	216	248
Travel Distance (mi)	3512	3492	3493	3470
Travel Time (hr)	194.6	166.5	141.5	178.1
Total Delay (hr)	122.7	95.1	69.8	107.1
Total Stops	3685	3746	3150	3531
Fuel Used (gal)	141.5	134.5	129.6	136.3

3: Chuluota Rd & Lake Pickett Rd Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.5	2.0	0.1	6.8	2.5
Total Del/Veh (s)	260.8	42.1	24.7	197.8	149.7

7: Chuluota Rd & Long Boat Ln/Cypress Lake Glen Blvd (N) Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.1	0.1	0.0	0.0	0.0
Total Del/Veh (s)	55.4	192.0	8.9	5.9	22.8

10: Chuluota Rd & Corner Lake Dr Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	0.1	0.0	0.0	0.0
Total Del/Veh (s)	30.0	10.5	8.1	10.1

12: Chuluota Rd & Cypress Lake Glen Blvd (S) Performance by approach

Approach	WB	NB	SB	All
Denied Del/Veh (s)	0.1	0.4	0.0	0.2
Total Del/Veh (s)	26.9	15.0	18.7	17.7

Total Network Performance

Denied Del/Veh (s)	2.1
Total Del/Veh (s)	151.6

Arterial Level of Service: NB Chuluota Rd

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Cypress Lake Glen Bl	12	18.4	27.3	0.1	19
Corner Lake Dr	10	10.4	28.2	0.3	34
Cypress Lake Glen Bl	7	9.2	49.4	0.6	45
	5	4.0	29.0	0.4	47
Lake Pickett Rd	3	24.4	37.2	0.2	20
Total		66.3	171.0	1.6	34

Arterial Level of Service: SB Chuluota Rd

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Lake Pickett Rd	3	200.0	230.9	0.4	6
	5	6.9	20.2	0.2	36
Long Boat Ln	7	5.2	29.0	0.4	47
Corner Lake Dr	10	8.4	49.1	0.6	46
Cypress Lake Glen Bl	12	18.6	35.7	0.3	27
Total		239.1	364.9	1.9	19

Intersection: 3: Chuluota Rd & Lake Pickett Rd

Movement	EB	EB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	TR	L	TR	L	T	R	L	TR
Maximum Queue (ft)	225	2108	105	118	178	385	121	424	1663
Average Queue (ft)	201	1405	44	43	87	203	34	72	1252
95th Queue (ft)	285	2670	87	95	150	335	86	309	2072
Link Distance (ft)		5086		1016		1008			2076
Upstream Blk Time (%)									9
Queuing Penalty (veh)									0
Storage Bay Dist (ft)	200		200		465		425	400	
Storage Blk Time (%)	5	66				0	0	0	60
Queuing Penalty (veh)	22	136				0	0	0	12

Intersection: 7: Chuluota Rd & Long Boat Ln/Cypress Lake Glen Blvd (N)

Movement	EB	WB	WB	NB	NB	SB	SB
Directions Served	LTR	L	TR	L	T	L	TR
Maximum Queue (ft)	46	381	112	20	127	90	153
Average Queue (ft)	10	208	37	2	28	30	25
95th Queue (ft)	35	404	84	11	87	66	96
Link Distance (ft)	427	3250	3250		3194		1913
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)				350		285	
Storage Blk Time (%)							0
Queuing Penalty (veh)							0

Intersection: 10: Chuluota Rd & Corner Lake Dr

Movement	EB	EB	NB	NB	SB	SB
Directions Served	L	R	L	T	T	R
Maximum Queue (ft)	72	58	50	183	152	28
Average Queue (ft)	20	21	13	46	33	2
95th Queue (ft)	57	46	39	129	101	14
Link Distance (ft)	635	635		1330	3194	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)			250			225
Storage Blk Time (%)				0	0	
Queuing Penalty (veh)				0	0	

Intersection: 12: Chuluota Rd & Cypress Lake Glen Blvd (S)

Movement	WB	WB	NB	NB	SB	SB
Directions Served	L	R	T	R	L	T
Maximum Queue (ft)	167	58	394	116	138	345
Average Queue (ft)	85	16	181	4	26	183
95th Queue (ft)	147	45	327	57	88	300
Link Distance (ft)	1954	1954	678	678		1330
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)					150	
Storage Blk Time (%)						9
Queuing Penalty (veh)						3

Network Summary

Network wide Queuing Penalty: 173

Intersection: 3: Chuluota Rd & Lake Pickett Rd

Phase	1	2	3	4	5	6	7	8
Movement(s) Served	NBL	SBT	EBL	WBTL	SBL	NBSB	WBL	EBTL
Maximum Green (s)	7.9	53.9	15.6	25.6	5.0	56.8	5.0	36.2
Minimum Green (s)	5.0	16.0	5.0	5.0	5.0	16.0	5.0	5.0
Recall	None	Ped	None	None	None	Ped	None	None
Avg. Green (s)	7.9	6.8	-9.8	2.3	5.3	-7.8	5.1	-11.4
g/C Ratio	2.66	2.38	-3.43	0.77	0.65	-2.72	1.46	-3.98
Cycles Skipped (%)	4	0	0	4	65	0	19	0
Cycles @ Minimum (%)	0	0	0	0	35	0	81	0
Cycles Maxed Out (%)	81	100	44	74	35	93	81	96
Cycles with Peds (%)	0	100	0	85	0	100	0	89

Controller Summary
Average Cycle Length (s): 2.9
Number of Complete Cycles : 26

Intersection: 12: Chuluota Rd & Cypress Lake Glen Blvd (S)

Phase	1	2	4	6
Movement(s) Served	SBL	NBT	WBL	SBTL
Maximum Green (s)	7.0	33.4	20.0	47.5
Minimum Green (s)	7.0	16.0	10.0	16.0
Recall	None	Ped	None	Ped
Avg. Green (s)	7.5	-1.5	5.2	1.4
g/C Ratio	0.42	-0.44	1.52	0.40
Cycles Skipped (%)	81	0	0	0
Cycles @ Minimum (%)	19	0	6	0
Cycles Maxed Out (%)	19	83	83	46
Cycles with Peds (%)	0	100	83	100

Controller Summary
Average Cycle Length (s): 3.4
Number of Complete Cycles : 47

ROUNDABOUTS

Summary of All Intervals

Run Number	2	3	4	5	6	8	11
Start Time	6:45	6:45	6:45	6:45	6:45	6:45	6:45
End Time	8:00	8:00	8:00	8:00	8:00	8:00	8:00
Total Time (min)	75	75	75	75	75	75	75
Time Recorded (min)	60	60	60	60	60	60	60
# of Intervals	3	3	3	3	3	3	3
# of Recorded Intervals	2	2	2	2	2	2	2
Vehs Entered	2918	2986	2918	2952	3004	2906	2916
Vehs Exited	2924	2878	2864	2912	2890	2823	2878
Starting Vehs	203	197	178	167	133	210	167
Ending Vehs	197	305	232	207	247	293	205
Travel Distance (mi)	4732	4775	4597	4736	4695	4591	4689
Travel Time (hr)	225.5	285.4	205.6	210.8	185.6	272.4	212.4
Total Delay (hr)	128.5	187.2	111.2	113.7	89.4	178.4	115.9
Total Stops	4833	5392	4441	4657	4444	4512	4281
Fuel Used (gal)	187.1	200.3	180.4	185.2	179.1	193.8	184.4

Summary of All Intervals

Run Number	14	15	16	Avg
Start Time	6:45	6:45	6:45	6:45
End Time	8:00	8:00	8:00	8:00
Total Time (min)	75	75	75	75
Time Recorded (min)	60	60	60	60
# of Intervals	3	3	3	3
# of Recorded Intervals	2	2	2	2
Vehs Entered	2910	2953	2864	2934
Vehs Exited	2935	2896	2784	2878
Starting Vehs	205	183	212	182
Ending Vehs	180	240	292	241
Travel Distance (mi)	4672	4696	4548	4673
Travel Time (hr)	228.2	196.4	253.0	227.5
Total Delay (hr)	132.1	99.9	159.5	131.6
Total Stops	4290	4092	5057	4599
Fuel Used (gal)	188.6	181.6	185.8	186.6

Interval #0 Information Seeding

Start Time	6:45
End Time	7:00
Total Time (min)	15
Volumes adjusted by PHF.	
No data recorded this interval.	

Interval #1 Information Period 1

Start Time	7:00
End Time	7:15
Total Time (min)	15

Volumes adjusted by PHF.

Run Number	2	3	4	5	6	8	11
Vehs Entered	753	785	745	786	771	744	773
Vehs Exited	710	731	720	732	731	725	730
Starting Vehs	203	197	178	167	133	210	167
Ending Vehs	246	251	203	221	173	229	210
Travel Distance (mi)	1162	1194	1174	1194	1176	1191	1180
Travel Time (hr)	58.3	55.7	51.8	47.5	38.4	57.1	47.8
Total Delay (hr)	34.6	31.1	27.7	23.1	14.3	32.7	23.6
Total Stops	1378	1124	1224	1003	939	1003	1110
Fuel Used (gal)	46.7	46.8	46.2	45.3	43.1	47.8	44.6

Interval #1 Information Period 1

Start Time	7:00
End Time	7:15
Total Time (min)	15

Volumes adjusted by PHF.

Run Number	14	15	16	Avg
Vehs Entered	772	777	781	768
Vehs Exited	749	758	727	731
Starting Vehs	205	183	212	182
Ending Vehs	228	202	266	224
Travel Distance (mi)	1222	1196	1217	1191
Travel Time (hr)	57.3	51.0	59.3	52.4
Total Delay (hr)	32.1	26.3	34.2	28.0
Total Stops	1170	1149	1391	1149
Fuel Used (gal)	48.5	46.5	47.8	46.3

Interval #2 Information Period 2

Start Time	7:15
End Time	8:00
Total Time (min)	45

Volumes adjusted by Anti PHF.

Run Number	2	3	4	5	6	8	11
Vehs Entered	2165	2201	2173	2166	2233	2162	2143
Vehs Exited	2214	2147	2144	2180	2159	2098	2148
Starting Vehs	246	251	203	221	173	229	210
Ending Vehs	197	305	232	207	247	293	205
Travel Distance (mi)	3571	3581	3423	3543	3519	3400	3509
Travel Time (hr)	167.2	229.7	153.8	163.2	147.1	215.3	164.6
Total Delay (hr)	93.9	156.1	83.5	90.6	75.0	145.8	92.3
Total Stops	3455	4268	3217	3654	3505	3509	3171
Fuel Used (gal)	140.4	153.5	134.3	139.8	136.0	146.0	139.8

Interval #2 Information Period 2

Start Time	7:15
End Time	8:00
Total Time (min)	45

Volumes adjusted by Anti PHF.

Run Number	14	15	16	Avg
Vehs Entered	2138	2176	2083	2164
Vehs Exited	2186	2138	2057	2147
Starting Vehs	228	202	266	224
Ending Vehs	180	240	292	241
Travel Distance (mi)	3450	3500	3331	3483
Travel Time (hr)	170.9	145.4	193.7	175.1
Total Delay (hr)	99.9	73.6	125.3	103.6
Total Stops	3120	2943	3666	3450
Fuel Used (gal)	140.2	135.1	137.9	140.3

3: Chuluota Rd & Lake Pickett Rd Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.5	0.2	23.8	0.7	8.4
Total Del/Veh (s)	20.2	8.9	79.4	152.1	80.8

7: Chuluota Rd & Long Boat Ln/Cypress Lake Glen Blvd (N) Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.1	0.1	0.0	0.0	0.0
Total Del/Veh (s)	5.1	6.3	17.5	38.0	27.0

10: Chuluota Rd & Corner Lake Dr Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	0.0	0.2	0.0	0.1
Total Del/Veh (s)	6.8	34.7	28.3	30.3

12: Chuluota Rd & Cypress Lake Glen Blvd (S) Performance by approach

Approach	WB	NB	SB	All
Denied Del/Veh (s)	0.2	1.4	11.7	5.8
Total Del/Veh (s)	10.3	15.3	115.2	58.7

Total Network Performance

Denied Del/Veh (s)	10.5
Total Del/Veh (s)	141.9

Arterial Level of Service: NB Chuluota Rd

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Cypress Lake Glen Bl	12	17.3	26.6	0.1	20
Corner Lake Dr	10	34.7	55.6	0.3	17
Cypress Lake Glen Bl	7	17.9	61.9	0.6	36
	5	9.4	38.7	0.4	35
Lake Pickett Rd	3	88.5	123.4	0.2	7
Total		167.9	306.2	1.6	21

Arterial Level of Service: SB Chuluota Rd

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Lake Pickett Rd	3	153.3	181.1	0.4	9
	5	9.1	26.6	0.2	28
Long Boat Ln	7	37.6	60.6	0.4	22
Corner Lake Dr	10	28.6	72.4	0.6	31
Cypress Lake Glen Bl	12	115.2	147.0	0.3	7
Total		343.8	487.8	1.9	15

Intersection: 3: Chuluota Rd & Lake Pickett Rd

Movement	EB	EB	WB	NB	NB	B5	SB
Directions Served	LT	R	LTR	LT	R	T	LTR
Maximum Queue (ft)	247	97	68	810	410	132	1295
Average Queue (ft)	105	42	23	486	231	22	871
95th Queue (ft)	203	81	52	987	595	164	1635
Link Distance (ft)	5016		953	936		1854	2258
Upstream Blk Time (%)				9			1
Queuing Penalty (veh)				64			0
Storage Bay Dist (ft)		1000			400		
Storage Blk Time (%)				48	0		
Queuing Penalty (veh)				63	0		

Intersection: 7: Chuluota Rd & Long Boat Ln/Cypress Lake Glen Blvd (N)

Movement	EB	EB	WB	WB	NB	NB	SB
Directions Served	LT	R	LT	R	LT	R	LTR
Maximum Queue (ft)	22	9	57	49	181	38	601
Average Queue (ft)	2	0	17	5	56	4	249
95th Queue (ft)	13	5	47	26	140	23	751
Link Distance (ft)	359	359	3191	3191	3074		1854
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)						400	
Storage Blk Time (%)							
Queuing Penalty (veh)							

Intersection: 10: Chuluota Rd & Corner Lake Dr

Movement	EB	EB	NB	SB	SB
Directions Served	L	R	LT	T	R
Maximum Queue (ft)	43	65	681	448	200
Average Queue (ft)	10	10	157	124	21
95th Queue (ft)	35	43	627	433	169
Link Distance (ft)	219		1192	3074	
Upstream Blk Time (%)			2		
Queuing Penalty (veh)			15		
Storage Bay Dist (ft)		200			400
Storage Blk Time (%)				6	
Queuing Penalty (veh)				2	

Intersection: 12: Chuluota Rd & Cypress Lake Glen Blvd (S)

Movement	WB	WB	NB	NB	SB
Directions Served	L	R	T	R	LT
Maximum Queue (ft)	114	23	313	225	1178
Average Queue (ft)	40	1	75	24	774
95th Queue (ft)	81	13	260	168	1358
Link Distance (ft)	550	550	631	631	1192
Upstream Blk Time (%)			2	2	12
Queuing Penalty (veh)			0	0	109
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Network Summary

Network wide Queuing Penalty: 254

EXISTING TRAFFIC CONTROLS & ROUNDABOUTS MIXTURE

Summary of All Intervals

Run Number	1	2	3	4	5	6	7
Start Time	6:45	6:45	6:45	6:45	6:45	6:45	6:45
End Time	8:00	8:00	8:00	8:00	8:00	8:00	8:00
Total Time (min)	75	75	75	75	75	75	75
Time Recorded (min)	60	60	60	60	60	60	60
# of Intervals	3	3	3	3	3	3	3
# of Recorded Intervals	2	2	2	2	2	2	2
Vehs Entered	2878	3016	2968	2869	2989	2972	2987
Vehs Exited	2929	2886	2941	2899	2909	2943	2928
Starting Vehs	193	188	184	182	171	232	181
Ending Vehs	142	318	211	152	251	261	240
Travel Distance (mi)	3644	3643	3684	3601	3621	3692	3669
Travel Time (hr)	188.1	272.8	222.9	170.4	244.2	225.7	237.4
Total Delay (hr)	111.5	196.4	145.5	94.7	168.0	148.1	160.5
Total Stops	5489	6100	6229	4873	5939	6468	5765
Fuel Used (gal)	155.2	172.2	164.9	149.7	168.6	165.2	166.4

Summary of All Intervals

Run Number	8	9	10	Avg
Start Time	6:45	6:45	6:45	6:45
End Time	8:00	8:00	8:00	8:00
Total Time (min)	75	75	75	75
Time Recorded (min)	60	60	60	60
# of Intervals	3	3	3	3
# of Recorded Intervals	2	2	2	2
Vehs Entered	2914	2910	2971	2948
Vehs Exited	2837	2906	2893	2907
Starting Vehs	129	171	163	180
Ending Vehs	206	175	241	217
Travel Distance (mi)	3619	3611	3700	3649
Travel Time (hr)	174.3	168.6	219.2	212.4
Total Delay (hr)	97.9	92.6	141.6	135.7
Total Stops	4971	4996	6163	5699
Fuel Used (gal)	151.2	150.3	164.4	160.8

Interval #0 Information Seeding

Start Time	6:45
End Time	7:00
Total Time (min)	15
Volumes adjusted by PHF.	
No data recorded this interval.	

Interval #1 Information Period 1

Start Time	7:00
End Time	7:15
Total Time (min)	15

Volumes adjusted by PHF.

Run Number	1	2	3	4	5	6	7
Vehs Entered	762	810	798	723	797	762	790
Vehs Exited	773	739	748	738	707	768	735
Starting Vehs	193	188	184	182	171	232	181
Ending Vehs	182	259	234	167	261	226	236
Travel Distance (mi)	949	930	941	932	893	953	961
Travel Time (hr)	50.2	58.2	54.1	46.9	55.2	56.8	49.1
Total Delay (hr)	30.2	38.6	34.3	27.4	36.4	36.7	29.1
Total Stops	1508	1552	1584	1353	1621	1760	1587
Fuel Used (gal)	40.8	41.1	41.5	39.4	39.9	42.4	40.0

Interval #1 Information Period 1

Start Time	7:00
End Time	7:15
Total Time (min)	15

Volumes adjusted by PHF.

Run Number	8	9	10	Avg
Vehs Entered	760	746	762	770
Vehs Exited	733	764	715	744
Starting Vehs	129	171	163	180
Ending Vehs	156	153	210	206
Travel Distance (mi)	927	942	909	934
Travel Time (hr)	36.1	40.3	45.9	49.3
Total Delay (hr)	16.6	20.3	26.9	29.7
Total Stops	1074	1155	1478	1470
Fuel Used (gal)	36.7	38.8	38.8	40.0

Interval #2 Information Period 2

Start Time	7:15
End Time	8:00
Total Time (min)	45

Volumes adjusted by Anti PHF.

Run Number	1	2	3	4	5	6	7
Vehs Entered	2116	2206	2170	2146	2192	2210	2197
Vehs Exited	2156	2147	2193	2161	2202	2175	2193
Starting Vehs	182	259	234	167	261	226	236
Ending Vehs	142	318	211	152	251	261	240
Travel Distance (mi)	2696	2714	2743	2670	2728	2739	2709
Travel Time (hr)	138.0	214.6	168.8	123.5	189.0	168.9	188.3
Total Delay (hr)	81.3	157.8	111.2	67.3	131.6	111.3	131.4
Total Stops	3981	4548	4645	3520	4318	4708	4178
Fuel Used (gal)	114.4	131.1	123.3	110.3	128.7	122.8	126.4

Interval #2 Information Period 2

Start Time	7:15
End Time	8:00
Total Time (min)	45

Volumes adjusted by Anti PHF.

Run Number	8	9	10	Avg
Vehs Entered	2154	2164	2209	2178
Vehs Exited	2104	2142	2178	2165
Starting Vehs	156	153	210	206
Ending Vehs	206	175	241	217
Travel Distance (mi)	2692	2669	2792	2715
Travel Time (hr)	138.2	128.3	173.3	163.1
Total Delay (hr)	81.3	72.3	114.7	106.0
Total Stops	3897	3841	4685	4232
Fuel Used (gal)	114.5	111.4	125.6	120.9

3: Chuluota Rd & Lake Pickett Rd Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	15.5	1.9	0.1	4.4	6.0
Total Del/Veh (s)	212.8	47.7	26.9	108.0	107.8

7: Chuluota Rd & Long Boat Ln/Cypress Lake Glen Blvd (N) Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.1	0.1	0.0	0.0	0.0
Total Del/Veh (s)	4.7	6.7	22.4	97.1	59.2

10: Chuluota Rd & Corner Lake Dr Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0
Total Del/Veh (s)	5.5	23.4	30.9	26.5

12: Chuluota Rd & Cypress Lake Glen Blvd (S) Performance by approach

Approach	WB	NB	SB	All
Denied Del/Veh (s)	0.2	0.8	0.0	0.4
Total Del/Veh (s)	27.5	16.7	20.0	19.1

Total Network Performance

Denied Del/Veh (s)	5.1
Total Del/Veh (s)	151.6

Arterial Level of Service: NB Chuluota Rd

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Cypress Lake Glen Bl	12	20.4	27.1	0.1	14
Corner Lake Dr	10	23.6	40.5	0.3	24
Cypress Lake Glen Bl	7	23.2	66.9	0.6	34
	5	5.7	34.9	0.4	39
Lake Pickett Rd	3	25.3	38.2	0.2	19
Total		98.4	207.6	1.6	27

Arterial Level of Service: SB Chuluota Rd

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Lake Pickett Rd	3	111.0	129.4	0.2	7
	5	9.1	22.4	0.2	33
Long Boat Ln	7	97.0	119.5	0.4	11
Corner Lake Dr	10	31.2	75.0	0.6	30
Cypress Lake Glen Bl	12	19.9	41.1	0.3	23
Total		268.1	387.4	1.7	16

Intersection: 3: Chuluota Rd & Lake Pickett Rd

Movement	EB	EB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	TR	L	TR	L	T	R	L	TR
Maximum Queue (ft)	250	1656	112	129	232	408	125	449	1052
Average Queue (ft)	220	1149	48	50	99	215	35	66	768
95th Queue (ft)	318	2083	98	106	185	351	88	302	1261
Link Distance (ft)		1942		1016		1008			1169
Upstream Blk Time (%)		16							7
Queuing Penalty (veh)		0							0
Storage Bay Dist (ft)	200		200		465		425	400	
Storage Blk Time (%)	7	65				0			44
Queuing Penalty (veh)	31	133				1			9

Intersection: 7: Chuluota Rd & Long Boat Ln/Cypress Lake Glen Blvd (N)

Movement	EB	EB	WB	WB	NB	NB	SB	B5
Directions Served	LT	R	LT	R	LT	R	LTR	T
Maximum Queue (ft)	20	8	62	53	312	119	1248	86
Average Queue (ft)	1	0	20	11	94	13	718	14
95th Queue (ft)	9	6	50	39	228	69	1475	155
Link Distance (ft)	359	359	3191	3191	3076		1854	1008
Upstream Blk Time (%)							3	
Queuing Penalty (veh)							31	
Storage Bay Dist (ft)						325		
Storage Blk Time (%)					1			
Queuing Penalty (veh)					1			

Intersection: 10: Chuluota Rd & Corner Lake Dr

Movement	EB	EB	NB	SB	SB
Directions Served	L	R	LT	T	R
Maximum Queue (ft)	46	56	343	376	123
Average Queue (ft)	12	10	104	142	15
95th Queue (ft)	38	39	263	337	121
Link Distance (ft)	212		1256	3076	
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)		200			400
Storage Blk Time (%)				2	
Queuing Penalty (veh)				1	

Intersection: 12: Chuluota Rd & Cypress Lake Glen Blvd (S)

Movement	WB	WB	NB	NB	SB	SB
Directions Served	L	R	T	R	L	T
Maximum Queue (ft)	164	63	408	172	99	337
Average Queue (ft)	82	14	205	17	25	169
95th Queue (ft)	138	43	371	157	65	275
Link Distance (ft)	618	618	473	473		1256
Upstream Blk Time (%)			1	1		
Queuing Penalty (veh)			0	0		
Storage Bay Dist (ft)					150	
Storage Blk Time (%)						7
Queuing Penalty (veh)						2

Network Summary

Network wide Queuing Penalty: 209

Intersection: 3: Chuluota Rd & Lake Pickett Rd

Phase	1	2	3	4	5	6	7	8
Movement(s) Served	NBL	SBT	EBL	WBTL	SBL	NBSB	WBL	EBTL
Maximum Green (s)	9.9	64.9	16.0	32.2	5.1	69.7	5.0	43.2
Minimum Green (s)	5.0	16.0	5.0	5.0	5.0	16.0	5.0	5.0
Recall	None	Ped	None	None	None	Ped	None	None
Avg. Green (s)	9.5	9.7	-11.9	4.0	5.7	-6.0	5.1	-12.9
g/C Ratio	4.64	4.73	-5.80	1.97	0.89	-2.92	2.16	-6.27
Cycles Skipped (%)	0	0	0	0	68	0	13	0
Cycles @ Minimum (%)	0	0	0	0	0	0	87	0
Cycles Maxed Out (%)	74	88	50	78	32	83	87	96
Cycles with Peds (%)	0	100	0	87	0	100	0	87

Controller Summary
Average Cycle Length (s): 2.1
Number of Complete Cycles : 22

Intersection: 12: Chuluota Rd & Cypress Lake Glen Blvd (S)

Phase	1	2	4	6
Movement(s) Served	SBL	NBT	WBL	SBTL
Maximum Green (s)	7.0	33.4	20.0	47.5
Minimum Green (s)	7.0	16.0	10.0	16.0
Recall	None	Ped	None	Ped
Avg. Green (s)	7.5	-2.1	5.1	1.8
g/C Ratio	0.52	-0.56	1.32	0.46
Cycles Skipped (%)	73	0	0	0
Cycles @ Minimum (%)	27	0	6	0
Cycles Maxed Out (%)	27	87	87	54
Cycles with Peds (%)	0	100	85	100

Controller Summary
Average Cycle Length (s): 3.9
Number of Complete Cycles : 46

CHULUOTA ROAD BUILD CORRIDOR ANALYSIS

Chuluota Road 4-Lane Widening Section With Alternative Intersection Concepts							
	Corridor Traffic Control Type	**Existing Traffic Controls (ETC)**		**Roundabouts at All Intersections**		**ETC & Roundabouts Mixture (1)**	
	Measure of Effectiveness (MOE)	**Delay (s/veh)**	**Arterial Speed (LOS)**	**Delay (s/veh)**	**Arterial Speed (LOS)**	**Delay (s/veh)**	**Arterial Speed (LOS)**
Corridor Travel Direction	Northbound	52.5	35 (B)	86.4	28 (C)	71.9	31 (C)
	Southbound	57.0	35 (B)	50.3	35 (B)	77.3	31 (C)

(1) TRAFFIC SIGNALS AT LAKE PICKETT ROAD AND CYPRESS LAKE GLEN BLVD (SOUTH), ROUNDABOUTS AT LONG BOAT LANE AND AT CORNER LAKE DRIVE

LOS Legend	
	LOS A
	LOS B
	LOS C
	LOS D
	LOS E
	LOS F

EXISTING TRAFFIC CONTROLS

Summary of All Intervals

Run Number	1	2	3	4	5	6	7
Start Time	6:45	6:45	6:45	6:45	6:45	6:45	6:45
End Time	8:00	8:00	8:00	8:00	8:00	8:00	8:00
Total Time (min)	75	75	75	75	75	75	75
Time Recorded (min)	60	60	60	60	60	60	60
# of Intervals	3	3	3	3	3	3	3
# of Recorded Intervals	2	2	2	2	2	2	2
Vehs Entered	4326	4195	4177	4137	4209	4189	4170
Vehs Exited	4367	4190	4197	4183	4256	4213	4200
Starting Vehs	200	181	197	191	219	175	192
Ending Vehs	159	186	177	145	172	151	162
Travel Distance (mi)	5693	5646	5627	5575	5650	5631	5601
Travel Time (hr)	183.2	182.0	180.1	172.9	176.9	180.6	178.6
Total Delay (hr)	57.5	57.8	56.1	50.5	52.6	56.3	54.6
Total Stops	4029	3880	3864	3813	3829	4197	3831
Fuel Used (gal)	198.5	197.7	194.6	194.5	195.4	195.0	193.8

Summary of All Intervals

Run Number	8	9	10	Avg
Start Time	6:45	6:45	6:45	6:45
End Time	8:00	8:00	8:00	8:00
Total Time (min)	75	75	75	75
Time Recorded (min)	60	60	60	60
# of Intervals	3	3	3	3
# of Recorded Intervals	2	2	2	2
Vehs Entered	4157	4253	4086	4190
Vehs Exited	4192	4245	4145	4221
Starting Vehs	204	175	209	192
Ending Vehs	169	183	150	163
Travel Distance (mi)	5547	5630	5509	5611
Travel Time (hr)	179.1	176.7	171.0	178.1
Total Delay (hr)	56.7	52.5	49.8	54.4
Total Stops	3914	3846	3711	3891
Fuel Used (gal)	193.7	194.7	190.8	194.9

Interval #0 Information Seeding

Start Time	6:45
End Time	7:00
Total Time (min)	15
Volumes adjusted by PHF.	
No data recorded this interval.	

Interval #1 Information Period 1

Start Time	7:00
End Time	7:15
Total Time (min)	15

Volumes adjusted by PHF.

Run Number	1	2	3	4	5	6	7
Vehs Entered	1140	1087	1081	1111	1105	1120	1086
Vehs Exited	1137	1093	1127	1128	1118	1065	1080
Starting Vehs	200	181	197	191	219	175	192
Ending Vehs	203	175	151	174	206	230	198
Travel Distance (mi)	1535	1505	1487	1519	1494	1458	1445
Travel Time (hr)	50.1	50.6	47.5	47.3	48.1	46.0	46.8
Total Delay (hr)	16.1	17.6	14.7	14.0	15.2	13.8	14.9
Total Stops	1040	1062	1056	1007	1037	1070	970
Fuel Used (gal)	53.7	53.0	51.8	53.3	52.5	50.5	50.1

Interval #1 Information Period 1

Start Time	7:00
End Time	7:15
Total Time (min)	15

Volumes adjusted by PHF.

Run Number	8	9	10	Avg
Vehs Entered	1139	1095	1011	1098
Vehs Exited	1122	1085	1063	1103
Starting Vehs	204	175	209	192
Ending Vehs	221	185	157	189
Travel Distance (mi)	1506	1457	1384	1479
Travel Time (hr)	49.4	45.6	42.9	47.4
Total Delay (hr)	16.3	13.6	12.5	14.9
Total Stops	1082	948	937	1022
Fuel Used (gal)	53.5	50.0	48.3	51.7

Interval #2 Information Period 2

Start Time	7:15
End Time	8:00
Total Time (min)	45

Volumes adjusted by Anti PHF.

Run Number	1	2	3	4	5	6	7
Vehs Entered	3186	3108	3096	3026	3104	3069	3084
Vehs Exited	3230	3097	3070	3055	3138	3148	3120
Starting Vehs	203	175	151	174	206	230	198
Ending Vehs	159	186	177	145	172	151	162
Travel Distance (mi)	4158	4141	4139	4056	4156	4173	4156
Travel Time (hr)	133.1	131.4	132.6	125.6	128.9	134.7	131.8
Total Delay (hr)	41.3	40.1	41.3	36.5	37.4	42.5	39.7
Total Stops	2989	2818	2808	2806	2792	3127	2861
Fuel Used (gal)	144.8	144.7	142.8	141.2	142.9	144.5	143.7

Interval #2 Information Period 2

Start Time	7:15
End Time	8:00
Total Time (min)	45

Volumes adjusted by Anti PHF.

Run Number	8	9	10	Avg
Vehs Entered	3018	3158	3075	3092
Vehs Exited	3070	3160	3082	3117
Starting Vehs	221	185	157	189
Ending Vehs	169	183	150	163
Travel Distance (mi)	4041	4173	4125	4132
Travel Time (hr)	129.7	131.1	128.1	130.7
Total Delay (hr)	40.4	38.9	37.4	39.6
Total Stops	2832	2898	2774	2871
Fuel Used (gal)	140.2	144.7	142.5	143.2

3: Chuluota Rd & Lake Pickett Rd Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	1.3	2.0	0.2	0.0	0.5
Total Del/Veh (s)	31.1	38.5	20.4	27.2	26.7

8: Chuluota Rd & Schoolview Wy/Cypress Lake Glen Blvd (S) Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.2	0.2	0.8	0.0	0.4
Total Del/Veh (s)	28.6	49.6	10.4	11.8	15.0

11: Chuluota Rd & Corner Lake Dr Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	0.1	0.0	0.0	0.0
Total Del/Veh (s)	34.6	4.2	3.6	4.8

13: Chuluota Rd & Long Boat Ln/Cypress Lake Glen Blvd (N) Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.1	0.1	0.0	0.0	0.0
Total Del/Veh (s)	35.1	80.1	3.5	2.6	7.8

Total Network Performance

Denied Del/Veh (s)	1.0
Total Del/Veh (s)	43.8

Arterial Level of Service: NB Chuluota Rd

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Cypress Lake Glen Bl	8	11.7	25.0	0.2	25
Corner Lake Dr	11	4.4	23.3	0.3	42
Cypress Lake Glen Bl	13	3.4	47.8	0.6	47
	5	2.1	29.6	0.4	46
Lake Pickett Rd	3	21.4	35.3	0.2	21
	4	9.4	23.2	0.2	26
Total		52.5	184.3	1.8	35

Arterial Level of Service: SB Chuluota Rd

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
	4	0.8	9.3	0.1	47
Lake Pickett Rd	3	31.8	43.7	0.2	14
	5	6.9	21.6	0.2	34
Long Boat Ln	13	2.2	28.0	0.4	48
Corner Lake Dr	11	3.7	48.1	0.6	47
Schoolview Wy	8	11.7	30.3	0.3	32
Total		57.0	181.0	1.7	35

Intersection: 3: Chuluota Rd & Lake Pickett Rd

Movement	EB	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	R	L	TR	L	T	T	R	L	T	T
Maximum Queue (ft)	246	313	266	129	164	195	296	236	81	66	310	291
Average Queue (ft)	143	160	109	51	64	83	158	104	30	21	188	175
95th Queue (ft)	238	267	210	100	128	151	254	202	65	50	271	262
Link Distance (ft)		2771			693		992	992			823	823
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	200		300	200		465			425	400		
Storage Blk Time (%)	5	2	0	0	0						0	
Queuing Penalty (veh)	31	10	0	0	0						0	

Intersection: 3: Chuluota Rd & Lake Pickett Rd

Movement	SB
Directions Served	R
Maximum Queue (ft)	108
Average Queue (ft)	45
95th Queue (ft)	82
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	400
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 4: Bend

Movement	NB
Directions Served	T
Maximum Queue (ft)	121
Average Queue (ft)	4
95th Queue (ft)	94
Link Distance (ft)	823
Upstream Blk Time (%)	0
Queuing Penalty (veh)	0
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 8: Chuluota Rd & Schoolview Wy/Cypress Lake Glen Blvd (S)

Movement	EB	EB	WB	WB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	TR	L	TR	L	T	T	L	T	T	R
Maximum Queue (ft)	151	55	270	75	44	235	209	67	252	248	51
Average Queue (ft)	62	17	131	24	12	125	88	23	110	119	15
95th Queue (ft)	120	45	246	58	37	207	176	54	208	212	41
Link Distance (ft)	356	356	1937	1937		848	848		1334	1334	
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (ft)					300			300			300
Storage Blk Time (%)						0			0	0	
Queuing Penalty (veh)						0			0	0	

Intersection: 11: Chuluota Rd & Corner Lake Dr

Movement	EB	EB	NB	NB	NB	SB	SB	SB
Directions Served	L	R	L	T	T	T	T	R
Maximum Queue (ft)	86	54	56	3	7	9	18	5
Average Queue (ft)	26	20	15	0	0	0	1	0
95th Queue (ft)	76	44	42	3	7	6	10	3
Link Distance (ft)	835	835		1334	1334	3186	3186	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)			325					250
Storage Blk Time (%)								
Queuing Penalty (veh)								

Intersection: 13: Chuluota Rd & Long Boat Ln/Cypress Lake Glen Blvd (N)

Movement	EB	EB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	TR	L	T	T	L	T	TR
Maximum Queue (ft)	38	30	247	78	24	14	20	74	5	14
Average Queue (ft)	5	3	110	33	3	1	1	24	0	1
95th Queue (ft)	24	17	251	63	14	8	12	53	3	7
Link Distance (ft)	532	532	2226	2226		3186	3186		1910	1910
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)					425			350		
Storage Blk Time (%)										
Queuing Penalty (veh)										

Network Summary

Network wide Queuing Penalty: 41

Intersection: 3: Chuluota Rd & Lake Pickett Rd

Phase	1	2	3	4	5	6	7	8
Movement(s) Served	NBL	SBT	EBL	WBTL	SBL	NBSB	WBL	EBTL
Maximum Green (s)	7.9	27.9	9.2	18.0	5.0	30.8	5.0	22.2
Minimum Green (s)	5.0	16.0	5.0	5.0	5.0	16.0	5.0	5.0
Recall	None	Min	None	None	None	Min	None	None
Avg. Green (s)	7.6	-3.9	-3.4	-2.5	5.2	5.5	5.3	6.7
g/C Ratio	1.92	-1.08	-0.95	-0.59	0.45	1.52	1.16	1.85
Cycles Skipped (%)	10	0	0	15	69	0	22	0
Cycles @ Minimum (%)	0	0	0	0	31	0	78	0
Cycles Maxed Out (%)	71	88	95	53	31	90	78	78
Cycles with Peds (%)	0	0	0	0	0	2	0	0

Controller Summary

Average Cycle Length (s): 3.6
Number of Complete Cycles : 39

Intersection: 8: Chuluota Rd & Schoolview Wy/Cypress Lake Glen Blvd (S)

Phase	1	2	3	4	5	6	7	8
Movement(s) Served	SBL	NBT	WBL	EBTL	NBL	SBT	EBL	WBTL
Maximum Green (s)	7.0	32.7	5.1	20.0	5.0	34.7	6.1	19.0
Minimum Green (s)	7.0	16.0	5.0	10.0	5.0	16.0	5.0	5.0
Recall	None	Min	None	None	None	Min	None	None
Avg. Green (s)	7.1	-2.3	-4.2	12.5	5.4	1.0	-4.2	9.4
g/C Ratio	0.79	-0.65	-1.10	0.86	0.27	0.28	-1.01	0.82
Cycles Skipped (%)	60	0	4	75	82	0	14	68
Cycles @ Minimum (%)	40	0	0	18	18	0	0	2
Cycles Maxed Out (%)	40	57	96	2	18	63	62	2
Cycles with Peds (%)	0	2	0	2	0	2	0	4

Controller Summary

Average Cycle Length (s): 3.6
Number of Complete Cycles : 56

ROUNDABOUTS

Summary of All Intervals

Run Number	1	2	3	4	5	6	7
Start Time	6:45	6:45	6:45	6:45	6:45	6:45	6:45
End Time	8:00	8:00	8:00	8:00	8:00	8:00	8:00
Total Time (min)	75	75	75	75	75	75	75
Time Recorded (min)	60	60	60	60	60	60	60
# of Intervals	3	3	3	3	3	3	3
# of Recorded Intervals	2	2	2	2	2	2	2
Vehs Entered	4199	4200	4284	4048	4245	4383	4207
Vehs Exited	4060	4097	4114	3991	4016	4204	4069
Starting Vehs	224	287	211	226	225	236	238
Ending Vehs	363	390	381	283	454	415	376
Travel Distance (mi)	6525	6480	6552	6245	6472	6692	6440
Travel Time (hr)	280.6	337.3	277.2	260.3	317.2	322.4	301.8
Total Delay (hr)	140.1	197.3	135.9	125.8	177.7	178.3	163.3
Total Stops	3032	3417	2817	2478	2884	3134	3098
Fuel Used (gal)	254.4	263.5	252.3	241.1	259.0	268.0	257.0

Summary of All Intervals

Run Number	8	9	10	Avg
Start Time	6:45	6:45	6:45	6:45
End Time	8:00	8:00	8:00	8:00
Total Time (min)	75	75	75	75
Time Recorded (min)	60	60	60	60
# of Intervals	3	3	3	3
# of Recorded Intervals	2	2	2	2
Vehs Entered	4208	4209	4355	4232
Vehs Exited	4024	4023	4104	4071
Starting Vehs	226	250	207	229
Ending Vehs	410	436	458	396
Travel Distance (mi)	6458	6454	6551	6487
Travel Time (hr)	318.8	336.5	368.8	312.1
Total Delay (hr)	179.8	197.8	227.5	172.4
Total Stops	2977	3094	3707	3060
Fuel Used (gal)	259.1	262.5	273.9	259.1

Interval #0 Information Seeding

Start Time	6:45
End Time	7:00
Total Time (min)	15
Volumes adjusted by PHF.	
No data recorded this interval.	

Interval #1 Information Period 1

Start Time	7:00
End Time	7:15
Total Time (min)	15

Volumes adjusted by PHF.

Run Number	1	2	3	4	5	6	7
Vehs Entered	1077	1102	1164	1065	1129	1122	1099
Vehs Exited	1063	1073	1121	1028	1079	1079	1063
Starting Vehs	224	287	211	226	225	236	238
Ending Vehs	238	316	254	263	275	279	274
Travel Distance (mi)	1696	1751	1800	1657	1743	1752	1693
Travel Time (hr)	61.2	71.4	58.8	56.9	61.9	66.1	62.7
Total Delay (hr)	24.6	33.5	20.0	21.2	24.3	28.3	26.3
Total Stops	743	932	760	588	845	762	907
Fuel Used (gal)	63.9	67.0	65.6	61.7	65.2	66.1	64.4

Interval #1 Information Period 1

Start Time	7:00
End Time	7:15
Total Time (min)	15

Volumes adjusted by PHF.

Run Number	8	9	10	Avg
Vehs Entered	1126	1106	1174	1114
Vehs Exited	1049	1057	1062	1068
Starting Vehs	226	250	207	229
Ending Vehs	303	299	319	281
Travel Distance (mi)	1776	1690	1760	1732
Travel Time (hr)	68.4	69.2	68.5	64.5
Total Delay (hr)	30.1	32.9	30.6	27.2
Total Stops	852	892	928	821
Fuel Used (gal)	66.6	64.0	67.3	65.2

Interval #2 Information Period 2

Start Time	7:15
End Time	8:00
Total Time (min)	45

Volumes adjusted by Anti PHF.

Run Number	1	2	3	4	5	6	7
Vehs Entered	3122	3098	3120	2983	3116	3261	3108
Vehs Exited	2997	3024	2993	2963	2937	3125	3006
Starting Vehs	238	316	254	263	275	279	274
Ending Vehs	363	390	381	283	454	415	376
Travel Distance (mi)	4829	4729	4752	4588	4729	4940	4747
Travel Time (hr)	219.4	265.9	218.4	203.5	255.3	256.4	239.1
Total Delay (hr)	115.5	163.8	115.9	104.6	153.4	150.0	137.0
Total Stops	2289	2485	2057	1890	2039	2372	2191
Fuel Used (gal)	190.5	196.4	186.8	179.4	193.8	201.9	192.6

Interval #2 Information Period 2

Start Time	7:15
End Time	8:00
Total Time (min)	45

Volumes adjusted by Anti PHF.

Run Number	8	9	10	Avg
Vehs Entered	3082	3103	3181	3118
Vehs Exited	2975	2966	3042	3003
Starting Vehs	303	299	319	281
Ending Vehs	410	436	458	396
Travel Distance (mi)	4683	4764	4791	4755
Travel Time (hr)	250.4	267.3	300.2	247.6
Total Delay (hr)	149.7	165.0	196.9	145.2
Total Stops	2125	2202	2779	2241
Fuel Used (gal)	192.5	198.4	206.6	193.9

3: Chuluota Rd & Lake Pickett Rd Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.8	0.2	2.2	0.0	1.0
Total Del/Veh (s)	437.5	11.9	45.2	10.2	148.1

8: Chuluota Rd & Schoolview Wy/Cypress Lake Glen Blvd (S) Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.2	0.2	0.3	0.0	0.1
Total Del/Veh (s)	10.7	10.3	9.3	11.6	10.5

11: Chuluota Rd & Corner Lake Dr Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0
Total Del/Veh (s)	4.3	11.6	12.1	11.6

13: Chuluota Rd & Long Boat Ln/Cypress Lake Glen Blvd (N) Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.1	0.1	0.0	0.0	0.0
Total Del/Veh (s)	5.0	6.7	11.0	9.1	9.7

Total Network Performance

Denied Del/Veh (s)	1.1
Total Del/Veh (s)	137.8

Arterial Level of Service: NB Chuluota Rd

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Cypress Lake Glen Bl	8	9.7	18.7	0.1	25
Corner Lake Dr	11	11.2	32.6	0.3	30
Cypress Lake Glen Bl	13	11.0	58.3	0.6	38
	5	3.5	34.6	0.4	39
Lake Pickett Rd	3	45.2	60.3	0.2	13
	4	5.8	22.5	0.2	27
Total		86.4	227.0	1.8	28

Arterial Level of Service: SB Chuluota Rd

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
	4	0.8	9.3	0.1	47
Lake Pickett Rd	3	10.6	21.7	0.2	28
	5	6.2	24.6	0.2	30
Long Boat Ln	13	9.1	33.9	0.4	40
Corner Lake Dr	11	11.9	59.1	0.6	38
Schoolview Wy	8	11.6	32.9	0.3	30
Total		50.3	181.6	1.7	35

Intersection: 3: Chuluota Rd & Lake Pickett Rd

Movement	EB	EB	WB	NB	NB	SB	SB
Directions Served	LT	R	LTR	LT	TR	LT	TR
Maximum Queue (ft)	5528	1050	111	573	498	133	106
Average Queue (ft)	3102	935	48	309	255	65	24
95th Queue (ft)	5671	1464	92	625	572	113	80
Link Distance (ft)	7540		640	920	920	754	754
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)		1000					
Storage Blk Time (%)	85	0					
Queuing Penalty (veh)	353	1					

Intersection: 4: Bend

Movement	NB
Directions Served	T
Maximum Queue (ft)	30
Average Queue (ft)	1
95th Queue (ft)	16
Link Distance (ft)	754
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 8: Chuluota Rd & Schoolview Wy/Cypress Lake Glen Blvd (S)

Movement	EB	WB	WB	NB	NB	SB	SB
Directions Served	LTR	LT	R	LT	TR	LT	TR
Maximum Queue (ft)	99	107	3	161	86	87	88
Average Queue (ft)	45	44	0	54	8	26	5
95th Queue (ft)	81	82	3	124	57	66	38
Link Distance (ft)	305	613	613	572	572	1177	1177
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)							
Storage Blk Time (%)							
Queuing Penalty (veh)							

Intersection: 11: Chuluota Rd & Corner Lake Dr

Movement	EB	EB	NB	NB	SB	SB
Directions Served	L	R	LT	T	T	TR
Maximum Queue (ft)	37	50	44	25	59	41
Average Queue (ft)	11	4	4	1	10	2
95th Queue (ft)	33	25	22	12	42	20
Link Distance (ft)	221		1177	1177	3048	3048
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)		200				
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 13: Chuluota Rd & Long Boat Ln/Cypress Lake Glen Blvd (N)

Movement	EB	EB	WB	WB	NB	NB	SB	SB
Directions Served	LT	R	LT	R	LT	TR	LT	TR
Maximum Queue (ft)	25	10	60	11	55	27	67	44
Average Queue (ft)	2	0	27	0	12	1	15	2
95th Queue (ft)	13	6	54	6	39	12	48	18
Link Distance (ft)	463	463	794	794	3048	3048	1838	1838
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)								
Storage Blk Time (%)								
Queuing Penalty (veh)								

Network Summary

Network wide Queuing Penalty: 354

EXISTING TRAFFIC CONTROLS & ROUNDABOUTS MIXTURE

Summary of All Intervals

Run Number	1	2	3	4	5	6	7
Start Time	6:45	6:45	6:45	6:45	6:45	6:45	6:45
End Time	8:00	8:00	8:00	8:00	8:00	8:00	8:00
Total Time (min)	75	75	75	75	75	75	75
Time Recorded (min)	60	60	60	60	60	60	60
# of Intervals	3	3	3	3	3	3	3
# of Recorded Intervals	2	2	2	2	2	2	2
Vehs Entered	4170	4281	4258	4229	4223	4225	4191
Vehs Exited	4175	4279	4240	4264	4271	4251	4228
Starting Vehs	173	190	163	200	215	193	212
Ending Vehs	168	192	181	165	167	167	175
Travel Distance (mi)	5190	5411	5385	5398	5358	5355	5288
Travel Time (hr)	174.7	189.4	182.4	184.7	182.7	180.8	176.1
Total Delay (hr)	59.1	68.7	62.4	64.6	63.2	61.6	58.2
Total Stops	3653	3944	3758	3968	3895	3757	3694
Fuel Used (gal)	199.3	210.8	208.4	209.0	208.0	208.0	202.7

Summary of All Intervals

Run Number	8	9	10	Avg
Start Time	6:45	6:45	6:45	6:45
End Time	8:00	8:00	8:00	8:00
Total Time (min)	75	75	75	75
Time Recorded (min)	60	60	60	60
# of Intervals	3	3	3	3
# of Recorded Intervals	2	2	2	2
Vehs Entered	4292	4135	4276	4228
Vehs Exited	4281	4132	4264	4238
Starting Vehs	173	180	172	186
Ending Vehs	184	183	184	172
Travel Distance (mi)	5478	5188	5410	5346
Travel Time (hr)	189.1	176.6	186.1	182.3
Total Delay (hr)	67.4	60.9	65.3	63.1
Total Stops	4048	3695	3955	3837
Fuel Used (gal)	211.7	201.3	209.1	206.8

Interval #0 Information Seeding

Start Time	6:45
End Time	7:00
Total Time (min)	15
Volumes adjusted by PHF.	
No data recorded this interval.	

Interval #1 Information Period 1

Start Time	7:00
End Time	7:15
Total Time (min)	15

Volumes adjusted by PHF.

Run Number	1	2	3	4	5	6	7
Vehs Entered	1145	1128	1120	1090	1106	1093	1112
Vehs Exited	1155	1125	1107	1085	1112	1080	1125
Starting Vehs	173	190	163	200	215	193	212
Ending Vehs	163	193	176	205	209	206	199
Travel Distance (mi)	1416	1418	1403	1366	1428	1373	1374
Travel Time (hr)	49.2	50.4	48.1	47.7	50.5	47.6	45.8
Total Delay (hr)	17.5	18.7	16.8	17.1	18.6	17.0	15.2
Total Stops	1062	1079	986	1028	1122	1021	970
Fuel Used (gal)	55.1	55.0	54.2	52.9	55.6	53.7	52.5

Interval #1 Information Period 1

Start Time	7:00
End Time	7:15
Total Time (min)	15

Volumes adjusted by PHF.

Run Number	8	9	10	Avg
Vehs Entered	1090	1124	1205	1121
Vehs Exited	1080	1102	1148	1111
Starting Vehs	173	180	172	186
Ending Vehs	183	202	229	193
Travel Distance (mi)	1417	1387	1484	1407
Travel Time (hr)	49.6	48.2	52.5	49.0
Total Delay (hr)	18.1	17.2	19.4	17.6
Total Stops	1040	1015	1152	1044
Fuel Used (gal)	54.5	54.1	57.8	54.5

Interval #2 Information Period 2

Start Time	7:15
End Time	8:00
Total Time (min)	45

Volumes adjusted by Anti PHF.

Run Number	1	2	3	4	5	6	7
Vehs Entered	3025	3153	3138	3139	3117	3132	3079
Vehs Exited	3020	3154	3133	3179	3159	3171	3103
Starting Vehs	163	193	176	205	209	206	199
Ending Vehs	168	192	181	165	167	167	175
Travel Distance (mi)	3774	3993	3982	4033	3931	3982	3914
Travel Time (hr)	125.5	139.0	134.3	137.0	132.2	133.2	130.3
Total Delay (hr)	41.6	50.1	45.6	47.4	44.6	44.5	43.0
Total Stops	2591	2865	2772	2940	2773	2736	2724
Fuel Used (gal)	144.2	155.8	154.2	156.2	152.4	154.2	150.3

Interval #2 Information Period 2

Start Time	7:15
End Time	8:00
Total Time (min)	45

Volumes adjusted by Anti PHF.

Run Number	8	9	10	Avg
Vehs Entered	3202	3011	3071	3108
Vehs Exited	3201	3030	3116	3126
Starting Vehs	183	202	229	193
Ending Vehs	184	183	184	172
Travel Distance (mi)	4061	3801	3926	3940
Travel Time (hr)	139.5	128.4	133.6	133.3
Total Delay (hr)	49.3	43.8	46.0	45.6
Total Stops	3008	2680	2803	2790
Fuel Used (gal)	157.2	147.2	151.3	152.3

3: Chuluota Rd & Lake Pickett Rd Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	1.4	2.0	0.2	0.0	0.6
Total Del/Veh (s)	31.2	39.7	21.4	28.8	27.7

8: Chuluota Rd & Schoolview Wy/Cypress Lake Glen Blvd (S) Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.2	0.2	0.8	0.0	0.4
Total Del/Veh (s)	27.7	42.2	10.5	12.2	14.5

11: Chuluota Rd & Corner Lake Dr Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0
Total Del/Veh (s)	4.8	11.7	13.2	12.3

13: Chuluota Rd & Long Boat Ln/Cypress Lake Glen Blvd (N) Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.1	0.1	0.0	0.0	0.0
Total Del/Veh (s)	6.2	7.9	12.0	10.7	11.0

Total Network Performance

Denied Del/Veh (s)	1.0
Total Del/Veh (s)	50.6

Arterial Level of Service: NB Chuluota Rd

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Cypress Lake Glen Bl	8	12.0	20.9	0.1	20
Corner Lake Dr	11	12.3	30.3	0.3	32
Cypress Lake Glen Bl	13	12.0	59.4	0.6	38
	5	3.4	34.5	0.4	39
Lake Pickett Rd	3	22.6	36.4	0.2	20
	4	9.7	23.4	0.2	26
Total		71.9	205.0	1.8	31

Arterial Level of Service: SB Chuluota Rd

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
	4	0.9	9.4	0.1	47
Lake Pickett Rd	3	33.8	45.7	0.2	13
	5	6.9	21.6	0.2	34
Long Boat Ln	13	10.7	35.6	0.4	38
Corner Lake Dr	11	13.1	60.3	0.6	37
Schoolview Wy	8	11.9	34.0	0.3	29
Total		77.3	206.8	1.7	31

Intersection: 3: Chuluota Rd & Lake Pickett Rd

Movement	EB	EB	EB	WB	WB	NB	NB	NB	NB	B5	B5	SB
Directions Served	L	TR	R	L	TR	L	T	T	R	T	T	L
Maximum Queue (ft)	246	362	265	127	146	200	326	285	94	16	20	62
Average Queue (ft)	134	158	111	58	65	89	170	114	29	1	1	20
95th Queue (ft)	226	269	214	109	124	160	279	225	69	16	20	49
Link Distance (ft)		2771			693		992	992		1838	1838	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	200		300	200		465			425			400
Storage Blk Time (%)	3	3	0	0								
Queuing Penalty (veh)	21	13	0	0								

Intersection: 3: Chuluota Rd & Lake Pickett Rd

Movement	SB	SB	SB
Directions Served	T	T	R
Maximum Queue (ft)	316	309	139
Average Queue (ft)	196	186	46
95th Queue (ft)	291	285	101
Link Distance (ft)	823	823	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			400
Storage Blk Time (%)	0	0	
Queuing Penalty (veh)	0	0	

Intersection: 4: Bend

Movement	NB	NB
Directions Served	T	
Maximum Queue (ft)	81	78
Average Queue (ft)	4	3
95th Queue (ft)	41	73
Link Distance (ft)	823	823
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 8: Chuluota Rd & Schoolview Wy/Cypress Lake Glen Blvd (S)

Movement	EB	EB	WB	WB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	TR	L	TR	L	T	T	L	T	T	R
Maximum Queue (ft)	149	60	256	63	73	254	228	76	225	234	47
Average Queue (ft)	59	17	114	22	13	140	87	28	97	113	14
95th Queue (ft)	114	45	213	53	54	235	188	61	192	201	39
Link Distance (ft)	356	356	682	682		558	558		1254	1254	
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (ft)					300			300			300
Storage Blk Time (%)						0	0		0	0	
Queuing Penalty (veh)						0	0		0	0	

Intersection: 11: Chuluota Rd & Corner Lake Dr

Movement	EB	EB	NB	NB	SB	SB
Directions Served	L	R	LT	T	T	TR
Maximum Queue (ft)	49	44	62	46	75	56
Average Queue (ft)	13	5	6	2	20	3
95th Queue (ft)	38	27	33	24	56	28
Link Distance (ft)	234		1254	1254	3050	3050
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)		200				
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 13: Chuluota Rd & Long Boat Ln/Cypress Lake Glen Blvd (N)

Movement	EB	WB	WB	NB	NB	SB	SB
Directions Served	LT	LT	R	LT	TR	LT	TR
Maximum Queue (ft)	28	76	8	60	27	77	45
Average Queue (ft)	3	30	0	16	2	22	3
95th Queue (ft)	17	61	5	46	19	61	25
Link Distance (ft)	463	794	794	3050	3050	1838	1838
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)							
Storage Blk Time (%)							
Queuing Penalty (veh)							

Network Summary

Network wide Queuing Penalty: 34

Intersection: 3: Chuluota Rd & Lake Pickett Rd

Phase	1	2	3	4	5	6	7	8
Movement(s) Served	NBL	SBT	EBL	WBTL	SBL	NBSB	WBL	EBTL
Maximum Green (s)	7.9	27.9	9.2	18.0	5.0	30.8	5.0	22.2
Minimum Green (s)	5.0	16.0	5.0	5.0	5.0	16.0	5.0	5.0
Recall	None	Min	None	None	None	Min	None	None
Avg. Green (s)	7.8	-4.2	-3.0	-3.1	5.2	5.6	5.2	6.2
g/C Ratio	2.07	-1.19	-0.83	-0.70	0.45	1.58	1.25	1.73
Cycles Skipped (%)	5	0	0	20	69	0	15	0
Cycles @ Minimum (%)	0	0	0	0	31	0	85	0
Cycles Maxed Out (%)	80	93	93	55	31	95	85	78
Cycles with Peds (%)	0	3	0	3	0	3	0	0

Controller Summary

Average Cycle Length (s): 3.6
Number of Complete Cycles : 39

Intersection: 8: Chuluota Rd & Schoolview Wy/Cypress Lake Glen Blvd (S)

Phase	1	2	3	4	5	6	7	8
Movement(s) Served	SBL	NBT	WBL	EBTL	NBL	SBT	EBL	WBTL
Maximum Green (s)	7.0	32.7	5.1	20.0	5.0	34.7	6.1	19.0
Minimum Green (s)	7.0	16.0	5.0	10.0	5.0	16.0	5.0	5.0
Recall	None	Min	None	None	None	Min	None	None
Avg. Green (s)	7.1	-2.4	-4.9	11.6	5.5	1.3	-5.4	10.2
g/C Ratio	0.89	-0.69	-1.36	0.97	0.29	0.39	-1.26	1.01
Cycles Skipped (%)	57	0	5	71	82	0	21	66
Cycles @ Minimum (%)	43	0	0	20	18	0	0	0
Cycles Maxed Out (%)	43	70	95	2	18	70	63	5
Cycles with Peds (%)	0	0	0	2	0	2	0	2

Controller Summary

Average Cycle Length (s): 3.4
Number of Complete Cycles : 56

APPENDIX F

DRAINAGE ANALSIS OF ICE ALTERNATIVES

October 5, 2024

Intersection Control Evaluations (ICE) Drainage Report

Roadway Conceptual Analysis for Chuluota Road from SR 50 to Lake Pickett Road

Orange County Project Number: Y20-830

Submitted to: Orange County Public Works, Florida



SECTION 1.0 – INTRODUCTION

The purpose of this Intersection Control Evaluations (ICE) is to discuss, analyze, and identify the stormwater management plan for the proposed Chuluota Road improvements based on environmental, hydrologic, hydraulic, and economic factors. Stormwater management for water quality treatment and runoff attenuation is proposed by using wet detention ponds. The design of the drainage and stormwater facilities will comply with the standards set forth by the FDOT drainage manual, the St. Johns River Water Management District (SJRWMD) Environmental Resource Permit (ERP) manual and the Orange County Land Development Code.

The roadway project limits have been divided into nine drainage sub-basins. The water quality and attenuation for two of the sub-basins will be provided in existing runoff attenuation systems, while seven of the sub-basins will be provided for in proposed pond sites or expansions of existing ponds. For all sub-basins which will require the construction of a new pond or expansion of an existing pond, at least two alternatives were evaluated. This report evaluates the adequacy of the pond sites using a volumetric analysis, which accounts for the water quality treatment and water quantity attenuation for runoff. Please note the volumetric analyses of the pond sites were performed with preliminary data. Pond sizes and configurations may change during the final design as refinements to the roadway design are made, and topographic survey is obtained.

Additional information such as geotechnical data have been obtained for this report to further refine the pond sizes to verify the right of way needs for the ponds. This report provides pond site alternatives that are hydraulically feasible and environmentally permittable based on the information. Locations were analyzed and evaluated for the following:

- Pond size required at tie down locations
- Stormwater conveyance and hydraulic parameters
- Parcel(s) required for acquisition
- FEMA flood zone(s)
- Wetland impacts
- Listed species impacts
- Contamination
- Cultural resources (archaeological and historical)
- Social impacts
- Other environmental impacts
- Utility conflicts
- Construction/maintenance concerns
- Public opinion
- Aesthetics
- Access issues
- Current land use zoning
- Future land use zoning
- Total cost of each alternative
- Potential risks associated with each alternative
- Recommendations/ranking

SECTION 2.0 – PROJECT DESCRIPTION

The Chuluota Road project area is located within the Big Econlockhatchee River Basin within the jurisdiction of the St. Johns River Water Management District (SJRWMD). The Econlockhatchee River System is considered an Outstanding Florida Waters (OFW). Refer to **Appendix A** for the project location map and USGS quadrangle map.

Orange County is proposing to widen Chuluota Road from East Colonial Drive to Lake Pickett Road to improve roadway capacity. The total project length is approximately 1.93 miles of roadway. The improvements include the widening of Chuluota Road with the construction of four eleven-foot travel lanes, one 10-foot multiuse path, and one 6-foot sidewalk. The lengths of existing turn lanes are anticipated to remain. The roadway corridor spans a mix of commercial, residential, institutional, and pastureland uses. Refer to **Appendix A** for additional information regarding the potential typical sections.

The project vertical datum is the North American Vertical Datum of 1988 (NAVD88), and all elevations contained in this document and the plans reference this datum unless otherwise noted. Conversion from NGVD29 to NAVD88 is -1.1 feet.

In this ICE report, the drainage implications of two intersection alternatives are assessed. The first drainage alternative includes the following options:

- Two-lane roundabout at Cypress Lake Glen Boulevard
- Two-lane roundabout at Corner Lake Drive
- Two-lane roundabout at Long Boat Lane / Cypress Lake Glen Boulevard (North)
- Two-lane roundabout at Lake Pickett Road

The second drainage alternative assesses the same two-lane roundabouts at Cypress Lake Glen Boulevard, Corner Lake Drive, and Long Boat Lane / Cypress Lake Glen Boulevard (North). However, this drainage alternative analyzes a signalized intersection at Lake Pickett Road and Chuluota Road with two bowties along Lake Pickett Road.

SECTION 3.0 – DATA COLLECTION

The pond siting report includes the data used for this analysis. This ICE drainage analysis used the layout for recommended intersection alternatives as described above to assess additional stormwater attenuation, water quality, and floodplain compensation requirements.

SECTION 4.0 – DESIGN CRITERIA

The pond siting report includes the design criteria used for this analysis.

SECTION 5.0 – ENVIRONMENTAL LOOK AROUND

The pond siting report includes the ecological summary report.

SECTION 6.0 – EXISTING & PROPOSED CONDITIONS

The existing and proposed basins are described in the pond siting report. For this ICE analysis, it is assumed the proposed pavement associated with intersection improvements adjacent to these basins will drain to each adjacent basin in final design conditions.

SECTION 7.0 – FLOODPLAIN & ENVIRONMENTAL INFORMATION

Based on the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRM's) dated September 25, 2009, portions of the study area are located within Zone A (100 Year) floodplain. There are no Zone AE floodplains within the study area. The Zone A floodplains occur:

- East of Chuluota Road across from Corner Lake Middle School. This Zone A floodplain is isolated.
- North and South of Cypress Lake Glen Boulevard and across Chuluota Road at the intersection. This Zone A floodplain ultimately drains to Lake Pickett.

Please refer to Appendix B for a depiction of the floodplains in the study area. There are no floodways within the project limits. There will be floodplain impacts within the project corridor that will be mitigated by providing compensatory volume in proposed floodplain compensation ponds. The Zone A floodplains have no designated elevation, though the floodplain limits within Chuluota Road for the Zone A floodplain north of Corner Lake Drive are associated with elevations varying between 69.8 and 70.8 ft NAVD88 as estimated from LiDAR data. Therefore, potentially raising the road profile to elevation 70.0 ft NAVD88 and widening the road would constitute floodplain fill. Note that no survey is available nor is a proposed roadway profile, so the amount of floodplain compensation required is preliminary.

Under the non-roundabout alternative, there is 0.03 ac-ft of floodplain impact between STA 22+00 and 26+00, and there is 1.87 ac-ft of floodplain impacts between 73+00 and 90+00. With the ICE alternatives, there is an estimated total of 2.13 ac-ft of floodplain impacts between STA 73+00 and 90+00. The same estimated floodplain impact volume (2.13 ac-ft) is anticipated for each ICE alternative.

Net Fill Summary				
Station to Station			Updated PSR Volume (Ac-Ft)	ICE Alternatives Volume (Ac-Ft)
22+00.00	TO	26+00.00	0.03	0.03
73+00.00	TO	90+00.00	1.87	2.13
Total			1.90	2.16

Calculations supporting the floodplain compensatory volume required and those provided are included in Appendix C. A floodplain compensatory pond (FC-1) is proposed across from Corner Lake Middle School. No changes to the size of this floodplain compensatory pond will be necessary with roundabouts. A second floodplain compensatory pond (FC-2) is proposed adjacent to wetlands south of Lake Pickett Road and east of Chuluota Road. The footprint of this pond without roundabouts was 1.87 acres. **With the roundabouts, FC-2 will need to be increased to 2.13 acres.**

A wetland survey was performed by MSE Group, LLC, and the potential wetland/surface water impacts were quantified for each pond option in the pond siting report. There are no archaeological or historical impacts. A contamination report is included in the pond siting report.

SECTION 8.0 – STORMWATER PONDS

POND SIZING AND LOCATION

In the pond siting report submitted on October 2022, the County-preferred Alternative is for Pond 3C to provide attenuation and water quality for Drainage Basins 1, 2, and 3, and for Pond 4C to provide attenuation and water quality for Drainage Basin 4. See Appendix D for the following pond sizing calculations.

The parcel size for Pond 3C is 40.22 acres and is owned by First Baptist Church of Oviedo, and the pond footprint with tie-downs is approximately 7.14 acres for the non-roundabout option and 8.17 acres for the ICE alternatives. The proposed pond site is adjacent to the west side of Chuluota Road. The outfall from the proposed pond is conveyed west to the existing wetland and eventually to Corner Lake. There are no wetlands within the proposed footprint of this pond site location. The seasonal high-water table is 67.0 ft NAVD88 based on a combination of LiDAR and a wetland delineation. A wet detention pond is proposed at this location due to the high-water table. Preliminary pond sizing calculations indicate that Drainage Basins 1, 2, and 3 require a total of 5.56 ac-ft of treatment and attenuation volume to accommodate the proposed roadway configuration and pond footprint without roundabouts. With the ICE alternatives, 6.10 ac-ft of treatment and attenuation volume is required. Pond sizing calculations were also completed to provide the required volume at one foot below the inside maintenance berm. The ability to convey runoff from Basin 1 north may require Chuluota Road to be raised in the vicinity of the SR50 intersection. Alternatively, a portion of Basin 1 can continue to drain to the FDOT drainage systems on SR50 such that peak discharges into FDOT right-of-way is maintained or reduced, and the remainder of Basin 1 can be conveyed to Pond 3C. This pond alternative assumes that the crown of Chuluota Road can be raised to elevation 70 ft NAVD88 in the vicinity of Pond 3C. If the profile of the road in this sag can be raised to a higher elevation, the footprint for Pond 3C can be reduced in size, though the floodplain compensation pond may need to increase in size.

The parcel size for Pond 4C is 2.046 acres and is located on the northeast corner of Chuluota Road and Lake Pickett Road, and the estimated pond footprint is approximately 1.22 acres with either the roundabout option at Lake Pickett Road or with the signalized intersection and bowtie option. The pond footprint is approximately the same size without the roundabouts or bowties. The parcel will require acquisition because of proposed improvements to Lake Pickett Road as part of another project, so the County is interested in using this parcel for stormwater and water quality needs for Chuluota Road Basin 4. A portion of the adjacent county right-of-way that will be used for a trail will also be needed to site pond 4C at this location. The outfall from the proposed pond is conveyed south to Lake Picket Road. There are no wetlands in this pond site location. The measured seasonal high-water table is 4.9 feet below existing ground. Pond 4C is proposed as a wet detention pond. Preliminary pond sizing calculations indicate that Basin 4 requires a total of 1.58 ac-ft of treatment and attenuation volume to accommodate the proposed roadway configuration and pond footprint. Pond sizing calculations were also completed to provide the required volume at one foot below the inside maintenance berm.

SECTION 9.0 – RESULTS

Pond 3C is the recommended pond for Drainage Basin 1, 2, and 3. This pond site requires the partial acquisition of the commercial parcel under the ownership of First Baptist Church of Oviedo Inc. The parcel size is listed at 40.22 acres and the proposed pond 3C footprint is approximately 8.17 acres.

Pond 4C is an alternative pond for Drainage Basin 4. It is located on the northeast corner of Chuluota Road and Lake Pickett Road. The parcel will require acquisition because of proposed improvements to Lake Pickett Road as part of another project, so the County is interested in using this parcel for stormwater and water quality needs for Chuluota Road Basin 4. The parcel size is listed at 2.046 acres, and the proposed pond 4C footprint is 1.22 acres. A portion of the adjacent county right-of-way that will be used to a trail will also be needed to site pond 4C at this location. If that is not possible, this pond will need to be sited within the property southeast of Chuluota Road and Lake Pickett Road.

SECTION 10.0 – CONCLUSIONS

The proposed pond sites have been analyzed using a volumetric analysis, which accounts for water quality treatment and water quantity for runoff attenuation including floodplain compensation. The analysis completed in this report verifies whether the existing parcels can accommodate pond sites with adequate volume when considering the estimated seasonal high-water elevations, ground elevations, and potential natural contouring.

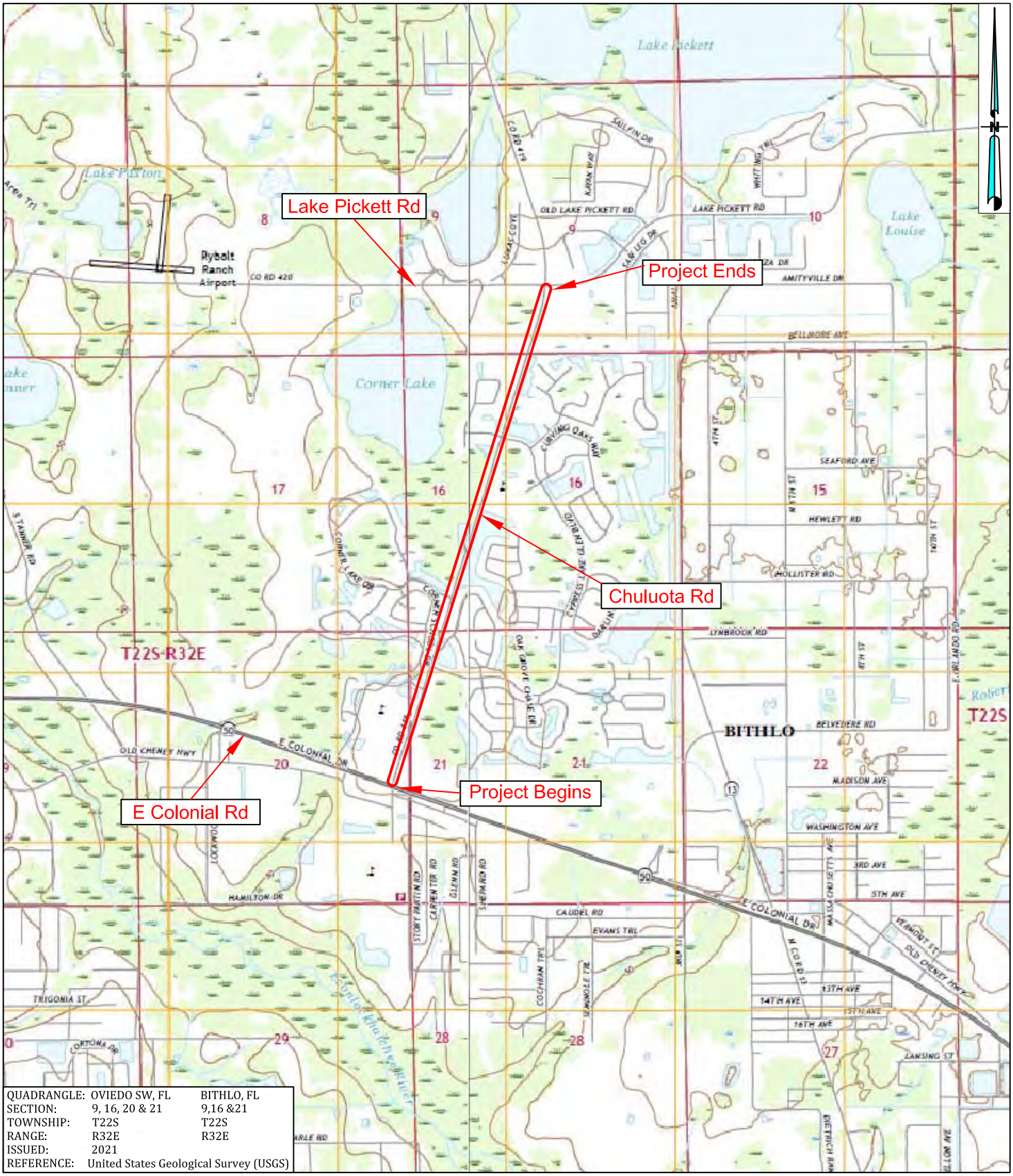
A floodplain compensatory pond (FC-1) is proposed across from Corner Lake Middle School. No changes to the size of this floodplain compensatory pond will be necessary with roundabouts. A second floodplain compensatory pond (FC-2) is proposed adjacent to wetlands south of Lake Pickett Road and east of Chuluota Road. The footprint of this pond without roundabouts was 1.87 acres. With the roundabouts, FC-2 will need to be increased to 2.13 acres. Note that no survey is available nor is a proposed roadway profile, so the amount of floodplain compensation required is preliminary.

For Basins 1, 2, and 3, the preferred pond site if Pond 3C due to the lower cost estimation compared to the other options. Additionally, the pond may be sited such that there are no wetland impacts. The proposed Pond 3C is also expected to accommodate proposed intersection improvements, though the pond will be slightly larger than without roundabout alternatives. The pond sizing assumes that Chuluota Road can be raised to at least elevation 70 NAVD88. If it can be raised higher, the Pond 3C footprint can likely be reduced, though the floodplain compensation pond FC-2 will need to increase in size.

For Basin 4, the preferred pond site is Pond 4C due to its low footprint and potential lower cost with and without the roundabout or bowtie alternatives. A portion of the adjacent county right-of-way that will be used to a trail will also be needed to site pond 4C at this location. If that is not possible, this pond will need to be sited within the property southeast of Chuluota Road and Lake Pickett Road.

Appendix A

Drainage Maps



NOT TO SCALE

Approximate Project Location

REVISIONS				NAMES	DATES
DATES	BY	DESCRIPTION	DRAWN BY:	MB	09-29-2021
			CHECKED BY:	GNN	09-29-2021
			DESIGNED BY:	N/A	N/A
			CHECKED BY:	N/A	N/A
			APPROVED BY:		

NADIC
GODWIN N. NNADI, Ph.D., P.E.
FL REGISTRATION NO. 50637
NADIC ENGINEERING SERVICES, INC.
601 N. HART BOULEVARD
ORLANDO, FL 32818
PH (407) 521-4771 FAX (407) 521-4772
CERTIFICATE OF AUTHORIZATION NO. 8214

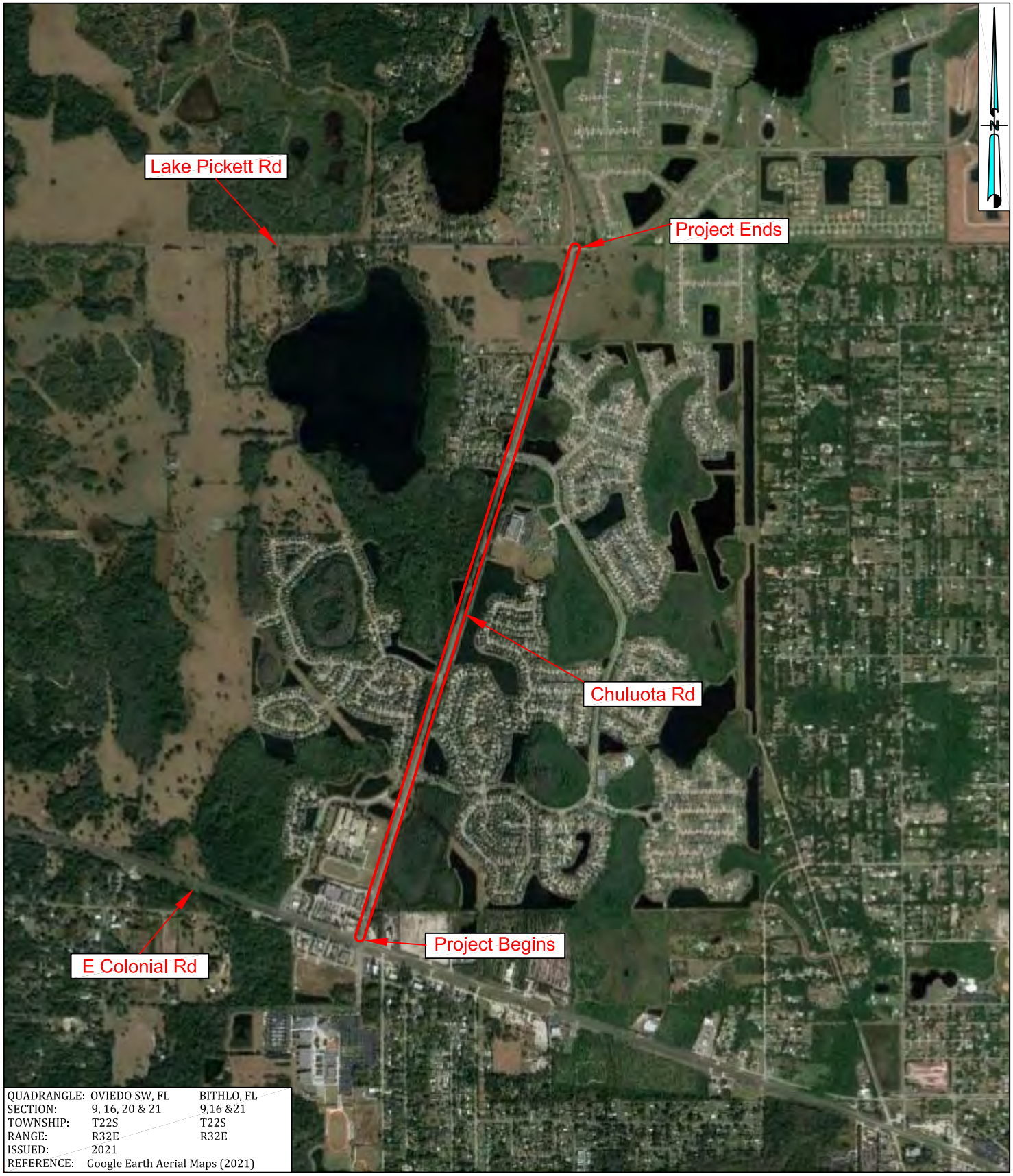
ORANGE COUNTY, FLORIDA

COUNTY	CONTRACT No.
ORANGE	Y20-830-CH

FIGURE 2
USGS QUADRANGLE MAP

PROJECT NAME:
CHULOUTA ROAD ROADWAY CONCEPTUAL ANALYSIS (RCA)

NADIC PROJECT NO.: PR.GEO.RD20027



QUADRANGLE:	OVIEDO SW, FL	BITHLO, FL
SECTION:	9, 16, 20 & 21	9,16 &21
TOWNSHIP:	T22S	T22S
RANGE:	R32E	R32E
ISSUED:	2021	
REFERENCE:	Google Earth Aerial Maps (2021)	

NOT TO SCALE

Approximate Project Location

REVISIONS				NAMES	DATES
DATES	BY	DESCRIPTION	DRAWN BY:	MB	10-04-2021
			CHECKED BY:	GNN	10-04-2021
			DESIGNED BY:	N/A	N/A
			CHECKED BY:	N/A	N/A
			APPROVED BY:		

NADIC
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FL REGISTRATION NO. 50637
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601 N. HART BOULEVARD
ORLANDO, FL 32818
PH (407) 521-4771 FAX (407) 521-4772
CERTIFICATE OF AUTHORIZATION NO. 8214

ORANGE COUNTY, FLORIDA

COUNTY	CONTRACT No.
ORANGE	Y20-830-CH

FIGURE 1
VICINITY MAP

PROJECT NAME:
CHULOUTA ROAD
ROADWAY CONCEPTUAL ANALYSIS (RCA)

NADIC PROJECT NO.: PR.GEO.RD20027

Appendix B

FEMA FIRMette Maps

National Flood Hazard Layer FIRMette

FEMA

81°7'43"W 28°34'58"N



81°7'5"W 28°34'26"N

0 250 500 1,000 1,500 2,000 Feet

1:6,000

Basemap Imagery Source: USGS National Map 2023

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 Cross Sections with 1% Annual Chance
- 17.5 Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

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National Flood Hazard Layer FIRMette

FEMA

81°7'33"W 28°35'24"N



0 250 500 1,000 1,500 2,000 Feet

1:6,000

81°6'56"W 28°34'52"N

Basemap Imagery Source: USGS National Map 2023

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN — Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 — Cross Sections with 1% Annual Chance
- 17.5 — Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

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National Flood Hazard Layer FIRMette

FEMA

81°8'2"W 28°34'3"N



81°7'25"W 28°33'31"N

0 250 500 1,000 1,500 2,000 Feet

1:6,000

Basemap Imagery Source: USGS National Map 2023

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 Cross Sections with 1% Annual Chance
- 17.5 Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

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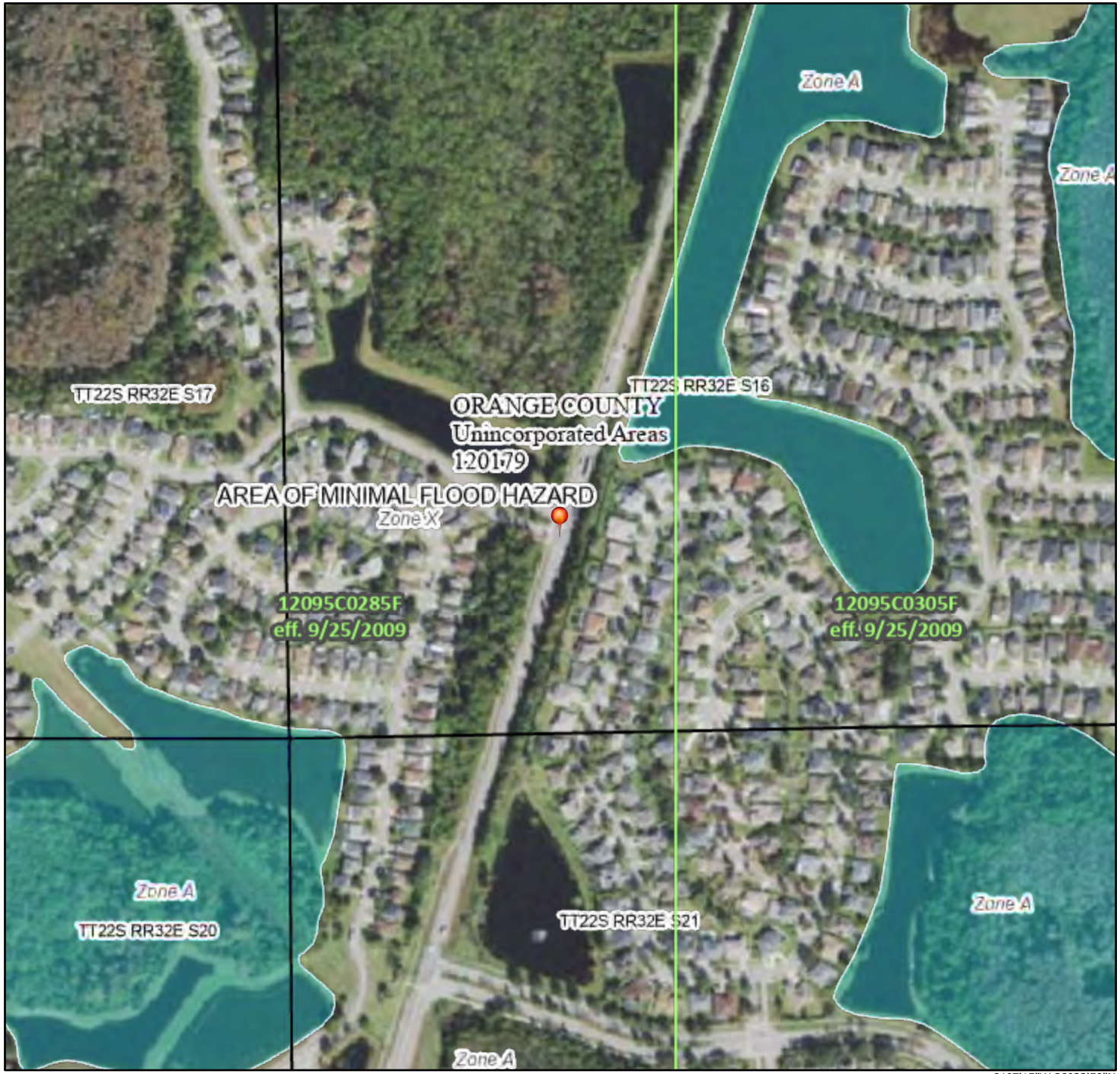
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National Flood Hazard Layer FIRMette

FEMA

81°7'53"W 28°34'30"N



81°7'15"W 28°33'59"N

0 250 500 1,000 1,500 2,000 Feet

1:6,000

Basemap Imagery Source: USGS National Map 2023

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 / 17.5 Cross Sections with 1% Annual Chance / Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

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Appendix C

Floodplain Compensation Calculations

Updated PSR Floodplain Encroachment Calculations

Net Fill Summary				
Station to Station			Original PSR Volume (Ac-Ft)	Updated PSR Volume (Ac-Ft)
22+00.00	TO	26+00.00	0.03	0.03
73+00.00	TO	90+00.00	0.77	1.87
Total			0.80	1.89

Net Fill - Sta. 22+00 to 26+00					
Station	Xsect Area (SF)	Average End Area (SF)	Length (FT)	Volume (CF)	Volume (Ac-Ft)
22+00.00	0.07	3.44	100	344	0.01
23+00.00	6.81	5.86	100	586	0.01
24+00.00	4.92	2.93	100	293	0.01
25+00.00	0.94	0.47	100	47	0.00
26+00.00	0.00	0.00	100	0	0.00
Total Flood Compensation Required					0.03

Net Fill - Sta. 73+00 to 84.80						
Station to Station			Fill Area Raising Road to 70 ft (SF, Profile View)	Average Floodplain Impact Width (FT)	Volume (CF)	Volume (Ac-Ft)
73+00.00	TO	75+10.00	283.50	27.10	7681	0.18
77+20.00	TO	84+80.00	774.75	84.10	65153	1.50
Total Flood Compensation Required					72834	1.67

Net Fill - Sta. 85+00 to 90+00					
Station	Xsect Area (SF)	Average End Area (SF)	Length (FT)	Volume (CF)	Volume (Ac-Ft)
85+00.00	10.36	9.53	100	953	0.02
86+00.00	8.71	16.67	100	1667	0.04
87+00.00	24.62	20.98	100	2098	0.05
88+00.00	17.34	20.94	100	2094	0.05
89+00.00	24.55	16.26	100	1626	0.04
Total Flood Compensation Required					0.19

ICE Alternatives Floodplain Encroachment Calculations

Net Fill Summary				
Station to Station			Original PSR Volume (Ac-Ft)	ICE Alts. Volume (Ac-Ft)
22+00.00	TO	26+00.00	0.03	0.03
73+00.00	TO	90+00.00	0.77	2.13
Total			0.80	2.15

Net Fill - Sta. 22+00 to 26+00					
Station	Xsect Area (SF)	Average End Area (SF)	Length (FT)	Volume (CF)	Volume (Ac-Ft)
22+00.00	0.07	3.44	100	344	0.01
23+00.00	6.81	5.86	100	586	0.01
24+00.00	4.92	2.93	100	293	0.01
25+00.00	0.94	0.47	100	47	0.00
26+00.00	0.00	0.00	100	0	0.00
Total Flood Compensation Required					0.03

Net Fill - Sta. 73+00 to 84.80						
Station to Station			Fill Area (SF)	Average Impact Width (FT)	Volume (CF)	Volume (Ac-Ft)
73+00.00	TO	75+10.00	283.50	27.10	7681	0.18
77+20.00	TO	84+80.00	774.75	84.10	65153	1.50
Total Flood Compensation Required					72834	1.67

Net Fill - Sta. 85+00 to 90+00					
Station	Xsect Area (SF)	Average End Area (SF)	Length (FT)	Volume (CF)	Volume (Ac-Ft)
85+00.00	10.36	9.53	100	953	0.02
86+00.00	8.71	16.67	100	1667	0.04
87+00.00	24.62	20.98	100	2098	0.05
88+00.00	17.34	20.94	100	2094	0.05
89+00.00	24.55	16.26	100	1626	0.04
Total Flood Compensation Required					0.19

ICE Alts. Additional Net Fill - Sta. 79+00 to 84+80					
Station to Station			Fill Depth Required (FT)	Additional Impact Area (ac)	Volume (Ac-Ft)
79+00.00	TO	84+80.00	0.5	0.52	0.26
Total Flood Compensation Required					0.26

Updated PSR Proposed Flood Comp Pond Sta. 22+00 to 26+00						
Description	**Stage (ft)**	**Pond Area (ac)**	**Total Volume (ac.ft.)**	**Height**	**Inc. Vol (ac-ft)**	**Cum. Vol (ac-ft)**
DHW	70.00	0.03				0.00
			0.03	0.50	0.02	
	70.50	0.04				0.02
			0.03	0.50	0.02	
Top of Bank	71.00	0.05				0.03
			Total (ac-ft)			**0.03**
			Total Flood Compensation Required between (ac-ft)			**0.03**
			Compensation Still Needed (ac-ft)			**0.00**

Updated PSR Proposed Flood Comp Pond Sta. 73+00 to 90+00						
Description	**Stage (ft)**	**Pond Area (ac)**	**Total Volume (ac.ft.)**	**Height**	**Inc. Vol (ac-ft)**	**Cum. Vol (ac-ft)**
DHW	70.00	1.85				0.00
			1.87	0.50	0.94	
	70.50	1.89				0.94
			1.87	0.50	0.94	
Top of Bank	71.00	1.93				1.87
			Total (ac-ft)			**1.87**
			Total Flood Compensation Required between (ac-ft)			**1.87**
			Compensation Still Needed (ac-ft)			**0.00**

ICE Alts. Proposed Flood Comp Pond Sta. 22+00 to 26+00						
Description	**Stage (ft)**	**Pond Area (ac)**	**Total Volume (ac.ft.)**	**Height**	**Inc. Vol (ac-ft)**	**Cum. Vol (ac-ft)**
DHW	70.00	0.03				0.00
			0.03	0.50	0.02	
	70.50	0.04				0.02
			0.03	0.50	0.02	
Top of Bank	71.00	0.05				0.03
					Total (ac-ft)	**0.03**
					Total Flood Compensation Required between (ac-ft)	**0.03**
					Compensation Still Needed (ac-ft)	**0.00**

ICE Alts. Proposed Flood Comp Pond Sta. 73+00 to 90+00						
Description	**Stage (ft)**	**Pond Area (ac)**	**Total Volume (ac.ft.)**	**Height**	**Inc. Vol (ac-ft)**	**Cum. Vol (ac-ft)**
DHW	70.00	2.10				0.00
			2.13	0.50	1.06	
	70.50	2.15				1.06
			2.13	0.50	1.06	
Top of Bank	71.00	2.20				2.13
					Total (ac-ft)	**2.13**
					Total Flood Compensation Required between (ac-ft)	**2.13**
					Compensation Still Needed (ac-ft)	**0.00**

Appendix D

Pond Sizing Calculations

PROJECT: *Chuluota Road Widening Conceptual Drainage Report*
Basin No. 1A
Subject Pre-Developed CN and SCS Runoff Volume Calculation

Basin Designation 1A (Existing)
Type Evaluation Pre-Developed

Drainage Area begins at Station 10+70
and continues until Station 17+00

Existing Impervious Area Tabulation				
Description	Width	Length	Product (sq. ft)	Product (ac)
Total Impervious Area =			37,352	0.86

L = Approximate Roadway Length (ft)
R = Average Right-of-Way Width in Basin (ft)
I_Ex = Impervious Area (ac)
P = Pervious Area (ac)
At = Total Existing Onsite Basin Area (ac) (Excluding Pond Area)
Off = Total Offsite Impervious Area (ac)

L = _____ ft
R = _____ ft

At = (R*L) / 43560
At = 1.28 ac

I_Ex = 0.86 ac

P = At-I_Ex
P = 0.42 ac

From existing Drainage Map:
Off = 0.15 ac

PROJECT: *Chuluota Road Widening Conceptual Drainage Report*
Basin No. 1A
Subject Post-Developed CN and SCS Runoff Volume Calculation

Basin Designation 1A (Proposed)
Type Evaluation Post-Developed

Drainage Area begins at Station 10+70
and continues until Station 17+00

Proposed Impervious Area Tabulation				
Description	Width	Length	Product (sq. ft)	Product (ac)
Total Impervious Area =			51,760	1.19

L = Approximate Roadway Length (ft)
R = Average Right-of-Way Width in Basin (ft)
I = Impervious Area (ac)
P = Pervious Area (ac)
At = Total Existing Onsite Basin Area (ac) (Excluding Pond Area)
Off = Total Offsite Impervious Area (ac)

L = _____ ft
R = _____ ft

Atp = (R*L) / 43560
Atp = 1.28 ac

I = 1.19 ac
I_New = I - I_Ex
I_New = 0.33 ac

P = Atp-I
P = 0.09 ac

From existing Drainage Map:
Off = 0.15 ac

PROJECT: *Chuluota Road Widening Conceptual Drainage Report*

Basin No. 1A

Subject Pre-Developed CN and SCS Runoff Volume Calculation

Existing Condition

Basin Designation	1A (Existing)		
Type Evaluation	Pre-Developed		
Basin Size	1.28 ac	Total Drainage Area	1.60 ac
Rainfall Depth	8.40 in		

Weighted, CN = $\frac{\text{Product}}{\text{Area}}$

Soil Storage, S = $\frac{1000}{CN} - 10$

Runoff, R = $\frac{(P - (0.2S))^2}{P + (0.8S)}$

Runoff Volume, V = $\frac{\text{R}}{12}$ x Area

Basin

**For this analysis, all soils are assumed to be D soils for grass.*

Soil Land Use Description	Soil Group	CN	Area (ac)	Product
Impervious Area (Roadway and Sidewalk)	-	98	0.86	84.03
Grass, Good Condition	A	39	0.00	0.00
Grass, Good Condition	D	80	0.42	33.81
	Total Area =		1.28	117.84

Offsite

Soil Land Use Description	Soil Group	CN	Area (ac)	Product
Impervious Area (Roadway and Sidewalk)	-	98	0.15	14.70
Grass, Good Condition (offsite)	D	80	0.17	13.60
	Total Area =		0.32	28.30

Basin		Offsite	
CN=	92.06	CN=	88.44
S=	0.86 in	S=	1.31 in
R=	7.45 in	R=	7.01 in
V=	0.79 ac-ft	V=	0.19 ac-ft

Total Volume= 0.98 ac-ft

PROJECT: *Chuluota Road Widening Conceptual Drainage Report*
Basin No. 1A
Subject Post-Developed CN and SCS Runoff Volume Calculation

Proposed Condition

Basin Designation 1A (Proposed)
Type Evaluation Post-Developed
Basin Size 1.28 ac
Total Drainage Area 1.60 ac
Rainfall Depth 8.40 in

Weighted, CN = $\frac{\text{Product}}{\text{Area}}$

Soil Storage, S = $\frac{1000}{CN} - 10$

Runoff, R = $\frac{(P - (0.2S))^2}{P + (0.8S)}$

Runoff Volume, V = $\frac{\text{R}}{12}$ x Area

Basin **For this analysis, all soils are assumed to be D soils for grass.*

Soil Land Use Description	Soil Group	CN	Area (ac)	Product
Impervious Area (Roadway and Sidewalk)	-	98	1.19	116.45
Grass, Good Condition	A	39	0.00	0.00
Grass, Good Condition	D	80	0.09	7.35
	Total Area =		1.28	123.79

Offsite

Soil Land Use Description	Soil Group	CN	Area (ac)	Product
Impervious Area (Roadway and Sidewalk)	-	98	0.15	14.70
Grass, Good Condition (offsite)	D	80	0.17	13.60
	Total Area =		0.32	28.30

Basin		Offsite	
CN=	96.71	CN=	88.44
S=	0.34 in	S=	1.31 in
R=	8.01 in	R=	7.01 in
V=	0.85 ac-ft	V=	0.19 ac-ft

Total Volume= 1.04 ac-ft

Post Developed Volume - Pre Developed Volume =

0.06 ac-ft = 2614 cu-ft

PROJECT: *Chuluota Road Widening Conceptual Drainage Report*
Basin No. 1A
Subject Treatment Volume Calculation

SJRWMD Treatment Volume Requirement

Water Quality Volume for a Wet Detention System is based upon 2.5" times the additional onsite impervious area and 1" times the total offsite drainage area. The project is located within the Econ River Basin and requires an additional 50% treatment volume.

Vt = 2.5 inches of runoff times the new impervious area
Vt = (I-New * 2.5 in) / 12
Vt = 0.07 ac-ft

Is Offsite Area Contributing to the Basin (yes or no)? Yes

Offsite Area, Off = 0.32 ac
Vt(off) = (Off * 1.0 in) / 12
Vt(off) = 0.03 ac-ft

Did the existing basin receive treatment (Yes or No)? No

Will the existing treatment system will be impacted by the proposed improvements (yes or no)? No

Existing Required Treatment area for basin = 0 ac

Existing Required Treatment Volume for basin, Vt(Ex) = 0 ac-ft

Treatment Volume Required = [Vt + Vt(Off)+Vt(Ex)]
Treatment Volume Required = 0.10 ac-ft

Is Basin Part of an OFW (yes or no)? Yes (If Yes, then add an additional 50% Treatment Volume)
(Econ River Basin)

Total Basin Required Treatment Volume = 0.15 ac-ft

Total Peak Storage Volume Requirement

The Total Peak Storage Volume Required is:

Volume (peak) = Treatment Volume + Estimated Peak Attenuation Volume

Treatment Volume =	0.15 ac-ft	=	6,534 cubic feet
Attenuation Volume =	0.06 ac-ft	=	2,614 cubic feet
Volume (peak) =	0.21 ac-ft	=	9,148 cubic feet

PROJECT: *Chuluota Road Widening Conceptual Drainage Report*
Basin No. 1B
Subject Pre-Developed CN and SCS Runoff Volume Calculation

Basin Designation 1B (Existing)
Type Evaluation Pre-Developed

Drainage Area begins at Station 10+70
and continues until Station 12+10

Existing Impervious Area Tabulation				
Description	Width	Length	Product (sq. ft)	Product (ac)
Total Impervious Area =			10,367	0.24

L = Approximate Roadway Length (ft)
R = Approximate Average Right-of-Way Width in Basin (ft)
I_Ex = Impervious Area (ac)
P = Pervious Area (ac)
At = Total Existing Onsite Basin Area (ac) (Excluding Pond Area)
Off = Total Offsite Impervious Area (ac)

L = _____ ft
R = _____ ft

At = (R*L) / 43560
At = 0.30 ac

I_Ex = 0.24 ac

P = At-I_Ex
P = 0.06 ac

From existing Drainage Map:
Off = 0.20 ac

PROJECT: *Chuluota Road Widening Conceptual Drainage Report*

Basin No. 1B

Subject Post-Developed CN and SCS Runoff Volume Calculation

Basin Designation 1B (Proposed)
Type Evaluation Post-Developed

Drainage Area begins at Station 10+70
and continues until Station 12+10

Proposed Impervious Area Tabulation				
Description	Width	Length	Product (sq. ft)	Product (ac)
Total Impervious Area =			11,342	0.26

L = Approximate Roadway Length (ft)
R = Average Right-of-Way Width in Basin (ft)
I = Impervious Area (ac)
P = Pervious Area (ac)
Atp = Proposed Total Existing Onsite Basin Area (ac) (Excluding Pond Area)
Off = Total Offsite Impervious Area (ac)

L = _____ ft
R = _____ ft

Atp = (R*L) / 43560
Atp = 0.30 ac

I = 0.26 ac
I_New = I - I_Ex
I_New = 0.02 ac

P = Atp-I
P = 0.04 ac

From existing Drainage Map:
Off = 0.20 ac

PROJECT: *Chuluota Road Widening Conceptual Drainage Report*
Basin No. 1B
Subject Pre-Developed CN and SCS Runoff Volume Calculation

Existing Condition

Basin Designation 1B (Existing)
Type Evaluation Pre-Developed
Basin Size 0.30 ac
Total Drainage Area 0.50 ac
Rainfall Depth 8.40 in

Weighted, CN = $\frac{\text{Product}}{\text{Area}}$

Soil Storage, S = $\frac{1000}{CN} - 10$

Runoff, R = $\frac{(P - (0.2S))^2}{P + (0.8S)}$

Runoff Volume, V = $\frac{\text{R}}{12}$ x Area

Basin **For this analysis, all soils are assumed to be D soils for grass.*

Soil Land Use Description	Soil Group	CN	Area (ac)	Product
Impervious Area (Roadway and Sidewalk)	-	98	0.24	23.32
Grass, Good Condition	A	39	0.00	0.00
Grass, Good Condition	D	80	0.06	5.04
	Total Area =		0.30	28.36

Offsite

Soil Land Use Description	Soil Group	CN	Area (ac)	Product
Impervious Area (Roadway and Sidewalk)	-	98	0.20	19.60
Grass, Good Condition (offsite)	D	80	0.00	0.00
	Total Area =		0.20	19.60

Basin		Offsite	
CN=	94.23	CN=	98
S=	0.61 in	S=	0.2 in
R=	7.71 in	R=	8.16 in
V=	0.19 ac-ft	V=	0.14 ac-ft

Total Volume= 0.33 ac-ft

PROJECT: *Chuluota Road Widening Conceptual Drainage Report*
Basin No. 1B
Subject Post-Developed CN and SCS Runoff Volume Calculation

Proposed Condition

Basin Designation 1B (Proposed)
Type Evaluation Post-Developed
Basin Size 0.30 ac
Total Drainage Area 0.50 ac
Rainfall Depth 8.40 in

Weighted, CN = $\frac{\text{Product}}{\text{Area}}$

Soil Storage, S = $\frac{1000}{CN} - 10$

Runoff, R = $\frac{(P - (0.2S))^2}{P + (0.8S)}$

Runoff Volume, V = $\frac{\text{R}}{12}$ x Area

Basin **For this analysis, all soils are assumed to be D soils for grass.*

Soil Land Use Description	Soil Group	CN	Area (ac)	Product
Impervious Area (Roadway and Sidewalk)	-	98	0.26	25.52
Grass, Good Condition	A	39	0.00	0.00
Grass, Good Condition	D	80	0.04	3.25
	Total Area =		0.30	28.76

Offsite

Soil Land Use Description	Soil Group	CN	Area (ac)	Product
Impervious Area (Roadway and Sidewalk)	-	98	0.20	19.60
Grass, Good Condition (offsite)	D	80	0.00	0.00
	Total Area =		0.20	19.60

Basin		Offsite	
CN=	95.57	CN=	98
S=	0.46 in	S=	0.2 in
R=	7.87 in	R=	8.16 in
V=	0.20 ac-ft	V=	0.14 ac-ft

Total Volume= 0.34 ac-ft

Post Developed Volume - Pre Developed Volume =

0.01 ac-ft = 436 cu-ft

PROJECT: *Chuluota Road Widening Conceptual Drainage Report*
Basin No. 1B
Subject Treatment Volume Calculation

SJRWMD Treatment Volume Requirement

Water Quality Volume for a Wet Detention System is based upon 2.5" times the additional onsite impervious area and 1" times the total offsite drainage area. The project is located within the Econ River Basin and requires an additional 50% treatment volume.

Vt = 2.5 inches of runoff times the new impervious area
Vt = (I-New * 2.5 in) / 12
Vt = 0.00 ac-ft

Is Offsite Area Contributing to the Basin (yes or no)? Yes

Offsite Area, Off = 0.20 ac

Vt(off) = (Off * 1.0 in) / 12

Vt(off) = 0.02 ac-ft

Did the existing basin receive treatment (Yes or No)? No

Will the existing treatment system will be impacted by the proposed improvements (yes or no)? No

Existing Required Treatment area for basin = 0 ac

Existing Required Treatment Volume for basin, Vt(Ex) = 0 ac-ft

Treatment Volume Required = [Vt + Vt(Off)+Vt(Ex)]
Treatment Volume Required = 0.02 ac-ft

Is Basin Part of an OFW (yes or no)? Yes (If Yes, then add an additional 50% Treatment *(Econ River Basin)*

Total Basin Required Treatment Volume = 0.03 ac-ft

Total Peak Storage Volume Requirement

The Total Peak Storage Volume Required is:

Volume (peak) = Treatment Volume + Estimated Peak Attenuation Volume

Treatment Volume =	0.03 ac-ft	=	1,307 cu-ft
Attenuation Volume =	0.01 ac-ft	=	436 cu-ft
Volume (peak) =	0.04 ac-ft	=	1,742 cu-ft

PROJECT: *Chuluota Road Widening Conceptual Drainage Report*
Basin No. 2A
Subject Pre-Developed CN and SCS Runoff Volume Calculation

Basin Designation 2A (Existing)
Type Evaluation Pre-Developed

Drainage Area begins at Station 17+00
and continues until Station 17+00

Existing Impervious Area Tabulation				
Description	Width	Length	Product (sq. ft)	Product (ac)
Total Impervious Area =			42,224	0.97

Existing Schoolview Way Configuration				
Description	Width	Length	Product (sq. ft)	Product (ac)
Total Impervious Area =			0	0

L = Approximate Roadway Length (ft)
R = Average Right-of-Way Width in Basin (ft)
I_Ex = Impervious Area (ac)
P = Pervious Area (ac)
At = Total Existing Onsite Basin Area (ac) (Excluding Pond Area)
Off = Total Offsite Impervious Area (ac)

L = _____ ft
R = _____ ft

At = (R*L) / 43560
At = 1.60 ac

I_Ex = 0.97 ac

P = At-I_Ex
P = 0.63 ac

From existing Drainage Map:
Off = 0.00 ac

PROJECT: *Chuluota Road Widening Conceptual Drainage Report*
Basin No. 2A
Subject Post-Developed CN and SCS Runoff Volume Calculation

Basin Designation 2A (Proposed)
Type Evaluation Post-Developed

Drainage Area begins at Station 17+00
and continues until Station 29+70

Proposed Impervious Area Tabulation				
Description	Width	Length	Product (sq. ft)	Product (ac)
Total Impervious Area =			51,743	1.19

Proposed Schoolview Way Configuration				
Description	Width	Length	Product (sq. ft)	Product (ac)
Total Impervious Area =			0	0

L = Approximate Roadway Length (ft)
R = Average Right-of-Way Width in Basin (ft)
I = Impervious Area (ac)
P = Pervious Area (ac)
At = Total Existing Onsite Basin Area (ac) (Excluding Pond Area)
Off = Total Offsite Impervious Area (ac)

L = ft
R = ft

Atp = (R*L) / 43560
Atp = 1.60 ac

From existing Drainage Map:
Off = 0.00 ac

I = 1.19 ac
I_New = I - I_Ex
I_New = 0.22 ac

P = Atp-I
P = 0.41 ac

PROJECT: *Chuluota Road Widening Conceptual Drainage Report*
Basin No. 2A
Subject Pre-Developed CN and SCS Runoff Volume Calculation

Existing Condition

Basin Designation 2A (Existing)
Type Evaluation Pre-Developed
Basin Size 1.60 ac
Rainfall Depth 8.40 in

Total Drainage Area 1.60 ac

Weighted, CN = $\frac{\text{Product}}{\text{Area}}$

Soil Storage, S = $\frac{1000}{CN} - 10$

Runoff, R = $\frac{(P-(0.2S))^2}{P+(0.8S)}$

Runoff Volume, V = $\frac{\text{R}}{12}$ x Area

Basin

Soil Land Use Description	Soil Group	CN	Area (ac)	Product
Impervious Area (Roadway and Sidewalk)	-	98	0.97	94.99
Grass, Good Condition	A	39	0.00	0
Grass, Good Condition	D	80	0.63	50.66
	Total Area =		1.60	145.65

Existing Pond Area **For this analysis, all soils are assumed to be D soils for grass.*

Soil Land Use Description	Soil Group	CN	Area (ac)	Product
Impervious Area (Roadway and Sidewalk)	-	98	0.00	0.00
Grass, Good Condition	A/D	80	0.00	0.00
Existing Pond 1 at DHW	-	100	0.00	0.00
Existing Pond 3 at DHW	-	100	0.00	0.00
	Total Area =		0.00	0.00

Proposed Intersection Area **For this analysis, all soils are assumed to be D soils for grass.*

Soil Land Use Description	Soil Group	CN	Area (ac)	Product
Grass, Good Condition	A/D	80	0.00	0.00
Grass, Good Condition	A/D	80	0.00	0.00
	Total Area =		0.00	0.00

Basin		Pond		Intersection	
CN=	90.89	CN=		CN=	
S=	1 in	S=	in	S=	in
R=	7.31 in	R=	in	R=	in
V=	0.98 ac-ft	V=	ac-ft	V=	ac-ft

Total Volume= 0.98 ac-ft

PROJECT: *Chuluota Road Widening Conceptual Drainage Report*
Basin No. 2A
Subject Post-Developed CN and SCS Runoff Volume Calculation

Proposed Condition

Basin Designation 2A (Proposed)
Type Evaluation Post-Developed
Basin Size 1.60 ac
Total Drainage Area 1.60 ac
Rainfall Depth 8.40 in

Weighted, CN = $\frac{\text{Product}}{\text{Area}}$

Soil Storage, S = $\frac{1000}{CN} - 10$

Runoff, R = $\frac{(P-(0.2S))^2}{P+(0.8S)}$

Runoff Volume, V = $\frac{\text{R}}{12}$ x Area

Basin

Soil Land Use Description	Soil Group	CN	Area (ac)	Product
Impervious Area (Roadway and Sidewalk)	-	98	1.19	116.4100739
Grass, Good Condition	A	39	0.00	0
Grass, Good Condition	D	80	0.41	33.17829201
	Total Area =		1.60	149.5883659

Existing Pond Area **For this analysis, all soils are assumed to be D soils for grass.*

Soil Land Use Description	Soil Group	CN	Area (ac)	Product
Grass, Good Condition	A/D	80	0.00	0.00
Pond 2A at DHW	-	100	0.00	0.00
	Total Area =		0.00	0.00

Proposed Intersection Area **For this analysis, all soils are assumed to be D soils for grass.*

Soil Land Use Description	Soil Group	CN	Area (ac)	Product
Impervious Area (Roadway and Sidewalk)	-	98	0.00	0.00
Grass, Good Condition	A/D	80	0.00	0.00
	Total Area =		0.00	0.00

Basin		Pond		Intersection	
CN=	93.34	CN=		CN=	
S=	0.71 in	S=	in	S=	in
R=	7.60 in	R=	in	R=	in
V=	1.02 ac-ft	V=	ac-ft	V=	ac-ft

Total Volume= 1.02 ac-ft

Post Developed Volume - Pre Developed Volume =

0.04 ac-ft = 1719 cu-ft

PROJECT: *Chuluota Road Widening Conceptual Drainage Report*
Basin No. 2A
Subject Treatment Volume Calculation

SJRWMD Treatment Volume Requirement

Water Quality Volume for a Wet Detention System is based upon 2.5" times the additional onsite impervious area and 1" times the total offsite drainage area. The project is located within the Econ River Basin and requires an additional 50% treatment volume.

Vt = 2.5 inches of runoff times the new impervious area
Vt = (I-New * 2.5 in) / 12
Vt = 0.05 ac-ft

Is Offsite Area Contributing to the Basin (yes or no)? No

Offsite Area, Off = 0.00 ac
Vt(off) = (Off * 1.0 in) / 12
Vt(off) = 0.00 ac-ft

Did the existing basin receive treatment (Yes or No)? No

Will the existing treatment system will be impacted by the proposed improvements (yes or no)? No

Existing Required Treatment area for basin = 0 ac

Existing Required Treatment Volume for basin, Vt(Ex) = 0 ac-ft

Treatment Volume Required = [Vt + Vt(Off)+Vt(Ex)]
Treatment Volume Required = 0.05 ac-ft

Is Basin Part of an OFW (yes or no)? Yes (If Yes, then add an additional 50% Treatment Volume)
(Econ River Basin)

Total Basin Required Treatment Volume = 0.08 ac-ft

Step No. 3, Pond 2 - Total Peak Storage Volume Requirement

The Total Peak Storage Volume Required is:

Volume (peak) = Treatment Volume + Estimated Peak Attenuation Volume

Treatment Volume =	0.08 ac-ft	=	3,267 cu-ft
Attenuation Volume =	0.04 ac-ft	=	1,719 cu-ft
Volume (peak) =	0.11 ac-ft	=	4,986 cu-ft

PROJECT: *Chuluota Road Widening Conceptual Drainage Report*
Basin No. 2B Original PSR
Subject Pre-Developed CN and SCS Runoff Volume Calculation

Basin Designation 2B (Existing)
Type Evaluation Pre-Developed

Drainage Area begins at Station 12+70
and continues until Station 47+85

Existing Impervious Area Tabulation				
Description	Width	Length	Product (sq. ft)	Product (ac)
Total Impervious Area =			185,536	4.26

L = Approximate Roadway Length (ft)
R = Average Right-of-Way Width in Basin (ft)
I_Ex = Impervious Area (ac)
P = Pervious Area (ac)
At = Total Existing Onsite Basin Area (ac) (Excluding Pond Area)
Off = Total Offsite Impervious Area (ac)

L = _____ ft
R = _____ ft

At = (R*L) / 43560
At = 9.11 ac

I_Ex = 4.26 ac

P = At-I_Ex
P = 4.85 ac

From existing Drainage Map:
Off = 0.00 ac

PROJECT: *Chuluota Road Widening Conceptual Drainage Report*
Basin No. 2B Original PSR
Subject Post-Developed CN and SCS Runoff Volume Calculation

Basin Designation 2B (Proposed)
Type Evaluation Post-Developed

Drainage Area begins at Station 12+70
and continues until Station 47+85

Proposed Impervious Area Tabulation				
Description	Width	Length	Product (sq. ft)	Product (ac)
Total Impervious Area =			269,839	6.19

L = Approximate Roadway Length (ft)
R = Average Right-of-Way Width in Basin (ft)
I = Impervious Area (ac)
P = Pervious Area (ac)
Atp = Proposed Total Existing Onsite Basin Area (ac) (Excluding Pond Area)
Off = Total Offsite Impervious Area (ac)

L = _____ ft
R = _____ ft

Atp = (R*L) / 43560
Atp = 9.11 ac

I = 6.19 ac
I_New = I - I_Ex
I_New = 1.94 ac

P = Atp-I
P = 2.92 ac

From existing Drainage Map:
Off = 0.00 ac

PROJECT: *Chuluota Road Widening Conceptual Drainage Report*
Basin No. 2B Original PSR
Subject Pre-Developed CN and SCS Runoff Volume Calculation

Existing Condition

Basin Designation	2B (Existing)
Type Evaluation	Pre-Developed
Basin Size	9.11 ac
Rainfall Depth	8.40 in

Weighted, CN = $\frac{\text{Product}}{\text{Area}}$

Soil Storage, S = $\frac{1000}{CN} - 10$

Runoff, R = $\frac{(P - (0.2S))^2}{P + (0.8S)}$

Runoff Volume, V = $\frac{\text{R}}{12}$ x Area

Basin

Soil Land Use Description	Soil Group	CN	Area (ac)	Product
Impervious Area (Roadway and Sidewalk)	-	98	4.26	417.41
Grass, Good Condition	A	39	0.00	0.00
Grass, Good Condition	D	80	4.85	388.38
	Total Area =		9.11	805.80

Offsite

Soil Land Use Description	Soil Group	CN	Area (ac)	Product
Grass, Good Condition (offsite)	D	80	0.38	30.40
				30.40

Basin		Offsite	
CN=	88.41	CN=	80
S=	1.31 in	S=	2.5 in
R=	7.01 in	R=	6.68 in
V=	5.32 ac-ft	V=	0.21 ac-ft

Total Volume= 5.54 ac-ft

PROJECT: *Chuluota Road Widening Conceptual Drainage Report*
Basin No. 2B Original PSR
Subject Post-Developed CN and SCS Runoff Volume Calculation

Proposed Condition

Basin Designation	2B (Proposed)
Type Evaluation	Post-Developed
Basin Size	9.11 ac
Rainfall Depth	8.40 in

Weighted, CN = $\frac{\text{Product}}{\text{Area}}$

Soil Storage, S = $\frac{1000}{CN} - 10$

Runoff, R = $\frac{(P - (0.2S))^2}{P + (0.8S)}$

Runoff Volume, V = $\frac{\text{R}}{12}$ x Area

Basin

Soil Land Use Description	Soil Group	CN	Area (ac)	Product
Impervious Area (Roadway and Sidewalk)	-	98	6.19	607.08
Grass, Good Condition	A	39	0.00	0.00
Grass, Good Condition	D	80	2.92	233.55
	Total Area =		9.11	840.63

Offsite

Soil Land Use Description	Soil Group	CN	Area (ac)	Product
Grass, Good Condition (offsite)	D	80	0.32	25.60
		Total	0.32	25.60

Basin		Offsite	
CN=	92.23	CN=	80
S=	0.84 in	S=	2.5 in
R=	7.47 in	R=	6.00 in
V=	5.67 ac-ft	V=	0.16 ac-ft

Total Volume= 5.83 ac-ft

Post Developed Volume - Pre Developed Volume =

Total 0.30 ac-ft = 13,068 cu-ft

PROJECT: *Chuluota Road Widening Conceptual Drainage Report*
Basin No. 2B Original PSR
Subject Treatment Volume Calculation

SJRWMD Treatment Volume Requirement

Water Quality Volume for a Wet Detention System is based upon 2.5" times the additional onsite impervious area and 1" times the total offsite drainage area. The project is located within the Econ River Basin and requires an additional 50% treatment volume.

Vt = 2.5 inches of runoff times the new impervious area
Vt = (I-New * 2.5 in) / 12
Vt = 0.4 ac-ft

Is Offsite Area Contributing to the Basin (yes or no)? Yes

Offsite Area, Off = 0.32 ac
Vt(off) = (Off * 1.0 in) / 12
Vt(off) = 0.03 ac-ft

Did the existing basin receive treatment (Yes or No)? No

Will the existing treatment system will be impacted by the proposed improvements (yes or no)? No

Existing Required Treatment area for basin = 0 ac

Existing Required Treatment Volume for basin, Vt(Ex) = 0 ac-ft

Treatment Volume Required = [Vt + Vt(Off)+Vt(Ex)]
Treatment Volume Required = 0.43 ac-ft

Is Basin Part of an OFW (yes or no)? Yes (If Yes, then add an additional 50% Treatment Volume)
(Econ River Basin)

Total Basin Required Treatment Volume = 0.65 ac-ft

Total Peak Storage Volume Requirement

The Total Peak Storage Volume Required is:

Volume (peak) = Treatment Volume + Estimated Peak Attenuation Volume

Treatment Volume =	0.65 ac-ft	=	28,096 cu-ft
Attenuation Volume =	0.30 ac-ft	=	13,068 cu-ft
Volume (peak) =	0.95 ac-ft	=	41,164 cu-ft

PROJECT: *Chuluota Road Widening Conceptual Drainage Report*
Basin No. 2B ICE Alternatives
Subject Pre-Developed CN and SCS Runoff Volume Calculation

Basin Designation 2B (Existing)
Type Evaluation Pre-Developed

Drainage Area begins at Station 12+70
and continues until Station 47+85

Existing Impervious Area Tabulation				
Description	Width	Length	Product (sq. ft)	Product (ac)
Total Impervious Area =			167,987	3.86

L = Approximate Roadway Length (ft)
R = Average Right-of-Way Width in Basin (ft)
I_Ex = Impervious Area (ac)
P = Pervious Area (ac)
At = Total Existing Onsite Basin Area (ac) (Excluding Pond Area)
Off = Total Offsite Impervious Area (ac)

L = _____ ft
R = _____ ft

At = (R*L) / 43560
At = 9.20 ac

I_Ex = 3.86 ac

P = At-I_Ex
P = 5.34 ac

From existing Drainage Map:
Off = 0.00 ac

PROJECT: *Chuluota Road Widening Conceptual Drainage Report*
Basin No. 2B ICE Alternatives
Subject Post-Developed CN and SCS Runoff Volume Calculation

Basin Designation 2B (Proposed)
Type Evaluation Post-Developed

Drainage Area begins at Station 12+70
and continues until Station 47+85

Proposed Impervious Area Tabulation				
Description	Width	Length	Product (sq. ft)	Product (ac)
Total Impervious Area =			276,011	6.34

L = Approximate Roadway Length (ft)
R = Average Right-of-Way Width in Basin (ft)
I = Impervious Area (ac)
P = Pervious Area (ac)
Atp = Proposed Total Existing Onsite Basin Area (ac) (Excluding Pond Area)
Off = Total Offsite Impervious Area (ac)
L = _____ ft
R = _____ ft

Atp = (R*L) / 43560
Atp = 9.20 ac

I = 6.34 ac
I_New = I - I_Ex
I_New = 2.48 ac

P = Atp-I
P = 2.86 ac

From existing Drainage Map:
Off = 0.00 ac

PROJECT: *Chuluota Road Widening Conceptual Drainage Report*
Basin No. 2B ICE Alternatives
Subject Pre-Developed CN and SCS Runoff Volume Calculation

Existing Condition

Basin Designation	2B (Existing)
Type Evaluation	Pre-Developed
Basin Size	9.20 ac
Rainfall Depth	8.40 in

Weighted, CN = $\frac{\text{Product}}{\text{Area}}$

Soil Storage, S = $\frac{1000}{CN} - 10$

Runoff, R = $\frac{(P - (0.2S))^2}{P + (0.8S)}$

Runoff Volume, V = $\frac{\text{R}}{12}$ x Area

Basin

Soil Land Use Description	Soil Group	CN	Area (ac)	Product
Impervious Area (Roadway and Sidewalk)	-	98	3.86	377.93
Grass, Good Condition	A	39	0.00	0.00
Grass, Good Condition	D	80	5.34	427.14
	Total Area =		9.20	805.07

Offsite

Soil Land Use Description	Soil Group	CN	Area (ac)	Product
Grass, Good Condition (offsite)	D	80	0.38	30.40
				30.40

Basin		Offsite	
CN=	87.55	CN=	80
S=	1.42 in	S=	2.5 in
R=	6.91 in	R=	6.75 in
V=	5.29 ac-ft	V=	0.21 ac-ft

Total Volume= 5.51 ac-ft

PROJECT: *Chuluota Road Widening Conceptual Drainage Report*
Basin No. 2B ICE Alternatives
Subject Post-Developed CN and SCS Runoff Volume Calculation

Proposed Condition

Basin Designation	2B (Proposed)
Type Evaluation	Post-Developed
Basin Size	9.20 ac
Rainfall Depth	8.40 in

Weighted, CN = $\frac{\text{Product}}{\text{Area}}$

Soil Storage, S = $\frac{1000}{CN} - 10$

Runoff, R = $\frac{(P - (0.2S))^2}{P + (0.8S)}$

Runoff Volume, V = $\frac{\text{R}}{12}$ x Area

Basin

Soil Land Use Description	Soil Group	CN	Area (ac)	Product
Impervious Area (Roadway and Sidewalk)	-	98	6.34	620.96
Grass, Good Condition	A	39	0.00	0.00
Grass, Good Condition	D	80	2.86	228.75
	Total Area =		9.20	849.71

Offsite

Soil Land Use Description	Soil Group	CN	Area (ac)	Product
Grass, Good Condition (offsite)	D	80	0.32	25.87
		Total	0.32	25.87

Basin		Offsite	
CN=	92.4	CN=	80
S=	0.82 in	S=	2.5 in
R=	7.49 in	R=	6.00 in
V=	5.74 ac-ft	V=	0.16 ac-ft

Total Volume= 5.90 ac-ft

Post Developed Volume - Pre Developed Volume =

Total 0.39 ac-ft = 16,988 cu-ft

PROJECT: *Chuluota Road Widening Conceptual Drainage Report*
Basin No. 2B ICE Alternatives
Subject Treatment Volume Calculation

SJRWMD Treatment Volume Requirement

Water Quality Volume for a Wet Detention System is based upon 2.5" times the additional onsite impervious area and 1" times the total offsite drainage area. The project is located within the Econ River Basin and requires an additional 50% treatment volume.

Vt = 2.5 inches of runoff times the new impervious area
Vt = (I-New * 2.5 in) / 12
Vt = 0.52 ac-ft

Is Offsite Area Contributing to the Basin (yes or no)? Yes

Offsite Area, Off = 0.32 ac
Vt(off) = (Off * 1.0 in) / 12
Vt(off) = 0.03 ac-ft

Did the existing basin receive treatment (Yes or No)? No

Will the existing treatment system will be impacted by the proposed improvements (yes or no)? No

Existing Required Treatment area for basin = 0 ac

Existing Required Treatment Volume for basin, Vt(Ex) = 0 ac-ft

Treatment Volume Required = [Vt + Vt(Off)+Vt(Ex)]
Treatment Volume Required = 0.55 ac-ft

Is Basin Part of an OFW (yes or no)? Yes (If Yes, then add an additional 50% Treatment Volume)
(Econ River Basin)

Total Basin Required Treatment Volume = 0.83 ac-ft

Total Peak Storage Volume Requirement

The Total Peak Storage Volume Required is:

Volume (peak) = Treatment Volume + Estimated Peak Attenuation Volume

Treatment Volume =	0.83 ac-ft	=	35,937 cu-ft
Attenuation Volume =	0.39 ac-ft	=	16,988 cu-ft
Volume (peak) =	1.22 ac-ft	=	52,925 cu-ft

PROJECT: *Chuluota Road Widening Conceptual Drainage Report*
Basin No. 3 Original PSR
Subject Pre-Developed CN and SCS Runoff Volume Calculation

Basin Designation 3 (Existing)
Type Evaluation Pre-Developed

Drainage Area begins at Station 47+85
and continues until Station 97+55

Existing Impervious Area Tabulation				
Description	Width	Length	Product (sq. ft)	Product (ac)
Total Impervious Area =			284,269	6.53

L = Approximate Roadway Length (ft)
R = Average Right-of-Way Width in Basin (ft)
I_Ex = Impervious Area (ac)
P = Pervious Area (ac)
At = Total Existing Onsite Basin Area (ac) (Excluding Pond Area)
Off = Total Offsite Impervious Area (ac)

L = _____ ft
R = _____ ft

At = (R*L) / 43560
At = 13.77 ac

I_Ex= 6.526 ac

P = At-I_Ex
P = 7.249 ac

From existing Drainage Map:
Off = 0.00 ac

PROJECT: *Chuluota Road Widening Conceptual Drainage Report*
Basin No. 3 Original PSR
Subject Post-Developed CN and SCS Runoff Volume Calculation

Basin Designation 3 (Proposed)
Type Evaluation Post-Developed

Drainage Area begins at Station 47+85
and continues until Station 97+55

Proposed Impervious Area Tabulation				
Description	Width	Length	Product (sq. ft)	Product (ac)
Total Impervious Area =			507,609	11.65

L = Approximate Roadway Length (ft)
R = Average Right-of-Way Width in Basin (ft)
I = Impervious Area (ac)
P = Pervious Area (ac)
Atp = Proposed Total Existing Onsite Basin Area (ac) (Excluding Pond Area)
Off = Total Offsite Impervious Area (ac)

L = _____ ft
R = _____ ft

Atp = (R*L) / 43560
Atp = 13.77 ac

I = 11.65 ac
I_New = I - I_Ex
I_New = 5.13 ac

P = Atp-I
P = 2.12 ac

From existing Drainage Map:
Off = 0.00 ac

PROJECT: *Chuluota Road Widening Conceptual Drainage Report*
Basin No. 3 Original PSR
Subject Pre-Developed CN and SCS Runoff Volume Calculation

Existing Condition

Basin Designation 3 (Existing)
Type Evaluation Pre-Developed
Basin Size 13.77 ac
Total Drainage Area 19.21 ac
Rainfall Depth 8.40 in

Weighted, CN = $\frac{\text{Product}}{\text{Area}}$

Soil Storage, S = $\frac{1000}{CN} - 10$

Runoff, R = $\frac{(P - (0.2S))^2}{P + (0.8S)}$

Runoff Volume, V = $\frac{\text{R}}{12}$ x Area

Basin **For this analysis, all soils are assumed to be D soils for grass.*

Soil Land Use Description	Soil Group	CN	Area (ac)	Product
Impervious Area (Roadway and Sidewalk)	-	98	6.53	639.54
Grass, Good Condition	A	39	0.00	0.00
Grass, Good Condition	D	80	7.25	579.92
	Total Area =		13.77	1219.46

Offsite

Soil Land Use Description	Soil Group	CN	Area (ac)	Product
Grass, Good Condition (offsite)	D	80	0.23	18.40
Grass, Good Condition (offsite)	D	80	0.70	56.00
	Total Area =		0.93	74.40

Proposed Pond Location **For this analysis, all soils are assumed to be all D*

Soil Land Use Description	Soil Group	CN	Area (ac)
Pond Area at DHW (Woods, good)	A/D	77	4.51

Basin	Offsite	Pond
CN= 88.53	CN= 80	CN= 77
S= 1.3 in	S= 2.5 in	S= 2.99 in
R= 7.02 in	R= 6.00 in	R= 5.64 in
V= 8.06 ac-ft	V= 0.47 ac-ft	V= 2.12 ac-ft

Total Volume= 10.64 ac-ft

PROJECT: *Chuluota Road Widening Conceptual Drainage Report*
Basin No. 3 Original PSR
Subject Post-Developed CN and SCS Runoff Volume Calculation

Proposed Condition

Basin Designation 3 (Proposed)
Type Evaluation Post-Developed
Basin Size 13.77 ac
Total Drainage Area 19.21 ac
Rainfall Depth 8.40 in

Weighted, CN = $\frac{\text{Product}}{\text{Area}}$

Soil Storage, S = $\frac{1000}{CN} - 10$

Runoff, R = $\frac{(P - (0.2S))^2}{P + (0.8S)}$

Runoff Volume, V = $\frac{\text{R}}{12}$ x Area

Basin **For this analysis, all soils are assumed to be D soils for grass.*

Soil Land Use Description	Soil Group	CN	Area (ac)	Product
Impervious Area (Roadway and Sidewalk)	-	98	11.65	1142.00
Grass, Good Condition	A	39	0.00	0.00
Grass, Good Condition	D	80	2.12	169.74
	Total Area =		13.77	1311.75

Offsite

Soil Land Use Description	Soil Group	CN	Area (ac)	Product
Grass, Good Condition (offsite)	D	80	0.23	18.40
Grass, Good Condition (offsite)	D	80	0.70	56.00
	Total Area =		0.93	74.40

Proposed Pond Location **For this analysis, all soils are assumed to be all D*

Soil Land Use Description	Soil Group	CN	Area (ac)
Pond Area at DHW (Water)	-	100	4.51

Basin	Offsite	Pond
CN= 95.23	CN= 80	CN= 100
S= 0.5 in	S= 2.5 in	S= 0 in
R= 7.83 in	R= 6.00 in	R= 8.40 in
V= 8.99 ac-ft	V= 0.47 ac-ft	V= 3.16 ac-ft

Total Volume= 12.61 ac-ft

Post Developed Volume - Pre Developed Volume =

1.97 ac-ft = 85,813 cu-ft

PROJECT: *Chuluota Road Widening Conceptual Drainage Report*
Basin No. 3 Original PSR
Subject Treatment Volume Calculation

SJRWMD Treatment Volume Requirement

Water Quality Volume for a Wet Detention System is based upon 2.5" times the additional onsite impervious area and 1" times the total offsite drainage area. The project is located within the Econ River Basin and requires an additional 50% treatment volume.

Vt = 2.5 inches of runoff times the new impervious area
Vt = (I-New * 2.5 in) / 12
Vt = 1.07 ac-ft

Is Offsite Area Contributing to the Basin (yes or no)? Yes

Offsite Area, Off = 5.44 ac
Vt(off) = (Off * 1.0 in) / 12
Vt(off) = 0.45 ac-ft

Did the existing basin receive treatment (Yes or No)? No

Will the existing treatment system will be impacted by the proposed improvements (yes or no)? No

Existing Required Treatment area for basin = 0 ac

Existing Required Treatment Volume for basin, Vt(Ex) = 0 ac-ft

Treatment Volume Required = [Vt + Vt(Off)+Vt(Ex)]
Treatment Volume Required = 1.52 ac-ft

Is Basin Part of an OFW (yes or no)? Yes (If Yes, then add an additional 50% Treatment Volume)
(Econ River Basin)

Total Basin Required Treatment Volume = 2.28 ac-ft

Total Peak Storage Volume Requirement

The Total Peak Storage Volume Required is:

Volume (peak) = Treatment Volume + Estimated Peak Attenuation Volume

Treatment Volume =	2.28 ac-ft	=	99,317 cu-ft
Attenuation Volume =	1.97 ac-ft	=	85,813 cu-ft
Volume (peak) =	4.25 ac-ft	=	185,130 cu-ft

PROJECT: *Chuluota Road Widening Conceptual Drainage Report*
Basin No. 3 ICE Alternatives
Subject Pre-Developed CN and SCS Runoff Volume Calculation

Basin Designation 3 (Existing)
Type Evaluation Pre-Developed

Drainage Area begins at Station 47+85
and continues until Station 97+55

Existing Impervious Area Tabulation				
Description	Width	Length	Product (sq. ft)	Product (ac)
Total Impervious Area =			284,269	6.53

L = Approximate Roadway Length (ft)
R = Average Right-of-Way Width in Basin (ft)
I_Ex = Impervious Area (ac)
P = Pervious Area (ac)
At = Total Existing Onsite Basin Area (ac) (Excluding Pond Area)
Off = Total Offsite Impervious Area (ac)

L = _____ ft
R = _____ ft

At = (R*L) / 43560
At = 19.49 ac

I_Ex= 6.526 ac

P = At-I_Ex
P = 12.96 ac

From existing Drainage Map:
Off = 0.00 ac

PROJECT: *Chuluota Road Widening Conceptual Drainage Report*
Basin No. 3 ICE Alternatives
Subject Post-Developed CN and SCS Runoff Volume Calculation

Basin Designation 3 (Proposed)
Type Evaluation Post-Developed

Drainage Area begins at Station 47+85
and continues until Station 97+55

Proposed Impervious Area Tabulation				
Description	Width	Length	Product (sq. ft)	Product (ac)
Total Impervious Area =			507,609	11.65

L = Approximate Roadway Length (ft)
R = Average Right-of-Way Width in Basin (ft)
I = Impervious Area (ac)
P = Pervious Area (ac)
Atp = Proposed Total Existing Onsite Basin Area (ac) (Excluding Pond Area)
Off = Total Offsite Impervious Area (ac)

L = _____ ft
R = _____ ft

Atp = (R*L) / 43560
Atp = 19.49 ac

I = 11.65 ac
I_New = I - I_Ex
I_New = 5.13 ac

P = Atp-I
P = 7.83 ac

From existing Drainage Map:
Off = 0.00 ac

PROJECT: *Chuluota Road Widening Conceptual Drainage Report*
Basin No. 3 ICE Alternatives
Subject Pre-Developed CN and SCS Runoff Volume Calculation

Existing Condition

Basin Designation 3 (Existing)
Type Evaluation Pre-Developed
Basin Size 19.49 ac
Total Drainage Area 25.74 ac
Rainfall Depth 8.40 in

Weighted, CN = $\frac{\text{Product}}{\text{Area}}$

Soil Storage, S = $\frac{1000}{CN} - 10$

Runoff, R = $\frac{(P - (0.2S))^2}{P + (0.8S)}$

Runoff Volume, V = $\frac{\text{R}}{12}$ x Area

Basin **For this analysis, all soils are assumed to be D soils for grass.*

Soil Land Use Description	Soil Group	CN	Area (ac)	Product
Impervious Area (Roadway and Sidewalk)	-	98	6.53	639.54
Grass, Good Condition	A	39	0.00	0.00
Grass, Good Condition	D	80	12.96	1036.80
	Total Area =		19.49	1676.34

Offsite

Soil Land Use Description	Soil Group	CN	Area (ac)	Product
Grass, Good Condition (offsite)	D	80	0.23	18.40
Grass, Good Condition (offsite)	D	80	0.70	56.00
	Total Area =		0.93	74.40

Proposed Pond Location **For this analysis, all soils are assumed to be all D*

Soil Land Use Description	Soil Group	CN	Area (ac)
Pond Area at DHW (Woods, good)	A/D	77	5.32

Basin	Offsite	Pond
CN= 86.03	CN= 80	CN= 77
S= 1.62 in	S= 2.5 in	S= 2.99 in
R= 6.73 in	R= 6.00 in	R= 5.64 in
V= 10.92 ac-ft	V= 0.47 ac-ft	V= 2.50 ac-ft

Total Volume= 13.89 ac-ft

PROJECT: *Chuluota Road Widening Conceptual Drainage Report*
Basin No. 3 ICE Alternatives
Subject Post-Developed CN and SCS Runoff Volume Calculation

Proposed Condition

Basin Designation 3 (Proposed)
Type Evaluation Post-Developed
Basin Size 19.49 ac
Total Drainage Area 25.74 ac
Rainfall Depth 8.40 in

Weighted, CN = $\frac{\text{Product}}{\text{Area}}$

Soil Storage, S = $\frac{1000}{CN} - 10$

Runoff, R = $\frac{(P - (0.2S))^2}{P + (0.8S)}$

Runoff Volume, V = $\frac{\text{R}}{12}$ x Area

Basin **For this analysis, all soils are assumed to be D soils for grass.*

Soil Land Use Description	Soil Group	CN	Area (ac)	Product
Impervious Area (Roadway and Sidewalk)	-	98	11.65	1142.00
Grass, Good Condition	A	39	0.00	0.00
Grass, Good Condition	D	80	7.83	626.62
	Total Area =		19.49	1768.63

Offsite

Soil Land Use Description	Soil Group	CN	Area (ac)	Product
Grass, Good Condition (offsite)	D	80	0.23	18.40
Grass, Good Condition (offsite)	D	80	0.70	56.00
	Total Area =		0.93	74.40

Proposed Pond Location **For this analysis, all soils are assumed to be all D*

Soil Land Use Description	Soil Group	CN	Area (ac)
Pond Area at DHW (Water)	-	100	5.32

Basin	Offsite	Pond
CN= 90.76	CN= 80	CN= 100
S= 1.02 in	S= 2.5 in	S= 0 in
R= 7.29 in	R= 6.00 in	R= 8.40 in
V= 11.84 ac-ft	V= 0.47 ac-ft	V= 3.72 ac-ft

Total Volume= 16.02 ac-ft

Post Developed Volume - Pre Developed Volume =

2.14 ac-ft = 93,218 cu-ft

PROJECT: *Chuluota Road Widening Conceptual Drainage Report*
Basin No. 3 ICE Alternatives
Subject Treatment Volume Calculation

SJRWMD Treatment Volume Requirement

Water Quality Volume for a Wet Detention System is based upon 2.5" times the additional onsite impervious area and 1" times the total offsite drainage area. The project is located within the Econ River Basin and requires an additional 50% treatment volume.

Vt = 2.5 inches of runoff times the new impervious area
Vt = (I-New * 2.5 in) / 12
Vt = 1.07 ac-ft

Is Offsite Area Contributing to the Basin (yes or no)? Yes

Offsite Area, Off = 6.25 ac
Vt(off) = (Off * 1.0 in) / 12
Vt(off) = 0.52 ac-ft

Did the existing basin receive treatment (Yes or No)? No

Will the existing treatment system will be impacted by the proposed improvements (yes or no)? No

Existing Required Treatment area for basin = 0 ac

Existing Required Treatment Volume for basin, Vt(Ex) = 0 ac-ft

Treatment Volume Required = [Vt + Vt(Off)+Vt(Ex)]
Treatment Volume Required = 1.59 ac-ft

Is Basin Part of an OFW (yes or no)? Yes (If Yes, then add an additional 50% Treatment Volume)
(Econ River Basin)

Total Basin Required Treatment Volume = 2.39 ac-ft

Total Peak Storage Volume Requirement

The Total Peak Storage Volume Required is:

Volume (peak) = Treatment Volume + Estimated Peak Attenuation Volume

Treatment Volume =	2.39 ac-ft	=	103,891 cu-ft
Attenuation Volume =	2.14 ac-ft	=	93,218 cu-ft
Volume (peak) =	4.53 ac-ft	=	197,109 cu-ft

PROJECT: *Chuluota Road Widening Conceptual Drainage Report*
Basin No. 4-200 Round-a-bout
Subject Pre-Developed CN and SCS Runoff Volume Calculation

Basin Designation 4-200 (Existing)
Type Evaluation Pre-Developed

Drainage Area begins at Station 110+50
and continues until Station 111+92

Existing Impervious Area Tabulation				
Description	Width	Length	Product (sq. ft)	Product (ac)
Total Impervious Area =			10,424	0.24

L = Approximate Roadway Length (ft)
R = Average Right-of-Way Width in Basin (ft)
I_Ex = Impervious Area (ac)
P = Pervious Area (ac)
At = Total Existing Onsite Basin Area (ac) (Excluding Pond Area)
Off = Total Offsite Impervious Area (ac)

L = _____ ft
R = _____ ft

At = (R*L) / 43560
At = 0.41 ac

I_Ex = 0.24 ac

P = At-I_Ex
P = 0.17 ac

From existing Drainage Map:
Off = 0.13 ac

PROJECT: *Chuluota Road Widening Conceptual Drainage Report*
Basin No. 4-200 Round-a-bout
Subject Post-Developed CN and SCS Runoff Volume Calculation

Basin Designation 4-200 (Proposed)
Type Evaluation Post-Developed

Drainage Area begins at Station 110+50
and continues until Station 111+92

Proposed Impervious Area Tabulation				
Description	Width	Length	Product (sq. ft)	Product (ac)
Total Impervious Area =			13,334	0.31

L = Approximate Roadway Length (ft)
R = Average Right-of-Way Width in Basin (ft)
I = Impervious Area (ac)
P = Pervious Area (ac)
Atp = Proposed Total Existing Onsite Basin Area (ac) (Excluding Pond Area)
Off = Total Offsite Impervious Area (ac)

L = _____ ft
R = _____ ft

Atp = (R*L) / 43560
Atp = 0.41 ac

I = 0.31
I_New = I - I_Ex
I_New = 0.07 ac

P = Atp-I
P = 0.10 ac

From existing Drainage Map:
Off = 0.13 ac

PROJECT: *Chuluota Road Widening Conceptual Drainage Report*
Basin No. 4-200 Round-a-bout
Subject Pre-Developed CN and SCS Runoff Volume Calculation

Existing Condition

Basin Designation 4-200 (Existing)
Type Evaluation Pre-Developed
Basin Size 0.41 ac
Total Drainage Area 4.52 ac
Rainfall Depth 8.40 in

Weighted, CN = $\frac{\text{Product}}{\text{Area}}$

Soil Storage, S = $\frac{1000}{CN} - 10$

Runoff, R = $\frac{(P - (0.2S))^2}{P + (0.8S)}$

Runoff Volume, V = $\frac{\text{R}}{12}$ x Area

Basin

Soil Land Use Description	Soil Group	CN	Area (ac)	Product
Impervious Area (Roadway and Sidewalk)	-	98	0.24	23.45
Grass, Good Condition	A	39	0.17	6.53
	Total Area =		0.41	29.98

Offsite

Soil Land Use Description	Soil Group	CN	Area (ac)	Product
Impervious Area (Offsite)	-	98	0.13	12.74
Grass, Good Condition (Offsite)	A	39	0.15	5.85
	Total Area =		0.28	18.59

Basin 4-100 **For this analysis, all soils are assumed to be D soils for grass.*

Soil Land Use Description	Soil Group	CN	Area (ac)	Product
Impervious Area	-	98	0.92	90.22
Grass, Good Condition	A/D	80	2.91	232.80
	Total Area =		3.83	323.03

Basin	Offsite	Basin 4-100
CN= 73.71	CN= 66.39	CN= 84.33
S= 3.57 in	S= 5.06 in	S= 1.86 in
R= 5.25 in	R= 4.38 in	R= 6.52 in
V= 0.18 ac-ft	V= 0.10 ac-ft	V= 2.08 ac-ft

Total Volume= 2.36 ac-ft

PROJECT: *Chuluota Road Widening Conceptual Drainage Report*
Basin No. 4-200 Round-a-bout
Subject Post-Developed CN and SCS Runoff Volume Calculation

Proposed Condition

Basin Designation 4-200 (Proposed)
Type Evaluation Pre-Developed
Basin Size Area (ac) ac
Total Drainage Area 4.52 ac
Rainfall Depth 8.40 in

Weighted, CN = $\frac{\text{Product}}{\text{Area}}$

Soil Storage, S = $\frac{1000}{CN} - 10$

Runoff, R = $\frac{(P - (0.2S))^2}{P + (0.8S)}$

Runoff Volume, V = $\frac{\text{R}}{12}$ x Area

Basin

Soil Land Use Description	Soil Group	CN	Area (ac)	Product
Impervious Area (Roadway and Sidewalk)	-	98	0.31	30.00
Grass, Good Condition	A	39	0.10	3.92
	Total Area =		0.41	33.92

Offsite

Soil Land Use Description	Soil Group	CN	Area (ac)	Product
Impervious Area (Offsite)	-	98	0.13	12.74
Grass, Good Condition (Offsite)	A	39	0.15	5.85
	Total Area =		0.28	18.59

Basin 4-100 **For this analysis, all soils are assumed to be D soils for grass.*

Soil Land Use Description	Soil Group	CN	Area (ac)	Product
Impervious Area	-	98	1.73	169.50
Grass, Good Condition	A/D	80	2.10	168.09
	Total Area =		3.83	337.59

Basin		Offsite		Basin 4-100	
CN=	83.4	CN=	66.39	CN=	88.13
S=	1.99 in	S=	5.06 in	S=	1.35 in
R=	6.41 in	R=	4.38 in	R=	6.97 in
V=	0.22 ac-ft	V=	0.10 ac-ft	V=	2.23 ac-ft

Total Volume= 2.55 ac-ft

Post Developed Volume - Pre Developed Volume =

0.19 ac-ft = 8276 cu-ft

PROJECT: *Chuluota Road Widening Conceptual Drainage Report*
Basin No. 4-200 Round-a-bout
Subject Treatment Volume Calculation

SJRWMD Treatment Volume Requirement

Water Quality Volume for a Wet Detention System is based upon 2.5" times the additional onsite impervious area and 1" times the total offsite drainage area. The project is located within the Econ River Basin and requires an additional 50% treatment volume.

Vt = 2.5 inches of runoff times the new impervious area
Vt = (I-New * 2.5 in) / 12
Vt = 0.18 ac-ft

Is Offsite Area Contributing to the Basin (yes or no)? No

Offsite Area, Off = 0.00 ac
Vt(off) = (Off * 1.0 in) / 12
Vt(off) = 0.00 ac-ft

**Offsite routed around system thus no offsite water quality provided.*

Did the existing basin receive treatment (Yes or No)? No

Will the existing treatment system will be impacted by the proposed improvements (yes or no)? No

Existing Required Treatment area for basin = 0 ac

Existing Required Treatment Volume for basin, Vt(Ex) = 0 ac-ft

Treatment Volume Required = [Vt + Vt(Off)+Vt(Ex)]
Treatment Volume Required = 0.18 ac-ft

Is Basin Part of an OFW (yes or no)? Yes (If Yes, then add an additional 50% Treatment Volume)
(Econ River Basin)

Total Basin Required Treatment Volume = 0.27 ac-ft

Total Peak Storage Volume Requirement

The Total Peak Storage Volume Required is:

Volume (peak) = Treatment Volume + Estimated Peak Attenuation Volume

Treatment Volume =	0.27 ac-ft	=	11761 cu-ft
Attenuation Volume =	0.19 ac-ft	=	828 cu-ft
Volume (peak) =	0.46 ac-ft	=	20,038 cu-ft

PROJECT: *Chuluota Road Widening Conceptual Drainage Report*
Basin No. 4-200 Bowtie
Subject Pre-Developed CN and SCS Runoff Volume Calculation

Basin Designation 4-200 (Existing)
Type Evaluation Pre-Developed

Drainage Area begins at Station 110+50
and continues until Station 111+92

Existing Impervious Area Tabulation				
Description	Width	Length	Product (sq. ft)	Product (ac)
Total Impervious Area =			10,424	0.24

L = Approximate Roadway Length (ft)
R = Average Right-of-Way Width in Basin (ft)
I_Ex = Impervious Area (ac)
P = Pervious Area (ac)
At = Total Existing Onsite Basin Area (ac) (Excluding Pond Area)
Off = Total Offsite Impervious Area (ac)

L = _____ ft
R = _____ ft

At = (R*L) / 43560
At = 0.41 ac

I_Ex = 0.24 ac

P = At-I_Ex
P = 0.17 ac

From existing Drainage Map:
Off = 0.13 ac

PROJECT: *Chuluota Road Widening Conceptual Drainage Report*
Basin No. 4-200 Bowtie
Subject Post-Developed CN and SCS Runoff Volume Calculation

Basin Designation 4-200 (Proposed)
Type Evaluation Post-Developed

Drainage Area begins at Station 110+50
and continues until Station 111+92

Proposed Impervious Area Tabulation				
Description	Width	Length	Product (sq. ft)	Product (ac)
Total Impervious Area =			10,694	0.25

L = Approximate Roadway Length (ft)
R = Average Right-of-Way Width in Basin (ft)
I = Impervious Area (ac)
P = Pervious Area (ac)
Atp = Proposed Total Existing Onsite Basin Area (ac) (Excluding Pond Area)
Off = Total Offsite Impervious Area (ac)

L = _____ ft
R = _____ ft

Atp = (R*L) / 43560
Atp = 0.41 ac

I = 0.25
I_New = I - I_Ex
I_New = 0.01 ac

P = Atp-I
P = 0.16 ac

From existing Drainage Map:
Off = 0.13 ac

PROJECT: *Chuluota Road Widening Conceptual Drainage Report*
Basin No. 4-200 Bowtie
Subject Pre-Developed CN and SCS Runoff Volume Calculation

Existing Condition

Basin Designation 4-200 (Existing)
Type Evaluation Pre-Developed
Basin Size 0.41 ac
Total Drainage Area 4.52 ac
Rainfall Depth 8.40 in

Weighted, CN = $\frac{\text{Product}}{\text{Area}}$

Soil Storage, S = $\frac{1000}{CN} - 10$

Runoff, R = $\frac{(P - (0.2S))^2}{P + (0.8S)}$

Runoff Volume, V = $\frac{\text{R}}{12}$ x Area

Basin

Soil Land Use Description	Soil Group	CN	Area (ac)	Product
Impervious Area (Roadway and Sidewalk)	-	98	0.24	23.45
Grass, Good Condition	A	39	0.17	6.53
	Total Area =		0.41	29.98

Offsite

Soil Land Use Description	Soil Group	CN	Area (ac)	Product
Impervious Area (Offsite)	-	98	0.13	12.74
Grass, Good Condition (Offsite)	A	39	0.15	5.85
	Total Area =		0.28	18.59

Basin 4-100 **For this analysis, all soils are assumed to be D soils for grass.*

Soil Land Use Description	Soil Group	CN	Area (ac)	Product
Impervious Area	-	98	0.92	90.22
Grass, Good Condition	A/D	80	2.91	232.80
	Total Area =		3.83	323.03

Basin	Offsite	Basin 4-100
CN= 73.71	CN= 66.39	CN= 84.33
S= 3.57 in	S= 5.06 in	S= 1.86 in
R= 5.25 in	R= 4.38 in	R= 6.52 in
V= 0.18 ac-ft	V= 0.10 ac-ft	V= 2.08 ac-ft

Total Volume= 2.36 ac-ft

PROJECT: *Chuluota Road Widening Conceptual Drainage Report*
Basin No. 4-200 Bowtie
Subject Post-Developed CN and SCS Runoff Volume Calculation

Proposed Condition

Basin Designation 4-200 (Proposed)
Type Evaluation Pre-Developed
Basin Size Area (ac) ac
Total Drainage Area 4.52 ac
Rainfall Depth 8.40 in

Weighted, CN = $\frac{\text{Product}}{\text{Area}}$

Soil Storage, S = $\frac{1000}{CN} - 10$

Runoff, R = $\frac{(P - (0.2S))^2}{P + (0.8S)}$

Runoff Volume, V = $\frac{\text{R}}{12}$ x Area

Basin

Soil Land Use Description	Soil Group	CN	Area (ac)	Product
Impervious Area (Roadway and Sidewalk)	-	98	0.25	24.06
Grass, Good Condition	A	39	0.16	6.29
	Total Area =		0.41	30.35

Offsite

Soil Land Use Description	Soil Group	CN	Area (ac)	Product
Impervious Area (Offsite)	-	98	0.13	12.74
Grass, Good Condition (Offsite)	A	39	0.15	5.85
	Total Area =		0.28	18.59

Basin 4-100 **For this analysis, all soils are assumed to be D soils for grass.*

Soil Land Use Description	Soil Group	CN	Area (ac)	Product
Impervious Area	-	98	2.02	198.28
Grass, Good Condition	A/D	80	1.81	144.59
	Total Area =		3.83	342.88

Basin		Offsite		Basin 4-100	
CN=	74.61	CN=	66.39	CN=	89.51
S=	3.4 in	S=	5.06 in	S=	1.17 in
R=	5.36 in	R=	4.38 in	R=	7.14 in
V=	0.18 ac-ft	V=	0.10 ac-ft	V=	2.28 ac-ft

Total Volume= 2.56 ac-ft

Post Developed Volume - Pre Developed Volume =

0.20 ac-ft = 8712 cu-ft

PROJECT: *Chuluota Road Widening Conceptual Drainage Report*
Basin No. 4-200 Bowtie
Subject Treatment Volume Calculation

SJRWMD Treatment Volume Requirement

Water Quality Volume for a Wet Detention System is based upon 2.5" times the additional onsite impervious area and 1" times the total offsite drainage area. The project is located within the Econ River Basin and requires an additional 50% treatment volume.

Vt = 2.5 inches of runoff times the new impervious area
Vt = (I-New * 2.5 in) / 12
Vt = 0.23 ac-ft

Is Offsite Area Contributing to the Basin (yes or no)? No

Offsite Area, Off = 0.00 ac
Vt(off) = (Off * 1.0 in) / 12
Vt(off) = 0.00 ac-ft

**Offsite routed around system thus no offsite water quality provided.*

Did the existing basin receive treatment (Yes or No)? No

Will the existing treatment system will be impacted by the proposed improvements (yes or no)? No

Existing Required Treatment area for basin = 0 ac

Existing Required Treatment Volume for basin, Vt(Ex) = 0 ac-ft

Treatment Volume Required = [Vt + Vt(Off)+Vt(Ex)]
Treatment Volume Required = 0.23 ac-ft

Is Basin Part of an OFW (yes or no)? Yes (If Yes, then add an additional 50% Treatment Volume)
(Econ River Basin)

Total Basin Required Treatment Volume = 0.35 ac-ft

Total Peak Storage Volume Requirement

The Total Peak Storage Volume Required is:

Volume (peak) = Treatment Volume + Estimated Peak Attenuation Volume

Treatment Volume =	0.35 ac-ft	=	15028 cu-ft
Attenuation Volume =	0.20 ac-ft	=	871 cu-ft
Volume (peak) =	0.55 ac-ft	=	23,740 cu-ft

PROJECT: *Chuluota Road Widening Conceptual Drainage Report*
Pond No.: 3C Original PSR
Subject: Pond Calculations

Step No. 1, Pond 3C Original PSR - Pond Type

Geotechnical analysis for the project took one boring within the limits of Pond 3C Original PSR. The results are shown below.

Average Ground Surface Elevation =	67.5	ft NAVD88
Seasonal High Water Table Elevation =	67.0	ft NAVD88
Seasonal High Water Table depth =	0.5	ft

Based upon the existing SHWT the pond will be a

Wet Pond or Dry Pond

Step No. 2, Pond 3C Original PSR - Storage Height Estimate (based upon Average Wet Season Water Elevation)

The Average Wet Seasonal Water Elevation and the existing ground elevation is taken from the a combination of LiDAR and a wetland delineation (see Appendix). The Berm Elevation is assumed to be equal to the low elevation along a LiDAR cut Chuluota Road's centerline. Therefore the treatment volume and the peak attenuation volume are constrained to the following storage height (SH) or CH (See Step No. 5).

SH = Store Berm Elevation - Freeboard - Seasonal High Water Table Elevation

Existing Ground Elevation =	67.5	ft NGVD88
Berm Elevation =	69.40	ft NGVD88
Freeboard =	1.00	ft
Seasonal High Water Table EL =	67.0	ft NGVD88
SH =	1.40	ft

Note: Check CH (Step No. 5) before calculating pond configuration

Pond 3C Original PSR would receive water from Basins 1A/B, 2A/B, and 3.

Volume 1A =	9,147.60	cu-ft	=	0.21 ac-ft
Volume 1B =	1,742.40	cu-ft	=	0.04 ac-ft
Volume 2A =	4,986.13	cu-ft	=	0.11 ac-ft
Volume 2B =	41,164.20	cu-ft	=	0.95 ac-ft
Volume 3 =	185,130.00	cu-ft	=	4.25 ac-ft
Total =	242,170.33	cu-ft	=	5.56 ac-ft

PROJECT: *Chuluota Road Widening Conceptual Drainage Report*
Pond No.: *3C Original PSR*
Subject: *Pond Calculations*

Step No. 3, Pond 3C Original PSR - Pond Configuration

Use the formula for a rectangular box to determine the water surface area of a pond with vertical sides.

Volume = Length * Width * Height

Where: V = Volume from Step No. 3
L = Length of Pond
W = Width of Pond
H = Height (Lesser Height SH or CH from Step No.'s 2 or 6)

Assume that the width (W) is half of the Length (L), therefore L/W = 2

Volume = 242,170 cu-ft = L * W *H where L = 2* W

H = 1.3 ft
W = 306 ft
L = 612 ft

Step No. 4, Pond 3C Original PSR - Accounting for the Pond Side Slopes

Pond Side Slope assumed to be 1:4

L(top) = 2 * (SH * Side Slope) + L
W(top) = 2 * (SH * Side Slope) + W

Where: L(top) = Length of the pond at the top slope
W(top) = Width of the pond at top slope
L = Length of Pond from Step No. 4
W = Width of Pond from Step No. 4

L(top) = 622 ft
W(top) = 316 ft

Area @ Peak Design Stage = L(top) * W(top)
Area @ Peak Design Stage = 4.51 ac Inside of Berm

PROJECT: *Chuluota Road Widening Conceptual Drainage Report*
Pond No.: *3C Original PSR*
Subject: *Pond Calculations*

Step No. 5, Pond 3C Original PSR - Accounting for Energy Loss

Urban section with closed storm sewer system therefore 10-year attenuation constrained to the following height (CH).

CH = Low point in gutter - Clearance - Estimated Energy Loss - Average Wet Season Water Elevation

Low Point in the gutter =	69.395	ft NGVD88	Assumes the low point in the road is raised to 70 FT NAVD88. Proposed gutter is 0.605 FT below crown.
Distance from Low Point to Pond =	100	ft	
Clearance =	1.00	ft	Assume Minor Losses
Estimated Energy Loss =	0.1	ft	Assume 0.05% Slope
Average Wet Season Water Elevation =	67.0	ft NGVD88	From Step No. 2
CH =	1.295	ft	

Step No. 6, Pond 3C Original PSR - Accounting for Maintenance Berms

Desired Maintenance Berm Width =	20.00	ft	
Freeboard Buffer Width =	4	ft	all sides
Top of Berm Elevation =	69.395	ft	
Existing Ground Elevation =	67.5	ft	
Tie Down Buffer Width =	7.58	ft	all sides
Additional Buffer Width =	5.00	ft	all sides
Length = L(top) + 2 * (Berm Width + Tie Down Buffer Width + Freeboard Buffer Width + Additional Buffer Width) =	695.08	ft	
Width = W(top) + 2 * (Berm Width + Tie Down Buffer Width + Freeboard Buffer Width + Additional Buffer Width) =	389	ft	
Pond Area Requirement =	**6.21**	ac	

Increasing Pond Area by: 15% to account for preceding information being preliminary (range between 10 and 20 percent).

Total Pond Area Requirement = 7.14 ac

Note: This estimate is for pond size only, further estimates for pond access and conveyance are site specific and should be added to the "Pond Area Requirement" estimated above.

PROJECT: *Chuluota Road Widening Conceptual Drainage Report*
Pond No.: 3C ICE Alternatives
Subject: Pond Calculations

Step No. 1, Pond 3C ICE Alternatives - Pond Type

Geotechnical analysis for the project took one boring within the limits of Pond 3C ICE Alternatives. The results are shown below.

Average Ground Surface Elevation =	67.5	ft NAVD88
Seasonal High Water Table Elevation =	67.0	ft NAVD88
Seasonal High Water Table depth =	0.5	ft

Based upon the existing SHWT the pond will be a

Wet Pond or Dry Pond

Step No. 2, Pond 3C ICE Alternatives - Storage Height Estimate (based upon Average Wet Season Water Elevation)

The Average Wet Seasonal Water Elevation and the existing ground elevation is taken from the a combination of LiDAR and a wetland delineation (see Appendix). The Berm Elevation is assumed to be equal to the low elevation along a LiDAR cut Chuluota Road's centerline. Therefore the treatment volume and the peak attenuation volume are constrained to the following storage height (SH) or CH (See Step No. 5).

SH = Store Berm Elevation - Freeboard - Seasonal High Water Table Elevation

Existing Ground Elevation =	67.5	ft NGVD88
Berm Elevation =	69.2	ft NGVD88
Freeboard =	1.00	ft
Seasonal High Water Table EL =	67.0	ft NGVD88
SH =	1.20	ft

Note: Check CH (Step No. 5) before calculating pond configuration

Pond 3C ICE Alternatives would receive water from Basins 1A/B, 2A/B, and 3.

Volume 1A =	9,147.60	cu-ft	=	0.21 ac-ft
Volume 1B =	1,742.40	cu-ft	=	0.04 ac-ft
Volume 2A =	4,986.13	cu-ft	=	0.11 ac-ft
Volume 2B =	52,925.40	cu-ft	=	1.22 ac-ft
Volume 3 =	197,109.00	cu-ft	=	4.53 ac-ft
Total =	265,910.53	cu-ft	=	6.10 ac-ft

PROJECT: *Chuluota Road Widening Conceptual Drainage Report*
Pond No.: *3C ICE Alternatives*
Subject: *Pond Calculations*

Step No. 3, Pond 3C ICE Alternatives - Pond Configuration

Use the formula for a rectangular box to determine the water surface area of a pond with vertical sides.

Volume = Length * Width * Height

Where: V = Volume from Step No. 3
L = Length of Pond
W = Width of Pond
H = Height (Lesser Height SH or CH from Step No.'s 2 or 6)

Assume that the width (W) is half of the Length (L), therefore L/W = 2

Volume = 265,911 cu-ft = L * W *H where L = 2* W

H = 1.2 ft
W = 333 ft
L = 666 ft

Step No. 4, Pond 3C ICE Alternatives - Accounting for the Pond Side Slopes

Pond Side Slope assumed to be 1:4

L(top) = 2 * (SH * Side Slope) + L
W(top) = 2 * (SH * Side Slope) + W

Where: L(top) = Length of the pond at the top slope
W(top) = Width of the pond at top slope
L = Length of Pond from Step No. 4
W = Width of Pond from Step No. 4

L(top) = 675 ft
W(top) = 342 ft

Area @ Peak Design Stage = L(top) * W(top)
Area @ Peak Design Stage = 5.31 ac Inside of Berm

PROJECT: *Chuluota Road Widening Conceptual Drainage Report*
Pond No.: *3C ICE Alternatives*
Subject: *Pond Calculations*

Step No. 5, Pond 3C ICE Alternatives - Accounting for Energy Loss

Urban section with closed storm sewer system therefore 10-year attenuation constrained to the following height (CH).

CH = Low point in gutter - Clearance - Estimated Energy Loss - Average Wet Season Water Elevation

Low Point in the gutter =	69.395	ft NGVD88	Assumes the low point in the road is raised to 70 FT NAVD88. Proposed gutter is 0.605 FT below crown.
Distance from Low Point to Pond =	100	ft	
Clearance =	1.00	ft	Assume Minor Losses
Estimated Energy Loss =	0.1	ft	Assume 0.05% Slope
Average Wet Season Water Elevation =	67.0	ft NGVD88	From Step No. 2
CH =	1.295	ft	

Step No. 6, Pond 3C ICE Alternatives - Accounting for Maintenance Berms

Desired Maintenance Berm Width =	20.00	ft	
Freeboard Buffer Width =	4	ft	all sides
Top of Berm Elevation =	69.2	ft	
Existing Ground Elevation =	67.5	ft	
Tie Down Buffer Width =	6.80	ft	all sides
Additional Buffer Width =	5.00	ft	all sides
Length = L(top) + 2 * (Berm Width + Tie Down Buffer Width + Freeboard Buffer Width + Additional Buffer Width) =	746.92	ft	
Width = W(top) + 2 * (Berm Width + Tie Down Buffer Width + Freeboard Buffer Width + Additional Buffer Width) =	414	ft	
Pond Area Requirement =	**7.10**	ac	

Increasing Pond Area by: 15% to account for preceding information being preliminary (range between 10 and 20 percent).

Total Pond Area Requirement = 8.17 ac

Note: This estimate is for pond size only, further estimates for pond access and conveyance are site specific and should be added to the "Pond Area Requirement" estimated above.

PROJECT: *Chuluota Road Widening Conceptual Drainage Report*
Pond No.: 4C Round-a-bout
Subject: Pond Calculations

Step No. 1, Pond 4C Round-a-bout - Pond Type

Geotechnical analysis for the project took one boring within the limits of Pond 4C Round-a-bout. The results are shown below.

Average Ground Surface Elevation at pond =	71.9	ft NAVD88
Seasonal High Water Table Elevation =	67.0	ft NAVD88
Seasonal High Water Table depth =	4.9	ft

Based upon the existing SHWT the pond will be a

Wet Pond or Dry Pond

Step No. 2, Pond 4C Round-a-bout - Storage Height Estimate (based upon Average Wet Season Water Elevation)

The Average Wet Seasonal Water Elevation and the existing ground elevation is taken from the geotechnical information. The Berm Elevation is assumed to be equal to the low elevation along Lake Pickett Road. Therefore the treatment volume and the peak attenuation volume are constrained to the following storage height (SH) or CH (See Step No. 5).

SH = Store Berm Elevation - Freeboard - Seasonal High Water Table Elevation

Existing Ground Elevation =	71.9	ft NGVD88
Berm Elevation =	71.9	ft NGVD88
Freeboard =	1.00	ft
Seasonal High Water Table EL =	67	ft NGVD88
SH =	3.90	ft

Note: Check CH (Step No. 6) before calculating pond configuration

Pond 4C Round-a-bout would receive water from 4-100, 4-200, 4-300, and 4-400.

Volume 4-100/200 =	20,037.60	cu-ft	=	0.46	ac-ft
Volume 4-300 =	6,534.00	cu-ft	=	0.15	ac-ft
Volume 4-400 =	41,599.80	cu-ft	=	0.96	ac-ft
Total =	68,171.40	cu-ft	=	1.57	ac-ft

PROJECT: *Chuluota Road Widening Conceptual Drainage Report*
Pond No.: *4C Round-a-bout*
Subject: *Pond Calculations*

Step No. 3, Pond 4C Round-a-bout - Pond Configuration

Use the formula for a rectangular box to determine the water surface area of a pond with vertical sides.

Volume = Length * Width * Height

Where: V = Volume from Step No. 3
L = Length of Pond
W = Width of Pond
H = Height (Lesser Height SH or CH from Step No.'s 2 or 6)

Assume that the width (W) is half of the Length (L), therefore L/W = 2

Volume = 68,171 cu-ft = L * W *H where L = 2* W

H = 3.900 ft
W = 93 ft
L = 187 ft

Step No. 4, Pond 4C Round-a-bout - Accounting for the Pond Side Slopes

Pond Side Slope assumed to be 1:4

L(top) = 2 * (SH * Side Slope) + L
W(top) = 2 * (SH * Side Slope) + W

Where: L(top) = Length of the pond at the top slope
W(top) = Width of the pond at top slope
L = Length of Pond from Step No. 4
W = Width of Pond from Step No. 4

L(top) = 218 ft
W(top) = 125 ft

Area @ Peak Design Stage = L(top) * W(top)
Area @ Peak Design Stage = 0.62 ac Inside of Berm

PROJECT: *Chuluota Road Widening Conceptual Drainage Report*
Pond No.: *4C Round-a-bout*
Subject: *Pond Calculations*

Step No. 5, Pond 4C Round-a-bout - Accounting for Energy Loss

Urban section with closed storm sewer system therefore 10-year attenuation constrained to the following height (CH).

CH = Low point in gutter - Clearance - Estimated Energy Loss - Average Wet Season Water Elevation

Low Point in the gutter =	72.395	ft NGVD88	Crown at low point is 73 FT NAVD88.
Distance from Low Point to Pond =	100	ft	Proposed gutter at 0.605 FT below crown.
Clearance =	1.00	ft	Assume Minor Losses
Estimated Energy Loss =	0.1	ft	Assume 0.05% Slope
Average Wet Season Water Elevation =	67	ft NGVD88	From Step No. 2
CH =	4.295	ft	

Step No. 6, Pond 4C Round-a-bout - Accounting for Maintenance Berms

Desired Maintenance Berm Width =	20.00	ft	
Freeboard Buffer Width =	4	ft	all sides
Length = L(top) + (2 * Berm Width + 2 * Freeboard Buffer Width) =	266	ft	
Width = W(top) + (2 * Berm Width + 2 * Freeboard Buffer Width) =	173	ft	

Pond Area Requirement = **1.06** ac

Increasing Pond Area by: 15% to account for preceding information being preliminary

Total Pond Area Requirement = **1.22**

Note: This estimate is for pond size only, further estimates for pond access and conveyance are site specific and should be added to the "Pond Area Requirement" estimated above.

PROJECT: *Chuluota Road Widening Conceptual Drainage Report*
Pond No.: 4C Bowtie
Subject: Pond Calculations

Step No. 1, Pond 4C Bowtie - Pond Type

Geotechnical analysis for the project took one boring within the limits of Pond 4C Bowtie. The results are shown below.

Average Ground Surface Elevation at pond =	71.9	ft NAVD88
Seasonal High Water Table Elevation =	67.0	ft NAVD88
Seasonal High Water Table depth =	4.9	ft

Based upon the existing SHWT the pond will be a

Wet Pond or Dry Pond

Step No. 2, Pond 4C Bowtie - Storage Height Estimate (based upon Average Wet Season Water Elevation)

The Average Wet Seasonal Water Elevation and the existing ground elevation is taken from the geotechnical information. The Berm Elevation is assumed to be equal to the low elevation along Lake Pickett Road. Therefore the treatment volume and the peak attenuation volume are constrained to the following storage height (SH) or CH (See Step No. 5).

SH = Store Berm Elevation - Freeboard - Seasonal High Water Table Elevation

Existing Ground Elevation =	71.9	ft NGVD88
Berm Elevation =	71.9	ft NGVD88
Freeboard =	1.00	ft
Seasonal High Water Table EL =	67	ft NGVD88
SH =	3.90	ft

Note: Check CH (Step No. 6) before calculating pond configuration

Pond 4C Bowtie would receive water from 4-100, 4-200, 4-300, and 4-400.

Volume 4-100/200 =	23,740.20	cu-ft	=	0.55	ac-ft
Volume 4-300 =	4,356.00	cu-ft	=	0.10	ac-ft
Volume 4-400 =	40,510.80	cu-ft	=	0.93	ac-ft
Total =	68,607.00	cu-ft	=	1.58	ac-ft

PROJECT: *Chuluota Road Widening Conceptual Drainage Report*
Pond No.: *4C Bowtie*
Subject: *Pond Calculations*

Step No. 3, Pond 4C Bowtie - Pond Configuration

Use the formula for a rectangular box to determine the water surface area of a pond with vertical sides.

Volume = Length * Width * Height

Where: V = Volume from Step No. 3
L = Length of Pond
W = Width of Pond
H = Height (Lesser Height SH or CH from Step No.'s 2 or 6)

Assume that the width (W) is half of the Length (L), therefore L/W = 2

Volume = 68,607 cu-ft = L * W *H where L = 2* W

H = 3.900 ft
W = 94 ft
L = 188 ft

Step No. 4, Pond 4C Bowtie - Accounting for the Pond Side Slopes

Pond Side Slope assumed to be 1:4

L(top) = 2 * (SH * Side Slope) + L
W(top) = 2 * (SH * Side Slope) + W

Where: L(top) = Length of the pond at the top slope
W(top) = Width of the pond at top slope
L = Length of Pond from Step No. 4
W = Width of Pond from Step No. 4

L(top) = 219 ft
W(top) = 125 ft

Area @ Peak Design Stage = L(top) * W(top)
Area @ Peak Design Stage = 0.63 ac Inside of Berm

PROJECT: *Chuluota Road Widening Conceptual Drainage Report*
Pond No.: *4C Bowtie*
Subject: *Pond Calculations*

Step No. 5, Pond 4C Bowtie - Accounting for Energy Loss

Urban section with closed storm sewer system therefore 10-year attenuation constrained to the following height (CH).

CH = Low point in gutter - Clearance - Estimated Energy Loss - Average Wet Season Water Elevation

Low Point in the gutter =	72.395	ft NGVD88	Crown at low point is 73 FT NAVD88. Proposed gutter at 0.605 FT below crown.
Distance from Low Point to Pond =	100	ft	
Clearance =	1.00	ft	Assume Minor Losses
Estimated Energy Loss =	0.1	ft	Assume 0.05% Slope
Average Wet Season Water Elevation =	67	ft NGVD88	From Step No. 2
CH =	4.295	ft	

Step No. 6, Pond 4C Bowtie - Accounting for Maintenance Berms

Desired Maintenance Berm Width =	20.00	ft	
Freeboard Buffer Width =	4	ft	all sides
Length = L(top) + (2 * Berm Width + 2 *	267	ft	
Width = W(top) + (2 * Berm Width + 2 *	173	ft	

Pond Area Requirement = **1.06** ac

Increasing Pond Area by: 15% to account for preceding information being preliminary (range between 10 and 20 percent).

Total Pond Area Requirement = **1.22 ac**

Note: This estimate is for pond size only, further estimates for pond access and conveyance are site specific and should be added to the "Pond Area Requirement" estimated above.

APPENDIX G
ICE PUBLIC INVOLVEMENT

ORANGE COUNTY GOVERNMENT
FLORIDA

Chuluota Road Intersection Control Evaluation (ICE)
Alternatives Public Meeting
From State Road (S.R.) 50 to Lake Pickett Road

PUBLIC MEETING SUMMARY

October 2024

Chuluota Road Intersection Control Evaluation (ICE)
Alternatives Intersection Workshop

From State Road (SR) 50 to Lake Pickett Road
Orange County, Florida

Workshop Summary
Date: Monday, September 16, 2024
Time: 5:30 p.m. – 7 p.m.
Location: Corner Lake Middle School

As part of the Chuluota Road Roadway Conceptual Analysis (RCA) study, Orange County is conducting an Intersection Control Evaluation (ICE) Study along Chuluota Road from north of Colonial Drive (State Road (SR) 50) to Lake Pickett Road. Orange County held the Alternatives Intersection Workshop for this project on Monday, September 16, 2024. The purpose of this meeting was to show interested members of the public all the different options the County is looking at for at least four intersections along Chuluota Road. The County also provided an opportunity for attendees to offer feedback and ask questions.

Public Notification
A newsletter with the meeting invitation and information regarding the project was sent by U.S. Mail to 2,010 property owners and tenants. The invitations included the date and time of the public meeting, where to attend and the project map. A copy of the English and Spanish newsletter and the mail list are in **Appendix A.**

Meeting Advertisement
The meeting was advertised with a newspaper display ad in both English and Spanish on Sunday, September 8, 2024, in the *Orlando Sentinel*. The meeting notice was also posted on the Orange County website, and a media release was sent out by Orange County. A copy of the English and Spanish news display ads and the media release are in **Appendix B**.

Public Meeting Agenda
The meeting was held at Corner Lake Middle School's Cafeteria, 1700 Chuluota Road, Orlando, FL 32820. The open-house portion of the meeting was scheduled to open at 5:30 p.m., however, some attendees arrived at 5 p.m. The board exhibits were on easels and project team members were available to answer any questions the guests may have. Following the open house portion, Orange County's Project Manager, Blanche Hardy, gave a presentation with details of the project. Once the presentation was complete, Orange County took questions from the attendees.

The following summarizes the verbal question-and-answer session:

1. Question about the location of the two properties mentioned as possible acquisitions to accommodate widening.

   Ms. Hardy said the properties for possible full acquisition are on the entire parcel northeast corner of Chuluota Road and Lake Pickett Road. We've met with those property owners. The other potential acquisition is the former church property across from the elementary school. Ms. Hardy mentioned this property is desirable because of the wildlife corridor and proposed trail.
2. Where is the funding for this project coming from? Will some come from The Grow?

   The initial funding came from Investment in our Homes for Life from Mayor Jacobs. The other funding in the future from Construction Improvement Project, and the proportionate fair share from development are the main sources. The Grow is included since the development abuts the corridor.
3. Is this project fully funded?

   No. The study phase is funded. Mr. Sanders reminded everyone this is still in the early phases and budgets are done a year at a time.
4. Has the County done a study to specifically state how much the proposals will improve safety, especially with pedestrians.

   Ms. Hardy said as part of the study they ran a safety analysis (SPICE). Mr. Sanders and Ms. Hardy pledged to bring back more information on the safety findings at the next meeting.
5. Children's safety is a top priority. Is there a plan to extend improvements south of S.R. 50? Are you saying the analysis is showing the current (stop) condition is safer for children crossing than the proposed change?

   The project does not extend across S.R. 50 onto East River Falcons Way. Ms. Hardy noted the FDOT will be making interim pedestrian crossing improvements on S.R. 50 at Corner School Drive and Chuluota Road. Those improvements are expected to begin in early 2025. Ms. Hardy also detailed the many pedestrian enhancements that are planned, such as high visibility crosswalks, pedestrian lighting and a slower speed limit.
6. Has there been consideration of RRFBs or other signals to stop north-south traffic at the crosswalks (where stop signs are located).

   Because of the speed limit, RRFBs have not been considered.
7. Are bicycle lanes proposed? On weekends, there are a lot of bicycle clubs.

   Ms. Hardy and Mr. Sanders said the project proposes a multi-use path, which appeals to may bicyclists who are not comfortable riding on the road next to traffic. There was a discussion about the many bicycle clubs that travel in the area.

8. Has there been consideration of adding shade trees along the shared use path? It's not a good plan to have a multi-use trail that no one uses because it is uncomfortable.
   Ms. Hardy explained that landscaping is usually installed within the median. She said large trees next to multi-use paths can become an issue because the roots push up the pavement and become a maintenance problem. Mr. Sanders said they do understand, and the County is always working to balance the issues.
9. Commissioner Bonilla had several questions about the existing and proposed speed limit and questioned whether the proposals would be effective in slowing traffic.
   Mr. Sanders discussed the lane narrowing, landscaping, median and new curbing and how those features work to help make drivers less comfortable speeding. He also mentioned the proposed traffic signals Commissioner Bonilla said it does not make sense because the added lane would provide more room and people will go faster. She said there are long sections where there are no lights or stop signs to slow people down.
10. There was a suggestion for a pedestrian bridge at Schoolview Way.
    Mr. Sanders said pedestrian bridges are a significant structure and investment and are used in areas where there is a constant stream of pedestrians. In this area, the crossings are typically morning and afterschool.
11. Question about whether noise walls would be included or some other barrier.
    Mr. Sanders explained that the sound walls start 13 to 15 feet high. There are some disadvantages because of sight distance when pulling out. He said the county has a subdivision wall policy and we can look at that. If there is a landscape berm, it would not qualify for a noise wall.
12. Resident voiced support for a traffic signal rather than a roundabout at Longboat.

The meeting wrapped up at around 7:15 p.m.

Meeting Attendance

Twenty (20) people attended the meeting, including Orange County Commissioner Emily Bonilla. There were also eleven (11) staff members and consultants. Copies of the sign in sheets are in **Appendix C**.

Handouts

A copy of the newsletter, in English and Spanish, were available at the meeting for attendees. A comment form was also available. Participants were encouraged to fill out the comment form and drop it in the comment box before leaving the meeting. They were also told they could mail

it back or email the project manager, whose information was on the comment form. A copy of the comment form is in **Appendix D**.

Public Comments

Three people submitted written comment forms at the public meeting. The comments consisted of:

- Wants flashing light at Chuluota Road at Long Boat and/or Cypress Lake Glen Blvd
- Wants 4 lanes
- Does not want roundabouts
- Wants turn lanes at Lake Pickett
- Believes traffic signal will help slow traffic
- Flow of traffic at East River High School needs to be addressed / wants study / huge safety issue / new school road will not work
- SB turn lane needed into Country Lake Estates
- Does not want bowties / adds gas emissions
- Concerned about no bike lanes because of all the bike clubs who use the area

Comment Forms collected at the meeting are in **Appendix E**.

End of Meeting Summary

This public meeting summary was prepared by Shari Curley, Senior Communications Manager, Quest Corporation of America Inc. If you feel that clarifications are necessary, or if it differs from your understanding, please notify Shari by email at shari.curley@qcausa.com.

APPENDIX A

CHULUOTA ROAD/CR 419
INTERSECTION CONTROL EVALUATION (ICE)
FROM SR 50 TO LAKE PICKETT ROAD



ORANGE COUNTY MAYOR
JERRY L. DEMINGS



DISTRICT 5 COMMISSIONER
EMILY BONILLA

Issue #1 - September 2024

INTERSECTION CONTROL EVALUATION ALTERNATIVES WORKSHOP

As part of the Chuluota Road Roadway Conceptual Analysis (RCA) study, Orange County is conducting an Intersection Control Evaluation (ICE) Study along Chuluota Road from north of Colonial Drive (State Road (SR) 50) to Lake Pickett Road. This study will examine various intersection controls and configurations such as stop signs, traffic signals, roundabouts, and other options, to determine the best alternative to promote safety, operations, and mobility along the corridor.

The ICE Study will evaluate the Chuluota Road intersections at Lake Pickett Road, Long Boat Lane/Cypress Lake Glen Boulevard (North), Corner Lake Drive, Cypress Lake Glen Boulevard (South), and Schoolview Way. These intersections will be analyzed in a No Build scenario (existing two-lane configuration) and a Build scenario (future four-lane configuration as recommended by the RCA study).

Orange County welcomes public input and invites the community to learn more about the intersection control options under consideration at an Alternatives Workshop on **Monday, September 16, 2024, Corner Lake Middle School Cafeteria, 1700 Chuluota Road, Orlando, FL 32820.** The meeting will begin at 5:30 p.m. with a presentation starting at 6 p.m. Orange County will review alternatives and recommended solutions for each intersection. The community will have an opportunity to comment on the recommendations. A second public meeting will be held in October to present the recommendations. The final recommendations will be presented to the Orange County Board of County Commissioners for consideration and approval.



OPPORTUNITIES TO PARTICIPATE IN THE CHULUOTA ICE STUDY

Public Meeting

When: September 16, 2024

Where: Corner Lake Middle School Cafeteria
1700 Chuluota Road, Orlando, FL 32820

Meeting Begins: 5:30 p.m.

Presentation: 6 p.m.

Public participation is solicited without regard to race, color, national origin, age, sex, religion, income, disability, or family status. Persons who require language translation or interpretive services, which are provided at no cost, should contact Yvette Best, Orange County Title VI/Nondiscrimination coordinator, at 407-836- 5825 or by email at yvette.best@ocfl.net at least seven (7) days prior to the workshop. Persons requiring special accommodations under the American with Disabilities Act of 1990 (ADA) may request assistance from Nicola Norton, County ADA coordinator, at 407-836-6568 or nicola.norton@ocfl.net at least seven (7) days prior to the meeting.

Learn more at the project website: www.chuluotarca.com or www.ocfl.net

CHULUOTA ROAD/CR 419
INTERSECTION CONTROL EVALUATION (ICE)
FROM SR 50 TO LAKE PICKETT ROAD

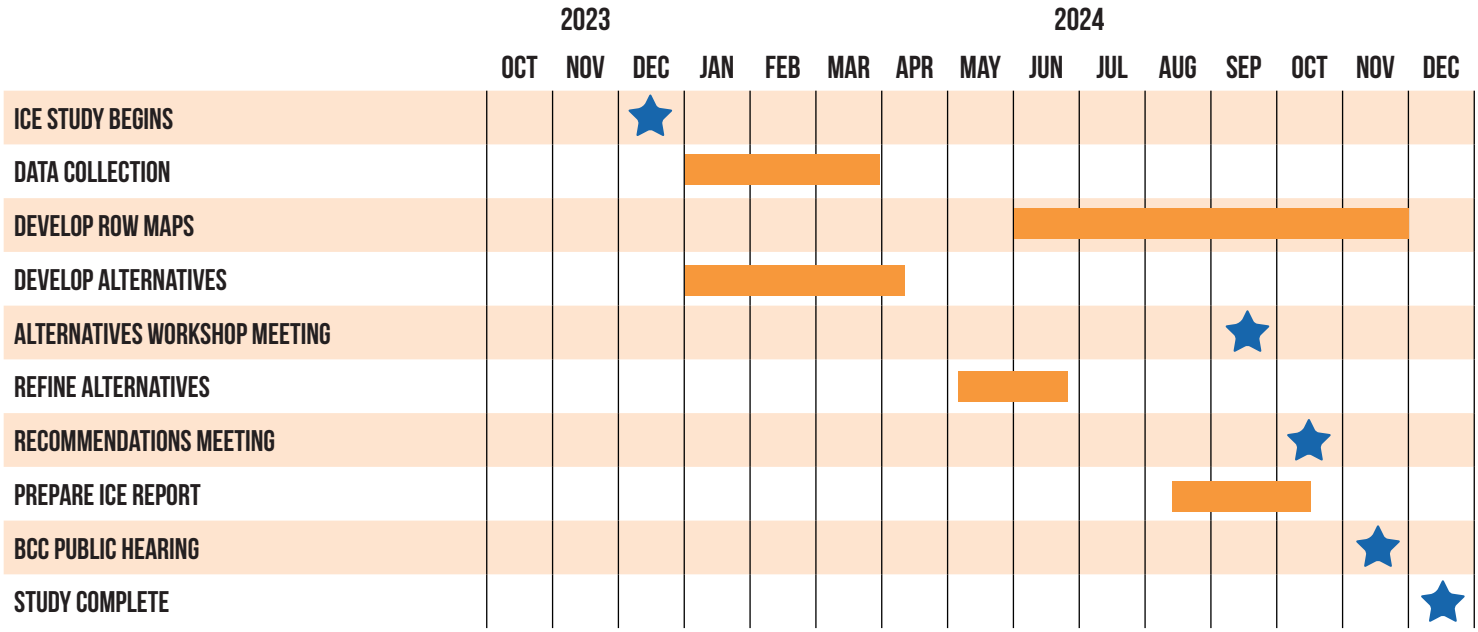


ORANGE COUNTY MAYOR
JERRY L. DEMINGS



DISTRICT 5 COMMISSIONER
EMILY BONILLA

CHULUOTA ROAD ICE PROJECT SCHEDULE



QUESTIONS OR COMMENTS?

You may contact a member of the project team directly with questions or comments.

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Orange County Public Works
Transportation Planning Division
4200 S. John Young Parkway, Orlando, FL 32839
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Para informacíon en Español, llame a:

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Learn more at the project website: www.chuluotarca.com or www.ocfl.net

CARRETERA CHULUOTA/CR 419

EVALUACIÓN DE CONTROL DE INTERSECCIONES (ICE)

DESDE LA SR 50 HASTA LAKE PICKETT ROAD



ALCALDE DEL CONDADO DE ORANGE
JERRY L. DEMINGS



COMISIONADO DEL DISTRITO 5
EMILY BONILLA

Foyeto 1 - septiembre de 2024

TALLER DE ALTERNATIVAS PARA LA EVALUACIÓN DEL CONTROL DE INTERSECCIÓNES

Como parte del estudio de Análisis Conceptual de Carreteras (RCA) de Chuluota Road, el condado de Orange está llevando a cabo un Estudio de Evaluación de Control de Intersecciones (ICE) a lo largo de Chuluota Road desde al norte de Colonial Drive (State Road (SR) 50) hasta Lake Pickett Road. Este estudio examinará varios controles y configuraciones de intersecciones, como señales de alto, semáforos, rotondas y otras opciones, para determinar la mejor alternativa para promover la seguridad, las operaciones y la movilidad a lo largo del corredor.

El estudio ICE evaluará las intersecciones de Chuluota Road en Lake Pickett Road, Long Boat Lane/Cypress Lake Glen Boulevard (norte), Corner Lake Drive, Cypress Lake Glen Boulevard (sur) y Schoolview Way. Estas intersecciones se analizarán en un escenario de No Construcción (configuración existente de dos carriles) y un escenario de Construcción (configuración futura de cuatro carriles según lo recomendado por el estudio de RCA).

El condado de Orange agradece los comentarios del público e invita a la comunidad a aprender más sobre las opciones de control de intersecciones que se están considerando en un Taller de Alternativas **el lunes, 16 de septiembre de 2024, en la cafetería de la escuela secundaria Corner Lake, 1700 Chuluota Road, Orlando, FL 32820**. La reunión comenzará a las 5:30 p.m. con una presentación a partir de las 6 p.m. El condado de Orange revisará alternativas y soluciones recomendadas para cada intersección. La comunidad tendrá la oportunidad de comentar sobre las recomendaciones. Una segunda reunión pública se realizará en octubre para presentar las recomendaciones. Las recomendaciones finales se presentarán a la Junta de Comisionados del condado para su consideración y aprobación.



OPORTUNIDADES PARA PARTICIPAR EN EL ESTUDIO ICE EN LA CARRETERRA CHULUOTA

REUNIÓN PÚBLICA

Cuándo: 16 de septiembre de 2024

Dónde: Cafetería de la escuela secundaria Corner Lake
1700 Chuluota Road, Orlando, FL 32820

Comienza la reunión: 5:30 p.m.

Presentación: 6 p.m.

Se solicita la participación del público sin distinción de raza, color, origen nacional, edad, sexo, religión, ingresos, discapacidad o situación familiar. Las personas que requieran traducción de idiomas o servicios de interpretación, que se brindan sin costo, deben comunicarse con Yvette Best, coordinadora de No discriminación/Título VI del condado de Orange, al 407-836-5825 o por correo electrónico a yvette.best@ocfl.net al menos siete (7) días antes del taller. Las personas que requieran adaptaciones especiales según la Ley de Estadounidenses con Discapacidades de 1990 (ADA) pueden solicitar asistencia de Nicola Norton, coordinadora de ADA del condado, al 407-836-6568 o nicola.norton@ocfl.net al menos siete (7) días antes de la reunión.

Obtenga más información en el sitio web del proyecto: www.chuluotarca.com o www.ocfl.net

CARRETERA CHULUOTA/CR 419

EVALUACIÓN DE CONTROL DE INTERSECCIONES (ICE)

DESDE LA SR 50 HASTA LAKE PICKETT ROAD

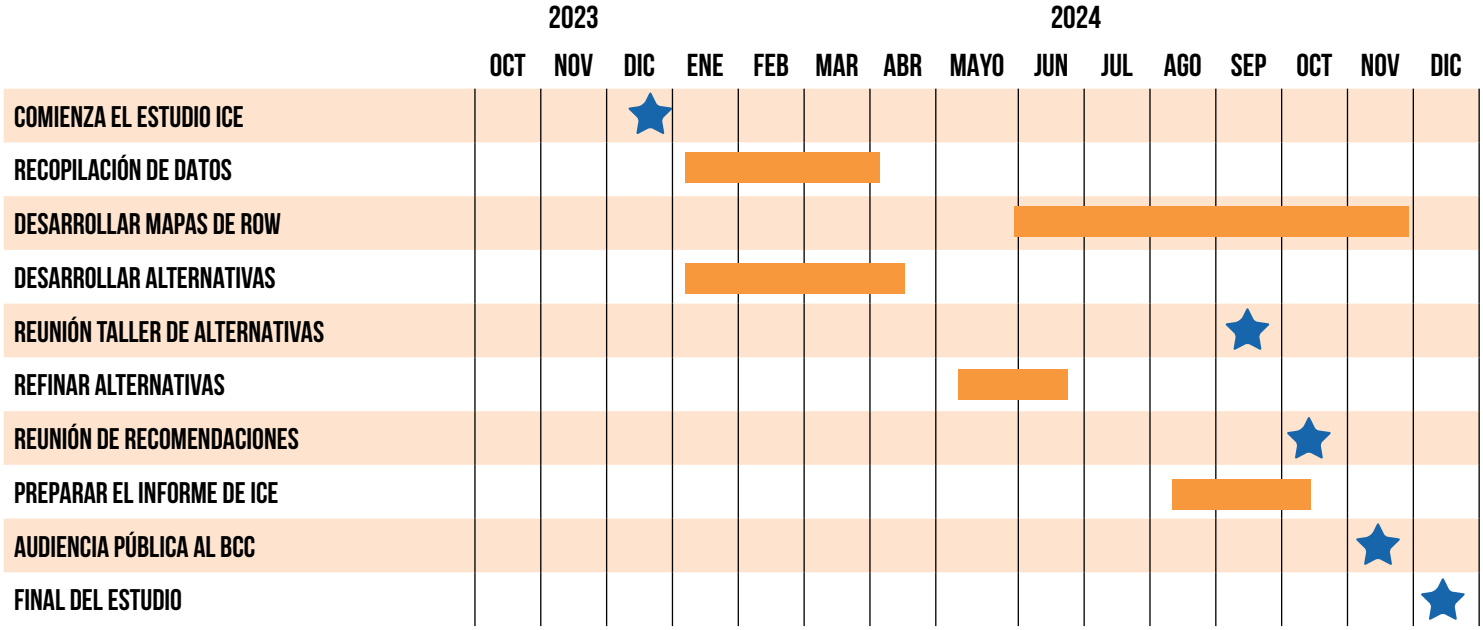


ALCALDE DEL CONDADO DE ORANGE
JERRY L. DEMINGS



COMISIONADO DEL DISTRITO 5
EMILY BONILLA

CALENDARIO DEL PROYECTO DE ICE EN LA CARRETERA DE CHULUOTA



¿PREGUNTAS O COMENTARIOS?

Puede comunicarse directamente con un miembro del equipo del proyecto si tiene preguntas o comentarios.

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Departamento de Obras Públicas del Condado Orange
División de Planificación de Transporte
4200 S. John Young Parkway, Orlando, FL 32839
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Greg Smith, P.E.
Gerente Consultor de Proyecto
Johnson, Miriman, Thompson
400 Colonial Center Pkwy, Suite 100
Lake Mary, FL 32746
Email: gsmith@jmt.com
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Teléfono: 407-836-7982

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NAME (1)	NAME (2)	ADD1	ADD2	ADD3	CITY	STATE	ZIP	ZIP4	COUNTRY
SONG QING	JIA ZHIHONG	101 SUMMIT DR			BASKING RIDGE	NJ	7920	1982	
MOLDAN HOWARD	MOLDAN PAMELA	1015 57TH ST E			BRADENTON	FL	34208	6207	
TRAN MICHAEL THANH	TRAN AMY SINH	10226 PICTURESQUE CT			NOKESVILLE	VA	20181	3641	
ZAXBYS PROPERTIES LLC		1040 FOUNDERS BLVD STE 100			ATHENS	GA	30606	6138	
WEI JINLIAN		10448 37TH DR			CORONA	NY	11368	5292	
BOWSER CAMERON S	PLOSA-BOWSER BEVERLY A	1052 MILL HILL RD			EAST GREENVILLE	PA	18041	2124	
HENRY CASSANDRA FLEMING		10600 BLOOMFIELD DR APT 614			ORLANDO	FL	32825	5905	
HARILALL TONY S	HARILALL ANITA ANN	10756 115TH ST			SOUTH RICHMOND HILL	NY	11419	2604	
WEATHERS CORY J	BRADLEY STEVY N	10756 CABBAGE TREE LOOP			ORLANDO	FL	32825	8875	
CRUZ ANGEL M	CRUZ ROSA E	108 ADMIRAL LN			BRONX	NY	10473	2483	
WEST ANDREW P	WEST KARI LYNN	110 KANSAS AVE			FORT LEAVENWORTH	KS	66027	1117	
RICKYANTO FRANS	RICKYANTO RIBKAH	1137 OSPREY WAY			APOPKA	FL	32712	2371	
MCBEAN MARIA		11422 REDBERRY DR			DAVIE	FL	33330	1380	
BARNES ANDRIANNE		1144 HULL ISLAND DR			OAKLAND	FL	34787	9174	
UNG THUY THI		1145 EMERALD DR			MOUNT DORA	FL	32757	4647	
SAM DHANRAJ	SAM JUDY P	116 HARRISON AVE			YONKERS	NY	10705	2613	
ARIAS EFRAIN	ARIAS GLORIA	11712 OCEAN PROMENADE APT L2			ROCKAWAY PARK	NY	11694	2081	
HPA BORROWER 2016-1 LLC		120 S RIVERSIDE PLZ STE 2000			CHICAGO	IL	60606	6995	
MASAKEE HOLDINGS AND MANAGEMENT LLC		12648 GRECO DR			ORLANDO	FL	32824	5859	
BRANSTETTER MILDRED L	BRANSTETTER KEVIN W	127 CAMERON CT			WESTON	FL	33326	3518	
HERNANDEZ AMANTINA		128 POST AVE APT 1J			NEW YORK	NY	10034	3440	
BURNAZI BEDRI		130 ELLINGTON PL			OVIEDO	FL	32765	6335	
NYAGA ERIC K		13035 SUNSHINE CIR			CLERMONT	FL	34711	8888	
BARTLEY WILBERT A	BARTLEY CELINE V	1308 RICHMOND GRAND AVE			ORLANDO	FL	32820	2721	
ANTHONY DAVONDA S		1309 RICHMOND GRAND AVE			ORLANDO	FL	32820	2722	
BEMIS COLLEEN M		1314 RICHMOND GRAND AVE			ORLANDO	FL	32820	2721	
DIORIO DANIEL	DIORIO RAELYNN A	1320 RICHMOND GRAND AVE			ORLANDO	FL	32820	2721	
STEVERSON ELLEN K	STEVERSON PAUL ANTHONY	1326 RICHMOND GRAND AVE			ORLANDO	FL	32820	2721	
BROOKS KEVIN	APONTE DEBORAH	1332 RICHMOND GRAND AVE			ORLANDO	FL	32820	2721	
STRANG KEVIN	STRANG CHRISTINE	1338 RICHMOND GRAND AVE			ORLANDO	FL	32820	2721	
RAYSOR BYRON D	RAYSOR VASANTHA L	13388 LAKE TURNBERRY CIR			ORLANDO	FL	32828	8524	
BOOKER LARRY WILMER	BOOKER PEGGY M	1344 RICHMOND GRAND AVE			ORLANDO	FL	32820	2721	
CABE JOHNNY L	CABE CYNTHIA L	1345 TALL MAPLE LOOP			OVIEDO	FL	32765	7358	
HAN KYONG AE		1351 AMARYLLIS CIR			ORLANDO	FL	32825	7430	
NGUYEN HUNG DUY	NGUYEN THANH TRUC THI	13520 OLD DOCK RD			ORLANDO	FL	32828	6198	
ABDO ZAFIR A	KHALAFALLA SAFAA A	1367 WILLOW BRANCH DR			ORLANDO	FL	32828	7458	
RADJESKI DANIEL T		1383 SUNSHOWERS CIR			ORLANDO	FL	32828		
RAMIREZ MARIA CRISTINA		13855 MORNING FROST DR			ORLANDO	FL	32828	7478	
ROMULUS JEAN MARIO LIFE ESTATE	REM: GIANA VICTORIA ROMULUS	1406 RICHMOND GRAND AVE			ORLANDO	FL	32820	2721	
BEAUMONT ALFRED G	BEAUMONT ELEANOR	1412 RICHMOND GRAND AVE			ORLANDO	FL	32820	2721	
DECKER LAWRENCE	DECKER KAREN MARIE	1418 RICHMOND GRAND AVE			ORLANDO	FL	32820	2721	
PAINTSIL SAMPSON K	ELLIS-PAINTSIL JOAN	1419 RICHMOND GRAND AVE			ORLANDO	FL	32820	2724	
CONCEPCION ELADIO ANTONIO	CONCEPCION ANA RAMONA	14225 TURNING LEAF DR			ORLANDO	FL	32828	7490	
SALICRUP LAURA E		14245 PARADISE TREE DR			ORLANDO	FL	32828	6425	
KOCZUR BONG		1425 RICHMOND GRAND AVE			ORLANDO	FL	32820		
LEGATUS PROPERTIES LLC		14258 ANASTASIA LN			ORLANDO	FL	32828	4804	
CEPEDA FRANCISCO ALBERTO		14424 MAILER BLVD			ORLANDO	FL	32828	6473	
TRAN VONG C	TRAN HOANG-OANH T	14539 MICHENER TRL			ORLANDO	FL	32828	6459	
MEDINA ERNEST	MEDINA MARGARITA	14556 TANJA KING BLVD			ORLANDO	FL	32828	4802	
LISSY PENA REALTY LLC		1457 FAIRFIELD AVE			BRIDGEPORT	CT	6605	1932	
MONTECALVO FAMILY REVOCABLE TRUST		1460 PELICAN BAY TRL			WINTER PARK	FL	32792	6131	
RICHARDSON COREY S		14605 OLD FOREST CT			ORLANDO	FL	32826	4260	
BOTROS BISHOY N	SORIAL SILVANA F	1476 ARBITUS CIR			OVIEDO	FL	32765		
GAO JOHN JIE	CHANG MICHELLE X	15 MAJESTIC CT			NEW HYDE PARK	NY	11040	1154	
COURTRIGHT MICHAEL F		1504 ARMONE ST			ORLANDO	FL	32825	5840	
RIVAS MIRIAM		1506 CORNER MEADOW CIR			ORLANDO	FL	32820	1945	
SCHAFFER MARK E		1512 CORNER MEADOW CIR			ORLANDO	FL	32820	1945	
SUAREZ NISSA		1513 CORNER MEADOW CIR			ORLANDO	FL	32820	1944	
MURILLO TANYA LORENA	COBOS WILLIAM VICENTE	1519 CORNER MEADOW CIR			ORLANDO	FL	32820	1944	
BECK JENNIFER E	BECK NORMAN III	1520 SIERRA RIDGE DR			ORLANDO	FL	32820	2735	
RINALDI MATTHEW	GONZALEZ LORIE DE LEON	1524 CORNER MEADOW CIR			ORLANDO	FL	32820	1945	
CAMACHO RUTH I		1525 CORNER MEADOW CIR			ORLANDO	FL	32820	1944	
LECAROS JORGE A		1531 CORNER MEADOW CIR			ORLANDO	FL	32820	1944	
SHIPLEY ANDRE	SHIPLEY KORISHA	1536 CORNER MEADOW CIR			ORLANDO	FL	32820	1945	
CASTILLO LUIS	SANCHEZ WANDA	1537 CORNER MEADOW CIR			ORLANDO	FL	32820	1944	
CUFFARO GIAN CARLO	CUFFARO LEONARDO	1543 CORNER MEADOW CIR			ORLANDO	FL	32820	1944	
THOMAS JOHN	THOMAS SANDRA	1549 CORNER MEADOW CIR			ORLANDO	FL	32820	1944	
RPR MLR 771 LLC		1576 BELLA CRUZ DR			LADY LAKE	FL	32159	8969	
HALL LEATON HARMON JR		158 KESTWICK DR E			AUGUSTA	GA	30907	1676	
NGUYEN PHUOC K	NGUYEN THUY T	1586 EAGLE NEST CIR			WINTER SPRINGS	FL	32708	5939	
HERNANDEZ JULIO		16007 CORNER LAKE DR			ORLANDO	FL	32820	1934	
WOOTEN JAMES C	WOOTEN PAMELA M	16008 CORNER LAKE DR			ORLANDO	FL	32820		
PAZ LUIS F JR	PAZ KIMBERLY A	16014 CORNER LAKE DR			ORLANDO	FL	32820	1924	
STEWART ROBERT L	STEWART KIMBERLY H	16019 CORNER LAKE DR			ORLANDO	FL	32820	1934	
SAHADEO CHARLOTTE		16020 CORNER LAKE DR			ORLANDO	FL	32820	1924	
ROMNEY JASON BENJAMIN		16026 CORNER LAKE DR			ORLANDO	FL	32820	1924	
BARANSKA MARTA	BARANSKA AGATA	16031 CORNER LAKE DR			ORLANDO	FL	32820	1934	
YANG YAN		16032 CORNER LAKE DR			ORLANDO	FL	32820	1924	
LOZANO ISAZA JOHN J	VALENCIA ANNE LOAIZA	16038 CORNER LAKE DR			ORLANDO	FL	32820	1924	
HOLMES ROBERT W	HOLMES REBECCA A	16043 CORNER LAKE DR			ORLANDO	FL	32820	1934	
VAZQUEZ DANIEL J		1606 SIERRA RIDGE			ORLANDO	FL	32820	2735	
GHODS SHAWN		1608 TECHWOOD CT			ORLANDO	FL	32820	2742	
PEREZ ANTONIO A CRUZ	COLINA RAQUEL	1609 CORNER MEADOW CIR			ORLANDO	FL	32820	1942	
RAMHARACKSINGH NARVIN	RAMHARACKSINGH TRUDY	1609 TECHWOOD CT			ORLANDO	FL	32820	2742	
HOVE ESTA		16116 CORNER LAKE DR			ORLANDO	FL	32820		
ROBERTSON JOHN	ROBERTSON ALLISON	1612 SIERRA RIDGE DR			ORLANDO	FL	32820	2735	
FRASER JAMIE MARIE		16128 CORNER LAKE DR			ORLANDO	FL	32820	1951	
ROBERTSON HAROLD L III	ROBERTSON SHELBY C	1614 CORNER MEADOW CIR			ORLANDO	FL	32820	1943	
JEETOO KHEMOO	JEETOO OMA VANESSA	1614 CORNERVIEW LN			ORLANDO	FL	32820	1917	
JOHNSON WILLIE	JOHNSON BARBARA	1614 TECHWOOD CT			ORLANDO	FL	32820	2742	
TAYLOR ARTHUR	TAYLOR BELINDA	16146 CORNER LAKE DR			ORLANDO	FL	32820	1951	
THOMPSON KEITH M		1615 CORNER MEADOW CIR			ORLANDO	FL	32820	1942	
CARR WILLIAM R LIFE ESTATE	CARR BARBARA S LIFE ESTATE	1615 TECHWOOD CT			ORLANDO	FL	32820	2742	
LORENZO JASON M		16152 CORNER LAKE DR			ORLANDO	FL	32820	1951	
RODRIGUEZ LISSETTE		16158 CORNER LAKE DR			ORLANDO	FL	32820	1951	
CLINTON KEVIN J	CLINTON JAMIE L	1617 S RIVERBEND LN			SUPERIOR	CO	80027	8049	
MILLS MARK A		1618 SIERRA RIDGE DR			ORLANDO	FL	32820	2735	
NGUYEN HA 50%	NGUYEN TRUC 50%	1619 SIERRA RIDGE DR			ORLANDO	FL	32820	2737	

FORD LEE DOC		1620 CORNER MEADOW CIR	ORLANDO	FL	32820	1943
MCCOURT ERIN		1620 CORNERVIEW LN	ORLANDO	FL	32820	1917
BREZNIK CLAY WESLEY	BREZNIK STACY PELHAM	1620 TECHWOOD CT	ORLANDO	FL	32820	2742
BENEBY DEVON	MARTIN PATRICE	1621 TECHWOOD CT	ORLANDO	FL	32820	2742
CURET LORNA D		1622 CANDELA CT	ORLANDO	FL	32820	2743
NAGAIAH NARASIMHA RAJU	NARASIMHA RAJU DIVYA	16221 OLD ASH LOOP	ORLANDO	FL	32828	6905
ABRAMS JOHN		1623 CANDELA CT	ORLANDO	FL	32820	2743
NGUYEN KIM CHI		1624 SIERRA RIDGE DR	ORLANDO	FL	32820	2735
LUPIANI JAMES THOMAS	LUPIANI ISABEL KU	16242 CORNER LAKE DR	ORLANDO	FL	32820	1964
BARAHONA CARLOS	INFANTE MARIA	16248 CORNER LAKE DR	ORLANDO	FL	32820	1964
THEN AMBER		1625 SIERRA RIDGE DR	ORLANDO	FL	32820	2737
TRAVIS JOSHUA K	TRAVIS CHARITY M	16254 CORNER LAKE DR	ORLANDO	FL	32820	1964
BUTLER NICOLE		16258 OLD ASH LOOP	ORLANDO	FL	32828	6906
MARTINEZ CINTRON KIARA LIZ	CRUZ RODRIGUEZ RAUL IVAN	1626 CORNERVIEW LN	ORLANDO	FL	32820	1917
HOUSER DALE G	HOUSER DANIELLE	1626 TECHWOOD CT	ORLANDO	FL	32820	2742
MYERS EVELYN E LIFE ESTATE	REM: JOSEPH LOUIS MYERS	16260 CORNER LAKE DR	ORLANDO	FL	32820	1964
RIOS NEREIDA		16266 CORNER LAKE DR	ORLANDO	FL	32820	1964
CALLEJA STEPHANIE		1627 CORNER MEADOW CIR	ORLANDO	FL	32820	1942
GUTIERREZ WILMA		16272 CORNER LAKE DR	ORLANDO	FL	32820	1964
GRUNDORF CHRISTOPHER JASON	GRUNDORF MARCIA L	1628 CANDELA CT	ORLANDO	FL	32820	2743
GILL MICHAEL E	GILL REAGAN M	1631 SIERRA RIDGE DR	ORLANDO	FL	32820	2737
COLON LOURDES	VEGA ANGEL LUIS HERNANDEZ	1632 CORNER MEADOW CIR	ORLANDO	FL	32820	1943
HERNANDEZ ARMANDO	HERNANDEZ CARA S	1632 CORNERVIEW LN	ORLANDO	FL	32820	1917
GERGES BISHOP BOUTROS A	GERGES RUTH	1633 CORNER MEADOW CIR	ORLANDO	FL	32820	1942
KASSIM ASHRAPH A	KASSIM AIXA	16332 CORNER LAKE DR	ORLANDO	FL	32820	1962
KRET MICHAEL J	KRET MARYELLEN	16357 CORNER LAKE DR	ORLANDO	FL	32820	1961
JUAREZ DEILY		16369 CORNER LAKE DR	ORLANDO	FL	32820	1961
SOLER JASON A	SOLER ALICE D	16375 CORNER LAKE DR	ORLANDO	FL	32820	1961
AGRONT ALLSIBETH		1638 CORNER MEADOW CIR	ORLANDO	FL	32820	1943
SAINT PHORIN CHEVELINE	MEDARD NIKESHA R	1638 CORNERVIEW LN	ORLANDO	FL	32820	1917
MARTINOV TIM	MARTINOV LYUDMILA	1639 CORNER MEADOW CIR	ORLANDO	FL	32820	1942
HARDY MIQUILINA ADRIANNE		1640 CANDELA CT	ORLANDO	FL	32820	2743
SHEN EDWARD	SHEN WAN-LING	16418 BRISTOL LAKE CIR	ORLANDO	FL	32828	6958
BROOKSHIRE AUSTIN E	BROOKSHIRE SUZANNE P	1643 SIERRA RIDGE DR	ORLANDO	FL	32820	2737
ESPOSITO ANGELICA		16435 CORNER LAKE DR	ORLANDO	FL	32820	1959
WASSER CYNTHIA A		1644 CORNERVIEW LN	ORLANDO	FL	32820	1917
PHAM THANH	NGUYEN THU	16441 CORNER LAKE DR	ORLANDO	FL	32820	1959
PIERSON BRYCE	PIERSON JORDAN	16447 CORNER LAKE DR	ORLANDO	FL	32820	1959
MERCADO ORTIZ BRUNO	MERCADO MYRNA	1645 CORNER MEADOW CIR	ORLANDO	FL	32820	1942
TORRES JOSE G	TORRES EMILIE	16453 CORNER LAKE DR	ORLANDO	FL	32820	1959
MOSES NIGEL		16459 CORNER LAKE DR	ORLANDO	FL	32820	1959
BALL JOSHUA	BALL KATHRYN	16464 CORNER LAKE DR	ORLANDO	FL	32820	1960
TRAN DIEPCHI	TRAN DONALD H	1647 CANDELA CT	ORLANDO	FL	32820	2743
BADILLES DULCE M		16470 CORNER LAKE DR	ORLANDO	FL	32820	1960
PENAGOS LINA M	PEREZ DAMIEN	16471 CORNER LAKE DR	ORLANDO	FL	32820	1959
CONTRERAS NELLY EVELYN		16476 CORNER LAKE DR	ORLANDO	FL	32820	1960
CHAMBLESS SUMAYA	CHAMBLESS KENNETH SCOTT	16477 CORNER LAKE DR	ORLANDO	FL	32820	1959
RIZKALLA HANY MANSOUR LIFE ESTATE	ZAKY EMAN SAAD HAKIM LIFE ESTATE	16482 CORNER LAKE DR	ORLANDO	FL	32820	1960
NOEL DARNELL A		16483 CORNER LAKE DR	ORLANDO	FL	32820	1959
SEVENER JAMES DANIEL LIFE ESTATE	SEVENER ALYSSA JOY LIFE ESTATE	1649 SIERRA RIDGE DR	ORLANDO	FL	32820	2737
REED THOMAS		1650 CORNER MEADOW CIR	ORLANDO	FL	32820	1943
REED DAVID W	REED MICHELE M	1652 CANDELA CT	ORLANDO	FL	32820	2743
SOTO VICTOR	SOTO ELIZABETH	1653 CANDELA CT	ORLANDO	FL	32820	2743
FAROUDI MARK RAYMOND		16531 CORNER LAKE DR	ORLANDO	FL	32820	1957
SHI RU		16548 CORNER LAKE DR	ORLANDO	FL	32820	1958
ROTH MICHAEL J	ROTH CONNIE J	16549 CORNER LAKE DR	ORLANDO	FL	32820	1957
CAO WEIRONG LIFE ESTATE	RU CHUYUN LIFE ESTATE	16555 CORNER LAKE DR	ORLANDO	FL	32820	1957
JENNINGS CHARLES L	JENNINGS CHRISTINE M	1656 CORNERVIEW LN	ORLANDO	FL	32820	1917
FALCON RODRIGUEZ DAVID		16566 CORNER LAKE DR	ORLANDO	FL	32820	1958
ALVAREZ ANGEL L	ALVAREZ CARIDAD	16567 CORNER LAKE DR	ORLANDO	FL	32820	1957
SOLATE REVELATION YOMI	ATUESTA ANGELA ESTELLA	1657 CORNER MEADOW CIR	ORLANDO	FL	32820	1942
PATRICK ASHLEY	PATRICK MICHAEL A JR	1657 CORNERVIEW LN	ORLANDO	FL	32820	1919
MAYFIELD RYAN	NORRIS SARAH	16572 CORNER LAKE DR	ORLANDO	FL	32820	1958
ROBLES JOHNNY	RIVERA DELIA ENID	16573 CORNER LAKE DR	ORLANDO	FL	32820	1957
RODRIGUEZ JACQUELINE		16578 CORNER LAKE DR	ORLANDO	FL	32820	1958
BARAHONA ROY E	BARAHONA LAURA	16579 CORNER LAKE DR	ORLANDO	FL	32820	1957
GUTIERREZ JOSE M	GUTIERREZ HELENE	1658 CANDELA CT	ORLANDO	FL	32820	2743
MASTLEY PHILIP PATRICK		16584 CORNER LAKE DR	ORLANDO	FL	32820	1958
FONSECA-ROSARIO FELICIA	FONSECA-ROSARIO ZORIMAR	16585 CORNER LAKE DR	ORLANDO	FL	32820	1957
BITNER ANDREW	BITNER LISA	1659 CANDELA CT	ORLANDO	FL	32820	2743
FORRER DONALD A II	FORRER ZILA M	16597 CORNER LAKE DR	ORLANDO	FL	32820	1957
SCHIRO ROLAN		16603 CORNER LAKE DR	ORLANDO	FL	32820	1927
BARAHONA ALDO R		16614 CORNER LAKE DR	ORLANDO	FL	32820	1928
KOUKOURAS JOHN	KOUKOURAS CARA	16615 CORNER LAKE DR	ORLANDO	FL	32820	1927
WILLIAMS DAWN D		1662 CORNERVIEW LN	ORLANDO	FL	32820	1917
STRICKLAND CYBIL DIONNE	MUNOZ JAY	16620 CORNER LAKE DR	ORLANDO	FL	32820	1928
SCHIFTER GEORGE S	SCHIFTER MARILYN	16621 CORNER LAKE DR	ORLANDO	FL	32820	1927
SHAW MANEEKA	SHAW SARAH	16626 CORNER LAKE DR	ORLANDO	FL	32820	1928
ROSSELLO-ROSADO JOSE L	LLERA-VENTURA IBIS NOELIA	16627 CORNER LAKE DR	ORLANDO	FL	32820	1927
SCHNECK RICHARD	SCHNECK JACQUELYNE	1663 CORNER MEADOW CIR	ORLANDO	FL	32820	1942
SUAREZ LOPEZ EDWIN	NIETO JACQUELINE	1663 CORNERVIEW LN	ORLANDO	FL	32820	1919
ANGELL MICHAEL E	APPLEGATE SARAH K	16632 CORNER LAKE DR	ORLANDO	FL	32820	1928
EL KSIBI RIADH	SAAD AICHA BEN	16633 CORNER LAKE DR	ORLANDO	FL	32820	1927
SELLAS GUARIONEX	SALAZAR CLAUDIA J	16638 CORNER LAKE DR	ORLANDO	FL	32820	1928
RIVERA BETSY	RIVERA WALDO	16639 CORNER LAKE DR	ORLANDO	FL	32820	1927
PEREZ GILBERTO		16644 CORNER LAKE DR	ORLANDO	FL	32820	1928
LOPEZ JOSE LUIS	LOPEZ ALICIA B	16645 CORNER LAKE DR	ORLANDO	FL	32820	1927
SPEARS ANDREA		1665 CANDELA CT	ORLANDO	FL	32820	2743
ISREE JASON	ISREE YONETTE	16650 CORNER LAKE DR	ORLANDO	FL	32820	1928
HANA MARK	FARAG PETER	16657 CORNER LAKE DR	ORLANDO	FL	32820	1927
AGUILAR DESIDERIO LUIS	MASTRAPA IVETH	16662 CORNER LAKE DR	ORLANDO	FL	32820	1928
HOAYUN VIRGINIA	HOAYUN JOHN	16663 CORNER LAKE DR	ORLANDO	FL	32820	1927
BETANCOURT LEAH M		16669 CORNER LAKE DR	ORLANDO	FL	32820	1927
MOHAMMED SAAD		16674 CORNER LAKE DR	ORLANDO	FL	32820	1928
POPOVICH ARTHUR T		16675 CORNER LAKE DR	ORLANDO	FL	32820	1927
BURGOS RONNEY		1668 CORNERVIEW LN	ORLANDO	FL	32820	1917
LOPEZ RODOLFO		16680 CORNER COVE WAY	ORLANDO	FL	32820	1921
QUINTANA WANDA	POE JAZMINE	16681 CORNER COVE WAY	ORLANDO	FL	32820	1922
MURRELL YVETTE V	HOWARD TYRONE C	16681 CORNER LAKE DR	ORLANDO	FL	32820	1927

GUEVARA FELIX ALBERTO LIFE ESTATE	GUEVARA MARTHA LILA LIFE ESTATE	16687 CORNER COVE WAY	ORLANDO	FL	32820	1922
JOHNELL CHRISTOPHER	JOHNELL DIANE M	1671 CANDELA CT	ORLANDO	FL	32820	2743
DOMINGUEZ LISTER ERNESTO	DOMINGUEZ KAREN J	16713 CORNER LAKE DR	ORLANDO	FL	32820	1930
DAVIS KRISTIN L		16719 CORNER LAKE DR	ORLANDO	FL	32820	1930
MARINEZ GILDA A	MARINEZ LARRY J	16725 CORNER LAKE DR	ORLANDO	FL	32820	1930
CHAPLIN SARAH		16731 CORNER LAKE DR	ORLANDO	FL	32820	1930
TELLO RODNEY		16737 CORNER LAKE DR	ORLANDO	FL	32820	1930
ALAMO ROSA JOSE ANGEL		16749 CORNER LAKE DR	ORLANDO	FL	32820	1930
REZEK BISHOY	HANNA BARBARA H	1675 PEACE LILY WAY	OVIEDO	FL	32765	2016
BRADY STEFAN E	BRADY KATHY L	16755 CORNER LAKE DR	ORLANDO	FL	32820	1930
NEMITZ PHILIP D	NEMITZ LAMUL	16761 CORNER LAKE DR	ORLANDO	FL	32820	1930
MAGPRI SFR FL LLC		16773 CORNER LAKE DR	ORLANDO	FL	32820	1930
CHIASSON ALFRED R JR		16809 CORNER LAKE DR	ORLANDO	FL	32820	1930
HENFIELD SHEMICO		16814 CORNERWOOD DR	ORLANDO	FL	32820	1900
BACA CHRISTOPHER	BACA CATHERINE	16815 CORNER LAKE DR	ORLANDO	FL	32820	1930
RUTIGLIANO ANTHONY		16821 CORNER LAKE DR	ORLANDO	FL	32820	1930
CHACHOUTE LOURDIE	CHACHOUTE WESLY	16838 CORNERWOOD DR	ORLANDO	FL	32820	1900
SANCHEZ ZAYAS DEWELL LUIS	GONZALEZ SANCHEZ LAURA ANERIS	16850 CORNERWOOD DR	ORLANDO	FL	32820	1900
CAPPS CLAIRE E		16851 CORNERWOOD DR	ORLANDO	FL	32820	1913
ILIEVA ELENA DINEVA MINEVA	ILIEV NIKOLAY H	16856 CORNERWOOD DR	ORLANDO	FL	32820	1900
DIXON ANTHONY		16862 CORNERWOOD DR	ORLANDO	FL	32820	1900
MARTINEZ JOSE R	LOPEZ-MARTINEZ NELIDA M	16868 CORNERWOOD DR	ORLANDO	FL	32820	1900
REYES JORGE R	REYES LETICIA M	16906 CORNER HILL CT	ORLANDO	FL	32820	1925
LARIVERA GONZALO F	LARIVERA ANGELA	16906 CORNERWOOD DR	ORLANDO	FL	32820	1900
CARNEGIE BRENDA LIFE ESTATE	CARNEGIE THOMAS ANDREW LIFE ESTATE 5	16909 CORNER BAY CT	ORLANDO	FL	32820	1936
LEE NATHAN A	LEE AMY M	16912 CORNERWOOD DR	ORLANDO	FL	32820	1900
PACHECO ISRAEL L	PACHECO JANNISSE Y	16913 CORNER HILL CT	ORLANDO	FL	32820	1925
RUSHING HANNAH	RUSHING STEPHEN VICTOR	16915 CORNER BAY CT	ORLANDO	FL	32820	1936
FRANQUI NELSON IVAN JR	PEREZ FRANQUI STEPHANIE	16918 CORNERWOOD DR	ORLANDO	FL	32820	1900
QUINONES RICHARD A		16919 CORNERWOOD DR	ORLANDO	FL	32820	1913
YOUNG EDMOND		16921 CORNER BAY CT	ORLANDO	FL	32820	1936
ZHENG JUN CHAN		16924 CORNER HILL CT	ORLANDO	FL	32820	1925
SULLIVAN ADRIAN LIFE ESTATE	SULLIVAN JENNIFER R LIFE ESTATE	16924 CORNERWOOD DR	ORLANDO	FL	32820	1900
EDGECOMBE PRIMO	EDGECOMBE CARMEN	16927 CORNER BAY CT	ORLANDO	FL	32820	1936
NORMAN TETIANA		16930 CORNER HILL CT	ORLANDO	FL	32820	1925
GRAVIER MICHAEL R	GRAVIER SOPHIE J	16930 CORNERWOOD DR	ORLANDO	FL	32820	1900
ORTEGA LUISA		16932 CORNER BAY CT	ORLANDO	FL	32820	1936
PELT LATONYA KATRICE		16933 CORNER BAY CT	ORLANDO	FL	32820	1936
MARTINEZ EDNA GISELLA	NAVARRO RAFAEL EDUARDO	16936 CORNERWOOD DR	ORLANDO	FL	32820	1900
MOHAMMED JOANNE	MOHAMMED AZAD RAZAI	16937 CORNER HILL CT	ORLANDO	FL	32820	1925
PAUL DEBORAH L		16937 CORNERWOOD DR	ORLANDO	FL	32820	1913
RAMOS BRENDA L	GALYON RODNEY	16938 CORNER BAY CT	ORLANDO	FL	32820	1936
DEWDAT COEINDRA P LIFE ESTATE	DEWDAT DEOWATTI LIFE ESTATE	16942 CORNER HILL CT	ORLANDO	FL	32820	1925
ZIRI HOUSING AND DEVELOPMENT CORP		16942 CORNERWOOD DR	ORLANDO	FL	32820	1900
MAHMOOD MOHAMED F	SINGH MALA	16943 CORNER HILL CT	ORLANDO	FL	32820	1925
DIREUS JEAN		16944 CORNER BAY CT	ORLANDO	FL	32820	1936
DEWDAT GOVINDA P	DEWDAT ASHMINEE	16948 CORNER HILL CT	ORLANDO	FL	32820	1925
CABRERA EDGARDO		16949 CORNER HILL CT	ORLANDO	FL	32820	1925
LOPEZ ARLENE		16949 CORNERWOOD DR	ORLANDO	FL	32820	1913
GRUBBS MILFORD C	GRUBBS BONNIE J	16954 CORNER HILL CT	ORLANDO	FL	32820	1925
ROMAN MARILYN		16954 CORNERWOOD DR	ORLANDO	FL	32820	1900
LINDLEY KEVIN R	LINDLEY CHRISTAL R	16955 CORNER HILL CT	ORLANDO	FL	32820	1925
DARBY DONALD MITCH	DARBY JAIME M	16955 CORNERWOOD DR	ORLANDO	FL	32820	1913
HARRIPERSAUD PREM	HARRIPERSAUD RAUANI	16960 CORNERWOOD DR	ORLANDO	FL	32820	1900
CAEZ JOSE MIGUEL	ACEVEDO MARIA LOUISA	16961 CORNERWOOD DR	ORLANDO	FL	32820	1913
FRIEND ROBERT L	FRIEND CAROLYN D	16966 CORNERWOOD DR	ORLANDO	FL	32820	1900
HERNANDEZ ADRIANA		16967 CORNERWOOD DR	ORLANDO	FL	32820	1913
GREEN EAST COLONIAL DRIVE LLC		16969 E COLONIAL DR	ORLANDO	FL	32820	1912
HALE MICHAEL L SR	HALE MICHELLE L	16972 CORNERWOOD DR	ORLANDO	FL	32820	1900
BIRDSONG TAMMY SUE		16973 CORNERWOOD DR	ORLANDO	FL	32820	1913
VANDENBELT DAVID	VANDENBELT CAROL A	16978 CORNERWOOD DR	ORLANDO	FL	32820	1900
PATTERSON SEAN A	PATTERSON NICOLE P	16979 CORNERWOOD DR	ORLANDO	FL	32820	1913
EXIL-MERA MILIENE		16984 CORNERWOOD DR	ORLANDO	FL	32820	1900
SHEPPARD STEPHEN	SHEPPARD GLENDA	16985 CORNERWOOD DR	ORLANDO	FL	32820	1913
LEE ROBERT E	LEE CRISTINA	16990 CORNERWOOD DR	ORLANDO	FL	32820	1900
HOLDER LATONYA		16991 CORNERWOOD DR	ORLANDO	FL	32820	1913
KABOT DAVID M	KABOT ROISIN	1700 OAK GROVE CHASE DR	ORLANDO	FL	32820	2255
ESCOBAR RAY	ESCOBAR JAIME	17000 BAY POINTE DR	ORLANDO	FL	32820	2784
MOHAMMED LATISHANAR		17000 OAK GROVE HILL CT	ORLANDO	FL	32820	2261
HOP JILLIAN		17001 BAY POINTE DR	ORLANDO	FL	32820	2784
DANIEL RONALD E	DANIEL JERI R	17001 OAK GROVE HILL CT	ORLANDO	FL	32820	2261
GONZALEZ JORGE A LEIVA	DONEFF KATHERINE	17003 CPYRESS PRESERVE PKWY	ORLANDO	FL	32820	2765
KATEKARI SANTOSH	KATEKARI SHUBHADA	17005 SAVANNAH SPRINGS LN	ORLANDO	FL	32820	2783
HUDSON REVOCABLE TRUST		17006 BAY POINTE DR	ORLANDO	FL	32820	2784
LARSON JEFFREY J	LARSON STACY L	17006 OAK GROVE HILL CT	ORLANDO	FL	32820	2261
FLYNN THOMAS	MONSANTO PAT	17007 BAY POINTE DR	ORLANDO	FL	32820	2784
MILLER CORY L	MILLER RAQUEL	17007 OAK GROVE HILL CT	ORLANDO	FL	32820	2261
DELA CRUZ LENILITO E LIFE ESTATE	DELA CRUZ DEIRDRE L LIFE ESTATE	17008 CYPRESS PRESERVE PKWY	ORLANDO	FL	32820	2764
YARNALL REBECCA LYNN	YARNALL SHANE D	17009 CYPRESS PRESERVE PKWY	ORLANDO	FL	32820	2765
CARLO LUIS A	CARLO ELSA C	17010 SAVANNAH SPRINGS LN	ORLANDO	FL	32820	2783
ROBINSON WILLIE JAMES	ROBINSON TERRY SHERRELL	17011 SAVANNAH SPRINGS LN	ORLANDO	FL	32820	2783
PHAM HUEY DOUGLAS	NGUYEN TRA L	17012 BAY POINTE DR	ORLANDO	FL	32820	2784
MOORE FRED A	MOORE CHERYL K	17012 OAK GROVE HILL CT	ORLANDO	FL	32820	2261
PRUSS JASON M	DEAN-PRUSS REBECCA	17013 BAY POINTE DR	ORLANDO	FL	32820	2784
BOVEE RANDY	BOVEE NIKOLE	17013 OAK GROVE HILL CT	ORLANDO	FL	32820	2261
TRAVIS PHILLIP A	TRAVIS CYNTHIA D	17014 CYPRESS PRESERVE PKWY	ORLANDO	FL	32820	2764
PARKER TRACY A	PARKER STEPHEN T	17015 CYPRESS PRESERVE PKWY	ORLANDO	FL	32820	2765
ROARK JAMES A JR	ROARK JANET A	17016 SAVANNAH SPRINGS LN	ORLANDO	FL	32820	2783
RODRIGUEZ EDWIN	RODRIGUEZ MILANIE	17017 SAVANNAH SPRINGS LN	ORLANDO	FL	32820	2783
REYENGA JOHN W	REYENGA STEPHANIE M	17018 OAK GROVE HILL CT	ORLANDO	FL	32820	2261
ROSARIO MILDRED		17019 OAK GROVE HILL CT	ORLANDO	FL	32820	2261
PFITZINGER KEVIN MICHAEL	PFITZINGER KATHERINE ANNE	17020 CYPRESS PRESERVE PKWY	ORLANDO	FL	32820	2764
HABEEB RICHARD	HABEEB MARGARITA DEOLINDA	17022 SAVANNAH SPRINGS LN	ORLANDO	FL	32820	2783
COOK JOHN	COOK CAROL	17023 SAVANNAH SPRINGS LN	ORLANDO	FL	32820	2783
ST URBAIN MAGALLY		17025 OAK GROVE HILL CT	ORLANDO	FL	32820	2261
JEAN PIERRE FABIENNE	SUFFRIN ETIENNE PAUL	17026 CYPRESS PRESERVE PKWY	ORLANDO	FL	32820	2764
ALBAN ANGEL V		17028 SAVANNAH SPRINGS LN	ORLANDO	FL	32820	2783
LAVORO PETER J	LAVORO SONJA	17029 SAVANNAH SPRINGS LN	ORLANDO	FL	32820	2783
LAWARRE BRAD A	LAWARRE SHARON D	17031 OAK GROVE HILL CT	ORLANDO	FL	32820	2261

LUZURIAGA YANDRY	ZAGUMA DIANA MARITZA OCAMPO	17032 CYPRESS PRESERVE PKWY	ORLANDO	FL	32820	2764
JENKINS ROBERT LEE JR	JENKINS BETTY LYNN	17034 SAVANNAH SPRINGS LN	ORLANDO	FL	32820	2783
GREEN CHARLENE		17035 SAVANNAH SPRINGS LN	ORLANDO	FL	32820	2783
ESTES RONALD L JR	ESTES ERIKA M	17037 OAK GROVE HILL CT	ORLANDO	FL	32820	2261
DIAZ CARLOS E	DIAZ TERESA M	17038 CYPRESS PRESERVE PKWY	ORLANDO	FL	32820	2764
POCIUS WILLIAM EDWARD	POCIUS ELIZABETH A SMITH	17043 OAK GROVE HILL CT	ORLANDO	FL	32820	2261
CHOPRA SAPAN	CHOPRA RITU	17044 CYPRESS PRESERVE PKWY	ORLANDO	FL	32820	2764
MARGAITIS RICHARD JAMES	MARGAITIS ASHWINI KOTHEKAR	17045 CYPRESS PRESERVE PKWY	ORLANDO	FL	32820	2766
SOLA JOSE R		17050 CYPRESS PRESERVE PKWY	ORLANDO	FL	32820	2764
LOPEZ CESARINA A		17056 CYPRESS PRESERVE PKWY	ORLANDO	FL	32820	2764
PERDOMO APOLINAR	PERDOMO GISELLE	1706 CORNERVIEW LN	ORLANDO	FL	32820	1917
OVERTON CARL M JR	OVERTON KATHY A	1706 OAK GROVE CHASE DR	ORLANDO	FL	32820	2255
RAMOS DOMINGO	ROMAN VANESSA I	1707 OAK GROVE CHASE DR	ORLANDO	FL	32820	2258
HAUSLER JUSTIN		17102 ARBOR WOODS CT	ORLANDO	FL	32820	2252
SHIVGOBIN RADHIKA		17103 ARBOR WOODS CT	ORLANDO	FL	32820	2252
NUNEZ FELICIANO JR	NUNEZ ALICIA	17104 CYPRESS PRESERVE PKWY	ORLANDO	FL	32820	2758
BULLARD PORNPEN P		17108 ARBOR WOODS CT	ORLANDO	FL	32820	2252
DUCKWORTH JAMES B LIFE ESTATE	DUCKWORTH MARY V LIFE ESTATE	17109 ARBOR WOODS CT	ORLANDO	FL	32820	2252
SETHI JAGTAR S	SETHI ALKA	17110 CYPRESS PRESERVE PKWY	ORLANDO	FL	32820	2758
RIVERA ALEX	RIVERA SHEILA	17114 ARBOR WOODS CT	ORLANDO	FL	32820	2252
BROOKS CHARLES C JR		17115 ARBOR WOODS CT	ORLANDO	FL	32820	2252
GARCES IBARRA		17116 CYPRESS PRESERVE PKWY	ORLANDO	FL	32820	2762
CRAGG THOMAS A	CRAGG CHRISTINE N	1712 CORNERVIEW LN	ORLANDO	FL	32820	1917
BOARD SHERMAN	BOARD CASSANDRA	1712 OAK GROVE CHASE DR	ORLANDO	FL	32820	2255
COLON VICTOR M	COLON MYRNA	17120 ARBOR WOODS CT	ORLANDO	FL	32820	2252
NGUYEN KRISTIE		17122 CYPRESS PRESERVE PKWY	ORLANDO	FL	32820	2762
PLESSY DANNY S		17123 CYPRESS PRESERVE PKWY	ORLANDO	FL	32820	2763
ALBORES SHEILA E		17126 ARBOR WOODS CT	ORLANDO	FL	32820	2252
FLOOD JOHN REDMOND JR	FLOOD NAFHE	17128 CYPRESS PRESERVE PKWY	ORLANDO	FL	32820	2762
ROSS LORI NAZRY	ROSS JAMAAL LEVOR	17129 CYPRESS PRESERVE PKWY	ORLANDO	FL	32820	2763
AYALA FIDEL JR	AYALA MARY	1713 OAK GROVE CHASE DR	ORLANDO	FL	32820	2258
BLANC CARLINE	BLANC FRITZ	17132 ARBOR WOODS CT	ORLANDO	FL	32820	2252
CADET KIANGA P JENKINS	CADET TIGE	17134 CYPRESS PRESERVE PKWY	ORLANDO	FL	32820	2762
CHO YOUNG AE		17135 CYPRESS PRESERVE PKWY	ORLANDO	FL	32820	2763
VANEK BRETT	VANEK ANNA	17141 CYPRESS PRESERVE PKWY	ORLANDO	FL	32820	2763
THRASHER JANE MARIE LIFE ESTATE	REM: JANE MARIE THRASHER LIVING TRUST	17146 CYPRESS PRESERVE PKWY	ORLANDO	FL	32820	2762
MORALES REINALDO	PENA IVONNE	17147 CYPRESS PRESERVE PKWY	ORLANDO	FL	32820	2763
LOPEZ ARMANDO	LOPEZ MILDRED	17152 CYPRESS PRESERVE PKWY	ORLANDO	FL	32820	2762
ELASRI MOSTAFA	ELASRI NADIRA	17153 CYPRESS PRESERVE PKWY	ORLANDO	FL	32820	2763
ARGAEZ NOEL	ACHILLE-ARGAEZ MARIALYN	17154 LONG BOAT LN	ORLANDO	FL	32820	2701
NORDEEN ROSS	NORDEEN LISA	17155 LONG BOAT LN	ORLANDO	FL	32820	2702
WITTHOLT GLADYS E	WITTHOLT GUNTER	17158 CYPRESS PRESERVE PKWY	ORLANDO	FL	32820	2762
MILLER KATHLEEN C		17160 LONG BOAT LN	ORLANDO	FL	32820	2701
CANTY RONALD BRIAN	CANTY SUSAN RENE	17161 LONG BOAT LN	ORLANDO	FL	32820	2702
HARTWELL ERIC E	HARTWELL DEBORAH N	17167 LONG BOAT LN	ORLANDO	FL	32820	2702
SFR JAVELIN BORROWER L P		1717 MAIN ST STE 2000	DALLAS	TX	75201	4657
IDDINGS NICHOLAS	IDDINGS KRISTEN	1718 CORNERVIEW LN	ORLANDO	FL	32820	1917
OQUENDO HECTOR OMAR	PONTON MADELINE	1718 OAK GROVE CHASE DR	ORLANDO	FL	32820	2255
MORGAN JAY	MORGAN ARIANNE	1719 CORNER MEADOW CIR	ORLANDO	FL	32820	1940
NOLASCO JOSE F		1719 CORNERVIEW LN	ORLANDO	FL	32820	1920
MILLER ADRIENNE L	MILLER JEFFERY A	17200 CYPRESS PRESERVE PKWY	ORLANDO	FL	32820	2759
WHEELER SANDRA	WILLIAMS LANA	17204 DEER RUN DR	ORLANDO	FL	32820	2253
MARIN VICTOR SR	MARIN VICTOR JR	17205 DEER RUN DR	ORLANDO	FL	32820	2254
LYONS JOHN W LIFE ESTATE	LYONS DONATILA P LIFE ESTATE	17206 CYPRESS PRESERVE PKWY	ORLANDO	FL	32820	2759
EADS MICHAEL	EADS CHRISTINE S	17208 LONG BOAT LN	ORLANDO	FL	32820	2701
DISERAFINO ANTHONY LIFE ESTATE	DISERAFINO ZOILA LIFE ESTATE	17209 LONG BOAT LN	ORLANDO	FL	32820	2702
KLEIN VITOR SERGIO		17210 DEER RUN DR	ORLANDO	FL	32820	2253
SHRIVER CARRIE F		17211 DEER RUN DR	ORLANDO	FL	32820	2254
GIANNOTTI CARMEN O		17212 CYPRESS PRESERVE PKWY	ORLANDO	FL	32820	2759
MELENDEZ-ROSARIO JOSE E	MELENDEZ YOLANDA	17214 LONG BOAT LN	ORLANDO	FL	32820	2701
MARTORANA KEITH W	MARTORANA JULIE A	17216 DEER RUN DR	ORLANDO	FL	32820	2253
VELAZQUEZ WILFREDO	VELAZQUEZ CRUZ I	17217 DEER RUN DR	ORLANDO	FL	32820	2254
ECHOLS JASON D	ECHOLS CHRISTINE L	17218 CYPRESS PRESERVE PKWY	ORLANDO	FL	32820	2759
RIVERA RAFAEL	RIVERA JOAN F	17222 DEER RUN DR	ORLANDO	FL	32820	2253
VAUGHN JED	VAUGHN MARCI	17223 DEER RUN DR	ORLANDO	FL	32820	2254
NATIVIDAD VIRGILIO C	PERRIN GEORGE III	17224 CYPRESS PRESERVE PKWY	ORLANDO	FL	32820	2759
CARLO ENID	TOLEDO HIRAM	17225 CYPRESS PRESERVE PKWY	ORLANDO	FL	32820	2761
KRUESEL JEROME A JR	KRUESEL SARAH M	17228 DEER RUN DR	ORLANDO	FL	32820	2253
BEAZLEY MELANIE		17229 DEER RUN DR	ORLANDO	FL	32820	2254
BORGES IBEM R	OTERO WANDA I	17230 CYPRESS PRESERVE PKWY	ORLANDO	FL	32820	2759
WIST JIMMIE	WIST LEE A	17231 CYPRESS PRESERVE PKWY	ORLANDO	FL	32820	2761
LECAROS VANESSA	LOPEZ ERICK J	17235 DEER RUN DR	ORLANDO	FL	32820	2254
LALOO RAVI	LALOO SHAMEEZA HAMID	17237 CYPRESS PRESERVE PKWY	ORLANDO	FL	32820	2761
GRISSOM JAMES S	GRISSOM BRANDI S	1724 CORNER MEADOW CIR	ORLANDO	FL	32820	1941
HEDRICK RUSTY L	HEDRICK JESSICA L	1724 CORNERVIEW LN	ORLANDO	FL	32820	1917
TORRES ROGER J	TORRES ALMA I	1724 OAK GROVE CHASE DR	ORLANDO	FL	32820	2255
ORTIZ JOSE R	DIAZ ELIZABETH	17240 DEER RUN DR	ORLANDO	FL	32820	2253
COLLINS PETER D		17241 DEER RUN DR	ORLANDO	FL	32820	2254
FOX MICHAEL EUGENE	FOX ANITA DENEEN	17243 CYPRESS PRESERVE PKWY	ORLANDO	FL	32820	2761
DE LEON INGRID	DE ZAYAS GABRIEL	17246 DEER RUN DR	ORLANDO	FL	32820	2253
WAJDA MICHAEL J	WAJDA SIRIA O	17247 DEER RUN DR	ORLANDO	FL	32820	2254
ELLIS JEFFERY D		17249 CYPRESS PRESERVE PKWY	ORLANDO	FL	32820	2761
COLLAZO IDA L		1725 CORNER MEADOW CIR	ORLANDO	FL	32820	1940
RIVERA MARTINEZ PAULO CESAR	MARTINEZ MARIA VICENTA	1725 CORNERVIEW LN	ORLANDO	FL	32820	1920
BIGLER BEVAN L	BIGLER NAOMI R	17254 CYPRESS PRESERVE PKWY	ORLANDO	FL	32820	2760
MCNEIL KELVIN E		17258 DEER RUN DR	ORLANDO	FL	32820	2253
CEDENO CRISTHIAN A		17276 DEER RUN DR	ORLANDO	FL	32820	2253
HAUGHT TAMSEN T		17283 DEER RUN DR	ORLANDO	FL	32820	2254
PENA COTTO WESLEY		17288 DEER RUN DR	ORLANDO	FL	32820	2253
RIVERA JAYSON S		17294 DEER RUN DR	ORLANDO	FL	32820	2253
ARTHUZO JOSE ORLANDO	ARTHUZO ROSELI	17295 DEER RUN DR	ORLANDO	FL	32820	2254
FUENTES ROBERTO LIFE ESTATE	REM: ROBERTO FUENTES	1730 CORNERVIEW LN	ORLANDO	FL	32820	1917
STEINER MATTHEW	STEINER DANIELLE	17300 DEER RUN DR	ORLANDO	FL	32820	2253
TOMLINSON MARK W	TOMLINSON KEIWA K	17302 CYPRESS PRESERVE PKWY	ORLANDO	FL	32820	2756
HYMAN BARRY A	HYMAN AMANDA L	17306 DEER RUN DR	ORLANDO	FL	32820	2253
HAYES JOHN	HAYES DORINA	17308 CYPRESS PRESERVE PKWY	ORLANDO	FL	32820	2756
MERINO RHINA	POWELL RICHARD	1731 CORNERVIEW LN	ORLANDO	FL	32820	1920
PEREZ ESTANISLAO	PEREZ ARACELIS	17314 CYPRESS PRESERVE PKWY	ORLANDO	FL	32820	2756
ELKASIMI KARIM	TJON-KET-TJONG DENISE S	17320 CYPRESS PRESERVE PKWY	ORLANDO	FL	32820	2756

KING DONALD LUCAS		17321 CYPRESS PRESERVE PKWY	ORLANDO	FL	32820	2757
OLEEN CHRISTOPHER P		17326 CYPRESS PRESERVE PKWY	ORLANDO	FL	32820	2756
CLARK ROBERT C	CLARK DANA J	17327 CYPRESS PRESERVE PKWY	ORLANDO	FL	32820	2757
ARISTEGUI MATIAS	ARISTEGUI CHRISTINE	17332 CYPRESS PRESERVE PKWY	ORLANDO	FL	32820	2756
TRAN UYEN		17333 CYPRESS PRESERVE PKWY	ORLANDO	FL	32820	2757
WORDEN ALASTAIR J	WORDEN SUZETTE M	17338 CYPRESS PRESERVE PKWY	ORLANDO	FL	32820	2756
FERNANDES PAULO F		17339 CYPRESS PRESERVE PKWY	ORLANDO	FL	32820	2757
STOKES TIFFANY L	STOKES CHRISMON Q	17351 CYPRESS PRESERVE PKWY	ORLANDO	FL	32820	2757
MITCHELL BRANDEN		17356 CYPRESS PRESERVE PKWY	ORLANDO	FL	32820	2756
MITCHELL CHAD R	MITCHELL MAGGIN LYNN	17357 CYPRESS PRESERVE PKWY	ORLANDO	FL	32820	2757
SANTIAGO ALTAGRACIA	VILLACIS LUIS N	17362 CYPRESS PRESERVE PKWY	ORLANDO	FL	32820	2756
POPE RUKMIN	POPE DAVID	17363 CYPRESS PRESERVE PKWY	ORLANDO	FL	32820	2757
CALDERON CINDERELLA		17368 CYPRESS PRESERVE PKWY	ORLANDO	FL	32820	2756
LEON CYNTHIA		1737 CORNER MEADOW CIR	ORLANDO	FL	32820	1940
BEECHAM ANTHOINY		1737 CORNERVIEW LN	ORLANDO	FL	32820	1920
PRINCE MARCUS C		17400 BELLA NOVA DR	ORLANDO	FL	32820	1439
WHALING MICHAEL A		17402 CASCADES HILL CT	ORLANDO	FL	32820	2237
ZILKHA PAUL		17403 CASCADES HILL CT	ORLANDO	FL	32820	2237
MANWAH HORACE	MANWAH SABITA	17407 BELLA NOVA DR	ORLANDO	FL	32820	1439
HENRIQUEZ LUANY		17408 BELLA NOVA DR	ORLANDO	FL	32820	1439
LOWE MICHAEL PAUL	LOWE BRITTANY GAYLE	17409 CASCADES HILL CT	ORLANDO	FL	32820	2237
RIVERA CARMEN L		17414 CASCADES HILL CT	ORLANDO	FL	32820	2237
MCCONKEY JOSHUA S	MCCONKEY JENNIFER L	17415 CASCADES HILL CT	ORLANDO	FL	32820	2237
GAINES CURTIS I		1742 CORNER MEADOW CIR	ORLANDO	FL	32820	1941
TAYLOR DEBRA	TAYLOR MORGAN	1742 CORNERVIEW LN	ORLANDO	FL	32820	1917
KABBAJ ANASS		1742 OAK GROVE CHASE DR	ORLANDO	FL	32820	2255
NORMAN ADRIANE IRENE	GONCALVES ROMULO	17420 CASCADES HILL CT	ORLANDO	FL	32820	2237
JEFFREY ETSON BARNEY	JEFFREY CHRISTINA	17421 CASCADES HILL CT	ORLANDO	FL	32820	2237
CHARLTON IAIN	CHARLTON MELISSA A	17426 CASCADES HILL CT	ORLANDO	FL	32820	2237
MALDONADO MARIO N	MALDONADO JULISSA SANCHEZ	1743 CORNER MEADOW CIR	ORLANDO	FL	32820	1940
MUCHACHO ADOLFO A	MUCHACHO CARMEN I	1743 CORNERVIEW LN	ORLANDO	FL	32820	1920
MAM MARY	ORK KONG	1743 OAK GROVE CHASE DR	ORLANDO	FL	32820	2258
WHITMORE NEALIE M	WHITMORE ERIK S	17432 CASCADES HILL CT	ORLANDO	FL	32820	2237
CRAWFORD BERTRAM JAY	CRAWFORD NELDA MARIA	1748 CORNERVIEW LN	ORLANDO	FL	32820	1917
POYSER DONTA	POYSER DANNIELLE	1748 OAK GROVE CHASE DR	ORLANDO	FL	32820	2255
WANG FEI		1749 CORNERVIEW LN	ORLANDO	FL	32820	1920
CARDOZA RANDY	CARDOZA ASTRIC D	17501 OSPRE GLEN DR	ORLANDO	FL	32820	2263
MALDONADO EDGARDO	MALDONADO CLAUDIA	17506 OSPRE GLEN DR	ORLANDO	FL	32820	2262
REID LOYLOLEE		17512 OSPRE GLEN DR	ORLANDO	FL	32820	2262
HULSE MELISSA J	HULSE TODD D	17513 OSPRE GLEN DR	ORLANDO	FL	32820	2263
BEAUDOIN CHRISTINE B	BEAUDOIN JASON M	17518 OSPRE GLEN DR	ORLANDO	FL	32820	2262
SINGH EARANAND	SINGH VEONA	17519 OSPRE GLEN DR	ORLANDO	FL	32820	2263
DELLA ROCCO NICHOLAS		17524 OSPRE GLEN DR	ORLANDO	FL	32820	2262
VECCHIO FRANK		17525 OSPRE GLEN DR	ORLANDO	FL	32820	2263
CRAIG-ANDERSON LAURA		17531 OSPRE GLEN DR	ORLANDO	FL	32820	2263
CHERJOVSKY MARIA F	GUEVARA MARIO ANTONIO	17531 SAILFIN DR	ORLANDO	FL	32820	1464
KAUHANE HENRY T	KAUHANE JACQUELINE O	17537 OSPRE GLEN DR	ORLANDO	FL	32820	2263
PAREL STEPHANIE L	PAREL DANIEL	1754 OAK GROVE CHASE DR	ORLANDO	FL	32820	2255
CHRISTENSON PETER	CHRISTENSON LINDA	17543 OSPRE GLEN DR	ORLANDO	FL	32820	2263
CARVER JUSTIN P		1755 CORNERVIEW LN	ORLANDO	FL	32820	1920
BIGHAM JONATHON		1755 OAK GROVE CHASE DR	ORLANDO	FL	32820	2258
WILLIAMS DARRYL L	WILLIAMS LOURDES	1756 BOAT LAUNCH RD	KISSIMMEE	FL	34746	4551
CANNON ROBERT M JR	CANNON BYRNA R	1760 OAK GROVE CHASE DR	ORLANDO	FL	32820	2255
SMITH HARRY J JR	SMITH DIANA M	17604 WOODFIELD HILL CT	ORLANDO	FL	32820	2264
BROWN OLIVER JR	BROWN ALICE G	17607 COOK FOREST DR	HUMBLE	TX	77346	3989
MCDOWALL RONALD	MCDOWALL RANDOLPH	1761 OAK GROVE CHASE DR	ORLANDO	FL	32820	2258
LORENZO BENITO LIFE ESTATE	LORENZO ANNA M LIFE ESTATE	17610 WOODFIELD HILL CT	ORLANDO	FL	32820	2264
CINTRON IVONNE MARIE MARTIN	ORONA SHIRLEY CINTRON	17611 WOODFIELD HILL CT	ORLANDO	FL	32820	2264
TRUEX ALAN	TRUEX SHANNON	17616 WOODFIELD HILL CT	ORLANDO	FL	32820	2264
WINDMILLER SUSAN R	WINDMILLER SCOTT	17617 WOODFIELD HILL CT	ORLANDO	FL	32820	2264
RAPP WILLIAM SCOTT		17622 WOODFIELD HILL CT	ORLANDO	FL	32820	2264
MANRY CARY J	MANRY JANE-ELLEN	17623 WOODFIELD HILL CT	ORLANDO	FL	32820	2264
ROBERTS JIMMIE D SR	ROBERTS ALLISON L	17628 WOODFIELD HILL CT	ORLANDO	FL	32820	2264
LAMBING TORRANCE J		17629 WOODFIELD HILL CT	ORLANDO	FL	32820	2264
MALDONADO OBED D	MARTIN-CINTRON MARLENE	17634 WOODFIELD HILL CT	ORLANDO	FL	32820	2264
HAWKINS TERRANCE LAVERTT	HAWKINS ARNECIA DEVON	1766 OAK GROVE CHASE DR	ORLANDO	FL	32820	2256
PERNAL ADOLPH F III	PERNAL RASHA HASHEM	1767 OAK GROVE CHASE DR	ORLANDO	FL	32820	2259
HUYNH CHAN BAO		1770 EDWIN BLVD	WINTER PARK	FL	32789	3961
JOHNSON ROBERT W		17700 LILY BLOSSOM LN	ORLANDO	FL	32820	2284
CENYOUR ERIC QUINCY	CENYOUR LISA	17701 LILY BLOSSOM LN	ORLANDO	FL	32820	2283
ALEXANDRU RADU		17702 STERLING POND LN	ORLANDO	FL	32820	2286
BERISWILL MICHAEL M	BERISWILL BARBARA LAURAINE	17703 STERLING POND LN	ORLANDO	FL	32820	2286
GAUTIER FREDDIE		17706 LILY BLOSSOM LN	ORLANDO	FL	32820	2284
AMDITIS PROANO NICOLE	PROANO LUIS ANTONIO	17707 LILY BLOSSOM LN	ORLANDO	FL	32820	2283
TREJOS MARIA		17708 STERLING POND LN	ORLANDO	FL	32820	2286
RICK MARGARET M LIFE ESTATE	REM: MATTHEW MICHAEL RICK	17709 STERLING POND LN	ORLANDO	FL	32820	2286
RAD MEHRY AZARI	CHABOKROW ALIREZA	17712 LILY BLOSSOM LN	ORLANDO	FL	32820	2284
MERCHI FARANAK		17713 LILY BLOSSOM LN	ORLANDO	FL	32820	2283
CRADDOCK WILLIAM LAWRENCE III	CRADDOCK ADRIENNE MARIE	17714 STERLING POND LN	ORLANDO	FL	32820	2286
OLIVA BENJAMIN	OLIVA NATALIA	17715 STERLING POND LN	ORLANDO	FL	32820	2286
KALICKI MARK	PARSONS-KALICKI VALERIE	17716 ASHFORD GRANDE WAY	ORLANDO	FL	32820	2746
SHELOSKE JENNIFER		17718 LILY BLOSSOM LN	ORLANDO	FL	32820	2284
NGUYEN DUNG TAN		17719 LILY BLOSSOM LN	ORLANDO	FL	32820	2283
DAVIS ERIK SCOTT	DAVIS MARSHA DAWN	17720 STERLING POND LN	ORLANDO	FL	32820	2286
SIERRA DANIEL		17721 STERLING POND LN	ORLANDO	FL	32820	2286
AZHAR MISHAH		17722 ASHFORD GRANDE WAY	ORLANDO	FL	32820	2746
BLAND KEVIN		17723 ASHFORD GRANDE WAY	ORLANDO	FL	32820	2745
HUMES LUCINE		17724 AYSHIRE ST	ORLANDO	FL	32820	2717
BOYD EDWARD	BOYD PAMELA F	17725 AYSHIRE ST	ORLANDO	FL	32820	2718
CRUZ OSVALDO	CRUZ SANDRA	17725 LILY BLOSSOM LN	ORLANDO	FL	32820	2283
CARSON TROY ALEXANDER	CARSON LAWANDA MICHELLE	17726 STERLING POND LN	ORLANDO	FL	32820	2286
DICKENSON ZACHARY RYAN	DICKENSON AMY	17728 ASHFORD GRANDE WAY	ORLANDO	FL	32820	2746
DELGADO GEORGE ARNALDO SR	PEREZ ISHAA	17729 ASHFORD GRANDE WAY	ORLANDO	FL	32820	2745
VELENZUELA RODOLFO	VALENZUELA NORMA	17730 AYSHIRE ST	ORLANDO	FL	32820	2717
CORREDOR EDGAR A SR	RUIZ ROSALBA	17730 LILY BLOSSOM LN	ORLANDO	FL	32820	2284
GRZEGORCZYK KEVIN B	GRZEGORCZYK IMELDA	17731 AYSHIRE ST	ORLANDO	FL	32820	2718
CAMACHO DAVID M	KOEHLER THERESA M	17731 LILY BLOSSOM LN	ORLANDO	FL	32820	2283
CORCHUELO JOSEPH		17732 STERLING POND LN	ORLANDO	FL	32820	2286
NAKHLA MERIAM	KHOZAM EHAB	17734 ASHFORD GRANDE WAY	ORLANDO	FL	32820	2746

BERKEY RAYMOND G	BERKEY ANGELA P	17735 ASHFORD GRANDE WAY	ORLANDO	FL	32820	2745	
DICKENSON DAX	DICKENSON KATIE	17736 AYSHIRE ST	ORLANDO	FL	32820	2717	
ALMUNTAFEKY SADDAM ENAD ABED	ALMUNTAFEKY MANAL N	17736 LILY BLOSSOM LN	ORLANDO	FL	32820	2284	
PEREZ LUCY	PEREZ ANTONIO	17737 LILY BLOSSOM LN	ORLANDO	FL	32820	2283	
CLARK LINDA S		17740 ASHFORD GRANDE WAY	ORLANDO	FL	32820	2746	
FOXX ELISHA	FOXX DANIEL T	17741 ASHFORD GRANDE WAY	ORLANDO	FL	32820	2745	
REBELLO KYLE	REBELLO BRIANA	17742 AYSHIRE ST	ORLANDO	FL	32820	2717	
MOCH THOMAS B	MOCH DEANNA M	17743 LILY BLOSSOM LN	ORLANDO	FL	32820	2283	
LEONARD GEORGE W	LEONARD MARTINA	17744 STERLING POND LN	ORLANDO	FL	32820	2286	
MARTINEZ EDWIN	BRACERO JEANNETTE	17747 ASHFORD GRANDE WAY	ORLANDO	FL	32820	2745	
DIEGO MANUEL R	DIEGO LINA A	17748 AYSHIRE ST	ORLANDO	FL	32820	2717	
GARCIA JORGE	PEREZ CIARA	17748 LILY BLOSSOM LN	ORLANDO	FL	32820	2284	
JOHNS JOBBY		17749 LILY BLOSSOM LN	ORLANDO	FL	32820	2283	
SFR 2012-1 FLORIDA LLC		1775 HANCOCK ST STE 200	SAN DIEGO	CA	92110	2036	
SWANGER ADAM	BYRNES VANESSA	17750 STERLING POND LN	ORLANDO	FL	32820	2286	
DEPAZZA MICHAEL J	DEPAZZA KAREN	17753 ASHFORD GRANDE WAY	ORLANDO	FL	32820	2745	
BARKER CHAZ	BARKER DANIELLE C	17754 LILY BLOSSOM LN	ORLANDO	FL	32820	2284	
ROZO LUIS R	ROZO MARTHA E	17756 STERLING POND LN	ORLANDO	FL	32820	2286	
JEAN PIERRE JOEL		17759 ASHFORD GRANDE WAY	ORLANDO	FL	32820	2745	
AYOUB MURAD	AYOUB MARINA	17760 LILY BLOSSOM LN	ORLANDO	FL	32820	2284	
PETERSON DARRIN BRADLEY	PETERSON SARAH A	17762 STERLING POND LN	ORLANDO	FL	32820	2286	
ANDRAWES PETER	ABDELNOUR ANGELA	17764 ASHFORD GRANDE WAY	ORLANDO	FL	32820	2746	
PETTY NANCY F	PETTY CHARLES A	17765 ASHFORD GRANDE WAY	ORLANDO	FL	32820	2745	
ZEQO GENTI	ZEQO ETLEVA	17768 STERLING POND LN	ORLANDO	FL	32820	2286	
LAM EM V	LAM HANH P	17769 STERLING POND LN	ORLANDO	FL	32820	2286	
YOUSEF NABEEL	NAYFEH NAWAL	17771 ASHFORD GRANDE WAY	ORLANDO	FL	32820	2745	
HARRIS RICARDO L		17774 STERLING POND LN	ORLANDO	FL	32820	2286	
PIZZUTO KYLE		17775 STERLING POND LN	ORLANDO	FL	32820	2286	
MASSOUD AKRAM		17776 ASHFORD GRANDE WAY	ORLANDO	FL	32820	2746	
CROSS MICHAEL A	CROSS JACQUELINE O	17777 ASHFORD GRANDE WAY	ORLANDO	FL	32820	2745	
WALKER DEAN	WALKER YULIN	1778 OAK GROVE CHASE DR	ORLANDO	FL	32820	2256	
MILLAR GARY JR		17780 STERLING POND LN	ORLANDO	FL	32820	2286	
CHENG KAM SUM		17781 STERLING POND LN	ORLANDO	FL	32820	2286	
NGUYEN THAO	PHAM SON	17782 ASHFORD GRANDE WAY	ORLANDO	FL	32820	2746	
PROCTOR RHETT		17786 STERLING POND LN	ORLANDO	FL	32820	2286	
MOJICA RICARDO	MOJICA MILDRED	17787 STERLING POND LN	ORLANDO	FL	32820	2286	
AKINS HUGH E	AKINS LORRAINE	1779 OAK GROVE CHASE DR	ORLANDO	FL	32820	2259	
GOODMAN STANLEY ARNOLD		1779 SENECA BLVD	WINTER SPRINGS	FL	32708	5619	
VANGA FELICIANO PEDRO JULIO	RIVERA ROSITA ALVIRA	17792 STERLING POND LN	ORLANDO	FL	32820	2286	
HICKEY DAVID ZANE	HICKEY MICHELLE	17793 STERLING POND LN	ORLANDO	FL	32820	2286	
RICHARDS DANA D	RICHARDS THEODORA	17805 OLIVE OAK WAY	ORLANDO	FL	32820	2273	
MONEY TIMOTHY WADE	MONEY DEBORAH ANN WAS	17806 GOLDEN LEAF LN	ORLANDO	FL	32820	2270	
KNAPP CHRISTOPHER	PETROW CHRISTINA	17807 GOLDEN LEAF LN	ORLANDO	FL	32820	2269	
MASCARENHAS GEORGE SAVIO	MASCARENHAS REBECCA HARITA	17809 IBIS LANDING WAY	ORLANDO	FL	32820	2711	
RODRIGUEZ WILLIAM	MEYER DENISE	17810 OLIVE OAK WAY	ORLANDO	FL	32820	2274	
HO SONTONY CONG	NGUYEN HIEN THI	17812 GOLDEN LEAF LN	ORLANDO	FL	32820	2270	
BARRETO ANGEL R	TORRES MARIA CLARED	17813 GOLDEN LEAF LN	ORLANDO	FL	32820	2269	
DARDEN MICHAEL W	VANZANT ASHLEY N	17815 IBIS LANDING WAY	ORLANDO	FL	32820	2711	
NEWTON MELISSA J		17816 OLIVE OAK WAY	ORLANDO	FL	32820	2274	
MISRAHI MICHAEL JOSEPH	MISRAHI BRITTANY DEVINE	17818 OLIVE OAK WAY	ORLANDO	FL	32820		
CABALLERO URSULA A	RESTO RICARDO L	17819 GOLDEN LEAF LN	ORLANDO	FL	32820	2269	
REXACH LUIS M		17822 OLIVE OAK WAY	ORLANDO	FL	32820	2274	
PLUGUEZ REBECCA		17825 GOLDEN LEAF LN	ORLANDO	FL	32820	2269	
VU TRUONG XUAN	TRUONG ANH DO NGOC	17828 OLIVE OAK WAY	ORLANDO	FL	32820	2274	
SMITH RYAN	SMITH BRITTANY	17829 OLIVE OAK WAY	ORLANDO	FL	32820	2273	
HUANG MIN CHIANG		17830 GOLDEN LEAF LN	ORLANDO	FL	32820	2270	
JACOBS ALEC	JACOBS JILLIAN	17832 IBIS LANDING WAY	ORLANDO	FL	32820	2710	
WIGGINS EDNA RAGLAND		17834 OLIVE OAK WAY	ORLANDO	FL	32820	2274	
IBANEZ LAURA		17835 OLIVE OAK WAY	ORLANDO	FL	32820	2273	
MOLON JON DAVID		17836 GOLDEN LEAF LN	ORLANDO	FL	32820	2270	
LYEW HERMAN	LYEW VERONICA	17837 GOLDEN LEAF LN	ORLANDO	FL	32820	2269	
IZQUIERDO EDUARDO	IZQUIERDO ANA	17838 IBIS LANDING WAY	ORLANDO	FL	32820	2710	
SOTOMAYOR CARRASQUILLO NINOTCHKA	LAMBOY JUSTIN D	1784 OAK GROVE CHASE DR	ORLANDO	FL	32820	2256	
MAGGARD CAROLINA LYNN		17840 OLIVE OAK WAY	ORLANDO	FL	32820	2274	
MALLOY THOMAS F	MALLOY PAMELA GRAHAM	17843 GOLDEN LEAF LN	ORLANDO	FL	32820	2269	
DEL ROSARIO MARIA		17845 IBIS LANDING WAY	ORLANDO	FL	32820	2711	
CHITIVA DANIEL E	CHITIVA ANITA	17847 OLIVE OAK WAY	ORLANDO	FL	32820	2273	
BOWEN MICHAEL G	BOWEN CLAUDETTE L	17848 GOLDEN LEAF LN	ORLANDO	FL	32820	2270	
CONTRERAS ORTIZ ADRIANA		17849 GOLDEN LEAF LN	ORLANDO	FL	32820	2269	
HETHERINGTON JAMES M	HETHERINGTON NELLY G	17851 IBIS LANDING WAY	ORLANDO	FL	32820	2711	
POLANCO PEDRO	VASQUEZ JOSELINE	17853 OLIVE OAK WAY	ORLANDO	FL	32820	2273	
TRINH DAVID	FLORES CHRISTINA	17856 IBIS LANDING WAY	ORLANDO	FL	32820	2710	
MALDONADO ANDERSON		17857 IBIS LANDING WAY	ORLANDO	FL	32820	2711	
ALCHALEL RON	HORTA KIMBERLY I	17859 OLIVE OAK WAY	ORLANDO	FL	32820	2273	
CRUZ EDILSON	SEVILLA ELINA	17862 IBIS LANDING WAY	ORLANDO	FL	32820	2710	
BRAVO ANA A	BRAVO PATRICIO	17865 OLIVE OAK WAY	ORLANDO	FL	32820	2273	
CURLIN FRANKLIN	CURLIN ALBA	17868 IBIS LANDING WAY	ORLANDO	FL	32820	2710	
JOHNSON JARED A	JOHNSON SHARON M	17871 OLIVE OAK WAY	ORLANDO	FL	32820	2273	
RODRIGUEZ LUIS OMAR	RODRIGUEZ CIRLEY CRISTINA	17877 OLIVE OAK WAY	ORLANDO	FL	32820	2273	
ESTAFAN MARK	ESTAFAN MARIAM	1790 OAK GROVE CHASE DR	ORLANDO	FL	32820	2256	
FRANKLIN JOHN L		17900 GOLDEN LEAF LN	ORLANDO	FL	32820	2272	
DEWDAT DENESHWAR P	DEWDAT SUBRENA	17907 SAXONY LN	ORLANDO	FL	32820	2713	
FELICIANO YMER	FELICIANO KAREN L	17909 CADENCE ST	ORLANDO	FL	32820	2729	
EMOND BRIAN	EMOND KRISTEN	17912 CAMARGO LN	ORLANDO	FL	32820	2726	
RANGEL ISIDRO	RANGEL MONICA	17912 GOLDEN LEAF LN	ORLANDO	FL	32820	2272	
CHIN-SEE LEIGHTON O	CHIN-SEE MARIE R	17913 CAMARGO LN	ORLANDO	FL	32820	2725	
PEREZ JORGE L		17913 SAXONY LN	ORLANDO	FL	32820	2713	
ROMAN RANDY	ROMAN KERI B	17914 CADENCE ST	ORLANDO	FL	32820	2727	
ENGLEHART WYATT J	ENGLEHART JANNA M	17918 CAMARGO LN	ORLANDO	FL	32820	2726	
VANDERWOUDE FREDERIC JR	COLTER STACI J	17918 GOLDEN LEAF LN	ORLANDO	FL	32820	2272	
FORTENBERRY ROBERT K	FORTENBERRY LORNA	17919 CAMARGO LN	ORLANDO	FL	32820	2725	
WINCH MATTHEW THOMAS	WINCH CHRISTIE MIRANDA	17919 SAXONY LN	ORLANDO	FL	32820	2713	
LUCAS HILDA E LIFE ESTATE	REM: GABRIELLE LUCAS	17920 CADENCE ST	ORLANDO	FL	32820	2727	
DOWNER MILLICENT E	DOWNER KAYE A	17921 CADENCE ST	ORLANDO	FL	32820	2729	
WHORMS EUGENIE A TR		17925 CAMARGO LN	ORLANDO	FL	32820	2725	
FORREST-JACOBS PAULINE P		17926 CADENCE ST	ORLANDO	FL	32820	2727	
QUEZADA LEONEL RAMON LEON	ARIAS MARIA LUBERKIS	17926 GOLDEN LEAF LN	ORLANDO	FL	32820	2272	
JONES TIFFANY M		17927 CADENCE ST	ORLANDO	FL	32820	2729	
GONZALEZ DIANA L		17930 CAMARGO LN	ORLANDO	FL	32820	2726	

MAI NHUT VAN	NGUYEN HUONG THU THI	17931 CAMARGO LN	ORLANDO	FL	32820	
WILDER TIMOTHY	WILDER KIMBERLY	17931 SAXONY LN	ORLANDO	FL	32820	2713
NASIBU-NASSY MUANAM UMBA	BINDA-THAMBA ROSALIA	17932 CADENCE ST	ORLANDO	FL	32820	2727
POOLE JAY	POOLE DEBORAH	17934 GOLDEN LEAF LN	ORLANDO	FL	32820	2272
WILLACEY AUDLEY WADE	WILLACEY MAXINE ALLISON	17937 CAMARGO LN	ORLANDO	FL	32820	2725
HERMAN DANIEL JOSEPH	HERMAN CHELSEA RILEY	17943 CAMARGO LN	ORLANDO	FL	32820	2725
WESTERKAMP MARJORIE JEAN		17943 SAXONY LN	ORLANDO	FL	32820	2713
HITT JAMES RAY	HITT DONNA MARIE	17946 GOLDEN LEAF LN	ORLANDO	FL	32820	2272
CHARRAN JANET B LIFE ESTATE	REM: JANET BINA CHARRAN TRUST	17949 SAXONY LN	ORLANDO	FL	32820	2713
PEREZ ISMAEL	ORJUELA GINNY A	17952 GOLDEN LEAF LN	ORLANDO	FL	32820	2272
JUSTO HECTOR		1796 OAK GROVE CHASE DR	ORLANDO	FL	32820	2256
RIVERA CARLOS	DAMICO ROSEMARIE T	1797 OAK GROVE CHASE DR	ORLANDO	FL	32820	2259
ALICEA JONATHAN LUIS		180 LAKEVIEW AVE	VALHALLA	NY	10595	1420
BORMAN WILLIAM	BORMAN JEANNETTE	18006 STRATFORD GRAND ST	ORLANDO	FL	32820	2738
SOLIS JULIO C		18009 SAXONY LN	ORLANDO	FL	32820	2713
NGUYEN HONG	DO HA	18010 CADENCE ST	ORLANDO	FL	32820	2727
MORRIS JEAN S		18012 STRATFORD GRAND ST	ORLANDO	FL	32820	2738
KNIGHT HOWARD G	KNIGHT PATRICIA A	18013 FALCON GREEN CT	ORLANDO	FL	32820	2712
SAWH VISHNU	SAWH SABITA M	18016 CADENCE ST	ORLANDO	FL	32820	2727
CARRION RAFAEL E	CARRION MILAGROS A	18017 CADENCE ST	ORLANDO	FL	32820	2729
SANTIAGO KENNETH		18018 STRATFORD GRAND ST	ORLANDO	FL	32820	2738
VEGA ROSA	VEGA HECTOR	18019 FALCON GREEN CT	ORLANDO	FL	32820	2712
BURIAS IAN J		1802 HAMMOCK MOSS DR	ORLANDO	FL	32820	2231
AWAD ALICE		1802 OAK GROVE CHASE DR	ORLANDO	FL	32820	2265
RAMOS GISELA C		18020 THORNHILL GRAND CIR	ORLANDO	FL	32820	2730
HOSIER ROGER OLIN	HOSIER NANCY MELISSA	18021 SAXONY LN	ORLANDO	FL	32820	2713
DOUGLAS HORACE	DOUGLAS DOREEN	18023 CADENCE ST	ORLANDO	FL	32820	2729
VISNIUS DOUGLAS J		18024 FALCON GREEN CT	ORLANDO	FL	32820	2712
YOUSSEF MAMDOUH S	YOUSSEF GIHAN A	18024 STRATFORD GRAND ST	ORLANDO	FL	32820	2738
SECREASE LORENA	SECREASE JEFFREY W	18025 FALCON GREEN CT	ORLANDO	FL	32820	2712
RODRIGUEZ FRANCISCO	RODRIGUEZ SUSAN	18026 SAXONY LN	ORLANDO	FL	32820	2715
NELSON ERIC A	NELSON SHANDRIA D	18027 SAXONY LN	ORLANDO	FL	32820	2713
PHAM DUY-HUAN NGUYEN	PHAM KHUONG AN NGUYEN	18029 CADENCE ST	ORLANDO	FL	32820	2729
TRUMBACH IAN LIFE ESTATE	TRUMBACH ANTONIA LIFE ESTATE	1803 OAK GROVE CHASE DR	ORLANDO	FL	32820	2266
WHITT ALNITA JATANA	WHITT DAVID LOUVONNE	18030 STRATFORD GRAND ST	ORLANDO	FL	32820	2738
NASIR RAYMAN A	DURGAPRASAD-NASIR JASODRA	18031 FALCON GREEN CT	ORLANDO	FL	32820	2712
EDWARDS SEYMOUR R	EDWARDS OLIVE E	18032 THORNHILL GRAND CIR	ORLANDO	FL	32820	2730
VILLANUEVA WILLIAM	VILLANUEVA LINDA	18033 SAXONY LN	ORLANDO	FL	32820	2713
ACOSTA-QUINONES JOSE D		18035 CADENCE ST	ORLANDO	FL	32820	2729
PORRAS FABIO	PORRAS LUZ	18036 FALCON GREEN CT	ORLANDO	FL	32820	2712
SANCHEZ ROBERTO C	SANCHEZ KAREN B	18036 STRATFORD GRAND ST	ORLANDO	FL	32820	2738
CROSWELL JAMES LAVON	CROSWELL TAYLOR LEIGH	18037 FALCON GREEN CT	ORLANDO	FL	32820	2712
GONZALEZ DION	GONZALEZ YVONNE	18038 THORNHILL GRAND CIR	ORLANDO	FL	32820	2730
PIECHOCKI JAMES	PIECHOCKI ANDREA	18039 SAXONY LN	ORLANDO	FL	32820	2713
SHARMA ANKUR		18041 CADENCE ST	ORLANDO	FL	32820	2729
LONGHOUSE RICHARD S		18042 FALCON GREEN CT	ORLANDO	FL	32820	2712
STROHFUS RICHARD H		18042 STRATFORD GRAND ST	ORLANDO	FL	32820	2738
MAGLALANG CARLOS R LIFE ESTATE	MAGLALANG JOANNE MARIE LIFE ESTATE	18043 FALCON GREEN CT	ORLANDO	FL	32820	2712
JEAN-LOUIS HUGUES J	JEAN-LOUIS FLORENCE	18044 THORNHILL GRAND CIR	ORLANDO	FL	32820	2730
FITZGIBBONS SEAN RAYMOND	FITZGIBBONS CHRISTINE ANN	18045 THORNHILL GRAND CIR	ORLANDO	FL	32820	2733
BENNETT ALEXANDRIA NICOLE	BENNETT JOSHUA DAVID	18048 FALCON GREEN CT	ORLANDO	FL	32820	2712
CERVANTES JORGE R JR	CERVANTES SILIA O	18048 STRATFORD GRAND ST	ORLANDO	FL	32820	2738
MARCZAK DENNIS M	MAECZAK CLAIRE M	18049 STRATFORD GRAND ST	ORLANDO	FL	32820	2740
MCLELLAN MATTHEW A		18050 THORNHILL GRAND CIR	ORLANDO	FL	32820	2730
MEISTINIS LAIMONAS	MEISTINIENE LORETA	18053 CADENCE ST	ORLANDO	FL	32820	2729
GARCIA WANDA	DEL VALLE HERNANDEZ TEDDY	18054 STRATFORD GRAND ST	ORLANDO	FL	32820	2738
TORMOS VERA RICARDO	SAMBOLIN PELLARIN JENNIFER	18055 STRATFORD GRAND ST	ORLANDO	FL	32820	2740
MILES PATRICIA J		18057 THORNHILL GRAND CIR	ORLANDO	FL	32820	2733
SANTOS RAY RADAMES	MEDINA JENNIFER A	1806 DARLIN CIR	ORLANDO	FL	32820	2703
RENDA VITTORIA MARIA		18060 STRATFORD GRAND ST	ORLANDO	FL	32820	2738
DANIEL MEUREEN O	BELHOMME JEAN C	18061 STRATFORD GRAND ST	ORLANDO	FL	32820	2740
SACKALOO CLIFTON E	SACKALOO JEAN J	18062 THORNHILL GRAND CIR	ORLANDO	FL	32820	2730
KING ERROL O	KING WINSOME E	18063 THORNHILL GRAND CIR	ORLANDO	FL	32820	2733
HIRALDO CORPORINA		18066 STRATFORD GRAND ST	ORLANDO	FL	32820	2738
JONES HARVEY JR	JONES CHANDRA W	18068 THORNHILL GRAND CIR	ORLANDO	FL	32820	2730
CHERUBIN SIMON	VALENTIN RAYMONDE	18069 THORNHILL GRAND CIR	ORLANDO	FL	32820	2733
PAVON FRANCISCO EVENOR	PAVON TARA NICOLE	18074 THORNHILL GRAND CIR	ORLANDO	FL	32820	2730
TURNBULL LILLIAN W		1808 CORNERVIEW LN	ORLANDO	FL	32820	1918
QUACH XUAN	LE LAY K	1808 HAMMOCK MOSS DR	ORLANDO	FL	32820	2231
PRIEST JAMES M	HOWELL EVELYN	1808 OAK GROVE CHASE DR	ORLANDO	FL	32820	2265
GRIMALDI JOSEPH J JR	GRIMALDI BARBARA	18080 THORNHILL GRAND CIR	ORLANDO	FL	32820	2730
DELER JOSEPH A	DELER MARIE V	18081 THORNHILL GRAND CIR	ORLANDO	FL	32820	2733
HOLT GABRIEL A		1809 CORNER MEADOW CIR	ORLANDO	FL	32820	1938
GREENE STEPHEN	GREENE ANNE	1809 CORNERVIEW LN	ORLANDO	FL	32820	1920
LOPEZ CARLOS J	RIVERA-LOPEZ SANDRA	18106 SAXONY LN	ORLANDO	FL	32820	2716
WILKINSON PAUL P	WILKINSON MYRNA P	18106 THORNHILL GRAND CIR	ORLANDO	FL	32820	2730
KUKOWSKI HILDA		18107 CADENCE ST	ORLANDO	FL	32820	2729
MARKS KARYN L		18107 SAXONY LN	ORLANDO	FL	32820	2714
GREEN MATTHEW F	GREEN STACEY D	18107 THORNHILL GRAND CIR	ORLANDO	FL	32820	2733
STANGE KYLE	STANGE MYSTY	18109 STRATFORD GRAND ST	ORLANDO	FL	32820	2741
MARTIR LUIS	MARTIR MIRIAM	18112 CADENCE ST	ORLANDO	FL	32820	2728
BOSSIO ABIGAIL	BOSSIO RENE	18112 SAXONY LN	ORLANDO	FL	32820	2716
HESS IRENE		18112 THORNHILL GRAND CIR	ORLANDO	FL	32820	2730
POOLE FREDRECKYA		18113 SAXONY LN	ORLANDO	FL	32820	2714
MOLINA GREGORY JR	MOLINA LOURDES	18113 THORNHILL GRAND CIR	ORLANDO	FL	32820	2733
RAMSUNDAR HELEN		18114 STRATFORD GRAND ST	ORLANDO	FL	32820	2738
SHEOMANGAL PAUL	SHEOMANGAL HEMATIE	18115 STRATFORD GRAND ST	ORLANDO	FL	32820	2741
BLOOMFIELD LARRY S		18118 CADENCE ST	ORLANDO	FL	32820	2728
MCCARTHY JEAN KRIENKE		18118 THORNHILL GRAND CIR	ORLANDO	FL	32820	2730
LEARD MARK	LEARD JESSICA M	18119 SAXONY LN	ORLANDO	FL	32820	2714
PAGAN CECILIA		1812 DARLIN CIR	ORLANDO	FL	32820	2703
GONZALEZ JAVIER O	GONZALEZ STACY W	18120 STRATFORD GRAND ST	ORLANDO	FL	32820	2738
GOMES PAUL S	GOMES MARIA G	18121 STRATFORD GRAND ST	ORLANDO	FL	32820	2741
METCALF JEFFREY	METCALF CALLETH	18124 CADENCE ST	ORLANDO	FL	32820	2728
GOODALE MARK	GOODALE DARBY A	18124 THORNHILL GRAND CIR	ORLANDO	FL	32820	2730
RAVIELE NICHOLAS LIFE ESTATE	RAVIELE JOANN LIFE ESTATE	18125 SAXONY LN	ORLANDO	FL	32820	2714
ARANGO IBAGON CRISTHIAN	RODRIGUEZ DE ARANGO ALEJANDRA	18126 STRATFORD GRAND ST	ORLANDO	FL	32820	2738
JACKSON ALRIC C	SCHERER SUSANNE B	18127 STRATFORD GRAND ST	ORLANDO	FL	32820	2741
PEREZ ENRIQUE	HERNANDEZ ERIKA	18131 SAXONY LN	ORLANDO	FL	32820	2714

SAMARTIN RUTH E		18132 STRATFORD GRAND ST	ORLANDO	FL	32820	2738
HARRIS WILLIAM BRUCE	HARRIS EMILY WILSON	18133 STRATFORD GRAND ST	ORLANDO	FL	32820	2741
LAMB ROBERT T	LAMB CANADETH MARLENA	18136 CADENCE ST	ORLANDO	FL	32820	2728
LOPEZ ARCE RAFAEL MELCHOR	CORRALES ESTEFANIA BARRIOS	18136 SAXONY LN	ORLANDO	FL	32820	2716
GRACIA DAYSI		18136 THORNHILL GRAND CIR	ORLANDO	FL	32820	2730
HAMLER NATHAN	HAMLER NICOLE	18137 CADENCE ST	ORLANDO	FL	32820	2729
MCDUFFIE KATHY TODD	TODD DEBORAH	18137 SAXONY LN	ORLANDO	FL	32820	2714
PENA JUAN	PENA YOHANNY	18138 STRATFORD GRAND ST	ORLANDO	FL	32820	2738
SANCHEZ VALERIO		1814 CORNER MEADOW CIR	ORLANDO	FL	32820	1939
CRABTREE PAUL	CRABTREE DEBORAH	1814 CORNERVIEW LN	ORLANDO	FL	32820	1918
ARBOLEDA ALEIKA MINELLY	ASPITIA NICHOLAS ALEJANDRO	1814 HAMMOCK MOSS DR	ORLANDO	FL	32820	2231
RABAH TAREK A	RABAH MARIA C	1814 OAK GROVE CHASE DR	ORLANDO	FL	32820	2265
CADET ANDRE	CADET DARLEY	18142 CADENCE ST	ORLANDO	FL	32820	2728
BRACEWELL DANIEL LOUIS	BRACEWELL DALIA V	18142 SAXONY LN	ORLANDO	FL	32820	2716
HAZELL ALBERT	HAZELL YVONNE	18142 THORNHILL GRAND CIR	ORLANDO	FL	32820	2730
BATSCH LARRY WILLIAM	BATSCH KATHRYN YVONNE	18143 SAXONY LN	ORLANDO	FL	32820	2714
HERNANDEZ BRUMELIS	HERNANDEZ GERARDO A	18144 STRATFORD GRAND ST	ORLANDO	FL	32820	2738
ISAIAH GIL		18148 CADENCE ST	ORLANDO	FL	32820	2728
MARTINO MARTA E		18148 THORNHILL GRAND CIR	ORLANDO	FL	32820	2730
AWAD JOSEPH N	HALIM BETTY S	18149 CADENCE ST	ORLANDO	FL	32820	2729
MONTGOMERY WENDY		18149 SAXONY LN	ORLANDO	FL	32820	2714
MONTANEZ BRIAN		1815 CORNER MEADOW CIR	ORLANDO	FL	32820	1938
BOSSIO GIL REYNALDO M	PEREZ REBECCA	1815 CORNERVIEW LN	ORLANDO	FL	32820	1920
ZUNIGA VICTOR H		1815 HAMMOCK MOSS DR	ORLANDO	FL	32820	2233
JOHNSON NANCY C		1815 OAK GROVE CHASE DR	ORLANDO	FL	32820	2266
HUYNH HIEN LIFE ESTATE	REM: MARY HIEN HUYNH REVOCABLE TRUS	18151 BELLEZZA DR	ORLANDO	FL	32820	1420
CAZIAN MICHELE D	CAZIAN GREGG P	18154 CADENCE ST	ORLANDO	FL	32820	2728
DO HAI HOANG	DO MY TIEN T	18154 THORNHILL GRAND CIR	ORLANDO	FL	32820	2730
MENTORE EMANUEL G	MENTORE TRACY A	18160 THORNHILL GRAND CIR	ORLANDO	FL	32820	2730
LALLOO TOOLSIE	LALLOO VERMA	18166 THORNHILL GRAND CIR	ORLANDO	FL	32820	2730
MENDEZ ROSA M	MENDEZ WILFREDO	18167 THORNHILL GRAND CIR	ORLANDO	FL	32820	2733
MUNROE JACQUELINE A	MUNROE DERRIETH A	18172 THORNHILL GRAND CIR	ORLANDO	FL	32820	2730
RAMIREZ JUAN DAVID	RAMIREZ VANESA STEPHANY	18173 THORNHILL GRAND CIR	ORLANDO	FL	32820	2733
RANIERI ROLAND R	RANIERI MILAGROS	1818 DARLIN CIR	ORLANDO	FL	32820	2703
MONTILLA RALPHY	MONTILLA FELICIA R	1819 DARLIN CIR	ORLANDO	FL	32820	2707
GILLIARD MATTHEW R	GILLIARD HEATHER B	1820 CORNERVIEW LN	ORLANDO	FL	32820	1918
STEVENS RICHARD M	STEVENS MARY ANNE	1820 HAMMOCK MOSS DR	ORLANDO	FL	32820	2231
MARTIN CHRISTOPHER JACK	MARTIN JENNIFER LANGLEY	1820 OAK GROVE CHASE DR	ORLANDO	FL	32820	2265
RUGGIERO LORETTA		18208 THORNHILL GRAND CIR	ORLANDO	FL	32820	2731
WIGGINS JOHN M	WIGGINS IRENE H	18209 THORNHILL GRAND CIR	ORLANDO	FL	32820	2734
ANDERSON ERIC B		1821 CORNER MEADOW CIR	ORLANDO	FL	32820	1938
ZAYAS JOSE	ZAYAS MARIA	1821 HAMMOCK MOSS DR	ORLANDO	FL	32820	2233
SADIQ SHAKILA	SHARIF ATIQ	1821 OAK GROVE CHASE DR	ORLANDO	FL	32820	2266
ALEXANDRE CASIMIRA	ALEXANDRE PATRICK	18214 THORNHILL GRAND CIR	ORLANDO	FL	32820	2731
RHODES SHAUN N	PETERSON RACHEL M	18215 THORNHILL GRAND CIR	ORLANDO	FL	32820	2734
MCCOY ANN RENE	MCCOY PATRICK SEAN	18221 THORNHILL GRAND CIR	ORLANDO	FL	32820	2734
STEWART IDA M		18227 THORNHILL GRAND CIR	ORLANDO	FL	32820	2734
DIXON DERRICK L		18232 THORNHILL GRAND CIR	ORLANDO	FL	32820	2731
PARSON KENNETH	ABRAMS-PARSON KIMBERLY L	18233 THORNHILL GRAND CIR	ORLANDO	FL	32820	2734
SMITH ROBERT ELLSWORTH	LEWIS-SMITH KAREN M	18238 THORNHILL GRAND CIR	ORLANDO	FL	32820	2731
BROWN JUAN C	BROWN KATHY T	18239 THORNHILL GRAND CIR	ORLANDO	FL	32820	2734
RAGHUANDAN MAHENDRA	RAGHUANDAN ANDREA	1824 DARLIN CIR	ORLANDO	FL	32820	2703
HURTADO ALBERT	HURTADO JODI L	18244 THORNHILL GRAND CIR	ORLANDO	FL	32820	2731
BUFFINGTON EDWARD A JR		18245 THORNHILL GRAND CIR	ORLANDO	FL	32820	2734
ORTIZ EDWIN	MELENDEZ WANDA IVETTE	1825 DARLIN CIR	ORLANDO	FL	32820	2707
PUNZALAN CELSO P	PUNZALAN ALEJANDRA N	18250 THORNHILL GRAND CIR	ORLANDO	FL	32820	2731
VELEZ CARLOS A	VELEZ MIGDALIA E	18256 THORNHILL GRAND CIR	ORLANDO	FL	32820	2731
DIAZ MEYLIN	GANDIA TAIMY	1826 CORNER MEADOW CIR	ORLANDO	FL	32820	1939
HOLBROOK STEPHANY		1826 CORNERVIEW LN	ORLANDO	FL	32820	1918
NOWAK BRIAN D		1826 HAMMOCK MOSS DR	ORLANDO	FL	32820	2231
DO HAI HOANG	DO MY TIEN T	1826 OAK GROVE CHASE DR	ORLANDO	FL	32820	2265
RIVERA LOUIS	RIVERA DAMARIS	18262 THORNHILL GRAND CIR	ORLANDO	FL	32820	2731
SMITH LAUREN MORE		1827 CORNER MEADOW CIR	ORLANDO	FL	32820	1938
BARRETO MICHELLE		1830 DARLIN CIR	ORLANDO	FL	32820	2703
LAWSON PRENTISS A III		1832 CORNER MEADOW CIR	ORLANDO	FL	32820	1939
COBURN BRENT A		1832 CORNERVIEW LN	ORLANDO	FL	32820	1918
NGUYEN THIEN		1832 HAMMOCK MOSS DR	ORLANDO	FL	32820	2231
BRASCH NICHOLAS CARL	BRASCH SANDRA JEAN	1832 OAK GROVE CHASE DR	ORLANDO	FL	32820	2265
DEL RIO ABEL	DEL RIO MARTA N	1833 HAMMOCK MOSS DR	ORLANDO	FL	32820	2233
SOLANO HUMBERTO GARZA		1833 OAK GROVE CHASE DR	ORLANDO	FL	32820	2266
GREENE JOHNNY	GREENE GLORIA	1836 DARLIN CIR	ORLANDO	FL	32820	2703
SAVARD CHARLES	SAVARD ANGELA	1838 HAMMOCK MOSS DR	ORLANDO	FL	32820	2231
DOUGLAS BRIANE	DOUGLAS ANGELENE	1838 OAK GROVE CHASE DR	ORLANDO	FL	32820	2265
BECKFORD SANDRA		1843 DARLIN CIR	ORLANDO	FL	32820	2707
HEROLD DAVID		1844 HAMMOCK MOSS DR	ORLANDO	FL	32820	2231
ADELMAN WILLIAM KEVIN LIFE ESTATE	REM: WILLIAM KEVIN ADELMAN LIVING TRU	1844 OAK GROVE CHASE DR	ORLANDO	FL	32820	2265
GUZMAN JOHN WILSON	GUZMAN FABIOLA	1845 HAMMOCK MOSS DR	ORLANDO	FL	32820	2233
ABRAHAM AMIN	ABRAHAM VIOLA G	1845 OAK GROVE CHASE DR	ORLANDO	FL	32820	2266
WOODIN ALEX	DURSO KAYLA	1848 DARLIN CIR	ORLANDO	FL	32820	2703
SCHWARTZ RANDY JAMES RONALD	SCHWARTZ BRITTANEY CLAIRE	1849 DARLIN CIR	ORLANDO	FL	32820	2707
REEG MITCHELL J		1850 CORNERVIEW LN	ORLANDO	FL	32820	1918
PEREZ NATALIA ROCIO		1850 HAMMOCK MOSS DR	ORLANDO	FL	32820	2231
CARTER ALFRED D JR	CARTER CHRYSTAL L	1850 OAK GROVE CHASE DR	ORLANDO	FL	32820	2265
BASSARAGH IAN C	BASSARAGH KAY A	1851 CORNER MEADOW CIR	ORLANDO	FL	32820	1938
MONTANEZ JEFFREY		1854 DARLIN CIR	ORLANDO	FL	32820	2703
NELSON PATRICIA		1856 HAMMOCK MOSS DR	ORLANDO	FL	32820	2231
GARCIA ANDY		1856 OAK GROVE CHASE DR	ORLANDO	FL	32820	2265
COX BRIAN CHRISTOPHER	CHEVALIER NICOLE ALEXIS	1857 CORNER MEADOW CIR	ORLANDO	FL	32820	1938
SEMORA WAYNE T		1857 CORNERVIEW LN	ORLANDO	FL	32820	1920
NELSON JONATHAN STEVEN	NELSON CLAIRE MARIE	1857 OAK GROVE CHASE DR	ORLANDO	FL	32820	2266
ELKIN AND JESSICA NORENA REVOCABLE TRUST		186 ETHAN HAMMOCK CT	OVIEDO	FL	32765	3726
DEL ROSARIO FIGUEROA SIGFRIDO		1862 CORNERVIEW LN	ORLANDO	FL	32820	1918
LEWIS GLENN H	MUNERA JOHN O	1862 HAMMOCK MOSS DR	ORLANDO	FL	32820	2231
LAUER MATTHEW ALLEN		1862 OAK GROVE CHASE DR	ORLANDO	FL	32820	2265
SIMPSON CRAIG L	SIMPSON MISHONE	1863 CORNERVIEW LN	ORLANDO	FL	32820	1920
ISHAK RAFICK A	ISHAK BIBI F	1863 OAK GROVE CHASE DR	ORLANDO	FL	32820	2266
ZIRI HOUSING AND DEVELOPMENT CORP		18642 NW 24TH PL	PEMBROKE PINES	FL	33029	5361
ANDRADE RICHARD		1868 CORNERVIEW LN	ORLANDO	FL	32820	1918
MARKX LAWRENCE Q		1868 OAK GROVE CHASE DR	ORLANDO	FL	32820	2265

GOMEZ CAESAR	GOMEZ JUDY	1869 CORNERVIEW LN	ORLANDO	FL	32820	1920
KENNEDY SARA E	KENNEDY JERRY W	1869 OAK GROVE CHASE DR	ORLANDO	FL	32820	2266
FIGUEROA FONTANEZ GEOVANNIE	FIGUEROA SIOMARI GISELLE	1874 CORNER MEADOW CIR	ORLANDO	FL	32820	1939
SEPULVEDA CHRISTOPHER		1874 HAMMOCK MOSS DR	ORLANDO	FL	32820	2231
MINNICK CONLEY TRIGG JR	MINNICK CHRISTINE GAIL	1874 OAK GROVE CHASE DR	ORLANDO	FL	32820	2265
BAILLY MICHAEL	BAILLY MARGARET	1875 CORNER MEADOW CIR	ORLANDO	FL	32820	1938
RODRIGUEZ DENNIS A	RIOS DIANONIS	1875 CORNERVIEW LN	ORLANDO	FL	32820	1920
WILLIAMS RAHSHAN		1880 CORNERVIEW LN	ORLANDO	FL	32820	1918
RIVERA XAVIER	ALICEA NANCY QUINONES	1880 HAMMOCK MOSS DR	ORLANDO	FL	32820	2231
RAFTER BRENDAN	RAFTER ANGELICA	1880 OAK GROVE CHASE DR	ORLANDO	FL	32820	2265
COBB DOUGLAS DONALD	COBB MIRIAM	1881 CORNER MEADOW CIR	ORLANDO	FL	32820	1938
FEIJO RICARDO		1881 CORNERVIEW LN	ORLANDO	FL	32820	1920
FARR CHRISTOPHER R	FARR WENDY POLITIS	1881 HAMMOCK MOSS DR	ORLANDO	FL	32820	2233
SETO JOHN	SETO AMY	1881 OAK GROVE CHASE DR	ORLANDO	FL	32820	2266
POPELAS JOHN WAYNE	POPELAS PATSY FAN	1886 CORNERVIEW LN	ORLANDO	FL	32820	1918
BROWN RODERICK M	BROWN ELTANYA D	1886 HAMMOCK MOSS DR	ORLANDO	FL	32820	2231
PANTUSO JOHN F	PANTUSO DELIA E	1886 OAK GROVE CHASE DR	ORLANDO	FL	32820	2265
WALKER KYLER	VENTURA ALEXANDRA	1887 HAMMOCK MOSS DR	ORLANDO	FL	32820	2233
TALBERT IRVIN G	TALBERT LAVON	1887 OAK GROVE CHASE DR	ORLANDO	FL	32820	2266
ELSAYED AHMED	ABOUSHANAB NOURHAM	1893 OAK GROVE CHASE DR	ORLANDO	FL	32820	2266
ADAM KAMAL	IDRIS JEDDAH	1898 HAMMOCK MOSS DR	ORLANDO	FL	32820	2231
VALDIVIA MICHAEL A		1898 OAK GROVE CHASE DR	ORLANDO	FL	32820	2265
GILES PERRY W	GILES ASHLEIGH M	1899 HAMMOCK MOSS DR	ORLANDO	FL	32820	2233
JEAN FRITZ SEBASTIAN	JEAN MARIE CHANTAL	1899 OAK GROVE CHASE DR	ORLANDO	FL	32820	2266
NEWBERRY PATRICIA		1900 CASCADES COVE DR	ORLANDO	FL	32820	2238
CASUCCIO JOSEPH N	CASUCCIO CYNTHIA V	1901 CASCADES COVE DR	ORLANDO	FL	32820	2249
SOUDERS PAUL M	SOUDERS LINDSEY M	1904 HAMMOCK MOSS DR	ORLANDO	FL	32820	2231
FERGUSON SERENA V		1905 HAMMOCK MOSS DR	ORLANDO	FL	32820	2233
GAHERTY DAN J		1905 OAK GROVE CHASE DR	ORLANDO	FL	32820	2260
ROGOZINSKI EDNA A WALSH		1906 CASCADES COVE DR	ORLANDO	FL	32820	2238
HERNANDEZ ALICIA		1907 CORNER SCHOOL DR	ORLANDO	FL	32820	1915
ORTIZ JAVIER OYOLA	OYOLA ROSSANA	1908 DARLIN CIR	ORLANDO	FL	32820	2704
PUGH-HOLMES PATRICIA L		1909 DARLIN CIR	ORLANDO	FL	32820	2707
NGUYEN TUYEN	NGUYEN LINH	1910 HAMMOCK MOSS DR	ORLANDO	FL	32820	2231
MCMAHEN AUTUMN GRACE	GILBERT BRIAN CHRISTOPHER	1910 OAK GROVE CHASE DR	ORLANDO	FL	32820	2257
WEST ROBIN	LEIGH JUSTIN	1911 HAMMOCK MOSS DR	ORLANDO	FL	32820	2233
SPELLEN EDWARD		1911 OAK GROVE CHASE DR	ORLANDO	FL	32820	2260
BATEMAN THOMAS J	BATEMAN VICTORIA L	1912 CASCADES COVE DR	ORLANDO	FL	32820	2238
DIEHL AUSTIN K	DIEHL GLORIA J	1912 CORNER GLEN DR	ORLANDO	FL	32820	1953
ZHOU LINWEI		1912 CORNER MEADOW CIR	ORLANDO	FL	32820	1937
DE CAMARGO ALESSANDRO P	DE CARMARGO BARBARA C	1913 CASCADES COVE DR	ORLANDO	FL	32820	2249
ARBOLEDA ENRIQUE	MERCADO MARIA T	1913 CORNER MEADOW CIR	ORLANDO	FL	32820	1929
BARRAGAN YOLIA ITZEL	ALVAREZ CHRISTIAN A	1913 CORNER SCHOOL DR	ORLANDO	FL	32820	1915
CARLISI ROBERT F JR	CONNELL CHRISTINA M	1914 CORNER CREST CT	ORLANDO	FL	32820	1946
WILEMAN JOSEPH M		1914 DARLIN CIR	ORLANDO	FL	32820	2704
CUTLER ALEX	CUTLER COURTNEY	1915 CORNER CREST CT	ORLANDO	FL	32820	1946
LOZA PIERRE		1916 HAMMOCK MOSS DR	ORLANDO	FL	32820	2231
JOLIBOIS MARIE SONIE		1917 HAMMOCK MOSS DR	ORLANDO	FL	32820	2233
TRAMELL JUNNITA		1917 OAK GROVE CHASE DR	ORLANDO	FL	32820	2260
MAXWELL JACOB R	SPROWLS JORDAN C	1918 CASCADES COVE DR	ORLANDO	FL	32820	2238
AFOON LESLEY-ANN M	AFOON ADRIAN	1918 CORNER GLEN DR	ORLANDO	FL	32820	1953
DEWDAT NIERENDRA	REWAH SHALINEE	1918 CORNER SCHOOL DR	ORLANDO	FL	32820	1914
MCARDLE GEORGE R JR	MCARDLE BE	1919 CASCADES COVE DR	ORLANDO	FL	32820	2249
PEREZ PEDRO	PEREZ DOMINICA	1919 CORNER MEADOW CIR	ORLANDO	FL	32820	1929
MOTILALL ROOPCHAND	MOTILALL BIBI A	1919 CORNER SCHOOL DR	ORLANDO	FL	32820	1915
OSORIO KARLA VANNESA	OSORIO ABRAHAM	1920 CORNER CREST CT	ORLANDO	FL	32820	1946
TORRES EDWARD I	JONES KIMBERLY M	1920 DARLIN CIR	ORLANDO	FL	32820	2704
ZIEMBA TADINE L		1921 CORNER CREST CT	ORLANDO	FL	32820	1946
EHIAGUINA EPHRAIM	EHIAGUINA BIBIAN	1922 HAMMOCK MOSS DR	ORLANDO	FL	32820	2231
VAZQUEZ RENE	ACEVEDO MARIA VICENTA	1922 OAK GROVE CHASE DR	ORLANDO	FL	32820	2257
PEREZ ANTHONY	PEREZ JESSICA	1923 HAMMOCK MOSS DR	ORLANDO	FL	32820	2233
ALSAIDI MOHMOUD Y	KAHKAH SAIDA	1923 OAK GROVE CHASE DR	ORLANDO	FL	32820	2260
HORTA RAPHAEL	MELENDEZ MIRIAM	1924 CASCADES COVE DR	ORLANDO	FL	32820	2238
WILLIAMS KATHARINE N	WILLIAMS JUSTIN M	1924 CORNER SCHOOL DR	ORLANDO	FL	32820	1914
ALLEN PAUL A	ALLEN MOYA A	1925 CASCADES COVE DR	ORLANDO	FL	32820	2249
RIVERA AIDA L		1925 CORNER SCHOOL DR	ORLANDO	FL	32820	1915
RODRIGUEZ RAUL	MADINA MARIBEL	1926 CORNER CREST CT	ORLANDO	FL	32820	1946
TORO JORGE E	TORO MILENA	1926 DARLIN CIR	ORLANDO	FL	32820	2704
TORRES-MENDEZ MELVIN RAFAEL	JORGE JULISA	1928 HAMMOCK MOSS DR	ORLANDO	FL	32820	2231
MONTANEZ JOSE E	VEGA NILSA E	1928 OAK GROVE CHASE DR	ORLANDO	FL	32820	2257
MORALES MILDRED		1930 CASCADES COVE DR	ORLANDO	FL	32820	2238
FALCO RICHARD A	FALCO JESSICA W	1930 CORNER GLEN DR	ORLANDO	FL	32820	1953
NUNEZ REYNALDO	NUNEZ MONSERRATE	1931 CASCADES COVE DR	ORLANDO	FL	32820	2249
PUELLO NELSIDO	PUELLO MARCIA	1931 CORNER MEADOW CIR	ORLANDO	FL	32820	1929
BUZZETTA FRANCESCO A	BUZZETTA LORELEI M	1931 CORNER SCHOOL DR	ORLANDO	FL	32820	1915
FLEMING CHARLES B	FLEMING CARMEN G	1933 DARLIN CIR	ORLANDO	FL	32820	2707
KNOX MICHAEL	KNOX CLAIRE	1934 HAMMOCK MOSS DR	ORLANDO	FL	32820	2231
GROSSY MAURICIO RICARDO		1934 OAK GROVE CHASE DR	ORLANDO	FL	32820	2257
SANTAMARIA RODOLFO A	SANTAMARIA VICTORIA E	1937 CASCADES COVE DR	ORLANDO	FL	32820	2249
CHAN JOSEPHINE CHUI	CHAN CHI HUNG	1937 CORNER GLEN DR	ORLANDO	FL	32820	1952
GUTIERREZ TORRES HERIBERTO LIFE ESTAT	DE LA ROSA NEGRON OLVIA LIFE ESTATE	1937 CORNER SCHOOL DR	ORLANDO	FL	32820	1915
RUSSOTTO SALVATORE		1938 DARLIN CIR	ORLANDO	FL	32820	2704
FAITHFUL ASSISTED LIVING LLC		1940 HAMMOCK MOSS DR	ORLANDO	FL	32820	2231
SILVIANO JAMES F	SILVIANO JENNY M	1940 OAK GROVE CHASE DR	ORLANDO	FL	32820	2257
HYSON MARK STEVEN	HYSON AKIMA	1942 CASCADES COVE DR	ORLANDO	FL	32820	2238
BERGL ANNE		1942 CORNER SCHOOL DR	ORLANDO	FL	32820	1914
THOMAS RODNEY	THOMAS MARIAN A	1943 CASCADES COVE DR	ORLANDO	FL	32820	2249
SAHADAO LALBAHADUR		1943 CORNER SCHOOL DR	ORLANDO	FL	32820	1915
TORRES SARITA		1944 DARLIN CIR	ORLANDO	FL	32820	2704
PARKER TREY D	PARKER SUSAN K	1945 DARLIN CIR	ORLANDO	FL	32820	2707
HAWK DAVID C	HAWK SHIRLEY V	1946 HAMMOCK MOSS DR	ORLANDO	FL	32820	2231
PERRYMAN MARIKA M	WIEGERT WILLIAM L	1946 OAK GROVE CHASE DR	ORLANDO	FL	32820	2257
PUNJABI MUKESH P	PUNJABI BINA M	1948 CASCADES COVE DR	ORLANDO	FL	32820	2238
SULLIVAN JOHN	SULLIVAN SANDRA	1948 CORNER GLEN DR	ORLANDO	FL	32820	1953
HOUSE STEPHEN D	HOUSE CATHY M	1949 CASCADES COVE DR	ORLANDO	FL	32820	2249
GILLETT JACLYN D		1949 CORNER GLEN DR	ORLANDO	FL	32820	1952
VANDEVENTER TAMARA ELIZABETH	STOCK JAMES EDWARD	1949 CORNER MEADOW CIR	ORLANDO	FL	32820	1929
MOLON ALEXANDER JAMES		1949 CORNER SCHOOL DR	ORLANDO	FL	32820	1915
GAFUR ABDUL A	GAFUR ANITA	1950 DARLIN CIR	ORLANDO	FL	32820	2704

TERRY BRADLEY WADE		1951 DARLIN CIR	ORLANDO	FL	32820	2707
BURRELL LORI	BURRELL WESLY R	1952 HAMMOCK MOSS DR	ORLANDO	FL	32820	2231
SMITH MARQUETTE	SMITH SHERRI	1953 HAMMOCK MOSS DR	ORLANDO	FL	32820	2234
LE KY XUAN	NGUYEN TRONG T	1953 OAK GROVE CHASE DR	ORLANDO	FL	32820	2260
GUMBS JANEEL	GEORGE JENNIFER	1954 CASCADES COVE DR	ORLANDO	FL	32820	2238
RICART MIGUEL R		1954 CORNER SCHOOL DR	ORLANDO	FL	32820	1914
OBEN RICHARD E JR	OBEN SHEILA A	1955 CASCADES COVE DR	ORLANDO	FL	32820	2249
GUTHRIE DEBBIE A		1955 CORNER GLEN DR	ORLANDO	FL	32820	1952
NAZARIO JOSE A	SANTIAGO ZULMA I	1955 CORNER MEADOW CIR	ORLANDO	FL	32820	1929
ROWE JOSHUA M	ROWE CARLY M	1956 DARLIN CIR	ORLANDO	FL	32820	2704
BICKHAM ASHLEY ROSE	BICKHAM DANIEL BRUCE	1957 DARLIN CIR	ORLANDO	FL	32820	2707
SNELLMAN MARK		1957 OAK GROVE CHASE DR	ORLANDO	FL	32820	2260
JOWERS MICHAEL S	JOWERS KERI	1958 HAMMOCK MOSS DR	ORLANDO	FL	32820	2231
SCHAFFER NOLAN PATRICK		1959 HAMMOCK MOSS DR	ORLANDO	FL	32820	2234
SEEBARAN SANTEE LIFE ESTATE	REM: SANTEE SEEBARAN LIVING TRUST	1960 CASCADES COVE DR	ORLANDO	FL	32820	2238
RIVERA ISMAEL	RIVERA VIVIAN S	1961 CORNER GLEN DR	ORLANDO	FL	32820	1952
WHITE JEFFREY J		1962 DARLIN CIR	ORLANDO	FL	32820	2704
SPITZOCK KRISTEN ANN	SPITZOCK FRANCIS RICHARD	1964 HAMMOCK MOSS DR	ORLANDO	FL	32820	2231
COWAN JAMES	COWAN CARLA	1964 OAK GROVE CHASE DR	ORLANDO	FL	32820	2257
MCKINNON DANIELLE		1965 HAMMOCK MOSS DR	ORLANDO	FL	32820	2234
BOLT MELISSA		1966 CASCADES COVE DR	ORLANDO	FL	32820	2238
MCDONALD RAY A	MCDONALD ROSEMARIE A	1966 CORNER GLEN DR	ORLANDO	FL	32820	1953
SMALLWOOD CARMEN I	SMALLWOOD KELVIN E	1967 CORNER GLEN DR	ORLANDO	FL	32820	1952
HORSLEY BRANDON R	HORSLEY STEPHANIE L	1969 DARLIN CIR	ORLANDO	FL	32820	2707
TRESSLER RICKY LIFE ESTATE	TRESSLER MYRA LIFE ESTATE	1970 HAMMOCK MOSS DR	ORLANDO	FL	32820	2231
RIVERA ROSA I		1970 OAK GROVE CHASE DR	ORLANDO	FL	32820	2257
ZIESIG JAMES DONALD	WINKELMAN JENNIFER A	1971 HAMMOCK MOSS DR	ORLANDO	FL	32820	2234
STEPHENS DANALYN PATTY	STEPHENS CADE THOMAS	1972 CASCADES COVE DR	ORLANDO	FL	32820	2238
LUGO ELANNA N		1972 CORNER SCHOOL DR	ORLANDO	FL	32820	1914
PEREZ-DIAZ NINA LIFE ESTATE	REM: JOSE A PEREZ JR	1973 CORNER SCHOOL DR	ORLANDO	FL	32820	1915
VALENTIN ELIZABETH		1974 DARLIN CIR	ORLANDO	FL	32820	2704
DELRIO RENE J	DELRIO EVA L	1976 HAMMOCK MOSS DR	ORLANDO	FL	32820	2231
NOWAK OLIVER	NOWAK HUI CHEN	1976 OAK GROVE CHASE DR	ORLANDO	FL	32820	2257
SHARMA SUBODH K	SHARMA HUNSHA S	1977 OAK GROVE CHASE DR	ORLANDO	FL	32820	2260
DIEP DI VAN	LY THUY NGOC THI	1978 CASCADES COVE DR	ORLANDO	FL	32820	2238
MARTIN KATIE	MARTIN ROBERT	1978 CORNER GLEN DR	ORLANDO	FL	32820	1953
GRADDY GEOFF	GRADDY SHAWNA	1979 CASCADES COVE DR	ORLANDO	FL	32820	2249
FOLK STEPHEN	FOLK VERNITA	1980 DARLIN CIR	ORLANDO	FL	32820	2704
GANESH VIDYARTIE D	GANESH ANDREW	1982 HAMMOCK MOSS DR	ORLANDO	FL	32820	2231
NUNEZ HUGO	NUNEZ LOURDES	1982 OAK GROVE CHASE DR	ORLANDO	FL	32820	2257
PERTTULA SHARON L		1983 OAK GROVE CHASE DR	ORLANDO	FL	32820	2260
MAI AU VAN	NGUYEN PHUONG THI	1984 CASCADES COVE DR	ORLANDO	FL	32820	2238
GALLAGHER ROBERT J		1985 CASCADES COVE DR	ORLANDO	FL	32820	2249
GONZALEZ ANA		1985 CORNER SCHOOL DR	ORLANDO	FL	32820	1915
MULNIX RICHARD	MULNIX JESSICA RAEANNE	1988 OAK GROVE CHASE DR	ORLANDO	FL	32820	2257
SCHROEDER MARK S	SCHROEDER ANGELA M	1989 OAK GROVE CHASE DR	ORLANDO	FL	32820	2260
HERRERA HILDA	HERRERA JAIME	1990 CASCADES COVE DR	ORLANDO	FL	32820	2238
EAPEN JASON		1991 CASCADES COVE DR	ORLANDO	FL	32820	2249
KHAN SHALIM	KHAN OPHELIA GANGIE	1994 HAMMOCK MOSS DR	ORLANDO	FL	32820	2231
HANSON DONALD A	HANSON PAMELA A	1995 OAK GROVE CHASE DR	ORLANDO	FL	32820	2260
HOSEIN IMSHAN		2000 HAMMOCK MOSS DR	ORLANDO	FL	32820	2231
MOLINARY DAVID	MOLINARY JANNETH	2002 CASCADES COVE DR	ORLANDO	FL	32820	2238
JOYNER LUTHER	CORRELL NASTASIA	2002 CORNER GLEN DR	ORLANDO	FL	32820	1955
GODDARD CRAIG B	GODDARD JILL DOREEN	2003 CASCADES COVE DR	ORLANDO	FL	32820	2249
MOYA GARY W		2003 OSPREY WOODS CIR	ORLANDO	FL	32820	2768
MBIONWU IJEOMA A		2004 HAWKS LANDING DR	ORLANDO	FL	32820	2785
MATEI RAZVAN		2005 HAWKS LANDING DR	ORLANDO	FL	32820	2787
NEALY TERRENCE	NEALY JILA	2006 BRISTOL GRANDE WAY	ORLANDO	FL	32820	2779
PLATON LEOPOLD P III	LITARDO MONICA	2006 CORNER TREE CT	ORLANDO	FL	32820	1926
MCBRIDE WESLEY P	BIGLER JAMIE L	2006 DARLIN CIR	ORLANDO	FL	32820	2705
RODRIGUEZ LUIS H	RODRIGUEZ BLANCA L	2006 GLORIA OAK CT	ORLANDO	FL	32820	2268
GLENN ANDREW		2006 HAMMOCK MOSS DR	ORLANDO	FL	32820	2231
TRAPP ELENI MARIE		2007 CORNER TREE CT	ORLANDO	FL	32820	1926
JARDINE EDMOND J	PANG JUSTINA M	2007 GLORIA OAK CT	ORLANDO	FL	32820	2268
RAM BHUPAL		2008 CASCADES COVE DR	ORLANDO	FL	32820	2238
CARRASQUILLO BARBARA	VELEZ FELICITA ESTATE	2008 CORNER MEADOW CIR	ORLANDO	FL	32820	1931
LY CINDY		2009 CASCADES COVE DR	ORLANDO	FL	32820	2249
KIMBERLY CHARLES	KIMBERLY MELISSA	2009 CORNER MEADOW CIR	ORLANDO	FL	32820	1932
LOPEZ CARLOS L	LOPEZ ORLED J	2009 CORNER SCHOOL DR	ORLANDO	FL	32820	1916
NGUYEN UYEN	NGUYEN LY	2009 OSPREY WOODS CIR	ORLANDO	FL	32820	2768
NELEN MARK ANDREW	ROEDER-NELEN DEBORAH MARIE	2011 HAWKS LANDING DR	ORLANDO	FL	32820	2787
RIVAS SILVIA LORENA		2012 BRISTOL GRANDE WAY	ORLANDO	FL	32820	2779
ANDINO REYES CARLOS J	DELGADO SANCHEZ ALEXANDRA	2012 CORNER TREE CT	ORLANDO	FL	32820	1926
HOM SETAHIM	PHAN SAOUN	2012 DARLIN CIR	ORLANDO	FL	32820	2705
SHARMA RAHUL K		2012 GLORIA OAK CT	ORLANDO	FL	32820	2268
LECAROS JOHNNY	LECAROS GISELA	2013 CORNER TREE CT	ORLANDO	FL	32820	1926
JAYANAMA PREMPREECHA	JAYANAMA AUBREY LYNN	2013 DARLIN CIR	ORLANDO	FL	32820	2708
MURRAY PATRICK M	MURRAY SANDRA A	2014 CASCADES COVE DR	ORLANDO	FL	32820	2238
HURTADO BRIONES JOSE A	HURTADO CORREA JOSE A	2014 CORNER GLEN DR	ORLANDO	FL	32820	1955
CALDERON GEORGE	CALDERON HEATHER	2015 CORNER MEADOW CIR	ORLANDO	FL	32820	1932
TROYER COURTNEY LYNN	BATES SAMUEL SCOTT	2015 CORNER SCHOOL DR	ORLANDO	FL	32820	1916
GIANNOTTI CARMEN		2015 OSPREY WOODS CIR	ORLANDO	FL	32820	2768
GLEMSER ROBERT CHRISTOPHER	GLEMSER TAINA CARIL	2016 HAWKS LANDING DR	ORLANDO	FL	32820	2785
JEANPIERRE LEMUEL		2017 HAWKS LANDING DR	ORLANDO	FL	32820	2787
FLORES LUIS R	COTTO SHEILA I	2018 BRISTOL GRANDE WAY	ORLANDO	FL	32820	2779
WHITAKER DANA B		2018 CORNER TREE CT	ORLANDO	FL	32820	1926
PETERSEN WILLIAM		2018 DARLIN CIR	ORLANDO	FL	32820	2705
RAMOS ALBERTO		2018 GLORIA OAK CT	ORLANDO	FL	32820	2268
CARPER JARRET		2018 HAMMOCK MOSS DR	ORLANDO	FL	32820	2231
GORDILLO ROSA E	GORDILLO VICTOR W	2019 CORNER TREE CT	ORLANDO	FL	32820	1926
GONZALEZ CESAR LIFE ESTATE	GONZALEZ NANCY LIFE ESTATE	2019 DARLIN CIR	ORLANDO	FL	32820	2708
CHARLES BERNADEAU	CHARLES LAURA	2019 GLORIA OAK CT	ORLANDO	FL	32820	2268
CORSI NINA	REDONDO ERIC	2020 CASCADES COVE DR	ORLANDO	FL	32820	2238
VAILLANCOURT LANDON M		2020 CORNER GLEN DR	ORLANDO	FL	32820	1955
SUDDUTH LINDA S		2021 CASCADES COVE DR	ORLANDO	FL	32820	2249
PEREZ ERIC	PEREZ ROSA	2021 CORNER SCHOOL DR	ORLANDO	FL	32820	1916
KHAN FARZAN	SINGH-KHAN SHALINI	2021 OSPREY WOODS CIR	ORLANDO	FL	32820	2768
LAUSCH DUSTIN E	LAUSCH LORENA A	2023 HAWKS LANDING DR	ORLANDO	FL	32820	2787
SINGH AMELLA	SINGH OSWALD H A	20235 FOOTHILL AVE APT B28	HOLLIS	NY	11423	1624

MARANI WILLIAM JR	MOFFITT WILLIAM	2024 BRISTOL GRANDE WAY	ORLANDO	FL	32820	2779
BOUCHARD SEAN JOSEPH		2024 CORNER TREE CT	ORLANDO	FL	32820	1926
SALEH NADER SOBHY HEMAIA	MEKHAIL MARIUM SAMIR MORIS	2024 GLORIA OAK CT	ORLANDO	FL	32820	2268
BOTSON SHARON		2024 HAMMOCK MOSS DR	ORLANDO	FL	32820	2231
HENRY PAUL		2025 CORNER TREE CT	ORLANDO	FL	32820	1926
MARTINEZ NIANAIS		2025 GLORIA OAK CT	ORLANDO	FL	32820	2268
OSORIO LINDA		2026 CASCADES COVE DR	ORLANDO	FL	32820	2238
CORNER GLEN REALTY LLC		2026 CORNER GLEN DR	ORLANDO	FL	32820	1955
APONTE JUAN M	APONTE NIXIDA	2027 CASCADES COVE DR	ORLANDO	FL	32820	2249
TISCHER CHRISTOPHER A	TISCHER TIFFANY M	2027 CORNER MEADOW CIR	ORLANDO	FL	32820	1932
FERGUSON GWENDALYN E		2027 OSPREY WOODS CIR	ORLANDO	FL	32820	2768
HASANAT MOHAMMAD ABUL	HASANAT FAYEZA S	2029 HAWKS LANDING DR	ORLANDO	FL	32820	2787
PETRUSKY JOHN		2030 BRISTOL GRANDE WAY	ORLANDO	FL	32820	2779
CAO WEILONG		2030 DARLIN CIR	ORLANDO	FL	32820	2705
ORDENANA ELIAS	ORELLANA ABIGAIL	2030 GLORIA OAK CT	ORLANDO	FL	32820	2268
FRANKLIN BRYAN M		2030 HAMMOCK MOSS DR	ORLANDO	FL	32820	2231
BERARDI JOSEPH	BERARDI NICOLE	2031 BRISTOL GRANDE WAY	ORLANDO	FL	32820	2780
MUTAWE KHALIDA K	NAYFEH SAMEER F	2031 CORNER TREE CT	ORLANDO	FL	32820	1926
PEREZ ALEXIS JOSEPH	ROMAN YAKSHIRA LIZBETH OSORIO	2031 GLORIA OAK CT	ORLANDO	FL	32820	2268
CINTRON ORONA SHIRLEY		2031 HAMMOCK MOSS DR	ORLANDO	FL	32820	2234
DIFRUSCIO ANGELO	DIFRUSCIO DIANE	2032 CASCADES COVE DR	ORLANDO	FL	32820	2238
PEREZ JOSE MIGUEL	AVILES DELIA JESSICA	2032 CORNER MEADOW CIR	ORLANDO	FL	32820	1931
ORTIZ DEL TORO NOEL ALFRED	DELGADO ORTIZ PILAR SANDRA	2032 CORNER SCHOOL DR	ORLANDO	FL	32820	1923
HUBBARD NICHOLAS RYAN	SALIM TOSHA	2033 CORNER GLEN DR	ORLANDO	FL	32820	1954
METZGER DEREK		2033 CORNER MEADOW CIR	ORLANDO	FL	32820	1932
CLARK JENNIFER GREER		2033 OSPREY WOODS CIR	ORLANDO	FL	32820	2768
SKEETE SAMOYA	SKEETE DWIGHT	2034 HAWKS LANDING DR	ORLANDO	FL	32820	2786
MARTINEZ ISRAEL MANUEL	MARTINEZ TAMARA THAIL	2035 HAWKS LANDING DR	ORLANDO	FL	32820	2787
GARLINGTON PENELOPE	GARLINGTON PAUL L II	2036 BRISTOL GRANDE WAY	ORLANDO	FL	32820	2779
RIVERA RUTHIE	RIVERA ALEXEI	2036 GLORIA OAK CT	ORLANDO	FL	32820	2268
RICE GARY GARLAND LIFE ESTATE	RICE JUDITY LIFE ESTATE	2036 HAMMOCK MOSS DR	ORLANDO	FL	32820	2231
LEGER DANIEL	LEGER SONIA	2037 CORNER TREE CT	ORLANDO	FL	32820	1926
WOODS CHOLIA		2037 DARLIN CIR	ORLANDO	FL	32820	2708
ANDREOLA LINA JULIANA		2037 GLORIA OAK CT	ORLANDO	FL	32820	2268
ERGER MADISON	NOHMER TYLER	2037 HAMMOCK MOSS DR	ORLANDO	FL	32820	2234
SARRIA KYLE	NEINER COLLEEN	2038 CORNER GLEN DR	ORLANDO	FL	32820	1955
TROVILLION DAVID P	TROVILLION PATRICIA J	2038 CORNER SCHOOL DR	ORLANDO	FL	32820	1923
ROBINSON ANDREW JAMES	BLANCHFIELD MEGAN RYAN	2039 CORNER GLEN DR	ORLANDO	FL	32820	1954
MOODIE RALSTON	MOODIE NEADIENE	2039 CORNER MEADOW CIR	ORLANDO	FL	32820	1932
CUENCA OLGA LIFE ESTATE	REM: RODNEY LEO RODRIGUEZ	2039 CORNER SCHOOL DR	ORLANDO	FL	32820	1916
ALEXANDER WILLIE J JR LIFE ESTATE	ALEXANDER APPIE LM LIFE ESTATE	2039 OSPREY WOODS CIR	ORLANDO	FL	32820	2768
STELLA JOHN R	STELLA CAROL A	2040 HAWKS LANDING DR	ORLANDO	FL	32820	2786
BRADSHAW WILLIAM L	BRADSHAW HALLIE A	2042 BRISTOL GRANDE WAY	ORLANDO	FL	32820	2779
TURNER MICHAEL JOSEPH	TURNER VICTORIA LYNN	2042 DARLIN CIR	ORLANDO	FL	32820	2705
GUIRRERI ANTHONY FRANK JR	SHAIKEWITZ HELEN ANN	2042 GLORIA OAK CT	ORLANDO	FL	32820	2268
JACAS SARAH TATIANA		2042 HAMMOCK MOSS DR	ORLANDO	FL	32820	2231
JOHNSON ALEXANDER	JOHNSON KELLY L	2043 BRISTOL GRANDE WAY	ORLANDO	FL	32820	2780
CRESSMAN BRANDON	CRESSMAN VICTORIA	2043 CORNER TREE CT	ORLANDO	FL	32820	1926
NEWSOME HEATHER	NEWSOME JEREMY	2043 DARLIN CIR	ORLANDO	FL	32820	2708
ALFORD CHANEL M	ALFORD EUGENE D	2043 GLORIA OAK CT	ORLANDO	FL	32820	2268
BAIRD ROBERT D		2044 CASCADES COVE DR	ORLANDO	FL	32820	2238
THOMAS KELBY	GUTIERREZ JENNIFER	2044 CORNER MEADOW CIR	ORLANDO	FL	32820	1931
TORRALES VICTOR M		2044 CORNER SCHOOL DR	ORLANDO	FL	32820	1923
STEPHENSON CRYSTAL N	STEPHENSON DALE A	2044 OSPREY WOODS CIR	ORLANDO	FL	32820	2767
ABBASI SAIMA ERUM		2045 CORNER MEADOW CIR	ORLANDO	FL	32820	1932
CANTAVE GUY LOUIS		2045 CORNER SCHOOL DR	ORLANDO	FL	32820	1916
CHOI LEWIS	CHOI KUKSUN KIM	2045 OSPREY WOODS CIR	ORLANDO	FL	32820	2768
ECHOLS PAUL T	ECHOLS MARILYN S	2046 HAWKS LANDING DR	ORLANDO	FL	32820	2786
UTT MONICA L		2047 HAWKS LANDING DR	ORLANDO	FL	32820	2787
IRWIN DANIEL S	IRWIN MICHELLE R	2048 BRISTOL GRANDE WAY	ORLANDO	FL	32820	2779
DIERKS RONALD	DIERKS BEVERLY	2048 DARLIN CIR	ORLANDO	FL	32820	2705
MOELLER RORY MICHAEL	MOILLER STARR	2048 GLORIA OAK CT	ORLANDO	FL	32820	2268
JACAS LARRY P	JACAS LESLIE SHIRLEY	2048 HAMMOCK MOSS DR	ORLANDO	FL	32820	2231
BARNES LOUIS C	BARNES JACQUELYN M	2049 BRISTOL GRANDE WAY	ORLANDO	FL	32820	2780
HOBBY DEVIN A	HOBBY ANGELA M	2049 DARLIN CIR	ORLANDO	FL	32820	2708
RODRIGUEZ CRISTINA		2049 GLORIA OAK CT	ORLANDO	FL	32820	2268
DAENS JAYNE		2049 HAMMOCK MOSS DR	ORLANDO	FL	32820	2234
HINES STEPHEN M	HINES CYNTHIA A	2050 CASCADES COVE DR	ORLANDO	FL	32820	2238
RODRIGUES AIRES D	RODRIGUES MARIBEL	2050 CORNER GLEN DR	ORLANDO	FL	32820	1955
HOLLOWAY SHARON	SPILLMAN MICHAEL SCOTT	2050 CORNER SCHOOL DR	ORLANDO	FL	32820	1923
GRASTY ALBERTO	GARCIA MARIAH NAE	2051 CORNER GLEN DR	ORLANDO	FL	32820	1954
VELEZ RICHARD J JR	VELEZ KASSANDRA Y	2051 OSPREY WOODS CIR	ORLANDO	FL	32820	2768
CONTRERAS RICHARD	CONTRERAS DAMARIS	2052 HAWKS LANDING DR	ORLANDO	FL	32820	2786
RAMPAUL SAMANTHA CHRISTINA		2053 HAWKS LANDING DR	ORLANDO	FL	32820	2787
GAL ABRAHAM		2054 DARLIN CIR	ORLANDO	FL	32820	2705
ECHEANDIA LUIS	ECHEANDIA SONIA	2054 GLORIA OAK CT	ORLANDO	FL	32820	2268
YOUSSEF MAGED SAMIER AZME		2054 HAMMOCK MOSS DR	ORLANDO	FL	32820	2231
BAKHRU RAMESH	CHOPRA MAMTA	2055 BRISTOL GRANDE WAY	ORLANDO	FL	32820	2780
GILLENS BRADFORD		2055 DARLIN CIR	ORLANDO	FL	32820	2708
DECHERNISS BILLY P III	DECHERNISS LUZ A	2055 GLORIA OAK CT	ORLANDO	FL	32820	2268
LOPEZ VICTOR M	LOPEZ MARIA D	2055 HAMMOCK MOSS DR	ORLANDO	FL	32820	2234
OLSZEWSKI RYSZARD	WLODARCZYK KRYSTYNA	2056 CASCADES COVE DR	ORLANDO	FL	32820	2238
MUNIZ MILAGRO		2056 CORNER GLEN DR	ORLANDO	FL	32820	1955
OCASIO WILLIAM A JR	BURGOS-SANTINI RACHEL M	2056 CORNER MEADOW CIR	ORLANDO	FL	32820	1931
PASTRANA ALLEK	CABEZAS ROSA G ALARCON	2056 CORNER SCHOOL DR	ORLANDO	FL	32820	1923
WILLIAMS MIKAIL DAVID		2057 CORNER GLEN DR	ORLANDO	FL	32820	1954
SANCHEZ RUTH E MARCHANY		2057 CORNER MEADOW CIR	ORLANDO	FL	32820	1932
SANTOS LYDIA M		2057 CORNER SCHOOL DR	ORLANDO	FL	32820	1916
MCGILL JOHN	MCGILL MARY BETH	2057 OSPREY WOODS CIR	ORLANDO	FL	32820	2768
WITTMER MARGARET		2058 HAWKS LANDING DR	ORLANDO	FL	32820	2786
MAHADEO RAJKUMAR R	MAHADEO ROSALBA	2059 HAWKS LANDING DR	ORLANDO	FL	32820	2787
YOUNG STEVE L	YOUNG MICHELE D	2060 HAMMOCK MOSS DR	ORLANDO	FL	32820	2231
NIEVES MELISSA JOAN	NIEVES JOEBRIEL	2061 GLORIA OAK CT	ORLANDO	FL	32820	2268
HAYNES KENDALL D		2062 CASCADES COVE DR	ORLANDO	FL	32820	2238
DRISKEL BRENT E		2062 CORNER GLEN DR	ORLANDO	FL	32820	1955
GONZALEZ FRANCISCO	GONZALEZ MARGARITA	2063 CASCADES COVE DR	ORLANDO	FL	32820	2249
AVALOS STEPHANIE		2063 CORNER SCHOOL DR	ORLANDO	FL	32820	1916
VOLONNINO DAVID		2065 HAWKS LANDING DR	ORLANDO	FL	32820	2787
MYERS BARBARA ELAINE	ROLLINS FREDRICK DREW	2066 HAMMOCK MOSS DR	ORLANDO	FL	32820	2231

BAUMANN JOHN		2068 CASCADES COVE DR	ORLANDO	FL	32820	2238
JOEL COURTNEY ELYSE		2068 CORNER GLEN DR	ORLANDO	FL	32820	1955
HARVEY LARRY M		2069 CASCADES COVE DR	ORLANDO	FL	32820	2249
RAMIREZ RICHARD R	RAMIREZ YAHAIRA	2069 CORNER MEADOW CIR	ORLANDO	FL	32820	1932
DAMELIO MICHAEL	DAMELIO JUDY	2072 HAMMOCK MOSS DR	ORLANDO	FL	32820	2231
PAYNE VICKIE C		2074 CASCADES COVE DR	ORLANDO	FL	32820	2238
BENITEZ MANUEL	BENITEZ MAGDALIS	2074 CORNER GLEN DR	ORLANDO	FL	32820	1955
TRAN KEVIN	VU MAI THUY-TIEN	2074 CORNER MEADOW CIR	ORLANDO	FL	32820	1931
KRIEGER BRUCE H	KRIEGER ANNE K	2075 CASCADES COVE DR	ORLANDO	FL	32820	2249
JACQUES ANSELET		2075 CORNER MEADOW CIR	ORLANDO	FL	32820	1932
HARRIS-MONROE JOANNE	MONROE KEITH T JR	2078 HAMMOCK MOSS DR	ORLANDO	FL	32820	2231
COPE DUVAN		2080 CASCADES COVE DR	ORLANDO	FL	32820	2238
OLMEDA CESAR E	OLMEDA IVONNE	2080 CORNER GLEN DR	ORLANDO	FL	32820	1955
MARINONI GUSTAVO	MARINONI DAWN	2084 HAMMOCK MOSS DR	ORLANDO	FL	32820	2232
REESE MARY DONNE		20848 FORT CHRISTMAS RD	CHRISTMAS	FL	32709	9425
GASTON ALONZO D		2086 CASCADES COVE DR	ORLANDO	FL	32820	2238
MASCHERI DAVID	MASCHERI KATE	2087 CASCADES COVE DR	ORLANDO	FL	32820	2250
JIMENEZ CHRISTIAN	LINARES ELAINE	2090 HAMMOCK MOSS DR	ORLANDO	FL	32820	2232
GUTIERREZ RUBEN M LIFE ESTATE	GUTIERREZ YINETTE A LIFE ESTATE	2096 HAMMOCK MOSS DR	ORLANDO	FL	32820	2232
HUBERT TODD E	SOBOCINSKI BARBARA A	2098 CASCADES COVE DR	ORLANDO	FL	32820	2238
TIMBIE DAVID P	TIMBIE GISELLE JULIE	2099 CASCADES COVE DR	ORLANDO	FL	32820	2250
CRESSWELL CARLA J		2100 MALLARD SPRUCE TER	ORLANDO	FL	32820	2778
ANDREWS ANDRE ESTATE		2102 HAMMOCK MOSS DR	ORLANDO	FL	32820	2232
LUCAS REBECCA	CAMPOAMOR ROBERT A	2103 BRISTOL GRANDE WAY	ORLANDO	FL	32820	2782
MADISON MARK	BISHOP NADIA	2104 CASCADES COVE DR	ORLANDO	FL	32820	2238
CUEVA LUIS A	BARAHONA MALENA LEONOR	2104 CORNER POINT CT	ORLANDO	FL	32820	1956
KARBAL SETH	DEPAOLO ALEXANDRA	2104 OSPREY WOODS CIR	ORLANDO	FL	32820	2769
BROOKS FAMILY REVOCABLE LIVING TRUST		2105 CASCADES COVE DR	ORLANDO	FL	32820	2250
PHIPPS-HARRIGAN JOY D	HARRIGAN VONCILLE G	2105 CORNER POINT CT	ORLANDO	FL	32820	1956
HILEY-HINES CAROL A		2105 OSPREY WOODS CIR	ORLANDO	FL	32820	2770
COOPER GROVER L	COOPER SHARON L	2106 MALLARD SPRUCE TER	ORLANDO	FL	32820	2778
ARBELO WILLIAM A	ARBELO NEREIDA	2107 CORNER SCHOOL DR	ORLANDO	FL	32820	1916
MORRIS JEFFREY TILLMAN JR	SIVERIO LAURA D	2108 DARLIN CIR	ORLANDO	FL	32820	2705
DACRES FITZROY	DACRES SHERIKA	2109 BRISTOL GRANDE WAY	ORLANDO	FL	32820	2782
BOYER YVES	BOYER QUETLY	2109 HAMMOCK MOSS DR	ORLANDO	FL	32820	2235
CAMPBELL KEVIN L	CAMPBELL ANGELA N	2110 CASCADES COVE DR	ORLANDO	FL	32820	2238
GARIB VIDIA		2110 CORNER POINT CT	ORLANDO	FL	32820	1956
ANDINO TORRES ALEX O	RODRIGUEZ ADA M	2110 OSPREY WOODS CIR	ORLANDO	FL	32820	2769
OLIVO FRANKLIN	OLIVO SUSSY	2111 CASCADES COVE DR	ORLANDO	FL	32820	2250
EDMUNDS MARK A		2111 OSPREY WOODS CIR	ORLANDO	FL	32820	2770
DAELO RENWICK O	DAELO CHRISTINA A	2112 MALLARD SPRUCE TER	ORLANDO	FL	32820	2778
WHITESIDE DENISE		2113 CORNER SCHOOL DR	ORLANDO	FL	32820	1916
SEILER CHRISTOPHER	SEILER MICHELLE	2115 BRISTOL GRANDE WAY	ORLANDO	FL	32820	2782
DUNCAN JOSEPH	DUNCAN MARY-MABEL	2115 HAMMOCK MOSS DR	ORLANDO	FL	32820	2235
MOYLEN FREDERICK J	BISHOP JEANETTE A	2116 CASCADES COVE DR	ORLANDO	FL	32820	2238
TOWNSEND DONALD D	TOWNSEND DEBRA L	2117 CASCADES COVE DR	ORLANDO	FL	32820	2250
TIMPERI MARTINA M	SANTINI LIZ M	2117 CORNER POINT CT	ORLANDO	FL	32820	1956
CEPERO CARLOS A	CEPERO FRANCES	2117 OSPREY WOODS CIR	ORLANDO	FL	32820	2770
BROADAWAY CHRISTOPHER L		2118 MALLARD SPRUCE TER	ORLANDO	FL	32820	2778
ZIEMBA DAVID		2119 CORNER SCHOOL DR	ORLANDO	FL	32820	1916
RIVERA WILFREDO	RIVERA LYDIA	2119 MALLARD SPRUCE TER	ORLANDO	FL	32820	2778
RODRIGUEZ SARMIENTO JOSE R LIFE ESTAT	HERNANDEZ ELSA LIFE ESTATE	2120 HAMMOCK MOSS DR	ORLANDO	FL	32820	2232
LODGE HOWARD III	LODGE MAY	2121 BRISTOL GRANDE WAY	ORLANDO	FL	32820	2782
LOUIS JEAN M	LOUIS MARIE S	2121 HAMMOCK MOSS DR	ORLANDO	FL	32820	2235
ORITZ ARAMIS ESPINOSA		2122 CASCADES COVE DR	ORLANDO	FL	32820	2238
ALVAREZ JESUS	ALVAREZ TAMARA	2122 CORNER POINT CT	ORLANDO	FL	32820	1956
GENOV CHRISTIAN	GENOV AMANDA	2123 CASCADES COVE DR	ORLANDO	FL	32820	2250
NOSAL KATRINA Z	NOSAL MARK S	2123 OSPREY WOODS CIR	ORLANDO	FL	32820	2770
NANGA SHAWN	NANGA SHAZEELA	2124 CORNER SCHOOL DR	ORLANDO	FL	32820	1923
SINGH AJIT PARKASH	BHATTAL JAGDIP	2124 MALLARD SPRUCE TER	ORLANDO	FL	32820	2778
WILLS JEFFERY A	WILLS THERESA	2125 CORNER SCHOOL DR	ORLANDO	FL	32820	1916
GARCIA KAREN		2126 HAMMOCK MOSS DR	ORLANDO	FL	32820	2232
THOMAS PATRICIA K	THOMAS RICHARD EARL	2127 BRISTOL GRANDE WAY	ORLANDO	FL	32820	2782
WILLIAMS STEPHEN A		2128 CASCADES COVE DR	ORLANDO	FL	32820	2238
MORRIS RICARDO O	APONTE ANNALLY	2128 CORNER POINT CT	ORLANDO	FL	32820	1956
OSINUGA OLUTOBI		2129 CASCADES COVE DR	ORLANDO	FL	32820	2250
REYES PHILLIP ANDREW	REYES ERICA L	2129 OSPREY WOODS CIR	ORLANDO	FL	32820	2770
NEELAKANTAN SARAVANAN SAROJINI	SARVANAN NAGARANI	213 HAWTHORNE AVE APT 83	CENTRAL ISLIP	NY	11722	1329
VEGA JUAN M 50% INT	VEGA ANDREA 50% INT	213 MAY ST	HAWTHORNE	NJ	7506	2634
COBB JENNETTE SUZANNE		2130 CORNER SCHOOL DR	ORLANDO	FL	32820	1923
PATEL TUSHAR B	PATEL JIKAL S	2130 MALLARD SPRUCE TER	ORLANDO	FL	32820	2778
GOMEZ EDWARD A	GOMEZ DINELCA	2131 CORNER SCHOOL DR	ORLANDO	FL	32820	1916
LEMON DARIN G	LEMON JENNIFER SUE	2131 MALLARD SPRUCE TER	ORLANDO	FL	32820	2778
ASHBA JOSEPH ALLEN	ASHBA TIFFANY NICOLE	2132 DARLIN CIR	ORLANDO	FL	32820	2705
GARDNER GARVIN C	GARDNER PAMELA C	2132 HAMMOCK MOSS DR	ORLANDO	FL	32820	2232
YATSENICK JEFFREY A		2133 BRISTOL GRANDE WAY	ORLANDO	FL	32820	2782
WHITE JAMES	WHITE KELLY	2134 CASCADES COVE DR	ORLANDO	FL	32820	2238
ACOSTA KAROL C		2135 CASCADES COVE DR	ORLANDO	FL	32820	2250
SCHULZ MATTHEW BARRY	SCHULZ LINDA MARIA	2135 OSPREY WOODS CIR	ORLANDO	FL	32820	2770
QUCSAI KIMBERLY	QUCSAI ANDREW JR	2136 CORNER SCHOOL DR	ORLANDO	FL	32820	1923
ADAMS GARY E	ADAMS WENDY L	2136 MALLARD SPRUCE TER	ORLANDO	FL	32820	2778
BRALEY BRANDON M		2137 CORNER SCHOOL DR	ORLANDO	FL	32820	1916
DAVILA HECTOR F	DAVILA MIGDALIA C	2137 MALLARD SPRUCE TER	ORLANDO	FL	32820	2778
HUGHES REGINALD S	COWART-HUGHES TIFFANY L	2138 BRISTOL GRANDE WAY	ORLANDO	FL	32820	2781
LOPEZ ANTONIO F		2138 DARLIN CIR	ORLANDO	FL	32820	2705
COLON ROSALINA		2138 HAMMOCK MOSS DR	ORLANDO	FL	32820	2232
ACEVEDO CARLOS E	RUIZ ANA M	2139 BRISTOL GRANDE WAY	ORLANDO	FL	32820	2782
SHELTON DARRELL	QUINTANA ATHENA	2140 CASCADES COVE DR	ORLANDO	FL	32820	2238
THOMASON AMANDA		2140 CORNER POINT CT	ORLANDO	FL	32820	1956
TOLENTINO AUGUSTO C JR	TOLENTINO FLOR L	2141 CASCADES COVE DR	ORLANDO	FL	32820	2250
ZOU WEI XIAN	LU JINLIAN	2141 OSPREY WOODS CIR	ORLANDO	FL	32820	2770
MEDINA ERNEST	MEDINA JOSEPHINE I	2141 WHITING TRL	ORLANDO	FL	32820	1457
VIRELLA VELEZ ARACELIS I		2142 CORNER SCHOOL DR	ORLANDO	FL	32820	1923
GRUNFELDER JANET R		2142 MALLARD SPRUCE TER	ORLANDO	FL	32820	2778
WILHELM MICHAEL J	WILHELM RYAN R	2144 BRISTOL GRANDE WAY	ORLANDO	FL	32820	2781
PECH VISAKA		2144 HAMMOCK MOSS DR	ORLANDO	FL	32820	2232
VO JOSEPH N	THAI TRANG THI THU	2145 BRISTOL GRANDE WAY	ORLANDO	FL	32820	2782
VAGOS JOMEICE		2145 DARLIN CIR	ORLANDO	FL	32820	2709
GUASP RICHARD	GUASP CYNTHIA M	2146 CASCADES COVE DR	ORLANDO	FL	32820	2238

MURNAN JAMES A		2147 CASCADES COVE DR	ORLANDO	FL	32820	2250
HARDY LANDERS B	HARDY BRENDA D	2147 OSPREY WOODS CIR	ORLANDO	FL	32820	2770
MAI HUY	TRINH THUY NGAN	2147 WHITING TRL	ORLANDO	FL	32820	1457
TOLOSA MANUEL E	TOLOSA AMANDA	2148 MALLARD SPRUCE TER	ORLANDO	FL	32820	2778
OBRIEN JEFFREY LIFE ESTATE	WILLIAMS JENNIFER BETH LIFE ESTATE	2149 CORNER SCHOOL DR	ORLANDO	FL	32820	1916
GERSHMAN MICHAEL J	GERSHMAN SONIA	2150 BRISTOL GRANDE WAY	ORLANDO	FL	32820	2781
BAYSE SHIRLEY A		2150 DARLIN CIR	ORLANDO	FL	32820	2705
CHAPARRO HERMAN	CHAPARRO CLARITZA	2150 HAMMOCK MOSS DR	ORLANDO	FL	32820	2232
NORMAN JAMES H	NORMAN JACKLYN L	2151 BRISTOL GRANDE WAY	ORLANDO	FL	32820	2782
DANDAN MOHAMMAD 1/4 INT	DANDAN BASSIMA MOUNEER 1/4 INT	2152 CASCADES COVE DR	ORLANDO	FL	32820	2238
LEOGRANDE JONATHAN		2152 OSPREY WOODS CIR	ORLANDO	FL	32820	2769
MABY NICHOLAS G	MABY LYNDSAY	2153 OSPREY WOODS CIR	ORLANDO	FL	32820	2770
KAYDASH SERGEY N	YAZLOVSKAYA YANINA	2155 CORNER SCHOOL DR	ORLANDO	FL	32820	1916
LIZARRAGA CARISSA M		2156 DARLIN CIR	ORLANDO	FL	32820	2705
RAINES RICHARD BARRY JR	RAINES KELLY JOISSE	2156 HAMMOCK MOSS DR	ORLANDO	FL	32820	2232
BULLOCK VICTOR S III	BULLOCK STEPHANY E	2158 CASCADES COVE DR	ORLANDO	FL	32820	2238
RAMIREZ CARLOS I		2161 CORNER SCHOOL DR	ORLANDO	FL	32820	1916
VARGAS MARTIN	VARGAS ANNY E	2162 HAMMOCK MOSS DR	ORLANDO	FL	32820	2232
LIGHTBOURNE DEDYS LIFE ESTATE	REM: MARINA E LIGHTBOURNE	2163 HAMMOCK MOSS DR	ORLANDO	FL	32820	2236
EASTERWOOD MARK BRAN	EASTERWOOD LAURIE ANN	2164 CASCADES COVE DR	ORLANDO	FL	32820	2238
AGOSTO LIONEL	RIVERA VERONICA	2167 CORNER SCHOOL DR	ORLANDO	FL	32820	1916
RAMIREZ ROSALIO	RAMIREZ MARIA	2168 HAMMOCK MOSS DR	ORLANDO	FL	32820	2232
SHAMMAH ALBERT ANTHONY	SHAMMAH ALINA	2169 HAMMOCK MOSS DR	ORLANDO	FL	32820	2236
GIRARD R MICHAEL	GIRARD IRIS N	2170 CASCADES COVE DR	ORLANDO	FL	32820	2238
SANCHEZ RICHARD		2172 CORNER SCHOOL DR	ORLANDO	FL	32820	1923
JENKINS ROBERT J	JENKINS ELIZABETH N	2176 CASCADES COVE DR	ORLANDO	FL	32820	2238
STORY DAVID	STORY GAYLE	2177 CASCADES COVE DR	ORLANDO	FL	32820	2251
FERRARO MICHAEL L		2178 CORNER SCHOOL DR	ORLANDO	FL	32820	1923
BASSETT JEAN ROBIN	BASSETT NORMA	2179 CORNER SCHOOL DR	ORLANDO	FL	32820	1916
WILLIAMS PEGGI D	WILLIAMS BYRON K	2180 HAMMOCK MOSS DR	ORLANDO	FL	32820	2232
DACOSTA CESAR		2182 CASCADES COVE DR	ORLANDO	FL	32820	2238
OGLESBY RICHARD BRADLEY		2183 CASCADES COVE DR	ORLANDO	FL	32820	2251
JONES DENNIS	JONES CHRISTIANA	2186 HAMMOCK MOSS DR	ORLANDO	FL	32820	2232
CRUZ ROBERTO JR 50%	CRUZ MICHELLE 50%	2192 HAMMOCK MOSS DR	ORLANDO	FL	32820	2232
WENTE BRIAN M	WENTE KAREN A	2198 HAMMOCK MOSS DR	ORLANDO	FL	32820	2232
KUMAR VIJAY	KAUR RUPINDER	2199 HAMMOCK MOSS DR	ORLANDO	FL	32820	2236
STARGEL DAVID S	STARGEL TISHA LENELL COOK	2201 OSPREY WOODS CIR	ORLANDO	FL	32820	2772
MANWAH HORACE	MANWAH SABITA	2204 HAMMOCK MOSS DR	ORLANDO	FL	32820	2232
PERCY FARISA		2205 HAMMOCK MOSS DR	ORLANDO	FL	32820	2236
ZABEL LUKE ANDREW	ZABEL BETH ANGELA	2205 HOLLY PINE CIR	ORLANDO	FL	32820	2275
FUNK AMANDA	FUNK DUSTIN	2206 HOLLY PINE CIR	ORLANDO	FL	32820	2275
HARDIN DEREK A		2207 DARLIN CIR	ORLANDO	FL	32820	2709
SCHUETTKE SCOTT R		2207 OSPREY WOODS CIR	ORLANDO	FL	32820	2772
PHAM STEVEN DINH	DUONG MY HOA	2210 HOLLY PINE CIR	ORLANDO	FL	32820	2275
LALOO STEPHEN		2211 HAMMOCK MOSS DR	ORLANDO	FL	32820	2236
RAMIREZ RAMSES M	RODRIGUEZ ELIZABETH ALANYA	2211 HOLLY PINE CIR	ORLANDO	FL	32820	2275
SEALEY OSWALD JR	SEALEY MELISSA K	2212 DARLIN CIR	ORLANDO	FL	32820	2706
GHOBRIAL ANTWAN		2213 DARLIN CIR	ORLANDO	FL	32820	2709
ACUNA EDGARDO M	ACUNA AMEERA	2213 OSPREY WOODS CIR	ORLANDO	FL	32820	2772
GONZALEZPLATA ELIEZER		2216 HAMMOCK MOSS DR	ORLANDO	FL	32820	2232
GEE LEWIS THOMAS	GEE PATRICIA L	2216 HOLLY PINE CIR	ORLANDO	FL	32820	2275
ADAMS MICHAEL L LIFE ESTATE	DALEN-ADAMS ELAINE M LIFE ESTATE	2217 HAMMOCK MOSS DR	ORLANDO	FL	32820	2236
HERNANDEZ ELISEO	HERNANDEZ AMPARO	2218 DARLIN CIR	ORLANDO	FL	32820	2706
MORALES ALIDA E LIFE ESTATE	REM: LOURDES MOLINA	2222 HAMMOCK MOSS DR	ORLANDO	FL	32820	2232
SERRANO CARLOS		2222 HOLLY PINE CIR	ORLANDO	FL	32820	2275
CASIANO IRIS		2223 HAMMOCK MOSS DR	ORLANDO	FL	32820	2236
SAUCEDA ESMERALDA	SAUCEDA MARIA DE JESUS	2224 DARLIN CIR	ORLANDO	FL	32820	2706
CARRANZA GLADYS		2225 DARLIN CIR	ORLANDO	FL	32820	2709
SELWOOD CLIFFORD BURNETT III	SELWOOD ETHEL MARIE	2225 OSPREY WOODS CIR	ORLANDO	FL	32820	2772
GRIFFIN GARRETT K		2228 HOLLY PINE CIR	ORLANDO	FL	32820	2275
GONZALEZ JONATHAN		2230 DARLIN CIR	ORLANDO	FL	32820	2706
MENDOZA LUIS	DEJESUS BRENDA	2230 OSPREY WOODS CIR	ORLANDO	FL	32820	2771
BECKER LOWELL	BECKER ANNETTE	2231 OSPREY WOODS CIR	ORLANDO	FL	32820	2772
RUH CHRISTOPHER	RUH JESSICA	2234 HOLLY PINE CIR	ORLANDO	FL	32820	2275
SANCHEZ GUILLERMO	MENDEZ-SANCHEZ BLANCA	2236 DARLIN CIR	ORLANDO	FL	32820	2706
DEBNATH SURAJIT	DEBNATH SUPRITI	2236 OSPREY WOODS CIR	ORLANDO	FL	32820	2771
BARLOW ANGELICA		2237 DARLIN CIR	ORLANDO	FL	32820	2709
MAJORS ALMON JR	MAJORS RITA R	2237 OSPREY WOODS CIR	ORLANDO	FL	32820	2772
OCCIL HUGO	MCKENZIE MELISSA	2242 DARLIN CIR	ORLANDO	FL	32820	2706
OBRIEN LISA S	OBRIEN DOUGLAS W	2242 OSPREY WOODS CIR	ORLANDO	FL	32820	2771
HERNANDEZ ORTIZ ELIAS	HERNANDEZ ORTIZ MILDRED	2243 OSPREY WOODS CIR	ORLANDO	FL	32820	2772
CARLSON BRYAN KEITH	CARLSON CHRISTI S	2246 HOLLY PINE CIR	ORLANDO	FL	32820	2275
LOPEZ LUZ M		2248 DARLIN CIR	ORLANDO	FL	32820	2706
DEMARIS JAN	DEMARIS AARON	2248 OSPREY WOODS CIR	ORLANDO	FL	32820	2771
BOOKER RAINEY	ANDERSON RUSSELL JAMES	2249 DARLIN CIR	ORLANDO	FL	32820	2709
TESTON DANIEL G	TESTON TANIN S	2249 OSPREY WOODS CIR	ORLANDO	FL	32820	2772
GAMBINO ANGELA		2254 OSPREY WOODS CIR	ORLANDO	FL	32820	2771
DOMINGUEZ AMNUBIZ LETICIA LIFE ESTATE	DOMINGUEZ SECOFF JULIO CESAR	2255 OSPREY WOODS CIR	ORLANDO	FL	32820	2772
STRICKLAND CURT		2258 HOLLY PINE CIR	ORLANDO	FL	32820	2275
SCHMIDT GAVIN A		2264 HOLLY PINE CIR	ORLANDO	FL	32820	2275
SERA-JOSEF JOSE R	SERA-JOSEF JOY T	2270 HOLLY PINE CIR	ORLANDO	FL	32820	2275
MONTERO SAMUEL	MONTERO JAMIE LEE	2276 HOLLY PINE CIR	ORLANDO	FL	32820	2275
SANKELLA NATASHA		2282 HOLLY PINE CIR	ORLANDO	FL	32820	2275
JANSSEN MEGAN A	JANSSEN JOSEPH T	2301 CARNATION HILL CT	ORLANDO	FL	32820	2285
LAVERDE GLADYS A		2302 HOLLY PINE CIR	ORLANDO	FL	32820	2277
ROSENSWEIG GARY RICHARD	ROSENSWEIG DIANNE MARY	2302 OSPREY WOODS CIR	ORLANDO	FL	32820	2773
DAVIS ROBERT	DAVIS DANIELE	2303 HOLLY PINE CIR	ORLANDO	FL	32820	2276
LOVEGREN JOEL LIFE ESTATE	REM: CHRISTOPHER JONATHAN LOVEGREN	2303 OSPREY WOODS CIR	ORLANDO	FL	32820	2775
MORRIS AKEEL		2308 HOLLY PINE CIR	ORLANDO	FL	32820	2277
WATSON DANIEL J LIFE ESTATE	WATSON LORETTA C LIFE ESTATE	2308 OSPREY WOODS CIR	ORLANDO	FL	32820	2773
ZOU WEI-XIONG	CHI QING-MEI	2309 HOLLY PINE CIR	ORLANDO	FL	32820	2276
SEILER ROBERT C	VALERON VALERIE	2309 OSPREY WOODS CIR	ORLANDO	FL	32820	2775
NGUYEN TAM	NGUYEN TRA	2312 CARNATION HILL CT	ORLANDO	FL	32820	2285
JONES JENNA B		2313 CARNATION HILL CT	ORLANDO	FL	32820	2285
MIKHAEL ADEL		2314 HOLLY PINE CIR	ORLANDO	FL	32820	2277
SCOTT AURIEL		2315 HOLLY PINE CIR	ORLANDO	FL	32820	2276
HARPER WINSTON J	HARPER BERIS M	2315 OSPREY WOODS CIR	ORLANDO	FL	32820	2775
VIDAL CARLOS NOEL	GARCIA NOEMI	2318 CARNATION HILL CT	ORLANDO	FL	32820	2285
BOYLE MARCUS JAMES	BOYLE BRENDA DIANE	2320 HOLLY PINE CIR	ORLANDO	FL	32820	2277

DE LA TORRE RAUL	DE LA TORRE BLANCA	2321 HOLLY PINE CIR	ORLANDO	FL	32820	2276
LOPERENA ELSIE G	PALACIOS NELSON	2321 OSPREY WOODS CIR	ORLANDO	FL	32820	2775
HOWARD TATIANA		2324 CARNATION HILL CT	ORLANDO	FL	32820	2285
SEALS JILL LEANN	SEALS BRIAN JAY	2326 DARLIN CIR	ORLANDO	FL	32820	2706
LOPEZ FRANCISCO J		2326 HOLLY PINE CIR	ORLANDO	FL	32820	2277
MORA CIELITO B	MORA NAOMI B	2326 NUTHATCH ST	SAINT CLOUD	FL	34771	8420
MARAH ARIANNA		2326 OSPREY WOODS CIR	ORLANDO	FL	32820	2774
NGUYEN THAM THIEN		2327 HOLLY PINE CIR	ORLANDO	FL	32820	2276
PAGAN LAUREN		2327 OSPREY WOODS CIR	ORLANDO	FL	32820	2775
MARTINEZ PAOLA ANDREA	DUQUE RODRIGO	2330 CARNATION HILL CT	ORLANDO	FL	32820	2285
PRIESTER MARA D		2331 CARNATION HILL CT	ORLANDO	FL	32820	2285
GUIWA ISAGANI	GUIWA MARIA CRISTINA F	2332 HOLLY PINE CIR	ORLANDO	FL	32820	2277
GORDON MARK	GORDON JACQUELINE	2333 DARLIN CIR	ORLANDO	FL	32820	2709
KUSIMO DELE		2333 HOLLY PINE CIR	ORLANDO	FL	32820	2276
VOLKERTS JAMES M	VOLKERTS CHERYL L	2333 OSPREY WOODS CIR	ORLANDO	FL	32820	2775
FRAGA MARIA	FRAGA LUCIANO AMIR	2338 DARLIN CIR	ORLANDO	FL	32820	2706
LOVELL C MALCOLM		2338 HOLLY PINE CIR	ORLANDO	FL	32820	2277
VERES CORY ANDREW		2339 DARLIN CIR	ORLANDO	FL	32820	2709
GIRALDO DORA	GIRALDO ORLANDO	2339 HOLLY PINE CIR	ORLANDO	FL	32820	2276
VANN SAVORN		2344 HOLLY PINE CIR	ORLANDO	FL	32820	2277
VILLA ORLANDO E		2345 OSPREY WOODS CIR	ORLANDO	FL	32820	2775
VIVES MAGALY		2350 HOLLY PINE CIR	ORLANDO	FL	32820	2277
SLOVER ANTHONY B	SLOVER ADRIENNE	2351 OSPREY WOODS CIR	ORLANDO	FL	32820	2775
TUNG AMY S	TUNG CHHAMNAN C	2356 HOLLY PINE CIR	ORLANDO	FL	32820	2277
DASILVA JONATHAN M		2357 OSPREY WOODS CIR	ORLANDO	FL	32820	2775
LUCAS ADAM		2362 HOLLY PINE CIR	ORLANDO	FL	32820	2277
SPEAR JAVIER		2404 HOLLY PINE CIR	ORLANDO	FL	32820	2278
CORTES-PRIETO JAIME HUMBERTO	SUAREZ MIRIAN	2410 HOLLY PINE CIR	ORLANDO	FL	32820	2278
STUDDARD RANDALL A	STUDDARD LISA	2411 OSPREY WOODS CIR	ORLANDO	FL	32820	2777
TRIPATHI SANSKRITI	TRIPATHI SHRUTIDHAR	2416 HOLLY PINE CIR	ORLANDO	FL	32820	2278
WISCOVITCH NOEL	WISCOVITCH CATHERINE	2416 OSPREY WOODS CIR	ORLANDO	FL	32820	2776
FAM FADI F		2417 OSPREY WOODS CIR	ORLANDO	FL	32820	2777
NGUYEN ALYSON		2422 HOLLY PINE CIR	ORLANDO	FL	32820	2278
MONGUA SANDRA M		2428 HOLLY PINE CIR	ORLANDO	FL	32820	2278
RODRIGUEZ RAMON DEJESUS	TORRES TANIA	2429 OSPREY WOODS CIR	ORLANDO	FL	32820	2777
BETANCOURT MARLEEN		2434 HOLLY PINE CIR	ORLANDO	FL	32820	2278
YANES GUILLERMO S	YANES MARTHA M	2435 OSPREY WOODS CIR	ORLANDO	FL	32820	2777
GORDON WALTER		2441 OSPREY WOODS CIR	ORLANDO	FL	32820	2777
GARDNER STEPHEN A	GARDNER ARLENE ZENAROSA	2446 HOLLY PINE CIR	ORLANDO	FL	32820	2278
2447 OSPREY WOODS CIRCLE INTERVIVOS	REVOCABLE TRUST	2447 OSPREY WOODS CIR	ORLANDO	FL	32820	2777
COLONIAL EQUITY PARTNERS LLC		245 CHERRY ST	MILFORD	CT	6460	3503
SALAHUDDIN MOHAMMAD		2452 HOLLY PINE CIR	ORLANDO	FL	32820	2278
JENKINS ALFRED A III		2453 OSPREY WOODS CIR	ORLANDO	FL	32820	2777
DANDY DAVID G	MCDONALD-DANDY MARVIA M	2458 HOLLY PINE CIR	ORLANDO	FL	32820	2278
GREEN KEVIN F	GREEN LEIGH A	2459 OSPREY WOODS CIR	ORLANDO	FL	32820	2777
MEDINA MARCO	MEDINA YANIRA I	2464 HOLLY PINE CIR	ORLANDO	FL	32820	2278
JOHNSON NANCY ANN		2464 OSPREY WOODS CIR	ORLANDO	FL	32820	2776
BRANCA ANNA CHRISTINE	BRANCA STEPHEN	2465 OSPREY WOODS CIR	ORLANDO	FL	32820	2777
MOGALLAPU CHAKRA D	MOGALLAPU ANITHA	2468 DOUBLE TREE PL	OVIEDO	FL	32766	7073
RICHARDS MARTIN LINCOLN		25 TRINITY PL APT 3A	NEW ROCHELLE	NY	10805	2610
OELSCHLAGER JEREMY LIFE ESTATE	OELSCHLAGER LISA LIFE ESTATE	2500 HOLLY PINE CIR	ORLANDO	FL	32820	2280
CAVAZOS RICARDO		2502 MEADOW LN	COCOA	FL	32926	2637
OSORIO YAKSHIRA LISETTE		2506 HOLLY PINE CIR	ORLANDO	FL	32820	2280
LAINE SIMON		2510 SW 110TH AVE	MIRAMAR	FL	33025	7686
ALEZI CLAUDIL	ALEZI RACINE	2518 HOLLY PINE CIR	ORLANDO	FL	32820	2280
COLON DAVID	BAGLOO DEBBIE RAYHANEH	2519 HOLLY PINE CIR	ORLANDO	FL	32820	2279
PITTS KERI JO	VAZQUEZ ALEXANDER D	2525 HOLLY PINE CIR	ORLANDO	FL	32820	2279
SHI RU		2530 HOLLY PINE CIR	ORLANDO	FL	32820	2280
TOMLINSON RIDLEY	TOMLINSON PANSY	2537 HOLLY PINE CIR	ORLANDO	FL	32820	2279
CORDERO BERNY	CORDERO GLORIA	2542 HOLLY PINE CIR	ORLANDO	FL	32820	2280
BAZEMORE THOMAS	BAZEMORE CYNTHIA	2543 HOLLY PINE CIR	ORLANDO	FL	32820	2279
SOUTHWORTH KARL E	SOUTHWORTH JOANNE	2548 HOLLY PINE CIR	ORLANDO	FL	32820	2280
FLANAGAN ALEX M	FLANAGAN ANDREA D	2549 HOLLY PINE CIR	ORLANDO	FL	32820	2279
ACEVEDO ELMER	ACEVEDO NORMA COLON	2554 HOLLY PINE CIR	ORLANDO	FL	32820	2280
CONKLIN KEVIN M		2570 GREENHILL WAY APT 212	OVIEDO	FL	32765	5185
SEVENTH HARBOR LLC		2606 ROUGHSIDE CIR	KISSIMMEE	FL	34746	3897
JIMENEA BENJAMIN G		26075 LANDS END DR	CHANTILLY	VA	20152	2535
SUAREZ JORGE	SUAREZ ANGELA	2612 HOLLY PINE CIR	ORLANDO	FL	32820	2282
WHITMAN GARRETT A	WHITMAN DEANNA M	2618 HOLLY PINE CIR	ORLANDO	FL	32820	2282
SAENZ BLANCA M	SAENZ CARLOS A	2624 HOLLY PINE CIR	ORLANDO	FL	32820	2282
JUGO JOSE CARLOS	MADUENO MARIA GIOVANNA	2630 HOLLY PINE CIR	ORLANDO	FL	32820	2282
WEIGEL GREGORY S		2636 HOLLY PINE CIR	ORLANDO	FL	32820	2282
WEST AUSTIN	WEST KATHERINE L	2642 HOLLY PINE CIR	ORLANDO	FL	32820	
SERRANO GABRIEL	SERRANO JULIA	2648 HOLLY PINE CIR	ORLANDO	FL	32820	2282
MOJICA YVETTE M	GONZALEZ RAUL	2654 HOLLY PINE CIR	ORLANDO	FL	32820	2282
BEATTIE MICHAEL EDWARD	BEATTIE LORNA JOY SERA-JOSEF	2660 HOLLY PINE CIR	ORLANDO	FL	32820	2282
NIVESA OF FLORIDA INC		2665 S BAYSHORE DR STE 220-81	MIAMI	FL	33133	5448
BAXTER COREY S	BAXTER JESSICA A	2666 HOLLY PINE CIR	ORLANDO	FL	32820	2282
ZABEL MARK A	ZABEL MARYBEL	2672 HOLLY PINE CIR	ORLANDO	FL	32820	2282
LIZARRAGE JOSE J	TAYLOR MARIE A	2677 HOLLY PINE CIR	ORLANDO	FL	32820	2281
PUENTE MARCOS		2678 HOLLY PINE CIR	ORLANDO	FL	32820	2282
AGUILA OMAR R	AGUILA MAKUNDA NNEKA	2684 HOLLY PINE CIR	ORLANDO	FL	32820	2282
KNIGHT KEVIN H LIFE ESTATE	REM: HEATHER COUGHLIN	2689 HOLLY PINE CIR	ORLANDO	FL	32820	2281
POWELL MICHAEL R		2690 HOLLY PINE CIR	ORLANDO	FL	32820	2282
COLON LUIS G	VAZQUEZ ARACELIS	2695 HOLLY PINE CIR	ORLANDO	FL	32820	2281
TOUSSAINT MIRLINE	TOUSSAINT RICARDO	2696 HOLLY PINE CIR	ORLANDO	FL	32820	2282
PIERRE GLEN E	PIERRE DEMAE L	2706 BLOWING BREEZE WAY	ORLANDO	FL	32820	2750
CASSERLEY ANDRENE M		2707 BLOWING BREEZE WAY	ORLANDO	FL	32820	2753
SOLIMAN NABIL	SOLIMAN LAILA	2712 BLOWING BREEZE WAY	ORLANDO	FL	32820	2750
WHARTON LARRY SR	CAUDLE DELPHINE L	2718 BLOWING BREEZE WAY	ORLANDO	FL	32820	2750
SITKOFF BARRY	SITKOFF SUSAN	2719 BLOWING BREEZE WAY	ORLANDO	FL	32820	2753
PARRA JISEL M		2722 WINDSORGATE LN	ORLANDO	FL	32828	7959
KELLY BRIAN ANTHONY	KELLY DEBRA MARIA	2724 BLOWING BREEZE WAY	ORLANDO	FL	32820	2750
LUCK MARIA	PANTERIS SOFIA	2725 BLOWING BREEZE WAY	ORLANDO	FL	32820	2753
MOSELEY MICHAEL D	MOSELEY TERESA O	2730 BLOWING BREEZE WAY	ORLANDO	FL	32820	2750
DELER PAUL R	DELER NATALIE D	2731 BLOWING BREEZE WAY	ORLANDO	FL	32820	2753
OSULLIVAN CHRISTOPHER	OSULLIVAN TAMERA	2737 BLOWING BREEZE WAY	ORLANDO	FL	32820	2753
HAUCK KYLE C	HAUCK KIMBERLY A	2743 BLOWING BREEZE WAY	ORLANDO	FL	32820	2753
SMITH AMY	SMITH ANTHONY CLARK	2744 LEE SHORE LOOP	ORLANDO	FL	32820	1947

REYES-FOSTER BEATRIZ M	REYES-FOSTER RONALD R	2750 BALLARD AVE	ORLANDO	FL	32833	4038
MILLER TRAVIS R	MILLER JENNIFER R	2750 LEE SHORE LOOP	ORLANDO	FL	32820	1947
MERCADO EDWIN B	MERCADO CARMEN C	2760 BLOWING BREEZE WAY	ORLANDO	FL	32820	2750
YORK DOUGLAS RUTHVEN II	YORK PAULA GENE	2780 LEE SHORE LOOP	ORLANDO	FL	32820	1947
BAUER STEVEN L	BAUER DONNA J	2801 CURVING OAKS WAY	ORLANDO	FL	32820	2747
CHAPMAN ANTHONY WAYNE	CHAPMAN MELISSA ANN	2807 CURVING OAKS WAY	ORLANDO	FL	32820	2747
FERRARA CHRISTOPHER N	PETROWSKI SHARON	2812 LEE SHORE LOOP	ORLANDO	FL	32820	1947
GANDHI BABU C	GANDHI BHARTI	2813 CURVING OAKS WAY	ORLANDO	FL	32820	2747
AYOUB KAMAL L	AYOUB FRANCOISE E	2818 LEE SHORE LOOP	ORLANDO	FL	32820	1947
REYNOLDS MCELRYN	REYNOLDS ANSELMA	2819 CURVING OAKS WAY	ORLANDO	FL	32820	2747
MCKINNEY HEWITT Q		2819 LEE SHORE LOOP	ORLANDO	FL	32820	2744
HALE ROGER CONRAD		2824 LEE SHORE LOOP	ORLANDO	FL	32820	1947
ABBONDANDOLO JOSEPH S		2825 CURVING OAKS WAY	ORLANDO	FL	32820	2747
WARREN STEPHANIE J	WARREN ANTHONY J	2830 LEE SHORE LOOP	ORLANDO	FL	32820	1947
LORENZO JEFFREY S	LORENZO CHRISTINA	2837 CURVING OAKS WAY	ORLANDO	FL	32820	2747
WILLIAMS KRISTOFFER	WILLIAMS JESSICA	2843 CURVING OAKS WAY	ORLANDO	FL	32820	2747
BITTAR JASMINE JENNIFER LIFE ESTATE	BITTAR MELISSA MARIE LIFE ESTATE	2849 CURVING OAKS WAY	ORLANDO	FL	32820	2747
HUGHES KEVIN MICHAEL	HUGHES REBECCA MARIE	2855 CURVING OAKS WAY	ORLANDO	FL	32820	2747
WYATT JOHN MICHAEL	WYATT WENDY H	2903 CURVING OAKS WAY	ORLANDO	FL	32820	2747
MAGALHAES JAILA S	MANGA LUISA MAGALHAES	2904 AEIN RD	ORLANDO	FL	32817	2911
NGUYEN THO VAN	NGUYEN NGOC THI	2904 E HIGHWAY 98	PANAMA CITY	FL	32401	5430
GONZALEZ ROBERT E	GONZALEZ MARITZA	2908 CURVING OAKS WAY	ORLANDO	FL	32820	2748
GARRISON ROBERT SEAN	GARRISON MICHELLE LEE	2908 LEE SHORE LOOP	ORLANDO	FL	32820	1947
SIMILIEN LOUBERT	VALENTIN SHEILIA	2909 CURVING OAKS WAY	ORLANDO	FL	32820	2747
CAMBOULIN ALBERT M	LETICEE MARIE A	2914 CURVING OAKS WAY	ORLANDO	FL	32820	2748
SANTOS WILLIAM A		2914 LEE SHORE LOOP	ORLANDO	FL	32820	1947
SUMINSKI LEONARD THOMAS IV	SUMINSKI DEBRA ANN	2915 CURVING OAKS WAY	ORLANDO	FL	32820	2747
MORRISON MARC B	MORRISON MARGARET	2920 CURVING OAKS WAY	ORLANDO	FL	32820	2748
CITRULLO VINCENT P III	CITRULLO MARIE-EVE	2920 LEE SHORE LOOP	ORLANDO	FL	32820	1947
JALOTA MANHAR KUMAR	JALOTA KIRAN BALA	2921 CURVING OAKS WAY	ORLANDO	FL	32820	2747
TRINH SONNY LIFE ESTATE	LUONG HANH T LIFE ESTATE	2926 CURVING OAKS WAY	ORLANDO	FL	32820	2748
HARRELL LAWRENCE EDMON MACK		2926 LEE SHORE LOOP	ORLANDO	FL	32820	1947
ABRAHAMS SHELLEY-MAY A		2927 CURVING OAKS WAY	ORLANDO	FL	32820	2747
CANNON RYAN	CANNON ASHLEY	2932 CURVING OAKS WAY	ORLANDO	FL	32820	2748
QU ZHIHUA	ZHANG XINFAN	2932 LEE SHORE LOOP	ORLANDO	FL	32820	1947
KENNEDY JOSEPH J		2933 CURVING OAKS WAY	ORLANDO	FL	32820	2747
GUZMAN IRMA V	APARICIO JUAN C	2939 CURVING OAKS WAY	ORLANDO	FL	32820	2747
DAUBER TIMOTHY	DAUBER LAURA	2944 CURVING OAKS WAY	ORLANDO	FL	32820	2748
CARR GLORIA ANN		2945 CURVING OAKS WAY	ORLANDO	FL	32820	2747
JIMENEZ LUIS C	JIMENEZ ASHLEY	2950 CURVING OAKS WAY	ORLANDO	FL	32820	2748
CARROLL AARON	CARROLL MELISSA	2951 CURVING OAKS WAY	ORLANDO	FL	32820	2747
SZCZEBLEWSKI ANTHONY LIFE ESTATE	REM: PAUL BRUNER	2956 CURVING OAKS WAY	ORLANDO	FL	32820	2748
GARCIA GRISEL	ALMADA HERNANDEZ FERNANDO M	2957 CURVING OAKS WAY	ORLANDO	FL	32820	2747
GONZALEZ ROBERT	GONZALEZ BELKIS	3004 CURVING OAKS WAY	ORLANDO	FL	32820	2748
FONSECA-RIVERA MANUEL	FONSECA-RIVERA MARGARITA	3005 CURVING OAKS WAY	ORLANDO	FL	32820	2747
SOMBECK MICHAEL D		3006 LEE SHORE LOOP	ORLANDO	FL	32820	1948
WILCOX RANDALL E	WILCOX JANICE S	3010 CURVING OAKS WAY	ORLANDO	FL	32820	2748
LIGEON VALERIE	SALADIN TANVEER	3011 CURVING OAKS WAY	ORLANDO	FL	32820	2747
CROOKS KYLE E	CROOKS CYNTHIA BEAVER	3013 LEE SHORE LOOP	ORLANDO	FL	32820	1950
GERMOSEN YERIKA LOIDET	GERMOSEN ROSARIO JOCSAN WAGNER	3017 CURVING OAKS WAY	ORLANDO	FL	32820	2747
LEWANDOWSKI ADAM P	LEWANDOWSKI KRISTEN A P	3018 LEE SHORE LOOP	ORLANDO	FL	32820	1948
BELTRAN DAVID LIFE ESTATE	BELTRAN ELIZABETH LIFE ESTATE	3019 LEE SHORE LOOP	ORLANDO	FL	32820	1950
LUONGO LINDA J LIFE ESTATE	REM: DAWN LORI EUBANKS	3022 CURVING OAKS WAY	ORLANDO	FL	32820	2748
VOYIK BRADLEY K		3023 CURVING OAKS WAY	ORLANDO	FL	32820	2747
GOMES LISA MARIE	GOMES BRIAN JOSEPH	3024 LEE SHORE LOOP	ORLANDO	FL	32820	1948
NGUYEN THAI H		3025 LEE SHORE LOOP	ORLANDO	FL	32820	
YOUNG CASEY T	BALLANCO JAIME K	3029 CURVING OAKS WAY	ORLANDO	FL	32820	2747
LIND KENNETH D	LIND DELMA	3030 LEE SHORE LOOP	ORLANDO	FL	32820	1948
GARRISON JULIE A	GARRISON CASSANDRA L	3035 CURVING OAKS WAY	ORLANDO	FL	32820	2747
HINDS-BARROW DEBRA CHARMAINE		3036 LEE SHORE LOOP	ORLANDO	FL	32820	1948
RAMNAUTH QUINCY	RAMNAUTH GAITREE	3041 CURVING OAKS WAY	ORLANDO	FL	32820	2747
LEFRID MOHAMMED	LEFRID KATHERINE A	3050 DEER HAVEN DR	JENISON	MI	49428	8799
LOVELL RANDAL	LOVELL MAUREEN A	3053 CURVING OAKS WAY	ORLANDO	FL	32820	2747
TERRANOVA JOHN LIFE ESTATE	TERRANOVA PATRICIA LIFE ESTATE	3059 CURVING OAKS WAY	ORLANDO	FL	32820	2747
AMH 2015-1 BORROWER LLC		30601 AGOURA RD STE 200	AGOURA HILLS	CA	91301	2148
SOLIMAN SIDNEY E		3082 ERSKINE DR	OVIEDO	FL	32765	6293
JETTE SUSY	JETTE JOSEPH	3101 CURVING OAKS WAY	ORLANDO	FL	32820	2749
RABIG WILLIAM LIFE ESTATE	REM: WILLIAM ROBERT RABIG JR	3107 CURVING OAKS WAY	ORLANDO	FL	32820	2749
DOAN VIET H	DOAN KIMBERLY	3108 LEE SHORE LOOP	ORLANDO	FL	32820	1948
HARDNEY ADAM ALI LIFE ESTATE	HARDNEY CERENA NICOLE LIFE ESTATE	3114 LEE SHORE LOOP	ORLANDO	FL	32820	1948
SHELBY BRUNILDA P LIFE ESTATE	REM: DONNA R SHELBY	3115 HEARTLEAF PL	WINTER PARK	FL	32792	8160
PENA TOMAS R	PENA THERESA H	3119 CURVING OAKS WAY	ORLANDO	FL	32820	2749
THOMAS ANTONY	THOMAS ROSA	3120 LEE SHORE LOOP	ORLANDO	FL	32820	1948
CORCORAN STACY EDWARD	VILLARAN ROSA AMEILA CARRILLO	3124 CURVING OAKS WAY	ORLANDO	FL	32820	2754
TWARDOWSKI RUSSELL DAVID LIFE ESTATE	TWARDOWSKI LISA DAHLBERG LIFE ESTATE	3125 CURVING OAKS WAY	ORLANDO	FL	32820	2749
DAMICO MARIA	DAMICO JOHN	3126 LEE SHORE LOOP	ORLANDO	FL	32820	1948
LYONS JOHN J	LYONS LYNNE A	3131 CURVING OAKS WAY	ORLANDO	FL	32820	2749
BRAVO EDDIE	BRAVO CARMEN	3132 LEE SHORE LOOP	ORLANDO	FL	32820	1948
ROGERS WILLIAM	ROGERS THERESA	3137 CURVING OAKS WAY	ORLANDO	FL	32820	2749
LARSEN CLAIRE FRANCES	HOORNSTRA TIMOTHY ALLEN	3138 LEE SHORE LOOP	ORLANDO	FL	32820	1948
TURK ZENOBIA		3142 CURVING OAKS WAY	ORLANDO	FL	32820	2754
LE SUE XUAN		3143 CURVING OAKS WAY	ORLANDO	FL	32820	2749
SCHMIDT ROBYN A	SCHMIDT GLENN EDWARD	3148 CURVING OAKS WAY	ORLANDO	FL	32820	2754
VENTURA MARIA		3149 CURVING OAKS WAY	ORLANDO	FL	32820	2749
CIFELLI JAMIE L	LYNCH DARWIN III	3154 CURVING OAKS WAY	ORLANDO	FL	32820	2754
KERRANE THOMAS M	KERRANE KAORU	3155 CURVING OAKS WAY	ORLANDO	FL	32820	2749
WRIGHT PATRICK	WRIGHT VIVIENNE L	3202 CURVING OAKS WAY	ORLANDO	FL	32820	2754
RABIG ROBERT T	SOCAS NURIA SUAREZ	3203 CURVING OAKS WAY	ORLANDO	FL	32820	2749
MAXWELL ANA IVIS	MAXWELL PAUL E JR	3206 LEE SHORE LOOP	ORLANDO	FL	32820	1949
EASLEY DAVID A		3207 LEE SHORE LOOP	ORLANDO	FL	32820	2700
PASOS THIRESA	AWDALLA VICTOR Y	3209 CURVING OAKS WAY	ORLANDO	FL	32820	2749
HENDERSON JAMES L	HENDERSON LINDA F	3212 LEE SHORE LOOP	ORLANDO	FL	32820	1949
SPEER SEAN P	SPEER NICOLE M	3213 LEE SHORE LOOP	ORLANDO	FL	32820	2700
MACLELLAN GERARD J	MACLELLAN KARIN A	3215 CURVING OAKS WAY	ORLANDO	FL	32820	2749
AYOUB FAWWAZ	AYOUB JANE	3218 LEE SHORE LOOP	ORLANDO	FL	32820	1949
JOHNSON MICHAEL T	BENJAMIN DAWN D	3219 LEE SHORE LOOP	ORLANDO	FL	32820	2700
SIMMONS JERRY ALAN	SIMMONS STEPHANIE RENEE	3220 CURVING OAKS WAY	ORLANDO	FL	32820	2754
CLIFFORD JASON JOHN	CLIFFORD ELISABETH ELLEN	3221 CURVING OAKS WAY	ORLANDO	FL	32820	2749
DAZA MARIA ISABEL		3227 CURVING OAKS WAY	ORLANDO	FL	32820	2749

NGUYEN OANH		3232 CURVING OAKS WAY	ORLANDO	FL	32820	2755
RODRIGUEZ DE JESUS GABRIEL	PEREZ LISSETTE	3233 CURVING OAKS WAY	ORLANDO	FL	32820	2749
MIKHAYLOV IVAN	MIKHAYLOVA NATALIA	3238 CURVING OAKS WAY	ORLANDO	FL	32820	2755
HAYRIC NICOLE	HAYRIC EMIR	3239 CURVING OAKS WAY	ORLANDO	FL	32820	2749
CARVAJAL ADRIANA M	ARREAGA FREDDY O	3242 91ST ST APT 103	EAST ELMHURST	NY	11369	2332
DAVIS ANITA	DAVIS DANIEL	3245 CURVING OAKS WAY	ORLANDO	FL	32820	2749
SNEAD HERMAN F LIFE ESTATE	SNEAD MARIE A LIFE ESTATE	325 GAUDLUPE ST	HAINES CITY	FL	33844	8468
MOLINA SARITA E	MOLINA WILFRIDO	3250 CURVING OAKS WAY	ORLANDO	FL	32820	2755
MCDERMOTT SEPHLYN		3256 CURVING OAKS WAY	ORLANDO	FL	32820	2755
CRAGG THOMAS	CRAGG GLORIA	3257 CURVING OAKS WAY	ORLANDO	FL	32820	2749
NGUYEN HONG-NHUNG THI	TRAN HUE	328 YAKIMA PL SE	RENTON	WA	98059	7063
MOUNTFORD JOHN E	MOUNTFORD KAREN	3305 CURVING OAKS WAY	ORLANDO	FL	32820	2749
WILLIFORD CLIFFORD F	WILLIFORD LORRAINE P	3311 CURVING OAKS WAY	ORLANDO	FL	32820	2749
ELDEEB HESHAM	ELDEEB GHADA	3317 CURVING OAKS WAY	ORLANDO	FL	32820	2749
MCPHAUL BAXTER	MCPHAUL ANGELA A	3322 CURVING OAKS WAY	ORLANDO	FL	32820	2752
PERSAUD SIVNARAYAN	PERSAUD ISSURDAI S	3323 CURVING OAKS WAY	ORLANDO	FL	32820	2749
SINGH GURDEV	PATIL VIDYA RANI	3329 CURVING OAKS WAY	ORLANDO	FL	32820	2749
QUIEVRYN TIMOTHY L	QUIEVRYN ALEXANDRIA LOREE	3334 CURVING OAKS WAY	ORLANDO	FL	32820	2752
DALY GEORGE BRIAN	DALY JESSICA TAYLOR	3335 CURVING OAKS WAY	ORLANDO	FL	32820	2749
BRIDGEMOHAN ADESH LIFE ESTATE	BRIDGEMOHAN MARISOL LIFE ESTATE	3341 CURVING OAKS WAY	ORLANDO	FL	32820	2749
DIAZ ELLEN LIFE ESTATE	REM: CECILIA KAMINSKI	3344 PAISLEY CIR	ORLANDO	FL	32817	1942
DESMOND REBECCA L	DESMOND RYAN P	3347 CURVING OAKS WAY	ORLANDO	FL	32820	2749
ALVARADO DAVID S	ALVARADO JACQUELINE	3353 CURVING OAKS WAY	ORLANDO	FL	32820	2749
MCMORRIS EARL FELIX	MCMORRIS HELEN JACSON	3358 CURVING OAKS WAY	ORLANDO	FL	32820	2752
BONTEMPS JEAUDINE E		3359 CURVING OAKS WAY	ORLANDO	FL	32820	2749
HOLLAND ALEXIS		3400 CURVING OAKS WAY	ORLANDO	FL	32820	2752
KOBILIS KRISTIAN		3401 CURVING OAKS WAY	ORLANDO	FL	32820	2751
VASQUEZ-CASTRO BELKYS		3406 CURVING OAKS WAY	ORLANDO	FL	32820	2752
NGUYEN PHONG H	NGUYEN THUY HONG THI	3407 CURVING OAKS WAY	ORLANDO	FL	32820	2751
RIVERA YEREIDA	RIVERA RICARDO	3412 CURVING OAKS WAY	ORLANDO	FL	32820	2752
ISMAIL ASHRAF MAGED MOSTAFA	MOHAMED EMAN MOHAMED ELBAKRY	3413 CURVING OAKS WAY	ORLANDO	FL	32820	2751
YEARWOOD PRISCILLA	YEARWOOD RICHARD A	3419 CURVING OAKS WAY	ORLANDO	FL	32820	2751
BRUNO MICHAEL C	BRUNO JENNIFER	3425 CURVING OAKS WAY	ORLANDO	FL	32820	2751
KHALIL ATEF N	TAWFIK AMIRA I	3430 CURVING OAKS WAY	ORLANDO	FL	32820	2752
GONZALEZ MARION	GONZALEZ LUIS F	3437 CURVING OAKS WAY	ORLANDO	FL	32820	2751
ZHOU PING		3442 CURVING OAKS WAY	ORLANDO	FL	32820	2752
ADILI SALIM	KFOUF AMANI	3443 CURVING OAKS WAY	ORLANDO	FL	32820	2751
STEWART RAVENELLE	STEWART REBECCA	3448 CURVING OAKS WAY	ORLANDO	FL	32820	2752
IPC PROPERTIES LLC		3451 TECHNOLOGICAL AVE STE 11	ORLANDO	FL	32817	8353
MITZNER KATHARINE		3454 CURVING OAKS WAY	ORLANDO	FL	32820	2752
DAVIS CHRISTOPHER T	DAVIS COLLEEN R	3455 CURVING OAKS WAY	ORLANDO	FL	32820	2751
ANDERSON JENNIFER L	STASKO JOHN	3470 HOLLOW OAK RUN	OVIEDO	FL	32766	7016
STARKEY LYNETTE N		3502 CURVING OAKS WAY	ORLANDO	FL	32820	2752
FLASH KAREN		3503 CURVING OAKS WAY	ORLANDO	FL	32820	2751
DO NAM HOANG	LE THE THI	3509 CURVING OAKS WAY	ORLANDO	FL	32820	2751
MONAGHAN THOMAS R	MONAGHAN VALERIE	3514 CURVING OAKS WAY	ORLANDO	FL	32820	2752
WEBSTER ANDREA	WEBSTER KIRK M	3515 CURVING OAKS WAY	ORLANDO	FL	32820	2751
LANGTON SCOTT J ESTATE		3520 AVALON PARK EAST BLVD STE 3	ORLANDO	FL	32828	7367
KAZZOUN HASSAN	KHALIL RANDA	3521 CURVING OAKS WAY	ORLANDO	FL	32820	2751
CDS LAND INVESTMENTS INC		3525 ORISKANY DR	ORLANDO	FL	32820	1402
WINFIELD APRIL		3527 CURVING OAKS WAY	ORLANDO	FL	32820	2751
ALVAREZ ROCHESTER A	ALVAREZ JULIA	3532 CURVING OAKS WAY	ORLANDO	FL	32820	2752
ZHANG YONG KANG	ZHOU RONG HUI	3533 CURVING OAKS WAY	ORLANDO	FL	32820	2751
PHAM DUY-HUNG N	PHAM HUE D	3538 CURVING OAKS WAY	ORLANDO	FL	32820	2752
DE JESUS JOSE A	DE JESUS SHIRLEY	3539 CURVING OAKS WAY	ORLANDO	FL	32820	2751
TRUONG HIEN T	TRUONG MY HIEN	3545 CURVING OAKS WAY	ORLANDO	FL	32820	2751
NGO BE VAN	NGO ADAM THOMAS	3550 CURVING OAKS WAY	ORLANDO	FL	32820	2752
BARTLEY RICHARD E JR		3557 CURVING OAKS WAY	ORLANDO	FL	32820	2751
KUGUOGLU LATIFE HAMIDE		3562 CURVING OAKS WAY	ORLANDO	FL	32820	2752
JOHNSON MARY BETH	JOHNSON TIMOTHY MARSHALL	3563 CURVING OAKS WAY	ORLANDO	FL	32820	2751
NGUYEN CUONG D	NGUYEN ALYNA H	377 CARRIAGE LN	LADY LAKE	FL	32159	4371
SANTIAGO CARRIE JO	SANTIAGO MARCO	385 LEMONTE ST	PHILADELPHIA	PA	19128	4546
PERRY MATTHEW R	PERRY VALERY A	3899 GOLDEN MEADOW CT	OVIEDO	FL	32765	9207
CHERY CARL	ARGENTINE TEANA-MARIE	3930 CASSIA DR	ORLANDO	FL	32828	7713
M/I HOMES OF ORLANDO LLC		400 INTERNATIONAL PKWY STE 470	LAKE MARY	FL	32746	5054
T AND D PROPERTIES INC		4001 N JOHN YOUNG PKWY	ORLANDO	FL	32804	3235
Q & V 1 LLC		4104 GLENVIEW DR	HALTOM CITY	TX	76117	1004
HAYES DARRYL		425 NEPTUNE AVE APT 14B	BROOKLYN	NY	11224	4576
SCHOOL BOARD OF ORANGE COUNTY FLORIDA		445 W AMELIA ST	ORLANDO	FL	32801	1129
BROOKS ALFORD P		450 N BARRY AVE	MAMARONECK	NY	10543	2830
PANIZA NELSON C	PANIZA EVELYN	4514 PASEO DR	FAIRFIELD	CA	94534	3809
WELLINGTON-HALL ANNETTE	DARWISH AERON	4543 SW 185TH AVE	MIRAMAR	FL	33029	6214
AWOFISAYO ADEOLU K		4658 NE 1ST CT	RENTON	WA	98059	5243
CEBALLOS GLORIA		4670 LINKS VILLAGE DR UNIT C601	PONCE INLET	FL	32127	3029
RODRIGUEZ ROBERTO		4705 MAGNOLIA RIDGE DR	WAXHAW	NC	28173	9023
ONEAL KENYA L	ONEAL KRISTAL C	4756 WALNUT RIDGE DR	ORLANDO	FL	32829	8254
WAGNER THOMAS W		4823 BASS POINT RD	ORLANDO	FL	32820	1133
LI CONAN		483 PANCHITA WAY	LOS ALTOS	CA	94022	1730
TRAN TONY	NGUYEN KATHY LIEN	4905 CATHEDRAL WAY	TITUSVILLE	FL	32780	6713
SINGH JASHOMATTIE	SINGH ANIL	4935 LAKE SHARP DR	ORLANDO	FL	32817	3175
CPI/AMHERST SFR PROGRAM OWNER L L C		5001 PLAZA ON THE LK STE 200	AUSTIN	TX	78746	1053
BOJINOVA MAIA H		5032 LAKE HOWELL RD	WINTER PARK	FL	32792	1053
JODANI LLC		5066 NW 98TH WAY	CORAL SPRINGS	FL	33076	2437
BOONE KEYANNA R		511 TERRACE SPRING DR	ORLANDO	FL	32828	6763
OKINE JAMES S	OKINE GRACE	5146 NW 62ND ST	GAINESVILLE	FL	32653	4072
CORNER LAKES ESTATES HOMEOWNERS ASSN INC		5728 MAJOR BLVD STE 300	ORLANDO	FL	32819	7969
BUI VY		6117 LES DORSON LN	ALEXANDRIA	VA	22315	3224
SAUMELL MARIA V		622 STALLION CT	WINTER SPRINGS	FL	32708	4504
EMINENT DOMAIN PROPERTY GROUP LLC		6252 COMMERCIAL WAY	BROOKSVILLE	FL	34613	6329
LI WENYAN		645 NEEDLE BLVD	MERRITT ISLAND	FL	32953	6138
WHITEMARK AT CORNER LAKES LLC		650 S CENTRAL AVE STE 1000	OVIEDO	FL	32765	5902
MARRONGELLI ANTHONY JOSEPH	JEANNIE R MARRONGELLI LIVING TRUST	6753 LURAIS DR	LAKE WORTH	FL	33463	7483
CYPRESS LAKES COMMUNITY ASSN INC		6972 LAKE GLORIA BLVD	ORLANDO	FL	32809	3200
EARNSHAW STEVE	EARNSHAW SUZANNE	713 HOLLYBROOK CT	ORLANDO	FL	32828	8325
MORALES IRAIDA	MORALES HERIBERTO	715 STEEPLECHASE RD	LANDISVILLE	PA	17538	1537
BHATIA MANU	RAGHUPATI APARNA	7215 KNOWLTON TRCE	SUWANEE	GA	30024	5363
DANG LOI HAI	HO LIEN	732 AILEEN ST	OAKLAND	CA	94609	1612
CAPTIVA 16910 LLC		7401 WILES RD STE 106	CORAL SPRINGS	FL	33067	2038
AMERICAN LAND INVESTMENTS OF ORANGE COUNTY LLC		7575 DR PHILLIPS BLVD STE 265	ORLANDO	FL	32819	7260

OVIEDO MEDICAL LLC	FLORIDA KF LLC	773 S LAKE JESSUP AVE			OVIEDO	FL	32765	9326		
CHELVAN THAMARAI P	THAMARAICHELVAN UMARANI	8043 LUDINGTON CIR			ORLANDO	FL	32836	5905		
MALONEY JAMES J		8090 EDEN RD APT 334			EDEN PRAIRIE	MN	55344	7692		
VELAZQUEZ CARMELO		81 SPARTAN AVE			STATEN ISLAND	NY	10303	1750		
MUNOZ ANDREA IRENE	MUNOZ OSVALDO SECUNDINO	82 JAMES AVE APT 2			CRANFORD	NJ	7016	2636		
SIMS DERRY CORNELL SR		8385 HORTON BEACH RD			MANITOU BEACH	MI	49253	9640		
SWH 2017-1 BORROWER LP		8665 E HARTFORD DR STE 200			SCOTTSDALE	AZ	85255	7807		
WAI NAING MIN		867 MOONLUSTER DR			CASSELBERRY	FL	32707	3420		
DANG HUU QUY	NGUYEN THU NGUYET THI	890 CALAFUT CT			OVIEDO	FL	32765	7200		
FRC MUSIC INVESTMENTS INC		9021 SW 28TH TER			MIAMI	FL	33165	3218		
PRASHAD AMRITA DEVI	BHARAT SHAVITRIE	9028 178TH ST			JAMAICA	NY	11432	5607		
SFR XII NM ORLANDO OWNER 1 LP		9200 E HAMPTON DR			CAPITOL HEIGHTS	MD	20743	3828		
BOSTWICK CAMERON L		9401 EVAN MILLER TRL			OLMSTED TWP	OH	44138	8175		
TORTO BALDWYN	TORTO RITA	9486 NW 23RD RD			GAINESVILLE	FL	32606	9216		
GIULIANA CATHLEEN H TR		95 BROADWAY			OCEAN GROVE	NJ	7756	1202		
PETITON HAROLL	ADAMES CAROLINA	9506 90TH AVE 2ND FL			WOODHAVEN	NY	11421	2754		
PETITON HAROLL	ADAMES CAROLINA	9506 90TH AVE 2ND FL			WOODHAVEN	NY	11421	2754		
RUIZ JUSTIN		9542 EMILY LOOP UNIT 201			ORLANDO	FL	32817			
MELISSA HWANG TRUST		99 GOLDEN TULIP CRESCENT			MARKHAM ON	XX	L6C	1W4	CANADA	
AH4R PROPERTIES TWO LLC		ATTN: PROPERTY TAX DEPT	23975 PARK SORRENTO STE 300		CALABASAS	CA	91302	4012		
1424 RICHMOND GRAND LAND TRUST		C/O ADELAIDE JASSEL TRUSTEE	125 E PINE ST APT 2220		ORLANDO	FL	32801	3099		
EL-AGROUDY FAMILY LIVING TRUST		C/O AMR A EL-AGROUDY & HEBATALLA	RAMADAN TRUSTEES	17166 LONG BOAT LN	ORLANDO	FL	32820	2701		
ANNE BERGL REVOCABLE TRUST		C/O ANNE BERGL TRUSTEE	19421 PALMLAND ST		ORLANDO	FL	32833	5304		
NEAL FAMILY TRUST		C/O BARRY O & DINA C NEAL TRUSTEES	2125 MALLARD SPRUCE TER		ORLANDO	FL	32820	2778		
NGO FAMILY TRUST		C/O BE VAN & VIOLETA V NGO CO-TRUS	3550 CURVING OAKS WAY		ORLANDO	FL	32820	2752		
BERNADETTE GARY MOSKAL LIVING TRUST		C/O BERNADETTE GARY MOSKAL TRUS	16877 E COLONIAL DR UNIT 140		ORLANDO	FL	32820	1910		
ALFONSO VARGAS FAMILY REVOABLE TRUST		C/O CARLOS FRANCISCO A MOLLER AN	CARMEN J VARGAS BUSTAMANTE CO-T	1936 CASCADES COVE DR	ORLANDO	FL	32820	2238		
CATHERINE MARY HARRIS REVOCABLE TRU	HARRIS ERISCA ANN	C/O CATHERINE MARY HARRIS TRUSTE	1892 HAMMOCK MOSS DR		ORLANDO	FL	32820	2231		
17201 EAST COLONIAL DRIVE LAND TRUST		C/O CFL LAND TRUSTEE LLC	479 MONTGOMERY PL		ALTAMONTE SPRINGS	FL	32714	3100		
CINDY QUINN REVOCABLE TRUST		C/O CINDY QUINN TRUSTEE	17906 GOLDEN LEAF LN		ORLANDO	FL	32820	2272		
DALE H ROOT REVOCABLE TRUST	TERESA L ROOT REVOCABLE TRUST	C/O DALE & TERESA ROOT TRUSTEES	1635 CANDELA CT		ORLANDO	FL	32820	2743		
RANDOLPH FAMILY TRUST		C/O DAVID & KAREN RANDOLPH TRUST	2041 HAWKS LANDING DR		ORLANDO	FL	32820	2787		
GIMM FAMILY TRUST		C/O DAVID W GIMM TRUSTEE	2766 BLOWING BREEZE WAY		ORLANDO	FL	32820	2750		
DIANE ELENI SCHEIN AND HAROLD JAY SCHEIN REVOCABLE TRUST		C/O DIANE ELENI SCHEIN TRUSTEE	1851 HAMMOCK MOSS DR		ORLANDO	FL	32820	2233		
DEJESUS FAMILY LIVING TRUST		C/O FEDERICO DEJESUS TRUSTEE	2749 BLOWING BREEZE WAY		ORLANDO	FL	32820	2753		
CRISTANCHO FAMILY TRUST		C/O FELIX CRISTANCHO TRUSTEE	2031 DARLIN CIR		ORLANDO	FL	32820	2708		
HOP FAMILY TRUST		C/O FIEMAN M HOP TRUSTEE	2010 HAWKS LANDING DR		ORLANDO	FL	32820	2785		
FLORA E MCKENLEY FAMILY TRUST		C/O FLORA E MCKENLEY TRUSTEE	17933 CADENCE ST		ORLANDO	FL	32820	2729		
GEORGE AND AMELIA N PUCCIO TRUST		C/O GEORGE PUCCIO TRUSTEE	16943 CORNERWOOD DR		ORLANDO	FL	32820	1913		
GIBBS FAMILY LIVING REVOCABLE TRUST		C/O GRIBRAN RAMZAN BACCHUS TRUS	2173 CORNER SCHOOL DR		ORLANDO	FL	32820	1916		
JIM AND TRISHA MINER LIVING TRUST		C/O HARLOW JAMES MINER III TRUSTEE	2524 HOLLY PINE CIR		ORLANDO	FL	32820	2280		
JAMIE JO BAKER LIVING TRUST		C/O JAMIE JO BAKER TRUSTEE	2143 MALLARD SPRUCE TER		ORLANDO	FL	32820	2778		
JO-ANN LOSITO LIVING TRUST		C/O JO-ANN LOSITO TRUSTEE	17408 CASCADES HILL CT		ORLANDO	FL	32820	2237		
JOHN AND NANCY MCLEAN REVOCABLE TRUST		C/O JOHN & NANCY MCLEAN TRUSTEE	2405 OSPREY WOODS CIR		ORLANDO	FL	32820	2777		
SANTOS LIVING TRUST		C/O JOSE M & PAMELA AC SANTOS TRS	2219 OSPREY WOODS CIR		ORLANDO	FL	32820	2772		
WILLIAMS FAMILY TRUST		C/O KIMBERLY D WILLIAMS TRUSTEE	2007 DARLIN CIR		ORLANDO	FL	32820	2708		
LADONA BONNETT COLL REVOCABLE TRUST		C/O LADONA BONNETT COLL TRUSTEE	18015 SAXONY LN		ORLANDO	FL	32820	2713		
DAUD 2022 LIVING TRUST		C/O MOHAMMAD SULEMAN DAUD &	AFSHAN UMAR DAUD TRUSTEES	2354 DELGADO PL	WOODLAND	CA	95776	5343		
OLGA RODRIGUEZ REVOCABLE TRUST		C/O OLGA I RODRIGUEZ TRUSTEE	17706 130TH AVE N		JUPITER	FL	33478	4607		
OLGA I RODRIGUEZ REVOCABLE TRUST		C/O OLGA I RODRIGUEZ TRUSTEE	2767 BLOWING BREEZE WAY		ORLANDO	FL	32820	2753		
PANKAJ AND NIKITA AGRAWAL LIVING TRUST		C/O PANKAJ MOHAN AGRAWAL TRUSTE	1932 DARLIN CIR		ORLANDO	FL	32820	2704		
RAOUF M DANIEL REVOCABLE LIVING TRUST		C/O RAOUF M DANIEL TRUSTEE	17770 ASHFORD GRANDE WAY		ORLANDO	FL	32820	2746		
ORANGE COUNTY BCC		C/O REAL ESTATE MNGT DEPT	PO BOX 1393		ORLANDO	FL	32802	1393		
MANDALAY COMMUNITY HOMEOWNERS ASSN INC		C/O SENTRY MANAGEMENT INC	2180 W STATE ROAD STE 5000		LONGWOOD	FL	32779			
SHAMSHAD AND NANDANEE KHAN REVOCABLE TRUST		C/O SHAMSHAD KHAN TRUSTEE	17710 ASHFORD GRANDE WAY		ORLANDO	FL	32820	2746		
BRAY FAMILY REVOCABLE TRUST		C/O SHAWN & NICOLE BRAY CO-TRUST	3047 CURVING OAKS WAY		ORLANDO	FL	32820	2747		
SHERYL ANN FELDMAN AND CHARLES FELDMAN REVOCABLE TRUST		C/O SHERYL ANN FELDMAN & CHARLES	FELDMAN TRUSTEES	1773 OAK GROVE CHASE DR	ORLANDO	FL	32820	2259		
COUNTRY LAKE HOMEOWNERS ASSN INC		C/O SOUTHWEST PROPERTY	610 N WYMORE RD STE 200		MAITLAND	FL	32751	4239		
BLAIR FAMILY TRUST		C/O STEPHEN M BLAIR JR TRUSTEE	1892 OAK GROVE CHASE DR		ORLANDO	FL	32820	2265		
TAH MS BORROWER LLC		C/O TRICON AMERICAN HOMES LLC	1508 BROOKHOLLOW DR		SANTA ANA	CA	92705	5426		
TRICON SFR 2024-3 BORROWER LLC		C/O TRICON AMERICAN HOMES LLC	15771 RED HILL AVE STE 100		TUSTIN	CA	92780	7333		
CHARLES GLAUBER II & UMBELINA N LOURENCO REVOCABLE TRUST		C/O UMBELINA N LOURENCO TRUSTEE	17833 IBIS LANDING WAY		ORLANDO	FL	32820	2711		
VINCENT AND MARIE-EVE CITRULLO LIVING TRUST		C/O VINCENT CITRULLO III AND	MARIE-EVE CITRULLO CO-TRS	2920 LEE SHORE LOOP	ORLANDO	FL	32820	1947		
WILLIAM AND JEAN PALMBY FAMILY TRUST		C/O WILLIAM GARNET PALMBY TRUSTE	17924 CAMARGO LN		ORLANDO	FL	32820	2726		
PANGONIS FAMILY TRUST		C/O WILLIAM J JR & SANDRA E PANGON	2755 BLOWING BREEZE WAY		ORLANDO	FL	32820	2753		
LONDERGAN FAMILY REVOCABLE TRUST		C/OMARK B LONDERGAN & KATHLEEN	LONDERGAN TRUSTEES	1637 SIERRA RIDGE DR	ORLANDO	FL	32820	2737		
TAH 2017-1 BORROWER LLC		PO BOX 15087			SANTA ANA	CA	92735	87		
MADDOX JEFFREY DAVID	MADDOX MARY BETH	PO BOX 234			CHRISTMAS	FL	32709	234		
MCGOWAN NANCY		PO BOX 292			CHRISTMAS	FL	32709	292		
HINEDI SAMI LIFE ESTATE	KHAYATAH YASMIN LIFE ESTATE	PO BOX 30925			MANAMA	XX			BAHRAIN	
REAL SUB LLC		PO BOX 32018			LAKELAND	FL	33802	2018		
CLDP HOLDINGS LLC		PO BOX 332			GENEVA	FL	32732	332		
PROGRESS RESIDENTIAL BORROWER 1 LLC		PO BOX 4090			SCOTTSDALE	AZ	85261	4090		
MARTIN LAERROL D	MARTIN DAWN	PO BOX 462			CHRISTMAS	FL	32709	462		
CIRCLE K STORES INC		PO BOX 52085 DC-17			PHOENIX	AZ	85072	2085		
YARDCO 1631 CHULUOTA LLC		PO BOX 560624			ORLANDO	FL	32856	624		
TORRENS BENJAMIN LIFE ESTATE	CUMBEY BARBARA D LIFE ESTATE	PO BOX 621015			OVIEDO	FL	32762	1015		
ASINAS EFREN B	ASINAS TERESITA F	PO BOX 621516			OVIEDO	FL	32762	1516		
TORRES DAVID		PO BOX 780113			ORLANDO	FL	32878	113		
HAMMONS KENNETH R		PO BOX 780817			ORLANDO	FL	32878	817		
POOL CLIFFORD R	POOL DARLEEN M	PO BOX 781331			ORLANDO	FL	32878	1331		
GILCHRIST JACQUES K	LACHELLE ARELA	PO BOX 781335			ORLANDO	FL	32878	1335		
MICHALSKI DAVID E		PO BOX 782133			ORLANDO	FL	32878	2133		
VARGAS JOHN	VARGAS ROSE	PO BOX 941558			MAITLAND	FL	32794	1558		
BREMER DAVID	BREMER ALEXANDRA	PSC 10 BOX 535			APO	AE	9142	6		
MAGNO JASON C	MAGNO TIFFANY	PSC 557 BOX 1191			FPO	AP	96379	12		
SIBLE PAMELA		16011 Old Cheney Highway			ORLANDO	FL	32833			
DORAN LEE		4866 NATIVE DANCER LN			ORLANDO	FL	32826			

NAME (1)	SITUS	SITUS_CIT	SITUS_ST	ZIP_SITUS
CURRENT RESIDENT / TENANT	1424 RICHMOND GRAND AVE	Orlando	FL	32820
CURRENT RESIDENT / TENANT	1431 RICHMOND GRAND AVE	Orlando	FL	32820
CURRENT RESIDENT / TENANT	1518 CORNER MEADOW CIR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	1526 SIERRA RIDGE DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	16013 CORNER LAKE DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	16025 CORNER LAKE DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	1605 CORNER SCHOOL RD	Orlando	FL	32820
CURRENT RESIDENT / TENANT	1607 CORNER SCHOOL DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	1608 CORNERVIEW LN	Orlando	FL	32820
CURRENT RESIDENT / TENANT	16109 CORNER LAKE DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	16122 CORNER LAKE DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	16134 CORNER LAKE DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	16140 CORNER LAKE DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	16164 CORNER LAKE DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	1621 CORNER MEADOW CIR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	1626 CORNER MEADOW CIR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	1629 CANDELA CT	Orlando	FL	32820
CURRENT RESIDENT / TENANT	16338 CORNER LAKE DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	16344 CORNER LAKE DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	16350 CORNER LAKE DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	1641 CANDELA CT	Orlando	FL	32820
CURRENT RESIDENT / TENANT	1644 CORNER MEADOW CIR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	1645 SIERRA RIDGE DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	16452 CORNER LAKE DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	16458 CORNER LAKE DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	16465 CORNER LAKE DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	16499 E COLONIAL DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	1650 CORNERVIEW LN	Orlando	FL	32820
CURRENT RESIDENT / TENANT	1651 CORNER MEADOW CIR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	16530 CORNER LAKE DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	16536 CORNER LAKE DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	16537 CORNER LAKE DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	16542 CORNER LAKE DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	16543 CORNER LAKE DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	16560 CORNER LAKE DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	16561 CORNER LAKE DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	16562 LAKE PICKETT RD	Orlando	FL	32820
CURRENT RESIDENT / TENANT	16591 CORNER LAKE DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	16609 CORNER LAKE DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	1662 TECHWOOD CT	Orlando	FL	32820
CURRENT RESIDENT / TENANT	16621 E COLONIAL DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	16655 CORNER LAKE DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	16660 CORNER LAKE DR	Orlando	FL	32820

CURRENT RESIDENT / TENANT	16668 CORNER LAKE DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	16675 CORNER COVE WAY	Orlando	FL	32820
CURRENT RESIDENT / TENANT	16686 CORNER COVE WAY	Orlando	FL	32820
CURRENT RESIDENT / TENANT	16707 CORNER LAKE DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	16727 E COLONIAL DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	16767 CORNER LAKE DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	16783 E COLONIAL DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	16820 CORNERWOOD DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	16826 CORNERWOOD DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	16832 CORNERWOOD DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	16839 CORNER LAKE DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	16844 CORNERWOOD DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	16861 E COLONIAL DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	16874 CORNERWOOD DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	16880 CORNERWOOD DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	16891 E COLONIAL DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	16900 CORNERWOOD DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	16912 CORNER HILL CT	Orlando	FL	32820
CURRENT RESIDENT / TENANT	16918 CORNER HILL CT	Orlando	FL	32820
CURRENT RESIDENT / TENANT	16926 CORNER BAY CT	Orlando	FL	32820
CURRENT RESIDENT / TENANT	16936 CORNER HILL CT	Orlando	FL	32820
CURRENT RESIDENT / TENANT	16939 CORNER BAY CT	Orlando	FL	32820
CURRENT RESIDENT / TENANT	16945 CORNER BAY CT	Orlando	FL	32820
CURRENT RESIDENT / TENANT	16948 CORNERWOOD DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	16959 E COLONIAL DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	16960 CORNER HILL CT	Orlando	FL	32820
CURRENT RESIDENT / TENANT	1700 CHULUOTA RD	Orlando	FL	32820
CURRENT RESIDENT / TENANT	17002 BAY POINTE DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	17002 CYPRESS PRESERVE PKWY	Orlando	FL	32820
CURRENT RESIDENT / TENANT	17007 CORNER LAKE DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	17016 CYPRESS PRESERVE PKWY	Orlando	FL	32820
CURRENT RESIDENT / TENANT	17019 BAY POINTE DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	17024 OAK GROVE HILL CT	Orlando	FL	32820
CURRENT RESIDENT / TENANT	17039 CYPRESS PRESERVE PKWY	Orlando	FL	32820
CURRENT RESIDENT / TENANT	17051 CYPRESS PRESERVE PKWY	Orlando	FL	32820
CURRENT RESIDENT / TENANT	17067 CORNER LAKE DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	1707 CORNER MEADOW CIR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	17105 E COLONIAL DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	17117 CYPRESS PRESERVE PKWY	Orlando	FL	32820
CURRENT RESIDENT / TENANT	1713 CORNER MEADOW CIR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	17140 CYPRESS PRESERVE PKWY	Orlando	FL	32820
CURRENT RESIDENT / TENANT	17159 CYPRESS PRESERVE PKWY	Orlando	FL	32820
CURRENT RESIDENT / TENANT	17166 LONG BOAT LN	Orlando	FL	32820
CURRENT RESIDENT / TENANT	17201 E COLONIAL DR	Orlando	FL	32820

CURRENT RESIDENT / TENANT	17220 LONG BOAT LN	Orlando	FL	32820
CURRENT RESIDENT / TENANT	17234 DEER RUN DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	17264 DEER RUN DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	17270 DEER RUN DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	17277 DEER RUN DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	17282 DEER RUN DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	17289 DEER RUN DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	1730 OAK GROVE CHASE DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	1731 CORNER MEADOW CIR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	17344 CYPRESS PRESERVE PKWY	Orlando	FL	32820
CURRENT RESIDENT / TENANT	17345 CYPRESS PRESERVE PKWY	Orlando	FL	32820
CURRENT RESIDENT / TENANT	1736 OAK GROVE CHASE DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	1749 OAK GROVE CHASE DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	1750 CORNER SCHOOL DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	17507 OSPRE GLEN DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	17530 OSPRE GLEN DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	1754 CORNERVIEW LN	Orlando	FL	32820
CURRENT RESIDENT / TENANT	17600 PLEASANT LAKE LN	Orlando	FL	32820
CURRENT RESIDENT / TENANT	17602 PLEASANT LAKE LN	Orlando	FL	32820
CURRENT RESIDENT / TENANT	17605 WOODFIELD HILL CT	Orlando	FL	32820
CURRENT RESIDENT / TENANT	17718 AYSHIRE ST	Orlando	FL	32820
CURRENT RESIDENT / TENANT	17719 AYSHIRE ST	Orlando	FL	32820
CURRENT RESIDENT / TENANT	1772 OAK GROVE CHASE DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	17724 LILY BLOSSOM LN	Orlando	FL	32820
CURRENT RESIDENT / TENANT	17727 STERLING POND LN	Orlando	FL	32820
CURRENT RESIDENT / TENANT	17733 STERLING POND LN	Orlando	FL	32820
CURRENT RESIDENT / TENANT	17738 STERLING POND LN	Orlando	FL	32820
CURRENT RESIDENT / TENANT	17742 LILY BLOSSOM LN	Orlando	FL	32820
CURRENT RESIDENT / TENANT	17743 AYSHIRE ST	Orlando	FL	32820
CURRENT RESIDENT / TENANT	17761 LILY BLOSSOM LN	Orlando	FL	32820
CURRENT RESIDENT / TENANT	17794 CYPRESS LAKE GLEN BLVD	Orlando	FL	32820
CURRENT RESIDENT / TENANT	17796 CYPRESS LAKE GLEN BLVD	Orlando	FL	32820
CURRENT RESIDENT / TENANT	17798 STERLING POND LN	Orlando	FL	32820
CURRENT RESIDENT / TENANT	17804 OLIVE OAK WAY	Orlando	FL	32820
CURRENT RESIDENT / TENANT	17808 AYSHIRE ST	Orlando	FL	32820
CURRENT RESIDENT / TENANT	17811 OLIVE OAK WAY	Orlando	FL	32820
CURRENT RESIDENT / TENANT	17821 IBIS LANDING WAY	Orlando	FL	32820
CURRENT RESIDENT / TENANT	17823 OLIVE OAK WAY	Orlando	FL	32820
CURRENT RESIDENT / TENANT	17824 GOLDEN LEAF LN	Orlando	FL	32820
CURRENT RESIDENT / TENANT	17826 IBIS LANDING WAY	Orlando	FL	32820
CURRENT RESIDENT / TENANT	17827 IBIS LANDING WAY	Orlando	FL	32820
CURRENT RESIDENT / TENANT	17831 GOLDEN LEAF LN	Orlando	FL	32820
CURRENT RESIDENT / TENANT	17839 IBIS LANDING WAY	Orlando	FL	32820
CURRENT RESIDENT / TENANT	17841 OLIVE OAK WAY	Orlando	FL	32820

CURRENT RESIDENT / TENANT	17844 AYSHIRE ST	Orlando	FL	32820
CURRENT RESIDENT / TENANT	17844 IBIS LANDING WAY	Orlando	FL	32820
CURRENT RESIDENT / TENANT	17845 AYSHIRE ST	Orlando	FL	32820
CURRENT RESIDENT / TENANT	17850 IBIS LANDING WAY	Orlando	FL	32820
CURRENT RESIDENT / TENANT	17906 CAMARGO LN	Orlando	FL	32820
CURRENT RESIDENT / TENANT	17907 CAMARGO LN	Orlando	FL	32820
CURRENT RESIDENT / TENANT	17908 CADENCE ST	Orlando	FL	32820
CURRENT RESIDENT / TENANT	17915 CADENCE ST	Orlando	FL	32820
CURRENT RESIDENT / TENANT	17925 SAXONY LN	Orlando	FL	32820
CURRENT RESIDENT / TENANT	17930 SAXONY LN	Orlando	FL	32820
CURRENT RESIDENT / TENANT	17936 CAMARGO LN	Orlando	FL	32820
CURRENT RESIDENT / TENANT	17937 SAXONY LN	Orlando	FL	32820
CURRENT RESIDENT / TENANT	17940 GOLDEN LEAF LN	Orlando	FL	32820
CURRENT RESIDENT / TENANT	17954 AYSHIRE ST	Orlando	FL	32820
CURRENT RESIDENT / TENANT	17955 AYSHIRE ST	Orlando	FL	32820
CURRENT RESIDENT / TENANT	18011 CADENCE ST	Orlando	FL	32820
CURRENT RESIDENT / TENANT	18018 FALCON GREEN CT	Orlando	FL	32820
CURRENT RESIDENT / TENANT	18021 THORNHILL GRAND CIR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	18026 THORNHILL GRAND CIR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	18030 FALCON GREEN CT	Orlando	FL	32820
CURRENT RESIDENT / TENANT	18044 SAXONY LN	Orlando	FL	32820
CURRENT RESIDENT / TENANT	18045 SAXONY LN	Orlando	FL	32820
CURRENT RESIDENT / TENANT	18047 CADENCE ST	Orlando	FL	32820
CURRENT RESIDENT / TENANT	18049 FALCON GREEN CT	Orlando	FL	32820
CURRENT RESIDENT / TENANT	18050 SAXONY LN	Orlando	FL	32820
CURRENT RESIDENT / TENANT	18051 SAXONY LN	Orlando	FL	32820
CURRENT RESIDENT / TENANT	18051 THORNHILL GRAND CIR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	18056 THORNHILL GRAND CIR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	18075 THORNHILL GRAND CIR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	18106 CADENCE ST	Orlando	FL	32820
CURRENT RESIDENT / TENANT	18108 STRATFORD GRAND ST	Orlando	FL	32820
CURRENT RESIDENT / TENANT	18118 SAXONY LN	Orlando	FL	32820
CURRENT RESIDENT / TENANT	18120 CADENCE ST	Orlando	FL	32820
CURRENT RESIDENT / TENANT	18124 SAXONY LN	Orlando	FL	32820
CURRENT RESIDENT / TENANT	18130 CADENCE ST	Orlando	FL	32820
CURRENT RESIDENT / TENANT	18130 THORNHILL GRAND CIR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	18132 THORNHILL GRAND CIR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	18134 THORNHILL GRAND CIR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	18139 STRATFORD GRAND ST	Orlando	FL	32820
CURRENT RESIDENT / TENANT	18148 SAXONY LN	Orlando	FL	32820
CURRENT RESIDENT / TENANT	18150 CADENCE ST	Orlando	FL	32820
CURRENT RESIDENT / TENANT	18155 CADENCE ST	Orlando	FL	32820
CURRENT RESIDENT / TENANT	18220 THORNHILL GRAND CIR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	18268 THORNHILL GRAND CIR	Orlando	FL	32820

CURRENT RESIDENT / TENANT	1827 HAMMOCK MOSS DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	1831 DARLIN CIR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	1833 CORNER MEADOW CIR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	1837 DARLIN CIR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	1838 CORNER MEADOW CIR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	1838 CORNERVIEW LN	Orlando	FL	32820
CURRENT RESIDENT / TENANT	1839 CORNER MEADOW CIR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	1839 HAMMOCK MOSS DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	1840 CORNERVIEW LN	Orlando	FL	32820
CURRENT RESIDENT / TENANT	1842 DARLIN CIR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	1844 CORNER MEADOW CIR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	1845 CORNER MEADOW CIR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	1848 CORNERVIEW LN	Orlando	FL	32820
CURRENT RESIDENT / TENANT	1850 CORNER SCHOOL DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	18501 CYPRESS LAKE GLEN BLVD	Orlando	FL	32820
CURRENT RESIDENT / TENANT	1856 CORNERVIEW LN	Orlando	FL	32820
CURRENT RESIDENT / TENANT	1863 CORNER MEADOW CIR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	1868 HAMMOCK MOSS DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	18703 CYPRESS LAKE BLVD	Orlando	FL	32820
CURRENT RESIDENT / TENANT	1874 CORNERVIEW LN	Orlando	FL	32820
CURRENT RESIDENT / TENANT	1880 N COUNTY ROAD 13	Orlando	FL	32820
CURRENT RESIDENT / TENANT	1893 HAMMOCK MOSS DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	1904 OAK GROVE CHASE DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	1906 CORNER GLEN DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	1906 CORNER SCHOOL DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	1907 CASCADES COVE DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	1907 CORNER MEADOW CIR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	1916 OAK GROVE CHASE DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	1918 CORNER MEADOW CIR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	1921 DARLIN CIR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	1924 CORNER GLEN DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	1925 CORNER MEADOW CIR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	1929 HAMMOCK MOSS DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	1930 CORNER SCHOOL DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	1932 DARLIN CIR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	1935 HAMMOCK MOSS DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	1936 CASCADES COVE DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	1937 CORNER MEADOW CIR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	1939 DARLIN CIR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	1942 CORNER GLEN DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	1942 CORNER SCHOOL DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	1943 CORNER MEADOW CIR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	1948 CORNER SCHOOL DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	1952 OAK GROVE CHASE DR	Orlando	FL	32820

CURRENT RESIDENT / TENANT	1954 CORNER GLEN DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	1955 CORNER SCHOOL DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	1958 OAK GROVE CHASE DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	1960 CORNER GLEN DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	1960 CORNER SCHOOL DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	1961 CORNER SCHOOL DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	1963 DARLIN CIR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	1966 CORNER SCHOOL DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	1967 CORNER SCHOOL DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	1968 DARLIN CIR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	1972 CORNER GLEN DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	1977 HAMMOCK MOSS DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	1979 CORNER SCHOOL DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	1988 HAMMOCK MOSS DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	1996 CASCADES COVE DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	2000 BRISTOL GRANDE WAY	Orlando	FL	32820
CURRENT RESIDENT / TENANT	2000 GLORIA OAK CT	Orlando	FL	32820
CURRENT RESIDENT / TENANT	2008 CORNER GLEN DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	2012 CHULUOTA RD	Orlando	FL	32820
CURRENT RESIDENT / TENANT	2012 HAMMOCK MOSS DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	2013 GLORIA OAK CT	Orlando	FL	32820
CURRENT RESIDENT / TENANT	2014 CORNER MEADOW CIR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	2015 CASCADES COVE DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	2020 CORNER MEADOW CIR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	2021 CORNER MEADOW CIR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	2024 DARLIN CIR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	2025 DARLIN CIR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	2026 CORNER SCHOOL DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	2027 CORNER SCHOOL DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	2032 CORNER GLEN DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	2036 DARLIN CIR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	2038 CASCADES COVE DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	2038 CORNER MEADOW CIR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	2043 HAMMOCK MOSS DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	2044 CORNER GLEN DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	2050 CORNER MEADOW CIR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	2051 CORNER MEADOW CIR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	2051 CORNER SCHOOL DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	2060 GLORIA OAK CT	Orlando	FL	32820
CURRENT RESIDENT / TENANT	2062 CORNER MEADOW CIR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	2063 CORNER MEADOW CIR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	2066 GLORIA OAK CT	Orlando	FL	32820
CURRENT RESIDENT / TENANT	2071 HAWKS LANDING DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	2092 CASCADES COVE DR	Orlando	FL	32820

CURRENT RESIDENT / TENANT	2103 HAMMOCK MOSS DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	2108 HAMMOCK MOSS DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	2111 CORNER POINT CT	Orlando	FL	32820
CURRENT RESIDENT / TENANT	2114 DARLIN CIR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	2114 HAMMOCK MOSS DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	2116 CORNER POINT CT	Orlando	FL	32820
CURRENT RESIDENT / TENANT	2116 OSPREY WOODS CIR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	2120 DARLIN CIR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	2123 CORNER POINT CT	Orlando	FL	32820
CURRENT RESIDENT / TENANT	2126 DARLIN CIR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	2129 CORNER POINT CT	Orlando	FL	32820
CURRENT RESIDENT / TENANT	2134 CORNER POINT CT	Orlando	FL	32820
CURRENT RESIDENT / TENANT	2134 OSPREY WOODS CIR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	2135 CORNER POINT CT	Orlando	FL	32820
CURRENT RESIDENT / TENANT	2143 CORNER SCHOOL DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	2144 DARLIN CIR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	2159 OSPREY WOODS CIR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	2174 HAMMOCK MOSS DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	2175 HAMMOCK MOSS DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	2181 HAMMOCK MOSS DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	2187 HAMMOCK MOSS DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	2193 HAMMOCK MOSS DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	2206 DARLIN CIR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	2210 HAMMOCK MOSS DR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	2219 DARLIN CIR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	2230 CHULUOTA RD	Orlando	FL	32820
CURRENT RESIDENT / TENANT	2231 DARLIN CIR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	2240 HOLLY PINE CIR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	2252 HOLLY PINE CIR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	2261 OSPREY WOODS CIR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	2288 HOLLY PINE CIR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	2307 CARNATION HILL CT	Orlando	FL	32820
CURRENT RESIDENT / TENANT	2314 DARLIN CIR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	2319 CARNATION HILL CT	Orlando	FL	32820
CURRENT RESIDENT / TENANT	2320 CHULUOTA RD	Orlando	FL	32820
CURRENT RESIDENT / TENANT	2320 DARLIN CIR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	2325 CARNATION HILL CT	Orlando	FL	32820
CURRENT RESIDENT / TENANT	2332 DARLIN CIR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	2336 CARNATION HILL CT	Orlando	FL	32820
CURRENT RESIDENT / TENANT	2339 OSPREY WOODS CIR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	2351 HOLLY PINE CIR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	2404 OSPREY WOODS CIR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	2423 OSPREY WOODS CIR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	2440 HOLLY PINE CIR	Orlando	FL	32820

CURRENT RESIDENT / TENANT	2507 HOLLY PINE CIR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	2512 HOLLY PINE CIR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	2513 HOLLY PINE CIR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	2531 HOLLY PINE CIR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	2555 HOLLY PINE CIR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	2606 HOLLY PINE CIR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	2683 HOLLY PINE CIR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	2698 HOLLY PINE CIR	Orlando	FL	32820
CURRENT RESIDENT / TENANT	2700 BLOWING BREEZE WAY	Orlando	FL	32820
CURRENT RESIDENT / TENANT	2736 BLOWING BREEZE WAY	Orlando	FL	32820
CURRENT RESIDENT / TENANT	2742 BLOWING BREEZE WAY	Orlando	FL	32820
CURRENT RESIDENT / TENANT	2748 BLOWING BREEZE WAY	Orlando	FL	32820
CURRENT RESIDENT / TENANT	2754 BLOWING BREEZE WAY	Orlando	FL	32820
CURRENT RESIDENT / TENANT	2761 BLOWING BREEZE WAY	Orlando	FL	32820
CURRENT RESIDENT / TENANT	2762 LEE SHORE LOOP	Orlando	FL	32820
CURRENT RESIDENT / TENANT	2763 LEE SHORE LOOP	Orlando	FL	32820
CURRENT RESIDENT / TENANT	2767 BLOWING BREEZE WAY	Orlando	FL	32820
CURRENT RESIDENT / TENANT	2774 LEE SHORE LOOP	Orlando	FL	32820
CURRENT RESIDENT / TENANT	2806 LEE SHORE LOOP	Orlando	FL	32820
CURRENT RESIDENT / TENANT	2831 CURVING OAKS WAY	Orlando	FL	32820
CURRENT RESIDENT / TENANT	2930 CHULUOTA RD	Orlando	FL	32820
CURRENT RESIDENT / TENANT	2938 CURVING OAKS WAY	Orlando	FL	32820
CURRENT RESIDENT / TENANT	3012 LEE SHORE LOOP	Orlando	FL	32820
CURRENT RESIDENT / TENANT	3113 CURVING OAKS WAY	Orlando	FL	32820
CURRENT RESIDENT / TENANT	3144 LEE SHORE LOOP	Orlando	FL	32820
CURRENT RESIDENT / TENANT	3150 LEE SHORE LOOP	Orlando	FL	32820
CURRENT RESIDENT / TENANT	3208 CURVING OAKS WAY	Orlando	FL	32820
CURRENT RESIDENT / TENANT	3214 CURVING OAKS WAY	Orlando	FL	32820
CURRENT RESIDENT / TENANT	3244 CURVING OAKS WAY	Orlando	FL	32820
CURRENT RESIDENT / TENANT	3251 CURVING OAKS WAY	Orlando	FL	32820
CURRENT RESIDENT / TENANT	3431 CURVING OAKS WAY	Orlando	FL	32820
CURRENT RESIDENT / TENANT	3449 CURVING OAKS WAY	Orlando	FL	32820
CURRENT RESIDENT / TENANT	3544 CURVING OAKS WAY	Orlando	FL	32820
CURRENT RESIDENT / TENANT	3551 CURVING OAKS WAY	Orlando	FL	32820

APPENDIX B

PUBLIC NOTICE

CHULUOTA ROAD RCA - ALTERNATIVES INTERSECTION WORKSHOP
SEPTEMBER 16, 2024

Orange County is conducting an Intersection Control Evaluation (ICE) along Chuluota Road. The purpose of the project is to evaluate various intersection control options, including stop signs, traffic signals and roundabouts, for improving safety and operations along the corridor.

The evaluation involves the Chuluota Road intersections at Lake Pickett Road, Long Boat Lane, Corner Lake Drive, Cypress Lake Glen Boulevard, and at Corner School Drive and Schoolview Way. Various intersection options have been analyzed under a No-Build scenario (generally maintaining the current roadway configuration with consideration of various intersection alternatives) and a Build scenario where Chuluota Road is widened to four lanes as recommended in the 2023 Chuluota Road Roadway Conceptual Analysis study (with consideration of various intersection alternatives).

An Alternatives Intersection Workshop will be held on September 16, 2024, beginning at 5:30 p.m. at the Corner Lake Middle School Cafeteria, 1700 Chuluota Road, Orlando, FL 32820.

Following the open house, a presentation by Orange County staff will begin at 6 p.m. The public will have opportunities to ask questions and provide comments. Project information is also available on the project website at www.chuluotarca.com or on the Orange County website at www.ocfl.net.

Public participation is solicited without regard to race, color, national origin, age, sex, religion, disability of family status.

Persons who require language translation or interpretive services, which are provided at no cost, should contact Yvette Best, Orange County Title VI/Nondiscrimination coordinator, at 407-836- 5825 or by email at yvette.best@ocfl.net at least seven (7) days prior to the workshop. Persons requiring accommodations under the American with Disabilities Act of 1990 (ADA) may request assistance from Nicola Norton, County ADA coordinator, at 407-836-6568 or by email nicola.norton@ocfl.net at least seven (7) days before the meeting.



For information, please contact:
Blanche Hardy, P.G., Project Manager
Orange County Public Works Department
Transportation Planning Division
Phone: 407-836-0257
Email: blanche.hardy@ocfl.net

What: Alternatives Intersection Workshop

Where: Corner Lake Middle School Cafeteria

When: Open House 5:30 pm.
Presentation 6 p.m.

AVISO PÚBLICO

CARRETERA CHULUOTA RCA - TALLER DE INTERSECCIÓN DE ALTERNATIVAS
16 DE SEPTIEMBRE DE 2024

El condado de Orange está llevando a cabo una Evaluación de Control de Intersecciones (ICE) a lo largo de Chuluota Road. El propósito del proyecto es evaluar varias opciones de control de intersecciones, incluidas señales de alto, semáforos y rotondas, para mejorar la seguridad y las operaciones a lo largo del corredor.

La evaluación incluye las intersecciones de Chuluota Road en Lake Pickett Road, Long Boat Lane, Corner Lake Drive, Cypress Lake Glen Boulevard y en Corner School Drive y Schoolview Way. Se han analizado varias opciones de intersección en un escenario de no construcción (en general, se mantiene la configuración actual de la carretera teniendo en cuenta varias alternativas de intersección) y un escenario de construcción en el que Chuluota Road se amplía a cuatro carriles como se recomienda en el estudio de análisis conceptual de la carretera de Chuluota Road de 2023 (considerando varias alternativas de intersección).

Se llevará a cabo un Taller de Alternativas de Intersecciones el 16 de septiembre de 2024, a partir de las 5:30 p.m. en la cafetería de la escuela secundaria Corner Lake, 1700 Chuluota Road, Orlando, FL 32820.

Después de la reuniuon de casa abierta, una presentación con el personal del condado de Orange comenzará a las 6 p.m. El público tendrá oportunidades de hacer preguntas y proporcionar comentarios. La información del proyecto también está disponible en el sitio web del proyecto en www.chuluotarca.com o en el sitio web del condado de Orange en www.ocfl.net.

Se solicita la participación del público sin distinción de raza, color, origen nacional, edad, sexo, religión, ingresos, discapacidad o situación familiar.

Las personas que requieran traducción de idiomas o servicios de interpretación, que se brindan sin costo, deben comunicarse con Yvette Best, coordinadora de No discriminación/ Título VI del condado de Orange, al 407-836-5825 o por correo electrónico a yvette.best@ocfl.net al menos siete (7) días antes del taller. Las personas que requieran adaptaciones especiales según la Ley de Estadounidenses con Discapacidades de 1990 (ADA) pueden solicitar asistencia de Nicola Norton, coordinadora de ADA del condado, al 407-836-6568 o nicola.norton@ocfl.net al menos siete (7) días antes de la reunión.



Para obtener más información, póngase en contacto con:
Blanche Hardy, P.G., Directora de Proyectos
Departamento de Obras Públicas del Condado Orange
División de Planificación de Transporte
Teléfono: 407-836-0257
Email: blanche.hardy@ocfl.net

Qué: **Taller de alternativas de la de intersección**

Cuándo: 16 de septiembre de 2024

Dónde: **Cafetería de la escuela secundaria Corner Lake**
Reunion de casa abierta: 5:30 p.m.
Presentación: 6 p.m.

Orlando Sentinel
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State Of Florida
County Of Orange

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Signature of Affiant

Rose Williams
Name of Affiant

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Signature of Notary Public



Name of Notary, Typed, Printed, or Stamped

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CORRECTIONS & CLARIFICATIONS

It is the mission of the Orlando Sentinel to pursue the truth aggressively. Our policy, in doing so, is to correct mistakes promptly and to clarify information reported in less-than-clear context. To report an error, email *corrections@orlandosentinel.com.*

LOTTERY

For more information, call 850-921-7529 or visit **flalottery.com**

Selected Saturday
Fireball: 6
Pick 2 (midday): 7-8
Pick 3 (midday): 5-2-8
Pick 4 (midday): 6-2-8-2
Pick 5 (midday): 3-1-1-2-4
Selected Friday
Fireball: 6
Pick 2 (evening): 3-7
Pick 3 (evening): 6-3-1
Pick 4 (evening): 4-7-6-7
Pick 5 (evening): 0-9-7-5-3

Selected Friday
Cash Pop
Afternoon: 10
Evening: 11
Late Night: 4
Fantasy 5: 2-9-16-26-33
JackPot Triple Play: 14-16-21-24-43-44
Cash 4 Life: 5-27-33-49-56 CB **3**
MegaMillions: 6-23-41-59-63 MB **25** 2x

Selected Saturday
Cash Pop
Morning: 14
Matinee: 8
Fantasy 5 (midday): 4-7-10-25-30

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Florida Rep. Carolina Amesty leaves the Orange County Jail in Orlando after being indicted on four felony charges on Aug. 29.
RICH POPE/ORLANDO SENTINEL

Amesty

from Page 1

a swing district that covers much of southwest Orange County and a slice of Osceola County, should remain in office.

Though Amesty's indictment is only a week old, the allegations against her, which include forging a former employee's signature and then notarizing the document, have been public for nearly six months, as they were revealed in March in an Orlando Sentinel investigation. Since then, fellow Republicans and conservative causes have continued to rally around Amesty by continuing to donate to her campaign — and, more recently, by staying mum about her indictment.

That strategy isn't unusual, said Joshua Scacco, the director of the Center for Sustainable Democracy at the University of South Florida.

"A lot of the within-party messaging and action will be closing ranks to either outwardly support the member or at minimum, take that wait-and-see approach until more information is garnered," said Scacco, whose research focuses on political communications.

Party leaders have ways to mitigate the impact of scandals involving their members, he said, especially as more voters gravitate to partisan news outlets that may downplay or ignore the allegations.

Florida GOP Chairman Evan Power has not responded to interview requests from the Orlando Sentinel about Amesty's indictment.

Several Republican House members vying for re-election in competitive races this fall didn't respond to questions from the Sentinel about whether Amesty should be expelled from office — something only they have the power to do — or deflected the inquiry.

"My attention is focused on my re-election campaign," wrote Rep. David Smith of Winter Springs in an email, saying he hadn't "read anything" about the indictment and doesn't know Amesty well.

Representatives Fabian Basabe of Miami Beach, Peggy Gossett-Seidman of Highland Beach, Chip LaMarca of Lighthouse Point and Paula Stark of St. Cloud remained silent when the Sentinel inquired about the matter. Nor did Sen. Danny Burgess of Zephyrhills and Rep. Stan McClain of Ocala, whose endorsements of Amesty are featured prominently on her campaign website.

The 29-year-old Amesty was indicted on four felony charges and booked into county jail on Aug. 29 after a grand jury determined she forged a man's signature on a document she notarized for her family-run school. Her indictment follows two Orlando Sentinel investigations into Amesty's background, credentials and conduct in her former role as an administrator at Central Christian University, a small school on North Hiawassee Road in Orange County.

Amesty, who is wrapping up her first term, is ramping up her re-election campaign and it is unclear whether the criminal charges will slow her fundraising efforts. Her political committee reported $24,000 in contributions last week, including $12,500 from Fun Spot founder John Arie and $10,000 from attorney Dan Newlin, who donated before she was arrested on Thursday.

Earlier this week, Amesty's campaign announced an endorsement from Florida Family Action, a conservative advocacy organization. The group endorsed Amesty before the indictment, Political Director Aaron DiPietro wrote in an email, adding that "our thoughts and prayers go out to Rep. Amesty for justice to be served swiftly."

"As a representative, Carolina has been a solid ally with a 100% voting record on our issues, and our endorsement reflects that record," DiPietro wrote. "We maintain the American principle of innocence until proven guilty, and hope for a speedy trial to achieve justice and resolve the accusations."

With two months until the general election, Amesty's removal is unlikely because it would require the agreement of two-thirds of the House, where Republicans hold a super majority.

"I think it's clear there's not going to be any accountability," said Rep. Tom Keen, an Orlando Democrat who also is in a tight re-election race this year. "And what I would say is, let the voters decide."

This year's election could be close, as Amesty's district, which takes in a large swath of southwest Orange County, including Windermere and Disney World, and part of northern Osceola County, is among the state's most evenly split. Republicans make up about 35% of registered voters, while Democrats comprise 31%.

The indictment could make a difference in a competitive race, especially during a presidential election year when turnout is likely to be higher, Scacco said.

"In a lot of ways, the voters will be the ultimate deciders of her future," he said.

The day after Amesty's arrest, Keen posted a screenshot on X of the state Division of Elections website showing a $500 contribution in April from his Republican opponent's political committee to Amesty's committee. He also shared a photo of his opponent, Erika Booth, posing with Amesty at a political event.

"Birds of a feather..." Keen wrote.

Booth, who is seeking her first term in the House, wrote in an email that "an indictment is an extremely serious matter" in response to questions from the Sentinel about whether she continued to support Amesty.

"Every American has the right to a vigorous defense, and her legal proceedings will get to the truth," Booth wrote. "That is where justice is found, and that is what we must wait for."

Keen acknowledged Amesty hasn't been convicted, but pointed out that Gov. Ron DeSantis has suspended local elected officials shortly after charges were filed against them, including fellow Republican Fred Hawkins after he was arrested and charged with impersonating a police officer, a felony, in 2020. Hawkins, then an Osceola County Commissioner, was running for the Florida House at the time of his arrest. He eventually won that race and served as a lawmaker until June 2023, when he resigned to take on a new role as the president of South Florida State College. Keen defeated Booth in a close special election earlier this year to succeed Hawkins, flipping the district.

anmartin@orlandosentinel.com

PUBLIC NOTICE

Chuluota Road RCA - Alternatives Intersection Workshop
September 16, 2024

Orange County is conducting an Intersection Control Evaluation (ICE) along Chuluota Road. The purpose of the project is to evaluate various intersection control options, including stop signs, traffic signals and roundabouts, for improving safety and operations along the corridor.

The evaluation involves the Chuluota Road intersections at Lake Pickett Road, Long Boat Lane, Corner Lake Drive, Cypress Lake Glen Boulevard, and at Corner School Drive and Schoolview Way. Various intersection options have been analyzed under a No-Build scenario (generally maintaining the current roadway configuration with consideration of various intersection alternatives) and a Build scenario where Chuluota Road is widened to four lanes as recommended in the 2023 Chuluota Road Roadway Conceptual Analysis study (with consideration of various intersection alternatives).

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For information, please contact:
Blanche Hardy, P.G., Project Manager
Orange County Public Works Department
Transportation Planning Division
Phone: 407-836-0257
Email: blanche.hardy@ocfl.net

What:	Alternatives Intersection Workshop
Where:	Corner Lake Middle School Cafeteria
When:	Open House 5:30 pm. Presentation 6 p.m.



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County Of Orange

Before the undersigned authority personally appeared
Rose Williams, who on oath says that he or she is a duly authorized representative of the ORLANDO SENTINEL, a DAILY newspaper published in ORANGE County, Florida; that the attached copy of advertisement, being a Legal Notice in:

The matter of 11200-Misc. Legal
Was published in said newspaper by print in the issues of, or by publication on the newspaper's website, if authorized on Sep 08, 2024.

Affiant further says that the newspaper complies with all legal requirements for publication in Chapter 50, Florida Statutes.



Signature of Affiant

Rose Williams
Name of Affiant

Sworn to and subscribed before me on this 12 day of September, 2024,
by above Affiant, who is personally known to me (X) or who has produced identification ( ).



Signature of Notary Public



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7688905

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Issue Date: Sun, 09/08/24 Ad Number: 7688905-1

SEMINOLE COUNTY BOARD OF COUNTY COMMISSIONERS NOTICE OF PUBLIC HEARING TO CONSIDER AN AMENDMENT TO THE LAND DEVELOPMENT CODE OF SEMINOLE COUNTY

SEPTEMBER 24, 2024 AT 1:30 P.M.

Notice is hereby given that the Seminole County Board of County Commissioners will conduct a public hearing on September 24, 2024 beginning at 1:30 p.m., or as soon thereafter as possible, in the County Services Building, 1101 East First Street, Sanford, Florida, Room 1028 (Board Chambers). The purpose of this hearing is to consider recommendations of staff, receive public input, and consider adoption of an ordinance amending the Land Development Code as described below. This item will be available for review approximately one week prior to the public hearing on the County's website at

https://seminolecountyfl.legistar.com/Calendar.aspx

Expedited Building Permits (SB 812) - Consideration of an ordinance creating a process for expediting the issuance of building permits for residential subdivisions before a final plat is recorded to obtain compliance with Senate Bill 812.

AN ORDINANCE OF THE BOARD OF COUNTY COMMISSIONERS OF SEMINOLE COUNTY, AMENDING PART 2 (PROCEDURES FOR SECURING APPROVAL OF PLATS), CHAPTER 35 (SUBDIVISION REGULATIONS), SECTION 35.6 (HOME CONSTRUCTION PRIOR TO PLAT RECORDING) OF THE LAND DEVELOPMENT CODE OF SEMINOLE COUNTY TO ESTABLISH AN EXPEDITED BUILDING PERMIT ISSUANCE PROCESS FOR RESIDENTIAL SUBDIVISION PLATS PURSUANT TO SECTION 173.073, FLORIDA STATUTES AND AMENDING SECTION 35.44 (REQUIRED SUBMITTALS FOR FINAL PLAT) TO REQUIRE AS-BUILT ENGINEERING PLANS FOR EXPEDITED RESIDENTIAL BUILDING PERMITS; PROVIDING FOR CONFLICTS: PROVIDING FOR CODIFICATION IN THE LAND DEVELOPMENT CODE OF SEMINOLE COUNTY; PROVIDING FOR SEVERABILITY; AND PROVIDING AN EFFECTIVE DATE.

All interested persons are encouraged to appear at this hearing and present input regarding the proposed item in accordance with the procedures used by the Board, or submit written comments to **dhall02@seminolecountyfl.gov**, at the Seminole County Planning and Development Division Office located at the address above, Room 2028, or telephone **Dale Hall** at 407-665-7375. Input received in a timely manner will be forwarded to the Board for consideration at the public hearing. These hearings may be continued from time to time as found necessary. Additional information regarding this item, and any comments received, are available for public review at the address above, Room 2028, between the hours of 8:00 a.m. and 5:00 p.m., Monday through Friday, excluding holidays. Persons with disabilities needing assistance to participate in any of these proceedings should contact the County's Human Resources Department ADA Coordinator 48 hours in advance of the hearing at 407-665-7941. Persons are advised that if they decide to appeal any decisions made at this hearing, they will need a record of the proceedings, and for such purpose they may need to ensure a verbatim record of the of the proceedings is made, which record includes the testimony and evidence upon which the appeal is based (Florida Statutes, Section 286.0105).



AVISO PÚBLICO

CARRETERA CHULUOTA RCA - TALLER DE INTERSECCIÓN DE ALTERNATIVAS 16 DE SEPTIEMBRE DE 2024

El condado de Orange está llevando a cabo una Evaluación de Control de Intersecciones (ICE) a lo largo de Chuluota Road. El propósito del proyecto es evaluar varias opciones de control de intersecciones, incluidas señales de alto, semáforos y rotondas, para mejorar la seguridad y las operaciones a lo largo del corredor.

La evaluación incluye las intersecciones de Chuluota Road en Lake Pickett Road, Long Boat Lane, Corner Lake Drive, Cypress Lake Glen Boulevard y en Corner School Drive y Schoolview Way. Se han analizado varias opciones de intersección en un escenario de no construcción (en general, se mantiene la configuración actual de la carretera teniendo en cuenta varias alternativas de intersección) y un escenario de construcción en el que Chuluota Road se amplía a cuatro carriles como se recomienda en el estudio de análisis conceptual de la carretera de Chuluota Road de 2023 (considerando varias alternativas de intersección).

Se llevará a cabo un Taller de Alternativas de Intersecciones el 16 de septiembre de 2024, a partir de las 5:30 p.m. en la cafetería de la escuela secundaria Corner Lake, 1700 Chuluota Road, Orlando, FL 32820.

Después de la reuniuon de casa abierta, una presentación con el personal del condado de Orange comenzará a las 6 p.m. El público tendrá oportunidades de hacer preguntas y proporcionar comentarios. La información del proyecto también está disponible en el sitio web del proyecto en www.chuluotarca.com o en el sitio web del condado de Orange en www.ocfl.net.

Se solicita la participación del público sin distinción de raza, color, origen nacional, edad, sexo, religión, ingresos, discapacidad o situación familiar.

Las personas que requieran traducción de idiomas o servicios de interpretación, que se brindan sin costo, deben comunicarse con Yvette Best, coordinadora de No discriminación/Título VI del condado de Orange, al 407-836-5825 o por correo electrónico a yvette.best@ocfl.net al menos siete (7) días antes del taller. Las personas que requieran adaptaciones especiales según la Ley de Estadounidenses con Discapacidades de 1990 (ADA) pueden solicitar asistencia de Nicola Norton, coordinadora de ADA del condado, al 407-836-6568 o nicola.norton@ocfl.net al menos siete (7) días antes de la reunión.



Para obtener más información, póngase en contacto con:
Blanche Hardy, P.G., Directora de Proyectos
Departamento de Obras Públicas del Condado Orange
División de Planificación de Transporte
Teléfono: 407-836-0257
Email: blanche.hardy@ocfl.net

Qué: Taller de alternativas de la de intersección
Cuándo: 16 de septiembre de 2024
Dónde: Cafetería de la escuela secundaria Corner Lake
Reunion de casa abierta: 5:30 p.m.
Presentación: 6 p.m.



FOR IMMEDIATE RELEASE
September 9, 2024

Contact: Orange County Public Information Office at PIO@ocfl.net.

Alternatives Public Workshop for Chuluota Road Intersection Control Evaluation (ICE) Project

Orange County, Fla. – The public is invited to learn about potential intersection improvements along Chuluota Road at an alternatives public workshop on Monday, September 16, at 5:30 p.m.
As part of the Chuluota Road Roadway Conceptual Analysis (RCA) study, Orange County is conducting an Intersection Control Evaluation (ICE) to examine various intersection controls and configurations to determine the best alternative to promote safety, operations, and mobility along the corridor. The purpose of this meeting is to present the alternatives and gather community feedback.

The ICE project is evaluating the Chuluota Road intersections at Lake Pickett Road, Long Boat Lane/Cypress Lake Glen Boulevard (North), Corner Lake Drive, Cypress Lake Glen Boulevard (South), and Schoolview Way. These intersections will be analyzed for both existing conditions (generally two travel lanes) and future traffic conditions which assumes four-lane improvements for Chuluota Road.

The alternatives public workshop will be held at the Corner Lake Middle School Cafeteria, 1700 Chuluota Road, Orlando, FL 32820. Attendees may speak with project team members and view exhibits during an open house from 5:30 p.m. to 6 p.m. County staff will offer a presentation at 6 p.m., followed by a question-and-answer period.

Public participation is solicited without regard to race, color, national origin, age, sex, religion, income, disability, or family status. Persons who require language translation or interpretive services, which are provided at no cost, should contact Ricardo Daye, Orange County Title VI/Nondiscrimination coordinator, at 407-836- 5825 or ricardo.daye@ocfl.net at least seven (7) days prior to the meeting. Persons requiring special accommodations under the American with Disabilities Act of 1990 (ADA) may request assistance from Nicola Norton, County ADA coordinator, at 407-836-6568 or nicola.norton@ocfl.net at least seven (7) days prior to the meeting.

For more information, please contact Blanche Hardy, PG, Project Manager, Orange County Public Works Department, Transportation Planning Division, at 407-836-0257, or blanche.hardy@ocfl.net.

APPENDIX C

Chuluota Road (CR 419)

Intersection Control Evaluation (ICE)

SR 50 to Lake Pickett Road

Alternatives Public Meeting
Monday, September 16, 2024
5:30 p.m.
Presentation at 6:00 p.m.

Sign-In Sheet

Name (please print)	Organization (if applicable)	Mailing Address (please print)	E-mail Address/Phone (please print)
ANDREA WEBSTER	—		DREAWEB@GMAIL.COM
LEE Dorbal			leedoran378@gmail.com

Public Meeting Location: Corner Lake Middle School, Cafeteria, 1700 Chuluota Road, Orlando, Florida 32820

This sign-in sheet is part of the project record and is available for viewing by the public and media.

Chuluota Road (CR 419)

Intersection Control Evaluation (ICE)

SR 50 to Lake Pickett Road

Alternatives Public Meeting
Monday, September 16, 2024
5:30 p.m.
Presentation at 6:00 p.m.

Sign-In Sheet

Name (please print)	Organization (if applicable)	Mailing Address (please print)	E-mail Address/Phone (please print)
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Donna PAGAN		1907 Corner School DR. 32820	donna.pagan83@yahoo
Alicia Hernandez		1907 Corner School DR. 32820	
NINA PERFECTA		1973 Corner School Dr.	—
Eric Grimmer	Orlando YIMBY	574 Terrace Spring Dr.	orlandoyimby@gmail.com
B S. bb		16011 Old Cleg.	ps.bb91@gmail.com
Mary Murray		19311 Lake Pickett Rd	trinalarry@aol.com

Public Meeting Location: Corner Lake Middle School, Cafeteria, 1700 Chuluota Road, Orlando, Florida 32820

This sign-in sheet is part of the project record and is available for viewing by the public and media.

Chuluota Road (CR 419)

Intersection Control Evaluation (ICE)

SR 50 to Lake Pickett Road

Alternatives Public Meeting
Monday, September 16, 2024
5:30 p.m.
Presentation at 6:00 p.m.

Sign-In Sheet

Name (please print)	Organization (if applicable)	Mailing Address (please print)	E-mail Address/Phone (please print)
Larry Murray		19311 Lake Rickett Rd	4079486207
Towy EROS	Towy EROS	35604 Avalon 32828	TowyEROS407@gmail.com
Kenneth Lint		3030 Lee Shore Loop, Orl. 32820	kdxtreme13@yahoo.com
Ilan Caritzman	Orange County	7348 W. Sand Lake Road	561-926-7565

Public Meeting Location: Corner Lake Middle School, Cafeteria, 1700 Chuluota Road, Orlando, Florida 32820

This sign-in sheet is part of the project record and is available for viewing by the public and media.

Chuluota Road (CR 419)

Intersection Control Evaluation (ICE)

SR 50 to Lake Pickett Road

Alternatives Public Meeting
Monday, September 16, 2024
5:30 p.m.
Presentation at 6:00 p.m.

Sign-In Sheet

Name (please print)	Organization (if applicable)	Mailing Address (please print)	E-mail Address/Phone (please print)
Janet E Brewer		4707 Lazy H Lane Christmas 32709	janetmc1900@aol.com
Dawn D. Benjamin		3219 Lee Shore Loop Orlando, FL 32820	dawn.benjamin1@gmail.com
Andrew Rosenthal	Orlando YIMBY	13051 Lake Live Oak Dr. Orlando, FL 32828	joy1540@yahoo.com
Federico De Jesús		2749 Blowing Breeze Way Orlando, FL. 32826	
Irette Claudia			

Public Meeting Location: Corner Lake Middle School, Cafeteria, 1700 Chuluota Road, Orlando, Florida 32820

This sign-in sheet is part of the project record and is available for viewing by the public and media.

Chuluota Road (CR 419)

Intersection Control Evaluation (ICE)

SR 50 to Lake Pickett Road

Alternatives Public Meeting
Monday, September 16, 2024
5:30 p.m.
Presentation at 6:00 p.m.

Staff Sign-In Sheet

Name	Organization	E-mail	Initials
Blanche Hardy	Orange County	Blanche.Hardy@ocfl.net	
Brian Sanders	Orange County	Brian.Sanders@ocfl.net	
Bret Blackaby Renzo Nastasi	Orange County	brett.blackaby@ocfl.net Renzo.Nastasi@ocfl.net	
Ian Phyars	Orange County	Ian.Phyars@ocfl.net	
Greg Smith	JMT	GSmith@jmt.com	
Matt Knight	JMT	MKnight@jmt.com	
Anthony Chaumont	JMT	AChaumont@jmt.com	
Carolyn Fitzwilliam	Quest	Carolyn.Fitzwilliam@qcausa.com	
Shari Curley	Quest	Shari.Curley@qcausa.com	
LaTiesha Rivera	Quest	Latiesha.Rivera@qcausa.com	

Public Meeting Location: Corner Lake Middle School, Cafeteria, 1700 Chuluota Road, Orlando, Florida 32820

This sign-in sheet is part of the project record and is available for viewing by the public and media.

Chuluota Road (CR 419)

Intersection Control Evaluation (ICE)

SR 50 to Lake Pickett Road

Alternatives Public Meeting
Monday, September 16, 2024
5:30 p.m.
Presentation at 6:00 p.m.

~~Staff~~ Sign-In Sheet

Name (please print)	Organization (if applicable)	Mailing Address (please print)	E-mail Address/Phone (please print)
Nikilaus Wycha	District 5 BCC		Nikilaus.Wycha@ocfl.net
Emily Bonilla	D5		
Humberto Castillero	OC.		

Public Meeting Location: Corner Lake Middle School, Cafeteria, 1700 Chuluota Road, Orlando, Florida 32820

This sign-in sheet is part of the project record and is available for viewing by the public and media.

APPENDIX D

Chuluota Road (CR 419)

Intersection Control Evaluation (ICE)

SR 50 to Lake Pickett Road

Public Comment Form

Name _____ Phone _____

Address _____ Email _____

City _____ State _____ Zip Code _____

☐ Check here to be added to the project mailing list.

Please use this comment form to express your opinions regarding the planned Intersection Control Evaluation (ICE) improvements on Chuluota Road from SR 50 to Lake Pickett Road. You can leave your completed form in the comment box at this meeting, with a member of the project team today or mail it, postmarked by Friday, September 27, 2024, to the address below. All comments are part of the project record and are available for viewing by the public and media.

Comments: _____

Please mail comment form to:
Ms. Blanche Hardy, P.G., Project Manager
Orange County Public Works Department
Transportation Planning Division
4200 South John Young Pkwy
Orlando, FL 32839
E-mail: blanche.hardy@ocfl.net
Telephone: 407-836-0257

Public Meeting
Monday, September 16, 2024
5:30 p.m.
Presentation at 6:00 p.m.
Corner Lake Middle School Cafeteria
1700 Chuluota Road
Orlando, Florida 32820

Project website: www.chuluotarca.com

Please fold on dotted lines.

Chuluota Road Intersection Control Evaluation (ICE)
ATTN: Ms. Blanche Hardy, P.G., Project Manager
Orange County Public Works Department
Transportation Planning Division
4200 South John Young Pkwy
Orlando, FL 32839

APPENDIX E

Chuluota Road (CR 419)
Intersection Control Evaluation (ICE)
SR 50 to Lake Pickett Road

Public Comment Form

Name Kenneth Lind - CLHOA member Phone (240) 298-6811

Address 3030 Lee Shore Loop Email kbxtreme13@yahoo.com

City Orlando State FL Zip Code 32820

☐ Check here to be added to the project mailing list.

Please use this comment form to express your opinions regarding the planned Intersection Control Evaluation (ICE) improvements on Chuluota Road from SR 50 to Lake Pickett Road. You can leave your completed form in the comment box at this meeting, with a member of the project team today or mail it, postmarked by Friday, September 27, 2024, to the address below. All comments are part of the project record and are available for viewing by the public and media.

Comments: We like very much the RCA study with A lanes at the traffic lights. NO round-abouts please. The turning lanes into Lake Pickett, or from Lake Pickett into Chuluota will be a must have because drivers on Chuluota Road drive fast at 55-60 mph. I'm sure the traffic lights will help with the speed control. The flow of traffic to East River HS needs to be considered too. Coming or Exiting the HS from Chuluota Road is always a problem at the start and end of school hours.

The Southbound Turning Lane into the Country Lake Estates neighborhood is really needed it.

* No bowties - This design will create more gas emissions from vehicles not being able to make left turns and having to go to the next round-about to make a U turn.

Please mail comment form to:
Ms. Blanche Hardy, P.G., Project Manager
Orange County Public Works Department
Transportation Planning Division
4200 South John Young Pkwy
Orlando, FL 32839
E-mail: blanche.hardy@ocfl.net
Telephone: 407-836-0257

Public Meeting
Monday, September 16, 2024
5:30 p.m.
Presentation at 6:00 p.m.
Corner Lake Middle School Cafeteria
1700 Chuluota Road
Orlando, Florida 32820

Project website: www.chuluotarca.com

Chuluota Road (CR 419)
Intersection Control Evaluation (ICE)
SR 50 to Lake Pickett Road

Public Comment Form

Name Kenneth Lind - CLE HOA Board member Phone (240) 298-6811

Address 3030 Lee Shore Loop. Email Kdxtreme130@yahoo.com

City Orlando State FL Zip Code 32820

☒ Check here to be added to the project mailing list.

Please use this comment form to express your opinions regarding the planned Intersection Control Evaluation (ICE) improvements on Chuluota Road from SR 50 to Lake Pickett Road. You can leave your completed form in the comment box at this meeting, with a member of the project team today or mail it, postmarked by Friday, September 27, 2024, to the address below. All comments are part of the project record and are available for viewing by the public and media.

Comments: We didn't see bicycle lanes on Chulvota Road. There're UCF students and local bicycles clubs that use these roads all the time and specially on weekends to exercise.

Please mail comment form to:
Ms. Blanche Hardy, P.G., Project Manager
Orange County Public Works Department
Transportation Planning Division
4200 South John Young Pkwy
Orlando, FL 32839
E-mail: blanche.hardy@ocfl.net
Telephone: 407-836-0257

Public Meeting
Monday, September 16, 2024
5:30 p.m.
Presentation at 6:00 p.m.
Corner Lake Middle School Cafeteria
1700 Chuluota Road
Orlando, Florida 32820

Project website: www.chuluotarca.com

Chuluota Road (CR 419)
Intersection Control Evaluation (ICE)
SR 50 to Lake Pickett Road

Public Comment Form

Name Pamela SIBLE Phone 407.432.1645

Address 16011 Old Cheney Hwy Email ps.bb91@gmail.com

City Orl State FL Zip Code 32833

☒ Check here to be added to the project mailing list.

Please use this comment form to express your opinions regarding the planned Intersection Control Evaluation (ICE) improvements on Chuluota Road from SR 50 to Lake Pickett Road. You can leave your completed form in the comment box at this meeting, with a member of the project team today or mail it, postmarked by Friday, September 27, 2024, to the address below. All comments are part of the project record and are available for viewing by the public and media.

Comments: Congestion will still occur with either design since NO improvements planned for EAST R.T. WAY.
Please Add or conduct own STUDY-
Old Cheney Hwy - E+W of ER Falcon Way + ER Falcon W
East River Falcons Way -
Not included in "STUDY" -
OR A seperate STUDY DONE - OR
In progress.
Safety huge issue that causes parents to drive students which Adds more TRAFFIC
Issues from ER Falcon W
Backup happens on SC- E+W as well as 419
Also everyday-(M-F) residents - east or west of E River Falcons Way - Are unable to get out on ER Falcon Way.
New School Road will only dump more traffic on Old Cheney Rd.
Safety issue for peds

Please mail comment form to:
Ms. Blanche Hardy, P.G., Project Manager
Orange County Public Works Department
Transportation Planning Division
4200 South John Young Pkwy
Orlando, FL 32839
E-mail: blanche.hardy@ocfl.net
Telephone: 407-836-0257

Public Meeting
Monday, September 16, 2024
5:30 p.m.
Presentation at 6:00 p.m.
Corner Lake Middle School Cafeteria
1700 Chuluota Road
Orlando, Florida 32820

Project website: www.chuluotarca.com

Chuluota Road (CR 419)
Intersection Control Evaluation (ICE)
SR 50 to Lake Pickett Road

Public Comment Form

Name Dawn Benjamin Phone 443-691-6257

Address 3219 Lee Shore Loop Email dawn.benjamin.1@gmail.com

City Orlando State FL Zip Code 32820

☑ Check here to be added to the project mailing list.

Please use this comment form to express your opinions regarding the planned Intersection Control Evaluation (ICE) improvements on Chuluota Road from SR 50 to Lake Pickett Road. You can leave your completed form in the comment box at this meeting, with a member of the project team today or mail it, postmarked by Friday, September 27, 2024, to the address below. All comments are part of the project record and are available for viewing by the public and media.

Comments: Would like to see a flashing light to cross Chuluota Road from Long Boat and/or Cypress Lake Glen Blvd via vehicle or pedestrian.

This would also help making left turns from either Long Boat or Cypress Lake Glen Blvd.

Appreciate your time and information. The time and location for this meeting allowed me to attend.

Thank You.

Dawn

Please mail comment form to:
Ms. Blanche Hardy, P.G., Project Manager
Orange County Public Works Department
Transportation Planning Division
4200 South John Young Pkwy
Orlando, FL 32839
E-mail: blanche.hardy@ocfl.net
Telephone: 407-836-0257

Public Meeting
Monday, September 16, 2024
5:30 p.m.
Presentation at 6:00 p.m.
Corner Lake Middle School Cafeteria
1700 Chuluota Road
Orlando, Florida 32820

Project website: www.chuluotarca.com

Chuluota Road (CR 419)
Intersection Control Evaluation (ICE)
SR 50 to Lake Pickett Road

Public Comment Form

Name Lee Doran Phone 407-936-5635

Address 4866 Native Dancer Ln Email leedoran278-9@aol

City Orlando State FL Zip Code 32826

☒ Check here to be added to the project mailing list.

Please use this comment form to express your opinions regarding the planned Intersection Control Evaluation (ICE) improvements on Chuluota Road from SR 50 to Lake Pickett Road. You can leave your completed form in the comment box at this meeting, with a member of the project team today or mail it, postmarked by Friday, September 27, 2024, to the address below. All comments are part of the project record and are available for viewing by the public and media.

Comments:

Please mail comment form to:
Ms. Blanche Hardy, P.G., Project Manager
Orange County Public Works Department
Transportation Planning Division
4200 South John Young Pkwy
Orlando, FL 32839
E-mail: blanche.hardy@ocfl.net
Telephone: 407-836-0257

Public Meeting
Monday, September 16, 2024
5:30 p.m.
Presentation at 6:00 p.m.
Corner Lake Middle School Cafeteria
1700 Chuluota Road
Orlando, Florida 32820

Project website: www.chuluotarca.com

Chuluota Road Intersection Control Evaluation (ICE)
Alternatives Intersection Workshop

From State Road (SR) 50 to Lake Pickett Road
Orange County, Florida

Workshop Summary
Date: Monday, September 16, 2024
Time: 5:30 p.m. – 7 p.m.
Location: Corner Lake Middle School

As part of the Chuluota Road Roadway Conceptual Analysis (RCA) study, Orange County is conducting an Intersection Control Evaluation (ICE) Study along Chuluota Road from north of Colonial Drive (State Road (SR) 50) to Lake Pickett Road. Orange County held the Alternatives Intersection Workshop for this project on Monday, September 16, 2024. The purpose of this meeting was to show interested members of the public all the different options the County is looking at for at least four intersections along Chuluota Road. The County also provided an opportunity for attendees to offer feedback and ask questions.

Public Notification
A newsletter with the meeting invitation and information regarding the project was sent by U.S. Mail to 2,010 property owners and tenants. The invitations included the date and time of the public meeting, where to attend and the project map.

Meeting Advertisement
The meeting was advertised with a newspaper display ad in both English and Spanish on Sunday, September 8, 2024, in the *Orlando Sentinel*. The meeting notice was also posted on the Orange County website, and a media release was sent out by Orange County.

Public Meeting Agenda
The meeting was held at Corner Lake Middle School's Cafeteria, 1700 Chuluota Road, Orlando, FL 32820. The open-house portion of the meeting was scheduled to open at 5:30 p.m., however, some attendees arrived at 5 p.m. The board exhibits were on easels and project team members were available to answer any questions the guests may have. Following the open house portion, Orange County's Project Manager, Blanche Hardy, gave a presentation with details of the project. Once the presentation was complete, Orange County took questions from the attendees.

The following summarizes the verbal question-and-answer session:

1. Question about the location of the two properties mentioned as possible acquisitions to accommodate widening.

Ms. Hardy said the properties for possible full acquisition are on the entire parcel northeast corner of Chuluota Road and Lake Pickett Road. We've met with those property owners. The other potential acquisition is the former church property across from the elementary school. Ms. Hardy mentioned this property is desirable because of the wildlife corridor and proposed trail.

2. Where is the funding for this project coming from? Will some come from The Grow?
   The initial funding came from Investment in our Homes for Life from Mayor Jacobs. The other funding in the future from Construction Improvement Project, and the proportionate fair share from development are the main sources. The Grow is included since the development abuts the corridor.
3. Is this project fully funded?
   No. The study phase is funded. Mr. Sanders reminded everyone this is still in the early phases and budgets are done a year at a time.
4. Has the County done a study to specifically state how much the proposals will improve safety, especially with pedestrians.
   Ms. Hardy said as part of the study they ran a safety analysis (SPICE). Mr. Sanders and Ms. Hardy pledged to bring back more information on the safety findings at the next meeting.
5. Children's safety is a top priority. Is there a plan to extend improvements south of S.R. 50? Are you saying the analysis is showing the current (stop) condition is safer for children crossing than the proposed change?
   The project does not extend across S.R. 50 onto East River Falcons Way. Ms. Hardy noted the FDOT will be making interim pedestrian crossing improvements on S.R. 50 at Corner School Drive and Chuluota Road. Those improvements are expected to begin in early 2025. Ms. Hardy also detailed the many pedestrian enhancements that are planned, such as high visibility crosswalks, pedestrian lighting and a slower speed limit.
6. Has there been consideration of RRFBs or other signals to stop north-south traffic at the crosswalks (where stop signs are located).
   Because of the speed limit, RRFBs have not been considered.
7. Are bicycle lanes proposed? On weekends, there are a lot of bicycle clubs.
   Ms. Hardy and Mr. Sanders said the project proposes a multi-use path, which appeals to may bicyclists who are not comfortable riding on the road next to traffic. There was a discussion about the many bicycle clubs that travel in the area.

8. Has there been consideration of adding shade trees along the shared use path? It's not a good plan to have a multi-use trail that no one uses because it is uncomfortable.
   Ms. Hardy explained that landscaping is usually installed within the median. She said large trees next to multi-use paths can become an issue because the roots push up the pavement and become a maintenance problem. Mr. Sanders said they do understand, and the County is always working to balance the issues.
9. Commissioner Bonilla had several questions about the existing and proposed speed limit and questioned whether the proposals would be effective in slowing traffic.
   Mr. Sanders discussed the lane narrowing, landscaping, median and new curbing and how those features work to help make drivers less comfortable speeding. He also mentioned the proposed traffic signals Commissioner Bonilla said it does not make sense because the added lane would provide more room and people will go faster. She said there are long sections where there are no lights or stop signs to slow people down.
10. There was a suggestion for a pedestrian bridge at Schoolview Way.
    Mr. Sanders said pedestrian bridges are a significant structure and investment and are used in areas where there is a constant stream of pedestrians. In this area, the crossings are typically morning and afterschool.
11. Question about whether noise walls would be included or some other barrier.
    Mr. Sanders explained that the sound walls start 13 to 15 feet high. There are some disadvantages because of sight distance when pulling out. He said the county has a subdivision wall policy and we can look at that. If there is a landscape berm, it would not qualify for a noise wall.
12. Resident voiced support for a traffic signal rather than a roundabout at Longboat.

The meeting wrapped up at around 7:15 p.m.

Meeting Attendance
Twenty (20) people attended the meeting, including Orange County Commissioner Emily Bonilla. There were also eleven (11) staff members and consultants.

Handouts
A copy of the newsletter, in English and Spanish, were available at the meeting for attendees. A comment form was also available. Participants were encouraged to fill out the comment form and drop it in the comment box before leaving the meeting. They were also told they could mail it back or email the project manager, whose information was on the comment form.

Public Comments

Three people submitted written comment forms at the public meeting. The comments consisted of:

- Wants flashing light at Chuluota Road at Long Boat and/or Cypress Lake Glen Blvd
- Wants 4 lanes
- Does not want roundabouts
- Wants turn lanes at Lake Pickett
- Believes traffic signal will help slow traffic
- Flow of traffic at East River High School needs to be addressed / wants study / huge safety issue / new school road will not work
- SB turn lane needed into Country Lake Estates
- Does not want bowties / adds gas emissions
- Concerned about no bike lanes because of all the bike clubs who use the area

End of Meeting Summary

This public meeting summary was prepared by Shari Curley, Senior Communications Manager, Quest Corporation of America Inc. If you feel that clarifications are necessary, or if it differs from your understanding, please notify Shari by email at shari.curley@qcausa.com.

Chuluota Intersection Control Evaluation (ICE) Survey
Results Summary

In conjunction with the Roadway Conceptual Analysis (RCA) study on Chuluota Road from SR 50 to Lake Pickett Road, Orange County is evaluating various intersection control options along the corridor. In addition to an alternatives workshop held on September 16, 2024, Orange County conducted a survey to understand the community's priorities and preferences. The survey included seven questions and was mailed to property owners along with the notification for the recommendations meeting. It was also placed on the project website. A total of 45 surveys were returned, mostly online. The results are summarized below.

From the survey, some conclusions can be drawn. More than 60% of the respondents supported the widening of Chuluota Road. In addition, 59% of the public said relieving congestion and keeping traffic moving was the top priority. Traffic signals were the preferred control option at most of the intersections along Chuluota Road, though at Corner Lake Drive, roundabouts did receive more support by respondents rather than the use of traffic signals.

The Long Boat Lane/Cypress Glen Boulevard (North) was the highest ranked intersection by 43% of the respondents as having the most urgent need for improvements. Lake Pickett Road came in second by 32% of the respondents as needing improvements.

The Corner School Drive/Schoolview Way was perceived as being highly congested. The RCA is proposing on closing existing Schoolview Way and providing a new connection at the signalized Cypress Lake Glen Boulevard (South) intersection which may improve overall operations along Corner School Drive by removing the existing Schoolview Way intersection.

The Long Boat Lane/Cypress Glen Boulevard (North) intersection received the highest concerns by respondents about driving through this intersection as being unsafe (11%) or highly unsafe (32%). The Lake Pickett intersection received the highest concerns by respondents regarding pedestrian and bicycle crossings at this intersection as being unsafe (11%) or highly unsafe (27%).

(1) Respondents were asked to indicate which statement best reflected their opinion:
- Widen Chuluota Road (62%)
- Leave Chuluota Road as two lanes with minor intersection improvements (24%)
- Leave Chuluota Road alone and do nothing or voted for “other” (9%).

(2) When asked to rank the benefit goals for intersection improvements, respondents overwhelmingly said relieving congestion and keeping traffic moving was the top priority (59%), accommodating bicyclists ranked second (43%), followed by accommodating pedestrians (38%). Cost considerations were last at 20%.

(3) With respect to preferred control options at each intersection, the results show:
- Lake Pickett Road: Traffic signal (76%) followed by roundabout (24%)
- Long Boat Lane/Cypress Lake Glen Boulevard (North): Traffic signal (56%) followed by roundabout (27%)
- Corner Lake Drive: Roundabout (33%), followed by a traffic signal (31%)
- Cypress Lake Glen Boulevard (South): Traffic Signal (82%) followed by roundabout (9%)
- Corner School Drive/Schoolview Way: Traffic signal (40%) followed by roundabout (27%)

(4) Respondents were asked which intersections had the most urgent need for improvements. The results were:
- Long Boat Lane/Cypress Glen Boulevard (North) (43%).
- Lake Pickett Road (32%)
- Cypress Lake Glen Boulevard (South) (25%)
- Corner Lake Drive (20%)
- Corner School Drive/Schoolview Way (20%)

(5) When asked to rate the level of congestion experienced at each intersection, respondents said Corner School Drive/Schoolview Way, and Lake Pickett Road/Chuluota Road are the two most congested intersections.
- Corner School Drive/Schoolview Way: Highly congested (31%)
- Lake Pickett Road intersection: Highly congested (22%).
- Cypress Lake Glen Boulevard (South): Somewhat congested (47%)
- Long Boat Lane/Cypress Glen Boulevard (North): Somewhat congested (25%)
- Corner Lake Drive: Not very congested (29%).

(6) With respect to how safe respondents feel driving through the intersections, the Long Boat Lane/Cypress Glen Boulevard (North) intersection had the highest concerns regarding unsafe or highly unsafe conditions:

- Long Boat Lane/Cypress Glen Boulevard (North): 23% felt very safe though 11% felt unsafe or highly unsafe (32%)
- Lake Pickett Road: 25% felt very safe, but 16% felt unsafe or highly unsafe (20%)
- Cypress Lake Glen Boulevard: 32% felt very safe, though 9% felt highly unsafe
- Corner School Drive/Schoolview Way: 25% felt very safe, though 9% felt highly unsafe
- Corner Lake Drive: 25% felt very safe, though 11% felt highly unsafe

(7) Regarding perceived safety for pedestrian and bicycle crossing movements at the project intersections, the results showed the following:

- Lake Pickett Road: 5% felt very safe, but 11% felt unsafe or highly unsafe (27%)
- Long Boat Lane/Cypress Glen Boulevard (North): 13% felt safe though 16% felt unsafe or highly unsafe (25%)
- Corner Lake Drive: 9% felt safe, though 11% felt unsafe or highly unsafe (16%)
- Cypress Lake Glen Boulevard (South): 13% felt safe, though 11% felt unsafe or highly unsafe (14%)
- Corner School Drive/Schoolview Way: 7% felt safe, though 14% felt unsafe or highly unsafe (11%)

Chuluota Road RCA Intersection Control Evaluation (ICE)

Q1. For each of the following intersections, please rate the typical level of congestion you regularly experience on a scale from 1 (low congestion) to 5 (high congestion)

	1		2		3		4		5	
at Lake Pickett Road	15.91%	7	18.18%	8	22.73%	10	20.45%	9	22.73%	10
at Long Boat Lane and Cypress Lake Glen Blvd (North)	20.45%	9	22.73%	10	25.00%	11	13.64%	6	15.91%	7
at Corner Lake Drive	29.55%	13	15.91%	7	20.45%	9	18.18%	8	15.91%	7
at Cypress Lake Glen Boulevard	13.64%	6	9.09%	4	47.73%	21	20.45%	9	9.09%	4
Corner School Drive and Schoolview Way	13.64%	6	25.00%	11	18.18%	8	31.82%	14	11.36%	5

Answered 44
Skipped 0

Q2. On a scale of 1 (very safe) to 5 (not safe), please tell us how safe you feel navigating each of the following intersections in a vehicle:

	1		2		3		4		5	
at Lake Pickett Road	25.00%	11	13.64%	6	20.45%	9	15.91%	7	20.45%	9
at Long Boat Lane and Cypress Lake Glen Blvd (North)	22.73%	10	11.36%	5	22.73%	10	11.36%	5	31.82%	14
at Corner Lake Drive	25.00%	11	20.45%	9	36.36%	16	6.82%	3	11.36%	5
at Cypress Lake Glen Boulevard	31.82%	14	15.91%	7	31.82%	14	11.36%	5	9.09%	4
Corner School Drive and Schoolview Way	25.00%	11	11.36%	5	40.91%	18	13.64%	6	9.09%	4

Answered 44
Skipped 0

Q3. On a scale of 1 (very safe) to 5 (not safe), please tell us how safe you feel crossing each of the following intersections on foot or by bicycle. If you do not walk or ride a bicycle at these intersections, please choose N/A:

	1		2		3		4		5		N/A	
at Lake Pickett Road	4.55%	2	2.27%	1	4.55%	2	11.36%	5	27.27%	12	50.00%	22
at Long Boat Lane and Cypress Lake Glen Blvd (North)	13.64%	6	0.00%	0	9.09%	4	15.91%	7	25.00%	11	36.36%	16
at Corner Lake Drive	9.09%	4	4.55%	2	13.64%	6	11.36%	5	15.91%	7	45.45%	20
at Cypress Lake Glen Boulevard	13.64%	6	6.82%	3	15.91%	7	11.36%	5	13.64%	6	38.64%	17
Corner School Drive and Schoolview Way	6.82%	3	11.36%	5	6.82%	3	13.64%	6	11.36%	5	50.00%	22

Answered 44
Skipped 0

Q4. Please rank the following intersections in order of priority, with 1 being for those intersections urgently needing the most improvement (e.g., added lanes, signals, etc.), and 5 for those intersections where no improvements are needed

	1		2		3		4		5	
at Lake Pickett Road	31.82%	14	6.82%	3	15.91%	7	15.91%	7	29.55%	13
at Long Boat Lane and Cypress Lake Glen Blvd (North)	43.18%	19	11.36%	5	15.91%	7	13.64%	6	15.91%	7
at Corner Lake Drive	20.45%	9	25.00%	11	9.09%	4	20.45%	9	25.00%	11
at Cypress Lake Glen Boulevard	25.00%	11	9.09%	4	11.36%	5	20.45%	9	34.09%	15
Corner School Drive and Schoolview Way	20.45%	9	18.18%	8	25.00%	11	18.18%	8	18.18%	8

Answered 44
Skipped 0

Q5. In choosing an intersection design, what factors are most important to you? Please rank on a scale of 1 to 5 with 5 being the most imporant:

	1		2		3		4		5	
Maintaining left turns for all movements	20.45%	9	9.09%	4	15.91%	7	20.45%	9	36.36%	16
Keeping traffic moving, reducing delays	9.09%	4	4.55%	2	9.09%	4	15.91%	7	59.09%	26
Slowing traffic down	20.45%	9	13.64%	6	18.18%	8	13.64%	6	34.09%	15
Accommodating pedestrians	13.64%	6	2.27%	1	22.73%	10	22.73%	10	38.64%	17
Accommodating bicyclists	11.36%	5	6.82%	3	20.45%	9	18.18%	8	43.18%	19
Cost	29.55%	13	4.55%	2	27.27%	12	13.64%	6	20.45%	9

Answered 44
Skipped 0

Q6. If given the choice between a roundabout, stop signs or a traffic signal, which intersection control would you choose at each of the following intersections:

	Stop Sign		Traffic Light		Roundabout	
at Lake Pickett Road	0.00%	0	75.56%	34	24.44%	11
at Long Boat Lane/Cypress Lake Glen Blvd (North)	17.78%	8	55.56%	25	26.67%	12
at Corner Lake Drive	28.89%	13	31.11%	14	33.33%	15
at Cypress Lake Glen Boulevard	6.67%	3	82.22%	37	8.89%	4
Corner School Drive and Schoolview Way	31.11%	14	40.00%	18	26.67%	12

Answered 45
Skipped 0

Q7. With which of the following statements do you agree most?

Answer Choices	Responses	
Chuluota Road is fine as is - do nothing	8.89%	4
Leave Chuluota Road as two lanes with minor intersection improvements	24.44%	11
Widen Chuluota Road to improve safety and alleviate congestion	62.22%	28
Other (please specify)	8.89%	4
Answered		**45**
Skipped		**0**

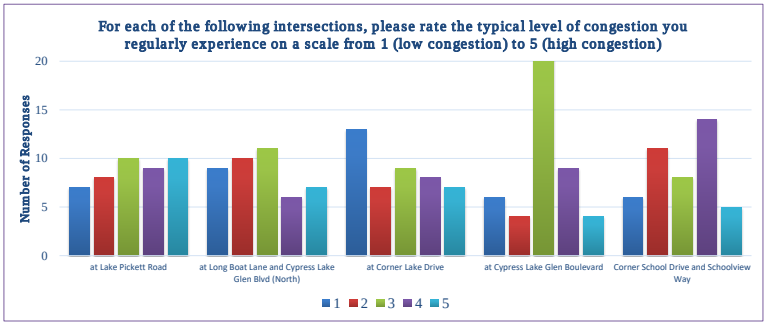
Q8. Optional

Answer Choices	Responses	
Name:	74.07%	25
Street you live on:	100.00%	31
Street address line 2:	0.00%	0
State:	0.00%	0
Zip code:	0.00%	0
Country:	0.00%	0
Answered		**27**
Skipped		**9**

Chuluota Road RCA Intersection Control Evaluation (ICE)

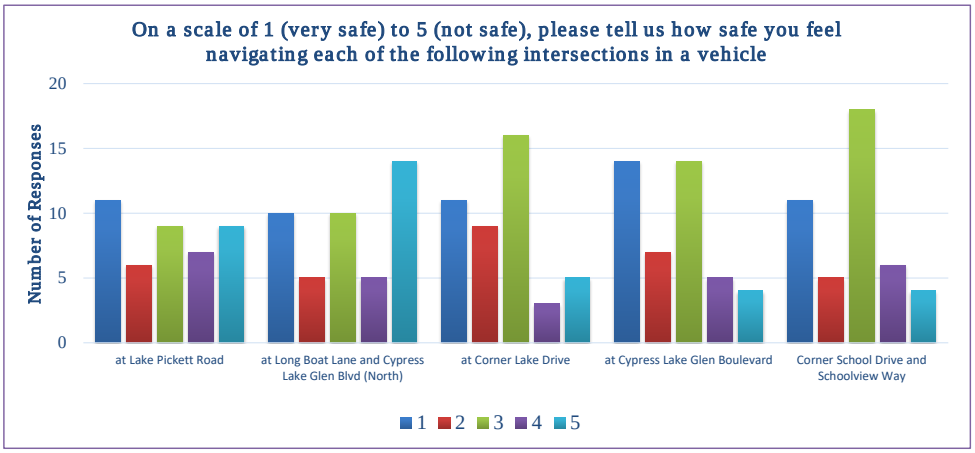
Q1. For each of the following intersections, please rate the typical level of congestion you regularly experience on a scale from 1 (low congestion) to 5 (high congestion)

	1	2	3	4	5
at Lake Pickett Road	7	8	10	9	10
at Long Boat Lane and Cypress Lake Glen Blvd (North)	9	10	11	6	7
at Corner Lake Drive	13	7	9	8	7
at Cypress Lake Glen Boulevard	6	4	21	9	4
Corner School Drive and Schoolview Way	6	11	8	14	5



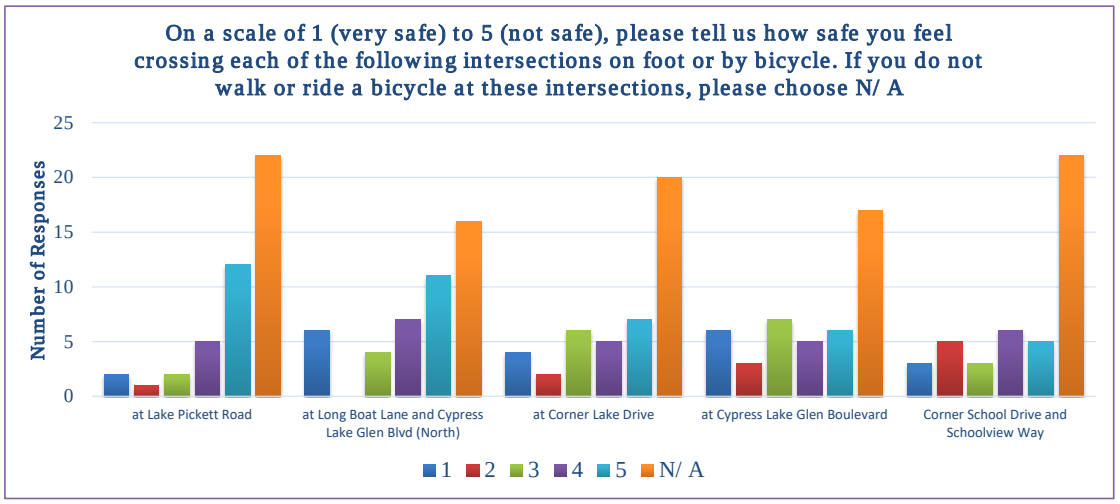
Q2. On a scale of 1 (very safe) to 5 (not safe), please tell us how safe you feel navigating each of the following intersections in a vehicle:

	1	2	3	4	5
at Lake Pickett Road	11	6	9	7	9
at Long Boat Lane and Cypress Lake Glen Blvd (North)	10	5	10	5	14
at Corner Lake Drive	11	9	16	3	5
at Cypress Lake Glen Boulevard	14	7	14	5	4
Corner School Drive and Schoolview Way	11	5	18	6	4



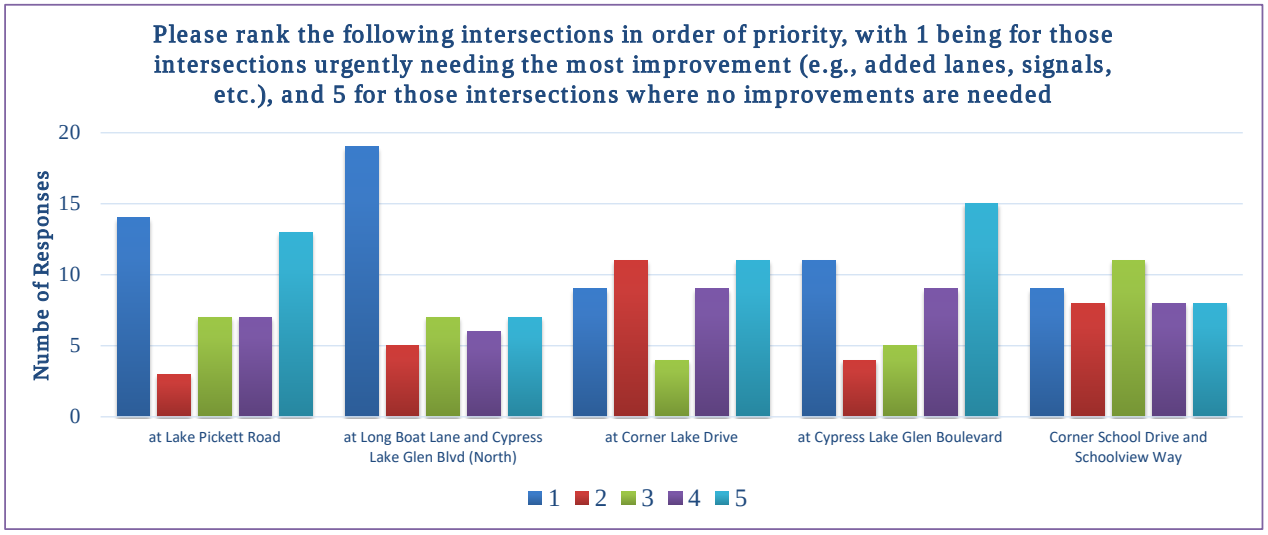
Q3. On a scale of 1 (very safe) to 5 (not safe), please tell us how safe you feel crossing each of the following intersections on foot or by bicycle. If you do not walk or ride a bicycle at these intersections, please choose N/A:

	1	2	3	4	5	N/A
at Lake Pickett Road	2	1	2	5	12	22
at Long Boat Lane and Cypress Lake Glen Blvd (North)	6	0	4	7	11	16
at Corner Lake Drive	4	2	6	5	7	20
at Cypress Lake Glen Boulevard	6	3	7	5	6	17
Corner School Drive and Schoolview Way	3	5	3	6	5	22



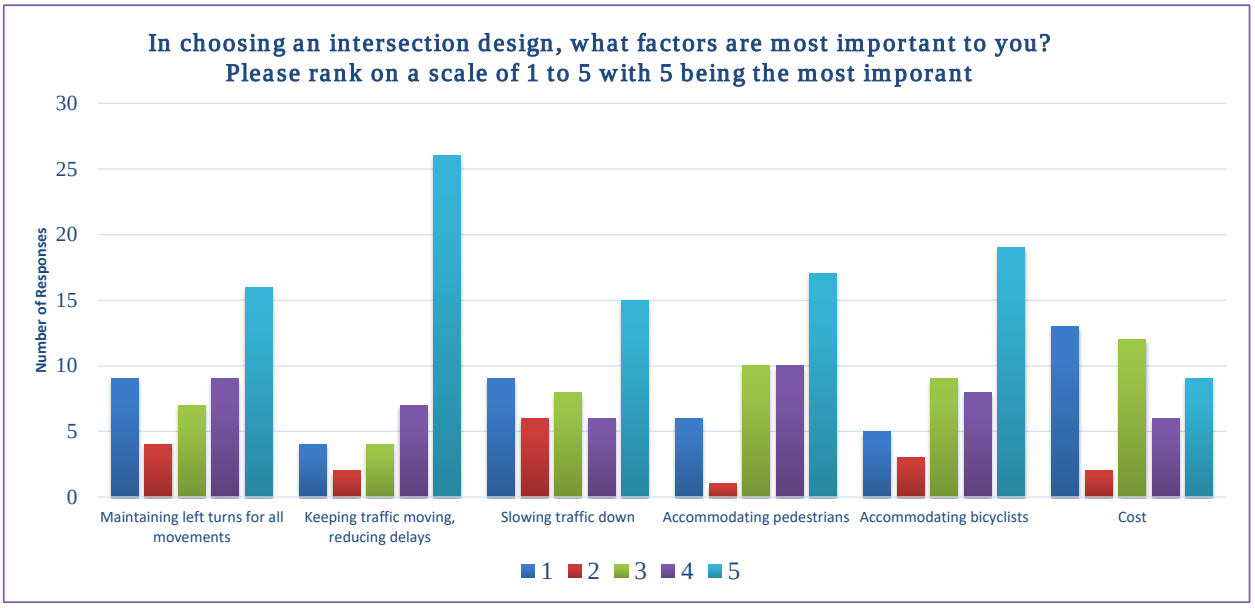
Q4. Please rank the following intersections in order of priority, with 1 being for those intersections urgently needing the most improvement (e.g., added lanes, signals, etc.), and 5 for those intersections where no improvements are needed

	1	2	3	4	5
at Lake Pickett Road	14	3	7	7	13
at Long Boat Lane and Cypress Lake Glen Blvd (North)	19	5	7	6	7
at Corner Lake Drive	9	11	4	9	11
at Cypress Lake Glen Boulevard	11	4	5	9	15
Corner School Drive and Schoolview Way	9	8	11	8	8



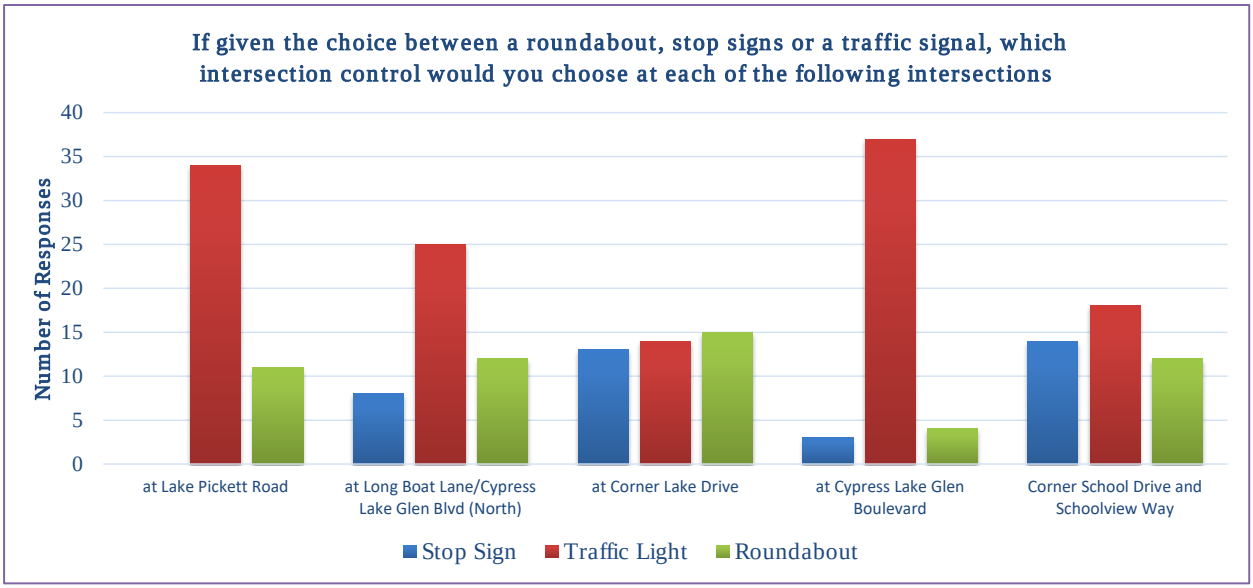
Q5. In choosing an intersection design, what factors are most important to you? Please rank on a scale of 1 to 5 with 5 being the most imporant:

	1	2	3	4	5
Maintaining left turns for all movements	9	4	7	9	16
Keeping traffic moving, reducing delays	4	2	4	7	26
Slowing traffic down	9	6	8	6	15
Accommodating pedestrians	6	1	10	10	17
Accommodating bicyclists	5	3	9	8	19
Cost	13	2	12	6	9



Q6. If given the choice between a roundabout, stop signs or a traffic signal, which intersection control would you choose at each of the following intersections:

	Stop Sign	Traffic Light	Roundabout
at Lake Pickett Road	0	34	11
at Long Boat Lane/Cypress Lake Glen Blvd (North)	8	25	12
at Corner Lake Drive	13	14	15
at Cypress Lake Glen Boulevard	3	37	4
Corner School Drive and Schoolview Way	14	18	12



Q7. With which of the following statements do you agree most?

	Responses
Chuluota Road is fine as is - do nothing	4
Leave Chuluota Road as two lanes with minor intersection improveme	11
Widen Chuluota Road to improve safety and alleviate congestion	28
Other (please specify)	4
	45

