

PROJECT TRAFFIC ANALYSIS REPORT

Malabar Road PD&E Study

From St. Johns Heritage Parkway to Minton Road

Financial Project Identification Number: 437210-1-28-01
City of Palm Bay Contract Number: 23-0-2019

Palm Bay, Florida

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PROJECT TRAFFIC ANALYSIS REPORT

City of Palm Bay and Brevard County, Florida

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St. Johns Heritage Parkway to Minton Road

Palm Bay, Florida

Financial Management Number: 437210-1-28-01

ETDM Number: 14396

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The environmental review, consultation, and other actions required by applicable federal environmental laws for this project are being, or have been, carried out by the Florida Department of Transportation (FDOT) pursuant to 23 U.S.C. § 327 and a Memorandum of Understanding dated May 26, 2022 and executed by the Federal Highway Administration and FDOT.



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1. EXECUTIVE SUMMARY

This Project Traffic Analysis Report (PTAR) has been prepared on behalf of the City of Palm Bay, Florida as part of the Malabar Road from St. Johns Heritage Parkway to Minton Road Project Development and Environment (PD&E) Study (FPID: 437210-1-28-01). The ongoing PD&E study is intended to identify alternatives to improve safety and increase capacity along the corridor and considers a two to four-lane widening along Malabar Road from St. Johns Heritage Parkway to Minton Road. This report summarizes the existing (2020) traffic conditions evaluation and future (no-build and build) traffic conditions for this study.

The maintaining jurisdiction of the study roadway is Brevard County on the western portion of the study roadway and the City of Palm Bay on the eastern portion of the study roadway, with the transition point being at Canal C-10 west of Bavarian Avenue. The study roadway can be seen in **Figure 1**. The study corridor traverses approximately four miles of Malabar Road and within the study area. Malabar Road is an urban minor arterial. The road is a two-lane facility across most of the study corridor, but it widens to four lanes just west of Minton Road.

1.1. Traffic Analysis Assumptions

Input parameters for this traffic analysis include the agreed upon traffic analysis methodology, the *2019 Project Traffic Forecasting Handbook*, and the *2014 Traffic Analysis Handbook*.

A traffic analysis methodology was developed and agreed upon with the City of Palm Bay and FDOT on June 2, 2020. The methodology addressed the various elements of the project's Purpose and Need. This methodology provided guidance how the traffic analysis should be conducted including study area and intersections, traffic characteristics and time periods studied, data collection requirements, traffic analysis tool selection, and performance measures of effectiveness used to study the Malabar Road corridor.

1.2. Introduction

This project is intended to improve capacity and address safety issues based on the area's planned growth and the associated increase of corridor traffic volumes. This report summarizes the existing (2020) conditions evaluation and future (no-build and build) conditions for the potential two to four-lane widening project.

1.3. Traffic Analysis Method

Traffic analysis was carried out for the following scenarios:

- Existing Conditions (2020)
- Opening Year Conditions (2030) No-Build and Build
- Design Year Conditions (2050) No-Build and Build

Data sources required for analysis include:

- Traffic operation conditions and control types
- Facility characteristics
- Safety data
- Transit data

Traffic analysis tools include HCM6 analyses in Synchro, HCS 7, and SIDRA.

Traffic analysis measures of effectiveness include level of service, volume-to-capacity ratio, delay, and queue length.

Traffic factors such as K, D, and T factors were determined through a review of historical traffic data and analysis of the traffic counts collected for the study.

1.4. Existing Conditions Analysis

As part of this study, existing roadway conditions were documented in **Table 8**, including roadway characteristics such as speed limit and geometric characteristics such as lane width. Existing January 2020 traffic volumes were also collected, including weekday 72-hour segment classification counts taken at locations along Malabar Road and individual intersection turning movement counts. The existing 72-hour segment classification counts were used to determine existing D and T_{24} factors and existing Annual Average Daily Traffic (AADT) volumes.

As documented in **Section 5.5.1: Existing Peak Hour Intersection Operations**, there are currently four signalized intersections and 13 unsignalized intersections. The existing turning movement volumes were used to analyze the traffic operations at each intersection along the Malabar Road corridor during the weekday AM and PM peak hour traffic conditions. The existing traffic analysis showed that all intersections operate under capacity with an overall LOS of E or better. It should be noted that the City of Palm Bay does not have an LOS standard for intersection operations.

Roadway segment operations were also evaluated along Malabar Road. The methods used during this analysis are described in **Section 5.5.2: Existing Peak Hour Segment Operations**. Existing roadway segment level of service was compared to different standards depending on the location as part of the study roadway is within the City of Palm Bay's jurisdiction and part is within Brevard County's jurisdiction. Depending on the location the roadway LOS was compared to the City of Palm Bay's adopted standard of LOS C or Brevard County's adopted standard of LOS E. The results of this analysis showed that multiple segments of the Malabar Road corridor operate worse than the City's and County's adopted standard for roadway segment operations of LOS C and LOS E, respectively.

Crash records were also obtained for Malabar Road along the study corridor for the most recent five-year period on record (2016 through 2020). A total of 642 crashes were reported from 2016 through 2020; 202 (32 percent) resulted in at least one injury and there were no fatalities. The crashes per year

along the corridor generally increased between 2016 (123 crashes) and 2019 (137 crashes). The 2020 crash data saw a decrease to 113 crashes, likely due to decreases in traffic volumes related to the COVID-19 pandemic. A crash rate/safety ratio analysis was also performed for the Malabar Road study corridor. The corridor's safety ratio was calculated to compare the annual crash rates of the corridor to the critical crash rates of similar facilities throughout FDOT District 5 and the State of Florida. The results of the analysis showed that average crash rates (crashes per million entering vehicles) at the intersections of Malabar Road & Jupiter Boulevard, Plaza Entrance, and Minton Road exceeded the FDOT Statewide average crash rates for the same facility type and number of approaches. Average crash rates along the segment of Malabar Road from Jupiter Boulevard to Plaza Entrance also exceeded the FDOT Statewide average crash rates in 2017.

1.5. Development of Future Year Traffic Forecast

Future traffic volumes were modeled using the Central Florida Regional Planning Model (CFRPM v6.1) subarea travel demand model. The model was validated and then used to determine model growth rates for each segment of the Malabar Road corridor. These annual growth rates were applied to the existing AADTs as volume growth per year values to determine the 2030 (opening year) and 2050 (design year) future volumes.

1.6. Alternatives Analysis

1.6.1. FUTURE (NO-BUILD) CONDITIONS

The no-build condition kept the current two-lane roadway. The estimated 2030 (opening year) and 2050 (design year) no-build turning movement volumes were used to analyze the traffic operations at each intersection along the Malabar Road corridor during the weekday AM and PM peak hour traffic conditions. As documented in **Section 7.1.3: No-Build Intersection Operations**, there are four signalized intersections and fifteen unsignalized intersections in the no-build future condition. The traffic analysis showed that three signalized intersections and twelve unsignalized intersections performed at LOS F or with a V/C ratio greater than 1.0 in either the design year's AM or PM peak hour. The operation of these intersections at LOS F may contribute to an increase in collisions, including rear end crashes on Malabar Road and left and right turn crashes on the minor streets.

The no-build 2030 and 2050 traffic volumes were also used to analyze the segment operations along Malabar Road. The methods used during this analysis are described in **Section 7.1.4: No-Build Conditions Segment Operations**. The results of this analysis showed that multiple segments of the Malabar Road corridor operate worse than the City's and County's adopted standard for roadway segment operations of LOS C and LOS E, respectively. The operation of these segments worse than the LOS standard may also contribute to an increase in collisions.

Future safety performance was also considered in the no-build condition. Using the predictive safety analysis methods provided in the Highway Safety Manual (HSM), as traffic volumes increase in the no-

build condition, crashes are predicted to increase by over 120 percent between 2020 and 2050, as documented in the PER.

The poor operational condition of many no-build intersections and segments and poor safety performance shown by the predictive HSM analysis emphasize the need for safety and capacity enhancements that can be provided by widening the study corridor to four lanes and implementing an access management plan.

1.6.2. FUTURE (BUILD) CONDITIONS

The build condition was analyzed as a divided four-lane roadway. The estimated 2030 and 2050 build turning movement volumes were used to analyze the traffic operations at each intersection along the Malabar Road corridor during the weekday AM and PM peak hour traffic conditions.

Access management improvements, along with the four-lane widening, are anticipated to alleviate many of the LOS F movements identified in the no-build unsignalized intersection operational analysis. However, after reviewing the build volumes to identify unsignalized intersections that may still have operated poorly in an unsignalized condition, a signal warrant screening was conducted to determine whether the signalized control could be justified at these intersections in the future condition. These intersections include:

- Malabar Road & St. Johns Heritage Parkway
- Malabar Road & Wisteria Avenue/Abilene Drive
- Malabar Road & Hurley Boulevard
- Malabar Road & Garvey Road
- Malabar Road & Maywood Avenue/Daffodil Drive

Based on the analysis results, it is anticipated these intersections all may meet signal warrant criteria in 2050. Accordingly, these five intersections were analyzed as signals and roundabouts in the build configuration.

As documented in **Section 7.2.4: Build Intersection Operations**, there are nine signalized intersections and ten unsignalized intersections in the build future condition. Roundabouts were also considered as intersection alternatives at seven intersections. The traffic operational analysis showed that all the signalized intersections are expected to operate at LOS E or better overall and no movements are anticipated to operate over capacity (v/c ratio greater than 1.0). The roundabouts are expected to operate at LOS E or better.

The build future traffic volumes were also used to analyze the segment operations along Malabar Road. As the build future Malabar corridor may be signalized throughout, the corridor was analyzed as an interrupted flow corridor. The methods used during this analysis are described in **Section 7.2.5: Build Segment Operations**. The results of this analysis showed that all of the Malabar Road corridor segments are expected to operate at LOS C or better in the future build condition, except for the following segment:

Westbound and eastbound segment from Plaza Entrance to Minton Road in 2050 AM and PM periods: LOS F (this is explained in Section 7.2.5 as being more related to intersection signal performance than segment performance due to the short length of the segment).

While the segment analysis was conducted for the build condition assuming a signalized corridor, multiple study intersections also have a roundabout alternative. To understand the operations of a corridor with roundabouts in place, NCHRP Report 772 (Evaluating the Performance of Corridors with Roundabouts) was consulted. The report states that “corridors with irregular intersection spacing show a higher likelihood for having better travel times under a roundabout configuration rather than a signalized configuration.” Since Malabar Road has irregular intersection spacing, it may have better roundabout corridor travel times than a signalized corridor, which would in turn lead to better roundabout segment operations. As the signalized corridor segment operations were acceptable, the roundabout segment operational performance is expected to also be acceptable.

Future safety performance was also considered in the build condition. Using the predictive safety analysis methods provided in the Highway Safety Manual (HSM), an estimate of expected crashes was determined for the build condition. By providing a four-lane facility, the 2050 crashes are predicted to be up to 40 percent less than a two-lane facility with the same traffic volumes.

1.7. Summary of Analysis Results

The existing operations analysis shows most of the intersections and segments along the corridor to function in an acceptable manner in the existing condition (two-lane roadway) with a few exceptions. However, the no-build, 2050 design year operations analysis shows most of the intersections along the corridor and roadway segments will be deficient in the future no-build condition (two-lane roadway). The deficient no build intersection operations are shown in **Table 1**. It was determined that the performance of the multiple deficient intersections and segments could be remedied with a four-lane widening and implementation of access management.

The 2050 four-lane build operations analysis showed significant improvement in intersection and segment performance. All minor intersections performed at LOS E or better. The intersections at Plaza Entrance and Minton Road both operated at LOS E or better. For all other major intersections, two intersection alternatives were considered and each major intersection had an alternative performing at LOS E or better, as shown in **Table 1**. As for roadway segments, nearly all segments performed at LOS C or better. Thus, the build alternative improves both operational and safety performance on the study corridor and meets the project’s primary objectives as described in the Purpose & Need.

Table 1: Future Build Intersection Alternative Summary

Intersection	No Build Alternative			Build Alternative 1			Build Alternative 2		
	Control Type	2050 AM LOS	2050 PM LOS	Control Type	2050 AM LOS	2050 PM LOS	Control Type	2050 AM LOS	2050 PM LOS
Malabar Rd. & St. Johns Heritage Pkwy.	TWSC*	F	F	Signal	E	E	Roundabout	D	C
Malabar Rd. & Wisteria Ave./Abilene Dr.	TWSC*	F	F	Signal	B	B	Roundabout	A	A
Malabar Rd. & Krassner Dr./Bending Branch Ln.	Signal	D	C	Signal	C	C	Roundabout	A	A
Malabar Rd. & Hurley Blvd.	TWSC*	F	F	Signal	B	B	Roundabout	A	A
Malabar Rd. & Jupiter Blvd.	Signal	F	F	Signal	E	D	Roundabout	D	E
Malabar Rd. & Garvey Rd.	TWSC*	F	F	Signal	B	B	Roundabout	C	B
Malabar Rd. & Maywood Ave./Daffodil Dr.	TWSC*	F	F	Signal	B	A	Roundabout	A	A

* Two-Way Stop Control

2. TRAFFIC ANALYSIS ASSUMPTIONS

Input parameters for this traffic analysis include the agreed upon traffic analysis methodology, the *2019 Project Traffic Forecasting Handbook*, and the *2014 Traffic Analysis Handbook*.

As determined in the methodology, this PTAR documents traffic conditions in the existing (2020) condition, as well as forecasts traffic and future operating conditions for the anticipated opening year (2030) and the design year (2050) for the project.

As part of this project, a traffic analysis methodology was developed and agreed upon with the City of Palm Bay and FDOT to address the various elements of the project's Purpose and Need. This methodology provided guidance how the traffic analysis should be conducted including study area and intersections, traffic characteristics and time periods studied, data collection requirements, traffic analysis tool selection, and performance measures of effectiveness used to study the Malabar Road corridor. The full description of these factors can be seen in the Malabar Road Traffic Analysis Methodology, which is provided in **Appendix A**.

3. INTRODUCTION

This Project Traffic Analysis Report (PTAR) has been prepared on behalf of the City of Palm Bay, Florida as part of the Malabar Road from St. Johns Heritage Parkway to Minton Road Project Development and Environment (PD&E) Study (FPID: 437210-1-28-01). The ongoing PD&E study is intended to improve safety and increase capacity along the corridor and considers a two to four-lane widening of Malabar Road from St. Johns Heritage Parkway to Minton Road. This report summarizes the existing (2020) conditions evaluation and future (no-build and build) conditions for this study. The scope of this report includes:

- Review of existing roadway characteristics;
- Collection of existing-year (2020) traffic data on roadway segment and intersections;
- Existing (2020) conditions operational evaluations; and
- Future year (no-build and build) operational evaluations.

The analysis years are:

- Existing Year: 2020
- Opening Year: 2030
- Design Year: 2050

3.1. Purpose and Need

This project is needed to improve capacity and address safety issues based on the area's planned growth and the associated increase of corridor traffic volumes. By 2050, the Malabar Road study corridor is expected to have segments and intersections operating at unacceptable levels of service in its current configuration or no-build condition.

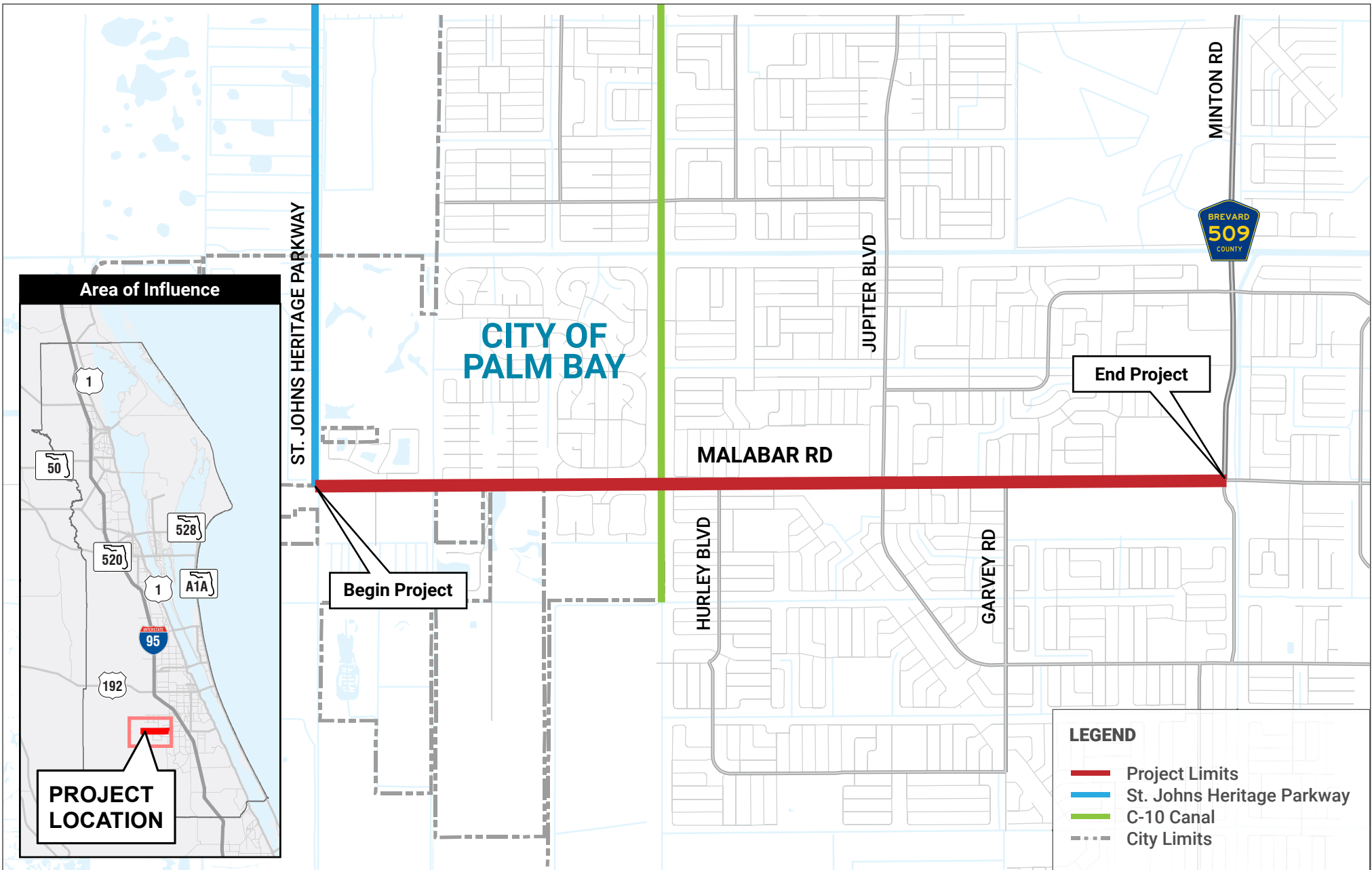
In addition, segments of Malabar Road have a crash rate higher than the statewide average for similar type roadways. Clusters of crashes are evident near major intersections, particularly near Jupiter Boulevard and Minton Road. During the five-year safety study period (2015-2019), average crash rates (crashes per million entering vehicles) at the intersections of Malabar Road & Jupiter Boulevard, Plaza Entrance, and Minton Road exceeded the FDOT Statewide average crash rates for the same facility type and number of approaches.

This project will address needed capacity and safety issues on Malabar Road from St Johns Heritage Parkway to Minton Road in Brevard County, a distance of approximately four miles. Currently, Malabar Road is a two-lane undivided roadway from St. Johns Heritage Parkway to Garvey Road, a three-lane roadway with a center two-way left-turn lane from Garvey Road to Plaza Entrance, and a four-lane divided roadway from Plaza Entrance to Minton Road and eastward from Minton Road. This project will study the widening of Malabar Road from two lanes to four lanes to provide improved capacity and safety and is funded for the Project Development and Environment (PD&E) phase in the FDOT's 5-year Work Program.

The study corridor's importance to regional connectivity will continue to grow due to the recent connection of the north leg of the St. Johns Heritage Parkway to Malabar Road, as well as the proposed extension of the St. Johns Heritage Parkway south of Malabar Road to connect to the recently opened interchange with I-95. The Parkway's regional connection will likely continue to add more daily traffic to the study corridor over time, increasing the need for operational and safety improvements.

3.2. Study Location

Malabar Road, located in Brevard County, is an east-west regional roadway connecting western Brevard County to US 1 in Malabar. At the western extent of the study corridor, the St. Johns Heritage Parkway, a new north-south regional roadway, has recently been connected from Malabar Road to US 192. The roadway's maintaining jurisdiction is Brevard County at its western edge, before transitioning to the City of Palm Bay at Canal C-10 west of Bavarian Avenue, and then becoming a state road between I-95 and US 1. The study corridor traverses approximately four miles of Malabar Road from St. Johns Heritage Parkway to Minton Road. Within the study area, Malabar Road is an urban minor arterial. The study area is shown in **Figure 1**.



Malabar Road PD&E Study

FPID: 437210-1-28-01

STUDY ROADWAY

FIGURE 1

4. TRAFFIC ANALYSIS METHOD

4.1. Traffic Analysis Time Periods and Study Area

Traffic analysis was carried out for the following scenarios:

- Existing Conditions (2020)
- Opening Year Conditions (2030) No-Build and Build
- Design Year Conditions (2050) No-Build and Build

Turning movement and tube counts will provide the weekday AM and PM peak periods for analysis.

The study area is documented in **Figure 1**.

4.2. Required Traffic Analysis Data

Data sources required for analysis are documented below.

4.2.1. TRAFFIC OPERATIONS AND CONTROL

Traffic signal control data were obtained from Brevard County. In addition to signal timing information, other control data were confirmed from field visits. This includes the following:

- Speed Limits;
- Turn Restrictions; and
- Yield Signs/Stop Signs.

The key sources for traffic operations and control information were:

- Field observations and traffic count data;
- Aerial photography (e.g. Google Earth, Bing Maps, FDOT aerial files, etc.);
- Street view photography (e.g. Google Earth);
- The SCTPO traffic count database;
- The FDOT Traffic Database (e.g. FTO website, etc.); and
- Information provided by the relevant jurisdictional authority (e.g. signal timing data from Brevard County and the City of Palm Bay).

4.2.2. FACILITY CHARACTERISTICS

Basic geometric data including the number of lanes, length, and speeds were obtained from several sources, which included aerial mapping, field surveys/inventories, and committed improvements. Facility characteristics of the study area were collected from the following sources:

- Field observations;
- The FDOT Traffic Database (e.g. FTO website, etc.); and
- Aerial Photography (e.g. Google Earth, Bing Maps, FDOT aerial files, etc.).

4.2.3. SAFETY DATA

Reported crash data for 2015 to 2019 was obtained from the University of Florida’s Signal Four Analytics database and FDOT’s CARS database. Crash history was reviewed to extract crash types, locations, and the numbers of fatal, injury, and property damage only crashes. The crash history will be presented in a tabular format that shows crash types by approach in Section 5.2.

Traffic volumes, for the use in determining crash rates, were collected from the available historical count traffic databases of the Space Coast Transportation Planning Organization (SCTPO) and FDOT.

4.2.4. TRANSIT DATA

Transit data for the study corridor, such as ridership, was acquired from Space Coast Area Transit and considered in the existing and future condition. This data is presented in Section 5.3.

4.3. Traffic Analysis Tools

HCM6 provides accepted state-of-practice methods for analyzing urban intersections and arterials. Many of the methodologies have been implemented into Synchro 10, a deterministic tool. Highway Capacity Software (HCS) 7 will also be utilized for arterial performance analysis. SIDRA will be utilized for analyzing roundabouts assessed for future build alternatives. **Table 2** summarizes which tool will be used for the appropriate task. Further detail on these analysis tools can be found in the traffic analysis methodology in **Appendix A**.

Table 2: Analysis Tool Selection

Traffic Analysis Task	Analysis Tool
Analyze the existing interrupted flow two-lane highway sections	HCM6 (Synchro 10 and/or HCS 7)
Analyze the operations of signalized intersections, unsignalized intersections and urban arterials	HCM6 (Synchro 10 and/or HCS 7)
Analyze interim year preferred alternative and no-build traffic volume scenarios	HCM6 (Synchro 10 and/or HCS 7)
Develop and test feasibility of alternatives	HCM6 (Synchro 10 and/or HCS 7)
Analyze future viable alternatives	HCM6 (Synchro 10 and/or HCS 7)
Future roundabout analysis	SIDRA 8.0

4.4. Traffic Analysis Measures of Effectiveness

As per the *Project Traffic Forecasting Handbook*, LOS analyses will be performed in accordance with HCM6 procedures and accompanying software. The MOE's and their respective locations within HCM6 are discussed in the following sections.

4.4.1. LEVEL OF SERVICE

LOS is a concept developed to quantify the degree of comfort (including such elements as travel time, number of stops, total amount of stopped delay, and impediments caused by other vehicles) afforded to drivers as they travel through an intersection or roadway segment. Six grades are used to denote the various level of service from "A" to "F".

4.4.1.1. Signalized Intersections

The six LOS grades are described for signalized intersections in Chapter 19 of the HCM6. Exhibit 19-8 in the HCM6 identifies the relationship between LOS and average control delay per vehicle. A summary of these LOS grades is provided in **Table 3**. Synchro will be used to evaluate these measures.

Table 3: HCM6 Signalized Intersection LOS Criteria

Control Delay (s/veh)	LOS by Volume-to-Capacity Ratio	
	≤1.0	>1.0
≤10	A	F
>10-20	B	F
>20-35	C	F
>35-55	D	F
>55-80	E	F
>80	F	F

4.4.1.2. Unsignalized Intersections

Unsignalized intersections include two-way stop controlled (TWSC) conditions. The HCM6 provides models for estimating control delay at TWSC intersections. A description of the various service levels associated with an unsignalized intersection is presented in Chapter 20 of the HCM6. A quantitative definition of level of service for unsignalized intersections is presented in Exhibit 20-2 from HCM6. For TWSC intersections, the overall intersection level of service can be calculated but is often misleading because there is little delay on the unrestricted roadway. Therefore, level of service will be analyzed for each minor street lane. A summary of these LOS grades is provided in **Table 4**. Synchro will be used to determine these measures.

Table 4: HCM6 Unsignalized Intersection LOS Criteria

Control Delay (s/veh)	LOS by Volume-to-Capacity Ratio	
	≤1.0	>1.0
≤10	A	F
>10-15	B	F
>15-25	C	F
>25-35	D	F
>35-50	E	F
>50	F	F

4.4.1.3. Roundabouts

The six LOS grades are described for roundabouts in Chapter 22 of the HCM6. Exhibit 22-8 in the HCM6 identifies the relationship between LOS and average control delay per vehicle. It should be noted that these LOS grades are the same as for unsignalized intersections. They are shown in **Table 5**. SIDRA will be used to determine these measures.

Table 5: HCM6 Roundabout LOS Criteria

Control Delay (s/veh)	LOS by Volume-to-Capacity Ratio	
	≤1.0	>1.0
≤10	A	F
>10-15	B	F
>15-25	C	F
>25-35	D	F
>35-50	E	F
>50	F	F

4.4.1.4. Segments

The study corridor has segments with uninterrupted and interrupted flow, each of which has their own LOS criteria. The LOS for the uninterrupted segments is based upon Percent Free Flow Speed (PFFS). The LOS thresholds for two-lane highways are summarized in **Table 6** per Exhibit 15-3 of the *HCM 6th Edition*.

Table 6: HCM 6 Uninterrupted Segment LOS Criteria

LOS	Class III Highways
	PFFS (%)
A	>91.7
B	>83.3-91.7
C	>75.0-83.3
D	>66.7-75.0
E	≤66.7

The LOS for the interrupted segments is based upon Percent of Base Free Flow Speed (PBFFS). The LOS thresholds for urban street segments are summarized in **Table 7**.

Table 7: HCM 6 Interrupted Segment LOS Criteria

LOS	Travel Speed as a Percentage of Base Free-Flow Speed (%)
A	>80
B	>67-80
C	>50-67
D	>40-50
E	>30-40
F	≤30

4.4.2. OTHER MEASURES OF EFFECTIVENESS

In the performance evaluation of intersections, it is important to consider other measures of effectiveness (MOEs) in addition to delay, such as volume to capacity (v/c) ratios for individual movements, average queue lengths, and 95th-percentile queue lengths. By focusing on a single MOE for the worst movement only, such as delay for the minor-street left turn, users may make inappropriate traffic control decisions.

4.4.2.1. Volume-to-Capacity Ratio

The v/c ratio cannot be directly measured in the field nor is it a measure of traveler perceptions as it is a theoretical measure of congestion. A v/c ratio greater than or equal to 1.0 indicates there is more demand than the facility can effectively serve. The v/c ratio is used in the HCM6 methods to define the LOS E-F threshold, but not other LOS thresholds.

4.4.2.2. Delay

Delay is a key performance measure for interrupted-flow elements. Control delay is brought about by the presence of a traffic control device and is the principal service measure in the HCM6 for evaluating the LOS at signalized and unsignalized intersections. The LOS thresholds are defined by the average

delay per vehicle in seconds for the respective lane group or intersection for both signalized and unsignalized intersections.

4.4.2.3. Queue Length

Queuing is an operation measure and a design consideration for an intersection and the immediate area. Queues longer than available storage length can create safety and operational issues. A through-lane queue can prevent a turn lane from being used effectively and a turn-lane queue can overflow into a through lane and impede the movement of through vehicles.

Queue lengths do not affect the calculated LOS but are an important factor in the conceptual design process.

4.5. Traffic Factors

The following summarizes the traffic factors used to develop future design hour volumes consistent with the approved traffic methodology.

4.5.1. STANDARD K

The K factor is the proportion of AADT that occurs during the design hour. Standard K factors were obtained from the FDOT *Project Traffic Forecasting Handbook* (2019). These factors were established using statewide data measured at continuous count sites. The factors are based on area type and facility type, with considerations to typical peak periods of the day.

In the existing condition, the entire corridor is classified as an urban minor arterial. Therefore, an urban K factor of 0.09 was selected for the intersections and segment along the corridor as documented in the traffic methodology. Actual existing peak-to-daily ratios from the collected AM and PM peak hour count data both ranged from 8.1 to 9.5. As areas increase in density, the peak-to-daily ratios tend to decrease; therefore, the use of Standard K factor of 0.09 will result in a reasonable estimate of the future projected Design Hour Volumes (DHVs).

4.5.2. HISTORIC D AND T₂₄ FACTORS

The Directional Distribution (D) factor is the percentage of the total two-way traffic traveling in the peak direction. The T₂₄ factor is the percentage of trucks over the course of an average day. These D and T₂₄ factors were reviewed based on FDOT Count Station 708242 shown in **Appendix B**. Historical information obtained from the 2019 FDOT Florida Traffic Online website was reviewed to estimate historical D and T₂₄ factors. These D and T factors were universal countywide values and do not reflect the D and T values calculated from the 72-hour tube and vehicle classification counts conducted along the corridor during this study. The historical AADT reports are provided, for informational purposes, in **Appendix B**.

4.5.3. RECOMMENDED K, D, AND T₂₄ FACTORS

The recommended K factor is the FDOT standard K factor of 0.09 for the urban area along the corridor. Historic D and T₂₄ factors were considered for use as design factors, but a comprehensive review of the 72-hour tube counts as well as approach and departure volumes from the turning movement counts showed that the historic countywide D and T values were not representative of the study corridor. Instead, the 72-hour tube counts, and approach and departure volumes shown in **Table 10** were used to estimate the recommended D factors for the weekday design hour. Recommended D factors were based on the future traffic conditions expected along the Malabar Road corridor, and the recommended values vary from 51.0 percent to 63.0 percent along and adjacent to the Malabar Road corridor.

The recommended T₂₄ factors are based upon the vehicle classification counts shown in **Table 10** conducted during this study. The recommended T₂₄ factors range from 1.1 percent to 6.5 percent. Design Hour Truck (DHT) factors were determined as one-half the recommended T₂₄ factors.

The recommended K, D, T₂₄, and DHT factors are summarized in **Table 8** and are based off the counts provided in **Table 10**.

Table 8: Malabar Road Weekday Design Hour – Recommended K, D, and T₂₄ and DHT Factors

From	K	D	T ₂₄	DHT
Malabar Road, St. Johns Heritage Parkway to Krassner Dr.	0.09	60.00%	4.50%	2.25%
Malabar Road, Krassner Dr. to Garvey Rd.	0.09	55.00%	5.50%	2.75%
Malabar Road, Garvey Rd. to Minton Rd.	0.09	55.00%	2.50%	1.25%
St. Johns Heritage Parkway, north of Malabar Rd.	0.09	60.00%	6.50%	3.25%
Jupiter Boulevard, north of Malabar Rd.	0.09	51.00%	3.50%	1.75%
Jupiter Boulevard, south of Malabar Rd.	0.09	55.00%	5.60%	2.80%
Garvey Road, south of Malabar Rd.	0.09	60.00%	3.00%	1.50%
Minton Road, north of Malabar Rd.	0.09	55.00%	1.30%	0.65%
Minton Road. South of Malabar Rd.	0.09	63.00%	1.10%	0.55%

5. EXISTING CONDITIONS ANALYSIS

The purpose of the existing conditions analysis is to gain an understanding of how the corridor performs today and to gain insights into why it functions as it does to inform any future efforts. Topics addressed include roadway characteristics and evaluation of existing traffic operations conditions.

5.1. Existing Roadway Characteristics

The following section summarizes the existing geometric characteristics for the study corridor.

5.1.1. GEOMETRIC CHARACTERISTICS

Within the study limits, Malabar Road has the basic geometric characteristics summarized in **Table 9**. Aerial and street view imagery taken in 2018, supplemented with field reviews, were utilized to determine the summarized characteristics.

Malabar Road was divided into four sections to summarize the roadway characteristics along the study corridor, as shown in **Table 9**. The four sections are summarized below.

- Segment 1 – Malabar Road from St. Johns Heritage Parkway to Jupiter Boulevard
- Segment 2 – Malabar Road from Jupiter Boulevard to Garvey Road
- Segment 3 – Malabar Road from Garvey Road to Plaza Entrance
- Segment 4 – Malabar Road from Plaza Entrance to Minton Road

Seventeen (17) intersections along the study corridor were analyzed for existing conditions. Data was collected at 16 of the existing intersections (one intersection's volumes were interpolated from the data collection) to provide a comprehensive snapshot of existing conditions and inform decisions regarding access management. Of the study intersections, four are signalized intersections and the remaining are two-way stop controlled (TWSC) intersections. The existing lane configurations for each intersection are shown in **Figure 2**. Intersection geometry was determined using Google Earth Aerials that were flown in March 2017 and verified through a field visit on May 20, 2020.

Table 9: Existing Roadway Characteristics Summary

Characteristic	Malabar Road Roadway Segment			
	Segment 1 – St. Johns Heritage Pkwy. to Jupiter Blvd.	Segment 2 – Jupiter Blvd. to Garvey Rd.	Segment 3 – Garvey Rd. to Plaza Shopping Center	Segment 4 – Plaza Shopping Center to Minton Rd.
Functional Classification	Urban Minor Arterial	Urban Minor Arterial – Other	Urban Minor Arterial – Other	Urban Minor Arterial – Other
SIS Designation	Non-SIS	Non-SIS	Non-SIS	Non-SIS
Maintaining Jurisdiction	Brevard County/City of Palm Bay ¹	City of Palm Bay	City of Palm Bay	City of Palm Bay
Speed Limit	35 mph/45 mph ²	45 mph	35 mph/45 mph ³	35 mph
Lane Width	12 feet/11 feet ⁴	11 feet	11 feet	11 feet
Shoulder Width	2 feet/No Shoulder ⁵	No Shoulder	No Shoulder	No Shoulder
Median	None	None	Two-Way Left Turn Lane	4-foot paved median
Passing Zones	No passing is allowed	No passing is allowed	No passing is allowed	No passing is allowed
Curb and Gutter	None	None	None	Type F
Sidewalks	Sidewalk on north side ⁶	Sidewalk on north side	Sidewalk on north side, partial sidewalk on south side	Sidewalk on both sides of roadway
Bike Lanes	None	None	None	None
Street Lighting	None	None	None	None

¹The maintaining jurisdiction changes at Canal C-10 west of Bavarian Avenue

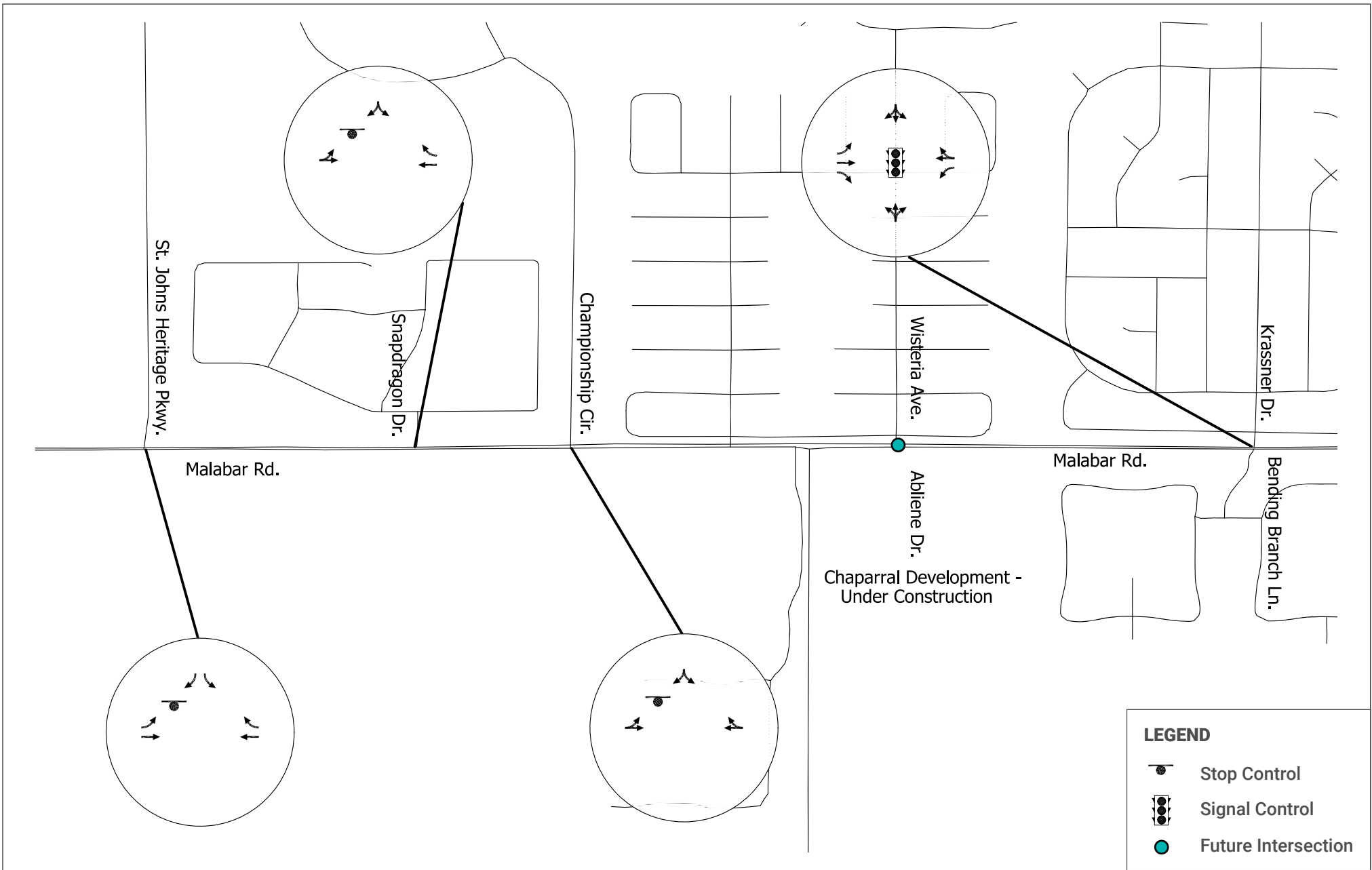
²Malabar Road is 35 mph west of Championship Drive and 45 mph east of Championship Drive

³Posted speed limit changes from 45 mph to 35 mph at Sta. 256+00 (just west of the ExtraSpace Storage driveway)


⁴Malabar Road has 12' travel lanes west of Championship Drive and 11' travel lanes east of Championship Drive


⁵Malabar Road has 2' paved shoulder west of Championship Drive and no paved shoulder east of Championship Drive

⁶Some sidewalk is present on the south side around the Jupiter Boulevard intersection



LEGEND

-  Stop Control
-  Signal Control
-  Future Intersection

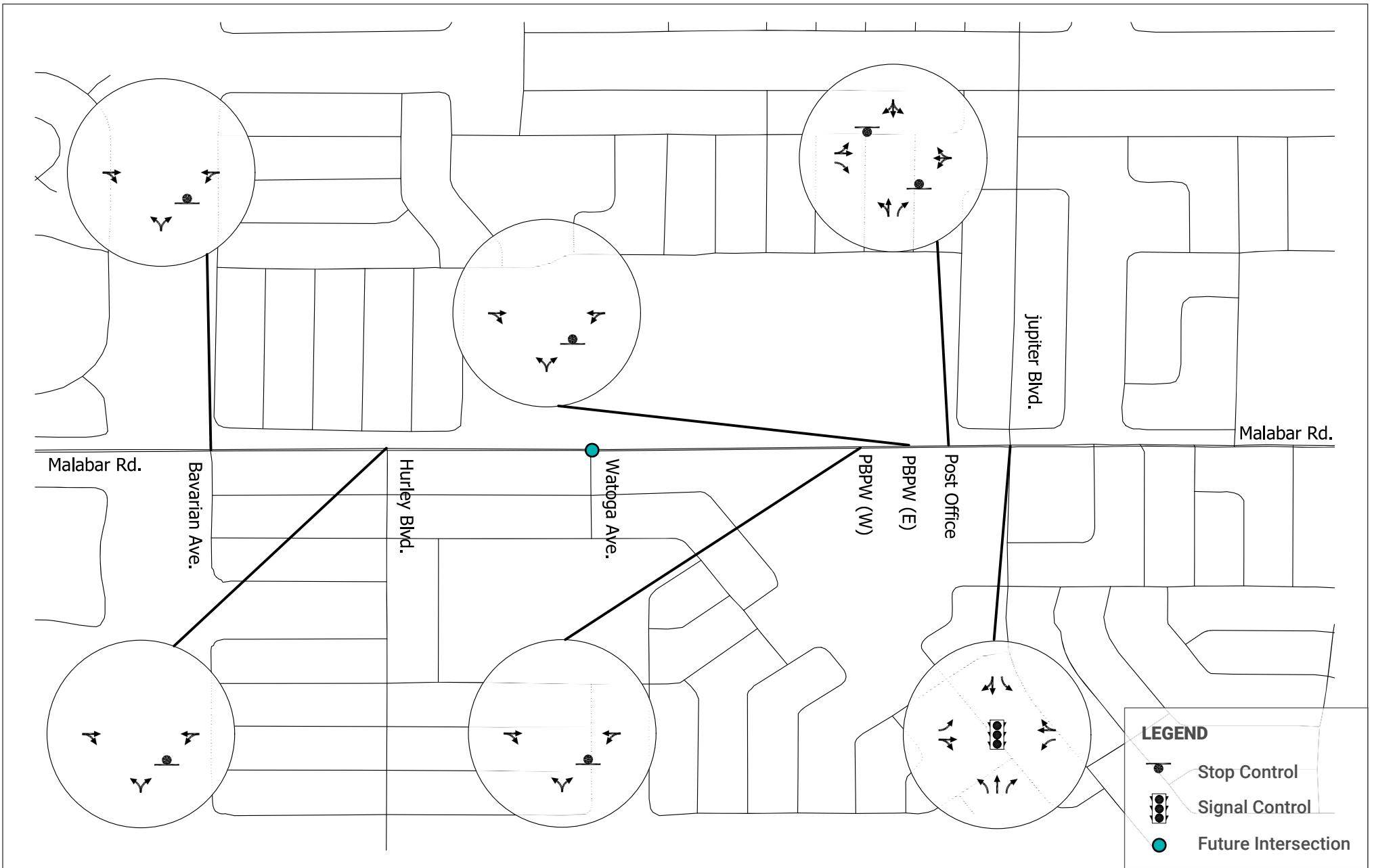
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North

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EXISTING LANE CONFIGURATIONS

FIGURE 2A



LEGEND

-  Stop Control
-  Signal Control
-  Future Intersection

Not to Scale  
North

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EXISTING LANE CONFIGURATIONS

FIGURE 2B



Malabar Road PD&E Study

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EXISTING LANE CONFIGURATIONS

FIGURE 2C

5.2. Historical Safety Assessment

Crash records were obtained for Malabar Road from 900' west of the St. Johns Heritage Parkway to ¼ mile east of Minton Road for the most recent five-year period on record (2016 through 2020). The crash data was obtained from the University of Florida's Signal Four (S4) Analytics crash database because this is a non-State roadway. The FDOT Crash Analysis Reporting System (CARS) and FDOT State Safety Office Map Based Query Tool (SSOGis) (2016-2018) was also cross referenced for additional crashes that may not have been reported in the S4 dataset. This led to an additional five crashes being added to the analysis dataset. Note that 2019 and 2020 CARS data was not verified at the time of this report thus the reason 2016 to 2018 were utilized.

A total of 642 crashes were reported from 2016 through 2020; 202 (32 percent) resulted in at least one injury and there were no fatalities. As displayed in **Figure 3**, the crashes per year along the corridor generally increased between 2016 (123 crashes) and 2019 (137 crashes). The 2020 crash data saw a decrease to 113 crashes, likely due to decreases in traffic volumes related to the COVID-19 pandemic. However, injury crashes in 2020 increased from 2019 to 2020 and were higher than every year in the study period except 2017. It is important to note the traffic counts for this project were performed in January 2020, prior to the beginning of the pandemic in March 2020. **Figure 3** and **Figure 4** show the crash history along the Malabar Road study corridor.

A crash rate/safety ratio analysis was also performed for the Malabar Road study corridor. The corridor's safety ratio was calculated to compare the annual crash rates of the corridor to the critical crash rates of similar facilities throughout FDOT District 5 and the State of Florida. The method takes into account the traffic volume along the corridor, considers the variance in crash data by including regional and statewide averages, and classifies roadway segment types into categories for more applicable comparisons. This process is documented in more detail in the Preliminary Engineering Report (PER). The results of the analysis showed that average crash rates (crashes per million entering vehicles) at the intersections of Malabar Road & Jupiter Boulevard, Plaza Entrance, and Minton Road exceeded the FDOT Statewide average crash rates for the same facility type and number of approaches. Average crash rates along the segment of Malabar Road from Jupiter Boulevard to Plaza Entrance also exceeded the FDOT Statewide average crash rates in 2017.

Appendix C shows the crash history on the Malabar Road study corridor in more detail.

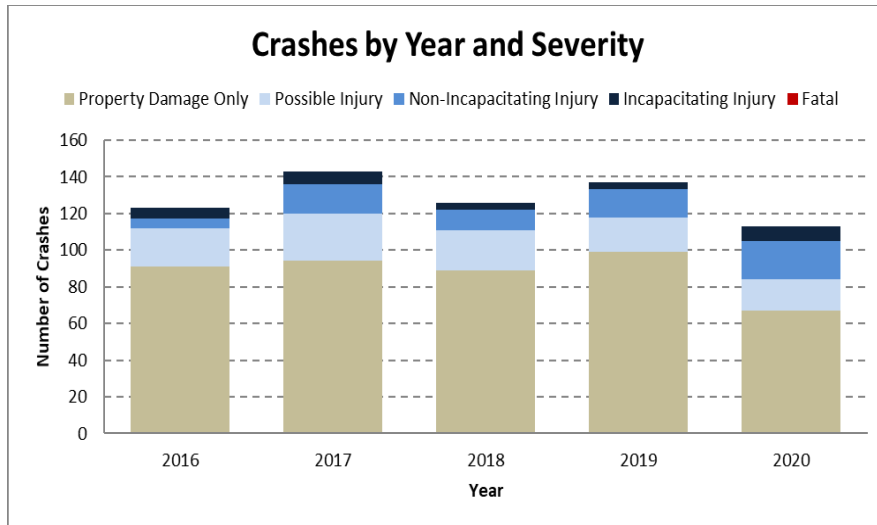


Figure 3: Malabar Road Crash History by Year

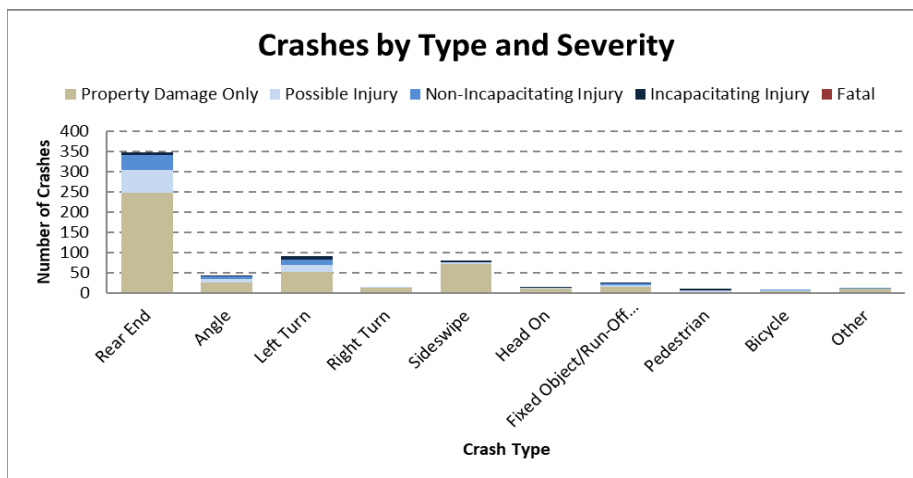


Figure 4: Malabar Road Crash History by Type

After review of the crash data and crash locations, several patterns emerged to help identify contributing causes of crashes along the corridor.

Rear End Crashes

Fifty-four (54) percent of crashes along the study corridor were rear end crashes. Just over half of the rear end crashes occurred at the signalized intersections, which is indicative of congestion. The remainder of the rear end crashes are likely being caused by drivers slowing to make left or right turns along the two-lane roadway. With limited turn lanes along the corridor and a speed limit of 45 mph, slowing to make turns could be a contributing cause for rear end crashes.

Left Turn Crashes

Left turn crashes accounted for the second highest crash type (14 percent) along Malabar Road. Just under half of the left turn crashes occurred along the study corridor outside of the signalized intersections. There are over 30 driveways and public streets where left turns can be made between the St. Johns Heritage Parkway and the Plaza Shopping Center. The high number of access points and lack of access management is a contributing cause for the left turn crashes along the study corridor. Permitted left turn movements are the contributing cause for left turn crashes at the signalized intersections.

Midday and PM Peak Hour Crashes

In addition to crash types, the time of crashes was also reviewed. It was noted that there are increases in the number of crashes during the Midday and PM peak hours. Sixteen (16) percent of crashes occurred between 11 AM to 2 PM and 33 percent of crashes occurred from 3 PM to 6 PM, suggesting peak hour congestion is contributing to crashes during peak travel times.

5.3. Transit Assessment

Space Coast Area Transit operates Route 20 and Route 23 along the study corridor. Route 20 operates on a loop from Malabar Road to Minton Road to US 192 to St. Johns Heritage Parkway and back to Malabar Road, serving the communities of Palm Bay, Melbourne, and West Melbourne. There are 10 westbound stops for this route along the study corridor. The route operates from 6:25 AM to 8:20 PM on weekdays and 7:25 AM to 5:20 PM on Saturday. Route 23 operates on a loop from Malabar Road to Emerson Drive to Jupiter Boulevard and back to Malabar Road and serves Palm Bay. There are six eastbound stops for this route along the study corridor. The route operates from 6:35 AM to 8:30 PM on weekdays and 7:35 AM to 5:30 PM on Saturday.

The eastbound bus stop in front of the Madalyn Landing Apartments is the only stop with a bus shelter. The other bus stops are sign posts in the grass shoulder.

Both routes operate with hour-long headways. Per Space Coast Area Transit, Route 20 has an annual ridership of 23,000 and Route 23 has an annual ridership of approximately 72,000. The transit data is documented in **Appendix D**.

5.4. Existing Traffic Data Collection

As part of this study, weekday segment volume counts were taken at locations along Malabar Road. The count type, location, and dates taken are as follows:

- 72-Hour Volume Classification Counts
 - Malabar Road, East of Championship Circle; January 14-16, 2020
 - Jupiter Boulevard, North of Malabar Road; January 14-16, 2020
 - Jupiter Boulevard, South of Malabar Road; January 14-16, 2020

- 72-Hour Volume Counts
 - St. Johns Heritage Parkway, North of Malabar Road; February 25-27, 2020
 - Malabar Road, West of Jupiter Boulevard; January 14-16, 2020
 - Malabar Road, West of Marywood Avenue; January 14-16, 2020
 - Garvey Road, South of Malabar Road; January 14-16, 2020
 - Minton Road, North of Malabar Road; January 14-16, 2020
 - Minton Road, South of Malabar Road; January 14-16, 2020

The 2020 roadway volume count locations are illustrated in **Figure 5**. In addition to the 72-hour counts described above, FDOT and Space Coast Transportation Planning Organization (SCTPO) counts were also obtained and utilized on this project. FDOT counts were considered when determining D and T₂₄ factors, but ultimately the field counts were used to determine D and T₂₄ factors. This process is described in the section. The raw count data is provided in **Appendix E**.

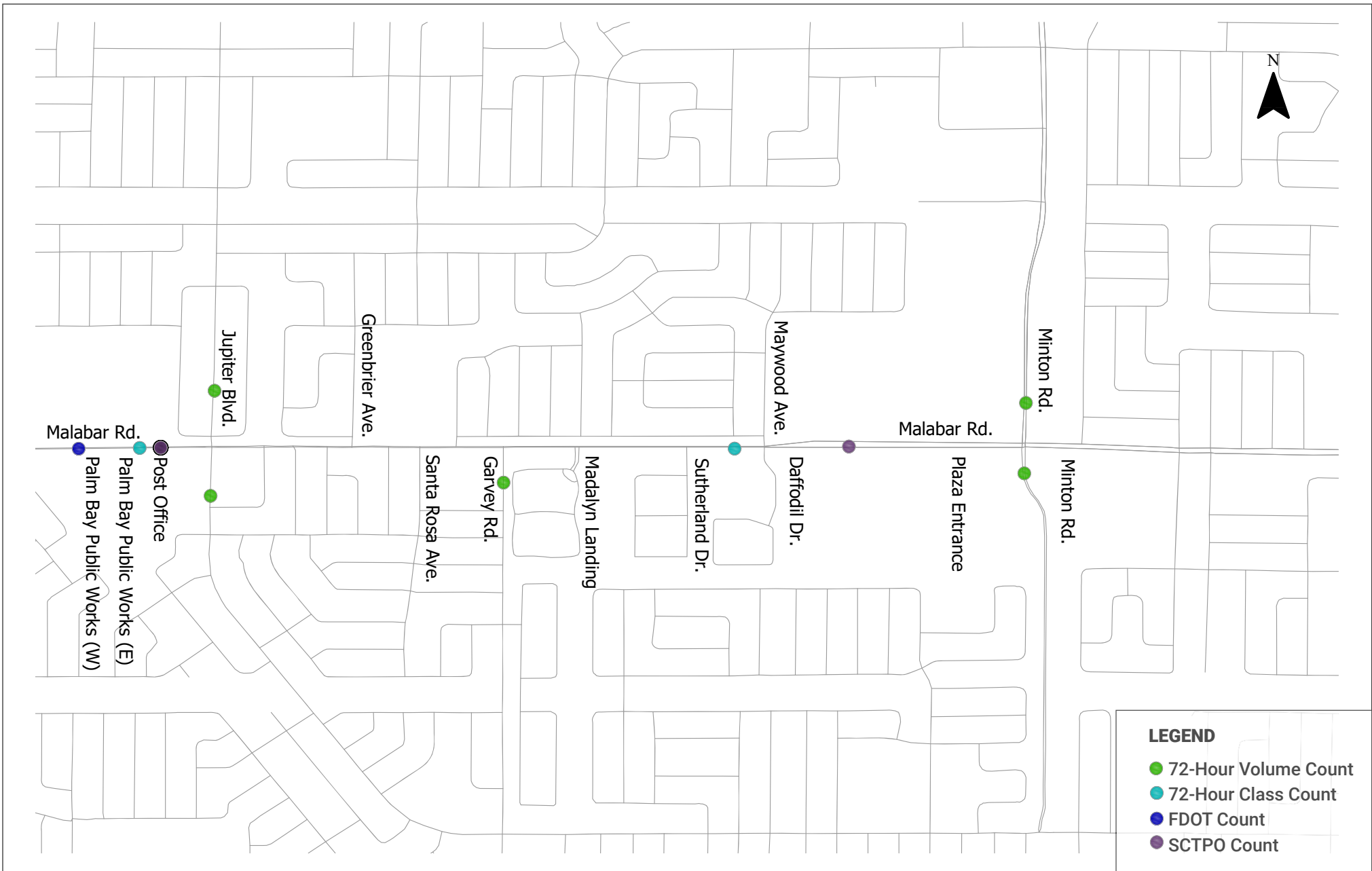


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VOLUME COUNT LOCATIONS

FIGURE 5A



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VOLUME COUNT LOCATIONS

FIGURE 5B

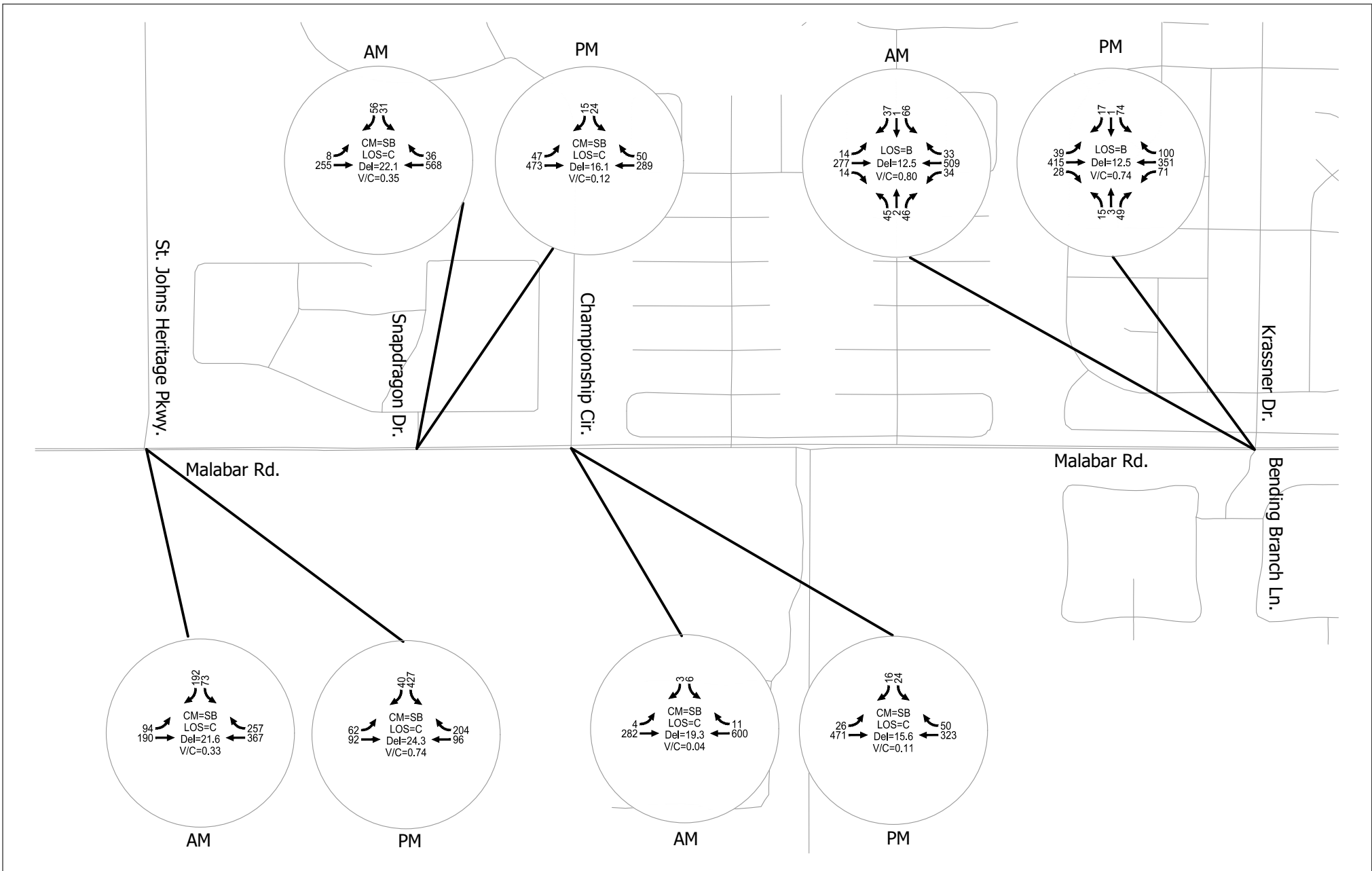
Weekday intersection turning movement counts were also taken at 16 intersections along the Malabar Road study corridor. Counts were taken on Thursday, January 16th, 2020 during the AM (7:00 – 9:00 AM) and PM (4:00 – 6:00 PM) peak periods at the following intersections:

- Malabar Road & St. Johns Heritage Parkway
- Malabar Road & Snapdragon Drive
- Malabar Road & Championship Circle
- Malabar Road & Krassner Drive/Bending Branch Lane
- Malabar Road & Bavarian Avenue
- Malabar Road & Hurley Boulevard
- Malabar Road & Palm Bay Public Works (West Driveway)
- Malabar Road & Post Office
- Malabar Road & Jupiter Boulevard (signalized)
- Malabar Road & Santa Rosa Avenue
- Malabar Road & Garvey Road
- Malabar Road & Madalyn Landing
- Malabar Road & Sutherland Drive
- Malabar Road & Maywood Avenue/Daffodil Drive
- Malabar Road & Plaza Entrance (signalized)
- Malabar Road & Minton Road (signalized)

5.4.1. EXISTING TRAFFIC VOLUMES AND FACTORS

The turning movement counts and volume counts were adjusted using seasonal adjustment factors (included in **Appendix F** and shown in **Table 10**) obtained from the 2019 Florida Traffic Online website to estimate 2020 turning movement volumes and AADT volumes. The seasonal factor in most cases was 0.97, but in one case a count was taken later and the seasonal factor for that count was 0.89. These seasonally adjusted volumes were used for the existing conditions analysis and are shown in **Figure 6**.

The existing 2020 AADT values and T_{24} factors along the study corridor are presented in **Table 10**. Vehicle classification counts were not collected for minor street roadways, so T_{24} factors were estimated as the peak hour truck percentage on the roadway leg multiplied by two following procedures relating T_{24} and DHT from the FDOT *Project Traffic Forecasting Handbook* (2019). Using the collected traffic volumes, existing traffic factors were calculated for the individual peak hour. Details including the peak-to-daily ratio, and the directional factor for the individual peak hour are also summarized in **Table 10**. Peak hour volumes summarized in **Table 10** also include the seasonal adjustment factor.



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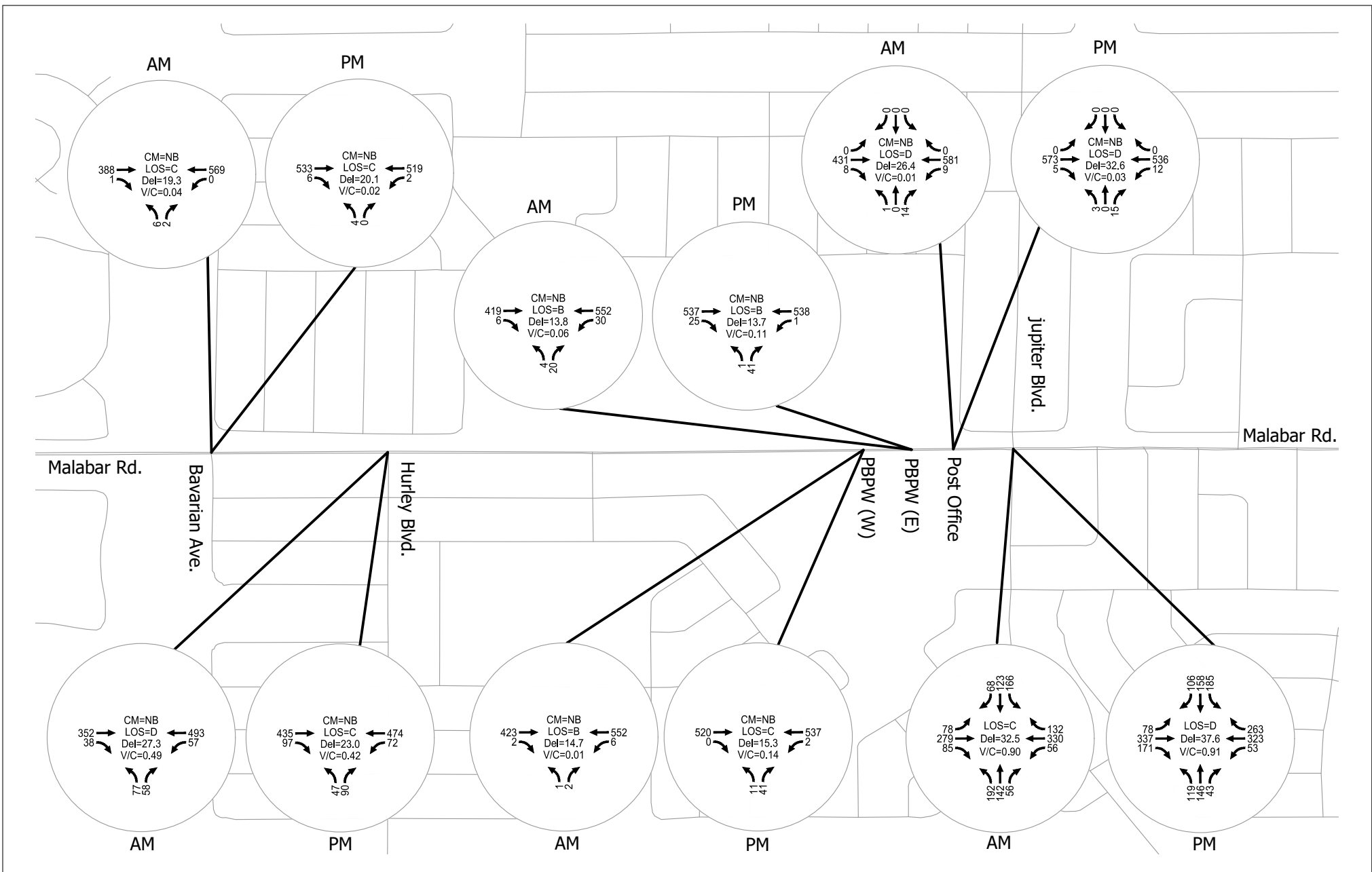
 North

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EXISTING TRAFFIC VOLUMES AND OPERATIONAL PERFORMANCE

FIGURE 6A



Not to Scale

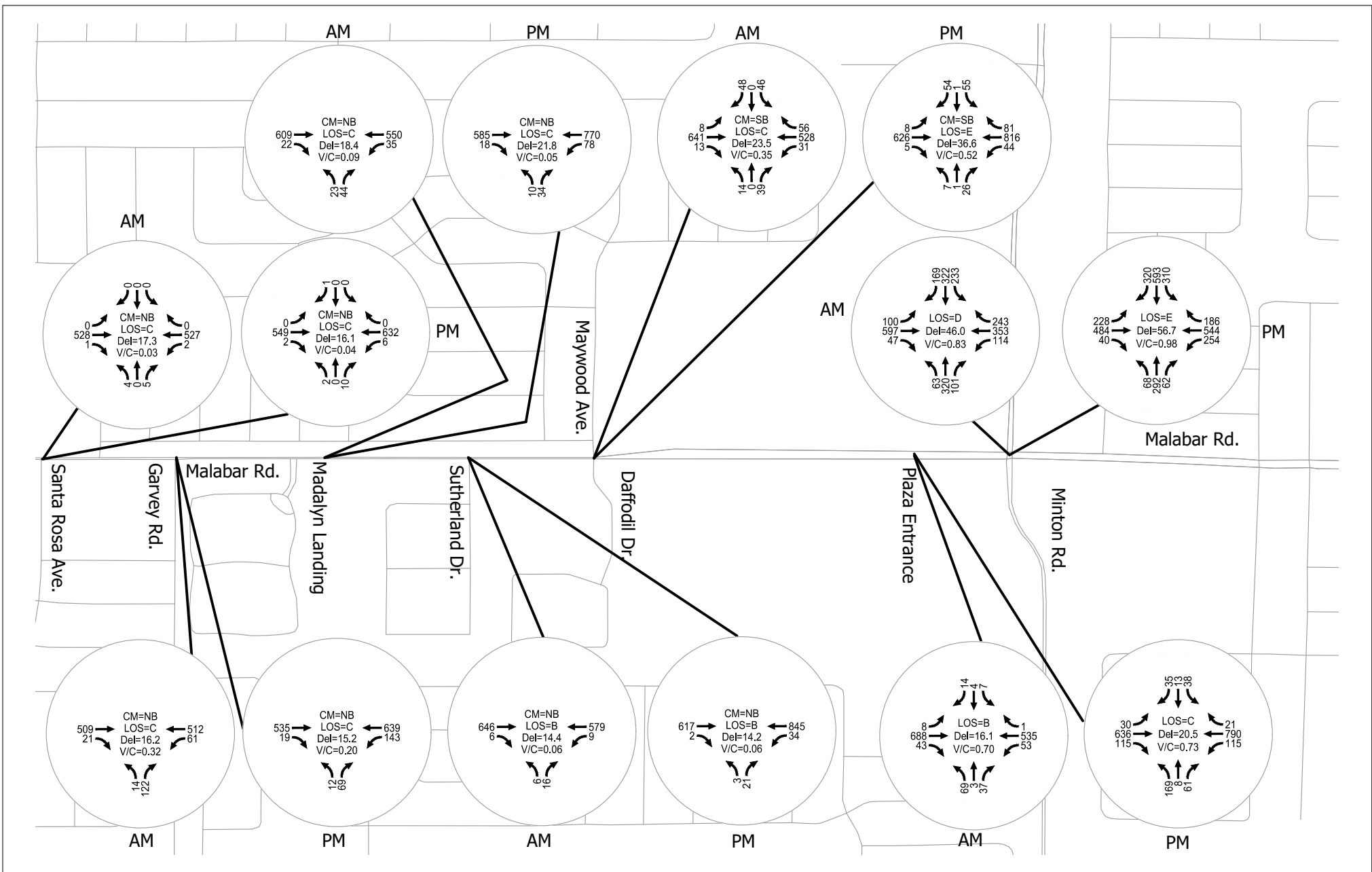
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EXISTING TRAFFIC VOLUMES AND OPERATIONAL PERFORMANCE

FIGURE 6B



Not to Scale



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EXISTING TRAFFIC VOLUMES AND OPERATIONAL PERFORMANCE

FIGURE 6C

Table 10: Weekday Existing Traffic Factors

Roadway	Count Dates	ADT	Axle Adj. Factor	Seasonal Adj. Factor	AADT	T ₂₄ Factors	Peak Hour Volume	NB/EB	SB/WB	Peak-to-Daily Ratio	D
Malabar Road, St. Johns Heritage Parkway to Krassner Dr.	1/14/2020-1/16/2020	7,382	N/A*	0.97	7,200	4.54%	760	250	510	9.5%	67.3%
Malabar Road, Krassner Dr. to Garvey Rd.	1/14/2020-1/16/2020	11,138	N/A*	0.97	11,000	5.64%	940	420	520	8.4%	55.4%
Malabar Road, Garvey Rd. to Minton Rd.	1/14/2020-1/16/2020	16,978	N/A*	0.97	16,000	2.47%	1,370	790	580	8.1%	57.6%
St. Johns Heritage Parkway, north of Malabar Rd.	02/25/2020-02/27/2020	5,931	0.98	0.89	5,200	6.50%**	580	340	240	9.5%	59.1%
Jupiter Boulevard, north of Malabar Rd.	1/14/2020-1/16/2020	10,690	0.99	0.97	10,000	3.50%**	900	460	440	8.4%	51.2%
Jupiter Boulevard, south of Malabar Rd.	1/14/2020-1/16/2020	7,394	0.99	0.97	7,100	5.60%**	710	400	310	8.7%	55.9%
Garvey Road, south of Malabar Rd.	1/14/2020-1/16/2020	2,825	0.99	0.97	2,700	3.00%**	250	140	100	8.4%	58.8%
Minton Road, north of Malabar Rd.	1/14/2020-1/16/2020	22,967	0.99	0.97	22,000	1.30%**	2,000	1,090	870	8.2%	55.7%
Minton Road. South of Malabar Rd.	1/14/2020-1/16/2020	13,499	0.99	0.97	13,000	1.10%**	1,100	410	710	8.3%	63.4%

*Vehicle classification count was used so an axle adjustment factor was not necessary.

**Vehicle classification count was not used so T₂₄ factor was estimated as peak hour truck percentage multiplied by two.

5.5. Existing Traffic Operations

The existing roadway and intersection volumes were used to prepare a baseline operational analysis for the study roadways and intersections.

Per the traffic methodology, level of service (LOS), vehicle delay, volume-to-capacity (v/c) ratio, and queue length were used as measures of effectiveness for intersection operations. The City of Palm Bay does not define a standard to be met for any of these measures.

Per the traffic methodology, LOS was used as a measure of effectiveness for roadway segment operations. The Level of Service (LOS) standard defined for the Malabar Road study roadway is LOS C per the City of Palm Bay Comprehensive Plan, as it states that all City roadway segments must meet LOS C.

5.5.1. EXISTING PEAK HOUR INTERSECTION OPERATIONS

The existing conditions (2020) were evaluated for the weekday AM and PM peak hour traffic volume conditions. A system peak was used for the AM and PM peak hours and traffic volumes were balanced between intersections. Current signal timing plans were obtained from the City of Palm Bay and Brevard County for use in the analysis. The signal timing plans are provided in Appendix G.

Existing intersection LOS analyses were conducted using *Highway Capacity Manual 6th Edition (HCM6)* methodologies as implemented by Synchro 10. **Figure 6** also summarizes the basic operational performance of the study intersections. Detailed Synchro 10 output reports and a summary of the measures of effectiveness for each intersection are located in **Appendix H**. While the City of Palm Bay does not define operational standards to be met for intersections, a summary of intersection operations is shown below, which notes where intersections operate poorly. A full summary of the operational performance of each intersection is shown below in **Table 11**.

5.5.1.1. Signalized Intersections

All signalized intersections operate with an overall intersection LOS of E or better.

5.5.1.2. Unsignalized Intersections

All unsignalized intersections operate with an overall intersection LOS of E or better.

Table 11: Existing (2020) Intersection LOS

Intersection	Control Type	2020 AM LOS	2020 PM LOS
Malabar Rd. & St. Johns Heritage Pkwy*	Two-Way Stop Control	C	C
Malabar Rd. & Snapdragon Dr. *	Two-Way Stop Control	C	C
Malabar Rd. & Championship Cir. *	Two-Way Stop Control	C	C
Malabar Rd. & Krassner Dr./ Bending Branch Ln. **	Signal	B	B
Malabar Rd. & Bavarian Ave. *	Two-Way Stop Control	C	C
Malabar Rd. & Hurley Blvd. *	Two-Way Stop Control	B	C
Malabar Rd. & Palm Bay Public Works (W) *	Two-Way Stop Control	B	C
Malabar Rd. & Palm Bay Public Works (E) *	Two-Way Stop Control	B	B
Malabar Rd. & Post Office*	Two-Way Stop Control	D	D
Malabar Rd. & Jupiter Blvd. **	Signal	C	D
Malabar Rd. & Santa Rosa Ave. *	Two-Way Stop Control	C	C
Malabar Rd. & Garvey Rd. *	Two-Way Stop Control	C	C
Malabar Rd. & Madalyn Landing*	Two-Way Stop Control	C	C
Malabar Rd. & Sutherland Dr. *	Two-Way Stop Control	B	B
Malabar Rd. & Maywood Ave./Daffodil Dr. *	Two-Way Stop Control	C	E
Malabar Rd. & Plaza Entrance**	Signal	B	C
Malabar Rd. & Minton Rd. **	Signal	D	E

*LOS shown is for worst movement

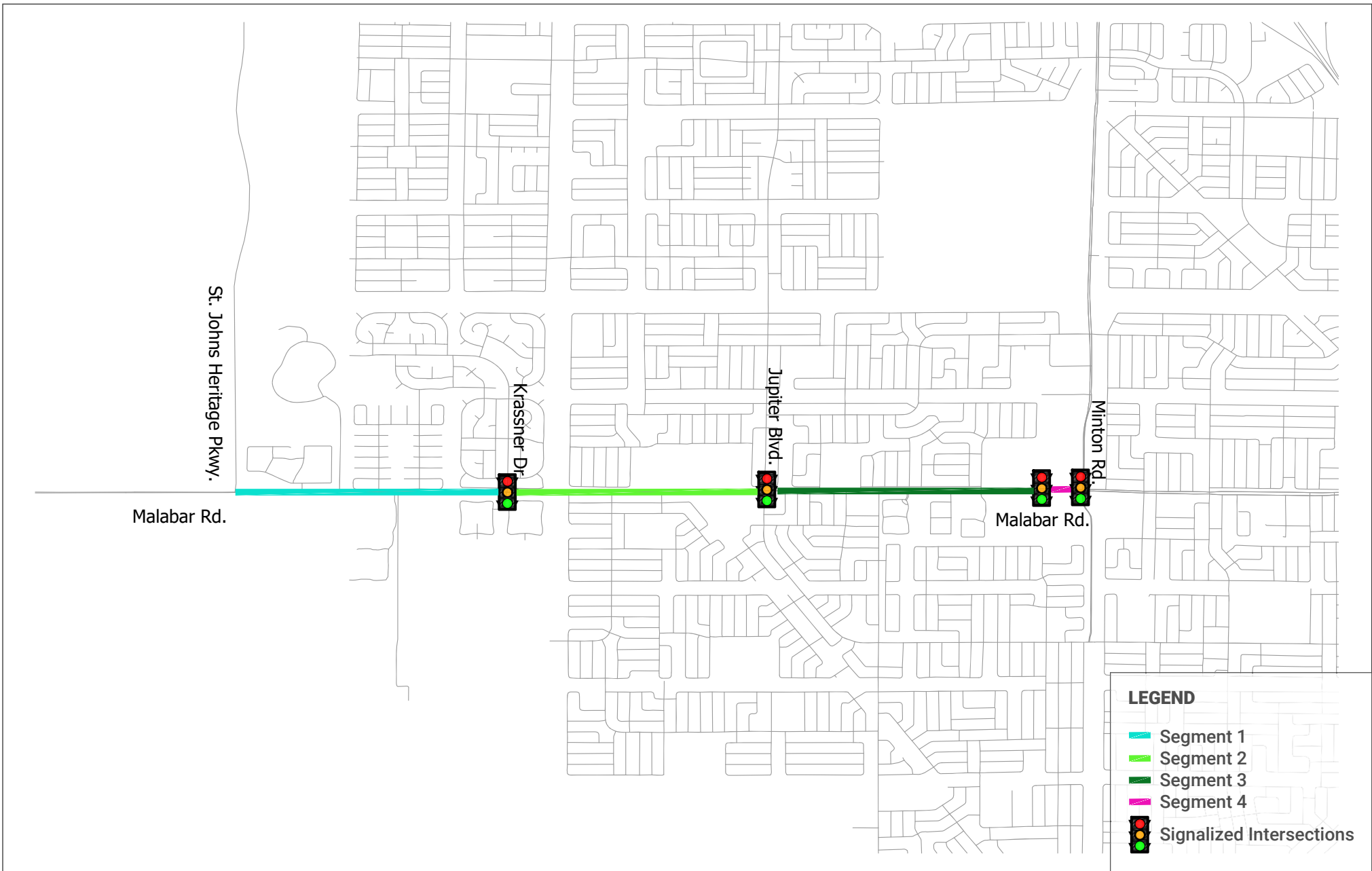
**LOS shown is for entire intersection.

5.5.2. EXISTING PEAK HOUR SEGMENT OPERATIONS

Malabar Road is an urban minor arterial for the study corridor’s length and has four signalized intersections creating interrupted flow traffic conditions for most of the study segments. However, the westbound segment from St. Johns Heritage Parkway to Krassner Drive/Bending Branch Lane is not influenced by a signal and is thus uninterrupted. To evaluate existing peak hour segment operations, the corridor was divided into the segments presented in **Table 12** and illustrated in **Figure 7**.

Table 12: Existing Condition Evaluation Segments

Segment #	Segment Limits	Flow Type	Analysis Method
1	Malabar Road, St. Johns Heritage Pkwy. to Krassner Dr./Bending Branch Ln.	Interrupted (EB) / Uninterrupted (WB)	Synchro 10/HCM6 (Urban Street)/HCS 7(Two-Lane Highway)
2	Malabar Road, Krassner Dr./Bending Branch Ln. to Jupiter Blvd.	Interrupted	Synchro 10/ HCM6 (Urban Street)
3	Malabar Road, Jupiter Blvd. to Plaza Entrance.	Interrupted	Synchro 10/ HCM6 (Urban Street)
4	Malabar Road, Plaza Entrance to Minton Rd.	Interrupted	Synchro 10/ HCM6 (Urban Street)



LEGEND

- Segment 1
- Segment 2
- Segment 3
- Segment 4
- Signalized Intersections

Not to Scale

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EXISTING CONDITION EVALUATION SEGMENTS

FIGURE 7

5.5.2.1. Uninterrupted Flow Segment Analysis

Analysis of the uninterrupted flow two-lane highway segments was performed using the *HCM 6th Edition* procedures as implemented in HCS software for Segment 1 in the westbound direction from **Table 12**. Two-lane highway operations are influenced by vehicle travel speeds and the presence or absence of passing zones. Factors considered in the two-lane highway analysis include segment length, percent trucks, percent no-passing zones, and access points per mile. For Segment 1 in the westbound direction, Malabar Road is classified as a Class III Highway, with LOS thresholds as shown in **Table 13**. Class III Highways serve moderately developed areas and there is often a mix of local and regional traffic. Per guidance on Page 15-15 of *HCM 6th Edition*, the Base Free-Flow Speed (BFFS) can be estimated as the speed limit plus 10 miles per hour. The level of service for these two-lane highway facilities of this nature is based upon Percent Free Flow Speed (PFFS). The LOS thresholds for two-lane highways are summarized in **Table 13** per Exhibit 15-3 of the *HCM 6th Edition*. The results of the operational analysis are shown in **Table 14**. Documentation for this analysis can be found in **Appendix I**.

Table 13: LOS for Two-Lane Highways (HCM6)

LOS	Class III Highways
	PFFS (%)
A	>91.7
B	>83.3-91.7
C	>75.0-83.3
D	>66.7-75.0
E	≤66.7

Table 14: Existing 2020 Segment LOS – (Uninterrupted Flow)

Segment #	Segment Limits	Analysis Direction	AM Peak Hour				PM Peak Hour			
			BFFS (mph)	ATS (mph)	PFFS* (%)	LOS	BFFS (mph)	ATS (mph)	PFFS* (%)	LOS
1	Malabar Road, Krassner Drive/Bending Branch Lane to St. Johns Heritage Parkway	Westbound	50.6	32.8	73.5	D	50.6	35.4	79.4	C

Note: BFFS is Base Free Flow Speed, ATS is Average Travel Speed, and PFFS is Percent Free Flow Speed

5.5.2.2. Interrupted Flow Segment Analysis

The corridor was analyzed using the HCM6 Urban Street (interrupted flow) methodologies. The HCM6 methodology was used to calculate the base free flow speed (BFFS) as noted in **Appendix I**, Synchro 10 was used to provide the travel speed, and the travel speed as a percentage of base free flow speed (PBFFS) was calculated. The PBFFS value was compared to the LOS criteria summarized in **Table 15**. The results of this analysis are shown in **Table 16**. Detailed analysis output reports for all segments are in **Appendix I**.

Table 15: LOS for Urban Streets (HCM6)

LOS	Travel Speed as a Percentage of Base Free-Flow Speed (%)
A	>80
B	>67-80
C	>50-67
D	>40-50
E	>30-40
F	≤30

Table 16: Existing 2020 Segment LOS – Both Directions (Interrupted Flow)

Segment #	Segment Limits	Analysis Direction	AM Peak Hour				PM Peak Hour			
			BFFS (mph)	Synchro Travel Speed (mph)	P _{BFFS} * (%)	LOS	BFFS (mph)	Synchro Travel Speed (mph)	P _{BFFS} * (%)	LOS
1	Malabar Road, St. Johns Heritage Pkwy. to Krassner Dr./Bending Branch Ln.	Eastbound	46.4	36.5	78.7	B	46.4	35.9	77.4	B
2	Malabar Road, Krassner Dr./Bending Branch Ln. to Jupiter Blvd.	Eastbound	46.1	33.7	73.1	B	46.1	32.7	70.9	B
3	Malabar Road, Jupiter Blvd. to Plaza Entrance	Eastbound	45.0	35.5	77.8	B	45.0	33.7	73.9	B
4	Malabar Road, Plaza Entrance to Minton Rd.	Eastbound	36.8	7.8	21.2	F**	36.8	7.3	19.8	F**
Facility	Malabar Road, St. Johns Heritage Pkwy. to Minton Rd.	Eastbound	-	-	63.0	C	-	-	60.8	C
4	Malabar Road, Minton Rd. to Plaza Entrance	Westbound	38.1	10.6	27.8	F**	38.1	9.8	25.7	F**
3	Malabar Road, Plaza Entrance to Jupiter Blvd.	Westbound	45.0	20.0	43.9	D	45.2	16.0	35.0	E
2	Malabar Road, Jupiter Blvd. to Krassner Dr./Bending Branch Ln.	Westbound	46.1	31.5	68.3	B	46.1	31.6	68.5	B
Facility	Malabar Road, Minton Rd. to Krassner Dr./Bending Branch Ln.	Westbound	-	-	46.9	D	-	-	43.2	D

*Note: P_{BFFS} is the Percent of Base Free Flow Speed

** This is likely due to the relatively short length of segment between signalized intersections and the relatively high control delay of the adjacent signalized intersections.

5.5.2.3. Segment Analysis Summary

Detailed HCS and Synchro 10 output reports for each segment are located in **Appendix I**. A summary of segment operations is shown below.

All roadway segments within Brevard County's jurisdiction operate better than LOS E. Most roadway segments within the City of Palm Bay's jurisdiction operate at the City of Palm Bay's LOS C roadway standard or better with the exception of the following segments:

- Westbound AM Peak Hour
 - Minton Road to Plaza Entrance: LOS F
 - Plaza Entrance to Jupiter Boulevard: LOS D
- Westbound PM Peak Hour
 - Minton Road to Plaza Entrance: LOS F
 - Plaza Entrance to Jupiter Boulevard: LOS E
- Eastbound AM Peak Hour
 - Plaza Entrance to Minton Road: LOS F
- Eastbound PM Peak Hour
 - Plaza Entrance to Minton Road: LOS F

As shown in **Table 16**, the segment between the intersections of Malabar Road & Plaza Entrance and Malabar Road & Minton Road currently operates with LOS approaching F. This is likely due to the relatively short length of segment between signalized intersections and the relatively high control delay of the adjacent signalized intersections. Because of this, intersection operating conditions are a better indicator of adjacent segment operations.

6. DEVELOPMENT OF FUTURE YEAR TRAFFIC FORECAST

6.1. Subarea Travel Demand Model Development

The Central Florida Regional Planning Model (CFRPM) version 6.1 is FDOT's latest adopted regional planning model for use within Brevard County, and it reflects transportation improvements identified within the Space Coast Transportation Planning Organization (SCTPO) Long Range Transportation Plan (LRTP). In support of this study, a subarea model of the CFRPM v6.1, with a base year of 2015, was calibrated and validated to meet Florida Standard Urban Transportation Model Structure (FSUTMS) subarea model calibration and validation standards to improve the traffic forecasting reliability in the area. The subarea model calibration and validation followed the procedures outlined in Florida Department of Transportation (FDOT) *2019 Project Traffic Forecasting Handbook*. The calibration adjustments conducted for base year were also applied to the future year modeling scenarios (year 2030 and 2045). The 2045 future year modeling scenario used the CFRPM v6.1 2040 roadway network and TAZ zone structure with the SCTPO approved 2045 socioeconomic data. This is documented in the Future Volumes Technical Memorandum, which is provided in **Appendix J**.

This section summarizes the data collection effort, subarea model development, calibration procedures, and model validation results.

6.1.1. SUBAREA MODEL BOUNDARY

The boundary of the subarea model, as shown in **Figure 8**, was selected to include the major facilities in the vicinity of the study corridor. It generally includes the area bounded by Lake Washington Road on the north, the Brevard/Indian River County Line on the south; the St. Johns River on the west; and US 1 on the east. The eastern, western, and southern boundaries were chosen as natural geographic or jurisdictional breakpoints, while the northern boundary was chosen to include the major employment center around the Melbourne International Airport.

6.1.2. SUBAREA MODEL DATA COLLECTION

To support the model subarea refinement and calibration, traffic count data, roadway network data, and land use data from 2015 were collected.

6.1.2.1. Traffic Count Data

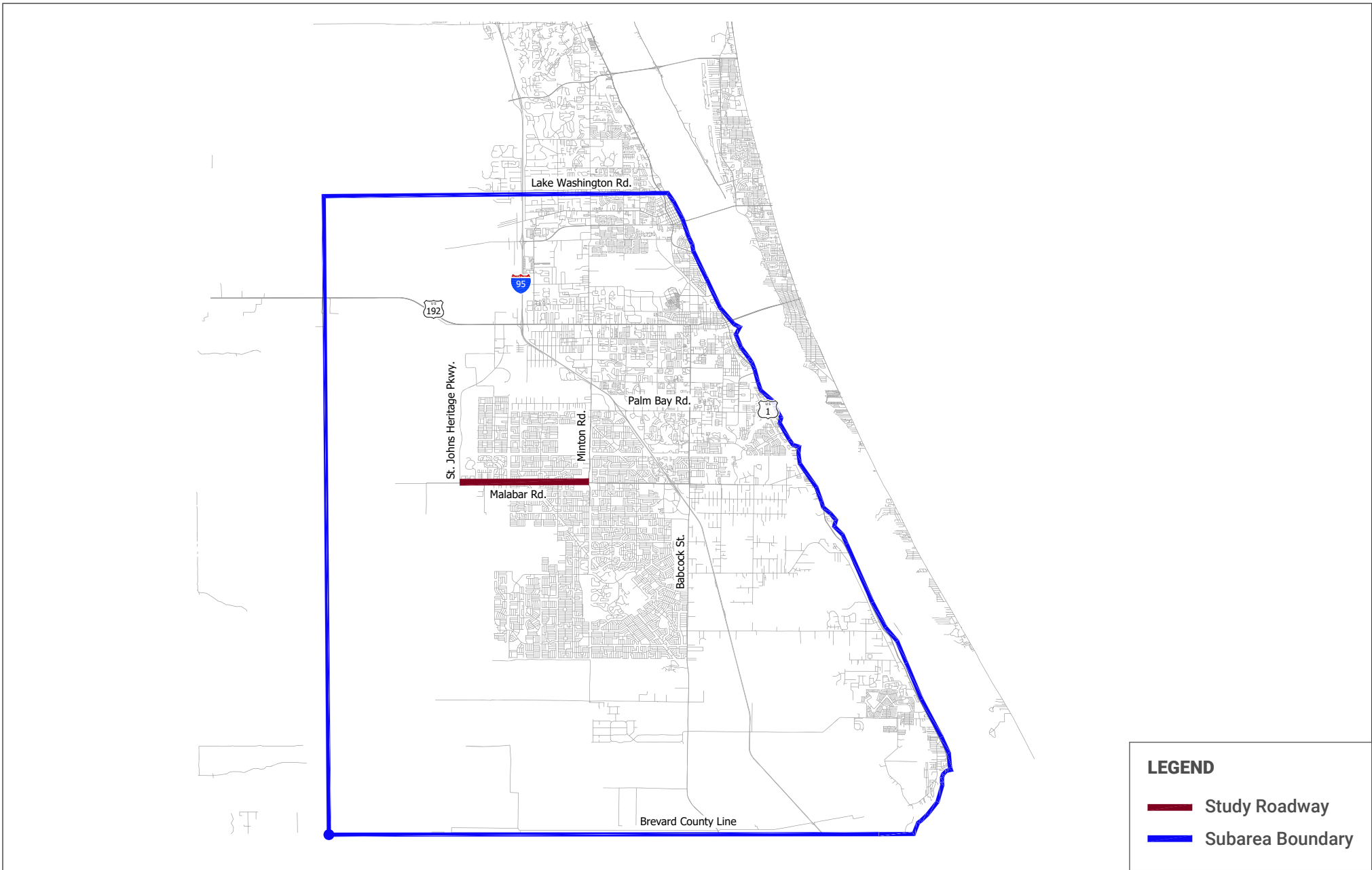
The subarea model was validated to year 2015. Thus, the currently available year 2015 traffic count data were obtained from FDOT and Brevard County and listed in **Appendix J**.

6.1.2.2. Roadway Network Data

The base year (2015) and future years (2030 and 2040) roadway network within the subarea were updated using available network data listed below:

- 2015 Google Earth historical imagery;
- 2015 Roadway Shapefile from FTI DVD; and
- The approved and planned 2030 and 2040 roadway network improvements information available from the SCTPO LRTP and City of Palm Bay.

These changes are documented in **Appendix J** and the **Roadway Network Assumptions** section.



LEGEND

- Study Roadway
- Subarea Boundary

Not to Scale

Malabar Road PD&E Study

FPID: 437210-1-28-01

SUBAREA MODEL BOUNDARY

FIGURE 8

6.1.2.3. Land Use Data

The base year (2015) and future years (2030 and 2045) land use data for Traffic Analysis Zones (TAZs) within the subarea were updated using information listed below:

- 2015 Google Earth historical imagery;
- The approved and planned development programs in the study area vicinity; and
- The approved land use data sets supporting the recently completed 2045 SCTPO LRTP.

6.1.3. BASE YEAR (2015) SUBAREA MODEL CALIBRATION

The FDOT and Brevard County traffic count station locations were originally coded in the CFRPM v6.1. A review of the base year (2015) count station locations and traffic counts was conducted before the subarea model calibration process to improve the count data accountability. The following screening criteria and updates were made to the 2015 count data:

- Duplicate counts on the roadway segments were removed to avoid double counting.
- Count stations sometimes do not have year 2015 Annual Average Daily Traffic (AADT) data available. Linear regression analysis was applied to approximate the 2015 AADT for stations using data from the previous and subsequent years.
- Count stations that no longer existed in 2015 in the FDOT and Brevard County count database were removed.

The subarea model calibration process involved a comprehensive review of the base year (2015) socioeconomic (land use) data and transportation network data within the subarea. The 2015 land use data were taken from CFRPM v6.1. The 2015 land use data of zones near the study corridor were further refined based on the existing known development. At the time of model calibration, the CFRPM v7 zone structure for Brevard County was available. After reviewing the new and old TAZ structures, zones within a half-mile of the study corridor were converted to the CFRPM v7 zone structure. This process is documented in **Table 17**. The TAZ conversion details and land use changes for 2015 are shown in **Appendix J**.

After TAZ by TAZ refinement, the subarea land use socioeconomic data were further uniformly factored to match the 2015 subarea socioeconomic data based on the recently completed SCTPO LRTP. For outside subarea boundary, the 2015 socioeconomic data control total were factored to match the corresponding data from recently completed SCTPO LRTP and surrounding counties' LRTPs. This process is documented in **Table 17**.

Table 17: Subarea Model Scenario Summary

Year	Outside Subarea Boundary	Inside Subarea Boundary
Base 2015	<ul style="list-style-type: none"> Use CFRPM v6.1 2015 TAZ structure and network as start Modify roadway network to reflect 2015 roadway # lanes within Brevard County No update for roadway network outside Brevard County 	<ul style="list-style-type: none"> Use CFRPM v6.1 2015 TAZ structure and network as start Review the land use in 2015 and update SE data Modify roadway network to reflect 2015 roadway # lanes Conduct subarea validation updates.

The subarea model network was adjusted, where needed, to reflect year 2015 conditions. The following iterative steps were applied for calibration until the subarea model met acceptable FSUTMS thresholds.

1. TAZ centroid connectors were added, deleted, or moved based on loading patterns determined from the 2015 Google Earth historical imagery to more accurately reflect the traffic distribution of parcels.
2. The existing (2015) numbers of lanes were assessed for all roads within the study area for correctness and updated if necessary.
3. The facility types were refined based on the roadway characteristics.
4. The posted speeds on roads were increased or decreased within 10 miles per hour (mph) to reflect the realistic route choice pattern of travelers.
5. New roadway segments were added to better represent the base year 2015 network within the subarea.

In addition, link and turning time penalties were added to replicate the existing travel patterns. The number of trips in external zones were updated based on the counts for base year (2015). The network and turning penalty modifications to the base year (2015) model scenario during the calibration effort are detailed within **Appendix J**.

6.1.4. BASE YEAR (2015) SUBAREA MODEL VALIDATION

After the model calibration, the model validation was documented by comparing model estimates of base year traffic to base year traffic counts. Daily volumes were obtained from the base year (2015) subarea model. However, the daily volumes in CFRPM v6.1 represent peak season weekday average daily traffic (PSWADT) and the 2015 count data is AADT. The PSWADT values were converted to AADT by applying the model output conversion factor (MOCF):

$$\text{AADT} = \text{PSWADT} * \text{MOCF}$$

In the subarea, two different MOCFs, were applied for factoring AADT. The I-95 MOCF was applied to I-95 within the subarea. The countywide MOCF was applied to all other roadways in the subarea. The

two MOCF factors are shown in **Table 18**. The MOCF reports obtained from the 2015 FTI data are included in **Appendix J**.

Table 18: Model MOCF

County	Category	MOCF
Brevard County	Countywide	0.94
	I-95	0.97

6.1.4.1. Subarea Validation

The validation for the entire subarea is based primarily on the percent root mean square error (RMSE%) between the 2015 model AADTs and count AADTs. The RMSE% results were compared with the standards outlined in Figure 3.3 of the *2019 FDOT Project Traffic Forecasting Handbook* and Table 2-11 of the *FSUTMS-Cube Model Calibration and Validation Standards*. **Table 19** summarizes the RMSE% calculation of the original CFRPM v6.1 model prior to adjustments and the calibrated subarea model. More detailed data for this analysis can be found in **Appendix J**.

Table 19: RMSE% by Volume Group of the Subarea Model

Group	Volume Range (vehicles/day)	FSUTMS Standards		Number of Observations	Original Subarea	Calibrated Subarea
		Acceptable	Preferable			
1	Less than 5,000	100%	45%	3	142%	51%
2	5,000 - 9,999	45%	35%	4	113%	35%
3	10,000-14,999	35%	27%	11	30%	20%
4	15,000-19,999	30%	25%	7	31%	14%
5	20,000-29999	27%	15%	5	32%	11%
6	30,000-49,999	25%	15%	9	20%	14%
7	50,000-59,999	20%	10%	1	5%	3%
8	60,000+	19%	10%	2	4%	8%
Total		45%	35%	42	24%	13.8%

Based on **Table 19**, 42 traffic count locations were used to evaluate the areawide RMSE%. The overall subarea model RMSE% is 13.8 %, which is better than the FSUTMS preferable standard of 35%. The subarea model RMSE% for most of the volume groups are better than the original subarea model and the applicable FSUTMS acceptable standard.

6.1.4.2. Malabar Road Study Corridor Validation

Table 20 shows the comparison of observed counts, original model AADT, and calibrated subarea model AADT on the Malabar Road study corridor and I-95. The calibrated subarea model volumes are generally closer to the actual 2015 counts than the original subarea model.

Based on the evaluation displayed in **Table 19** and **Table 20**, the calibrated subarea model meets the FSUTMS standards, produces a reasonable approximation of 2015 traffic volumes, and is expected to generate a reasonable future traffic projection.

Table 20: Study Corridor Volume to Count Ratio of the Subarea Model

Category	Location	2015 Count			Original Subarea		Calibrated Subarea	
		Source	Station ID	AADT	Model AADT	V/C Ratio	Model AADT	V/C Ratio
Arterial	Malabar Rd West of Minton Rd	Brevard County	371	20,950	13,799	-34%	20,285	-3%
	Malabar Rd West of Emerson Dr	FDOT	707041	22,100	11,520	-48%	20,974	-5%
	Malabar Rd East of Emerson Dr	Brevard County	513	36,050	20,095	-44%	34,127	-5%
	Malabar Rd East of Hurley Blvd	FDOT	708142	10,000	6,995	-30%	9,435	-6%
	Summation				89,100	52,410	-41%	84,821
Freeway	I-95, Between Malabar Rd. and Fellesmere Rd.	FDOT	700134	40,653	43,773	8%	38,843	-4%
	Summation				40,653	43,773	8%	38,843

6.1.5. FUTURE YEARS SUBAREA MODEL DEVELOPMENT

To support the design year analysis, the design year traffic volumes are forecasted based on the future year (2030 and 2045) subarea models, which were built based on the CFRPM v6.1 Year 2030 and 2040 Cost Feasible scenarios. The following updates discussed in this subsection were included during the future year subarea model development.

6.1.5.1. Roadway Network Assumptions

Network modifications made during the base year (2015) model calibration process were applied to the CFRPM v6.1 Year 2040 road network to build the future year 2030 and 2045 subarea models, as the modifications are anticipated to remain valid in the future years. The following future road improvements were also assumed in the future road networks:

- Babcock Street between Palm Bay Road and Malabar Road was widened to six lanes.
- St. Johns Heritage Parkway between Ellis Road and Micco Road was completed as a four-lane facility.
- The St. Johns Heritage Parkway interchange with I-95 was added north of Micco Road on St. Johns Heritage Parkway.

- Minton Road was originally coded as a six-lane road in the CFRPM v6.1 Year 2040 model. It was changed back to a four-lane road based on the recent SCTPO Minton Road Feasibility Study, which suggests the road will stay as a four-lane facility in the future.
- Other projects programmed in SCTPO's LRTP and FDOT's Five-Year Work Program were checked and updated accordingly within the study area.

6.1.5.2. Future Land Use Data Updates

The 2045 land use and socioeconomic data were developed using two steps. First, the housing and employment variables were factored to 2045 levels. Second, the land use inputs within the Malabar Road study area were updated to include known specific development projects.

2045 Regional Forecasts. The CFRPM v6.1 Year 2040 land use and socioeconomic data were factored to match 2045 population and employment totals for each county consistent with the more current forecasts being used for CFRPM v7. Within Brevard County, the 2040 data were factored to 2045 subarea socioeconomic data based on the recently completed SCTPO LRTP, with separate factors applied within the study subarea and outside the subarea boundary. The factors for each county and Brevard County subarea are listed in **Appendix K**.

Specific Development Projects. Based on a review of future development plans and Transportation Impact Analyses (TIAs) for proposed developments obtained from the City of Palm Bay and Brevard County, the future years (2030 and 2045) socio-economic data were further updated to include and reflect the following development plans:

- Avery Springs (under construction)
- Brentwood Lakes (under construction)
- Chapparral (under construction)
- Crown Square
- Malabar Mini Storage
- Cypress Bay Preserve
- Emerald Lakes
- Space Coast Town Center
- St. Johns Preserve – Commercial
- St. Johns Preserve - Housing Units (under construction)
- Waterstone and Rolling Meadows

The increments of land use associated with the above new developments were compared to the 2015 to 2030 or 2045 growth increments in the future year land use for the corresponding TAZs. If the 2030 or 2045 TAZ growth increment was less than the proposed development land use, the 2030 and 2045 housing and employment inputs for that TAZ were increased to account for the planned development. Detailed land use changes can be found in **Appendix K**.

6.1.6. MODEL FORECASTS

The year 2015, 2030, and 2045 subarea models were developed following FSUTMS procedures and standards. Based on the base year calibration and validation, and the updates to future input assumptions, the models were expected to generate reasonable traffic volumes for the PD&E design traffic process. The AADTs for study segments within the subarea from the horizon-year (2045) subarea model are included in **Appendix L**.

6.2. Traffic Forecasting

Traffic volumes were collected for the present year (2020) and forecasted for the opening and design years shown below.

- Opening year – 2030
- Design year – 2050

The forecasts presented herein reflect the Malabar Road “build” conditions. Separate travel model forecasts were not run for the “no build” conditions. One set of future model volumes were selected as there are not viable or convenient parallel alternative routes to Malabar Road and diversions due to potential congestion in the no-build scenario are not expected to be significant. Additionally, with Malabar Road modeled as a four-lane facility under the “build scenario”, a clearer understanding of demand traffic volumes can be realized as the model would not divert potential demand traffic due to perceived capacity constraints. For the design year, the 2045 model’s growth rates were used to create a 2050 forecast to determine the 2050 design year volumes.

This section presents the future-year daily traffic volume forecasts for the 2030 opening year and 2050 design year and the process by which they were determined.

6.2.1. METHODOLOGY

An annual growth rate was selected for each roadway segment based upon comparison of model growth rates and historical volume trends. Future intersection turning movements were projected using accepted methodologies from the FDOT Project Traffic Forecasting Handbook.

6.2.2. HISTORIC GROWTH RATES

Historic growth rates were evaluated using FDOT standard spreadsheets for linear trend analysis. Evaluations were conducted for six SCTPO count locations and four FDOT count locations along and adjacent to the corridor. Historic growth rates for the Malabar Road study segments and other segments within the study area are shown in **Table 21** and **Table 22**. Linear growth rates trended between -0.3 percent and 33.3 percent along Malabar Road and between -1.2 and 103.1 percent along minor streets. Historic trends analyses are provided in **Appendix M**.

Table 21: Summary of FDOT Historic Growth Rates within the Study Area

Year	Malabar Road, East of Hurley Blvd.	St. Johns Heritage Parkway, North of Malabar Rd.	Minton Road, North of Malabar Rd.	Minton Road, South of Malabar Rd.
	FDOT Site: 708142	FDOT Site: 708156	FDOT Site: 707084	FDOT Site: 707016
2019	13,000	5,900	21,500	16,400
2018	12,800	5,900	25,000	15,100
2017	12,400	3,400	24,000	14,700
2016	10,600	3,300	23,000	14,000
2015	10,000	-	18,500	13,100
2014	9,600	-	18,200	12,700
2013	9,600	-	18,000	12,500
2012	9,100	-	18,200	13,400
2011	-	-	18,100	13,600
2010	-	-	18,000	11,700
2009	-	-	18,400	-
Annual Linear Growth Rate	7.09%	33.33%	3.87%	3.24%
R ²	91.53%	81.51%	61.56%	72.46%

Table 22: Summary of SCTPO Historic Growth Rates within Study Area

Year	Malabar Road, West of Jupiter Blvd.	Malabar Road, West of Minton Rd.	Malabar Road, East of Minton Rd.	St. Johns Heritage Parkway, North of Malabar Rd.	Jupiter Boulevard, North of Malabar Rd.	Jupiter Boulevard, South of Malabar Rd.	Minton Road, North of Malabar Rd.
	SCTPO Site: 589	SCTPO Site: 371	SCTPO Site: 491	SCTPO Site: 609	SCTPO Site: 620	SCTPO Site: 573	SCTPO Site: 490
2019	11,400	22,100	25,400	-	11,400	7,800	22,800
2018	11,100	20,000	23,400	5,500	11,000	7,800	21,700
2017	11,400	20,200	23,800	2,000	-	7,100	21,600
2016	12,300	19,000	24,500	2,200	-	6,600	21,100
2015	11,000	21,000	22,600	-	-	6,200	20,000
2014	11,900	21,000	22,400	-	-	6,300	18,800
2013	11,300	19,800	21,500	-	-	6,100	17,900
2012	-	20,900	22,200	-	-	6,200	18,700
2011	-	20,600	22,500	-	-	-	19,000
2010	-	19,500	22,100	-	-	-	19,000
2009	-	20,100	23,400	-	-	-	18,600
2008	-	20,100	23,500	-	-	-	19,700
2007	-	18,800	23,000	-	-	-	20,200
2006	-	-	25,400	-	-	-	20,500
Annual Linear Growth Rate	-0.29%	0.55%	0.17%	103.13%	3.64%	4.68%	0.98%
R ²	2.28%	20.81%	1.58%	70.47%	100.00%	84.20%	29.83%

6.2.3. ANNUAL MODEL VOLUME GROWTH RATES

Annual model volume growth rates were calculated by using the model volume growth in each modeled time period. The annual volume growth was determined from 2015 to 2030 and 2015 to 2045. The MOCF used was 0.94. The model AADT (with MOCF applied) and annual model volume growth rates for the Malabar Road study segments and major cross streets are summarized in **Table 23**. Model plots are included in **Appendix L**.

Table 23: Model Growth Rates for Malabar Road

Roadway Segment	2015 Base Year Model AADT	2015-2030 Base Year Model AADT	2030 Model AADT	2015-2045 Annual Model Volume Growth	2045 Model AADT
Malabar Road, West of St. Johns Heritage Pkwy.	2,867	8,518	377	230	9,768
Malabar Road, St. Johns Heritage Pkwy. to Krassner Dr./ Bending Branch Ln.	5,302	10,703	360	299	14,270
Malabar Road, Krassner Dr./ Bending Branch Ln. to Jupiter Blvd.	7,571	15,077	500	354	18,197
Malabar Road, Jupiter Blvd. to Minton Rd.	16,782	18,904	141	391	28,514
Malabar Road, East of Minton Rd.	25,394	20,428	-331	-45	24,030
St. Johns Heritage Parkway, north of Malabar Rd.	5,164	11,120	397	508	20,404
St. Johns Heritage Parkway, south of Malabar Rd.	0	0	0	338	10,137
Jupiter Boulevard, north of Malabar Rd.	6,516	11,233	315	62	8,380
Jupiter Boulevard, south of Malabar Rd.	2,658	4,745	139	63	4,561
Garvey Road, south of Malabar Rd.	2,817	4,535	115	151	7,356
Minton Road, north of Malabar Rd.	23,139	21,242	-126	118	26,664
Minton Road, south of Malabar Rd.	12,489	12,622	9	-40	11,288

6.2.4. RECOMMENDED GROWTH RATES AND FUTURE AADTS

Recommended growth rates were determined based on an evaluation of historic and model predicted growth rates. **Table 24** summarizes the recommended volume growth rates used in both the no-build and build scenarios for the Malabar Road study segments and major cross street segments. Future 2050 AADTs are also summarized in **Table 24**. Existing and projected future AADTs are displayed in **Figure 9**. These growth rates were all determined in the previously reviewed and approved Future Volumes Technical Memorandum, which is provided in **Appendix J**.

As previously described, model volume growth rates were calculated by using the model volume growth in each modelled time period. Results from this model-based growth forecast were compared against historical AADT trends to verify reasonableness. The trends are provided in **Appendix M**. Growth rate recommendations primarily reflect the model-based growth rates. Growth rates were evaluated on an individual segment basis.

On most minor streets, model growth rates were evaluated for roads with projected model volumes available. For some minor streets and streets not coded into the model, a zero-percent growth rate was applied because these streets serve areas where development is fully built out and side street volume growth is not expected. However, forecasts for the minor street intersections at Krassner Drive/Bending Branch Lane and Wisteria Avenue/Krassner Drive were developed based on developer information because of expected growth from the developments, as shown in Section 6.2.5 and **Appendix N**.

Future AADTs were calculated by using the annual model volume growth for each time period and applying this growth to the traffic counts collected during the study. Therefore, to calculate the 2050 AADTs the annual model volume growth from 2015 to 2045 was multiplied by the years of the growth period (2020 to 2050 would be 30 years) and added to the 2020 AADTs. A similar method was also used when 2030 AADTs were calculated. In some cases, the annual model volume growth was negative. This was assumed to be due to the opening of a new regional roadway in the form of the St. Johns Heritage Parkway extension and traffic diversion to that roadway. In these cases, a zero-growth rate was used to be conservative.

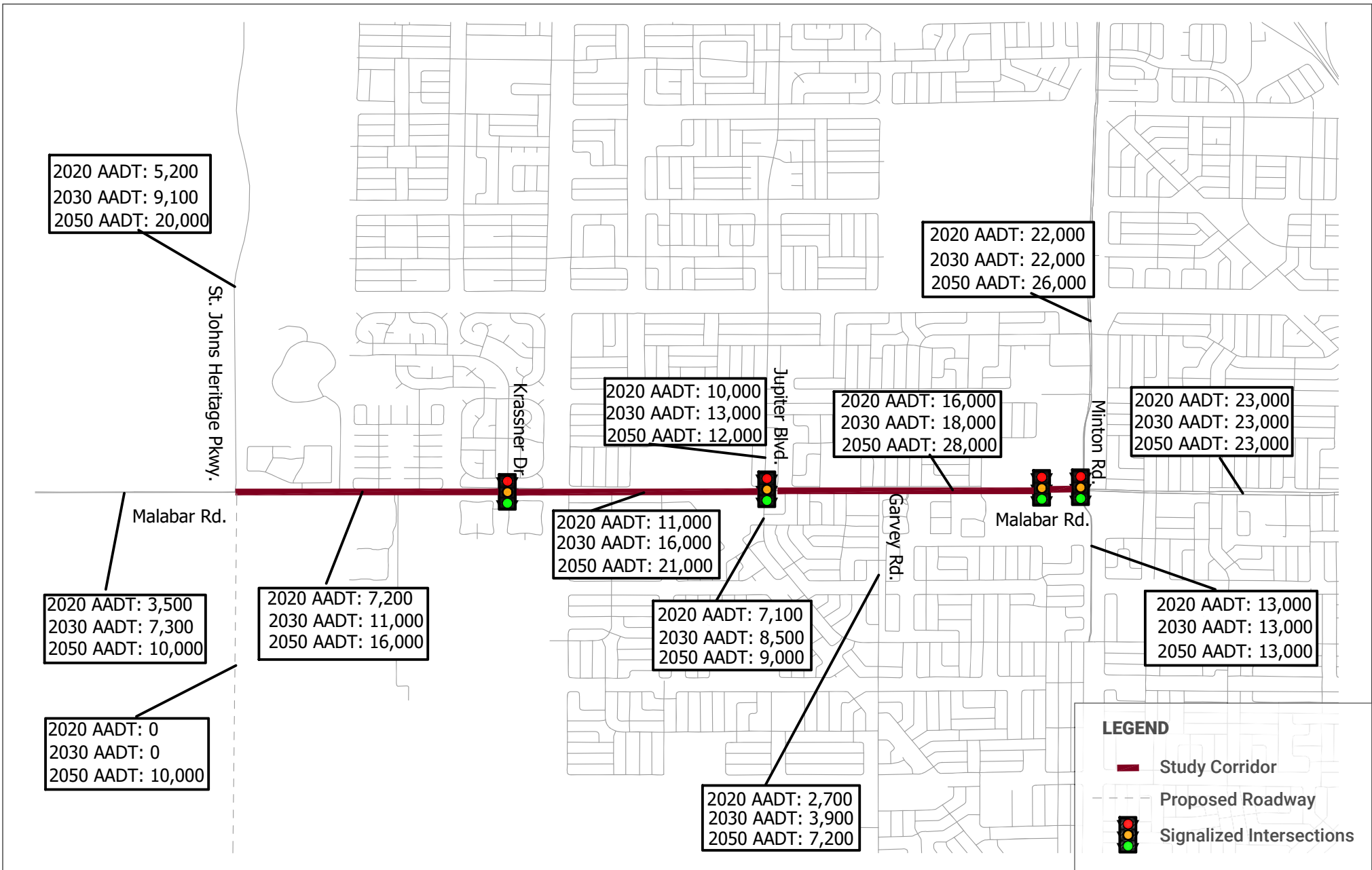
6.2.4.1. St. Johns Heritage Parkway Growth

The proposed southern leg of the St. Johns Heritage Parkway intersection with Malabar Road is anticipated to be constructed after the opening year (2030) of the proposed Malabar Road widening. Therefore, the 2030 forecast volumes will not include this proposed connection. The proposed southern leg is expected to be completed between 2030 and 2050 and therefore the 2050 forecast volumes include this proposed connection.

Table 24: Future Year Growth and AADT Projections

Roadway	2020 AADT	2020-2030 Annual Volume Growth	2020-2030 Annual Volume Growth Rate	2030 Projected AADT	2020-2050 Annual Volume Growth	2020-2050 Annual Volume Growth Rate	2050 Projected AADT
Malabar Road, West of St. Johns Heritage Pkwy.	3,500	377	10.77%	7,300	230	6.57%	10,000
Malabar Road, St. Johns Heritage Pkwy. to Krassner Dr./ Bending Branch Ln.	7,200	360	5.03%	11,000	299	4.18%	16,000
Malabar Road, Krassner Dr./ Bending Branch Ln. to Jupiter Blvd.	11,000	500	4.63%	16,000	354	3.28%	21,000
Malabar Road, Jupiter Blvd. to Minton Rd.	16,000	141	0.86%	18,000	391	2.37%	28,000
Malabar Road, East of Minton Rd.	23,000	0	0.00%	23,000	0	0.00%	23,000
St. Johns Heritage Parkway, north of Malabar Rd.	5,200	397	7.67%	9,100	508	9.82%	20,000
St. Johns Heritage Parkway, south of Malabar Rd.	0	0	-*	0	338	-*	10,000
Jupiter Boulevard, north of Malabar Rd.	10,000	315	3.07%	13,000	62	0.60%	12,000
Jupiter Boulevard, south of Malabar Rd.	7,100	139	1.96%	8,500	63	0.89%	9,000
Garvey Road, south of Malabar Rd.	2,700	115	4.24%	3,900	151	5.57%	7,200
Minton Road, north of Malabar Rd.	22,000	0	0.00%	22,000	118	0.54%	26,000
Minton Road, south of Malabar Rd.	13,000	9	0.07%	13,000	0	0.00%	13,000

*Roadway segment will not be built until after 2030. Growth from 2020-2030 or from 2020-2050 is not applicable.



Not to Scale

North

Malabar Road PD&E Study

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EXISTING AND FUTURE AVERAGE ANNUAL DAILY TRAFFIC

FIGURE 9

6.2.5. FUTURE INTERSECTION TURNING MOVEMENT VOLUMES DEVELOPMENT

Future intersection turning movement volumes for the 2030 and 2050 peak hours were developed following procedures described in NCHRP Report 255. This effort was completed for the four intersections with regional connectivity and expected to experience the highest level of growth.

1. Malabar Road & St. Johns Heritage Parkway.
2. Malabar Road & Jupiter Boulevard
3. Malabar Road & Garvey Road
4. Malabar Road & Minton Road

Spreadsheet tools were utilized that implement the NCHRP Report 255 turn movement forecasting procedures. This is consistent with acceptable tools described in the *FDOT 2019 Project Traffic Forecasting Handbook*. Forecast AADTs were converted to directional design hourly volumes (DDHVs) utilizing the identified K and D factors. The DDHVs and existing turning movement percentages were then used as inputs to generate the future turning movement volumes. This was done independently for the AM and PM peak hour. The inputs and outputs generated from the applied spreadsheet tools are provided in **Appendix O**.

At the other intersections along the corridor, existing turning movement volumes to and from minor side streets are not expected to experience growth due to existing built-out conditions. To grow the mainline volumes at each intersection, traffic volumes were “flowed” from the four intersections where the NCHRP tool had already been used to estimate turning movements. In this manner, turning movements were estimated for the remaining turning movements.

Through this procedure, future 2030 and 2050 turning movement volumes were determined.

6.2.5.1. St. Johns Heritage Parkway Intersection Growth

The spreadsheet tools utilized to implement the NCHRP Report 255 procedures require input of initial estimates of turning movement percentages for all movements (typically, these would be the existing turn movement counts). However, the intersection of Malabar Road & St. Johns Heritage Parkway changes from a three-leg intersection in the existing condition to a four-leg intersection in the future 2050 condition. Initial seed turning movement volumes were calculated based on the forecasted approach and departure volumes from the adjacent roadway segments. This procedure, which is documented in **Appendix O**, was used to determine the initial turning movement percentages. From there, the NCHRP tool was used to calculate future turning movement volumes. This is also documented in **Appendix O**. Additionally, the St. Johns Preserve development on the northwest corner of the intersection will contribute to future intersection volumes. This is accounted for in the forecasted approach and departure volumes.

6.2.5.2. Wisteria Avenue/Abilene Drive Intersection Growth

The intersection of Malabar Road & Wisteria Avenue/Abilene Drive is an additional intersection that will be studied in the future condition because of the Chaparral development being built on the south leg of the intersection. This development is expected to have more than 700 homes and 75 apartments when it is built out (per a 2019 Traffic Impact Study shown in **Appendix O**). Since this intersection was not originally included as a study intersection, standard trip generation rates were used to estimate the number of trips entering and exiting both the northern and southern leg of the intersection in the AM and PM peak hours. The number of homes served by the southern leg of the intersection was determined from the Chaparral Traffic Impact Study, while the number of homes served by the northern leg of the intersection was determined by counting homes in the quadrant adjacent to Wisteria Avenue. Then the directional factors determined for Malabar Road in this area were applied to these entering and exiting trips to estimate minor street turning movement volumes. Once minor street volumes were determined, mainline volumes on Malabar Road were added to the intersection based on the volumes forecasted at the four intersections described above. This process is described more fully in **Appendix O**.

6.2.5.3. Krassner Drive/Bending Branch Lane Intersection Growth

The intersection of Malabar Road & Krassner Drive/Bending Branch Lane is the location of the Brentwood Lakes development. The development is on the southern leg of the intersection (Bending Branch Lane). Currently 332 homes have been built in the development (based on a May 2020 field review), while another 97 homes remain to be built. Since the existing traffic volumes collected at this intersection do not account for the additional homes to be built at the intersection, trip generation was used to estimate the additional number of trips entering and exiting the southern leg of the intersection in the AM and PM peak hours. The number of homes served by the southern leg of the intersection was determined from the Brentwood Lakes site plan. Then the directional factors determined for Malabar Road in this area were applied to these entering and exiting trips to determine minor street turning movement volumes. Once minor street volumes were determined, mainline volumes on Malabar Road were added to the intersection based on the volumes forecasted at the four intersections described above. This process is described more fully in **Appendix O**.

6.2.5.4. Hurley Boulevard Intersection Growth

In the build condition, the construction of a fourth leg on the northern side of the intersection of Malabar Road & Hurley Boulevard is planned to redirect traffic from the adjacent intersection of Malabar Road & Hillock Avenue. To forecast volumes on this new northern leg of the intersection, the number of homes served by the northern leg of the intersection was determined by counting homes in the quadrant adjacent to Hurley Boulevard. Then the directional factors determined for Malabar Road in this area were applied to these entering and exiting trips to estimate minor street turning movement volumes. Nominal through movements on the north and south approaches were estimated as 10 percent of the left and right turn northbound and southbound movements. Once minor street volumes

were determined, mainline volumes on Malabar Road were added to the intersection based on the volumes forecasted at the four intersections described above. This process is described more fully in **Appendix O**.

6.2.5.5. Watoga Avenue/Avery Springs Intersection Growth

The intersection of Malabar Road & Watoga Avenue/Avery Springs is an additional intersection that will be studied in the future condition because of the Avery Springs development being built on the north leg of the intersection. This development is currently approved for the construction of 140 homes (per a site plan shown in **Appendix O**). Since this intersection was not originally included as a study intersection, standard trip generation rates were used to estimate the number of trips entering and exiting both the northern and southern leg of the intersection in the AM and PM peak hours. The number of homes served by the northern leg of the intersection was determined from the Avery Springs site plan, while the number of homes served by the southern leg of the intersection was determined by counting homes in the quadrant adjacent to Watoga Avenue. Then the directional factors determined for Malabar Road in this area were applied to these entering and exiting trips to estimate minor street turning movement volumes. Once minor street volumes were determined, mainline volumes on Malabar Road were added to the intersection based on the volumes forecasted at the four intersections described above. This process is described more fully in **Appendix O**.

6.2.5.6. Garvey Road Intersection Growth

The intersection of Malabar Road & Garvey Road is a three-leg intersection and requires a different NCHRP tool than the tool used for four-leg intersections. This three-leg tool requires DDHVs as an input like the four-leg tool, but it also requires an estimated future turning movement volume. Since a new supermarket is proposed for the southwest corner of this intersection, trip generation was used to estimate one of the northbound turning movement. The model growth rate was applied to the turning movements from the south leg, then the trips calculated for the supermarket were also added to the northbound movements with appropriate trip distribution. With these estimated future turning movements, the three-leg NCHRP tool was used to calculate the rest of the future turning movement volumes.

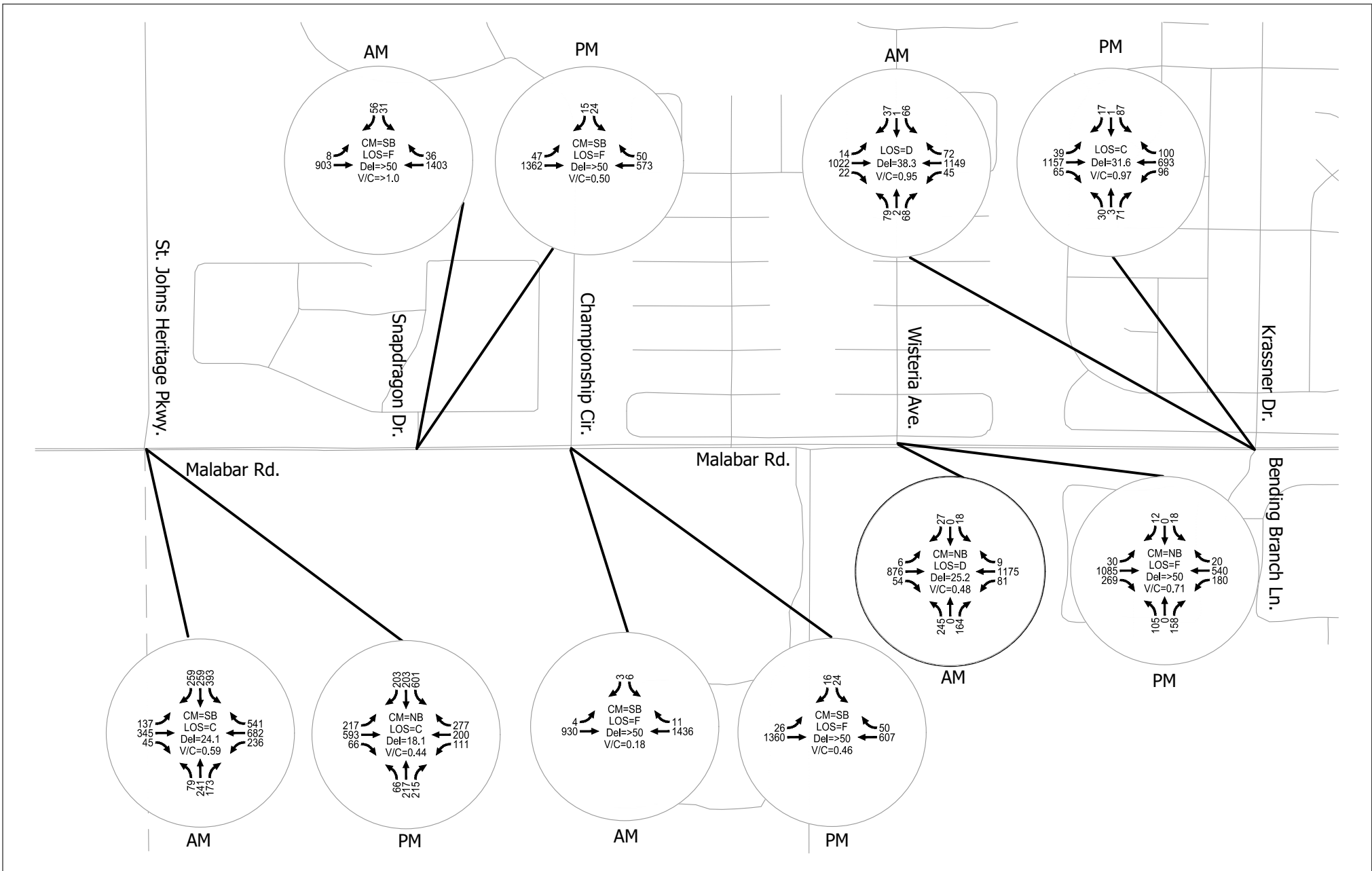
7. ALTERNATIVES ANALYSIS

7.1. Future (No-Build) Conditions

This section describes traffic operations for the opening (2030) and design (2050) analysis years. The analysis includes evaluation of intersections within the study area, as well as individual segments along Malabar Road, for the no-build alternative.

7.1.1. NO-BUILD VOLUMES

Following the traffic forecasting method described earlier, no-build turning movement volumes were developed for the opening (2030) and design (2050) analysis years. The 2050 no-build turning movement volumes are shown in **Figure 10**. The 2030 no-build turning movement volumes are located in **Appendix P**.



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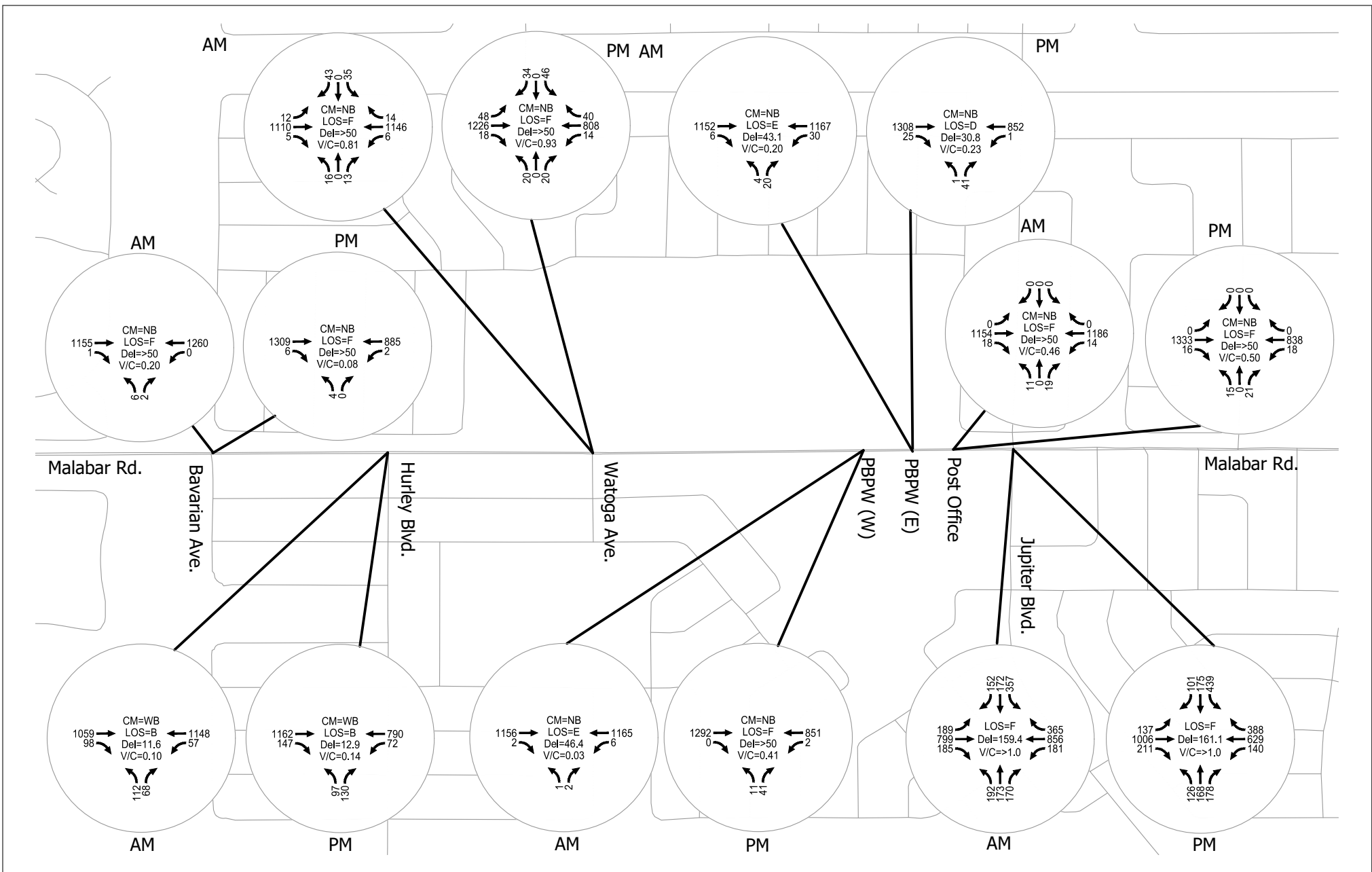
North

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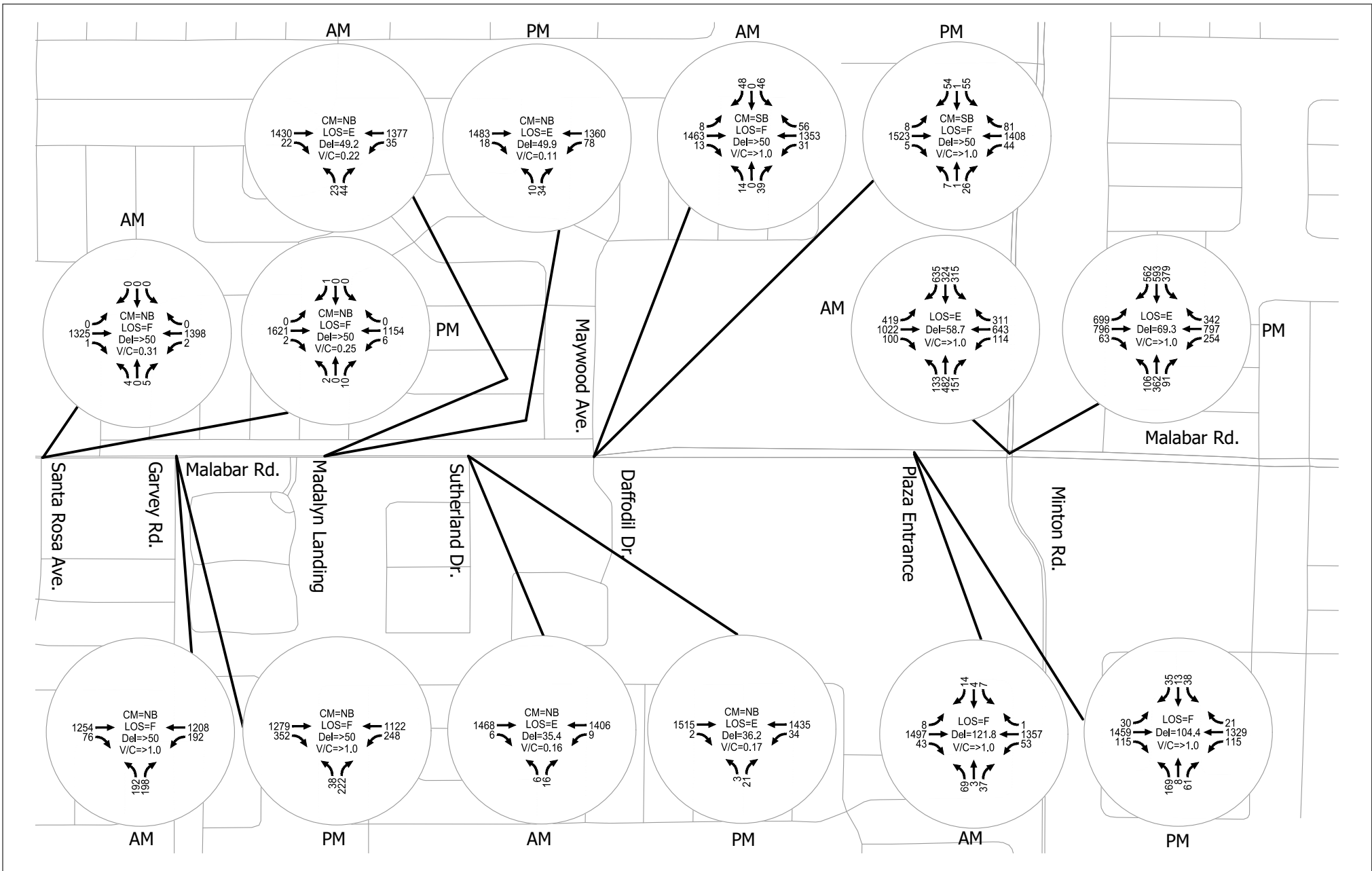
2050 NO-BUILD TRAFFIC VOLUMES AND OPERATIONAL PERFORMANCE

FIGURE 10A



Not to Scale

North



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North

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2050 NO-BUILD TRAFFIC VOLUMES AND OPERATIONAL PERFORMANCE

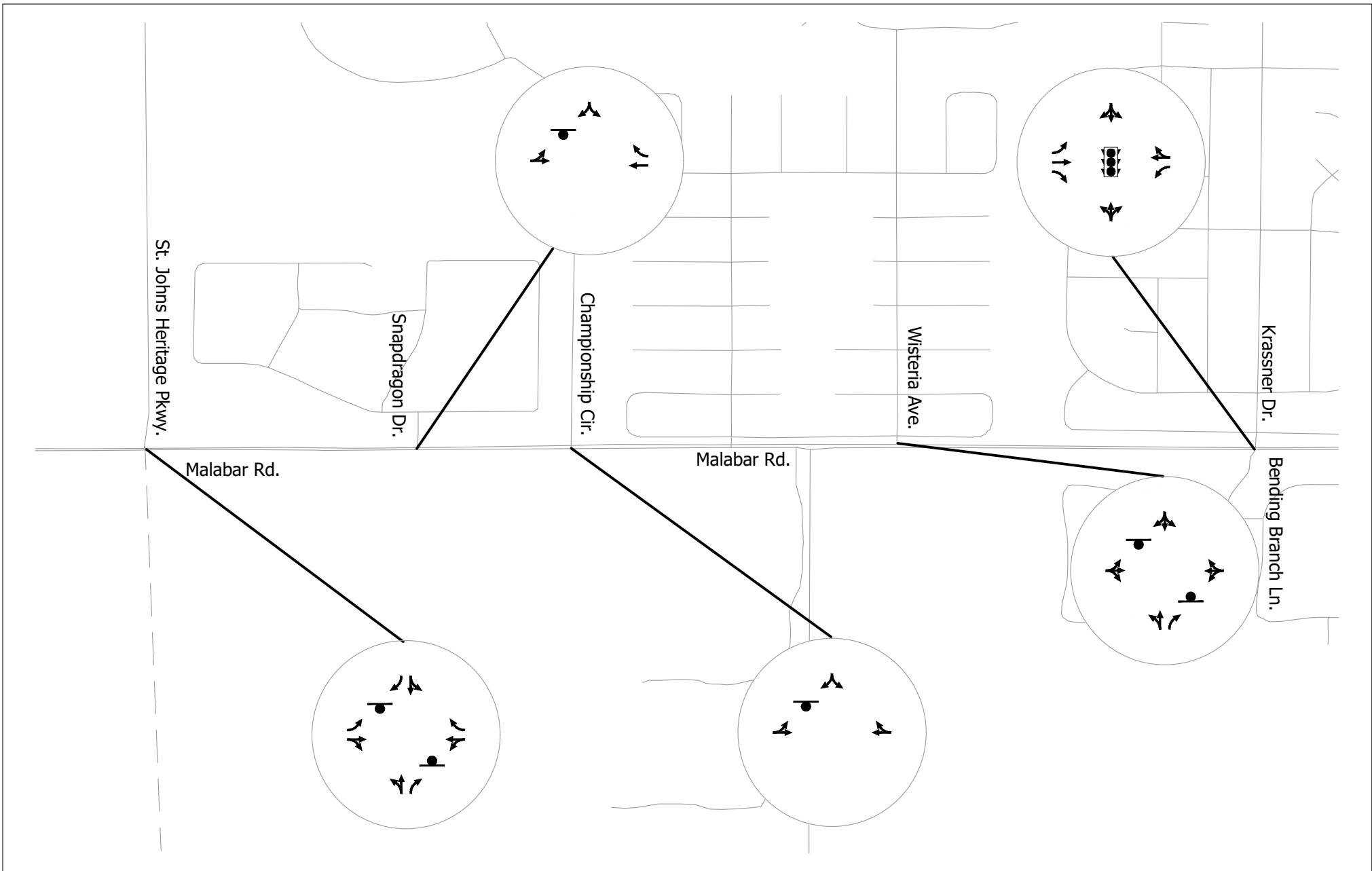
FIGURE 10C

7.1.2. NO-BUILD INTERSECTION IMPROVEMENTS

Several geometric changes are underway or programmed between the existing condition and the no-build conditions in the future years. Proposed improvements at St. Johns Heritage Parkway, the addition of a new intersection for the Chaparral development at Wisteria Avenue/Abilene Drive, and the addition of a new intersection for the Avery Springs development at Watoga Avenue were included in the no-build operational analyses. The no-build lane configurations and traffic control are illustrated in **Figure 11**.

. Key changes between the existing and future no-build lane configurations are summarized below.

- St. Johns Heritage Parkway
 - The intersection of Malabar Road & St. Johns Heritage Parkway changes from a three-leg intersection in the existing condition to a four-leg intersection in the future 2050 condition.
- Wisteria Avenue/Abilene Drive
 - The intersection of Malabar Road & Wisteria Avenue/Abilene Drive is an additional intersection to be analyzed in the future condition because of the Chaparral development being built on the south leg of the intersection.
 - This development is expected to have more than 700 homes and 75 apartments when it is built out.
- Watoga Avenue/Avery Springs
 - The intersection of Malabar Road & Watoga Avenue/Avery Springs is an additional intersection to be analyzed in the future condition because of the Avery Springs development being built on the north leg of the intersection.
 - This development is approved for the construction of 140 homes.



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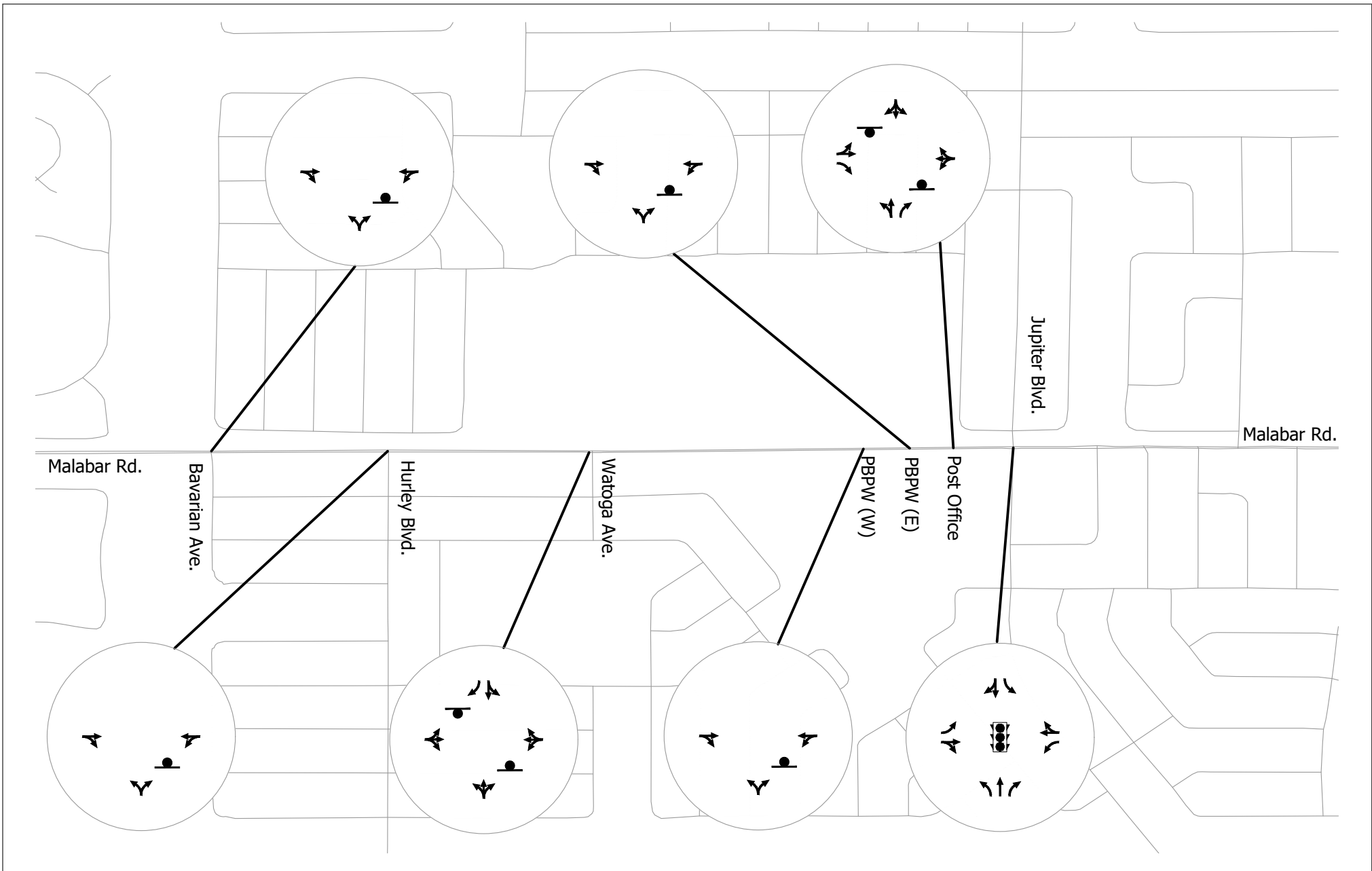
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2050 NO-BUILD LANE CONFIGURATIONS

FIGURE 11A



Not to Scale



North

Malabar Road PD&E Study

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2050 NO-BUILD LANE CONFIGURATIONS

FIGURE 11B



Not to Scale



North

Malabar Road PD&E Study

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2050 NO-BUILD LANE CONFIGURATIONS

FIGURE 11C

7.1.3. NO-BUILD INTERSECTION OPERATIONS

Study intersections were analyzed using HCM 6th Edition methodologies, implemented in Synchro 10. In the no-build analysis, signal phasing, signal cycle lengths and signal coordination values were carried over from existing signals to no-build signals. The splits at these intersections were then optimized to reflect periodic adjustments as traffic flows naturally change.

- Malabar Road & Krassner Drive/Bending Branch Lane – Coordinated (along Malabar Road)
- Malabar Road & Jupiter Boulevard – Coordinated (along Malabar Road)
- Malabar Road & Plaza Entrance – Coordinated (along Malabar Road)
- Malabar Road & Minton Road – Coordinated (along Malabar Road)

Detailed LOS reports for the study intersections are provided in **Appendix Q**. In addition to showing no-build traffic volumes, **Figure 10** also summarizes the operations of the 2050 peak hours, which includes the movements anticipated to operate at LOS F. The following briefly summarizes the future no-build peak hour intersection operational results, focusing on individual movements that are performing at LOS F or with a v/c ratio of 1.0 or higher. It should be noted that the LOS F and v/c over 1.0 thresholds at these intersections indicate significant congestion which potentially leads to unsafe driver behavior. The build alternatives to be considered on this project were developed to address these potential congestion and safety issues to better satisfy the Purpose and Need. A summary of intersection operations is shown below and in **Table 25**.

7.1.3.1. Signalized Intersections

1. Malabar Road & Jupiter Boulevard
 - The overall intersection is expected to operate at LOS F during both 2050 peak hours.
 - Several movements are anticipated to operate over capacity (v/c ratio greater than 1.0):
 - i. Eastbound shared through-right-turn
 1. v/c ratio of 1.09 – 2050 AM peak hour
 2. v/c ratio of 1.26 – 2050 PM peak hour
 - ii. Westbound left-turn
 1. v/c ratio of 1.11 – 2050 AM peak hour
 2. v/c ratio of 1.16 – 2050 PM peak hour
 - iii. Westbound shared through-right-turn
 1. v/c ratio of 1.32 – 2050 AM peak hour
 2. v/c ratio of 1.23 – 2050 PM peak hour
 - iv. Southbound left-turn
 1. v/c ratio of 1.34 – 2050 AM peak hour
 2. v/c ratio of 1.54 – 2050 PM peak hour

2. Malabar Road & Plaza Entrance
 - The overall intersection is expected to operate at LOS F during both 2050 peak hours.
 - Eastbound through movement is anticipated to operate over capacity:
 1. v/c ratio of 1.45 – 2050 AM peak hour
 2. v/c ratio of 1.40 – 2050 PM peak hour
3. Malabar Road & Minton Road
 - The overall intersection is expected to operate at LOS E during both 2050 peak hours.
 - Eastbound left-turn movement is anticipated to operate over capacity:
 1. v/c ratio of 1.08 – 2050 PM peak hour
 - Southbound left-turn movement is anticipated to operate over capacity:
 1. v/c ratio of 1.03 – 2050 AM peak hour
 2. v/c ratio of 1.12 – 2050 PM peak hour

7.1.3.2. Unsignalized Intersections

LOS F is experienced at the following unsignalized intersections for at least one movement during the 2050 peak hours.

1. Malabar Road & St. Johns Heritage Parkway
2. Malabar Road & Snapdragon Drive
3. Malabar Road & Championship Circle
4. Malabar Road & Wisteria Avenue/Abilene Drive
5. Malabar Road & Bavarian Avenue
6. Malabar Road & Hurley Boulevard
7. Malabar Road & Watoga Avenue/Avery Springs
8. Malabar Rd. & Palm Bay Public Works (W)
9. Malabar Road & Post Office
10. Malabar Road & Santa Rosa Avenue
11. Malabar Road & Garvey Road
12. Malabar Road & Maywood Avenue/Daffodil Drive

Identification of alternatives to address these intersections (including traffic control changes, turn lane additions, and signal phasing modifications) will be discussed in the **Build Intersection Improvements** section of this report

Table 25: No Build (2050) Intersection LOS

Intersection	Control Type	2050 AM LOS	2050 PM LOS
Malabar Rd. & St. Johns Heritage Pkwy*	Two-Way Stop Control	F	F
Malabar Rd. & Snapdragon Dr. *	Two-Way Stop Control	F	F
Malabar Rd. & Championship Cir. *	Two-Way Stop Control	F	F
Malabar Rd. & Wisteria Ave./Abilene Dr. *	Two-Way Stop Control	F	F
Malabar Rd. & Krassner Dr./ Bending Branch Ln. **	Signal	D	C
Malabar Rd. & Bavarian Ave. *	Two-Way Stop Control	F	F
Malabar Rd. & Hurley Blvd. *	Two-Way Stop Control	F	F
Malabar Rd. & Watoga Ave. *	Two-Way Stop Control	F	F
Malabar Rd. & Palm Bay Public Works (W) *	Two-Way Stop Control	E	F
Malabar Rd. & Palm Bay Public Works (E) *	Two-Way Stop Control	E	D
Malabar Rd. & Post Office*	Two-Way Stop Control	F	F
Malabar Rd. & Jupiter Blvd. **	Signal	F	F
Malabar Rd. & Santa Rosa Ave. *	Two-Way Stop Control	F	F
Malabar Rd. & Garvey Rd. *	Two-Way Stop Control	F	F
Malabar Rd. & Madalyn Landing*	Two-Way Stop Control	E	E
Malabar Rd. & Sutherland Dr. *	Two-Way Stop Control	E	E
Malabar Rd. & Maywood Ave./Daffodil Dr. *	Two-Way Stop Control	F	F
Malabar Rd. & Plaza Entrance**	Signal	F	F
Malabar Rd. & Minton Rd. **	Signal	E	E

*LOS shown is for worst movement

**LOS shown is for entire intersection

7.1.4. NO-BUILD SEGMENT OPERATIONS

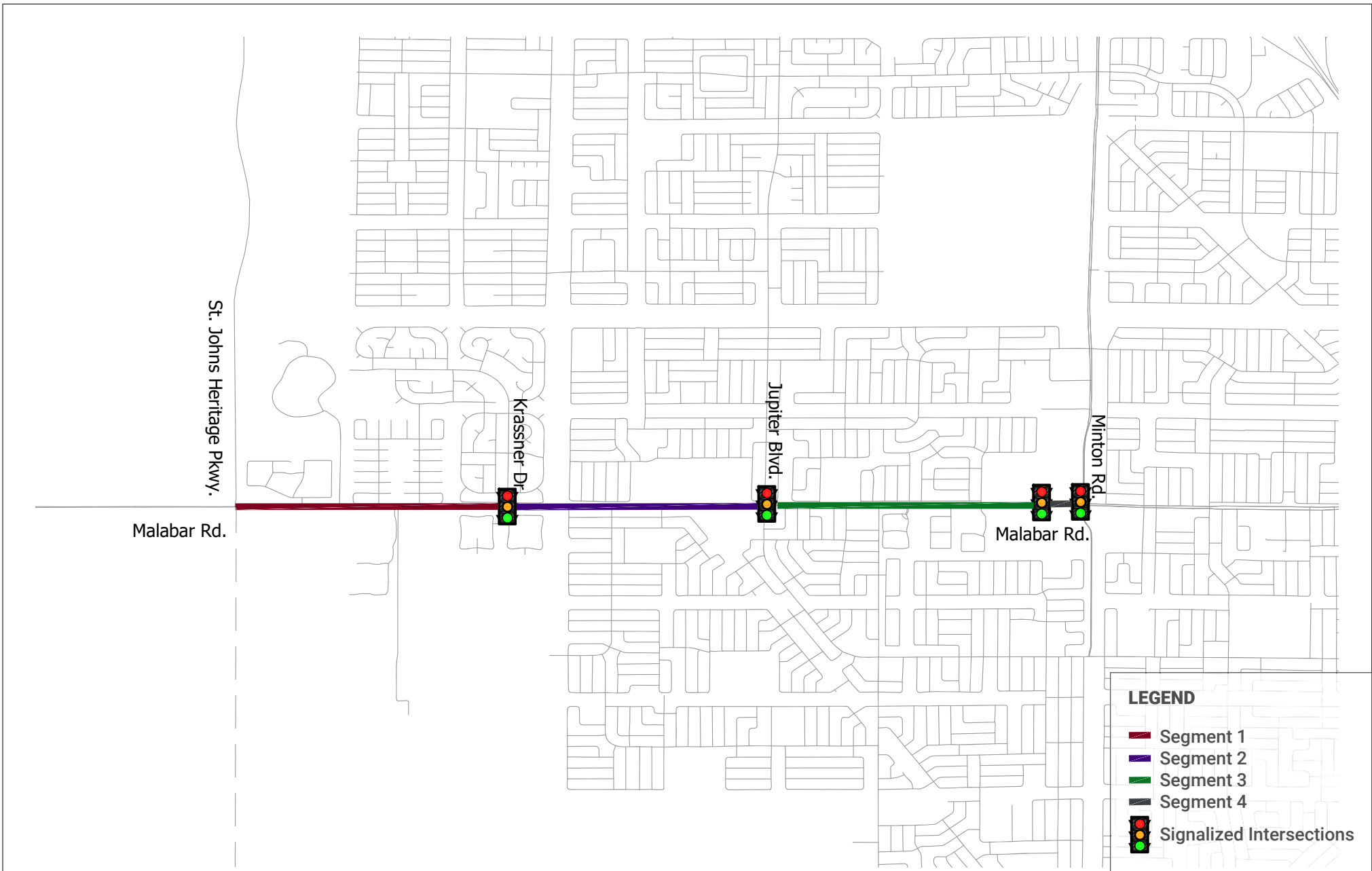
Segment analyses were performed using the *HCM 6th Edition* methodologies for Two-Lane Highways and Urban Street methodologies, consistent to the methodologies outlined previously in the existing conditions. The segments used for the no-build segment operational analyses are illustrated in **Figure 12**. The segmentation and methodologies for the no build-analysis is shown in **Table 26**.

Table 26: Future No-Build Conditions Evaluation Segments

Segment #	Segment Limits	Flow Type	Analysis Method
1	Malabar Road, St. Johns Heritage Pkwy. to Krassner Dr./Bending Branch Ln.	Interrupted (EB) / Uninterrupted (WB)	Synchro 10/HCM6 (Urban Street)/HCS 7 (Two-Lane Highway)
2	Malabar Road, Krassner Dr./Bending Branch Ln. to Jupiter Blvd.	Interrupted	Synchro 10/ HCM6 (Urban Street)
3	Malabar Road, Jupiter Blvd. to Plaza Entrance.	Interrupted	Synchro 10/ HCM6 (Urban Street)
4	Malabar Road, Plaza Entrance to Minton Rd.	Interrupted	Synchro 10/ HCM6 (Urban Street)

The 2050 results of this analysis are shown in **Table 27** and **Table 28**. The detailed outputs and 2030 analysis are provided in **Appendix R**.

It is important to note that these no-build segment operations indicate that several segments of Malabar Road are projected to function unacceptably as a two-lane roadway (operating worse than LOS C). In addition, the deficient no-build intersection operations along the study corridor emphasizes the need for significant safety and capacity enhancements that can be provided through widening the study corridor to four-lanes and implementing an access management plan.



LEGEND

- █ Segment 1
- █ Segment 2
- █ Segment 3
- █ Segment 4
- Signalized Intersections

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NO-BUILD CONDITION EVALUATION SEGMENTS

FIGURE 12

Table 27: 2050 No-Build Segment LOS – (Uninterrupted Flow)

Segment #	Segment Limits	Analysis Direction	AM Peak Hour				PM Peak Hour			
			BFFS (mph)	ATS (mph)	PFFS* (%)	LOS	BFFS (mph)	ATS (mph)	PFFS* (%)	LOS
1	Malabar Road, Krassner Drive/Bending Branch Lane to St. Johns Heritage Parkway	Westbound	50.6	25.1	93.4	E	50.6	28.1	74.7	E

Note: BFFS is Base Free Flow Speed, ATS is Average Travel Speed, and PFFS is Percent Followers

Table 28: 2050 No-Build Segment LOS – Both Directions (Interrupted Flow)

Segment #	Segment Limits	Analysis Direction	AM Peak Hour				PM Peak Hour			
			BFFS (mph)	Synchro Travel Speed (mph)	P _{BFFS} * (%)	LOS	BFFS (mph)	Synchro Travel Speed (mph)	P _{BFFS} * (%)	LOS
1	Malabar Road, St. Johns Heritage Pkwy. to Krassner Dr./Bending Branch Ln.	Eastbound	46.4	34.7	74.8	B	46.4	34.2	73.8	B
2	Malabar Road, Krassner Dr./Bending Branch Ln. to Jupiter Blvd.	Eastbound	46.1	21.9	47.5	D	46.1	13.1	28.4	F
3	Malabar Road, Jupiter Blvd. to Plaza Entrance	Eastbound	45.0	14.8	32.4	E	45.0	15.0	32.9	E
4	Malabar Road, Plaza Entrance to Minton Rd.	Eastbound	36.8	11.8	32.1	E**	36.8	8.2	22.3	F**
Facility	Malabar Road, St. Johns Heritage Pkwy. to Minton Rd.	Eastbound	-	-	46.8	D	-	-	39.4	E
4	Malabar Road, Minton Road to Plaza Entrance	Westbound	38.1	7.5	19.7	F**	38.1	5.9	15.5	F**
3	Malabar Road, Plaza Entrance to Jupiter Boulevard	Westbound	45.0	22.9	50.2	C	45.2	18.1	39.6	E
2	Malabar Road, Jupiter Boulevard to Krassner Drive/Bending Branch Lane	Westbound	46.1	17.2	37.3	E	46.1	24.8	53.8	C
Facility	Malabar Road, Minton Rd. to Krassner Dr./Bending Branch Ln.	Westbound	-	-	36.0	E	-	-	36.4	E

*Note: P_{BFFS} is the Percent of Base Free Flow Speed

** This is likely due to the relatively short length of segment between signalized intersections and the relatively high control delay of the adjacent signalized intersections.

7.1.5. FUTURE NO-BUILD CONDITIONS OPERATIONAL SUMMARY

Below is a summary of the no-build operations evaluated for the future AM and PM peak hour traffic volume conditions.

7.1.5.1. Future No-Build Conditions Intersection Operations

Future no-build intersection LOS analyses were conducted using *Highway Capacity Manual 6th Edition (HCM6)* methodologies as implemented by Synchro 10. The following intersections experienced turning movements that are performing at LOS F and/or with a v/c ratio of 1.0 or higher:

7.1.5.1.1 Signalized Intersections

1. Malabar Road & Jupiter Boulevard
2. Malabar Road & Plaza Entrance
3. Malabar Road & Minton Road

7.1.5.1.2 Unsignalized Intersections

1. Malabar Road & St. Johns Heritage Parkway
2. Malabar Road & Snapdragon Drive
3. Malabar Road & Championship Circle
4. Malabar Road & Wisteria Avenue/Abilene Drive
5. Malabar Road & Bavarian Avenue
6. Malabar Road & Hurley Boulevard
7. Malabar Road & Watoga Avenue/Avery Springs
8. Malabar Road & Palm Bay Public Works (W)
9. Malabar Road & Post Office
10. Malabar Road & Santa Rosa Avenue
11. Malabar Road & Garvey Road
12. Malabar Road & Maywood Avenue/Daffodil Drive

7.1.5.2. No-Build Conditions Segment Operations

Future no-build segment operation analyzes were conducted using *Highway Capacity Manual 6th Edition (HCM6)* methodologies. The western, rural portion of the corridor was analyzed for uninterrupted flow traffic conditions in the HCS software as two-lane highway segments. The eastern, urban portion of the corridor was analyzed for interrupted flow traffic conditions using the *HCM6* Urban Street methodology.

As shown in **Table 28**, the segment between the intersections of Malabar Road & Plaza Entrance and Malabar Road & Minton Road operates with an LOS of F. This is likely due to the relatively short length

of segment between signalized intersections and the relatively high control delay of the adjacent signalized intersections. Because of this, intersection operating conditions are a better indicator of adjacent segment operations.

Future no-build segment operations indicate that several segments of Malabar Road are projected to function unacceptably as a two-lane roadway (operating worse than the City of Palm Bay's LOS C standard), which emphasizes the need for widening the study corridor from two to four-lanes and implementing an access management plan.

7.2. Future (Build) Conditions

One alternative was developed as part of this study to provide safety and operational benefits along the corridor: a two to four-lane widening alternative. While Alternatives A and B were presented at the Alternative Public Workshop both were four-lane widening alternatives and varied in right-of-way requirements not impacting the operations analysis. This section describes traffic operations for the opening (2030) and design (2050) analysis years of the build alternative. The analysis includes evaluation of individual segments along Malabar Road, as well as intersections within the study area, for the build alternative.

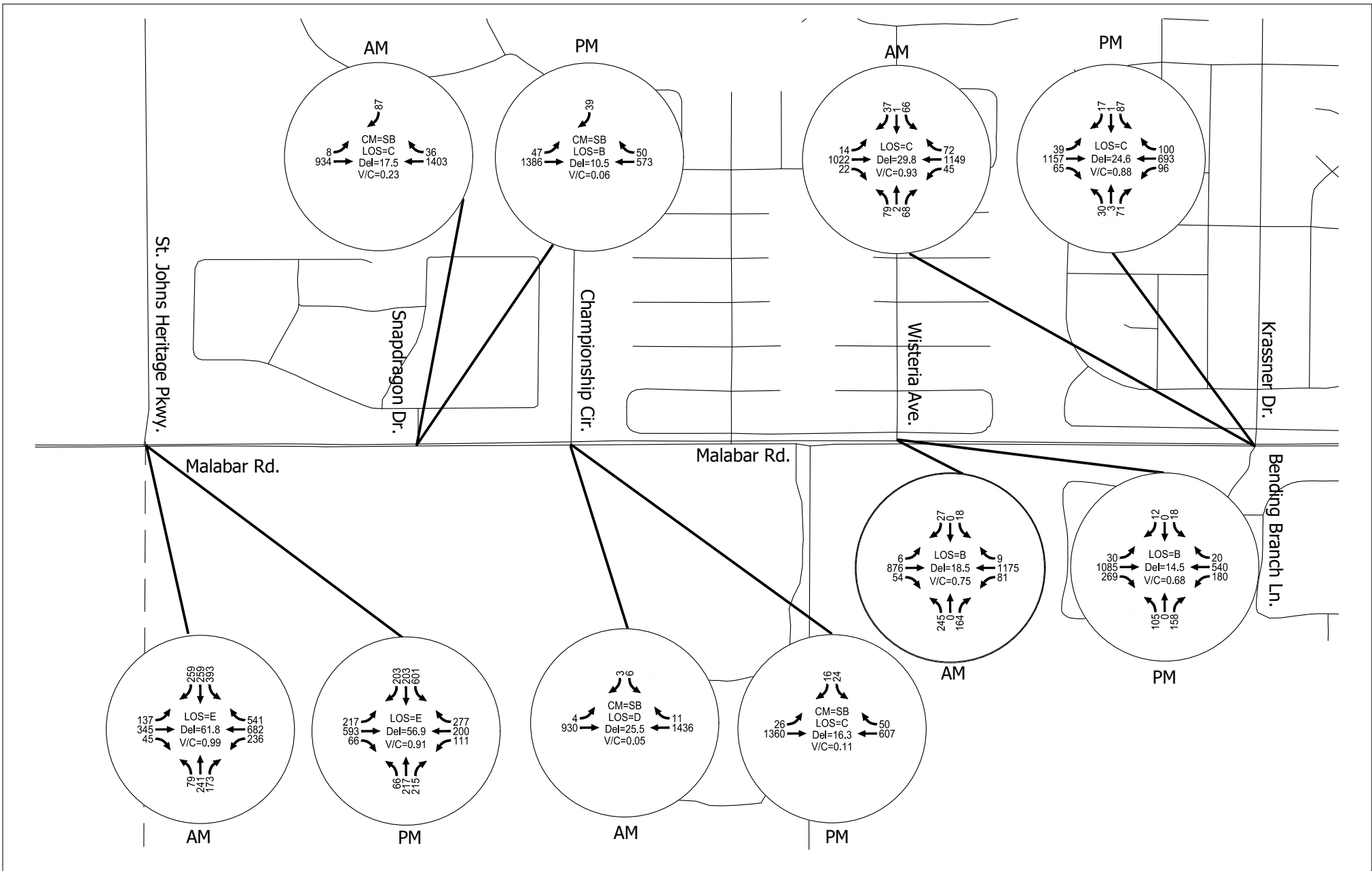
7.2.1. DESCRIPTION OF BUILD ALTERNATIVES

The primary build alternative is a four-lane widening of Malabar Road along the entire study corridor to increase the overall roadway capacity to meet the system needs through 2050. Under this alternative, a signalized intersection or a roundabout will be considered at each major intersection which is either currently signalized or may warrant future signalization. The exception to this were the Plaza Entrance and the Minton Road intersections due to right-of-way constraints.

Widening to four lanes provides opportunities to improve congestion and safety by implementing median turn lanes and access management strategies throughout the corridor. This four-lane widening not only provides better segment operational and safety performance, but also better intersection performance as there are more through lanes on Malabar Road for vehicles to travel through the intersection.

7.2.2. BUILD VOLUMES

Following the traffic forecasting method described earlier, build turning movement volumes were developed for the 2030 and 2050 time periods. The build turning movement volumes were developed using the no-build turning movement volumes as a base and then adjusted according to the build alternative for the corridor (described in **Appendix S**). The 2050 build turning movement volumes are shown in **Figure 13**. The 2030 build turning movement volumes are located in **Appendix T**.



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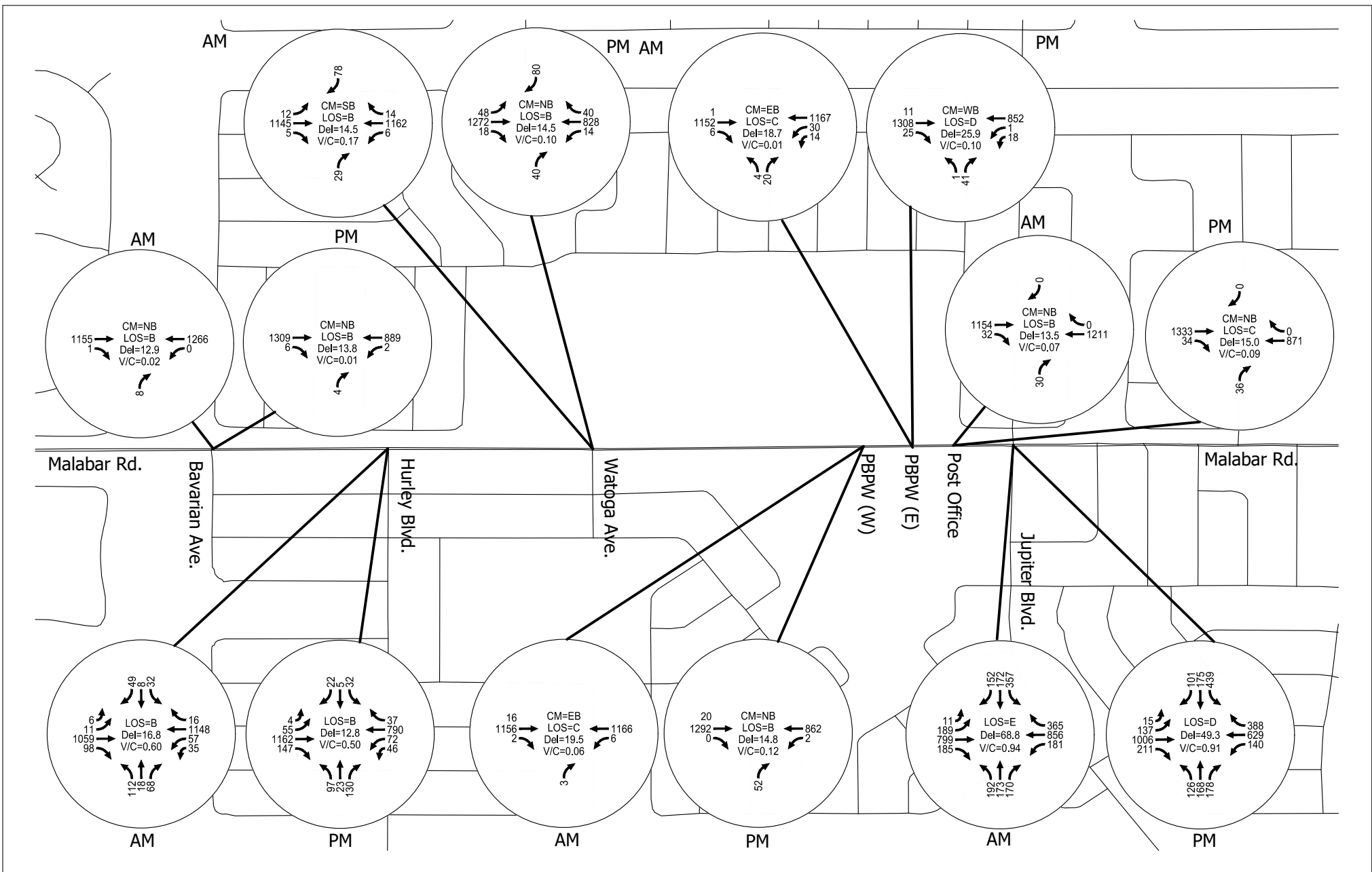
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2050 BUILD TRAFFIC VOLUMES AND OPERATIONAL PERFORMANCE

FIGURE 13A



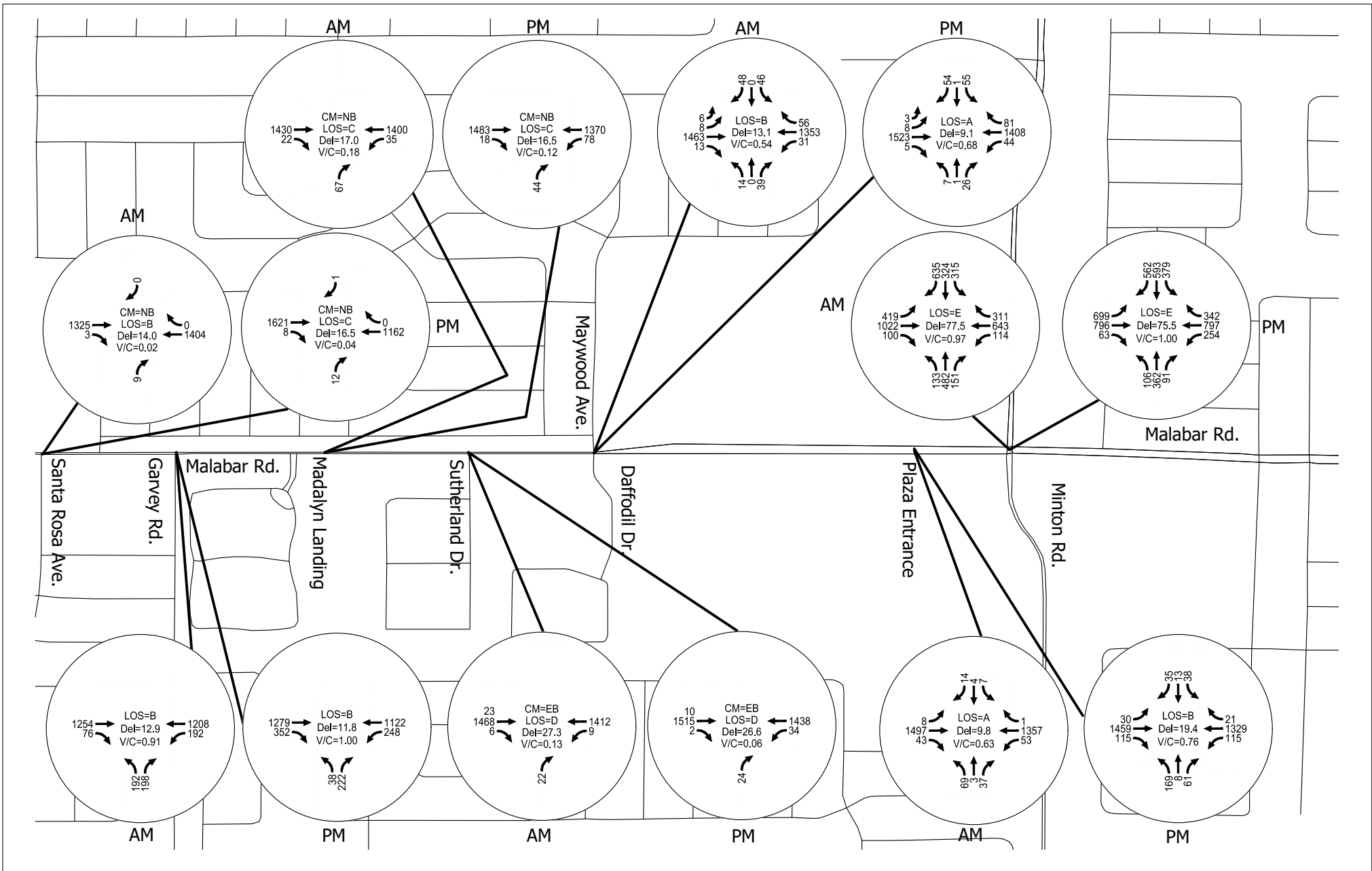
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2050 BUILD TRAFFIC VOLUMES AND OPERATIONAL PERFORMANCE

FIGURE 13B



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 North

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2050 BUILD TRAFFIC VOLUMES AND OPERATIONAL PERFORMANCE

FIGURE 13C

7.2.2.1. Preliminary Signal Warrant Screening

After a review of the 2050 turning movement volumes, a preliminary signal warrant screening was conducted at certain intersections where the minor street volumes indicated that intersection operations may not be remedied by four-lane widening alone. The preliminary signal warrant screening was prepared only for the purposes of identifying whether signalized control may be an option for consideration in the future analyses because signalization of intersections could impact the mainline operations of Malabar Road. This preliminary signal warrant screening shall not be construed as a replacement of a formal signal warrant study consistent with Chapter 4 of the MUTCD.

The preliminary signal warrant screening was prepared at intersections that were unsignalized in the existing condition and identified as potentially deficient if they remained in the unsignalized condition. These intersections include:

- Malabar Road & St. Johns Heritage Parkway
- Malabar Road & Wisteria Avenue/Abilene Drive
- Malabar Road & Hurley Boulevard
- Malabar Road & Garvey Road
- Malabar Road & Maywood Avenue/Daffodil Drive

The projected 2050 turning movement volumes were compared against the eight-hour and four-hour signal warrant volume thresholds (Warrants 1 and 2). Based on the analysis results, it is anticipated these intersections all may meet signal warrant criteria in 2050. Accordingly, these five intersections were analyzed as signals and roundabouts in the build configuration.

These intersections should be monitored periodically to determine when signalization is appropriate. Detailed reports of the preliminary signal warrant screening at the study intersections are provided in **Appendix V**.

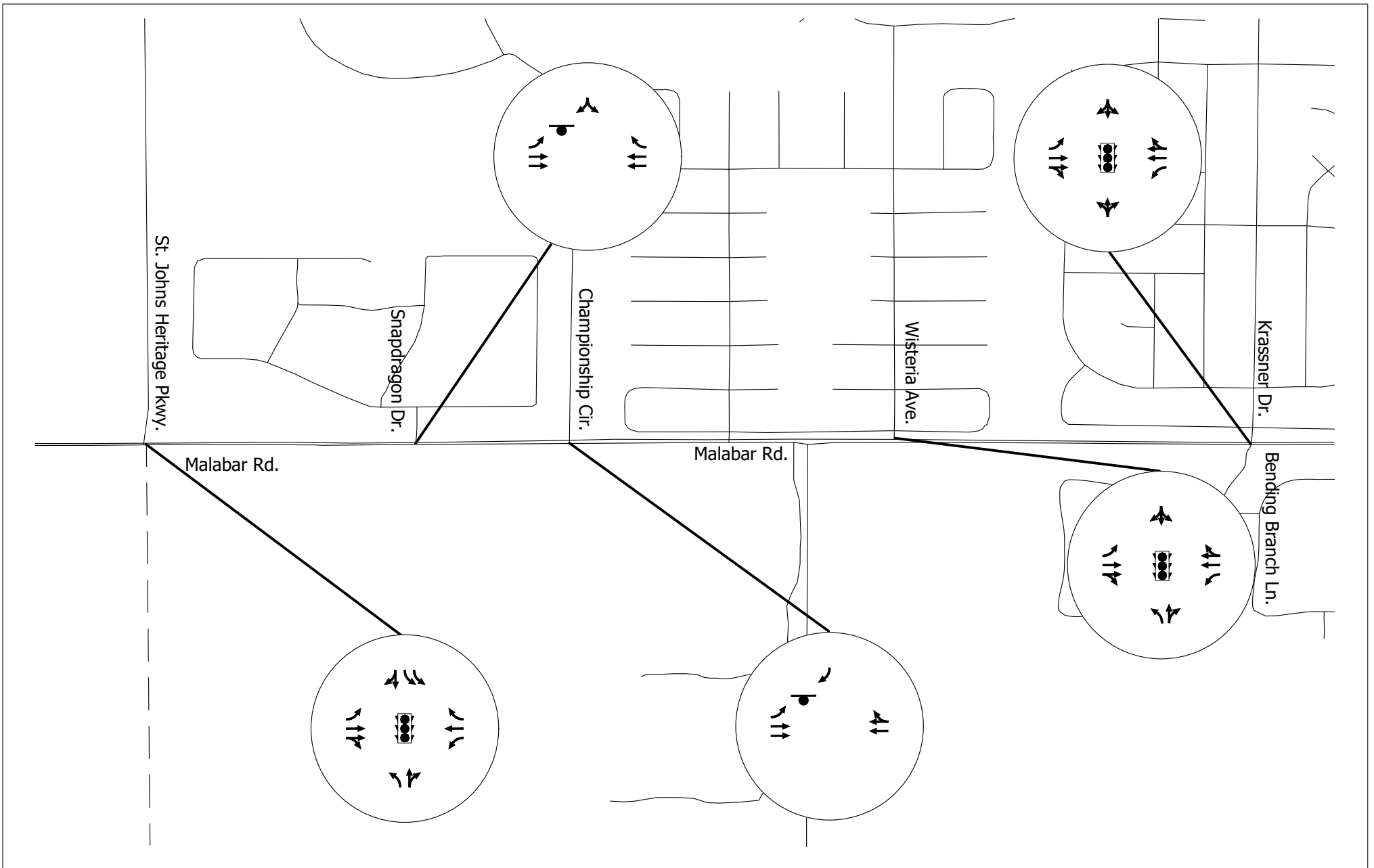
7.2.3. BUILD INTERSECTION IMPROVEMENTS

The build condition was assumed to have all the improvements that were considered in the no-build condition. In addition, the four-lane widening (adding two through lanes) and access management geometric changes were made to improve operations in the build condition. The build lane configurations and traffic control, and intersection operations are illustrated in **Figure 14**. A summary of notable geometric changes from the no-build condition are described below.

- Malabar Road & St. Johns Heritage Parkway
 - After the preliminary signal warrant screening discussed above was conducted and satisfied, the intersection was signalized in the build condition.
 - Due to operational performance, it was determined that the westbound approach requires an exclusive left turn lane.

- Due to operational performance, it was determined that the northbound left turn movement required an exclusive left turn lane and southbound left turn movement require a second exclusive left turn lane.
- Malabar Road & Snapdragon Drive
 - Due to access management considerations, it was determined that the eastbound approach requires an exclusive left turn lane.
- Malabar Road & Championship Circle
 - Due to access management considerations, it was determined that the eastbound approach requires an exclusive left turn lane.
- Malabar Road & Wisteria Avenue/Abilene Drive
 - After the preliminary signal warrant screening discussed above was conducted and satisfied, the intersection was signalized in the build condition.
 - Due to access management considerations, it was determined that the eastbound and westbound approaches require an exclusive left turn lane.
- Malabar Road & Bavarian Avenue
 - Due to access management considerations, it was determined that the westbound approach requires an exclusive left turn lane.
- Malabar Road & Hurley Boulevard
 - After the preliminary signal warrant screening discussed above was conducted and satisfied, the intersection was signalized in the build condition.
 - Due to access management considerations, it was determined that the westbound approach requires an exclusive left turn lane.
- Malabar Road & Watoga Avenue
 - Due to access management considerations, it was determined that the eastbound and westbound approach requires an exclusive left turn lane.
- Malabar Road & Palm Bay Public Works (West Driveway)
 - Due to access management considerations, it was determined that the westbound approach requires an exclusive left turn lane.
- Malabar Road & Palm Bay Public Works (East Driveway)
 - Due to access management considerations, it was determined that the westbound approach requires an exclusive left turn lane.
- Malabar Road & Jupiter Boulevard
 - Due to operational performance, it was determined that the southbound left turn movement requires a second exclusive left turn lane
- Malabar Road & Garvey Road
 - After the preliminary signal warrant screening discussed above was conducted and satisfied, the intersection was signalized in the build condition.
 - Due to access management considerations, it was determined that the northbound approach requires exclusive left turn and right turn lanes.

- Malabar Road & Maywood Avenue/Daffodil Drive
 - After the preliminary signal warrant screening discussed above was conducted and satisfied, the intersection was signalized in the build condition.



Not to Scale



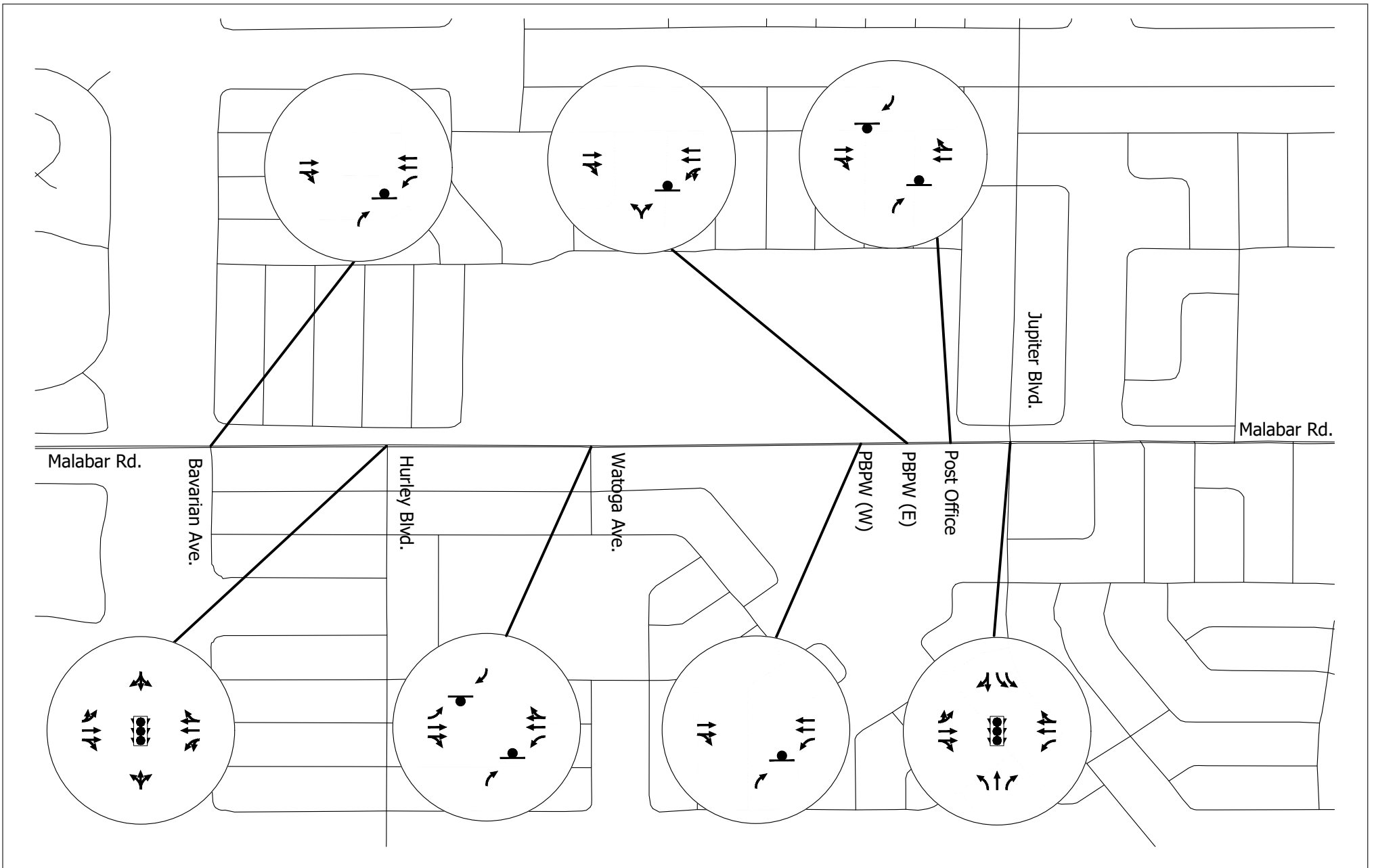
North

Malabar Road PD&E Study

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2050 BUILD LANE CONFIGURATIONS

FIGURE 14A



Not to Scale



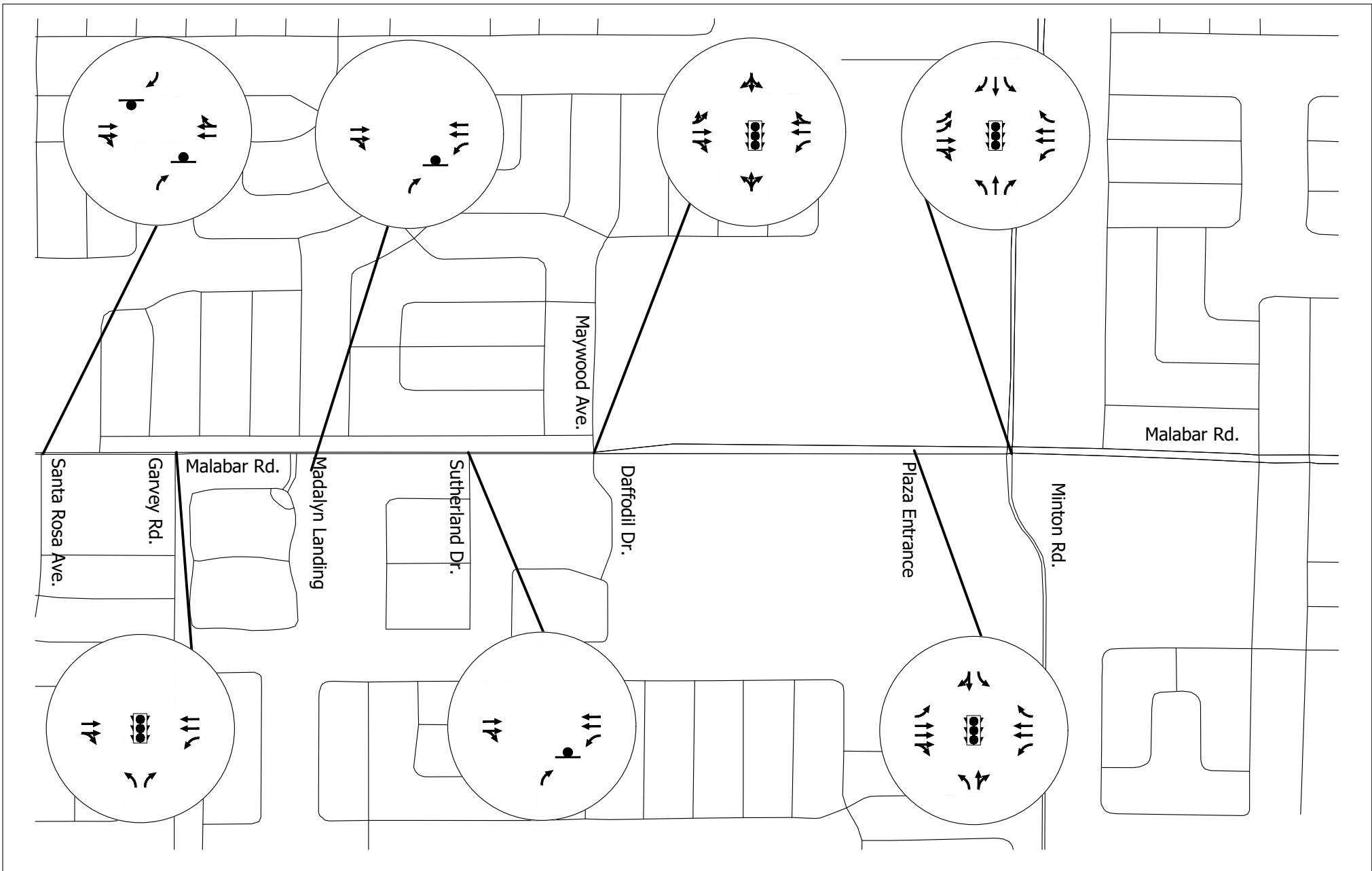
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2050 BUILD LANE CONFIGURATIONS

FIGURE 14B



Not to Scale



North

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2050 BUILD LANE CONFIGURATIONS

FIGURE 14C

7.2.4. BUILD INTERSECTION OPERATIONS

In the build analysis, signal phasing, signal cycle lengths and signal coordination values were carried over from the existing or no build condition and used as a starting point. Signal coordination was assumed for the length of the study corridor and cycle lengths and splits were adjusted to provide the best operational performance at each of signalized intersections listed below.

- Malabar Road & St. Johns Heritage Parkway
- Malabar Road & Wisteria Avenue/Abilene Drive
- Malabar Road & Krassner Drive/Bending Branch Lane
- Malabar Road & Hurley Boulevard
- Malabar Road & Jupiter Boulevard
- Malabar Road & Garvey Road
- Malabar Road & Maywood Avenue/Daffodil Drive
- Malabar Road & Plaza Entrance
- Malabar Road & Minton Road

The build operations and volumes are consistent with the build alternative, which is described in **Appendix S**. Unsignalized and signalized intersections were analyzed using *HCM6* methodologies, implemented in Synchro 10 for the Malabar Road four-lane build scenario.

In addition to showing build volumes, **Figure 13** also summarize the operations of the 2050 peak hours, which includes the movements anticipated to operate at LOS F.

The following briefly summarizes the 2050 build peak hour intersection operational results, focusing on locations where movements are still anticipated to experience LOS F operations during the 2050 peak hours. The LOS operations at each intersection are shown in **Table 29**. Signalized intersections are described first, then unsignalized intersections are described. Detailed Synchro 10 LOS reports for the study intersections are provided in **Appendix U**. The final section provides a detailed operational analysis of roundabouts.

7.2.4.1. Signalized Intersections

Due to the improvements considered in the build condition, all the signalized intersections are expected to operate at LOS E or better.

7.2.4.2. Unsignalized Intersections

Due to the improvements considered in the build condition, all the unsignalized intersections are expected to operate with a v/c ratio less than 1.0 and with no movements at LOS F.

Table 29: Build (2050) Intersection LOS

Intersection	Control Type	2050 AM LOS	2050 PM LOS
Malabar Rd. & St. Johns Heritage Pkwy**	Signal	E	E
Malabar Rd. & Snapdragon Dr.*	Two-Way Stop Control	C	B
Malabar Rd. & Championship Cir.*	Two-Way Stop Control	D	C
Malabar Rd. & Wisteria Ave./Abilene Dr.**	Signal	B	B
Malabar Rd. & Krassner Dr./Bending Branch Ln.**	Signal	C	C
Malabar Rd. & Bavarian Ave.*	Two-Way Stop Control	B	B
Malabar Rd. & Hurley Blvd.**	Signal	B	B
Malabar Rd. & Watoga Ave.*	Two-Way Stop Control	B	B
Malabar Rd. & Palm Bay Public Works (W)*	Two-Way Stop Control	C	B
Malabar Rd. & Palm Bay Public Works (E)*	Two-Way Stop Control	C	D
Malabar Rd. & Post Office*	Two-Way Stop Control	B	C
Malabar Rd. & Jupiter Blvd.**	Signal	E	D
Malabar Rd. & Santa Rosa Ave.*	Two-Way Stop Control	B	C
Malabar Rd. & Garvey Rd.**	Signal	B	B
Malabar Rd. & Madalyn Landing*	Two-Way Stop Control	C	C
Malabar Rd. & Sutherland Dr.*	Two-Way Stop Control	D	D
Malabar Rd. & Maywood Ave./Daffodil Dr.**	Signal	B	A
Malabar Rd. & Plaza Entrance**	Signal	A	B
Malabar Rd. & Minton Rd.**	Signal	E	E

*LOS shown is for worst movement

**LOS shown is for entire intersection

7.2.4.3. Intersection Queue Lengths

In addition to the overall intersection LOS, the 95th percentile queue lengths for exclusive turn lanes at signalized intersections for the 2050 AM and PM peak hours are summarized in **Table 30**. The 95th percentile queue lengths are rounded up to the nearest 25-foot increment.

Table 30: 2050 Build Queue Analysis Results

Intersections Along Malabar Road	Movement	95th Percentile Queue Length (ft)	
		AM Peak	PM Peak
St. Johns Heritage Parkway	EBL	175	300
	WBL	125	175
	WBR	300	50
	NBL	200	150
	SBL	375	500
Wisteria Avenue/Abilene Drive	EBL	25	25
	WBL	50	50
	NBL	450	100
Krassner Drive/Bending Branch Lane	EBL	25	25
	WBL	25	75
Hurley Boulevard	EBL	25	25
	WBL	25	50
Jupiter Boulevard	EBL	250	200
	WBL	225	175
	NBL	425	250
	NBR	125	100
	SBL	350	100
Garvey Road	WBL	100	350
	NBL	400	50
	NBR	225	175
Maywood Avenue/Daffodil Drive	EBL	25	25
	WBL	25	25

Table 30: 2050 Build Queue Analysis Results (Continued)

Intersections Along Malabar Road	Movement	95th Percentile Queue Length (ft)	
		AM Peak	PM Peak
Plaza Entrance	EBL	25	25
	WBL	25	150
	WBR	25	25
	NBL	175	325
	SBL	25	75
Minton Road	EBL	425	575
	WBL	325	500
	WBR	175	125
	NBL	200	125
	NBR	125	75
	SBL	500	600
	SBR	425	250

7.2.4.4. Build Roundabout Operations

Based on a review of the traffic volumes, safety analysis, and other data as provided within this project traffic report, the feasibility of constructing a roundabout in lieu of replacing the traffic signal at the following intersections was evaluated at the following intersections.

1. Malabar Road & St. Johns Heritage Parkway
2. Malabar Road & Wisteria Avenue/Abilene Drive
3. Malabar Road & Krassner Drive/Bending Branch Lane
4. Malabar Road & Hurley Boulevard
5. Malabar Road & Jupiter Boulevard
6. Malabar Road & Garvey Road
7. Malabar Road & Maywood Avenue/Daffodil Drive

Figure 15 provide a typical roundabout layout considered in this study at Malabar Road & Jupiter Boulevard. Roundabout layouts for other locations are provided in **Appendix W**.

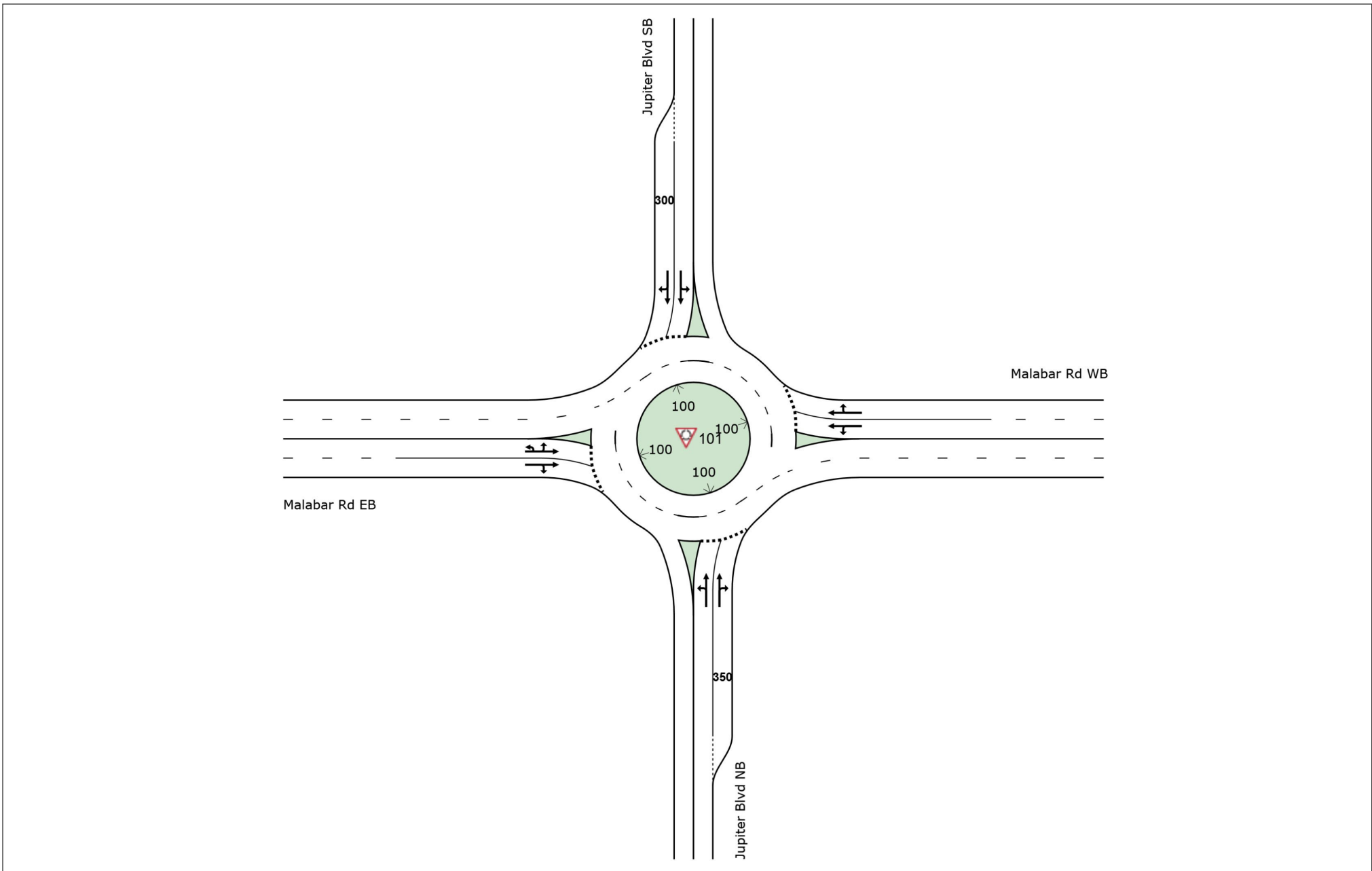
The SIDRA Intersection 8.0 software was run to evaluate the implementation of a roundabout at the aforementioned locations. Utilizing the 2050 traffic volumes, a roundabout analysis was conducted. The LOS operations at each roundabout location are shown in **Table 31**. The analysis showed that each roundabout operates at a v/c ratio lower than 1.0 in 2050.

The detailed MOE results (Delay, V/C, LOS) by approach for each analysis locations are also provided in **Appendix W**. The procedure for identifying the control type selected at each of these intersections will be discussed later in the report.

Table 31: 2050 Roundabout LOS

Intersection	Control Type	2050 AM LOS	2050 PM LOS
Malabar Rd. & St. Johns Heritage Pkwy*	Roundabout	D	C
Malabar Rd. & Wisteria Ave./Abilene Dr.*	Roundabout	A	A
Malabar Rd. & Krassner Dr./ Bending Branch Ln.*	Roundabout	A	A
Malabar Rd. & Hurley Blvd.*	Roundabout	A	A
Malabar Rd. & Jupiter Blvd.*	Roundabout	D	E
Malabar Rd. & Garvey Rd.*	Roundabout	C	B
Malabar Rd. & Maywood Ave./Daffodil Dr.*	Roundabout	A	A

*LOS shown is for entire intersection



Not to Scale



North

Malabar Road PD&E Study

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ROUNDAABOUT CONFIGURATION AT MALABAR RD AND JUPTER BLVD

FIGURE 15

7.2.5. BUILD SEGMENT OPERATIONS

Signalization at several intersections along the study corridor was assumed as part of the build operational analysis as described previously. The study corridor was divided into eight analysis segments as illustrated in **Figure 16**. The segmentation for the build analysis is also described in **Table 32**. Detailed LOS reports for the segmentation analysis are provided in **Appendix X**.

Table 32: Future Build Condition Evaluation Segments

Segment #	Segment Limits	Flow Type	Analysis Method
1	Malabar Road, St. Johns Heritage Pkwy. to Wisteria Ave./Abilene Dr.	Interrupted	Synchro 10/HCM6 (Urban Street)
2	Malabar Road, Wisteria Ave./Abilene Dr. to Krassner Dr./Bending Branch Ln.	Interrupted	Synchro 10/ HCM6 (Urban Street)
3	Malabar Road, Krassner Dr./Bending Branch Ln. to Hurley Blvd.	Interrupted	Synchro 10/ HCM6 (Urban Street)
4	Malabar Road Hurley Blvd. to Jupiter Blvd.	Interrupted	Synchro 10/ HCM6 (Urban Street)
5	Malabar Road, Jupiter Blvd. to Garvey Rd.	Interrupted	Synchro 10/ HCM6 (Urban Street)
6	Malabar Road, Garvey Rd. to Maywood Ave./Daffodil Dr.	Interrupted	Synchro 10/ HCM6 (Urban Street)
7	Malabar Road, Maywood Ave./Daffodil Dr. to Plaza Entrance	Interrupted	Synchro 10/ HCM6 (Urban Street)
8	Malabar Road, Plaza Entrance to Minton Rd.	Interrupted	Synchro 10/ HCM6 (Urban Street)

An Urban Street Segment analysis was performed using the *HCM6* methodologies for Segment 1 through Segment 8. The methodology followed for the build segment analysis is consistent with the methodology described previously for the existing and no-build interrupted flow analyses. Roadways features included in the analysis methodology include number of lanes, median type, curb type and access points per mile. The results of the urban street segment analysis for the eastbound and westbound directions are summarized in **Table 33**.

Segment 8 (Plaza Entrance to Minton Rd.) show segment operation results of LOS F in the build condition. This is explained by the short lengths of the subsegment and the effect of the overlapping delays of the two adjacent signals. While Segment 8 is expected to have relatively lower travel speeds due to adjacent signal delay, the overall facility is expected to operate in an acceptable condition.

While the segment analysis was conducted for the build condition assuming a signalized corridor, multiple study intersections also have a roundabout alternative. To understand the operations of a corridor with roundabouts in place, NCHRP Report 772 (Evaluating the Performance of Corridors with Roundabouts) was consulted. While the report does note that a case-by-case evaluation is valuable, it states on Page S-3 that “corridors with irregular intersection spacing show a higher likelihood for having better travel times under a roundabout configuration rather than a signalized configuration.”

Since Malabar Road has irregular intersection spacing, it may have better roundabout corridor travel times than a signalized corridor, which would in turn lead to better roundabout segment operations. As the signalized corridor segment operations were acceptable, the roundabout segment operational performance is expected to also be acceptable.



LEGEND

- Segment 1
- Segment 2
- Segment 3
- Segment 4
- Segment 5
- Segment 6
- Segment 7
- Segment 8
- Signalized Intersections

Not to Scale

Malabar Road PD&E Study

FPID: 437210-1-28-01

BUILD CONDITION EVALUATION SEGMENTS

FIGURE 16

Table 33: 2050 Build Segment LOS – Both Directions (Interrupted Flow)

Segment #	Segment Limits	Analysis Direction	AM Peak Hour				PM Peak Hour			
			BFFS (mph)	Synchro Travel Speed (mph)	P _{BFFS} * (%)	LOS	BFFS (mph)	Synchro Travel Speed (mph)	P _{BFFS} * (%)	LOS
1	Malabar Road, St. Johns Heritage Pkwy. to Wisteria Ave./Abilene Dr.	Eastbound	43.9	31.4	71.5	B	43.9	31.6	72.0%	B
2	Malabar Road, Wisteria Ave./Abilene Dr. to Krassner Dr./Bending Branch Ln.	Eastbound	44.1	24.5	55.5	C	44.1	29.7	67.3%	B
3	Malabar Road, Krassner Dr./Bending Branch Ln. to Hurley Blvd.	Eastbound	43.9	26.2	59.7	C	43.9	31.8	72.5%	B
4	Malabar Road Hurley Blvd. to Jupiter Blvd.	Eastbound	43.8	23.9	54.6	C	43.8	27.3	62.3%	C
5	Malabar Road, Jupiter Blvd. to Garvey Rd.	Eastbound	43.4	32.4	74.7	B	43.4	34.9	80.5%	A
6	Malabar Road, Garvey Rd. to Maywood Ave./Daffodil Dr.	Eastbound	44.0	36.8	83.7	A	44.0	36.2	82.3%	A
7	Malabar Road, Maywood Ave./Daffodil Dr. to Plaza Entrance	Eastbound	40.4	22.6	56.0	C	40.4	22.0	54.5%	C
8	Malabar Road, Plaza Entrance to Minton Rd.	Eastbound	38.1	5.6	14.7	F**	38.1	7.4	19.4%	F**
Facility	Malabar Road, St. Johns Heritage Pkwy. to Minton Rd.	Eastbound	-	-	58.8	C	-	-	63.9	C
8	Malabar Road, Minton Road to Plaza Entrance	Westbound	38.1	6.6	17.3	F**	38.1	5.0	13.1	F**
7	Malabar Road, Plaza Entrance to Maywood Ave./Daffodil Dr.	Westbound	40.4	24.9	61.7	C	40.4	21.8	54.0	C
6	Malabar Road, Maywood Ave./Daffodil Dr. to Garvey Rd.	Westbound	44.0	28.3	64.4	C	44.0	35.7	81.2	A
5	Malabar Road, Garvey Rd. to Jupiter Blvd.	Westbound	43.4	38.4	88.5	A	43.4	33.4	77.0	B
4	Malabar Road, Jupiter Blvd. to Hurley Blvd.	Westbound	43.8	22.7	51.8	C	43.8	32.7	74.7	B
3	Malabar Road, Hurley Blvd. to Krassner Dr./Bending Branch Ln.	Westbound	43.9	36.9	84.1	A	43.9	39.7	90.5	A
2	Malabar Road, Krassner Dr./Bending Branch Ln. to Wisteria Ave./Abilene Dr.	Westbound	44.1	26.8	60.7	C	44.1	31.9	72.3	B
1	Malabar Road, Wisteria Ave./Abilene Dr. to St. Johns Heritage Pkwy.	Westbound	43.9	22.6	51.5	C	43.9	29.0	66.1	C
Facility	Malabar Road, Minton Rd. to St. Johns Heritage Pkwy.	Westbound	-	-	60.0	C	-	-	66.1	C

*Note: P_{BFFS} is the Percent of Base Free Flow Speed

** This is likely due to the relatively short length of segment between signalized intersections and the relatively high control delay of the adjacent signalized intersections.

7.2.6. FUTURE BUILD CONDITIONS OPERATIONAL SUMMARY

Below is a summary of the build operations evaluated for the future AM and PM peak hour traffic volume conditions.

7.2.6.1. Future Build Conditions Intersection Operations

Future build intersection LOS analyses were conducted using *HCM6* methodologies as implemented by Synchro 10. Due to the improvements considered in the build condition, all intersections operate with an overall intersection LOS of E or better and under capacity.

7.2.6.2. Future Build Conditions Segment Operations

Future build segment operation analyzes were conducted using *HCM6* methodologies. The entire build corridor was analyzed using the *HCM6* Urban Street methodology. In the future build conditions, all segments performed at LOS C or better except for the segment between the intersections of Malabar Road & Plaza Entrance and Malabar Road & Minton Road, which operates at LOS F. This is likely due to the relatively short length of segment between signalized intersections and the relatively high control delay of the adjacent signalized intersections. Because of this, intersection operating conditions are a better indicator of adjacent segment operations.

8. SUMMARY OF ANALYSIS RESULTS

This Project Traffic Analysis Report summarized the traffic operations for the existing conditions, no-build, and build alternatives for the intersections and segments along the study corridor. The following summarizes the results of the analysis and the anticipated next steps.

As summarized in the no-build intersection operations section, there were several operational deficiencies identified which are projected to occur during the 2050 peak hours. Three signalized intersections (Jupiter Boulevard, Plaza Entrance, and Minton Road) and 11 stop-controlled intersections were anticipated to experience deficient movements in the 2050 peak hours. No-build intersection operations at significant intersections are shown in **Table 34**. Future no-build segment operations indicate that several segments of Malabar Road are projected to function unacceptably as a two-lane roadway (operating worse than LOS C), which emphasizes the need for widening the study corridor from two to four lanes and implementing an access management plan.

The intersection improvements needed to alleviate congestion and improve safety are expected to require access management changes and the addition of eastbound and westbound through lanes. Additionally, the relatively close average spacing of intersections along the corridor complicates the simple assumption that spot intersection improvements can be provided to alleviate intersection congestion. Therefore, the build alternative is preferable.

As part of the build analysis, several geometric changes were assumed such as a four-lane widening, access management improvements, and spot intersection turn lane additions. The operational analysis for the build scenario resulted in unacceptable operations for most of the operationally deficient movements identified in the no-build analysis.

The build operational analysis considered a signal or roundabout alternative at several intersections to provide options for the best control type at major intersections. These alternatives and their operational performance are shown in **Table 34**.

Table 34: Future Build Intersection Alternatives

Intersection	No Build Alternative			Build Alternative 1			Build Alternative 2		
	Control Type	2050 AM LOS	2050 PM LOS	Control Type	2050 AM LOS	2050 PM LOS	Control Type	2050 AM LOS	2050 PM LOS
Malabar Rd. & St. Johns Heritage Pkwy.	TWSC*	F	F	Signal	E	E	Roundabout	D	C
Malabar Rd. & Wisteria Ave./Abilene Dr.	TWSC*	F	F	Signal	B	B	Roundabout	A	A
Malabar Rd. & Krassner Dr./Bending Branch Ln.	Signal	D	C	Signal	C	C	Roundabout	A	A
Malabar Rd. & Hurley Blvd.	TWSC*	F	F	Signal	B	B	Roundabout	A	A
Malabar Rd. & Jupiter Blvd.	Signal	F	F	Signal	E	D	Roundabout	D	E
Malabar Rd. & Garvey Rd.	TWSC*	F	F	Signal	B	B	Roundabout	C	B
Malabar Rd. & Maywood Ave./Daffodil Dr.	TWSC*	F	F	Signal	B	A	Roundabout	A	A

* Two-Way Stop Control

As the project is still ongoing, a final selection of control type will not be made for these intersections in this report. Instead, the selection of a roundabout or signal will be evaluated later in the PD&E process. This evaluation will include the consideration of safety, operational, construction, maintenance, and right of way costs associated with each alternative and will be documented in the Preliminary Engineering Report.

APPENDIX A – TRAFFIC ANALYSIS METHODOLOGY

Contained in this Appendix –

- Traffic Analysis Methodology

Traffic Analysis Methodology

Malabar Road from St. Johns Heritage Parkway to Minton Road Project Development and Environment (PD&E) Study

Financial Project Identification Number: 437210-1-28-01

Palm Bay, Florida

March 2020

Traffic Analysis Methodology

Malabar Road from St. Johns Heritage Parkway to Minton Road Project Development and Environment (PD&E) Study

Brevard County, Florida

Prepared For:

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March 2020

Document Control Sheet

Quality Control Review		
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Section 1 Project Description

PROJECT DESCRIPTION

Malabar Road, from St. Johns Heritage Parkway to Minton Road, is undergoing a PD&E study to evaluate impacts associated with providing additional roadway capacity in accordance with the Purpose & Need. Project alternatives developed during the PD&E Study may include traffic operations and safety improvements, access management treatments, and/or capacity improvements. The project limits cover a distance of approximately four miles. This report presents a proposed traffic analysis methodology for the PD&E study's Project Traffic Analysis Report (PTAR).

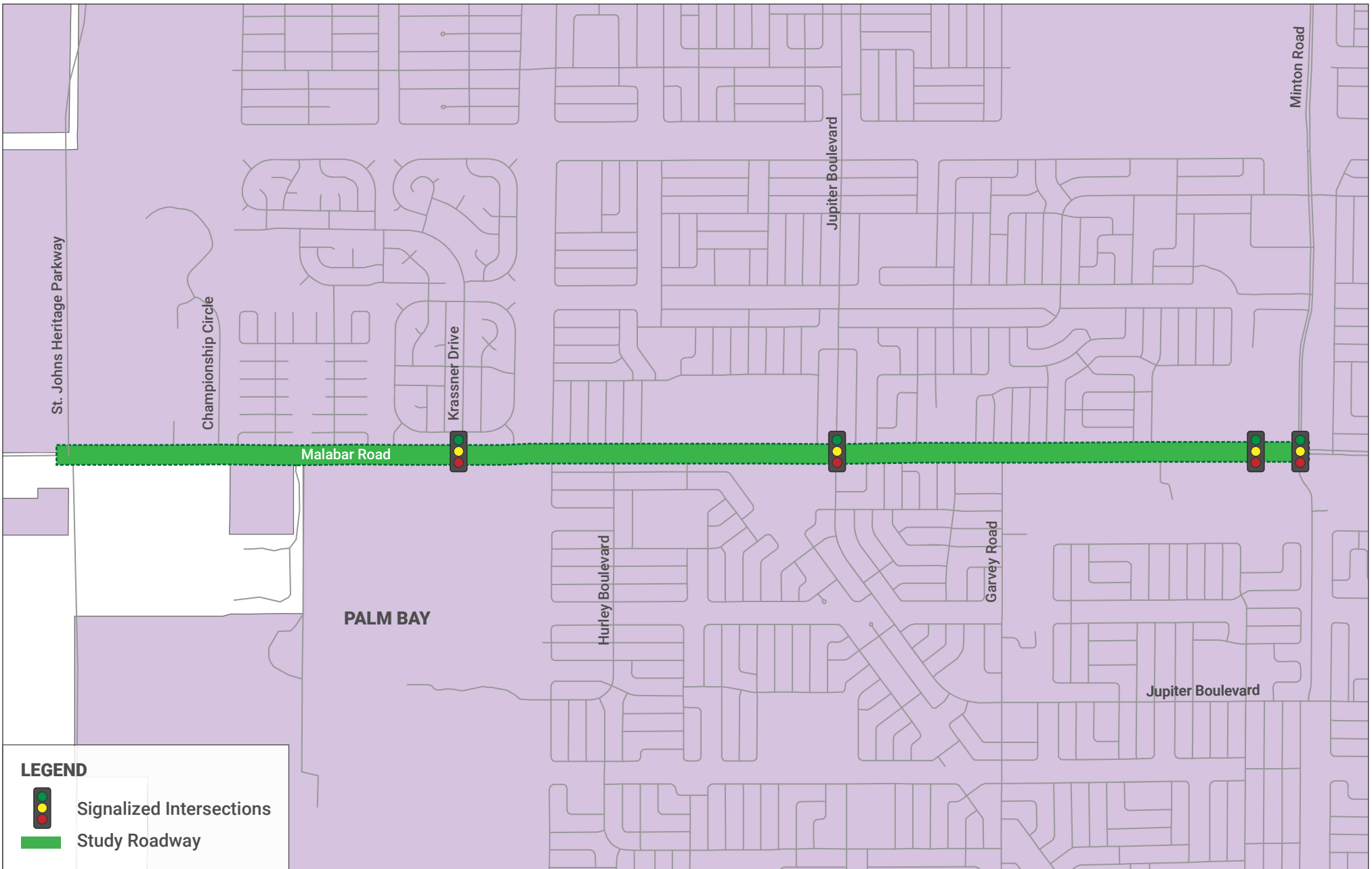
The study roadway is within Brevard County, Florida and borders the jurisdictions of the City of Palm Bay and Brevard County as illustrated in **Figure 1**. There are three existing signalized intersections within the study limits, which are listed below.

- Babcock Street & Krassner Drive/Bending Branch Lane
- Babcock Street & Jupiter Boulevard
- Babcock Street & Plaza Entrance
- Babcock Street & Minton Road



Five existing roadway cross sections are present along the existing alignment, as follows:

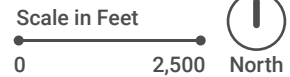
- From St. Johns Heritage Parkway to 650 feet west of Krassner Drive: Two (2) lanes, one (1) in each direction, undivided (1.17 miles);
- From 650 feet west of Krassner Drive to 650 feet east of Krassner Drive: Two (2) lanes, one (1) in each direction, separated by a 11-foot wide continuous two-way left-turn lane (0.25 miles);
- From 650 feet east of Krassner Drive to 500 feet west of Garvey Road: Two (2) lanes, one (1) in each direction, undivided (1.54 miles);
- From 500 feet west of Garvey Road to Plaza Entrance: Two (2) lanes, one (1) in each direction, separated by a 11-foot wide continuous two-way left-turn lane (0.90 miles); and
- From Plaza Entrance to Minton Road: Four (4) lanes, two (2) in each direction, separated by a four-foot concrete traffic separator (0.14 miles).

Based on the results of the traffic analysis, and in consideration of the overall project's purpose and need, the PD&E Study will result in the identification of alternatives or improvement strategies to improve operating conditions and safety along the roadway.



LEGEND

-  Signalized Intersections
-  Study Roadway



Malabar Road PD&E Study

FPID: 437210-1-28-01

STUDY ROADWAY

FIGURE 1
A-9

Section 2 Traffic Analysis Objective

TRAFFIC ANALYSIS OBJECTIVE

The PTAR will document traffic forecasts and future operating conditions for the anticipated opening year (2030) and the design year (2050) for the project.

The primary measure of effectiveness (MOE) for traffic analysis will be level of service (LOS) in the design year, using Highway Capacity Manual, 6th Edition (HCM6) methods. At the intersections, volume-to-capacity (v/c) ratios will also be considered to determine potential improvements for specific movements. Recommendations for intersection improvements will be identified with the goal of providing operating conditions within acceptable standards.

The City of Palm Bay has established the roadway link segment LOS standard at LOS C for Malabar Road from St. Johns Heritage Parkway to Minton Road. **Table 1** displays the LOS standards along the study corridor. LOS C will be the targeted standard for operations. In the event that LOS C cannot be reasonably achieved, then the City of Palm Bay will be consulted to determine an acceptable alternative performance standard.

Table 1: Malabar Road LOS Standards

Roadway	Limits		Roadway Classification	LOS Standard
	From	To		
Malabar Road	St. Johns Heritage Parkway	Jupiter Boulevard	Urban Minor Arterial	C
Malabar Road	Jupiter Boulevard	Minton Road	Urban Principal Arterial - Other	C

Source: *City of Palm Bay Comprehensive Plan*

Historical crash data from the University of Florida’s Signal Four Analytics database and the FDOT Crash Analysis Reporting System (CARS) database will be used to identify significant crash trends or patterns within the study limits. A *Highway Safety Manual* (HSM) crash prediction will be carried out, and alternatives will be recommended to mitigate identified trends and patterns using HSM principles. Known effective countermeasure strategies will be incorporated into the PTAR and conceptual design recommendations.

Section 3 Analysis Description

ANALYSIS DESCRIPTION

EXISTING ROADWAY CHARACTERISTICS

The existing roadway characteristics are summarized in **Table 2**. Since Malabar Road is not a State Highway, there is not currently a designated access classification. As part of the PD&E Study, access management will be considered for the future build alternatives and an access management class will be proposed.

Table 2: Existing Roadway Characteristics

Roadway	Limits		# of Lanes	Roadway Classification	Median Type	Posted Speed Limit (mph)	Segment Length (mi.)
	From	To					
Malabar Road	St. Johns Heritage Parkway	650' W of Krassner Drive	2	Urban Minor Arterial	Undivided	45	1.17
Malabar Road	650' W of Krassner Drive	650' E of Krassner Drive	2	Urban Minor Arterial	TWLTL*	45	0.25
Malabar Road	650' E of Krassner Drive	Jupiter Boulevard	2	Urban Minor Arterial	Undivided	45	1.07
Malabar Road	Jupiter Boulevard	500' W of Garvey Road	2	Urban Principal Arterial - Other	Undivided	45	0.47
Malabar Road	500' W of Garvey Road	Plaza Entrance	2	Urban Principal Arterial - Other	Undivided	45	0.90
Malabar Road	Plaza Entrance	Minton Road	4	Urban Principal Arterial - Other	Divided	45	0.14

Source: SCTPO 2018 Annual State of the System Report

*Two-Way Left Turn Lane

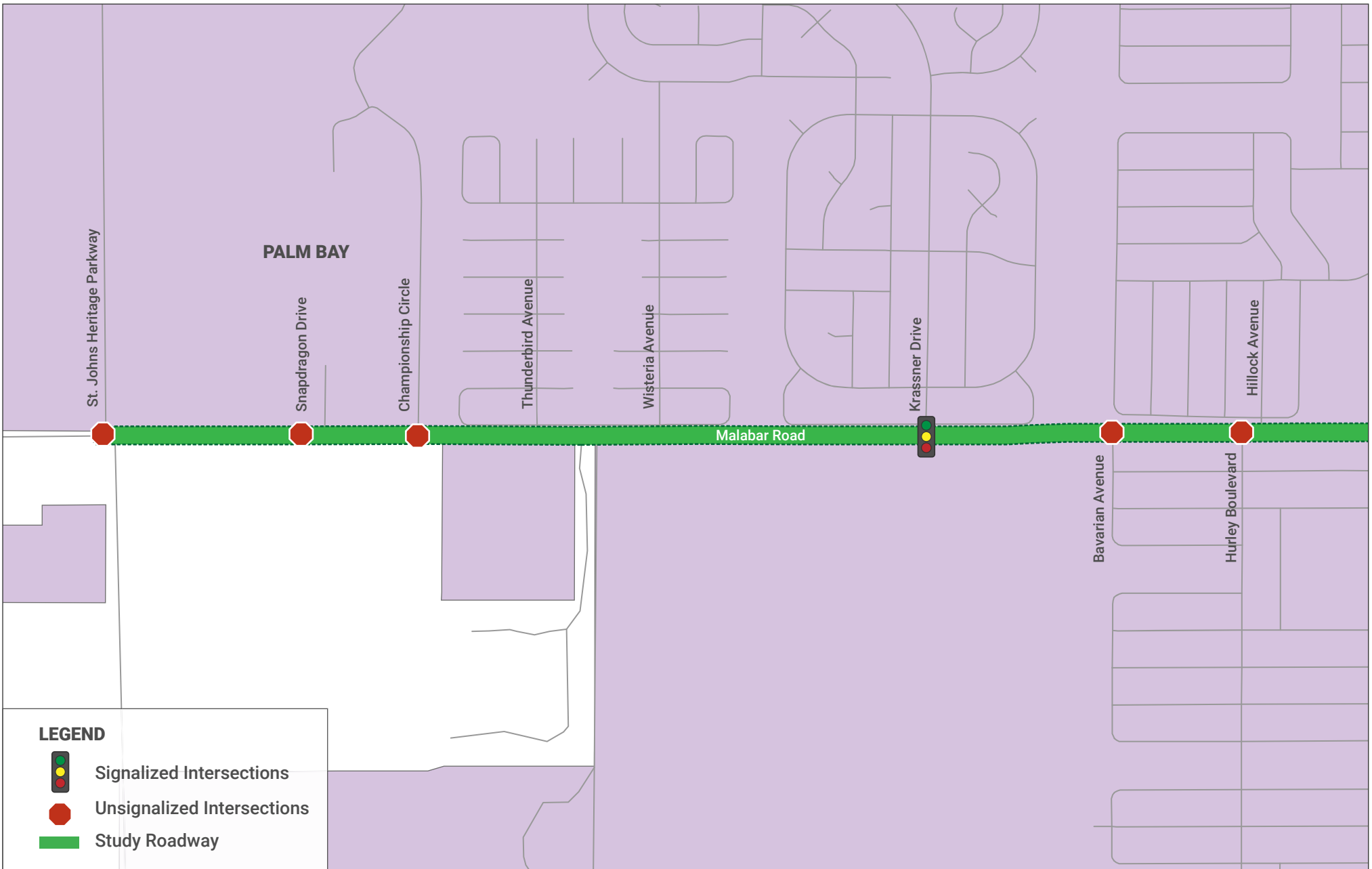
STUDY INTERSECTIONS

The study intersections within the project area are as follows:

1. Malabar Road & St. Johns Heritage Parkway;
2. Malabar Road & Snapdragon Drive;
3. Malabar Road & Championship Circle;
4. Malabar Road & Krassner Drive/Bending Branch Lane (signalized);
5. Malabar Road & Bavarian Avenue;
6. Malabar Road & Hurley Boulevard;
7. Malabar Road & Palm Bay Public Works;
8. Malabar Road & Post Office;
9. Malabar Road & Jupiter Boulevard (signalized);
10. Malabar Road & Santa Rosa Avenue;
11. Malabar Road & Garvey Road;

12. Malabar Road & Madalyn Landing;
13. Malabar Road & Sutherland Drive;
14. Malabar Road & Maywood Avenue/Daffodil Drive;
15. Malabar Road & Plaza Entrance (signalized); and
16. Malabar Road & Minton Road (signalized).

The listed intersections correspond with those shown in **Figure 2.1** and **Figure 2.2**. The intersections are unsignalized unless otherwise noted. The details of the data collection program are discussed further in **Section 4**.

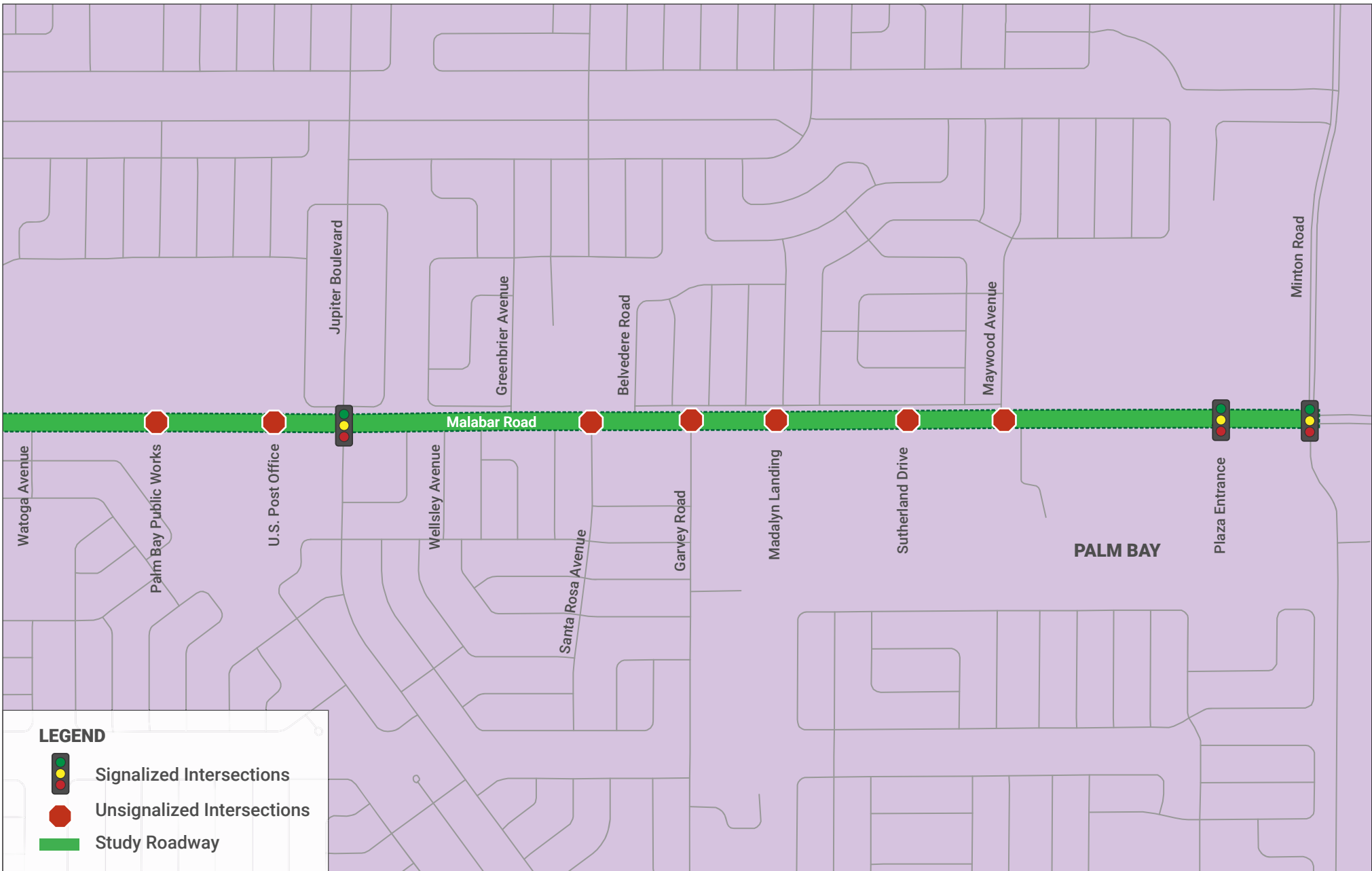


Malabar Road PD&E Study

FPID: 437210-1-28-01

STUDY INTERSECTIONS

FIGURE 2.1
A-15



Malabar Road PD&E Study

FPID: 437210-1-28-01

STUDY INTERSECTIONS

FIGURE 2.2
A-16

TRAFFIC CHARACTERISTICS

Design traffic characteristics (K, D, and T-factors) will be developed in accordance with the *2019 Project Traffic Forecasting Handbook*.

K Factor

The 2019 Project Traffic Forecasting Handbook requires a standard K factor of 0.09 to be used to estimate typical weekday design hour traffic in urban areas. Because the study roadway is located within an urban area, a standard K factor of 0.09 will be utilized for the entire project corridor.

D Factor

The directional distribution (D) is the percentage of the total, two-way design traffic traveling in the peak direction. The D-factors will be developed based on a review of data contained within the SCTPO Traffic Count Program and traffic count data collected for this study. The D-factors developed through this process will be provided to the City for approval prior to their use.

T Factor

The Truck Factor (T), or T_{24} , is the percentage of daily truck traffic. The T-factors will be developed based on a review of data contained within the SCTPO Traffic Count Program, the Florida Traffic Online application, and 48-hour traffic count data collected for this study. The T-factors developed through this process will be provided to the City for approval prior to their use.

The design hour truck (DHT) percentage is equal to half of the daily truck traffic as per the *2019 Project Traffic Forecasting Handbook*.

ANALYSIS TIME PERIODS

Traffic analysis will be carried out for the following scenarios:

- Existing Conditions (2020)
- Opening Year Conditions (2030) Build and No-Build
- Design Year Conditions (2050) Build and No-Build

Turning movement and tube counts will provide the weekday AM and PM peak periods for analysis.

Section 4 Data Requirements and Data Collection

DATA REQUIREMENTS AND DATA COLLECTION

FIELD OBSERVATIONS

Field observations will be conducted during the AM and PM peak periods. Field observations will include a review of traffic operations and queuing.

REQUIRED DATA

Data sources required for analysis have been identified and are documented below.

Traffic Operations and Control

Traffic signal control data will be obtained from Brevard County. In addition to signal timing information, other control data will be confirmed from field visits. Additional control data includes, but is not limited to, the following:

- Speed Limits;
- Turn Restrictions; and
- Yield Signs/Stop Signs.

The key sources for traffic operations and control information are:

- Field observations and traffic count data;
- Aerial photography (e.g. Google Earth, Bing Maps, FDOT aerial files, etc.);
- Street view photography (e.g. Google Earth);
- The SCTPO traffic count database;
- The FDOT Traffic Database (e.g. FTO website, etc.);
- Information provided by the relevant jurisdictional authority (e.g. signal timing data from Brevard County and the City of Palm Bay); and
- Roadway Characteristics Inventory (RCI) Features & Characteristics Database.

Facility Characteristics

Basic geometric data including the number of lanes, length, and speeds will be obtained from a number of sources, which include aerial mapping, field surveys/inventories, committed improvements, and any previous analysis. Facility characteristics of the study area will be collected from the following sources:

- Field observations;
- The FDOT Traffic Database (e.g. FTO website, etc.);
- RCI Features & Characteristics Database; and
- Aerial Photography (e.g. Google Earth, Bing Maps, FDOT aerial files, etc.).

Safety Data

Reported crash data for 2015 to 2019 will be obtained from the University of Florida's Signal Four Analytics database and FDOT's CARS database. Crash history will be used to provide crash types, locations, and the numbers of fatal, injury, and property damage only crashes. The crash history will be presented in a tabular format that will show crash types by approach. Crashes will also be mapped utilizing GIS and displayed in figure format in the PTAR.

Traffic volumes, for the use in determining crash rates, will be collected from the available historical count traffic databases of the SCTPO and FDOT.

Transit Data

Transit data for the study corridor, such as ridership, will be acquired from Space Coast Area Transit (SCAT) and considered in the existing and future condition.

DATA COLLECTION PLAN

There are multiple SCTPO and FDOT count stations along the Malabar Road study roadway with available vehicle class history counts. The available historical vehicle class information will be used to document historical trends and supplemented with 72-hour counts.

SCTPO and FDOT Count Stations

The SCTPO count stations along the Malabar Road study roadway are below.

- 589 – east of Jupiter Boulevard
- 371 – east of Minton Road

The FDOT count station along the Malabar Road study roadway is below.

708142 – east of Hurley Boulevard

Traffic Volume Data

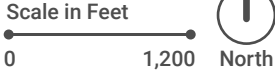
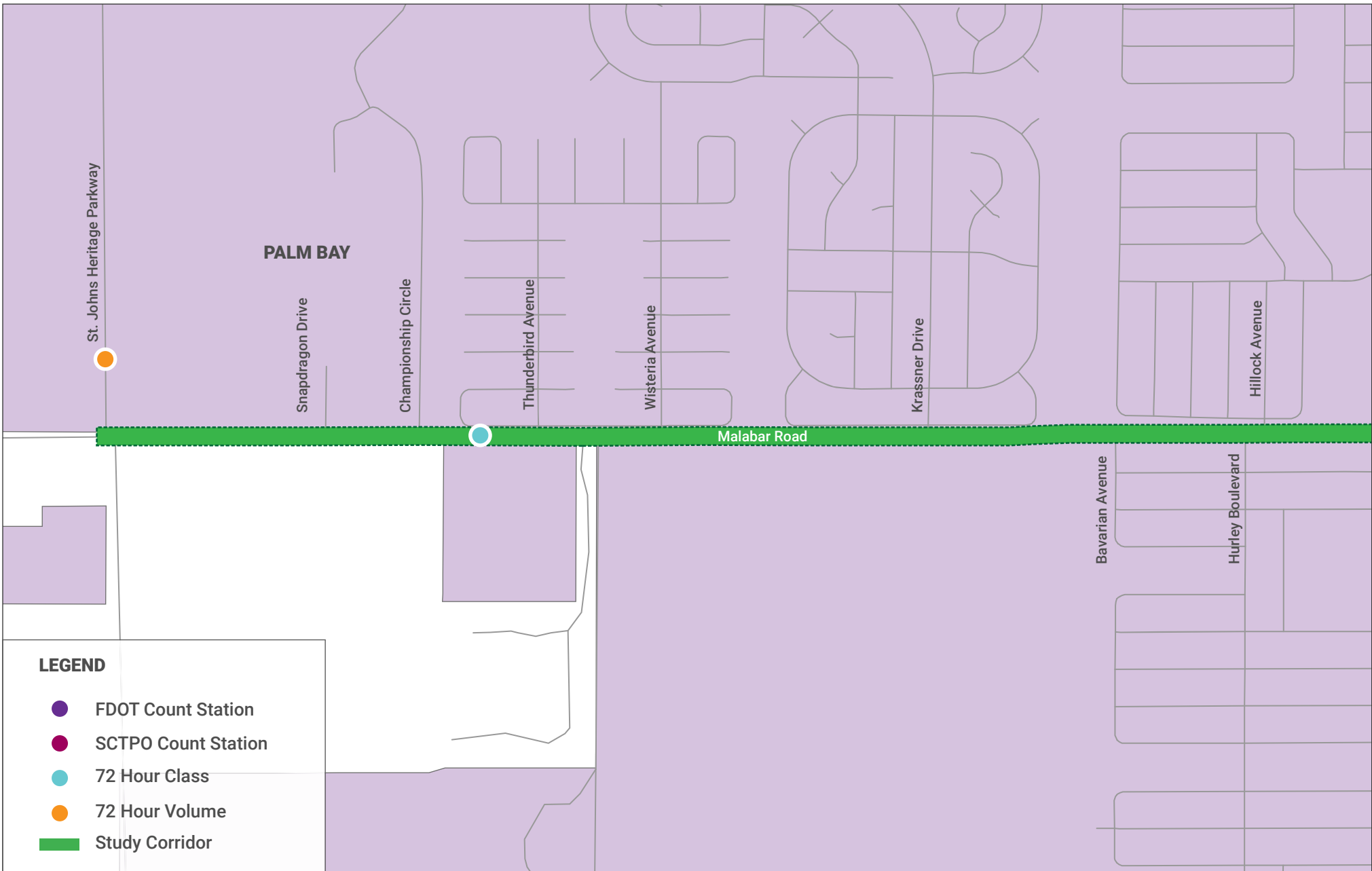
In addition to historical traffic count data from the SCTPO and FDOT databases, the following information and data will be collected.

72-Hour Bidirectional Volume Counts

72-hour bidirectional volume counts will be collected at the locations below. The 72-hour weekday counts will be collected on a consecutive Tuesday/Wednesday/Thursday during the week. The 72-hour volume counts will correspond with the turning movement counts of the adjacent intersections. Counts were located to avoid complications caused by driveways and minor streets. The following locations for 72-hour volume and classification counts have been selected to complement the existing count locations:

1. St Johns Heritage Parkway, North of Malabar Road (Volume Count);
2. Malabar Road, East of Championship Circle (Classification Count);
3. Malabar Road, West of Jupiter Boulevard (Classification Count);
4. Jupiter Boulevard, South of Malabar Road (Volume Count);
5. Jupiter Boulevard, North of Malabar Road (Volume Count);
6. Garvey Road, South of Garvey Road (Volume Count);
7. Malabar Road, West of Maywood Avenue (Classification Count);
8. Minton Road, South of Malabar Road (Volume Count); and
9. Minton Road, North of Malabar Road (Volume Count);

Approximate count locations, in addition to the existing SCTPO and FDOT count stations, are shown in **Figure 3.1** and **Figure 3.2**.

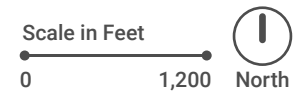
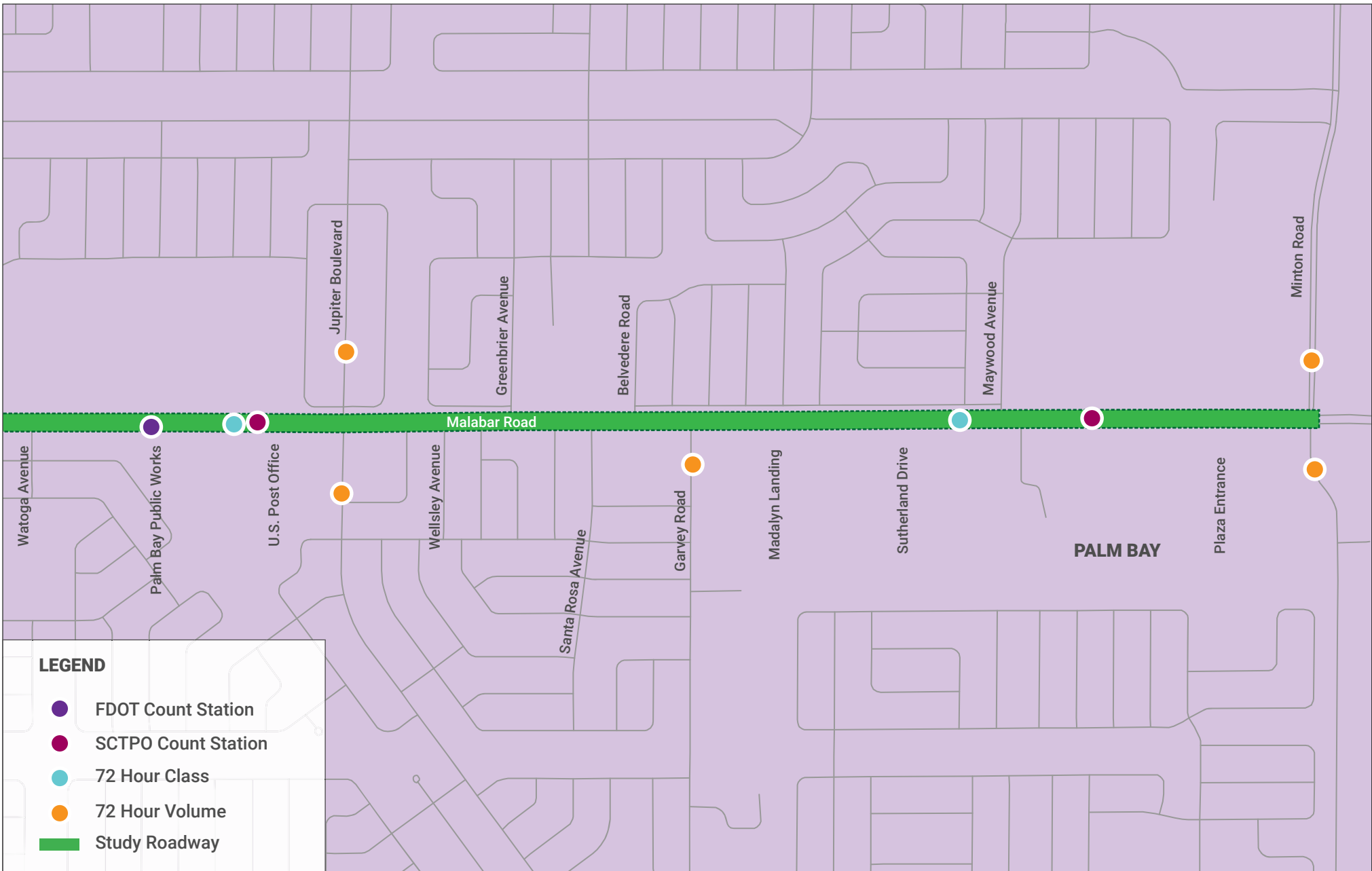


Malabar Road PD&E Study

FPID: 437210-1-28-01

VOLUME COUNT LOCATIONS

FIGURE 3.1
A-22



Malabar Road PD&E Study

FPID: 437210-1-28-01

VOLUME COUNT LOCATIONS

FIGURE 3.2
A-23

Turning Movement Counts

Weekday Peak Periods

Turning movement counts will be collected while the 72-hour counts are to be collected. Weekday turning movement counts will be collected one day on a Tuesday, Wednesday, or Thursday. Turning movement counts will include trucks, pedestrians, and bicyclists. Weekday turning movement counts will be collected at the intersections discussed in the **Data Requirements and Data Collection** section and illustrated in **Figure 2.1** and **Figure 2.2**.

The intersections where manual turning movement counts will be performed are unsignalized unless otherwise noted. The selected intersections encompass all signalized intersections along the Malabar Road corridor from St. Johns Heritage Parkway to Minton Road, which are noted in **Figure 2.1** and **Figure 2.2**. The weekday turning movement counts will be collected during the hours of 7:00 AM to 9:00 AM and 4:00 PM to 6:00 PM.

Section 5 Analysis Tool Selection and Analysis Approach

TRAFFIC ANALYSIS TOOL SELECTION AND ANALYSIS APPROACH

This study focuses on the approximately four-mile corridor of Malabar Road from St. Johns Heritage Parkway to Minton Road. The corridor serves as an arterial in southern Brevard County.

HCM6 provides accepted state-of-practice methods for analyzing urban intersections and arterials. Many of the methodologies have been implemented into Synchro 10, a deterministic tool. *Highway Capacity Software (HCS) 7* will also be utilized for arterial performance analysis. SIDRA will be utilized for analyzing roundabouts assessed for future build alternatives. **Table 3** summarizes which tool will be used for the appropriate task. The tools are discussed in further detail in the following paragraphs.

Table 3: Analysis Tool Selection

Traffic Analysis Task	Analysis Tool
Analyze the existing interrupted flow two-lane highway sections	HCM6 (Synchro 10 and/or HCS 7)
Analyze the operations of signalized intersections, unsignalized intersections and urban arterials	HCM6 (Synchro 10 and/or HCS 7)
Analyze interim year preferred alternative and no-build traffic volume scenarios	HCM6 (Synchro 10 and/or HCS 7)
Develop and test feasibility of alternatives	HCM6 (Synchro 10 and/or HCS 7)
Analyze future viable alternatives	HCM6 (Synchro 10 and/or HCS 7)
Future roundabout analysis	SIDRA 8.0

SYNCHRO 10

Synchro 10 incorporates the HCM6 methodologies including pedestrian and bicycle LOS analysis. Capabilities of Synchro 10 as they relate to this project are summarized in the bullets below.

Signalized Intersections

- Auto, pedestrian, and bike modes;
- National Electrical Manufacturers Association (NEMA) Phasing;
- Right turns on red;
- Adjustable calibration parameters; and
- Accounts for coordination effects.

Two-Way Stop Control Intersections

- One and two-stage maneuvers;
- U-turns;
- Flared right turn approaches; and
- Coordination effects are considered for nearby signalized intersections.

SIDRA 8.0

SIDRA 8.0 utilizes HCM6 methodologies to assess LOS, delay, and other traffic metrics for roundabout intersection types. It is anticipated that SIDRA will be utilized to assess roundabout alternatives for the future build conditions.

PERFORMANCE MEASURES

The performance measures proposed, based on the *2014 Traffic Analysis Handbook*, to be reported are summarized by facility and mode in **Table 4** below.

Table 4: Performance Measures

Facility	Project Need	Performance MOE
Urban Arterial	Determine how the facility will operate	Speed, LOS, Safety
Intersections	Analyzing closely spaced intersections	LOS, V/C, Delay, Queue Length, Safety

Section 6 Project Traffic Demand Forecasting

PROJECT TRAFFIC DEMAND FORECASTING

The methodology to be followed for the development of the PTAR is consistent with the Project Traffic Forecasting Procedure (Topic No. 525-030-120-h) published by the FDOT. The methodology covers the following topics:

- Collect available traffic count information from historical traffic count records and from actual field count data, review previous studies, traffic characteristics, and other relevant data.
- Based on the data collection process, estimate future travel characteristics of the corridor. These characteristics include the Directional Design Hour Volume factor (D), the Design Hour Volume factor (K), and the truck percentage (T).
- Develop future year traffic volume forecasts for the corridor and turning movements based on trend analysis of historical traffic counts and/or officially adopted travel demand models (CFRPM). NCHRP 765 will be referenced when developing these future year volumes and turning movements.
- In addition to design year traffic conditions, develop opening year and mid-design year traffic volume forecasts for the No Build and preferred alternatives.
- Provide a LOS analysis for the study intersections.
- Certification of Methodology and Calculations by State of Florida Registered Professional Engineer to the Department.

TRAFFIC PROJECTIONS

Historical traffic count data included in the SCTPO and FTO databases will be analyzed to determine trend growth rates.

Trends Analyses

The FDOT standard spreadsheet for linear trends analyses will be used to determine historical trends.

Central Florida Regional Planning Model

The current version of the Central Florida Regional Planning Model (CFRPM 6.1 Daily) with forecast year 2040 will be obtained and reviewed to assist in estimating annual growth rates. Because the CFRPM is in the process of undergoing updates as part of the ongoing SCTPO 2045 Long Range Transportation Plan (LRTP) effort, the model will be updated based upon the most-current information available from the SCTPO.

A subarea 2015 validation is proposed. Outside the subarea, the 2010 SE data from CFRPM v6.1 will be factored to the 2015 SE data control total (from ongoing SCTPO LRTP) to be consistent. For 2045, a similar approach will be conducted.

It is proposed to utilize the SCTPO’s socio-economic (SE) data from the ongoing 2045 LRTP effort provided this information can be obtained from the SCTPO. The 2015 and 2045 SE data will be implemented using the 2040 CFRPM’s SE data zone structure. The roadway network will be based upon the roadway network existing in 2015 and the 2040 LRTP. This will include the roadway and zonal structure based on the 2040 SCTPO LRTP. This subarea model scenario is described in **Table 5**.

Table 5: Subarea Model Scenario Summary

Year	Outside Subarea Boundary	Inside Summary Boundary
Base 2015	<ul style="list-style-type: none"> • Use CFRPM v6.1 2010 TAZ structure and network as start • Factor 2010 SE data to 2015 SE data control total from ongoing SCTPO LRTP and surrounding counties • Modify 2010 roadway network to reflect 2015 roadway # lanes within Brevard County • Maintain 2010 roadway network outside Brevard County 	<ul style="list-style-type: none"> • Use CFRPM v6.1 2010 TAZ structure and network as start • Review the new land use and network changes between 2010 and 2015 and update SE data and network data to 2015 • Modify 2010 roadway network to reflect 2015 roadway # lanes • The subarea land use SE total will match 2015 SE based on ongoing SCTPO LRTP • Conduct subarea validation updates.
Future 2045	<ul style="list-style-type: none"> • Use CFRPM v6.1 2040 TAZ structure and network as start • Factor 2040 SE data to 2045 SE data control total from ongoing SCTPO LRTP and surrounding counties • Maintain 2040 LRTP roadway network outside subarea 	<ul style="list-style-type: none"> • Use CFRPM v6.1 2040 TAZ structure and network as start • Update 2040 SE data to match 2045 SE data based on ongoing SCTPO LRTP • Carry forward all 2015 subarea validation adjustment changes • Prepare no build and build scenarios

The traffic forecasting will be guided by the *2019 Project Traffic Forecasting Handbook*. Any adjustments to the model for this project will follow the standards set forth by the Florida Model Task Force. The 2050 traffic projections will be developed using the 2045 SE data with the currently adopted 2040 roadway network zonal structure.

Planned Improvements

The following documents will be reviewed for planned future projects in and around the study area:

- SCTPO Adopted FY 2020-2024 Transportation Improvement Program; and
- Most current FDOT Five-Year Work Program.

Sub Area Validation and Reasonableness Checking

Using the latest CFRPM (version 6.1), the base year model will be reviewed against the same year FDOT and County data sources to verify that the CFRPM is providing reasonable results within the Malabar

Road PD&E project subarea boundary. The subarea model boundaries will be selected to include the entire study corridor as well as major land uses and roadways within and surrounding the study area. The proposed subarea boundary map is shown in **Figure 4**. Links of regional significance with available data that are crossed by a cutline will be identified and compared as part of the subarea validation process.

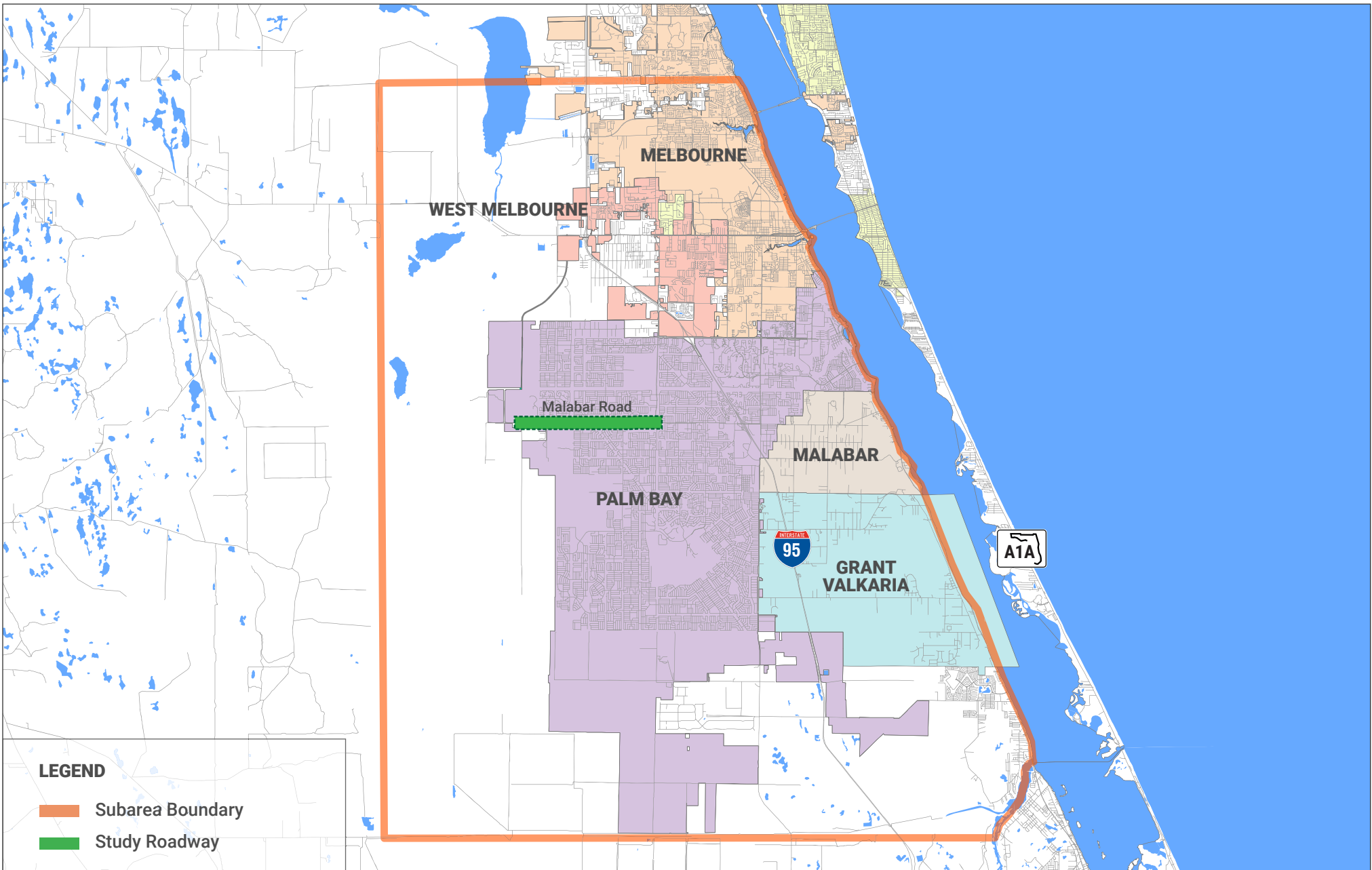
The socio-economic data set for 2010 will be updated to 2015, as noted above. The validation of the base year model is performed by comparing base year counts to the modeled volumes. Before validation is conducted, 2015 base year model volumes will be obtained within the project subarea and a Model Output Conversion Factor (MOCF) used to convert the volumes into model AADT volumes.

The sub-area validation process focuses on improving the forecasting accuracy within the impact limits of the study. This is achieved by running the model base year and checking how the model AADT volumes compare against actual traffic counts. Adjustments to Traffic Analysis Zone (TAZ) centroid connections based on confirming land uses seen from aerial maps are made, and where necessary, refining the TAZ centroid connection locations and splitting TAZ are considered. Other model enhancements are performed involving adjustments to facility and area types, speed-capacity tables, number of lanes and roadway coverage to represent the base year roadway condition.

The standards of Percent Error and Root Mean Square Error (RMSE) are outlined in the FDOT *Traffic Forecasting Handbook* and the FSUTMS *Cube Framework Phase II: Model Calibration and Validation Standards*. The validated CFRPM should meet the FSUTMS standards and is expected to provide a reasonable future traffic projection. Once validated, the model will be used to forecast the 2040 travel demand. The model results will be checked for reasonableness against general growth trends prevalent in the area and manual adjustments, if necessary, will be made.

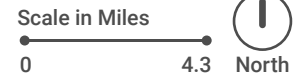
Future Traffic Volume Evaluation

Future-year AADTs will be estimated by applying a recommended annual growth rate to the existing AADT values and DDHVs will be estimated by applying K and D factors. The annual growth rate will be determined based on review of model, historical AADT, and population growth rates for the Malabar Road area. For the purposes of this study, a single set of future volumes will be evaluated to evaluate build and no-build conditions. Turning movement volumes will be forecasted based upon methods detailed within FDOT's *2019 Project Traffic Forecasting Handbook*.



LEGEND

- Subarea Boundary
- Study Roadway



Malabar Road PD&E Study

FPID: 437210-1-28-01

SUBAREA MODEL BOUNDARY

FIGURE 4
A-32

Section 7 Performance Measures of Effectiveness

PERFORMANCE MEASURES OF EFFECTIVENESS

As per the *Project Traffic Forecasting Handbook*, LOS analyses will be performed in accordance with HCM6 procedures and accompanying software. The MOE's and their respective locations within HCM6 are discussed in the following paragraphs.

ANALYTICALLY ESTABLISHED MOE'S

Level of Service

LOS is a concept developed to quantify the degree of comfort (including such elements as travel time, number of stops, total amount of stopped delay, and impediments caused by other vehicles) afforded to drivers as they travel through an intersection or roadway segment. Six grades are used to denote the various level of service from "A" to "F".

Signalized Intersections

The six LOS grades are described for signalized intersections in Chapter 19 of the HCM6. Exhibit 19-8 in the HCM6 identifies the relationship between LOS and average control delay per vehicle.

Unsignalized Intersections

Unsignalized intersections include two-way stop controlled (TWSC) conditions. The HCM6 provides models for estimating control delay at TWSC intersections. A description of the various service levels associated with an unsignalized intersection is presented in Chapter 20 of the HCM6. A quantitative definition of level of service for unsignalized intersections is presented in Exhibit 19-2 from HCM6. For TWSC intersections, the overall intersection level of service can be calculated but is often misleading because there is little delay on the unrestricted roadway. Therefore, level of service will be analyzed for each minor street lane.

In the performance evaluation of TWSC intersections, it is important to consider other measures of effectiveness (MOEs) in addition to delay, such as volume to capacity (v/c) ratios for individual movements, average queue lengths, and 95th-percentile queue lengths. By focusing on a single MOE for the worst movement only, such as delay for the minor-street left turn, users may make inappropriate traffic control decisions.

Roundabouts

The six LOS grades are described for roundabouts in Chapter 22 of the HCM6. Exhibit 22-8 in the HCM6 identifies the relationship between LOS and average control delay per vehicle. SIDRA will be used to determine these measures.

Volume-to-Capacity Ratio

The v/c ratio cannot be directly measured in the field nor is it a measure of traveler perceptions as it is a theoretical measure of congestion. A v/c ratio greater than or equal to 1.0 indicates there is more demand than the facility can effectively serve. The v/c ratio is used in the HCM6 methods to define the LOS E-F threshold, but not other LOS thresholds.

Delay

Delay is a key performance measure for interrupted-flow elements. Control delay is brought about by the presence of a traffic control device and is the principal service measure in the HCM6 for evaluating the LOS at signalized and unsignalized intersections. The LOS thresholds are defined by the average delay per vehicle in seconds for the respective lane group or intersection for both signalized and unsignalized intersections.

Queue Length

Queuing is an operation measure and a design consideration for an intersection and the immediate area. Queues longer than available storage length can create safety and operational issues. A through-lane queue can prevent a turn lane from being used effectively and a turn-lane queue can overflow into a through lane and impede the movement of through vehicles.

Queue lengths do not affect the calculated LOS but are an important factor in the conceptual design process.

Intersection Safety

Intersection safety performance will be evaluated in accordance with Highway Safety Manual (HSM) acceptable methodologies. Performance measures will include predicted and/or expected crashes.

Section 8 Project Alternatives

PROJECT ALTERNATIVES

Project alternatives for Malabar Road to St. Johns Heritage Parkway to Minton Road will be developed to address the project purpose and need. The purpose and need for the project will be developed, in part, from the results of the travel demand forecasting effort as well as the analysis of existing traffic and traffic operations along the existing corridor. Overall, the factors that may influence the project purpose and need include capacity and mobility, safety, systems continuity, and consistency with adopted local, state, and regional long-range transportation plans.

The analysis of existing traffic and traffic operations as well as the development of future travel demand forecasts is an important part of understanding the need for proposed improvements. The development of project alternatives for the Malabar Road PD&E Study will begin by identifying and evaluating appropriate typical section alternatives for the project that satisfy the project purpose and need, if based on the need for additional capacity and/or mobility. These conceptual designs will include standard FDOT typical sections from the FDOT Design Manual (FDM), which will be presented as the desired typical sections, as well as typical sections that may result in minimizing right-of-way impacts based on the Florida Greenbook. Safety is another important part of documenting the project need; therefore, project alternatives may also include safety improvements.

Finally, based on the results of the existing conditions analysis, short-term traffic operational and access management improvements may be developed including signal re-timing, intersection turn lane improvements median treatments, and/or alternative intersection concepts. Intersections having future volumes sufficient to consider signalization will also be evaluated as roundabouts. Proposed improvements to bicycle and pedestrian facilities will also be considered.

The preliminary engineering and conceptual design efforts will also consider alternative roadway alignments along Malabar Road (south-side widening). This work includes determining the location of each alignment alternative's centerline, edge of pavement, and right-of-way requirements and will show the lengths and locations of structures along each alignment alternative and, where intersections need realignment, the general configuration for that re-alignment.

Section 9 Project Traffic Analysis Report

PROJECT TRAFFIC ANALYSIS REPORT AND TECHNICAL DOCUMENTATION

The Malabar Road PTAR will be produced in a series of individual memoranda. For each memo submitted, City of Palm Bay, Brevard County, and FDOT District Five staff will be given the opportunity to review and comment. The project team will not prepare the final PTAR report until concurrence has been reached on the technical memorandums. Interim memos planned for submission include:

- **Model Calibration and Validation Technical Memorandum:** This report presents the traffic forecasting process and documents procedures, assumptions, and results of the sub-area model validation.
- **Existing Traffic Operations Technical Memorandum:** This report provides an overview of the condition of the existing transportation network under study including existing data analysis.
- **Future Demand Forecasting and No-Build Analysis Technical Memorandum:** This report reviews the future traffic projections along the corridor and the operational results from the future no-build analysis.

The project team will follow the guidance set in the *2014 Traffic Analysis Handbook* and draw upon our experience on tabular summaries, graphical presentation, and animation.

REFERENCES

1. Space Coast TPO. *2018 Annual State of the System Report*. Brevard County, FL. Currently under production with expected completion December 2019.
2. FDOT. *2019 Project Traffic Forecasting Handbook*. Tallahassee, FL. October 2019.
3. FDOT Systems Planning Office. *Traffic Analysis Handbook*. Tallahassee, FL. March 2014.
4. Transportation Research Board. *Highway Capacity Manual 6th Edition*.
5. Cambridge Systematics, Inc. *FSUTMS-Cube Framework Phase II: Model Calibration and Validation Standards*. FDOT Systems Planning Office. Tallahassee, FL. October 2, 2008.

APPENDIX B – HISTORIC AADT REPORTS

Contained in this Appendix –

- Historic AADT Reports

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2019 HISTORICAL AADT REPORT

COUNTY: 70 - BREVARD

SITE: 7016 - MINTON ROAD, JUPITER BLVD. TO MALABAR ROAD (HPMS)

YEAR	AADT		DIRECTION 1		DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR	
2019	16400	C	N	7500	S	8900	9.00	54.70	3.20
2018	15100	S	N	7100	S	8000	9.00	54.10	6.20
2017	14700	F	N	6900	S	7800	9.00	54.30	6.20
2016	14000	C	N	6600	S	7400	9.00	53.40	6.20
2015	13100	S	N	6300	S	6800	9.00	53.80	9.70
2014	12700	F	N	6100	S	6600	9.00	53.80	9.70
2013	12500	C	N	6000	S	6500	9.00	54.20	9.70
2012	13400	F	N	6400	S	7000	9.00	53.60	4.50
2011	13600	C	N	6500	S	7100	9.00	54.30	3.70
2010	11700	C	N	5400	S	6300	10.91	56.02	3.60
2009	19100	F	N	9100	S	10000	11.80	61.02	3.30
2008	19900	C	N	9400	S	10500	11.37	57.79	3.20

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN

*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION
 TRANSPORTATION STATISTICS OFFICE
 2019 HISTORICAL AADT REPORT

COUNTY: 70 - BREVARD

SITE: 7084 - MILTON RD, 0.49 MI N OF MALABAR RD (HPMS)

YEAR	AADT		DIRECTION 1		DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2019	21500	C	N 10500		S 11000	9.00	54.70	2.80
2018	25000	S	N 11500		S 13500	9.00	54.10	3.50
2017	24000	F	N 11000		S 13000	9.00	54.30	3.50
2016	23000	C	N 10500		S 12500	9.00	53.40	3.50
2015	18500	E				9.00	53.80	5.50
2014	18200	S	N 8700		S 9500	9.00	53.80	2.20
2013	18000	F	N 8600		S 9400	9.00	54.20	2.20
2012	18200	C	N 8700		S 9500	9.00	53.60	2.20
2010	18000	F	N 8700		S 9300	10.91	56.02	4.40
2009	18400	C	N 8900		S 9500	11.80	61.02	2.30

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
 S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
 V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN

*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2019 HISTORICAL AADT REPORT

COUNTY: 70 - BREVARD

SITE: 8142 - MALABAR RD, 0.32 MI E OF HURLEY BLVD - OFF SYSTEM

YEAR	AADT		DIRECTION 1		DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR	
2019	13000	S	E	6500	W	6500	9.00	54.70	4.40
2018	12800	F	E	6400	W	6400	9.00	54.10	4.20
2017	12400	C	E	6200	W	6200	9.00	54.30	5.00
2016	10600	T	E	5300	W	5300	9.00	53.40	5.60
2015	10000	S	E	5000	W	5000	9.00	53.80	6.20
2014	9600	F	E	4800	W	4800	9.00	53.80	4.90
2013	9600	C	E	4800	W	4800	9.00	54.20	3.80
2012	9100	C	E	0	W	0	9.00	53.60	4.50

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN

*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION
 TRANSPORTATION STATISTICS OFFICE
 2019 HISTORICAL AADT REPORT

COUNTY: 70 - BREVARD

SITE: 8156 - ST. JOHNS HERITAGE PKWY, N OF MALABAR RD - OFF SYSTEM HPMS '18

YEAR	AADT	DIRECTION 1		DIRECTION 2		*K FACTOR	D FACTOR	T FACTOR
2019	5900 F	N	2900	S	3000	9.00	54.70	3.80
2018	5900 C	N	2900	S	3000	9.00	54.10	3.80
2017	3400 F	N	1000	S	2400	9.00	54.30	5.00
2016	3300 C	N	1000	S	2300	9.00	53.40	5.60

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
 S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
 V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN

*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

APPENDIX C – MALABAR ROAD CRASH HISTORY

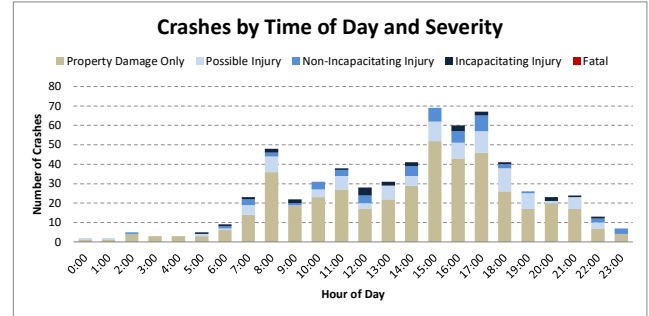
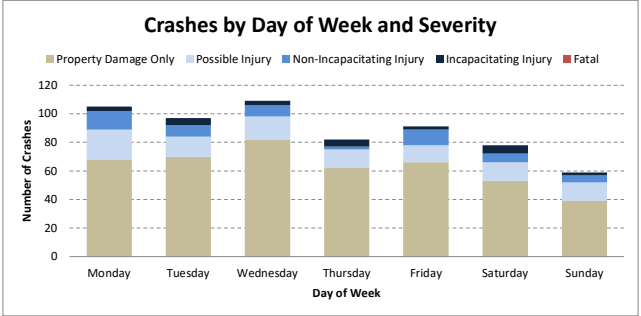
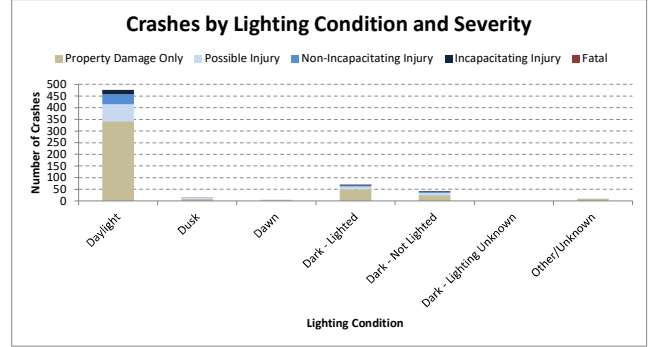
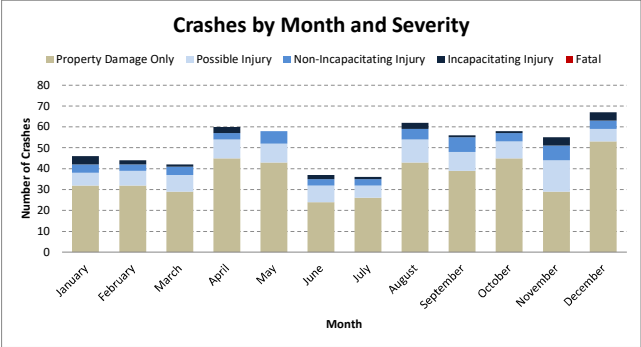
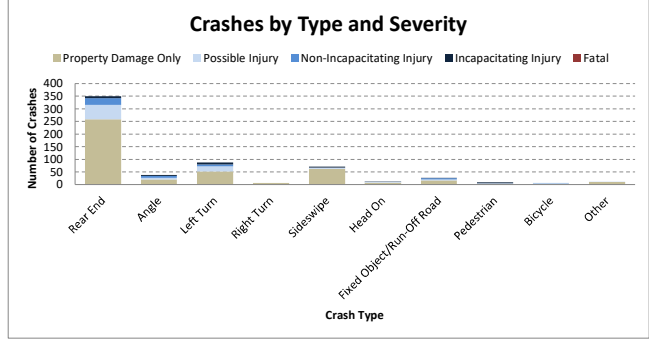
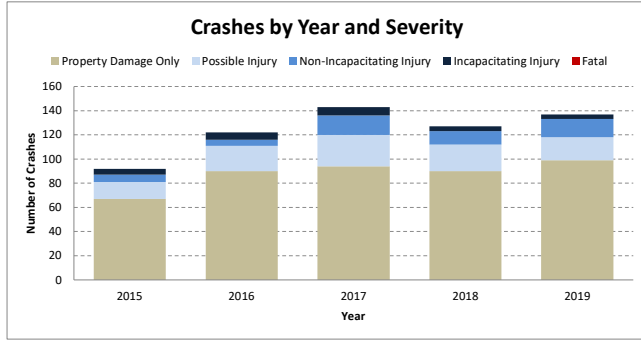
Contained in this Appendix –

- Malabar Road Crash History

CRASH ANALYSIS - Malabar Road from St. Johns Heritage Parkway to Minton Road

		Analysis Year					Severity					Total	Average	Percent
		2015	2016	2017	2018	2019	Property Damage Only	Possible Injury	Non-Incapacitating Injury	Incapacitating Injury	Fatal			
Type of Crash	Rear End	58	81	77	58	75	259	56	27	7	0	349	69.80	56.2%
	Angle	4	4	9	11	10	21	6	8	3	0	38	7.60	6.1%
	Left Turn	13	13	23	20	19	52	20	8	8	0	88	17.60	14.2%
	Right Turn	1	0	1	3	2	7	0	0	0	0	7	1.40	1.1%
	Sideswipe	8	15	15	17	16	63	4	1	3	0	71	14.20	11.4%
	Head On	1	2	3	4	3	8	3	1	1	0	13	2.60	2.1%
	Fixed Object/Run-Off Road	5	3	7	5	7	16	5	5	1	0	27	5.40	4.3%
	Pedestrian	0	2	3	2	2	1	5	0	3	0	9	1.80	1.4%
	Bicycle	0	0	2	3	2	3	2	2	0	0	7	1.40	1.1%
	Other	2	2	3	4	1	10	1	1	0	0	12	2.40	1.9%
	Total Crashes	92	122	143	127	137	440	102	53	26	0	621	124.20	100.0%
Crash Severity	Property Damage Only	67	90	94	90	99						440	88.00	70.9%
	Possible Injury	14	21	26	22	19						102	20.40	16.4%
	Non-Incapacitating Injury	6	5	16	11	15						53	10.60	8.5%
	Incapacitating Injury	5	6	7	4	4						26	5.20	4.2%
	Fatal	0	0	0	0	0						0	0.00	0.0%
Light Conditions	Daylight	68	98	112	94	104	341	74	42	19	0	476	95.20	76.7%
	Dusk	2	1	5	4	5	10	5	2	0	0	17	3.40	2.7%
	Dawn	1	0	1	2	1	4	1	0	0	0	5	1.00	0.8%
	Dark - Lighted	11	19	14	12	14	50	12	4	4	0	70	14.00	11.3%
	Dark - Not Lighted	7	4	9	12	11	25	10	5	3	0	43	8.60	6.9%
	Dark - Lighting Unknown	0	0	0	0	0	0	0	0	0	0	0	0.00	0.0%
	Other/Unknown	3	0	2	3	2	10	0	0	0	0	10	2.00	1.6%
Road Surface Condition	Dry	71	105	121	111	114	378	79	45	20	0	522	104.40	84.1%
	Wet	21	16	22	16	23	61	23	8	6	0	98	19.60	15.8%
	Other	0	1	0	0	0	1	0	0	0	0	1	0.20	0.2%
Month	January	6	8	10	11	11	32	6	4	4	0	46	9.20	7.4%
	February	6	6	12	7	13	32	7	3	2	0	44	8.80	7.1%
	March	3	9	9	9	12	29	8	4	1	0	42	8.40	6.8%
	April	11	11	11	18	9	45	9	3	3	0	60	12.00	9.7%
	May	8	14	15	11	10	43	9	6	0	0	58	11.60	9.3%
	June	5	4	14	6	8	24	8	3	2	0	37	7.40	6.0%
	July	6	13	7	5	5	26	6	3	1	0	36	7.20	5.8%
	August	9	17	11	10	15	43	11	5	3	0	62	12.40	10.0%
	September	9	11	14	10	12	39	9	7	1	0	56	11.20	9.0%
	October	11	10	17	11	9	45	8	4	1	0	58	11.60	9.3%
	November	12	8	13	12	10	29	15	7	4	0	55	11.00	8.9%
	December	6	11	10	17	23	53	6	4	4	0	67	13.40	10.8%
Day of Week	Monday	19	16	20	22	28	68	21	13	3	0	105	21.00	16.9%
	Tuesday	14	28	21	16	18	70	14	8	5	0	97	19.40	15.6%
	Wednesday	14	23	29	23	20	82	16	8	3	0	109	21.80	17.6%
	Thursday	12	9	19	17	25	62	13	2	5	0	82	16.40	13.2%
	Friday	14	20	23	19	15	66	12	11	2	0	91	18.20	14.7%
	Saturday	17	13	16	14	18	53	13	6	6	0	78	15.60	12.6%
	Sunday	2	13	15	16	13	39	13	5	2	0	59	11.80	9.5%
Hour of Day	0:00	1	0	0	0	1	1	1	0	0	0	2	0.40	0.3%
	1:00	0	1	0	0	1	1	1	0	0	0	2	0.40	0.3%
	2:00	1	0	0	2	2	4	0	1	0	0	5	1.00	0.8%
	3:00	1	0	1	1	0	3	0	0	0	0	3	0.60	0.5%
	4:00	0	0	1	1	1	3	0	0	0	0	3	0.60	0.5%
	5:00	1	1	0	2	1	3	1	0	1	0	5	1.00	0.8%
	6:00	0	2	2	3	2	6	1	1	1	0	9	1.80	1.4%
	7:00	2	4	9	6	2	14	5	3	1	0	23	4.60	3.7%
	8:00	7	11	13	8	9	36	8	2	2	0	48	9.60	7.7%
	9:00	3	3	5	7	4	19	0	1	2	0	22	4.40	3.5%
	10:00	5	3	9	6	8	23	4	4	0	0	31	6.20	5.0%
	11:00	5	15	5	3	10	27	7	3	1	0	38	7.60	6.1%
	12:00	1	9	12	2	4	17	3	4	4	0	28	5.60	4.5%
	13:00	2	6	6	11	6	22	7	0	2	0	31	6.20	5.0%
	14:00	6	12	6	9	8	29	5	5	2	0	41	8.20	6.6%
	15:00	10	11	15	17	16	52	10	7	0	0	69	13.80	11.1%
	16:00	11	10	17	8	14	43	8	6	3	0	60	12.00	9.7%
	17:00	15	9	16	11	16	46	11	8	2	0	67	13.40	10.8%
	18:00	11	4	5	9	12	26	12	2	1	0	41	8.20	6.6%
	19:00	3	4	5	6	8	17	8	1	0	0	26	5.20	4.2%
	20:00	3	7	3	2	8	20	1	0	2	0	23	4.60	3.7%
	21:00	3	6	6	7	2	17	6	0	1	0	24	4.80	3.9%
	22:00	1	2	6	3	1	7	3	2	1	0	13	2.60	2.1%
	23:00	0	2	1	3	1	4	0	3	0	0	7	1.40	1.1%
Alcohol & Drugs	None	88	119	141	122	132	433	95	52	22	0	602	120.40	96.9%
	Alcohol Involved	3	3	1	5	4	6	6	1	3	0	16	3.20	2.6%
	Drugs Involved	1	0	1	0	1	1	1	0	1	0	3	0.60	0.5%
	Alcohol and Drugs	0	0	0	0	0	0	0	0	0	0	0	0.00	0.0%
	Undetermined	0	0	0	0	0	0	0	0	0	0	0	0.00	0.0%

CRASH ANALYSIS - Malabar Road from St. Johns Heritage Parkway to Minton Road



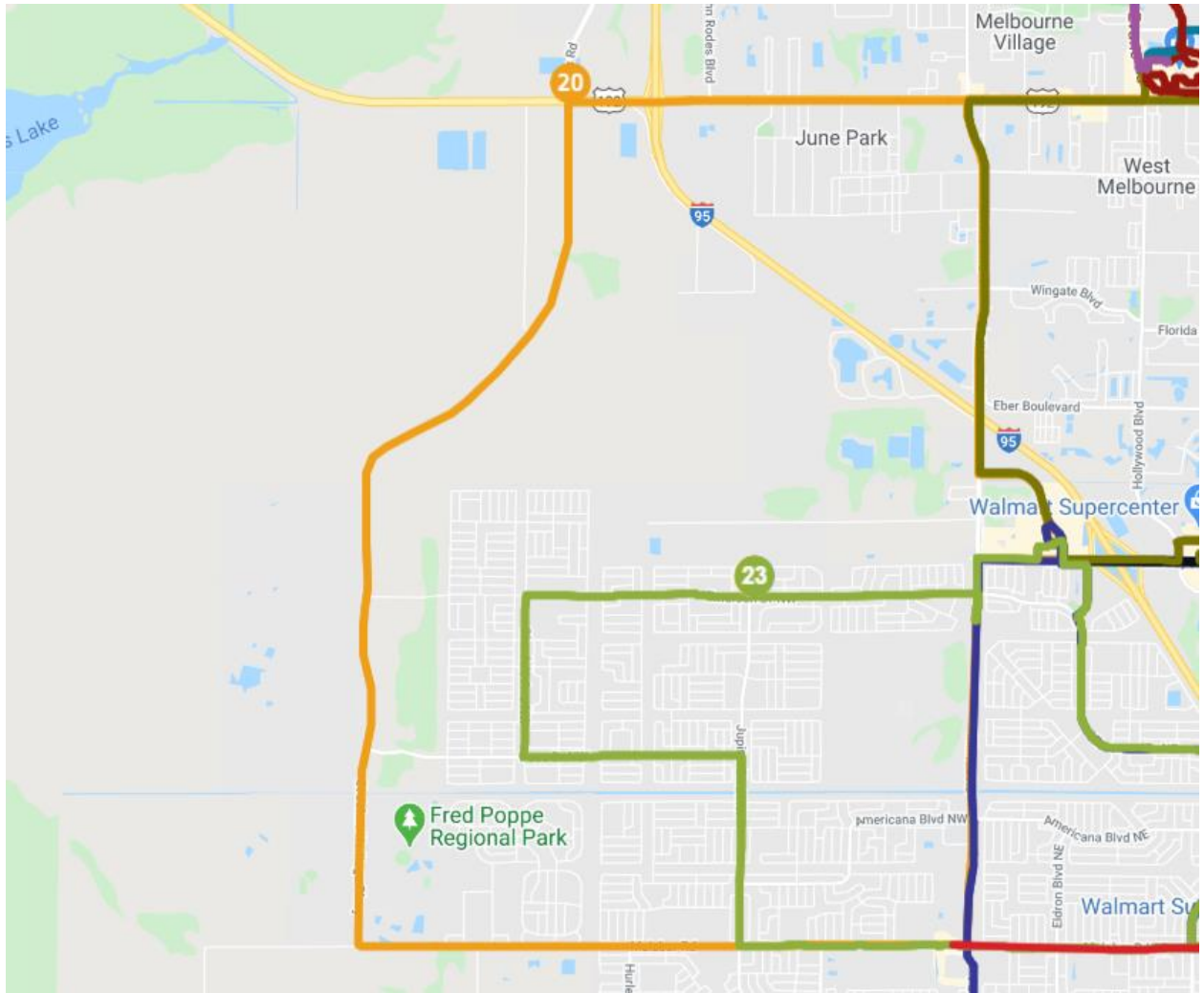
APPENDIX D – SPACE COAST AREA TRANSIT DATA

Contained in this Appendix –

- Space Coast Area Transit Data

2018-2019 SCAT Ridership

MONTH	1	2	3	4	5	6	7	8	9	20	21	22	23	24	25	26	27	28	29	33	TOTAL
OCTOBER	18470	6795	4462	23782	3491	18927	3719	2428	16835	1219	9708	4695	6820	6344	11418	3225	7355	9373	10611	36	169712
NOVEMBER	14713	6434	4238	22802	3120	16807	3252	2035	16344	1448	10061	4017	5923	5675	10089	2888	6904	8781	9300	98	154929
DECEMBER	13647	5627	4093	21541	2733	14941	2860	2189	14770	1443	8312	3812	5026	5689	9071	2506	6029	7170	8472	24	139954
JANUARY	15177	7041	4547	23342	3636	17068	3053	2334	16524	1722	9473	4340	5945	5786	9993	3038	7166	8505	9114	48	157854
FEBRUARY	13921	6409	3979	21778	3358	14548	2626	2386	16012	1809	8833	3962	5504	5504	9317	2876	7249	8263	8571	72	146979
MARCH	14149	6540	4100	22104	3339	14925	3022	2230	16762	1528	8674	4271	5220	6083	9494	2775	6966	8307	8555	84	149129
APRIL	14622	5954	4244	22509	3414	16218	2873	1612	17402	1902	8591	4179	5889	6222	10216	2892	7884	8673	8479	48	153823
MAY	14747	6375	4184	23142	3259	16665	3143	1693	22127	1641	8584	4717	5443	5698	10569	3185	7286	7909	8865	97	159327
JUNE	13250	6155	3978	20465	2851	16437	3083	1790	16910	1702	7059	4134	4506	5166	9962	2609	6781	7650	8304	55	142847
JULY	14936	6809	4569	22546	3137	16715	3047	2192	18380	1848	8404	4498	4889	6083	10589	2954	6498	7968	8638	57	154757
AUGUST	15559	6714	4340	21691	3306	17294	2835	2664	18075	2071	7619	4171	5132	5805	10639	2866	6795	8756	8824	72	155226
SEPTEMBER	13088	5851	3635	18758	2777	14513	2300	2224	13221	1685	5715	3483	4620	4451	8427	2356	5644	6506	6649	28	125930
WEEKDAY	176280	76704	50369	264460	38422	195059	35814	25779	203360	20017	101033	50278	64915	68506	119784	34170	82557	97861	104383	719	1810467
WEEKEND	15364	8340	5664	54269	3954	16363	2840	4653	49948	2654	14514	5873	6760	7947	12620	4527	10181	7731	9599		
TOTAL	191644	85044	56033	157809	42376	211422	38654	30432	253307	22670	115547	56151	71675	76452	132404	38697	92738	105591	113982	719	1893348



How to Use the Route Maps and Schedules

The route maps and schedules are color coordinated. The numbered stops on the map match the numbered locations listed on the schedule. To determine what time a bus will stop at a specific location, read across. To determine how long it will take you to get from one location to another, read down. Transfer points indicate designated stops at which you may transfer to other routes. When transferring, check the schedule of the route you are transferring to for exact times and return trip availability.

BUS FARES

FULL FARE, 1-RIDE	\$1.50
REDUCED FARE, 1-RIDE	\$0.75
FULL FARE, 10-RIDE PASS	\$12.00
REDUCED FARE, 10-RIDE PASS	\$6.00
FULL FARE, 30 DAY PASS	\$42.00
REDUCED FARE, 30 DAY PASS	\$21.00

Eligibility For Reduced Fare

Those eligible for Reduced Fare include seniors (60+), disabled, veterans, and students. All Reduced Fare riders must register for a Reduced Fare ID Card at Space Coast Area Transit or at 321Transit.com. There is no charge for children under the age of five (5), or for transfers. EFSC students ride free with a valid EFSC Student ID. Due to a grant from the City of Melbourne, no fare is charged on Routes 21, 24, and 29 to Melbourne residents with valid ID who ride within the Melbourne city limits.

Types Of Fares And How To Purchase

1-Ride fares are paid when boarding. Exact change is required; the driver is not equipped to make change. Fare specials include a **10-Ride** and a **30 Day Pass**. Both must be purchased in advance. Options include:

- At Space Coast Area Transit, 401 S. Varr Ave., Cocoa, Florida, 32922, or 460 S. Harbor City Blvd., Melbourne, Florida, 32901, and also at select Brevard County Libraries.
- Checks up to \$100.00, money orders, and credit cards are accepted by mail.
- Visa, MasterCard, and Discover cards are also accepted on 321Transit.com or by calling 321.635.7815, option 2 or 321.952.4561, option 1.

Holiday Schedules

Generally, the following holidays operate on modified schedules: New Year's Day, Martin Luther King Day, Memorial Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving Day, the day after Thanksgiving, Christmas Eve, and Christmas Day. For updates, call 321.633.1878.

How to Ride

- The safety of our passengers is our #1 priority.
 - Please limit packages to those you can personally carry on the bus by yourself.
 - Be at the stop at least 5 minutes prior to the scheduled arrival time.
 - Do not approach a moving bus.
 - If you need assistance to board the bus, please ask. It is part of the driver's duty to help.
 - Have exact fare or pass ready prior to boarding the bus. Drivers cannot make change.
 - Leave seats near the front for elderly or disabled riders, moving promptly to the next available seat.
 - Passengers may only use audio devices with head phones activated.
 - Eating, drinking, smoking, electronic cigarettes, and any materials that are flammable are not allowed on buses.
 - Service animals are the only animals allowed.
 - If available, use the stop bar or pull cord to signal your stop one block in advance. If one is not available, alert your driver at least one block in advance.
 - Do not leave your seat until the bus is fully stopped.
 - All buses are equipped with bike racks. Surfboards and bikes are permitted inside the bus when space is available.
 - Proper attire is needed to board. Shirts and shoes are required. Bathing suits, except board shorts, must be covered.
- All scheduled times are approximate and depend on traffic and other conditions.

VANPOOL



TAKE THE WORK OUT OF GETTING TO WORK!

Space Coast Area Transit's Vanpool Leasing Program provides assistance to commuters who live in the same area and work in the same location. Groups of 7-15 passengers often meet at one of Brevard County's Park & Ride lots and ride to work comfortably in state-of-the-art passenger vans. Saves money, time and gas!

VIERA PARK & RIDE

5545 Porada Drive, Viera, FL 32940
Near Stadium Pkwy. and Viera Blvd.

EAU GALLIE PARK & RIDE

5110 West Eau Gallie Blvd., Melbourne, FL 32934
Exit 183, 1/8 mile west of I-95, on Eau Gallie Blvd.

PALM BAY PARK & RIDE

341 Emerson Drive NW, Palm Bay, FL 32907
Emerson Dr. NW, west of Minton Rd.

ROUTE 20
SPACE COAST
AREA TRANSIT

HERITAGE / WEST MELBOURNE

MONDAY-SATURDAY
OCTOBER 5, 2019

321Transit.com

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INTO
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space
coast
AREA TRANSIT

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coast
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For Vanpool Info Call
321.952.4562
321Transit.com

EXPRESS ROUTE

REFERENCE ROADS

ROUTE DIRECTION

BUS STOP NUMBER

TRANSFER POINT

HOSPITAL

SHOPPING

AIRPORT

LIBRARY

COLLEGE



ROUTE 20 • HERITAGE – WEST MELBOURNE • MONDAY-FRIDAY SCHEDULE

This route has DESIGNATED STOPS only. The bus will drop off and pick up ONLY at marked bus stops along the route. **TRANSFER STOPS** are indicated in bold italics.

MAP #	TIME POINTS	AM	AM	AM	AM	AM	AM	PM	PM	PM	PM	PM	PM	PM	PM	MAP #	TRANSFER TO ROUTE NUMBER
1	MELBOURNE SQUARE MALL (DEPART)	6:25	7:25	8:25	9:25	10:25	-	12:25	1:25	2:25	3:25	4:25	5:25	6:25	7:25	1	#21 #25 #28
2	WEST NEW HAVEN & PINE ST.	6:31	7:31	8:31	9:31	10:31	-	12:31	1:31	2:31	3:31	4:31	5:31	6:31	7:31	2	
3	MINTON RD. @ FIELD OF DREAMS	6:36	7:36	8:36	9:36	10:36	-	12:36	1:36	2:36	3:36	4:36	5:36	6:36	7:36	3	
4	NORFOLK PKWY ACROSS FROM PROMISE IN BREVARD	6:39	7:39	8:39	9:39	10:39	-	12:39	1:39	2:39	3:39	4:39	5:39	6:39	7:39	4	
5	HAMMOCK LANDING	6:41	7:41	8:41	9:41	10:41	-	12:41	1:41	2:41	3:41	4:41	5:41	6:41	7:41	5	
6	MINTON RD. & AMERICANA BLVD.	6:47	7:47	8:47	9:47	10:47	-	12:47	1:47	2:47	3:47	4:47	5:47	6:47	7:47	6	
7	MALABAR RD. / GREENBRIER AVE.	6:53	7:53	8:53	9:53	10:53	-	12:53	1:53	2:53	3:53	4:53	5:53	6:53	7:53	7	
8	MALABAR RD. @ FRED POPPE REGIONAL PARK	6:59	7:59	8:59	9:59	10:59	-	12:59	1:59	2:59	3:59	4:59	5:59	6:59	7:59	8	
9	MALABAR RD. / ST. JOHN'S HERITAGE PKWY.	7:00	8:00	9:00	10:00	11:00	-	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9	
10	WEST NEW HAVEN AVE. @ GOODWILL	7:08	8:08	9:08	10:08	11:08	-	1:08	2:08	3:08	4:08	5:08	6:08	7:08	8:08	10	
11	NEW HAVEN AVE. @ WINDOVER SQUARE	7:17	8:17	9:17	10:17	11:17	-	1:17	2:17	3:17	4:17	5:17	6:17	7:17	8:17	11	
1	MELBOURNE SQUARE MALL (ARRIVE)	7:20	8:20	9:20	10:20	11:20	-	1:20	2:20	3:20	4:20	5:20	6:20	7:20	8:20	1	#21 #25 #28

ROUTE 20 • HERITAGE – WEST MELBOURNE • SATURDAY SCHEDULE

MAP #	TIME POINTS	AM	AM	AM	AM	AM	PM	PM	PM	PM	PM	MAP #	TRANSFER TO ROUTE NUMBER
1	MELBOURNE SQUARE MALL (DEPART)	7:25	8:25	9:25	10:25	11:25	-	1:25	2:25	3:25	4:25	1	
2	WEST NEW HAVEN & PINE ST.	7:31	8:31	9:31	10:31	11:31	-	1:31	2:31	3:31	4:31	2	
3	MINTON RD. @ FIELD OF DREAMS	7:36	8:36	9:36	10:36	11:36	-	1:36	2:36	3:36	4:36	3	
4	NORFOLK PKWY ACROSS FROM PROMISE IN BREVARD	7:39	8:39	9:39	10:39	11:39	-	1:39	2:39	3:39	4:39	4	
5	HAMMOCK LANDING	7:41	8:41	9:41	10:41	11:41	-	1:41	2:41	3:41	4:41	5	
6	MINTON RD. & AMERICANA BLVD.	7:47	8:47	9:47	10:47	11:47	-	1:47	2:47	3:47	4:47	6	
7	MALABAR RD. / GREENBRIER AVE.	7:53	8:53	9:53	10:53	11:53	-	1:53	2:53	3:53	4:53	7	
8	MALABAR RD. @ FRED POPPE REGIONAL PARK	7:59	8:59	9:59	10:59	11:59	-	1:59	2:59	3:59	4:59	8	
9	MALABAR RD. / ST. JOHN'S HERITAGE PKWY.	8:00	9:00	10:00	11:00	12:00	-	2:00	3:00	4:00	5:00	9	
10	WEST NEW HAVEN AVE. @ GOODWILL	8:08	9:08	10:08	11:08	12:08	-	2:08	3:08	4:08	5:08	10	
11	NEW HAVEN AVE. @ WINDOVER SQUARE	8:17	9:17	10:17	11:17	12:17	-	2:17	3:17	4:17	5:17	11	
1	MELBOURNE SQUARE MALL (ARRIVE)	8:20	9:20	10:20	11:20	12:20	-	2:20	3:20	4:20	5:20	1	

NOTES:

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Space Coast AREA TRANSIT

Call The RideLine **321.633.1878**
321Transit.com

How to Use the Route Maps and Schedules

The route maps and schedules are color coordinated. The numbered stops on the map match the numbered locations listed on the schedule. To determine what time a bus will stop at a specific location, read across. To determine how long it will take you to get from one location to another, read down. Transfer points indicate designated stops at which you may transfer to other routes. When transferring, check the schedule of the route you are transferring to for exact times and return trip availability.

BUS FARES

FULL FARE, 1-RIDE	\$1.50
REDUCED FARE, 1-RIDE	\$0.75
FULL FARE, 10-RIDE PASS	\$12.00
REDUCED FARE, 10-RIDE PASS	\$6.00
FULL FARE, 30 DAY PASS	\$42.00
REDUCED FARE, 30 DAY PASS	\$21.00

Eligibility For Reduced Fare

Those eligible for Reduced Fare include seniors (60+), disabled, veterans, and students. All Reduced Fare riders must register for a Reduced Fare ID Card at Space Coast Area Transit or at 321Transit.com. There is no charge for children under the age of five (5), or for transfers. EFSC students ride free with a valid EFSC Student ID. Due to a grant from the City of Melbourne, no fare is charged on Routes 21, 24, and 29 to Melbourne residents with valid ID who ride within the Melbourne city limits.

Types Of Fares And How To Purchase

1-Ride fares are paid when boarding. Exact change is required; the driver is not equipped to make change. Fare specials include a **10-Ride** and a **30 Day Pass**. Both must be purchased in advance. Options include:

- At Space Coast Area Transit, 401 S. Varr Ave., Cocoa, Florida, 32922, or 460 S. Harbor City Blvd., Melbourne, Florida, 32901, and also at select Brevard County Libraries.
- Checks up to \$100.00, money orders, and credit cards are accepted by mail.
- Visa, MasterCard, and Discover cards are also accepted on 321Transit.com or by calling 321.635.7815, option 2 or 321.952.4561, option 1.

Holiday Schedules

Generally, the following holidays operate on modified schedules: New Year's Day, Martin Luther King Day, Memorial Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving Day, the day after Thanksgiving, Christmas Eve, and Christmas Day. For updates, call 321.633.1878.

How to Ride

- The safety of our passengers is our #1 priority.
 - Please limit packages to those you can personally carry on the bus by yourself.
 - Be at the stop at least 5 minutes prior to the scheduled arrival time.
 - Do not approach a moving bus.
 - If you need assistance to board the bus, please ask. It is part of the driver's duty to help.
 - Have exact fare or pass ready prior to boarding the bus. Drivers cannot make change.
 - Leave seats near the front for elderly or disabled riders, moving promptly to the next available seat.
 - Passengers may only use audio devices with head phones activated.
 - Eating, drinking, smoking, electronic cigarettes, and any materials that are flammable are not allowed on buses.
 - Service animals are the only animals allowed.
 - If available, use the stop bar or pull cord to signal your stop one block in advance. If one is not available, alert your driver at least one block in advance.
 - Do not leave your seat until the bus is fully stopped.
 - All buses are equipped with bike racks. Surfboards and bikes are permitted inside the bus when space is available.
 - Proper attire is needed to board. Shirts and shoes are required. Bathing suits, except board shorts, must be covered.
- All scheduled times are approximate and depend on traffic and other conditions.

VANPOOL



TAKE THE WORK OUT OF GETTING TO WORK!

Space Coast Area Transit's Vanpool Leasing Program provides assistance to commuters who live in the same area and work in the same location. Groups of 7-15 passengers often meet at one of Brevard County's Park & Ride lots and ride to work comfortably in state-of-the-art passenger vans. Saves money, time and gas!

VIERA PARK & RIDE

5545 Porada Drive, Viera, FL 32940
Near Stadium Pkwy. and Viera Blvd.

EAU GALLIE PARK & RIDE

5110 West Eau Gallie Blvd., Melbourne, FL 32934
Exit 183, 1/8 mile west of I-95, on Eau Gallie Blvd.

PALM BAY PARK & RIDE

341 Emerson Drive NW, Palm Bay, FL 32907
Emerson Dr. NW, west of Minton Rd.

ROUTE
23
SPACE
COAST
AREA TRANSIT

WEST
PALM BAY

MONDAY-SATURDAY
OCTOBER 5, 2019

321Transit.com

MOVING
BREVARD
INTO
THE
FUTURE

PARATRANSIT SERVICE 321.633.1878
TTY 321.633.1896

LOST AND FOUND 321.633.1878

VOLUNTEERS IN MOTION ... 321.635.7999

Call The RideLine
321.633.1878
321Transit.com

SPACE
COAST
AREA TRANSIT

SPACE
COAST
AREA TRANSIT

For Vanpool Info Call
321.952.4562
321Transit.com

f i YouTube } 321Transit



ROUTE 23 • WEST PALM BAY • MONDAY-FRIDAY SCHEDULE

This route has DESIGNATED STOPS only. The bus will drop off and pick up ONLY at marked bus stops along the route. *TRANSFER STOPS* are indicated in bold italics.

MAP #	TIME POINTS	AM	AM	AM	AM	AM	AM/PM	PM	PM	PM	PM	PM	PM	PM	PM	PM	MAP #	TRANSFER TO ROUTE NUMBER
1	HAMMOCK LANDING (DEPART)	6:35	7:35	8:35	9:35	10:35	11:35	12:35	1:35	2:35	3:35	4:35	5:35	6:35	7:35	8:30	1	#22 #25 #27
2	MINTON RD. & EMERSON DR.	6:39	7:39	8:39	9:39	10:39	11:39	12:39	1:39	2:39	3:39	4:39	5:39	6:39	7:39		2	
3	EMERSON DR. & JUPITER BLVD.	6:41	7:41	8:41	9:41	10:41	11:41	12:41	1:41	2:41	3:41	4:41	5:41	6:41	7:41		3	
4	EMERSON DR. & GLENDALE AVE.	6:45	7:45	8:45	9:45	10:45	11:45	12:45	1:45	2:45	3:45	4:45	5:45	6:45	7:45		4	
5	PACE DR. & GLENDALE AVE.	6:47	7:47	8:47	9:47	10:47	11:47	12:47	1:47	2:47	3:47	4:47	5:47	6:47	7:47		5	
6	PACE DR. & JUPITER BLVD.	6:51	7:51	8:51	9:51	10:51	11:51	12:51	1:51	2:51	3:51	4:51	5:51	6:51	7:51		6	
7	MALABAR RD. & JUPITER BLVD.	6:55	7:55	8:55	9:55	10:55	11:55	12:55	1:55	2:55	3:55	4:55	5:55	6:55	7:55		7	
8	MALABAR RD. @ PALM BAY WEST	6:58	7:58	8:58	9:58	10:58	11:58	12:58	1:58	2:58	3:58	4:58	5:58	6:58	7:58		8	
9	MALABAR RD. @ WALMART	7:03	8:03	9:03	10:03	11:03	12:03	1:03	2:03	3:03	4:03	5:03	6:03	7:03	8:03		9	
10	EFSC - PALM BAY	7:08	8:08	9:08	10:08	11:08	12:08	1:08	2:08	3:08	4:08	5:08	6:08	7:08	8:08		10	
11	MALABAR RD. & EMERSON DR.	7:13	8:13	9:13	10:13	11:13	12:13	1:13	2:13	3:13	4:13	5:13	6:13	7:13	8:13		11	
12	EMERSON DR. & AMERICANA BLVD.	7:15	8:15	9:15	10:15	11:15	12:15	1:15	2:15	3:15	4:15	5:15	6:15	7:15	8:15		12	
13	CULVER DR. @ PALM BAY SENIOR CENTER	7:19	8:19	9:19	10:19	11:19	12:19	1:19	2:19	3:19	4:19	5:19	6:19	7:19	8:19		13	
1	HAMMOCK LANDING (ARRIVE)	7:30	8:30	9:30	10:30	11:30	12:30	1:30	2:30	3:30	4:30	5:30	6:30	7:30	8:30		1	#22 #25 #27

ROUTE 23 • WEST PALM BAY • SATURDAY SCHEDULE

MAP #	TIME POINTS	AM	AM	AM	AM	AM/PM	PM	PM	PM	PM	PM	PM	MAP #	TRANSFER TO ROUTE NUMBER
1	HAMMOCK LANDING (DEPART)	7:35	8:35	9:35	10:35	11:35	—	1:35	2:35	3:35	4:35	5:35	1	#22 #25 #27
2	MINTON RD. & EMERSON DR.	7:39	8:39	9:39	10:39	11:39	—	1:39	2:39	3:39	4:39		2	
3	EMERSON DR. & JUPITER BLVD.	7:41	8:41	9:41	10:41	11:41	—	1:41	2:41	3:41	4:41		3	
4	EMERSON DR. & GLENDALE AVE.	7:45	8:45	9:45	10:45	11:45	—	1:45	2:45	3:45	4:45		4	
5	PACE DR. & GLENDALE AVE.	7:47	8:47	9:47	10:47	11:47	—	1:47	2:47	3:47	4:47		5	
6	PACE DR. & JUPITER BLVD.	7:51	8:51	9:51	10:51	11:51	—	1:51	2:51	3:51	4:51		6	
7	MALABAR RD. & JUPITER BLVD.	7:55	8:55	9:55	10:55	11:55	—	1:55	2:55	3:55	4:55		7	
8	MALABAR RD. @ PALM BAY WEST	7:58	8:58	9:58	10:58	11:58	—	1:58	2:58	3:58	4:58		8	
9	MALABAR RD. @ WALMART	8:03	9:03	10:03	11:03	12:03	—	2:03	3:03	4:03	5:03		9	
10	EFSC - PALM BAY	8:08	9:08	10:08	11:08	12:08	—	2:08	3:08	4:08	5:08		10	
11	MALABAR RD. & EMERSON DR.	8:13	9:13	10:13	11:13	12:13	—	2:13	3:13	4:13	5:13		11	
12	EMERSON DR. & AMERICANA BLVD.	8:15	9:15	10:15	11:15	12:15	—	2:15	3:15	4:15	5:15		12	
13	CULVER DR. @ PALM BAY SENIOR CENTER	8:19	9:19	10:19	11:19	12:19	—	2:19	3:19	4:19	5:19		13	
1	HAMMOCK LANDING (ARRIVE)	8:30	9:30	10:30	11:30	12:30	—	2:30	3:30	4:30	5:30		1	#22 #25 #27

NOTES:

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APPENDIX E – RAW VOLUME AND INTERSECTION COUNT DATA

Contained in this Appendix –

- 72-Hour Volume Counts
 - Intersection Turning Movement Counts
-

VOLUME COUNTS

SITE ID: 1

LOCATION: ST. JOHNS HERITAGE PARKWAY, NORTH OF MALABAR ROAD

Accurate Traffic Counts
 WEEKLY SUMMARY
 Starting:2/25/2020

Site Ref: 000000000001
 Counter ID: 000000018486
 Location: St Johns Heritage Pkwy, N of Malabar Rd
 Direction: NORTH

File: D0225001.prn
 City: Malabar
 County: Brevard

TIME	MON		TUE 25		WED 26		THU 27		FRI		SAT		SUN		WK TOT		WK AVG	
	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm
00:15			1	26	3	20	0	32							4	78	1	26
00:30			1	27	2	19	2	20							5	66	1	22
00:45			1	27	1	26	0	26							2	79	0	26
01:00			5	31	6	23	1	23							12	77	4	25
01:15			1	34	2	18	1	31							4	83	1	27
01:30			2	16	0	28	2	34							4	78	1	26
01:45			1	26	1	32	2	23							4	81	1	27
02:00			0	31	0	34	0	34							0	99	0	33
02:15			0	39	1	40	2	40							3	119	1	39
02:30			5	28	3	37	5	33							13	98	4	32
02:45			1	35	5	30	1	31							7	96	2	32
03:00			1	43	2	46	0	34							3	123	1	41
03:15			2	45	3	37	1	28							6	110	2	36
03:30			3	26	1	34	2	50							6	110	2	36
03:45			1	101	2	75	2	122							5	298	1	99
04:00			5	100	5	105	6	94							16	299	5	99
04:15			3	63	5	64	6	52							14	179	4	59
04:30			5	45	3	47	5	39							13	131	4	43
04:45			10	39	8	55	9	44							27	138	9	46
05:00			10	55	10	37	10	35							30	127	10	42
05:15			23	59	23	49	10	38							56	146	18	48
05:30			14	49	19	61	14	44							47	154	15	51
05:45			33	50	29	34	38	47							100	131	33	43
06:00			43	42	36	53	40	39							119	134	39	44
06:15			46	47	47	42	43	37							136	126	45	42
06:30			62	26	76	30	77	42							215	98	71	32
06:45			105	31	95	32	85	45							285	108	95	36
07:00			104	46	89	21	112	29							305	96	101	32
07:15			118	24	128	16	112	18							358	58	119	19
07:30			139	28	132	18	124	15							395	61	131	20
07:45			103	22	114	9	110	21							327	52	109	17
08:00			100	17	98	18	96	26							294	61	98	20
08:15			102	23	97	9	84	13							283	45	94	15
08:30			83	17	97	14	85	21							265	52	88	17
08:45			114	15	85	13	107	15							306	43	102	14
09:00			72	20	97	17	86	16							255	53	85	17
09:15			43	12	28	6	33	12							104	30	34	10
09:30			43	4	34	11	30	6							107	21	35	7
09:45			31	4	46	6	37	3							114	13	38	4
10:00			34	5	29	9	28	10							91	24	30	8
10:15			25	4	30	10	27	7							82	21	27	7
10:30			27	5	31	11	34	2							92	18	30	6
10:45			43	8	26	5	17	4							86	17	28	5
11:00			27	3	28	2	27	5							82	10	27	3
11:15			25	7	30	5	36	2							91	14	30	4
11:30			23	2	32	3	27	3							82	8	27	2
11:45			27	1	24	1	29	2							80	4	26	1
12:00			26	4	30	3	20	5							76	12	25	4

TOTALS		0		3105		3008		2977		0		0		0		9090		2998

AM Times				6:45		7:15		7:00								7:00		7:00
AM Peaks				466		472		458								1385		460
AM PHF				0.84		0.89		0.92								0.88		0.88

PM Times				15:45		15:45		15:30								15:45		15:45
PM Peaks				309		291		318								907		300
PM PHF				0.76		0.69		0.65								0.76		0.76

Accurate Traffic Counts
 WEEKLY SUMMARY
 Starting:2/25/2020

Site Ref: 00000000001
 Counter ID: 000000018486
 Location: St Johns Heritage Pkwy, N of Malabar Rd
 Direction: SOUTH

File: D0225001.prn
 City: Malabar
 County: Brevard

TIME	MON		TUE 25		WED 26		THU 27		FRI		SAT		SUN		WK TOT		WK AVG	
	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm
Lane 2																		
00:15			5	28	6	23	2	17							13	68	4	22
00:30			4	34	2	26	4	27							10	87	3	29
00:45			5	38	8	23	5	36							18	97	6	32
01:00			2	22	2	30	2	27							6	79	2	26
01:15			1	25	6	14	2	21							9	60	3	20
01:30			3	23	2	24	1	24							6	71	2	23
01:45			2	26	2	27	2	26							6	79	2	26
02:00			2	27	5	35	4	31							11	93	3	31
02:15			5	31	8	33	2	33							15	97	5	32
02:30			2	40	0	22	2	34							4	96	1	32
02:45			1	45	1	35	1	47							3	127	1	42
03:00			0	40	3	38	3	42							6	120	2	40
03:15			1	54	2	59	2	54							5	167	1	55
03:30			5	76	5	55	3	65							13	196	4	65
03:45			0	62	1	58	1	49							2	169	0	56
04:00			3	57	1	34	2	48							6	139	2	46
04:15			1	88	2	65	1	69							4	222	1	74
04:30			1	96	2	99	1	86							4	281	1	93
04:45			2	121	2	99	2	110							6	330	2	110
05:00			1	120	1	74	1	105							3	299	1	99
05:15			3	109	3	103	3	105							9	317	3	105
05:30			2	112	4	101	3	115							9	328	3	109
05:45			2	107	4	105	4	127							10	339	3	113
06:00			5	118	5	111	5	126							15	355	5	118
06:15			8	137	6	85	4	107							18	329	6	109
06:30			14	74	18	93	21	78							53	245	17	81
06:45			17	57	18	78	18	69							53	204	17	68
07:00			15	38	24	40	25	40							64	118	21	39
07:15			24	48	23	39	19	39							66	126	22	42
07:30			32	37	17	30	27	28							76	95	25	31
07:45			43	31	34	32	27	30							104	93	34	31
08:00			46	26	39	27	38	37							123	90	41	30
08:15			57	32	59	23	52	32							168	87	56	29
08:30			88	28	79	28	72	28							239	84	79	28
08:45			87	24	86	12	92	24							265	60	88	20
09:00			21	28	30	30	34	26							85	84	28	28
09:15			16	24	22	24	29	13							67	61	22	20
09:30			33	19	28	21	29	25							90	65	30	21
09:45			23	16	28	19	32	26							83	61	27	20
10:00			20	15	16	18	22	19							58	52	19	17
10:15			25	8	28	24	19	13							72	45	24	15
10:30			16	10	27	12	22	13							65	35	21	11
10:45			20	11	24	11	20	12							64	34	21	11
11:00			22	13	14	9	20	11							56	33	18	11
11:15			23	7	21	12	23	4							67	23	22	7
11:30			26	12	29	8	33	5							88	25	29	8
11:45			29	7	19	12	18	17							66	36	22	12
12:00			29	6	31	5	37	10							97	21	32	7

TOTALS			0	2999	2782	2921	0	0	0	0	0	0	0	0	8702	2875		
AM Times				8:00	8:00	8:00									8:00	8:00		
AM Peaks				278	263	254									795	264		
AM PHF				0.79	0.76	0.69									0.75	0.75		
PM Times				17:30	17:15	17:30									17:30	17:30		
PM Peaks				474	420	475									1351	449		
PM PHF				0.86	0.95	0.94									0.95	0.95		

Accurate Traffic Counts
 WEEKLY SUMMARY
 Starting:2/25/2020

Site Ref: 000000000001
 Counter ID: 000000018486
 Location: St Johns Heritage Pkwy, N of Malabar Rd
 Direction: ROAD TOTAL

File: D0225001.prn
 City: Malabar
 County: Brevard

TIME	MON		TUE 25		WED 26		THU 27		FRI		SAT		SUN		WK TOT		WK AVG	
	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm
Lane 3																		
00:15			6	54	9	43	2	49							17	146	5	48
00:30			5	61	4	45	6	47							15	153	5	51
00:45			6	65	9	49	5	62							20	176	6	58
01:00			7	53	8	53	3	50							18	156	6	52
01:15			2	59	8	32	3	52							13	143	4	47
01:30			5	39	2	52	3	58							10	149	3	49
01:45			3	52	3	59	4	49							10	160	3	53
02:00			2	58	5	69	4	65							11	192	3	64
02:15			5	70	9	73	4	73							18	216	6	72
02:30			7	68	3	59	7	67							17	194	5	64
02:45			2	80	6	65	2	78							10	223	3	74
03:00			1	83	5	84	3	76							9	243	3	81
03:15			3	99	5	96	3	82							11	277	3	92
03:30			8	102	6	89	5	115							19	306	6	102
03:45			1	163	3	133	3	171							7	467	2	155
04:00			8	157	6	139	8	142							22	438	7	146
04:15			4	151	7	129	7	121							18	401	6	133
04:30			6	141	5	146	6	125							17	412	5	137
04:45			12	160	10	154	11	154							33	468	11	156
05:00			11	175	11	111	11	140							33	426	11	142
05:15			26	168	26	152	13	143							65	463	21	154
05:30			16	161	23	162	17	159							56	482	18	160
05:45			35	157	33	139	42	174							110	470	36	156
06:00			48	160	41	164	45	165							134	489	44	163
06:15			54	184	53	127	47	144							154	455	51	151
06:30			76	100	94	123	98	120							268	343	89	114
06:45			122	88	113	110	103	114							338	312	112	104
07:00			119	84	113	61	137	69							369	214	123	71
07:15			142	72	151	55	131	57							424	184	141	61
07:30			171	65	149	48	151	43							471	156	157	52
07:45			146	53	148	41	137	51							431	145	143	48
08:00			146	43	137	45	134	63							417	151	139	50
08:15			159	55	156	32	136	45							451	132	150	44
08:30			171	45	176	42	157	49							504	136	168	45
08:45			201	39	171	25	199	39							571	103	190	34
09:00			93	48	127	47	120	42							340	137	113	45
09:15			59	36	50	30	62	25							171	91	57	30
09:30			76	23	62	32	59	31							197	86	65	28
09:45			54	20	74	25	69	29							197	74	65	24
10:00			54	20	45	27	50	29							149	76	49	25
10:15			50	12	58	34	46	20							154	66	51	22
10:30			43	15	58	23	56	15							157	53	52	17
10:45			63	19	50	16	37	16							150	51	50	17
11:00			49	16	42	11	47	16							138	43	46	14
11:15			48	14	51	17	59	6							158	37	52	12
11:30			49	14	61	11	60	8							170	33	56	11
11:45			56	8	43	13	47	19							146	40	48	13
12:00			55	10	61	8	57	15							173	33	57	11

TOTALS			0	6104	5790	5898	0	0	0	0	0	0	0	0	17792	5898		
AM Times				8:00	8:00	8:00									8:00	8:00		
AM Peaks				677	640	626									1943	647		
AM PHF				0.84	0.91	0.79									0.85	0.85		
PM Times				16:45	17:15	17:30									17:15	17:15		
PM Peaks				664	617	642									1904	633		
PM PHF				0.95	0.94	0.92									0.97	0.97		

SITE ID: 2

LOCATION: JUPITER BOULEVARD, NORTH OF MALABAR ROAD

Accurate Traffic Counts
 WEEKLY SUMMARY
 Starting:1/14/2020

Site Ref: 00000000002
 Counter ID: 000000033592
 Location: Jupiter Bv, N of Malabar Rd
 Direction: NORTH

File: D0114003.prn
 City: Malabar
 County: Brevard

TIME	MON		TUE 14		WED 15		THU 16		FRI		SAT		SUN		WK TOT		WK AVG	
	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm
00:15			8	75	11	77	12	100							31	252	10	84
00:30			11	81	19	78	12	73							42	232	14	77
00:45			7	58	8	70	9	78							24	206	8	68
01:00			8	71	7	69	10	62							25	202	8	67
01:15			6	84	8	78	4	71							18	233	6	77
01:30			7	59	9	76	6	91							22	226	7	75
01:45			7	84	6	83	5	74							18	241	6	80
02:00			5	80	5	76	0	84							10	240	3	80
02:15			6	77	3	76	12	82							21	235	7	78
02:30			8	77	3	86	1	85							12	248	4	82
02:45			4	99	4	85	2	86							10	270	3	90
03:00			4	92	3	106	5	110							12	308	4	102
03:15			2	88	7	95	2	94							11	277	3	92
03:30			4	84	5	98	4	104							13	286	4	95
03:45			4	101	5	95	1	102							10	298	3	99
04:00			2	117	3	101	5	125							10	343	3	114
04:15			4	91	5	112	0	113							9	316	3	105
04:30			4	117	4	107	7	105							15	329	5	109
04:45			5	119	5	130	8	125							18	374	6	124
05:00			7	117	4	106	5	106							16	329	5	109
05:15			7	127	7	125	5	113							19	365	6	121
05:30			12	122	9	111	9	130							30	363	10	121
05:45			19	121	11	115	12	104							42	340	14	113
06:00			14	108	8	111	12	127							34	346	11	115
06:15			23	116	21	118	19	132							63	366	21	122
06:30			26	95	25	116	31	101							82	312	27	104
06:45			46	92	49	99	45	91							140	282	46	94
07:00			48	78	50	83	50	94							148	255	49	85
07:15			58	68	62	66	79	107							199	241	66	80
07:30			83	64	86	56	84	69							253	189	84	63
07:45			116	53	85	84	107	76							308	213	102	71
08:00			104	54	115	67	111	79							330	200	110	66
08:15			106	53	100	67	93	63							299	183	99	61
08:30			75	61	78	55	65	69							218	185	72	61
08:45			88	65	65	71	75	54							228	190	76	63
09:00			61	50	53	61	70	55							184	166	61	55
09:15			63	52	44	43	67	65							174	160	58	53
09:30			51	45	75	59	54	31							180	135	60	45
09:45			70	40	65	48	62	52							197	140	65	46
10:00			78	31	59	35	64	38							201	104	67	34
10:15			44	32	64	33	57	37							165	102	55	34
10:30			66	33	53	38	55	29							174	100	58	33
10:45			71	29	54	34	71	31							196	94	65	31
11:00			70	27	67	38	67	18							204	83	68	27
11:15			82	17	55	18	87	10							224	45	74	15
11:30			82	16	67	20	69	18							218	54	72	18
11:45			71	16	69	13	66	10							206	39	68	13
12:00			84	10	73	11	67	19							224	40	74	13

TOTALS			0	5277	5292	5455	0	0	0	0	0	0	0	0	16024	5314		
AM Times				7:30	7:30	7:30									7:30	7:30		
AM Peaks				409	386	395									1190	395		
AM PHF				0.88	0.84	0.89									0.90	0.90		
PM Times				17:00	16:45	17:30									16:45	16:45		
PM Peaks				487	472	493									1431	475		
PM PHF				0.96	0.91	0.93									0.96	0.96		

Accurate Traffic Counts
 WEEKLY SUMMARY
 Starting:1/14/2020

Site Ref: 00000000002
 Counter ID: 000000033592
 Location: Jupiter Bv, N of Malabar Rd
 Direction: SOUTH

File: D0114003.prn
 City: Malabar
 County: Brevard

TIME	MON		TUE 14		WED 15		THU 16		FRI		SAT		SUN		WK TOT		WK AVG		
	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	
00:15			10	76	10	74	12	69							32	219	10	73	
00:30			10	74	8	68	5	62							23	204	7	68	
00:45			9	56	5	77	10	70							24	203	8	67	
01:00			6	89	6	78	4	72							16	239	5	79	
01:15			7	73	8	68	5	76							20	217	6	72	
01:30			7	74	9	67	9	87							25	228	8	76	
01:45			6	70	4	71	6	79							16	220	5	73	
02:00			7	65	9	75	4	88							20	228	6	76	
02:15			5	79	8	74	3	90							16	243	5	81	
02:30			2	80	2	85	7	83							11	248	3	82	
02:45			6	105	9	101	2	97							17	303	5	101	
03:00			2	96	2	96	2	106							6	298	2	99	
03:15			6	88	3	81	9	63							18	232	6	77	
03:30			5	84	8	86	1	89							14	259	4	86	
03:45			4	95	4	88	2	83							10	266	3	88	
04:00			6	84	9	106	6	88							21	278	7	92	
04:15			6	97	8	89	8	103							22	289	7	96	
04:30			7	79	1	86	3	95							11	260	3	86	
04:45			9	112	9	83	10	112							28	307	9	102	
05:00			15	102	10	100	7	99							32	301	10	100	
05:15			9	95	4	89	8	103							21	287	7	95	
05:30			13	112	15	117	16	110							44	339	14	113	
05:45			28	126	24	115	21	115							73	356	24	118	
06:00			29	104	26	91	30	124							85	319	28	106	
06:15			37	126	42	109	36	99							115	334	38	111	
06:30			50	104	57	92	64	112							171	308	57	102	
06:45			66	86	61	99	76	94							203	279	67	93	
07:00			76	66	85	94	78	80							239	240	79	80	
07:15			73	69	75	73	69	75							217	217	72	72	
07:30			108	59	122	67	91	65							321	191	107	63	
07:45			117	65	118	54	121	69							356	188	118	62	
08:00			133	67	112	57	100	55							345	179	115	59	
08:15			109	56	105	69	91	66							305	191	101	63	
08:30			83	46	96	56	83	40							262	142	87	47	
08:45			107	38	73	50	74	37							254	125	84	41	
09:00			90	39	80	45	84	50							254	134	84	44	
09:15			76	36	78	45	100	34							254	115	84	38	
09:30			80	39	81	31	69	51							230	121	76	40	
09:45			71	32	59	37	62	28							192	97	64	32	
10:00			73	24	72	28	85	31							230	83	76	27	
10:15			66	24	79	36	81	28							226	88	75	29	
10:30			73	20	60	19	76	24							209	63	69	21	
10:45			88	24	69	30	79	21							236	75	78	25	
11:00			71	15	65	17	60	19							196	51	65	17	
11:15			79	16	44	12	74	10							197	38	65	12	
11:30			84	14	79	19	77	15							240	48	80	16	
11:45			73	13	68	19	81	19							222	51	74	17	
12:00			75	16	75	10	83	8							233	34	77	11	

TOTALS			0		5381		5289		5377		0		0		0		16047		5312
AM Times					7:30		7:30		7:30								7:30		7:30
AM Peaks					467		457		403								1327		441
AM PHF					0.88		0.94		0.83								0.93		0.93
PM Times					17:30		17:30		17:15								17:30		17:30
PM Peaks					468		432		452								1348		448
PM PHF					0.93		0.92		0.91								0.95		0.95

Accurate Traffic Counts
 WEEKLY SUMMARY
 Starting:1/14/2020

Site Ref: 00000000002
 Counter ID: 000000033592
 Location: Jupiter Bv, N of Malabar Rd
 Direction: ROAD TOTAL

File: D0114003.prn
 City: Malabar
 County: Brevard

TIME	MON		TUE 14		WED 15		THU 16		FRI		SAT		SUN		WK TOT		WK AVG	
	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm
Lane 3																		
00:15			18	151	21	151	24	169							63	471	21	157
00:30			21	155	27	146	17	135							65	436	21	145
00:45			16	114	13	147	19	148							48	409	16	136
01:00			14	160	13	147	14	134							41	441	13	147
01:15			13	157	16	146	9	147							38	450	12	150
01:30			14	133	18	143	15	178							47	454	15	151
01:45			13	154	10	154	11	153							34	461	11	153
02:00			12	145	14	151	4	172							30	468	10	156
02:15			11	156	11	150	15	172							37	478	12	159
02:30			10	157	5	171	8	168							23	496	7	165
02:45			10	204	13	186	4	183							27	573	9	191
03:00			6	188	5	202	7	216							18	606	6	202
03:15			8	176	10	176	11	157							29	509	9	169
03:30			9	168	13	184	5	193							27	545	9	181
03:45			8	196	9	183	3	185							20	564	6	188
04:00			8	201	12	207	11	213							31	621	10	207
04:15			10	188	13	201	8	216							31	605	10	201
04:30			11	196	5	193	10	200							26	589	8	196
04:45			14	231	14	213	18	237							46	681	15	227
05:00			22	219	14	206	12	205							48	630	16	210
05:15			16	222	11	214	13	216							40	652	13	217
05:30			25	234	24	228	25	240							74	702	24	234
05:45			47	247	35	230	33	219							115	696	38	232
06:00			43	212	34	202	42	251							119	665	39	221
06:15			60	242	63	227	55	231							178	700	59	233
06:30			76	199	82	208	95	213							253	620	84	206
06:45			112	178	110	198	121	185							343	561	114	187
07:00			124	144	135	177	128	174							387	495	129	165
07:15			131	137	137	139	148	182							416	458	138	152
07:30			191	123	208	123	175	134							574	380	191	126
07:45			233	118	203	138	228	145							664	401	221	133
08:00			237	121	227	124	211	134							675	379	225	126
08:15			215	109	205	136	184	129							604	374	201	124
08:30			158	107	174	111	148	109							480	327	160	109
08:45			195	103	138	121	149	91							482	315	160	105
09:00			151	89	133	106	154	105							438	300	146	100
09:15			139	88	122	88	167	99							428	275	142	91
09:30			131	84	156	90	123	82							410	256	136	85
09:45			141	72	124	85	124	80							389	237	129	79
10:00			151	55	131	63	149	69							431	187	143	62
10:15			110	56	143	69	138	65							391	190	130	63
10:30			139	53	113	57	131	53							383	163	127	54
10:45			159	53	123	64	150	52							432	169	144	56
11:00			141	42	132	55	127	37							400	134	133	44
11:15			161	33	99	30	161	20							421	83	140	27
11:30			166	30	146	39	146	33							458	102	152	34
11:45			144	29	137	32	147	29							428	90	142	30
12:00			159	26	148	21	150	27							457	74	152	24

TOTALS			0	10658	10581	10832			0		0		0		32071		10658	
AM Times				7:30	7:30	7:30									7:30		7:30	
AM Peaks				876	843	798									2517		838	
AM PHF				0.92	0.93	0.88									0.93		0.93	
PM Times				17:30	17:30	17:30									17:30		17:30	
PM Peaks				935	887	941									2763		920	
PM PHF				0.95	0.96	0.94									0.98		0.98	

SITE ID: 3

LOCATION: JUPITER BOULEVARD, SOUTH OF MALABAR ROAD

Accurate Traffic Counts
 WEEKLY SUMMARY
 Starting:1/14/2020

Site Ref: 00000000003
 Counter ID: 000000033019
 Location: Jupiter Bv SW, S of Malabar Rd
 Direction: NORTH

File: D0114004.prn
 City: Malabar
 County: Brevard

TIME	MON		TUE 14		WED 15		THU 16		FRI		SAT		SUN		WK TOT		WK AVG	
	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm
00:15			4	38	7	31	6	47							17	116	5	38
00:30			2	45	12	55	5	45							19	145	6	48
00:45			6	45	6	51	3	42							15	138	5	46
01:00			3	44	6	49	5	32							14	125	4	41
01:15			3	43	2	48	4	47							9	138	3	46
01:30			1	43	6	47	5	53							12	143	4	47
01:45			4	46	6	41	2	46							12	133	4	44
02:00			2	46	3	52	2	50							7	148	2	49
02:15			2	55	1	49	7	48							10	152	3	50
02:30			4	47	4	30	1	57							9	134	3	44
02:45			5	54	1	68	2	63							8	185	2	61
03:00			3	97	2	105	5	106							10	308	3	102
03:15			1	75	3	80	0	69							4	224	1	74
03:30			2	60	1	61	3	80							6	201	2	67
03:45			2	61	2	50	0	44							4	155	1	51
04:00			1	60	1	56	3	67							5	183	1	61
04:15			4	73	2	86	1	64							7	223	2	74
04:30			4	67	3	78	5	72							12	217	4	72
04:45			10	89	10	66	6	76							26	231	8	77
05:00			3	67	5	59	5	61							13	187	4	62
05:15			11	69	7	74	6	50							24	193	8	64
05:30			12	75	8	54	10	72							30	201	10	67
05:45			20	80	15	73	20	78							55	231	18	77
06:00			19	77	18	94	19	84							56	255	18	85
06:15			22	62	17	64	27	81							66	207	22	69
06:30			46	60	40	56	45	68							131	184	43	61
06:45			66	55	61	58	67	60							194	173	64	57
07:00			64	56	65	48	57	52							186	156	62	52
07:15			60	38	69	30	76	44							205	112	68	37
07:30			67	23	77	26	83	26							227	75	75	25
07:45			93	32	86	42	107	42							286	116	95	38
08:00			122	13	124	31	134	25							380	69	126	23
08:15			112	26	104	30	120	33							336	89	112	29
08:30			95	37	110	33	100	25							305	95	101	31
08:45			69	33	69	31	51	26							189	90	63	30
09:00			56	21	47	30	63	28							166	79	55	26
09:15			50	24	37	32	40	30							127	86	42	28
09:30			51	22	45	28	47	20							143	70	47	23
09:45			37	20	50	24	48	14							135	58	45	19
10:00			39	17	50	13	49	17							138	47	46	15
10:15			40	14	42	10	28	19							110	43	36	14
10:30			39	15	40	12	41	13							120	40	40	13
10:45			48	15	39	12	40	15							127	42	42	14
11:00			45	8	47	14	46	8							138	30	46	10
11:15			49	13	42	13	49	7							140	33	46	11
11:30			47	3	48	8	33	10							128	21	42	7
11:45			35	7	39	5	37	5							111	17	37	5
12:00			57	4	50	5	42	5							149	14	49	4

TOTALS			0	3611	3641	3681	0	0	0	0	0	0	0	0	10933	3613		
AM Times				7:45	7:45	7:45									7:45	7:45		
AM Peaks				422	424	461									1307	434		
AM PHF				0.86	0.85	0.86									0.86	0.86		
PM Times				17:15	14:45	14:45									14:45	14:45		
PM Peaks				301	314	318									918	304		
PM PHF				0.94	0.75	0.75									0.75	0.75		

Accurate Traffic Counts
 WEEKLY SUMMARY
 Starting:1/14/2020

Site Ref: 00000000003
 Counter ID: 000000033019
 Location: Jupiter Bv SW, S of Malabar Rd
 Direction: SOUTH

File: D0114004.prn
 City: Malabar
 County: Brevard

TIME	MON		TUE 14		WED 15		THU 16		FRI		SAT		SUN		WK TOT		WK AVG		
	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	
00:15			7	37	6	38	6	39							19	114	6	38	
00:30			8	43	3	43	3	41							14	127	4	42	
00:45			6	50	6	51	7	45							19	146	6	48	
01:00			5	41	6	51	4	38							15	130	5	43	
01:15			3	39	2	51	4	50							9	140	3	46	
01:30			1	56	7	41	2	52							10	149	3	49	
01:45			4	61	5	40	1	67							10	168	3	56	
02:00			2	49	2	67	1	54							5	170	1	56	
02:15			5	53	2	65	1	54							8	172	2	57	
02:30			3	81	2	72	5	67							10	220	3	73	
02:45			1	79	5	73	2	87							8	239	2	79	
03:00			4	53	1	65	4	68							9	186	3	62	
03:15			1	58	2	55	5	48							8	161	2	53	
03:30			4	51	1	52	0	58							5	161	1	53	
03:45			3	79	2	86	0	100							5	265	1	88	
04:00			0	112	1	104	2	89							3	305	1	101	
04:15			2	75	2	70	4	94							8	239	2	79	
04:30			1	58	1	78	0	87							2	223	0	74	
04:45			1	95	1	73	1	81							3	249	1	83	
05:00			3	63	0	89	3	106							6	258	2	86	
05:15			3	85	1	93	4	86							8	264	2	88	
05:30			3	121	8	96	6	101							17	318	5	106	
05:45			14	80	9	110	8	87							31	277	10	92	
06:00			7	80	13	89	8	90							28	259	9	86	
06:15			26	98	12	71	16	77							54	246	18	82	
06:30			24	63	34	70	32	80							90	213	30	71	
06:45			30	66	26	75	42	53							98	194	32	64	
07:00			36	60	48	51	44	47							128	158	42	52	
07:15			54	45	46	47	60	59							160	151	53	50	
07:30			90	47	89	51	81	38							260	136	86	45	
07:45			74	46	103	37	103	57							280	140	93	46	
08:00			101	44	76	40	83	34							260	118	86	39	
08:15			56	33	55	54	58	53							169	140	56	46	
08:30			54	42	59	43	47	24							160	109	53	36	
08:45			71	40	69	34	65	36							205	110	68	36	
09:00			45	27	46	44	54	31							145	102	48	34	
09:15			37	61	44	33	39	36							120	130	40	43	
09:30			39	30	49	20	48	19							136	69	45	23	
09:45			47	22	42	26	49	21							138	69	46	23	
10:00			41	23	50	17	44	22							135	62	45	20	
10:15			33	17	48	20	54	15							135	52	45	17	
10:30			42	28	39	17	46	16							127	61	42	20	
10:45			43	24	47	12	46	13							136	49	45	16	
11:00			50	15	31	7	34	16							115	38	38	12	
11:15			49	11	37	11	41	8							127	30	42	10	
11:30			52	14	37	17	38	10							127	41	42	13	
11:45			45	11	33	11	38	11							116	33	38	11	
12:00			55	10	50	6	48	9							153	25	51	8	

TOTALS			0		3761		3724		3765		0		0		0		11250		3716
AM Times					7:30		7:30		7:15								7:30		7:30
AM Peaks					321		323		327								969		321
AM PHF					0.79		0.78		0.79								0.87		0.86
PM Times					17:30		17:00		17:00								17:15		17:00
PM Peaks					379		388		380								1118		372
PM PHF					0.78		0.88		0.90								0.88		0.88

Accurate Traffic Counts
 WEEKLY SUMMARY
 Starting:1/14/2020

Site Ref: 00000000003
 Counter ID: 000000033019
 Location: Jupiter Bv SW, S of Malabar Rd
 Direction: ROAD TOTAL

File: D0114004.prn
 City: Malabar
 County: Brevard

TIME	MON		TUE 14		WED 15		THU 16		FRI		SAT		SUN		WK TOT		WK AVG	
	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm
Lane 3																		
00:15			11	75	13	69	12	86							36	230	12	76
00:30			10	88	15	98	8	86							33	272	11	90
00:45			12	95	12	102	10	87							34	284	11	94
01:00			8	85	12	100	9	70							29	255	9	85
01:15			6	82	4	99	8	97							18	278	6	92
01:30			2	99	13	88	7	105							22	292	7	97
01:45			8	107	11	81	3	113							22	301	7	100
02:00			4	95	5	119	3	104							12	318	4	106
02:15			7	108	3	114	8	102							18	324	6	108
02:30			7	128	6	102	6	124							19	354	6	118
02:45			6	133	6	141	4	150							16	424	5	141
03:00			7	150	3	170	9	174							19	494	6	164
03:15			2	133	5	135	5	117							12	385	4	128
03:30			6	111	2	113	3	138							11	362	3	120
03:45			5	140	4	136	0	144							9	420	3	140
04:00			1	172	2	160	5	156							8	488	2	162
04:15			6	148	4	156	5	158							15	462	5	154
04:30			5	125	4	156	5	159							14	440	4	146
04:45			11	184	11	139	7	157							29	480	9	160
05:00			6	130	5	148	8	167							19	445	6	148
05:15			14	154	8	167	10	136							32	457	10	152
05:30			15	196	16	150	16	173							47	519	15	173
05:45			34	160	24	183	28	165							86	508	28	169
06:00			26	157	31	183	27	174							84	514	28	171
06:15			48	160	29	135	43	158							120	453	40	151
06:30			70	123	74	126	77	148							221	397	73	132
06:45			96	121	87	133	109	113							292	367	97	122
07:00			100	116	113	99	101	99							314	314	104	104
07:15			114	83	115	77	136	103							365	263	121	87
07:30			157	70	166	77	164	64							487	211	162	70
07:45			167	78	189	79	210	99							566	256	188	85
08:00			223	57	200	71	217	59							640	187	213	62
08:15			168	59	159	84	178	86							505	229	168	76
08:30			149	79	169	76	147	49							465	204	155	68
08:45			140	73	138	65	116	62							394	200	131	66
09:00			101	48	93	74	117	59							311	181	103	60
09:15			87	85	81	65	79	66							247	216	82	72
09:30			90	52	94	48	95	39							279	139	93	46
09:45			84	42	92	50	97	35							273	127	91	42
10:00			80	40	100	30	93	39							273	109	91	36
10:15			73	31	90	30	82	34							245	95	81	31
10:30			81	43	79	29	87	29							247	101	82	33
10:45			91	39	86	24	86	28							263	91	87	30
11:00			95	23	78	21	80	24							253	68	84	22
11:15			98	24	79	24	90	15							267	63	89	21
11:30			99	17	85	25	71	20							255	62	85	20
11:45			80	18	72	16	75	16							227	50	75	16
12:00			112	14	100	11	90	14							302	39	100	13
TOTALS	0		7372		7365		7446		0		0		0		22183		7361	
AM Times			7:30		7:45		7:30								7:30		7:30	
AM Peaks			715		717		769								2198		731	
AM PHF			0.80		0.90		0.89								0.86		0.86	
PM Times			17:30		17:15		17:30								17:15		17:15	
PM Peaks			673		683		670								1998		665	
PM PHF			0.86		0.93		0.96								0.96		0.96	

SITE ID: 4

LOCATION: GARVEY ROAD, SOUTH OF MALABAR ROAD

Accurate Traffic Counts
 WEEKLY SUMMARY
 Starting:1/14/2020

Site Ref: 00000000004
 Counter ID: 000000033020
 Location: Gavey Rd, S of Malabar Rd
 Direction: NORTH

File: D0114005.prn
 City: Malabar
 County: Brevard

TIME	MON		TUE 14		WED 15		THU 16		FRI		SAT		SUN		WK TOT		WK AVG		
	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	
00:15			1	13	0	11	0	6							1	30	0	10	
00:30			3	16	1	20	1	20							5	56	1	18	
00:45			1	13	2	10	0	23							3	46	1	15	
01:00			2	19	4	17	1	10							7	46	2	15	
01:15			2	26	0	14	0	11							2	51	0	17	
01:30			1	23	2	21	2	17							5	61	1	20	
01:45			0	12	2	18	0	9							2	39	0	13	
02:00			2	27	0	11	0	16							2	54	0	18	
02:15			1	22	0	19	2	15							3	56	1	18	
02:30			0	17	0	26	0	21							0	64	0	21	
02:45			0	20	0	15	1	19							1	54	0	18	
03:00			0	24	2	29	0	44							2	97	0	32	
03:15			0	28	0	32	1	17							1	77	0	25	
03:30			0	16	0	22	0	19							0	57	0	19	
03:45			2	14	1	25	2	15							5	54	1	18	
04:00			1	22	0	20	0	19							1	61	0	20	
04:15			1	25	2	17	3	24							6	66	2	22	
04:30			2	14	0	18	1	24							3	56	1	18	
04:45			6	20	4	14	5	27							15	61	5	20	
05:00			0	18	2	35	3	17							5	70	1	23	
05:15			4	23	5	22	8	16							17	61	5	20	
05:30			6	19	7	21	5	20							18	60	6	20	
05:45			13	19	10	15	14	20							37	54	12	18	
06:00			13	20	15	26	9	17							37	63	12	21	
06:15			16	17	21	24	20	24							57	65	19	21	
06:30			21	18	28	24	23	24							72	66	24	22	
06:45			36	21	23	29	30	17							89	67	29	22	
07:00			21	13	28	12	26	11							75	36	25	12	
07:15			24	13	24	11	28	18							76	42	25	14	
07:30			27	15	32	13	29	16							88	44	29	14	
07:45			44	6	35	15	39	11							118	32	39	10	
08:00			44	14	36	6	56	12							136	32	45	10	
08:15			36	7	31	6	33	8							100	21	33	7	
08:30			29	13	30	8	24	10							83	31	27	10	
08:45			16	6	30	10	23	12							69	28	23	9	
09:00			22	8	12	10	15	6							49	24	16	8	
09:15			17	5	19	9	16	6							52	20	17	6	
09:30			19	7	21	5	20	6							60	18	20	6	
09:45			11	6	19	8	22	9							52	23	17	7	
10:00			9	3	22	5	17	7							48	15	16	5	
10:15			19	3	14	4	12	7							45	14	15	4	
10:30			15	6	17	10	11	7							43	23	14	7	
10:45			29	6	17	3	16	4							62	13	20	4	
11:00			15	7	20	3	14	3							49	13	16	4	
11:15			13	5	12	4	17	1							42	10	14	3	
11:30			14	6	20	2	20	5							54	13	18	4	
11:45			18	1	26	1	18	3							62	5	20	1	
12:00			12	1	10	1	18	4							40	6	13	2	

TOTALS			0		1265		1307		1282		0		0		0		3854		1256
AM Times					7:45		7:30		7:30								7:30		7:30
AM Peaks					153		134		157								442		146
AM PHF					0.87		0.93		0.70								0.81		0.81
PM Times					14:30		15:00		14:30								14:30		14:30
PM Peaks					89		108		101								292		96
PM PHF					0.79		0.84		0.57								0.75		0.75

Accurate Traffic Counts
 WEEKLY SUMMARY
 Starting:1/14/2020

Site Ref: 000000000004
 Counter ID: 000000033020
 Location: Gavey Rd, S of Malabar Rd
 Direction: SOUTH

File: D0114005.prn
 City: Malabar
 County: Brevard

TIME	MON		TUE 14		WED 15		THU 16		FRI		SAT		SUN		WK TOT		WK AVG	
	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm
Lane 2																		
00:15			2	25	5	20	3	12							10	57	3	19
00:30			4	15	7	24	8	24							19	63	6	21
00:45			5	19	6	17	2	15							13	51	4	17
01:00			0	20	1	22	3	25							4	67	1	22
01:15			4	17	2	21	2	8							8	46	2	15
01:30			3	22	4	24	0	22							7	68	2	22
01:45			1	22	0	15	2	19							3	56	1	18
02:00			1	18	2	19	0	20							3	57	1	19
02:15			2	18	0	24	1	25							3	67	1	22
02:30			1	27	1	24	3	22							5	73	1	24
02:45			0	37	2	28	2	31							4	96	1	32
03:00			1	27	2	27	1	38							4	92	1	30
03:15			2	33	2	39	2	25							6	97	2	32
03:30			1	35	1	39	3	26							5	100	1	33
03:45			0	31	0	30	0	24							0	85	0	28
04:00			0	34	0	39	1	53							1	126	0	42
04:15			0	41	1	31	0	40							1	112	0	37
04:30			0	28	0	34	1	35							1	97	0	32
04:45			2	42	1	41	0	34							3	117	1	39
05:00			1	41	1	28	1	41							3	110	1	36
05:15			1	39	1	37	3	43							5	119	1	39
05:30			1	50	1	45	1	38							3	133	1	44
05:45			0	33	0	42	3	25							3	100	1	33
06:00			3	30	4	44	5	29							12	103	4	34
06:15			2	34	4	38	1	36							7	108	2	36
06:30			6	32	5	36	4	42							15	110	5	36
06:45			8	27	5	36	3	37							16	100	5	33
07:00			6	39	14	30	10	32							30	101	10	33
07:15			20	27	18	32	12	27							50	86	16	28
07:30			14	26	33	25	26	24							73	75	24	25
07:45			31	21	26	21	30	23							87	65	29	21
08:00			28	24	26	22	28	22							82	68	27	22
08:15			23	23	21	25	23	27							67	75	22	25
08:30			31	21	26	19	15	27							72	67	24	22
08:45			18	22	20	16	10	25							48	63	16	21
09:00			14	16	15	25	19	17							48	58	16	19
09:15			10	13	13	19	15	18							38	50	12	16
09:30			12	19	11	14	23	15							46	48	15	16
09:45			6	14	7	8	13	14							26	36	8	12
10:00			7	11	11	15	12	14							30	40	10	13
10:15			14	5	13	9	13	13							40	27	13	9
10:30			13	10	11	7	12	10							36	27	12	9
10:45			14	7	11	6	14	5							39	18	13	6
11:00			14	10	18	8	13	3							45	21	15	7
11:15			16	6	19	2	24	1							59	9	19	3
11:30			17	9	14	4	20	6							51	19	17	6
11:45			20	2	17	3	14	7							51	12	17	4
12:00			13	5	21	5	19	2							53	12	17	4
TOTALS	0		1519		1562		1541		0		0		0		4622		1516	
AM Times			7:45		7:30		7:30								7:30		7:30	
AM Peaks			113		106		107								309		102	
AM PHF			0.91		0.80		0.89								0.89		0.88	
PM Times			16:45		17:30		16:00								16:45		16:45	
PM Peaks			172		169		162								479		158	
PM PHF			0.86		0.94		0.76								0.90		0.90	

Accurate Traffic Counts
 WEEKLY SUMMARY
 Starting:1/14/2020

Site Ref: 000000000004
 Counter ID: 000000033020
 Location: Gavey Rd, S of Malabar Rd
 Direction: ROAD TOTAL

File: D0114005.prn
 City: Malabar
 County: Brevard

TIME	MON		TUE 14		WED 15		THU 16		FRI		SAT		SUN		WK TOT		WK AVG	
	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm
Lane 3																		
00:15			3	38	5	31	3	18							11	87	3	29
00:30			7	31	8	44	9	44							24	119	8	39
00:45			6	32	8	27	2	38							16	97	5	32
01:00			2	39	5	39	4	35							11	113	3	37
01:15			6	43	2	35	2	19							10	97	3	32
01:30			4	45	6	45	2	39							12	129	4	43
01:45			1	34	2	33	2	28							5	95	1	31
02:00			3	45	2	30	0	36							5	111	1	37
02:15			3	40	0	43	3	40							6	123	2	41
02:30			1	44	1	50	3	43							5	137	1	45
02:45			0	57	2	43	3	50							5	150	1	50
03:00			1	51	4	56	1	82							6	189	2	63
03:15			2	61	2	71	3	42							7	174	2	58
03:30			1	51	1	61	3	45							5	157	1	52
03:45			2	45	1	55	2	39							5	139	1	46
04:00			1	56	0	59	1	72							2	187	0	62
04:15			1	66	3	48	3	64							7	178	2	59
04:30			2	42	0	52	2	59							4	153	1	51
04:45			8	62	5	55	5	61							18	178	6	59
05:00			1	59	3	63	4	58							8	180	2	60
05:15			5	62	6	59	11	59							22	180	7	60
05:30			7	69	8	66	6	58							21	193	7	64
05:45			13	52	10	57	17	45							40	154	13	51
06:00			16	50	19	70	14	46							49	166	16	55
06:15			18	51	25	62	21	60							64	173	21	57
06:30			27	50	33	60	27	66							87	176	29	58
06:45			44	48	28	65	33	54							105	167	35	55
07:00			27	52	42	42	36	43							105	137	35	45
07:15			44	40	42	43	40	45							126	128	42	42
07:30			41	41	65	38	55	40							161	119	53	39
07:45			75	27	61	36	69	34							205	97	68	32
08:00			72	38	62	28	84	34							218	100	72	33
08:15			59	30	52	31	56	35							167	96	55	32
08:30			60	34	56	27	39	37							155	98	51	32
08:45			34	28	50	26	33	37							117	91	39	30
09:00			36	24	27	35	34	23							97	82	32	27
09:15			27	18	32	28	31	24							90	70	30	23
09:30			31	26	32	19	43	21							106	66	35	22
09:45			17	20	26	16	35	23							78	59	26	19
10:00			16	14	33	20	29	21							78	55	26	18
10:15			33	8	27	13	25	20							85	41	28	13
10:30			28	16	28	17	23	17							79	50	26	16
10:45			43	13	28	9	30	9							101	31	33	10
11:00			29	17	38	11	27	6							94	34	31	11
11:15			29	11	31	6	41	2							101	19	33	6
11:30			31	15	34	6	40	11							105	32	35	10
11:45			38	3	43	4	32	10							113	17	37	5
12:00			25	6	31	6	37	6							93	18	31	6

TOTALS			0	2784	2869	2823	0	0	0	0	0	0	0	0	8476	2792		
AM Times				7:45	7:30	7:30									7:30	7:30		
AM Peaks				266	240	264									751	248		
AM PHF				0.89	0.92	0.79									0.86	0.86		
PM Times				16:45	18:00	16:00									16:45	16:45		
PM Peaks				252	257	256									731	243		
PM PHF				0.91	0.92	0.89									0.95	0.95		

SITE ID: 5

LOCATION: MINTON ROAD, SOUTH OF MALABAR ROAD

Accurate Traffic Counts
 WEEKLY SUMMARY
 Starting:1/14/2020

Site Ref: 000000000005
 Counter ID: 000000036058
 Location: Minton Rd, S of Malabar Rd
 Direction: NORTH

File: D0114007.prn
 City: Malabar
 County: Brevard

TIME	MON		TUE 14		WED 15		THU 16		FRI		SAT		SUN		WK TOT		WK AVG	
	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm
00:15			9	103	6	103	11	89							26	295	8	98
00:30			11	83	15	79	4	108							30	270	10	90
00:45			10	90	3	84	9	83							22	257	7	85
01:00			5	81	2	89	5	79							12	249	4	83
01:15			6	96	4	94	2	100							12	290	4	96
01:30			9	89	5	80	8	84							22	253	7	84
01:45			1	81	4	85	5	87							10	253	3	84
02:00			5	90	4	78	4	83							13	251	4	83
02:15			3	102	7	78	7	95							17	275	5	91
02:30			4	101	3	97	3	111							10	309	3	103
02:45			3	104	3	125	3	107							9	336	3	112
03:00			4	101	2	96	6	124							12	321	4	107
03:15			4	118	5	117	5	113							14	348	4	116
03:30			7	101	7	117	10	118							24	336	8	112
03:45			5	101	10	97	13	108							28	306	9	102
04:00			9	122	11	120	12	114							32	356	10	118
04:15			13	102	11	112	6	98							30	312	10	104
04:30			12	100	11	108	13	115							36	323	12	107
04:45			29	114	28	119	31	118							88	351	29	117
05:00			20	102	19	105	18	112							57	319	19	106
05:15			19	85	28	109	21	112							68	306	22	102
05:30			39	92	39	103	47	94							125	289	41	96
05:45			75	91	68	97	60	114							203	302	67	100
06:00			86	87	81	110	76	86							243	283	81	94
06:15			89	83	98	91	88	77							275	251	91	83
06:30			115	89	132	98	127	101							374	288	124	96
06:45			130	63	117	83	117	63							364	209	121	69
07:00			116	79	132	76	113	82							361	237	120	79
07:15			112	57	136	50	112	70							360	177	120	59
07:30			95	52	99	56	98	66							292	174	97	58
07:45			100	54	100	51	92	49							292	154	97	51
08:00			100	53	110	47	107	48							317	148	105	49
08:15			105	40	117	43	121	40							343	123	114	41
08:30			115	44	104	52	128	41							347	137	115	45
08:45			107	40	121	37	113	50							341	127	113	42
09:00			88	35	86	40	88	44							262	119	87	39
09:15			100	42	111	30	102	55							313	127	104	42
09:30			116	28	82	19	105	32							303	79	101	26
09:45			89	33	94	22	105	42							288	97	96	32
10:00			85	14	82	23	96	30							263	67	87	22
10:15			86	18	100	20	79	21							265	59	88	19
10:30			77	12	82	29	91	28							250	69	83	23
10:45			93	25	94	19	83	24							270	68	90	22
11:00			67	15	88	21	89	18							244	54	81	18
11:15			72	18	87	20	88	10							247	48	82	16
11:30			85	11	103	17	83	14							271	42	90	14
11:45			93	10	77	10	93	7							263	27	87	9
12:00			98	10	100	6	88	9							286	25	95	8

TOTALS			0	5982	6190	6258	0	0	0	0	0	0	0	0	18430	6114		
AM Times				6:30	6:30	6:30									6:30	6:30		
AM Peaks				473	517	469									1459	485		
AM PHF				0.91	0.95	0.92									0.98	0.98		
PM Times				15:15	16:00	15:00									15:15	15:15		
PM Peaks				442	459	463									1346	448		
PM PHF				0.91	0.96	0.93									0.95	0.95		

Accurate Traffic Counts
 WEEKLY SUMMARY
 Starting:1/14/2020

Site Ref: 000000000005
 Counter ID: 000000036058
 Location: Minton Rd, S of Malabar Rd
 Direction: SOUTH

File: D0114007.prn
 City: Malabar
 County: Brevard

TIME	MON		TUE 14		WED 15		THU 16		FRI		SAT		SUN		WK TOT		WK AVG		
	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	
Lane 2																			
00:15			15	89	23	81	26	95							64	265	21	88	
00:30			24	105	17	90	20	90							61	285	20	95	
00:45			23	99	18	110	14	91							55	300	18	100	
01:00			12	108	13	100	18	91							43	299	14	99	
01:15			15	97	9	106	13	103							37	306	12	102	
01:30			17	89	7	83	9	99							33	271	11	90	
01:45			10	95	12	108	8	112							30	315	10	105	
02:00			6	86	13	94	7	111							26	291	8	97	
02:15			7	98	3	111	3	119							13	328	4	109	
02:30			6	101	5	107	7	85							18	293	6	97	
02:45			2	105	7	127	5	96							14	328	4	109	
03:00			3	126	3	128	6	128							12	382	4	127	
03:15			4	142	3	134	2	134							9	410	3	136	
03:30			4	144	3	146	1	165							8	455	2	151	
03:45			2	186	2	170	1	145							5	501	1	167	
04:00			4	159	2	170	3	159							9	488	3	162	
04:15			4	157	4	154	1	162							9	473	3	157	
04:30			4	163	2	174	6	166							12	503	4	167	
04:45			5	173	5	172	2	168							12	513	4	171	
05:00			8	189	10	154	4	183							22	526	7	175	
05:15			2	187	2	190	4	180							8	557	2	185	
05:30			4	192	7	204	6	201							17	597	5	199	
05:45			23	190	13	176	18	161							54	527	18	175	
06:00			17	147	17	184	26	171							60	502	20	167	
06:15			21	171	32	162	25	190							78	523	26	174	
06:30			37	164	23	161	35	196							95	521	31	173	
06:45			45	122	65	113	78	152							188	387	62	129	
07:00			79	138	64	109	63	128							206	375	68	125	
07:15			77	112	73	120	75	128							225	360	75	120	
07:30			114	108	109	123	90	118							313	349	104	116	
07:45			131	89	138	99	111	113							380	301	126	100	
08:00			116	96	142	111	146	98							404	305	134	101	
08:15			134	85	125	101	113	94							372	280	124	93	
08:30			103	110	94	93	90	107							287	310	95	103	
08:45			79	87	90	95	80	100							249	282	83	94	
09:00			61	97	86	89	75	64							222	250	74	83	
09:15			83	74	92	71	80	72							255	217	85	72	
09:30			60	59	83	58	84	67							227	184	75	61	
09:45			60	71	63	57	77	84							200	212	66	70	
10:00			70	53	86	58	69	55							225	166	75	55	
10:15			69	49	79	53	66	68							214	170	71	56	
10:30			73	31	78	41	86	53							237	125	79	41	
10:45			74	29	80	39	70	41							224	109	74	36	
11:00			73	30	75	30	73	39							221	99	73	33	
11:15			81	25	73	31	81	44							235	100	78	33	
11:30			90	40	81	40	82	36							253	116	84	38	
11:45			79	28	73	38	103	29							255	95	85	31	
12:00			79	20	82	13	101	25							262	58	87	19	

TOTALS			0		7224		7364		7479		0		0		0		22067		7324
AM Times					7:30		7:30		7:30								7:30		7:30
AM Peaks					495		514		460								1469		488
AM PHF					0.92		0.90		0.79								0.91		0.91
PM Times					17:00		17:15		16:45								17:00		17:00
PM Peaks					758		754		732								2207		734
PM PHF					0.99		0.92		0.91								0.92		0.92

Accurate Traffic Counts
 WEEKLY SUMMARY
 Starting:1/14/2020

Site Ref: 000000000005
 Counter ID: 000000036058
 Location: Minton Rd, S of Malabar Rd
 Direction: ROAD TOTAL

File: D0114007.prn
 City: Malabar
 County: Brevard

TIME	MON		TUE 14		WED 15		THU 16		FRI		SAT		SUN		WK TOT		WK AVG	
	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm
Lane 3																		
00:15			24	192	29	184	37	184							90	560	30	186
00:30			35	188	32	169	24	198							91	555	30	185
00:45			33	189	21	194	23	174							77	557	25	185
01:00			17	189	15	189	23	170							55	548	18	182
01:15			21	193	13	200	15	203							49	596	16	198
01:30			26	178	12	163	17	183							55	524	18	174
01:45			11	176	16	193	13	199							40	568	13	189
02:00			11	176	17	172	11	194							39	542	13	180
02:15			10	200	10	189	10	214							30	603	10	201
02:30			10	202	8	204	10	196							28	602	9	200
02:45			5	209	10	252	8	203							23	664	7	221
03:00			7	227	5	224	12	252							24	703	8	234
03:15			8	260	8	251	7	247							23	758	7	252
03:30			11	245	10	263	11	283							32	791	10	263
03:45			7	287	12	267	14	253							33	807	11	269
04:00			13	281	13	290	15	273							41	844	13	281
04:15			17	259	15	266	7	260							39	785	13	261
04:30			16	263	13	282	19	281							48	826	16	275
04:45			34	287	33	291	33	286							100	864	33	288
05:00			28	291	29	259	22	295							79	845	26	281
05:15			21	272	30	299	25	292							76	863	25	287
05:30			43	284	46	307	53	295							142	886	47	295
05:45			98	281	81	273	78	275							257	829	85	276
06:00			103	234	98	294	102	257							303	785	101	261
06:15			110	254	130	253	113	267							353	774	117	258
06:30			152	253	155	259	162	297							469	809	156	269
06:45			175	185	182	196	195	215							552	596	184	198
07:00			195	217	196	185	176	210							567	612	189	204
07:15			189	169	209	170	187	198							585	537	195	179
07:30			209	160	208	179	188	184							605	523	201	174
07:45			231	143	238	150	203	162							672	455	224	151
08:00			216	149	252	158	253	146							721	453	240	151
08:15			239	125	242	144	234	134							715	403	238	134
08:30			218	154	198	145	218	148							634	447	211	149
08:45			186	127	211	132	193	150							590	409	196	136
09:00			149	132	172	129	163	108							484	369	161	123
09:15			183	116	203	101	182	127							568	344	189	114
09:30			176	87	165	77	189	99							530	263	176	87
09:45			149	104	157	79	182	126							488	309	162	103
10:00			155	67	168	81	165	85							488	233	162	77
10:15			155	67	179	73	145	89							479	229	159	76
10:30			150	43	160	70	177	81							487	194	162	64
10:45			167	54	174	58	153	65							494	177	164	59
11:00			140	45	163	51	162	57							465	153	155	51
11:15			153	43	160	51	169	54							482	148	160	49
11:30			175	51	184	57	165	50							524	158	174	52
11:45			172	38	150	48	196	36							518	122	172	40
12:00			177	30	182	19	189	34							548	83	182	27

TOTALS		0		13206		13554		13737		0		0		0		40497		13462
AM Times				7:45		7:30		7:45							7:45		7:45	
AM Peaks				904		940		908							2742		913	
AM PHF				0.95		0.93		0.90							0.95		0.95	
PM Times				16:45		17:15		16:45							16:45		16:45	
PM Peaks				1134		1173		1168							3458		1151	
PM PHF				0.97		0.96		0.99							0.98		0.98	

SITE ID: 6

LOCATION: MINTON ROAD, NORTH OF MALABAR ROAD

Accurate Traffic Counts
 WEEKLY SUMMARY
 Starting:1/14/2020

Site Ref: 000000000006
 Counter ID: 31472--33023
 Location: Minton Rd, N of Malabar Rd
 Direction: NORTH

File: D0114008.prn
 City: Malabar
 County: Brevard

TIME	MON		TUE 14		WED 15		THU 16		FRI		SAT		SUN		WK TOT		WK AVG	
	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm
00:15			18	157	12	145	11	164							41	466	13	155
00:30			11	150	7	151	13	132							31	433	10	144
00:45			14	162	17	149	8	154							39	465	13	155
01:00			9	146	7	133	8	161							24	440	8	146
01:15			11	146	7	149	10	145							28	440	9	146
01:30			8	158	5	159	6	154							19	471	6	157
01:45			10	153	5	148	8	161							23	462	7	154
02:00			6	158	7	145	4	153							17	456	5	152
02:15			5	149	7	159	7	150							19	458	6	152
02:30			3	174	11	170	8	163							22	507	7	169
02:45			6	176	5	173	10	167							21	516	7	172
03:00			11	168	10	191	9	195							30	554	10	184
03:15			10	172	7	178	8	184							25	534	8	178
03:30			4	205	9	206	6	203							19	614	6	204
03:45			13	228	16	238	13	227							42	693	14	231
04:00			7	184	14	164	20	201							41	549	13	183
04:15			18	176	12	211	17	167							47	554	15	184
04:30			16	186	13	206	10	190							39	582	13	194
04:45			16	205	21	233	21	194							58	632	19	210
05:00			48	189	40	191	46	217							134	597	44	199
05:15			43	185	35	159	43	199							121	543	40	181
05:30			38	156	54	178	39	191							131	525	43	175
05:45			69	181	64	175	75	179							208	535	69	178
06:00			101	192	105	181	94	184							300	557	100	185
06:15			148	179	123	161	129	167							400	507	133	169
06:30			132	152	148	160	157	156							437	468	145	156
06:45			175	135	188	182	175	147							538	464	179	154
07:00			237	125	241	142	251	132							729	399	243	133
07:15			218	120	254	138	237	132							709	390	236	130
07:30			237	113	253	92	246	104							736	309	245	103
07:45			281	94	273	87	273	116							827	297	275	99
08:00			292	80	312	93	296	93							900	266	300	88
08:15			301	79	303	76	302	105							906	260	302	86
08:30			177	69	185	76	177	61							539	206	179	68
08:45			188	82	184	72	175	77							547	231	182	77
09:00			197	55	199	67	205	76							601	198	200	66
09:15			168	58	177	59	142	86							487	203	162	67
09:30			168	62	181	80	178	75							527	217	175	72
09:45			176	63	168	41	165	51							509	155	169	51
10:00			150	56	142	44	183	59							475	159	158	53
10:15			159	36	145	39	173	42							477	117	159	39
10:30			165	33	138	46	152	37							455	116	151	38
10:45			168	22	166	44	177	31							511	97	170	32
11:00			158	59	151	40	135	43							444	142	148	47
11:15			117	42	131	32	153	27							401	101	133	33
11:30			148	18	143	27	132	31							423	76	141	25
11:45			146	20	148	31	144	24							438	75	146	25
12:00			140	19	159	13	144	10							443	42	147	14

TOTALS	0		10868		11036		11112		0		0		0		33016		10976	
AM Times			7:30		7:30		7:30								7:30		7:30	
AM Peaks			1111		1141		1117								3369		1122	
AM PHF			0.92		0.91		0.92								0.93		0.93	
PM Times			15:30		16:15		15:15								15:30		15:30	
PM Peaks			793		841		815								2410		802	
PM PHF			0.87		0.90		0.90								0.87		0.87	

Accurate Traffic Counts
 WEEKLY SUMMARY
 Starting:1/14/2020

Site Ref: 000000000006
 Counter ID: 31472--33023
 Location: Minton Rd, N of Malabar Rd
 Direction: SOUTH

File: D0114008.prn
 City: Malabar
 County: Brevard

TIME	MON		TUE 14		WED 15		THU 16		FRI		SAT		SUN		WK TOT		WK AVG	
	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm
Lane 2																		
00:15			20	176	29	145	30	163							79	484	26	161
00:30			36	169	31	139	23	133							90	441	30	147
00:45			25	178	20	188	21	159							66	525	22	175
01:00			13	157	13	162	17	167							43	486	14	162
01:15			19	166	10	179	16	173							45	518	15	172
01:30			18	166	17	150	17	155							52	471	17	157
01:45			14	166	12	174	11	145							37	485	12	161
02:00			4	150	18	165	9	191							31	506	10	168
02:15			12	151	13	168	5	190							30	509	10	169
02:30			14	173	3	188	7	191							24	552	8	184
02:45			7	211	4	188	9	197							20	596	6	198
03:00			3	203	7	236	5	238							15	677	5	225
03:15			5	226	10	233	9	191							24	650	8	216
03:30			7	274	8	255	2	298							17	827	5	275
03:45			0	320	3	322	6	338							9	980	3	326
04:00			9	261	8	289	5	267							22	817	7	272
04:15			3	258	10	266	4	247							17	771	5	257
04:30			11	257	2	269	7	254							20	780	6	260
04:45			13	255	6	288	8	293							27	836	9	278
05:00			7	300	15	261	12	297							34	858	11	286
05:15			8	299	12	295	22	307							42	901	14	300
05:30			12	283	11	274	13	284							36	841	12	280
05:45			32	289	36	273	32	281							100	843	33	281
06:00			29	262	31	271	40	266							100	799	33	266
06:15			33	246	41	274	35	278							109	798	36	266
06:30			50	253	51	255	56	267							157	775	52	258
06:45			78	194	74	236	71	237							223	667	74	222
07:00			89	216	90	195	76	198							255	609	85	203
07:15			126	197	122	205	121	225							369	627	123	209
07:30			166	158	152	162	142	194							460	514	153	171
07:45			215	153	247	174	214	172							676	499	225	166
08:00			269	144	244	175	260	138							773	457	257	152
08:15			253	134	268	140	246	118							767	392	255	130
08:30			166	153	145	125	144	153							455	431	151	143
08:45			120	120	135	139	120	142							375	401	125	133
09:00			128	123	126	111	137	112							391	346	130	115
09:15			137	110	133	92	132	107							402	309	134	103
09:30			113	100	104	91	132	123							349	314	116	104
09:45			131	91	122	86	118	100							371	277	123	92
10:00			123	80	143	81	111	78							377	239	125	79
10:15			119	74	136	71	126	93							381	238	127	79
10:30			120	56	135	81	149	72							404	209	134	69
10:45			127	66	125	44	142	70							394	180	131	60
11:00			134	47	131	45	146	58							411	150	137	50
11:15			127	50	120	51	128	57							375	158	125	52
11:30			134	51	135	45	125	46							394	142	131	47
11:45			156	39	158	42	161	51							475	132	158	44
12:00			156	25	145	32	155	31							456	88	152	29

TOTALS			0	11821	11941	12122	0	0	0	0	0	0	0	0	35884	11932		
AM Times				7:30	7:30	7:45									7:30	7:30		
AM Peaks				903	911	864									2676	890		
AM PHF				0.84	0.85	0.83									0.87	0.87		
PM Times				17:00	15:45	16:45									17:00	17:00		
PM Peaks				1171	1146	1181									3443	1147		
PM PHF				0.98	0.89	0.96									0.96	0.96		

Accurate Traffic Counts
 WEEKLY SUMMARY
 Starting:1/14/2020

Site Ref: 000000000006
 Counter ID: 31472--33023
 Location: Minton Rd, N of Malabar Rd
 Direction: ROAD TOTAL

File: D0114008.prn
 City: Malabar
 County: Brevard

TIME	MON		TUE 14		WED 15		THU 16		FRI		SAT		SUN		WK TOT		WK AVG	
	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm
Lane 3																		
00:15			38	333	41	290	41	327							120	950	40	316
00:30			47	319	38	290	36	265							121	874	40	291
00:45			39	340	37	337	29	313							105	990	35	330
01:00			22	303	20	295	25	328							67	926	22	308
01:15			30	312	17	328	26	318							73	958	24	319
01:30			26	324	22	309	23	309							71	942	23	314
01:45			24	319	17	322	19	306							60	947	20	315
02:00			10	308	25	310	13	344							48	962	16	320
02:15			17	300	20	327	12	340							49	967	16	322
02:30			17	347	14	358	15	354							46	1059	15	353
02:45			13	387	9	361	19	364							41	1112	13	370
03:00			14	371	17	427	14	433							45	1231	15	410
03:15			15	398	17	411	17	375							49	1184	16	394
03:30			11	479	17	461	8	501							36	1441	12	480
03:45			13	548	19	560	19	565							51	1673	17	557
04:00			16	445	22	453	25	468							63	1366	21	455
04:15			21	434	22	477	21	414							64	1325	21	441
04:30			27	443	15	475	17	444							59	1362	19	454
04:45			29	460	27	521	29	487							85	1468	28	489
05:00			55	489	55	452	58	514							168	1455	56	485
05:15			51	484	47	454	65	506							163	1444	54	481
05:30			50	439	65	452	52	475							167	1366	55	455
05:45			101	470	100	448	107	460							308	1378	102	459
06:00			130	454	136	452	134	450							400	1356	133	452
06:15			181	425	164	435	164	445							509	1305	169	435
06:30			182	405	199	415	213	423							594	1243	198	414
06:45			253	329	262	418	246	384							761	1131	253	377
07:00			326	341	331	337	327	330							984	1008	328	336
07:15			344	317	376	343	358	357							1078	1017	359	339
07:30			403	271	405	254	388	298							1196	823	398	274
07:45			496	247	520	261	487	288							1503	796	501	265
08:00			561	224	556	268	556	231							1673	723	557	241
08:15			554	213	571	216	548	223							1673	652	557	217
08:30			343	222	330	201	321	214							994	637	331	212
08:45			308	202	319	211	295	219							922	632	307	210
09:00			325	178	325	178	342	188							992	544	330	181
09:15			305	168	310	151	274	193							889	512	296	170
09:30			281	162	285	171	310	198							876	531	292	177
09:45			307	154	290	127	283	151							880	432	293	144
10:00			273	136	285	125	294	137							852	398	284	132
10:15			278	110	281	110	299	135							858	355	286	118
10:30			285	89	273	127	301	109							859	325	286	108
10:45			295	88	291	88	319	101							905	277	301	92
11:00			292	106	282	85	281	101							855	292	285	97
11:15			244	92	251	83	281	84							776	259	258	86
11:30			282	69	278	72	257	77							817	218	272	72
11:45			302	59	306	73	305	75							913	207	304	69
12:00			296	44	304	45	299	41							899	130	299	43
TOTALS	0		22689		22977		23234		0		0		0		68900		22936	
AM Times			7:30		7:30		7:30								7:30		7:30	
AM Peaks			2014		2052		1979								6045		2013	
AM PHF			0.90		0.90		0.89								0.90		0.90	
PM Times			15:30		15:45		16:45								15:30		15:30	
PM Peaks			1906		1965		1982								5805		1933	
PM PHF			0.87		0.88		0.96								0.87		0.87	

SITE ID: 11

LOCATION: MALABAR ROAD, EAST OF CHAMPIONSHIP CIRCLE

Accurate Traffic Counts
 CLASSIFICATION SUMMARY
 Tue 1/14/2020

Site Ref: 00000000011
 Counter ID: 000000033594
 Location: Malabar Rd, E of Championshp Cir NW
 Direction: EAST
 Lane: 1

File: D0114001.prn
 City: Malabar
 County: Brevard

TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total
00:15	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
00:30	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
00:45	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	5
01:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Hour Total	0	11	1	0	0	0	0	0	0	0	0	0	0	0	0	12
01:15	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
01:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4
02:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Hour Total	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	8
02:15	0	2	0	0	0	0	0	1	0	0	0	0	0	0	0	3
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
03:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Hour Total	0	6	0	0	0	0	0	1	0	0	0	0	0	0	0	7
03:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30	1	2	0	1	0	0	0	1	0	0	0	0	0	0	0	5
03:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Hour Total	1	5	0	1	0	0	0	1	0	0	0	0	0	0	0	8
04:15	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
04:30	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
04:45	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	5
05:00	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Hour Total	0	8	1	0	0	0	0	0	0	0	0	0	0	0	0	9
05:15	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	4
05:30	0	4	0	0	1	0	0	0	0	0	0	0	0	0	0	5
05:45	0	4	1	0	0	0	0	0	0	0	0	0	0	0	0	5
06:00	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	5
Hour Total	0	16	2	0	1	0	0	0	0	0	0	0	0	0	0	19
06:15	0	2	1	0	1	0	0	0	0	0	0	0	0	0	0	4
06:30	0	13	4	1	1	0	0	0	0	0	0	0	0	0	0	19
06:45	0	20	5	0	0	0	0	0	0	0	0	0	0	0	0	25
07:00	0	18	4	5	2	0	0	0	0	0	0	0	0	0	0	29
Hour Total	0	53	14	6	4	0	0	0	0	0	0	0	0	0	0	77
07:15	0	21	2	4	1	1	0	0	0	0	0	0	0	0	0	29
07:30	0	32	4	0	1	2	0	0	1	0	0	0	0	0	0	40
07:45	0	21	1	0	0	0	0	1	0	0	0	0	0	0	0	23
08:00	0	36	5	1	0	0	0	1	0	0	0	0	0	0	0	43
Hour Total	0	110	12	5	2	3	0	2	1	0	0	0	0	0	0	135
08:15	0	49	5	1	2	1	0	0	0	0	0	0	0	0	0	58
08:30	0	45	5	0	0	0	0	0	0	0	0	0	0	0	0	50
08:45	0	51	5	4	2	0	0	0	0	0	0	0	0	0	0	62
09:00	0	37	8	1	1	1	0	0	0	0	0	0	0	0	0	48

Accurate Traffic Counts
 CLASSIFICATION SUMMARY
 Tue 1/14/2020

Site Ref: 00000000011
 Counter ID: 000000033594
 Location: Malabar Rd, E of Championshp Cir NW
 Direction: EAST
 Lane: 1

File: D0114001.prn
 City: Malabar
 County: Brevard

TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total
-----	-----															
Hour Total	0	182	23	6	5	2	0	0	0	0	0	0	0	0	0	218
09:15	0	16	5	0	1	0	0	0	0	0	0	0	0	0	0	22
09:30	0	22	3	0	0	0	0	0	0	0	0	0	0	0	0	25
09:45	0	22	4	0	0	1	1	0	0	0	0	0	0	0	0	28
10:00	0	21	6	0	1	2	0	0	0	0	0	0	0	0	0	30
-----	-----															
Hour Total	0	81	18	0	2	3	1	0	0	0	0	0	0	0	0	105
10:15	0	24	2	0	0	0	0	0	0	0	0	0	0	0	0	26
10:30	0	27	7	0	2	0	1	1	0	0	0	0	0	0	0	38
10:45	0	26	6	0	0	2	1	0	0	0	0	0	0	0	0	35
11:00	1	28	2	0	1	0	1	0	0	0	0	0	0	0	0	33
-----	-----															
Hour Total	1	105	17	0	3	2	3	1	0	0	0	0	0	0	0	132
11:15	1	25	3	0	1	0	0	0	0	0	0	0	0	0	0	30
11:30	0	29	5	0	0	0	0	0	0	0	0	0	0	0	0	34
11:45	0	29	2	0	2	0	0	0	0	0	0	0	0	0	0	33
12:00	0	24	6	0	0	1	0	0	0	0	0	0	0	0	0	31
-----	-----															
Hour Total	1	107	16	0	3	1	0	0	0	0	0	0	0	0	0	128
12:15	0	26	2	0	0	2	0	0	0	0	0	0	0	0	0	30
12:30	2	26	5	0	1	2	0	0	0	1	0	0	0	0	0	37
12:45	0	28	2	0	1	0	2	1	0	0	0	0	0	0	0	34
13:00	0	35	7	0	1	0	1	0	0	0	0	0	0	0	0	44
-----	-----															
Hour Total	2	115	16	0	3	4	3	1	0	1	0	0	0	0	0	145
13:15	0	26	7	1	2	3	0	0	0	0	0	0	0	0	0	39
13:30	0	25	6	0	0	1	0	0	0	0	0	0	0	0	0	32
13:45	0	27	12	1	1	0	4	0	0	0	0	0	0	0	0	45
14:00	0	35	2	0	1	3	1	0	0	0	0	0	0	0	0	42
-----	-----															
Hour Total	0	113	27	2	4	7	5	0	0	0	0	0	0	0	0	158
14:15	0	25	3	5	5	1	1	0	0	0	0	0	0	0	0	40
14:30	1	38	11	0	1	2	1	1	0	0	0	0	0	0	0	55
14:45	0	35	7	0	1	1	1	1	0	0	0	0	0	0	0	46
15:00	0	46	9	0	1	3	1	0	1	0	0	0	0	0	0	61
-----	-----															
Hour Total	1	144	30	5	8	7	4	2	1	0	0	0	0	0	0	202
15:15	0	52	5	0	3	2	0	2	0	0	0	0	0	0	0	64
15:30	0	30	10	0	0	1	0	0	0	0	0	0	0	0	0	41
15:45	2	93	8	3	5	1	0	0	0	0	0	0	0	0	0	112
16:00	1	125	10	0	0	0	0	0	0	0	0	0	0	0	0	136
-----	-----															
Hour Total	3	300	33	3	8	4	0	2	0	0	0	0	0	0	0	353
16:15	0	49	7	0	2	1	0	0	0	0	0	0	0	0	0	59
16:30	0	67	9	0	1	0	0	0	0	0	0	0	0	0	0	77
16:45	1	60	10	0	0	0	0	0	0	0	0	0	0	0	0	71
17:00	0	63	8	1	1	0	0	0	0	0	0	0	0	0	0	73
-----	-----															
Hour Total	1	239	34	1	4	1	0	0	0	0	0	0	0	0	0	280

Accurate Traffic Counts
 CLASSIFICATION SUMMARY
 Tue 1/14/2020

Site Ref: 00000000011
 Counter ID: 000000033594
 Location: Malabar Rd, E of Championshp Cir NW
 Direction: EAST
 Lane: 1

File: D0114001.prn
 City: Malabar
 County: Brevard

TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total

17:15	1	95	16	0	0	0	0	0	0	0	0	0	0	0	0	112
17:30	0	81	10	0	0	0	0	0	0	0	0	0	0	0	0	91
17:45	2	61	10	0	0	0	0	0	0	0	0	0	0	0	0	73
18:00	1	108	15	1	2	0	0	0	0	0	0	0	0	0	0	127
Hour Total	4	345	51	1	2	0	0	0	0	0	0	0	0	0	0	403

18:15	0	100	22	0	1	0	0	0	0	0	0	0	0	0	0	123
18:30	0	74	11	0	2	0	0	0	0	0	0	0	0	0	0	87
18:45	0	47	9	0	1	0	0	0	0	0	0	0	0	0	0	57
19:00	0	70	16	0	1	0	0	1	0	0	0	0	0	0	0	88
Hour Total	0	291	58	0	5	0	0	1	0	0	0	0	0	0	0	355

19:15	0	43	14	0	2	0	0	0	1	0	0	0	0	0	0	60
19:30	0	32	4	0	2	0	0	0	0	0	0	0	0	0	0	38
19:45	1	57	9	0	1	0	0	1	0	0	0	0	0	0	0	69
20:00	0	47	9	0	1	0	0	0	0	0	0	0	0	0	0	57
Hour Total	1	179	36	0	6	0	0	1	1	0	0	0	0	0	0	224

20:15	0	38	9	0	0	0	0	0	0	0	0	0	0	0	0	47
20:30	0	62	7	0	1	0	0	0	0	0	0	0	0	0	0	70
20:45	0	68	6	0	0	0	0	0	0	0	0	0	0	0	0	74
21:00	0	43	6	0	0	0	0	0	0	0	0	0	0	0	0	49
Hour Total	0	211	28	0	1	0	0	0	0	0	0	0	0	0	0	240

21:15	0	83	7	0	0	0	0	0	0	0	0	0	0	0	0	90
21:30	0	44	4	0	0	0	0	0	0	0	0	0	0	0	0	48
21:45	0	22	4	0	0	0	0	0	0	0	0	0	0	0	0	26
22:00	0	12	1	0	0	0	0	0	0	0	0	0	0	0	0	13
Hour Total	0	161	16	0	0	0	0	0	0	0	0	0	0	0	0	177

22:15	0	14	1	0	0	0	0	0	0	0	0	0	0	0	0	15
22:30	0	42	10	0	0	0	0	0	0	0	0	0	0	0	0	52
22:45	0	41	15	0	2	0	0	0	0	0	0	0	0	0	0	58
23:00	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	10
Hour Total	0	107	26	0	2	0	0	0	0	0	0	0	0	0	0	135

23:15	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	8
23:30	0	6	1	0	0	0	0	0	0	0	0	0	0	0	0	7
23:45	0	5	1	0	0	0	0	0	0	0	0	0	0	0	0	6
24:00	0	4	4	0	0	0	0	0	0	0	0	0	0	0	0	8
Hour Total	0	23	6	0	0	0	0	0	0	0	0	0	0	0	0	29

DAY TOTAL	15	2920	465	30	63	34	16	12	3	1	0	0	0	0	0	3559
PERCENTS	0.5%	82.1%	13.1%	0.9%	1.8%	0.9%	0.4%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
Passenger Vehicles	95.5%															
	Trucks & Buses 4.4%															
AM Times	10:30	08:15	08:15	06:30	08:15	10:00	10:15	07:15	06:45							08:15
AM Peaks	2	182	23	10	5	4	3	2	1							218
PM Times	17:15	17:30	17:45	13:30	15:00	14:30	13:45	14:30	14:15	12:15					17:30	
PM Peaks	4	350	58	6	9	8	7	4	1	1					414	

Accurate Traffic Counts
 CLASSIFICATION SUMMARY
 Wed 1/15/2020

Site Ref: 00000000011
 Counter ID: 000000033594
 Location: Malabar Rd, E of Championshp Cir NW
 Direction: EAST
 Lane: 1

File: D0114001.prn
 City: Malabar
 County: Brevard

TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total
00:15	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	8
00:30	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	4
00:45	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	4
01:00	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	3
Hour Total	0	16	3	0	0	0	0	0	0	0	0	0	0	0	0	19
01:15	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
01:30	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4
01:45	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4
02:00	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Hour Total	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	12
02:15	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
02:30	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2
02:45	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
03:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Hour Total	0	3	1	0	0	0	0	1	0	0	0	0	0	0	0	5
03:15	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	2
03:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
04:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Hour Total	0	3	0	1	0	0	0	0	0	0	0	0	0	0	0	4
04:15	0	4	1	0	0	0	0	0	0	0	0	0	0	0	0	5
04:30	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
04:45	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	4
05:00	0	2	0	0	0	0	0	1	0	0	0	0	0	0	0	3
Hour Total	0	11	2	0	0	0	0	1	0	0	0	0	0	0	0	14
05:15	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	6
05:30	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	5
05:45	0	3	2	0	0	0	0	0	0	0	0	0	0	0	0	5
06:00	0	8	2	0	0	0	0	0	0	0	0	0	0	0	0	10
Hour Total	0	22	4	0	0	0	0	0	0	0	0	0	0	0	0	26
06:15	0	7	2	0	0	0	0	0	0	1	0	0	0	0	0	10
06:30	0	8	1	1	0	1	0	0	0	0	0	0	0	0	0	11
06:45	0	12	3	1	0	0	0	1	0	0	0	0	0	0	0	17
07:00	0	19	4	5	4	0	0	0	0	0	0	0	0	0	0	32
Hour Total	0	46	10	7	4	1	0	1	0	1	0	0	0	0	0	70
07:15	1	14	2	4	3	0	0	0	0	1	0	0	0	0	0	25
07:30	0	19	5	0	1	2	1	0	0	0	0	0	0	0	0	28
07:45	0	29	5	0	0	1	0	0	0	0	0	0	0	0	0	35
08:00	0	35	3	0	2	0	0	0	0	0	0	0	0	0	0	40
Hour Total	1	97	15	4	6	3	1	0	0	1	0	0	0	0	0	128
08:15	0	41	7	1	0	0	0	0	0	0	0	0	0	0	0	49
08:30	0	66	14	3	1	0	0	0	1	0	0	0	0	0	0	85
08:45	0	85	10	8	0	0	0	0	0	0	0	0	0	0	0	103
09:00	0	36	5	0	1	2	0	1	0	0	0	0	0	0	0	45

Accurate Traffic Counts
 CLASSIFICATION SUMMARY
 Wed 1/15/2020

Site Ref: 00000000011
 Counter ID: 000000033594
 Location: Malabar Rd, E of Championshp Cir NW
 Direction: EAST
 Lane: 1

File: D0114001.prn
 City: Malabar
 County: Brevard

TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total
Hour Total	0	228	36	12	2	2	0	1	1	0	0	0	0	0	0	282
09:15	0	25	8	0	1	0	0	0	0	0	0	0	0	0	0	34
09:30	0	21	3	1	1	3	0	1	1	0	0	0	0	0	0	31
09:45	0	30	8	1	0	0	0	0	0	0	0	0	0	0	0	39
10:00	0	21	8	0	0	2	0	0	0	0	0	0	0	0	0	31
Hour Total	0	97	27	2	2	5	0	1	1	0	0	0	0	0	0	135
10:15	0	31	4	0	0	1	0	0	0	0	0	0	0	0	0	36
10:30	0	18	2	0	3	0	1	0	0	0	0	0	0	0	0	24
10:45	0	22	10	0	0	3	0	0	2	0	0	0	0	0	0	37
11:00	0	28	7	0	1	1	1	1	1	0	0	0	0	0	0	40
Hour Total	0	99	23	0	4	5	2	1	3	0	0	0	0	0	0	137
11:15	0	21	4	0	1	1	0	0	0	0	0	0	0	0	0	27
11:30	1	37	6	0	1	1	0	1	0	0	0	0	0	0	0	47
11:45	0	36	8	0	1	2	0	1	0	0	0	0	0	0	0	48
12:00	0	28	13	0	2	1	0	0	0	0	0	0	0	0	0	44
Hour Total	1	122	31	0	5	5	0	2	0	0	0	0	0	0	0	166
12:15	0	21	4	0	0	0	1	0	0	0	0	0	0	0	0	26
12:30	0	23	5	1	0	2	2	1	0	0	0	0	0	0	0	34
12:45	0	31	6	0	1	1	0	0	0	0	0	0	0	0	0	39
13:00	0	31	5	0	1	2	1	1	0	0	0	0	0	0	0	41
Hour Total	0	106	20	1	2	5	4	2	0	0	0	0	0	0	0	140
13:15	0	15	5	0	0	1	0	0	0	0	0	0	0	0	0	21
13:30	0	30	3	0	0	0	0	1	0	0	0	0	0	0	0	34
13:45	0	28	4	2	3	0	2	0	2	0	0	0	0	0	0	41
14:00	0	37	5	0	2	4	0	1	0	0	0	0	0	0	0	49
Hour Total	0	110	17	2	5	5	2	2	2	0	0	0	0	0	0	145
14:15	0	38	7	5	4	0	0	1	1	0	0	0	0	0	0	56
14:30	1	28	7	1	1	1	2	1	0	0	0	0	0	0	0	42
14:45	0	43	10	1	0	0	0	0	1	0	0	0	0	0	0	55
15:00	1	45	7	1	1	1	0	0	0	0	0	0	0	0	0	56
Hour Total	2	154	31	8	6	2	2	2	2	0	0	0	0	0	0	209
15:15	0	50	13	0	2	1	1	0	0	0	0	0	0	0	0	67
15:30	0	32	11	1	1	1	1	0	0	0	0	0	0	0	0	47
15:45	0	127	8	10	6	0	0	0	0	0	0	0	0	0	0	151
16:00	0	119	16	0	3	2	0	0	0	0	0	0	0	0	0	140
Hour Total	0	328	48	11	12	4	2	0	0	0	0	0	0	0	0	405
16:15	0	78	6	0	1	0	0	1	0	0	0	0	0	0	0	86
16:30	1	64	16	0	0	0	0	0	0	0	0	0	0	0	0	81
16:45	1	79	22	1	4	0	0	0	0	0	0	0	0	0	0	107
17:00	0	60	7	1	0	0	0	0	0	0	0	0	0	0	0	68
Hour Total	2	281	51	2	5	0	0	1	0	0	0	0	0	0	0	342

Accurate Traffic Counts
 CLASSIFICATION SUMMARY
 Wed 1/15/2020

Site Ref: 00000000011
 Counter ID: 000000033594
 Location: Malabar Rd, E of Championshp Cir NW
 Direction: EAST
 Lane: 1

File: D0114001.prn
 City: Malabar
 County: Brevard

TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total

17:15	1	104	18	0	0	0	0	0	0	0	0	0	0	0	0	123
17:30	0	85	20	0	3	0	0	0	0	0	0	0	0	0	0	108
17:45	1	87	13	0	1	0	0	0	0	0	0	0	0	0	0	102
18:00	0	110	17	0	1	0	0	0	0	0	0	0	0	0	0	128
Hour Total	2	386	68	0	5	0	0	0	0	0	0	0	0	0	0	461

18:15	0	87	13	0	0	0	0	0	0	0	0	0	0	0	0	100
18:30	0	69	14	0	2	0	0	0	0	0	0	0	0	0	0	85
18:45	1	55	17	0	0	0	0	2	0	0	0	0	0	0	0	75
19:00	0	38	7	0	2	0	0	0	0	0	0	0	0	0	0	47
Hour Total	1	249	51	0	4	0	0	2	0	0	0	0	0	0	0	307

19:15	0	35	2	0	2	0	0	0	0	0	0	0	0	0	0	39
19:30	0	50	6	0	1	0	0	0	0	0	0	0	0	0	0	57
19:45	0	41	11	0	0	0	0	0	0	0	0	0	0	0	0	52
20:00	1	38	8	0	1	0	0	0	0	0	0	0	0	0	0	48
Hour Total	1	164	27	0	4	0	0	0	0	0	0	0	0	0	0	196

20:15	0	39	2	0	2	0	0	0	0	0	0	0	0	0	0	43
20:30	0	32	4	0	0	0	0	0	0	0	0	0	0	0	0	36
20:45	0	42	1	0	1	0	0	0	0	0	0	0	0	0	0	44
21:00	2	49	4	0	0	0	0	0	0	0	0	0	0	0	0	55
Hour Total	2	162	11	0	3	0	0	0	0	0	0	0	0	0	0	178

21:15	0	26	0	0	0	0	0	0	0	0	0	0	0	0	0	26
21:30	0	20	1	0	0	0	0	0	0	0	0	0	0	0	0	21
21:45	0	16	3	0	0	0	0	0	0	0	0	0	0	0	0	19
22:00	0	10	2	0	0	0	0	0	0	0	0	0	0	0	0	12
Hour Total	0	72	6	0	0	0	0	0	0	0	0	0	0	0	0	78

22:15	0	25	1	0	0	0	0	0	0	0	0	0	0	0	0	26
22:30	0	13	4	0	0	0	0	0	0	0	0	0	0	0	0	17
22:45	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	9
23:00	0	4	1	0	0	0	0	0	0	0	0	0	0	0	0	5
Hour Total	0	51	6	0	0	0	0	0	0	0	0	0	0	0	0	57

23:15	0	7	1	0	0	0	0	0	0	0	0	0	0	0	0	8
23:30	0	12	1	0	0	0	0	0	0	0	0	0	0	0	0	13
23:45	0	5	1	0	0	0	0	0	0	0	0	0	0	0	0	6
24:00	0	8	1	0	0	0	0	0	0	0	0	0	0	0	0	9
Hour Total	0	32	4	0	0	0	0	0	0	0	0	0	0	0	0	36

DAY TOTAL	12	2851	492	50	69	37	13	17	9	2	0	0	0	0	0	3552
PERCENTS	0.4%	80.3%	13.9%	1.5%	2.0%	1.0%	0.3%	0.4%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
Passenger Vehicles	94.4%															
	Trucks & Buses 5.5%															
AM Times	06:30	08:15	08:30	08:00	06:45	09:30	10:15	11:00	10:15	05:30						08:15
AM Peaks	1	228	37	12	8	6	2	3	3	1						282
PM Times	16:30	15:45	17:15	15:00	15:15	12:30	12:15	13:30	13:30							17:15
PM Peaks	3	388	68	12	12	6	4	3	3							461

Accurate Traffic Counts
 CLASSIFICATION SUMMARY
 Thu 1/16/2020

Site Ref: 00000000011
 Counter ID: 000000033594
 Location: Malabar Rd, E of Championshp Cir NW
 Direction: EAST
 Lane: 1

File: D0114001.prn
 City: Malabar
 County: Brevard

TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total
00:15	0	4	2	0	0	0	0	0	0	0	0	0	0	0	0	6
00:30	0	4	1	0	0	0	0	0	0	0	0	0	0	0	0	5
00:45	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4
01:00	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	4
Hour Total	0	15	4	0	0	0	0	0	0	0	0	0	0	0	0	19
01:15	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	3
01:30	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
01:45	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
02:00	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Hour Total	0	6	1	0	0	0	0	0	0	0	0	0	0	0	0	7
02:15	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
02:30	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2
02:45	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
03:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Hour Total	0	4	2	0	0	0	0	0	0	0	0	0	0	0	0	6
03:15	0	2	0	0	1	0	0	0	0	0	0	0	0	0	0	3
03:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
04:00	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Hour Total	1	5	0	0	1	0	0	0	0	0	0	0	0	0	0	7
04:15	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	4
04:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	6
05:00	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Hour Total	0	12	1	0	0	0	0	0	0	0	0	0	0	0	0	13
05:15	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	3
05:30	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
05:45	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	4
06:00	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	6
Hour Total	0	13	2	0	0	0	0	0	0	0	0	0	0	0	0	15
06:15	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	6
06:30	0	14	3	0	1	1	0	0	0	0	0	0	0	0	0	19
06:45	0	6	8	1	1	0	0	0	0	0	0	0	0	0	0	16
07:00	0	22	2	5	2	0	0	0	0	0	0	0	0	0	0	31
Hour Total	0	48	13	6	4	1	0	0	0	0	0	0	0	0	0	72
07:15	0	14	2	4	3	0	0	0	0	0	0	0	0	0	0	23
07:30	0	24	6	1	0	1	2	0	0	0	0	0	0	0	0	34
07:45	0	40	2	0	1	1	1	0	1	0	0	0	0	0	0	46
08:00	0	38	4	0	0	0	0	1	0	0	0	0	0	0	0	43
Hour Total	0	116	14	5	4	2	3	1	1	0	0	0	0	0	0	146
08:15	0	43	8	1	1	0	0	0	1	0	0	0	0	0	0	54
08:30	0	62	9	1	1	0	1	0	1	0	0	0	0	0	0	75
08:45	0	84	6	7	0	0	1	1	0	0	0	0	0	0	0	99
09:00	0	29	5	0	1	1	0	0	0	0	0	0	0	0	0	36

Accurate Traffic Counts
 CLASSIFICATION SUMMARY
 Thu 1/16/2020

Site Ref: 00000000011
 Counter ID: 000000033594
 Location: Malabar Rd, E of Championshp Cir NW
 Direction: EAST
 Lane: 1

File: D0114001.prn
 City: Malabar
 County: Brevard

TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total
-----	-----															
Hour Total	0	218	28	9	3	1	2	1	2	0	0	0	0	0	0	264
09:15	0	19	10	1	0	1	0	0	1	0	0	0	0	0	0	32
09:30	0	24	3	0	0	0	0	1	2	0	0	0	0	0	0	30
09:45	0	33	10	0	2	1	1	0	0	0	0	0	0	0	0	47
10:00	0	24	4	0	1	0	0	0	0	0	0	0	0	0	0	29
-----	-----															
Hour Total	0	100	27	1	3	2	1	1	3	0	0	0	0	0	0	138
10:15	0	30	8	0	0	1	1	0	0	0	0	0	0	0	0	40
10:30	0	18	5	0	3	1	1	0	1	0	0	0	0	0	0	29
10:45	0	18	5	0	2	2	1	0	0	0	0	0	0	0	0	28
11:00	0	32	6	0	0	0	0	0	0	0	0	0	0	0	0	38
-----	-----															
Hour Total	0	98	24	0	5	4	3	0	1	0	0	0	0	0	0	135
11:15	1	22	8	0	1	0	0	0	0	0	0	0	0	0	0	32
11:30	0	29	8	0	1	1	1	0	0	0	0	0	0	0	0	40
11:45	0	24	4	0	0	0	1	0	0	0	0	0	0	0	0	29
12:00	0	30	2	0	2	1	2	0	0	0	0	0	0	0	0	37
-----	-----															
Hour Total	1	105	22	0	4	2	4	0	0	0	0	0	0	0	0	138
12:15	1	18	2	0	1	0	1	0	0	0	0	0	0	0	0	23
12:30	0	29	4	1	0	0	0	0	1	0	0	0	0	0	0	35
12:45	0	29	3	0	1	0	1	0	0	0	0	0	0	0	0	34
13:00	0	30	11	0	0	0	0	1	0	0	0	0	0	0	0	42
-----	-----															
Hour Total	1	106	20	1	2	0	2	1	1	0	0	0	0	0	0	134
13:15	0	30	6	0	1	1	2	0	0	0	0	0	0	0	0	40
13:30	0	38	8	0	0	1	1	1	0	0	0	0	0	0	0	49
13:45	1	28	6	0	1	1	0	0	0	0	0	0	0	0	0	37
14:00	0	41	6	1	3	0	2	0	0	0	0	0	0	0	0	53
-----	-----															
Hour Total	1	137	26	1	5	3	5	1	0	0	0	0	0	0	0	179
14:15	0	32	5	6	3	0	0	0	0	0	0	0	0	0	0	46
14:30	0	33	7	1	2	0	0	1	0	0	0	0	0	0	0	44
14:45	1	21	10	0	3	0	0	1	0	0	0	0	0	0	0	36
15:00	1	37	5	1	0	1	0	0	0	0	0	0	0	0	0	45
-----	-----															
Hour Total	2	123	27	8	8	1	0	2	0	0	0	0	0	0	0	171
15:15	0	36	7	0	0	0	0	0	1	0	0	0	0	0	0	44
15:30	0	43	11	0	1	0	0	0	0	0	0	0	0	0	0	55
15:45	1	132	10	7	1	0	0	0	0	0	0	0	0	0	0	151
16:00	1	132	15	0	0	1	0	0	0	0	0	0	0	0	0	149
-----	-----															
Hour Total	2	343	43	7	2	1	0	0	1	0	0	0	0	0	0	399
16:15	2	88	22	1	0	1	0	0	0	0	0	0	0	0	0	114
16:30	2	75	14	0	1	0	0	0	0	0	0	0	0	0	0	92
16:45	0	81	15	1	3	0	0	0	0	0	0	0	0	0	0	100
17:00	2	98	15	2	0	0	0	0	0	0	0	0	0	0	0	117
-----	-----															
Hour Total	6	342	66	4	4	1	0	0	0	0	0	0	0	0	0	423

Accurate Traffic Counts
 CLASSIFICATION SUMMARY
 Thu 1/16/2020

Site Ref: 00000000011
 Counter ID: 000000033594
 Location: Malabar Rd, E of Championshp Cir NW
 Direction: EAST
 Lane: 1

File: D0114001.prn
 City: Malabar
 County: Brevard

TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total

17:15	1	98	18	0	1	0	0	0	1	0	0	0	0	0	0	119
17:30	0	75	15	0	1	0	0	0	1	0	0	0	0	0	0	92
17:45	1	68	12	0	1	0	0	0	0	0	0	0	0	0	0	82
18:00	0	89	20	0	3	0	0	0	0	0	0	0	0	0	0	112
Hour Total	2	330	65	0	6	0	0	0	2	0	0	0	0	0	0	405

18:15	0	92	17	0	5	0	0	0	0	0	0	0	0	0	0	114
18:30	0	77	14	0	0	0	0	0	0	0	0	0	0	0	0	91
18:45	0	54	9	0	0	0	0	0	0	0	0	0	0	0	0	63
19:00	0	45	8	0	1	0	0	0	0	0	0	0	0	0	0	54
Hour Total	0	268	48	0	6	0	0	0	0	0	0	0	0	0	0	322

19:15	1	44	6	0	0	0	0	1	1	0	0	0	0	0	0	53
19:30	1	70	1	0	0	0	0	0	0	0	0	0	0	0	0	72
19:45	0	112	18	0	0	0	0	0	0	0	0	0	0	0	0	130
20:00	0	58	5	0	0	0	0	0	0	0	0	0	0	0	0	63
Hour Total	2	284	30	0	0	0	0	1	1	0	0	0	0	0	0	318

20:15	0	59	5	0	3	0	0	0	0	0	0	0	0	0	0	67
20:30	0	39	3	1	1	0	0	0	0	0	0	0	0	0	0	44
20:45	0	34	5	0	0	0	0	1	0	0	0	0	0	0	0	40
21:00	0	44	4	0	0	0	0	0	0	0	0	0	0	0	0	48
Hour Total	0	176	17	1	4	0	0	1	0	0	0	0	0	0	0	199

21:15	0	24	2	0	0	0	0	0	0	0	0	0	0	0	0	26
21:30	0	21	1	0	0	0	0	0	0	0	0	0	0	0	0	22
21:45	1	14	3	0	0	0	0	0	0	0	0	0	0	0	0	18
22:00	0	32	2	0	0	0	0	0	0	0	0	0	0	0	0	34
Hour Total	1	91	8	0	0	0	0	0	0	0	0	0	0	0	0	100

22:15	0	11	1	0	0	0	0	0	0	0	0	0	0	0	0	12
22:30	0	14	1	0	0	0	0	0	0	0	0	0	0	0	0	15
22:45	0	9	2	0	0	0	0	0	0	0	0	0	0	0	0	11
23:00	0	8	2	0	0	0	0	0	0	0	0	0	0	0	0	10
Hour Total	0	42	6	0	0	0	0	0	0	0	0	0	0	0	0	48

23:15	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	9
23:30	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	8
23:45	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	10
24:00	0	6	1	0	0	0	0	0	0	0	0	0	0	0	0	7
Hour Total	0	33	1	0	0	0	0	0	0	0	0	0	0	0	0	34

DAY TOTAL	19	3015	495	43	61	18	20	9	12	0	0	0	0	0	0	3692
PERCENTS	0.6%	81.7%	13.5%	1.2%	1.6%	0.4%	0.5%	0.2%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
Passenger Vehicles	95.5%															
	Trucks & Buses 4.4%															
AM Times	03:00	08:00	08:30	06:45	06:30	10:00	11:15	08:00	07:45							08:00
AM Peaks	1	227	30	11	7	4	4	2	3							271
PM Times	15:45	15:45	16:00	13:45	14:00	13:00	13:15	12:45	16:45							15:45
PM Peaks	6	427	66	8	11	3	5	2	2							506

Accurate Traffic Counts
 CLASSIFICATION SUMMARY
 Tue 1/14/2020

Site Ref: 00000000011
 Counter ID: 000000033594
 Location: Malabar Rd, E of Championshp Cir NW
 Direction: WEST
 Lane: 2

File: D0114001.prn
 City: Malabar
 County: Brevard

TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total
00:15	0	4	1	0	0	0	0	0	0	0	0	0	0	0	0	5
00:30	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	4
00:45	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
01:00	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Hour Total	0	12	2	0	0	0	0	0	0	0	0	0	0	0	0	14
01:15	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	3
01:30	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
01:45	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
02:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Hour Total	0	6	1	0	0	0	0	0	0	0	0	0	0	0	0	7
02:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30	0	2	0	0	0	0	0	1	0	0	0	0	0	0	0	3
02:45	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
03:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Hour Total	0	3	1	0	0	0	0	1	0	0	0	0	0	0	0	5
03:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2
03:45	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	3
04:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Hour Total	0	3	2	1	0	0	0	0	0	0	0	0	0	0	0	6
04:15	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
04:30	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
04:45	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	12
05:00	0	6	4	0	0	0	0	0	0	0	0	0	0	0	0	10
Hour Total	0	21	4	0	0	0	0	0	0	0	0	0	0	0	0	25
05:15	0	11	3	0	0	0	0	0	0	0	0	0	0	0	0	14
05:30	0	13	5	0	1	0	0	0	0	0	0	0	0	0	0	19
05:45	0	23	8	0	0	0	0	0	0	0	0	0	0	0	0	31
06:00	2	28	7	0	1	1	0	0	1	0	0	0	0	0	0	40
Hour Total	2	75	23	0	2	1	0	0	1	0	0	0	0	0	0	104
06:15	0	42	12	0	0	0	0	0	0	0	0	0	0	0	0	54
06:30	0	67	15	0	0	0	0	0	0	0	0	0	0	0	0	82
06:45	2	78	13	0	1	1	0	0	1	0	0	0	0	0	0	96
07:00	3	75	14	0	2	1	0	0	0	0	0	0	0	0	0	95
Hour Total	5	262	54	0	3	2	0	0	1	0	0	0	0	0	0	327
07:15	0	107	11	0	2	0	0	0	0	0	0	0	0	0	0	120
07:30	1	111	12	1	2	0	0	0	0	0	0	0	0	0	0	127
07:45	0	65	15	0	2	0	0	0	0	0	0	0	0	0	0	82
08:00	0	116	15	0	3	1	0	1	0	0	0	0	0	0	0	136
Hour Total	1	399	53	1	9	1	0	1	0	0	0	0	0	0	0	465
08:15	1	106	11	0	3	0	0	0	0	0	0	0	0	0	0	121
08:30	0	77	12	6	1	0	0	0	1	0	0	0	0	0	0	97
08:45	0	55	11	1	0	0	0	0	0	0	0	0	0	0	0	67
09:00	1	67	10	0	3	1	0	0	0	0	0	0	0	0	0	82

Accurate Traffic Counts
 CLASSIFICATION SUMMARY
 Tue 1/14/2020

Site Ref: 00000000011
 Counter ID: 000000033594
 Location: Malabar Rd, E of Championshp Cir NW
 Direction: WEST
 Lane: 2

File: D0114001.prn
 City: Malabar
 County: Brevard

TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total
-----	-----															
Hour Total	2	305	44	7	7	1	0	0	1	0	0	0	0	0	0	367
09:15	1	47	6	0	1	0	0	0	0	0	0	0	0	0	0	55
09:30	0	31	1	0	3	0	0	0	0	0	0	0	0	0	0	35
09:45	0	41	5	0	3	0	0	0	0	0	0	0	0	0	0	49
10:00	0	43	4	0	4	0	0	0	0	0	0	0	0	0	0	51
-----	-----															
Hour Total	1	162	16	0	11	0	0	0	0	0	0	0	0	0	0	190
10:15	1	33	5	0	0	1	0	0	0	0	0	0	0	0	0	40
10:30	0	44	5	0	3	3	0	0	0	0	0	0	0	0	0	55
10:45	0	45	2	0	2	0	0	0	0	0	0	0	0	0	0	49
11:00	1	34	2	1	0	1	0	0	0	0	0	0	0	0	0	39
-----	-----															
Hour Total	2	156	14	1	5	5	0	0	0	0	0	0	0	0	0	183
11:15	0	36	4	0	2	0	0	0	0	0	0	0	0	0	0	42
11:30	1	49	12	1	0	0	0	0	0	0	0	0	0	0	0	63
11:45	0	36	4	0	1	1	0	0	0	0	0	0	0	0	0	42
12:00	1	35	5	0	1	0	0	0	0	0	0	0	0	0	0	42
-----	-----															
Hour Total	2	156	25	1	4	1	0	0	0	0	0	0	0	0	0	189
12:15	0	28	6	0	1	3	0	1	0	0	0	0	0	0	0	39
12:30	0	33	5	0	4	0	0	0	0	0	0	0	0	0	0	42
12:45	0	35	2	0	0	1	0	0	0	0	0	0	0	0	0	38
13:00	1	47	6	0	2	1	0	1	0	0	0	0	0	0	0	58
-----	-----															
Hour Total	1	143	19	0	7	5	0	2	0	0	0	0	0	0	0	177
13:15	0	32	9	0	2	1	0	0	0	0	0	0	0	0	0	44
13:30	1	25	5	2	3	5	0	1	0	0	0	0	0	0	0	42
13:45	0	31	9	0	0	1	0	0	0	0	0	0	0	0	0	41
14:00	0	44	9	0	1	1	0	0	0	0	0	0	0	0	0	55
-----	-----															
Hour Total	1	132	32	2	6	8	0	1	0	0	0	0	0	0	0	182
14:15	2	19	0	0	0	0	0	0	0	0	0	0	0	0	0	21
14:30	0	27	6	0	2	2	0	0	0	0	0	0	0	0	0	37
14:45	1	40	4	0	0	3	0	0	0	0	0	0	0	0	0	48
15:00	0	54	5	4	4	1	0	1	1	0	0	0	0	0	0	70
-----	-----															
Hour Total	3	140	15	4	6	6	0	1	1	0	0	0	0	0	0	176
15:15	1	56	4	6	4	0	0	0	0	0	0	0	0	0	0	71
15:30	1	53	8	1	1	0	0	0	0	0	0	0	0	0	0	64
15:45	0	56	7	2	1	0	0	0	0	0	0	0	0	0	0	66
16:00	1	64	8	0	2	2	0	0	0	0	0	0	0	0	0	77
-----	-----															
Hour Total	3	229	27	9	8	2	0	0	0	0	0	0	0	0	0	278
16:15	1	52	7	0	2	0	0	0	0	0	0	0	0	0	0	62
16:30	0	70	6	0	0	0	0	0	0	0	0	0	0	0	0	76
16:45	0	42	2	0	0	0	0	1	0	0	0	0	0	0	0	45
17:00	0	43	1	2	2	0	0	0	0	0	0	0	0	0	0	48
-----	-----															
Hour Total	1	207	16	2	4	0	0	1	0	0	0	0	0	0	0	231

Accurate Traffic Counts
 CLASSIFICATION SUMMARY
 Tue 1/14/2020

Site Ref: 00000000011
 Counter ID: 000000033594
 Location: Malabar Rd, E of Championshp Cir NW
 Direction: WEST
 Lane: 2

File: D0114001.prn
 City: Malabar
 County: Brevard

TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total

17:15	1	50	6	1	0	0	0	1	0	0	0	0	0	0	0	59
17:30	1	62	4	2	0	0	0	0	1	0	0	0	0	0	0	70
17:45	1	77	8	0	1	0	0	0	0	0	0	0	0	0	0	87
18:00	2	88	8	0	2	0	0	0	0	0	0	0	0	0	0	100
Hour Total	5	277	26	3	3	0	0	1	1	0	0	0	0	0	0	316

18:15	0	63	6	0	0	0	0	0	0	0	0	0	0	0	0	69
18:30	1	56	5	0	1	0	0	0	0	0	0	0	0	0	0	63
18:45	0	74	13	0	0	0	0	0	0	0	0	0	0	0	0	87
19:00	0	52	11	0	2	0	0	0	0	0	0	0	0	0	0	65
Hour Total	1	245	35	0	3	0	0	0	0	0	0	0	0	0	0	284

19:15	0	53	3	0	1	0	0	0	0	0	0	0	0	0	0	57
19:30	0	32	6	0	0	0	0	0	0	0	0	0	0	0	0	38
19:45	0	25	2	0	0	0	0	0	0	0	0	0	0	0	0	27
20:00	0	22	4	0	1	0	0	0	0	0	0	0	0	0	0	27
Hour Total	0	132	15	0	2	0	0	0	0	0	0	0	0	0	0	149

20:15	0	22	2	0	0	0	0	0	0	0	0	0	0	0	0	24
20:30	0	28	5	0	0	0	0	0	0	0	0	0	0	0	0	33
20:45	0	27	1	0	0	0	0	0	0	0	0	0	0	0	0	28
21:00	0	18	4	0	0	0	0	0	0	0	0	0	0	0	0	22
Hour Total	0	95	12	0	0	0	0	0	0	0	0	0	0	0	0	107

21:15	0	13	2	0	0	0	0	0	0	0	0	0	0	0	0	15
21:30	0	11	1	0	0	0	0	0	0	0	0	0	0	0	0	12
21:45	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
22:00	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	11
Hour Total	0	38	3	0	0	0	0	0	0	0	0	0	0	0	0	41

22:15	0	12	2	0	0	0	0	0	0	0	0	0	0	0	0	14
22:30	0	6	0	0	1	0	0	0	0	0	0	0	0	0	0	7
22:45	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	5
23:00	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Hour Total	0	26	2	0	1	0	0	0	0	0	0	0	0	0	0	29

23:15	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
23:30	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
23:45	0	3	2	0	0	0	0	0	0	0	0	0	0	0	0	5
24:00	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Hour Total	0	10	2	0	0	0	0	0	0	0	0	0	0	0	0	12

DAY TOTAL	30	3234	443	31	81	32	0	8	5	0	0	0	0	0	0	3864
PERCENTS	0.8%	83.7%	11.5%	0.9%	2.0%	0.8%	0.0%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
Passenger Vehicles	95.9%															
																Trucks & Buses 4.0%
AM Times	06:45	07:15	06:15	08:00	09:15	10:15		01:45	06:00							07:30
AM Peaks	6	399	54	7	11	5		1	2							466
PM Times	17:15	17:30	18:15	15:00	14:30	12:45		12:15	14:15							17:30
PM Peaks	5	290	35	13	10	8		2	1							326

Accurate Traffic Counts
 CLASSIFICATION SUMMARY
 Wed 1/15/2020

Site Ref: 00000000011
 Counter ID: 000000033594
 Location: Malabar Rd, E of Championshp Cir NW
 Direction: WEST
 Lane: 2

File: D0114001.prn
 City: Malabar
 County: Brevard

TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total
00:15	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
00:30	0	4	1	0	0	0	0	0	0	0	0	0	0	0	0	5
00:45	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hour Total	0	8	1	0	0	0	0	0	0	0	0	0	0	0	0	9
01:15	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
01:30	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
01:45	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
02:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Hour Total	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	6
02:15	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
02:30	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	2
02:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Hour Total	0	4	0	0	0	0	0	1	0	0	0	0	0	0	0	5
03:15	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
03:30	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2
03:45	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	2
04:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Hour Total	0	4	1	0	1	0	0	0	0	0	0	0	0	0	0	6
04:15	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
04:30	0	4	1	0	0	0	0	0	0	0	0	0	0	0	0	5
04:45	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	9
05:00	0	10	2	0	0	0	0	0	0	0	0	0	0	0	0	12
Hour Total	0	25	3	0	0	0	0	0	0	0	0	0	0	0	0	28
05:15	0	14	2	0	0	0	0	0	0	0	0	0	0	0	0	16
05:30	0	15	4	0	0	0	0	0	0	0	0	0	0	0	0	19
05:45	0	27	9	0	0	0	0	0	0	0	0	0	0	0	0	36
06:00	0	26	8	0	1	0	0	0	0	0	0	0	0	0	0	35
Hour Total	0	82	23	0	1	0	0	0	0	0	0	0	0	0	0	106
06:15	0	54	14	0	1	0	0	1	0	0	0	0	0	0	0	70
06:30	0	53	5	0	1	0	0	0	0	0	0	0	0	0	0	59
06:45	0	84	9	0	1	0	0	0	0	0	0	0	0	0	0	94
07:00	2	81	14	0	2	0	0	0	0	0	0	0	0	0	0	99
Hour Total	2	272	42	0	5	0	0	1	0	0	0	0	0	0	0	322
07:15	0	102	22	0	2	0	0	0	0	0	0	0	0	0	0	126
07:30	2	107	18	1	1	0	0	0	0	0	0	1	0	0	0	130
07:45	0	83	10	1	1	0	0	0	1	0	0	0	0	0	0	96
08:00	0	103	15	0	1	0	0	0	0	0	0	0	0	0	0	119
Hour Total	2	395	65	2	5	0	0	0	1	0	0	1	0	0	0	471
08:15	1	107	16	1	2	1	0	0	0	0	0	0	0	0	0	128
08:30	2	169	22	6	6	0	0	2	0	0	0	0	0	0	0	207
08:45	0	103	11	2	2	2	0	0	0	1	0	0	0	0	0	121
09:00	0	42	4	0	1	0	0	0	1	0	0	0	0	0	0	48

Accurate Traffic Counts
 CLASSIFICATION SUMMARY
 Wed 1/15/2020

Site Ref: 00000000011
 Counter ID: 000000033594
 Location: Malabar Rd, E of Championshp Cir NW
 Direction: WEST
 Lane: 2

File: D0114001.prn
 City: Malabar
 County: Brevard

TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total
-----	-----															
Hour Total	3	421	53	9	11	3	0	2	1	1	0	0	0	0	0	504
09:15	0	40	5	0	3	0	0	0	0	0	0	0	0	0	0	48
09:30	0	34	10	0	1	1	0	1	0	0	0	0	0	0	0	47
09:45	2	34	3	0	1	2	0	0	0	0	0	0	0	0	0	42
10:00	0	41	5	0	2	0	0	0	0	0	0	0	0	0	0	48
-----	-----															
Hour Total	2	149	23	0	7	3	0	1	0	0	0	0	0	0	0	185
10:15	0	36	4	0	0	2	0	0	0	0	0	0	0	0	0	42
10:30	0	34	4	0	0	2	0	0	1	0	0	0	0	0	0	41
10:45	0	28	8	0	1	1	0	0	0	0	0	0	0	0	0	38
11:00	1	43	6	0	1	1	0	1	0	0	0	0	0	0	0	53
-----	-----															
Hour Total	1	141	22	0	2	6	0	1	1	0	0	0	0	0	0	174
11:15	0	42	7	1	2	0	0	1	0	0	0	0	0	0	0	53
11:30	0	35	5	0	1	0	0	0	0	0	0	0	0	0	0	41
11:45	0	35	8	0	1	0	0	0	0	0	0	0	0	0	0	44
12:00	0	34	3	0	1	2	0	1	2	0	0	0	0	0	0	43
-----	-----															
Hour Total	0	146	23	1	5	2	0	2	2	0	0	0	0	0	0	181
12:15	0	27	3	0	0	0	0	0	1	0	0	0	0	0	0	31
12:30	0	40	4	0	5	1	0	0	0	0	0	0	0	0	0	50
12:45	0	23	5	0	1	2	0	0	0	0	0	0	0	0	0	31
13:00	0	22	5	0	1	0	0	0	0	0	0	0	0	0	0	28
-----	-----															
Hour Total	0	112	17	0	7	3	0	0	1	0	0	0	0	0	0	140
13:15	0	28	5	0	1	0	0	0	1	0	0	0	0	0	0	35
13:30	1	19	7	0	0	4	0	0	0	0	0	0	0	0	0	31
13:45	1	29	2	0	0	0	0	0	0	0	0	0	0	0	0	32
14:00	0	27	7	1	1	2	0	0	0	0	0	0	0	0	0	38
-----	-----															
Hour Total	2	103	21	1	2	6	0	0	1	0	0	0	0	0	0	136
14:15	0	27	2	0	1	2	0	0	1	0	0	0	0	0	0	33
14:30	2	28	4	0	0	0	0	0	0	0	0	0	0	0	0	34
14:45	1	30	4	0	1	2	0	0	0	0	0	0	0	0	0	38
15:00	0	41	6	1	4	2	0	0	0	0	0	0	0	0	0	54
-----	-----															
Hour Total	3	126	16	1	6	6	0	0	1	0	0	0	0	0	0	159
15:15	5	42	4	5	3	1	0	0	1	0	0	0	0	0	0	61
15:30	1	57	7	2	5	0	0	1	1	0	0	0	0	0	0	74
15:45	0	47	4	0	0	0	0	0	1	0	0	0	0	0	0	52
16:00	0	43	5	0	1	1	0	0	0	0	0	0	0	0	0	50
-----	-----															
Hour Total	6	189	20	7	9	2	0	1	3	0	0	0	0	0	0	237
16:15	0	44	4	1	2	2	0	0	0	0	0	0	0	0	0	53
16:30	3	38	5	0	1	0	0	1	0	0	0	0	0	0	0	48
16:45	2	40	3	1	0	0	0	0	0	0	0	0	0	0	0	46
17:00	1	45	6	2	4	0	0	1	0	0	0	0	0	0	0	59
-----	-----															
Hour Total	6	167	18	4	7	2	0	2	0	0	0	0	0	0	0	206

Accurate Traffic Counts
 CLASSIFICATION SUMMARY
 Wed 1/15/2020

Site Ref: 00000000011
 Counter ID: 000000033594
 Location: Malabar Rd, E of Championshp Cir NW
 Direction: WEST
 Lane: 2

File: D0114001.prn
 City: Malabar
 County: Brevard

TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total

17:15	1	50	7	1	1	1	0	1	0	0	0	0	0	0	0	62
17:30	3	62	14	0	0	0	0	0	0	0	0	0	0	0	0	79
17:45	1	47	4	0	0	0	0	0	0	0	0	0	0	0	0	52
18:00	3	53	6	0	1	0	0	0	0	0	0	0	0	0	0	63
Hour Total	8	212	31	1	2	1	0	1	0	0	0	0	0	0	0	256

18:15	0	46	4	1	1	0	0	0	0	0	0	0	0	0	0	52
18:30	1	43	3	0	0	0	0	0	0	0	0	0	0	0	0	47
18:45	0	32	5	0	0	0	0	0	0	0	0	0	0	0	0	37
19:00	2	48	2	0	1	0	0	0	0	0	0	0	0	0	0	53
Hour Total	3	169	14	1	2	0	0	0	0	0	0	0	0	0	0	189

19:15	0	25	6	0	0	0	0	0	0	0	0	0	0	0	0	31
19:30	0	25	3	0	0	0	0	0	0	0	0	0	0	0	0	28
19:45	0	14	3	0	1	0	0	0	0	0	0	0	0	0	0	18
20:00	0	25	3	0	1	0	0	0	0	0	0	0	0	0	0	29
Hour Total	0	89	15	0	2	0	0	0	0	0	0	0	0	0	0	106

20:15	1	21	2	0	0	0	0	0	0	0	0	0	0	0	0	24
20:30	0	31	2	0	0	0	0	0	0	0	0	0	0	0	0	33
20:45	0	16	3	0	0	0	0	0	0	0	0	0	0	0	0	19
21:00	1	26	1	0	0	1	0	0	0	0	0	0	0	0	0	29
Hour Total	2	94	8	0	0	1	0	0	0	0	0	0	0	0	0	105

21:15	1	20	0	0	0	0	0	0	0	0	0	0	0	0	0	21
21:30	0	13	0	0	0	0	0	0	1	0	0	0	0	0	0	14
21:45	0	10	1	0	0	0	0	0	0	0	0	0	0	0	0	11
22:00	0	11	1	0	0	0	0	0	0	0	0	0	0	0	0	12
Hour Total	1	54	2	0	0	0	0	0	1	0	0	0	0	0	0	58

22:15	1	14	1	0	0	0	0	0	0	0	0	0	0	0	0	16
22:30	0	3	2	0	0	0	0	0	0	0	0	0	0	0	0	5
22:45	0	6	1	0	1	0	0	0	0	0	0	0	0	0	0	8
23:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Hour Total	1	24	4	0	1	0	0	0	0	0	0	0	0	0	0	30

23:15	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	5
23:30	0	7	1	0	0	0	0	0	0	0	0	0	0	0	0	8
23:45	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
24:00	1	5	0	0	0	0	0	0	0	0	0	0	0	0	0	6
Hour Total	1	18	1	0	0	0	0	0	0	0	0	0	0	0	0	20

DAY TOTAL	43	3010	423	27	75	35	0	12	12	1	0	1	0	0	0	3639
PERCENTS	1.2%	82.8%	11.7%	0.8%	2.0%	0.9%	0.0%	0.3%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
Passenger Vehicles	95.5%															
																Trucks & Buses 4.4%
AM Times	06:45	08:00	07:15	08:00	08:30	09:45		07:45	11:15	08:00		06:45				08:00
AM Peaks	4	482	65	9	12	6		2	2	1		1				575
PM Times	14:30	17:15	17:00	14:45	14:45	13:30		16:30	15:00							17:15
PM Peaks	8	212	31	8	13	8		3	3							256

Accurate Traffic Counts
 CLASSIFICATION SUMMARY
 Thu 1/16/2020

Site Ref: 00000000011
 Counter ID: 000000033594
 Location: Malabar Rd, E of Championshp Cir NW
 Direction: WEST
 Lane: 2

File: D0114001.prn
 City: Malabar
 County: Brevard

TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total
00:15	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2
00:30	0	4	1	0	0	0	0	0	0	0	0	0	0	0	0	5
00:45	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2
01:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Hour Total	1	7	2	0	0	0	0	0	0	0	0	0	0	0	0	10
01:15	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
01:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
02:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Hour Total	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4
02:15	0	2	0	0	0	0	0	1	0	0	0	0	0	0	0	3
02:30	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
02:45	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
03:00	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Hour Total	0	8	0	0	0	0	0	1	0	0	0	0	0	0	0	9
03:15	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
03:30	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
03:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Hour Total	2	3	0	1	0	0	0	0	0	0	0	0	0	0	0	6
04:15	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
04:30	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	3
04:45	0	8	1	0	0	0	0	0	0	0	0	0	0	0	0	9
05:00	0	12	1	0	0	0	0	0	0	0	0	0	0	0	0	13
Hour Total	0	23	3	0	0	0	0	0	0	0	0	0	0	0	0	26
05:15	0	18	4	0	0	0	0	0	0	0	0	0	0	0	0	22
05:30	0	16	5	0	0	0	0	0	0	0	0	0	0	0	0	21
05:45	0	31	12	0	0	1	0	0	0	0	0	0	0	0	0	44
06:00	0	28	12	0	1	0	0	0	0	0	0	0	0	0	0	41
Hour Total	0	93	33	0	1	1	0	0	0	0	0	0	0	0	0	128
06:15	1	44	8	0	1	0	0	0	0	0	0	0	0	0	0	54
06:30	0	55	16	0	1	0	0	0	0	0	0	0	0	0	0	72
06:45	0	73	10	0	1	0	0	0	0	0	0	0	0	0	0	84
07:00	2	81	14	0	3	2	0	0	0	0	0	0	0	0	0	102
Hour Total	3	253	48	0	6	2	0	0	0	0	0	0	0	0	0	312
07:15	0	102	12	0	1	0	0	0	0	0	0	0	0	0	0	115
07:30	0	109	22	1	1	0	0	0	0	0	0	0	0	0	0	133
07:45	0	93	7	0	1	0	0	0	1	0	0	0	0	0	0	102
08:00	0	111	15	1	1	1	0	0	0	0	0	0	0	0	0	129
Hour Total	0	415	56	2	4	1	0	0	1	0	0	0	0	0	0	479
08:15	1	115	17	1	1	0	0	2	0	0	0	0	0	0	0	137
08:30	0	146	14	5	5	1	0	0	1	0	0	0	0	0	0	172
08:45	3	117	9	0	4	4	0	0	0	0	0	0	0	0	0	137
09:00	2	41	8	0	1	3	0	1	0	0	0	0	0	0	0	56

Accurate Traffic Counts
 CLASSIFICATION SUMMARY
 Thu 1/16/2020

Site Ref: 00000000011
 Counter ID: 000000033594
 Location: Malabar Rd, E of Championshp Cir NW
 Direction: WEST
 Lane: 2

File: D0114001.prn
 City: Malabar
 County: Brevard

TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total
-----	-----															
Hour Total	6	419	48	6	11	8	0	3	1	0	0	0	0	0	0	502
09:15	1	45	10	0	1	0	0	1	1	0	0	0	0	0	0	59
09:30	0	43	12	0	2	0	0	0	0	0	0	0	0	0	0	57
09:45	0	41	2	0	1	1	0	0	0	0	0	0	0	0	0	45
10:00	0	39	2	0	3	1	0	1	0	0	0	0	0	0	0	46
-----	-----															
Hour Total	1	168	26	0	7	2	0	2	1	0	0	0	0	0	0	207
10:15	0	34	3	1	1	1	0	0	0	0	0	0	0	0	0	40
10:30	0	31	10	0	1	0	0	1	0	0	0	0	0	0	0	43
10:45	0	31	7	0	0	0	0	0	0	0	0	0	0	0	0	38
11:00	2	41	0	0	1	4	0	1	0	0	0	0	0	0	0	49
-----	-----															
Hour Total	2	137	20	1	3	5	0	2	0	0	0	0	0	0	0	170
11:15	2	50	5	0	0	1	0	0	0	0	0	0	0	0	0	58
11:30	2	33	5	0	0	3	0	0	0	0	0	0	0	0	0	43
11:45	0	39	2	0	0	0	0	0	0	0	0	0	0	0	0	41
12:00	0	39	3	0	0	0	0	0	0	0	0	0	0	0	0	42
-----	-----															
Hour Total	4	161	15	0	0	4	0	0	0	0	0	0	0	0	0	184
12:15	1	36	4	0	1	1	0	0	1	0	0	0	0	0	0	44
12:30	0	24	4	0	2	1	0	0	0	0	0	0	0	0	0	31
12:45	0	35	7	0	1	3	0	0	0	0	0	0	0	0	0	46
13:00	3	22	4	1	1	1	0	0	0	0	0	0	0	0	0	32
-----	-----															
Hour Total	4	117	19	1	5	6	0	0	1	0	0	0	0	0	0	153
13:15	2	28	2	0	1	0	0	1	0	0	0	0	0	0	0	34
13:30	1	26	5	0	0	1	0	0	1	0	0	0	0	0	0	34
13:45	1	40	3	0	0	0	0	0	0	0	0	0	0	0	0	44
14:00	2	23	3	0	1	2	0	0	0	0	0	0	0	0	0	31
-----	-----															
Hour Total	6	117	13	0	2	3	0	1	1	0	0	0	0	0	0	143
14:15	1	35	7	0	0	1	0	2	0	0	0	0	0	0	0	46
14:30	1	36	2	0	0	2	0	0	0	0	0	0	0	0	0	41
14:45	1	26	1	0	1	0	0	0	1	0	0	0	0	0	0	30
15:00	1	34	5	2	2	2	0	0	0	0	0	0	0	0	0	46
-----	-----															
Hour Total	4	131	15	2	3	5	0	2	1	0	0	0	0	0	0	163
15:15	1	32	6	6	1	1	0	0	0	0	0	0	0	0	0	47
15:30	1	52	7	0	1	1	1	0	0	0	0	0	0	0	0	63
15:45	1	45	4	2	2	1	0	0	0	0	0	0	0	0	0	55
16:00	1	47	4	0	2	0	0	0	0	0	0	0	0	0	0	54
-----	-----															
Hour Total	4	176	21	8	6	3	1	0	0	0	0	0	0	0	0	219
16:15	1	40	6	0	2	1	0	2	0	0	0	0	0	0	0	52
16:30	2	42	8	1	0	0	0	0	2	0	0	0	0	0	0	55
16:45	0	43	6	0	1	0	0	2	0	0	0	0	0	0	0	52
17:00	1	36	4	6	2	1	0	0	0	0	0	0	0	0	0	50
-----	-----															
Hour Total	4	161	24	7	5	2	0	4	2	0	0	0	0	0	0	209

Accurate Traffic Counts
 CLASSIFICATION SUMMARY
 Thu 1/16/2020

Site Ref: 00000000011
 Counter ID: 000000033594
 Location: Malabar Rd, E of Championshp Cir NW
 Direction: WEST
 Lane: 2

File: D0114001.prn
 City: Malabar
 County: Brevard

TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total

17:15	3	56	9	1	1	0	0	0	0	0	0	0	0	0	0	70
17:30	0	60	8	1	0	0	0	0	0	0	0	0	0	0	0	69
17:45	2	58	4	0	1	0	0	0	0	0	0	0	0	0	0	65
18:00	1	108	10	0	1	0	0	0	0	0	0	0	0	0	0	120
Hour Total	6	282	31	2	3	0	0	0	0	0	0	0	0	0	0	324

18:15	1	87	3	0	2	0	0	1	0	0	0	0	0	0	0	94
18:30	1	52	5	0	0	1	0	0	0	0	0	0	0	0	0	59
18:45	0	44	4	0	1	0	0	0	0	0	0	0	0	0	0	49
19:00	0	24	5	1	1	0	0	1	0	0	0	0	0	0	0	32
Hour Total	2	207	17	1	4	1	0	2	0	0	0	0	0	0	0	234

19:15	2	29	1	0	0	0	0	0	0	0	0	0	0	0	0	32
19:30	1	27	5	0	0	0	0	0	0	0	0	0	0	0	0	33
19:45	3	32	1	0	0	1	0	0	0	0	0	0	0	0	0	37
20:00	2	32	2	0	1	0	0	1	0	0	0	0	0	0	0	38
Hour Total	8	120	9	0	1	1	0	1	0	0	0	0	0	0	0	140

20:15	3	27	1	0	1	0	0	0	0	0	0	0	0	0	0	32
20:30	2	16	0	0	0	0	0	0	0	0	0	0	0	0	0	18
20:45	1	24	3	0	0	0	0	0	0	0	0	0	0	0	0	28
21:00	1	24	1	0	0	0	0	0	0	0	0	0	0	0	0	26
Hour Total	7	91	5	0	1	0	0	0	0	0	0	0	0	0	0	104

21:15	0	19	2	0	0	0	0	0	0	0	0	0	0	0	0	21
21:30	0	7	2	0	0	0	0	0	0	0	0	0	0	0	0	9
21:45	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	12
22:00	0	9	2	0	0	0	0	0	0	0	0	0	0	0	0	11
Hour Total	0	47	6	0	0	0	0	0	0	0	0	0	0	0	0	53

22:15	0	6	2	0	0	0	0	0	0	0	0	0	0	0	0	8
22:30	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	12
22:45	0	13	0	0	0	0	0	0	0	0	0	0	0	0	0	13
23:00	1	7	1	0	0	0	0	0	0	0	0	0	0	0	0	9
Hour Total	1	38	3	0	0	0	0	0	0	0	0	0	0	0	0	42

23:15	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	4
23:30	0	5	1	0	0	0	0	0	0	0	0	0	0	0	0	6
23:45	0	4	0	0	1	0	0	0	0	0	0	0	0	0	0	5
24:00	0	4	0	0	1	0	0	0	0	0	0	0	0	0	0	5
Hour Total	0	16	2	0	2	0	0	0	0	0	0	0	0	0	0	20

DAY TOTAL	65	3194	416	31	64	44	1	18	8	0	0	0	0	0	0	3841
PERCENTS	1.7%	83.2%	10.9%	0.9%	1.6%	1.1%	0.0%	0.4%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
Passenger Vehicles	95.6%															
	Trucks & Buses 4.3%															
AM Times	08:15	08:00	07:30	07:45	08:00	08:15		08:15	07:45							08:00
AM Peaks	6	489	61	7	11	8		3	2							575
PM Times	19:45	17:30	17:15	15:00	15:30	12:15	14:45	16:00	15:45							17:30
PM Peaks	10	313	31	10	7	6	1	4	2							348

Accurate Traffic Counts
 CLASSIFICATION SUMMARY
 Tue 1/14/2020

Site Ref: 00000000011
 Counter ID: 000000033594
 Location: Malabar Rd, E of Championshp Cir NW
 Direction: ROAD TOTAL

File: D0114001.prn
 City: Malabar
 County: Brevard

TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total
00:15	0	7	1	0	0	0	0	0	0	0	0	0	0	0	0	8
00:30	0	6	1	0	0	0	0	0	0	0	0	0	0	0	0	7
00:45	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	7
01:00	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	4
Hour Total	0	23	3	0	0	0	0	0	0	0	0	0	0	0	0	26
01:15	0	5	1	0	0	0	0	0	0	0	0	0	0	0	0	6
01:30	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
01:45	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	6
02:00	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Hour Total	0	14	1	0	0	0	0	0	0	0	0	0	0	0	0	15
02:15	0	2	0	0	0	0	0	1	0	0	0	0	0	0	0	3
02:30	0	2	0	0	0	0	0	1	0	0	0	0	0	0	0	3
02:45	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	4
03:00	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Hour Total	0	9	1	0	0	0	0	2	0	0	0	0	0	0	0	12
03:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30	1	3	1	1	0	0	0	1	0	0	0	0	0	0	0	7
03:45	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	3
04:00	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	4
Hour Total	1	8	2	2	0	0	0	1	0	0	0	0	0	0	0	14
04:15	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2
04:30	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
04:45	0	17	0	0	0	0	0	0	0	0	0	0	0	0	0	17
05:00	0	8	4	0	0	0	0	0	0	0	0	0	0	0	0	12
Hour Total	0	29	5	0	0	0	0	0	0	0	0	0	0	0	0	34
05:15	0	14	4	0	0	0	0	0	0	0	0	0	0	0	0	18
05:30	0	17	5	0	2	0	0	0	0	0	0	0	0	0	0	24
05:45	0	27	9	0	0	0	0	0	0	0	0	0	0	0	0	36
06:00	2	33	7	0	1	1	0	0	1	0	0	0	0	0	0	45
Hour Total	2	91	25	0	3	1	0	0	1	0	0	0	0	0	0	123
06:15	0	44	13	0	1	0	0	0	0	0	0	0	0	0	0	58
06:30	0	80	19	1	1	0	0	0	0	0	0	0	0	0	0	101
06:45	2	98	18	0	1	1	0	0	1	0	0	0	0	0	0	121
07:00	3	93	18	5	4	1	0	0	0	0	0	0	0	0	0	124
Hour Total	5	315	68	6	7	2	0	0	1	0	0	0	0	0	0	404
07:15	0	128	13	4	3	1	0	0	0	0	0	0	0	0	0	149
07:30	1	143	16	1	3	2	0	0	1	0	0	0	0	0	0	167
07:45	0	86	16	0	2	0	0	1	0	0	0	0	0	0	0	105
08:00	0	152	20	1	3	1	0	2	0	0	0	0	0	0	0	179
Hour Total	1	509	65	6	11	4	0	3	1	0	0	0	0	0	0	600
08:15	1	155	16	1	5	1	0	0	0	0	0	0	0	0	0	179
08:30	0	122	17	6	1	0	0	0	1	0	0	0	0	0	0	147
08:45	0	106	16	5	2	0	0	0	0	0	0	0	0	0	0	129
09:00	1	104	18	1	4	2	0	0	0	0	0	0	0	0	0	130

Accurate Traffic Counts
 CLASSIFICATION SUMMARY
 Tue 1/14/2020

Site Ref: 00000000011
 Counter ID: 000000033594
 Location: Malabar Rd, E of Championshp Cir NW
 Direction: ROAD TOTAL

File: D0114001.prn
 City: Malabar
 County: Brevard

TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total
Hour Total	2	487	67	13	12	3	0	0	1	0	0	0	0	0	0	585
09:15	1	63	11	0	2	0	0	0	0	0	0	0	0	0	0	77
09:30	0	53	4	0	3	0	0	0	0	0	0	0	0	0	0	60
09:45	0	63	9	0	3	1	1	0	0	0	0	0	0	0	0	77
10:00	0	64	10	0	5	2	0	0	0	0	0	0	0	0	0	81
Hour Total	1	243	34	0	13	3	1	0	0	0	0	0	0	0	0	295
10:15	1	57	7	0	0	1	0	0	0	0	0	0	0	0	0	66
10:30	0	71	12	0	5	3	1	1	0	0	0	0	0	0	0	93
10:45	0	71	8	0	2	2	1	0	0	0	0	0	0	0	0	84
11:00	2	62	4	1	1	1	1	0	0	0	0	0	0	0	0	72
Hour Total	3	261	31	1	8	7	3	1	0	0	0	0	0	0	0	315
11:15	1	61	7	0	3	0	0	0	0	0	0	0	0	0	0	72
11:30	1	78	17	1	0	0	0	0	0	0	0	0	0	0	0	97
11:45	0	65	6	0	3	1	0	0	0	0	0	0	0	0	0	75
12:00	1	59	11	0	1	1	0	0	0	0	0	0	0	0	0	73
Hour Total	3	263	41	1	7	2	0	0	0	0	0	0	0	0	0	317
12:15	0	54	8	0	1	5	0	1	0	0	0	0	0	0	0	69
12:30	2	59	10	0	5	2	0	0	1	0	0	0	0	0	0	79
12:45	0	63	4	0	1	1	2	1	0	0	0	0	0	0	0	72
13:00	1	82	13	0	3	1	1	1	0	0	0	0	0	0	0	102
Hour Total	3	258	35	0	10	9	3	3	0	1	0	0	0	0	0	322
13:15	0	58	16	1	4	4	0	0	0	0	0	0	0	0	0	83
13:30	1	50	11	2	3	6	0	1	0	0	0	0	0	0	0	74
13:45	0	58	21	1	1	1	4	0	0	0	0	0	0	0	0	86
14:00	0	79	11	0	2	4	1	0	0	0	0	0	0	0	0	97
Hour Total	1	245	59	4	10	15	5	1	0	0	0	0	0	0	0	340
14:15	2	44	3	5	5	1	1	0	0	0	0	0	0	0	0	61
14:30	1	65	17	0	3	4	1	1	0	0	0	0	0	0	0	92
14:45	1	75	11	0	1	4	1	1	0	0	0	0	0	0	0	94
15:00	0	100	14	4	5	4	1	1	2	0	0	0	0	0	0	131
Hour Total	4	284	45	9	14	13	4	3	2	0	0	0	0	0	0	378
15:15	1	108	9	6	7	2	0	2	0	0	0	0	0	0	0	135
15:30	1	83	18	1	1	1	0	0	0	0	0	0	0	0	0	105
15:45	2	149	15	5	6	1	0	0	0	0	0	0	0	0	0	178
16:00	2	189	18	0	2	2	0	0	0	0	0	0	0	0	0	213
Hour Total	6	529	60	12	16	6	0	2	0	0	0	0	0	0	0	631
16:15	1	101	14	0	4	1	0	0	0	0	0	0	0	0	0	121
16:30	0	137	15	0	1	0	0	0	0	0	0	0	0	0	0	153
16:45	1	102	12	0	0	0	0	1	0	0	0	0	0	0	0	116
17:00	0	106	9	3	3	0	0	0	0	0	0	0	0	0	0	121
Hour Total	2	446	50	3	8	1	0	1	0	0	0	0	0	0	0	511

Accurate Traffic Counts
 CLASSIFICATION SUMMARY
 Tue 1/14/2020

Site Ref: 00000000011
 Counter ID: 000000033594
 Location: Malabar Rd, E of Championshp Cir NW
 Direction: ROAD TOTAL

File: D0114001.prn
 City: Malabar
 County: Brevard

TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total

17:15	2	145	22	1	0	0	0	1	0	0	0	0	0	0	0	171
17:30	1	143	14	2	0	0	0	0	1	0	0	0	0	0	0	161
17:45	3	138	18	0	1	0	0	0	0	0	0	0	0	0	0	160
18:00	3	196	23	1	4	0	0	0	0	0	0	0	0	0	0	227
Hour Total	9	622	77	4	5	0	0	1	1	0	0	0	0	0	0	719

18:15	0	163	28	0	1	0	0	0	0	0	0	0	0	0	0	192
18:30	1	130	16	0	3	0	0	0	0	0	0	0	0	0	0	150
18:45	0	121	22	0	1	0	0	0	0	0	0	0	0	0	0	144
19:00	0	122	27	0	3	0	0	1	0	0	0	0	0	0	0	153
Hour Total	1	536	93	0	8	0	0	1	0	0	0	0	0	0	0	639

19:15	0	96	17	0	3	0	0	0	1	0	0	0	0	0	0	117
19:30	0	64	10	0	2	0	0	0	0	0	0	0	0	0	0	76
19:45	1	82	11	0	1	0	0	1	0	0	0	0	0	0	0	96
20:00	0	69	13	0	2	0	0	0	0	0	0	0	0	0	0	84
Hour Total	1	311	51	0	8	0	0	1	1	0	0	0	0	0	0	373

20:15	0	60	11	0	0	0	0	0	0	0	0	0	0	0	0	71
20:30	0	90	12	0	1	0	0	0	0	0	0	0	0	0	0	103
20:45	0	95	7	0	0	0	0	0	0	0	0	0	0	0	0	102
21:00	0	61	10	0	0	0	0	0	0	0	0	0	0	0	0	71
Hour Total	0	306	40	0	1	0	0	0	0	0	0	0	0	0	0	347

21:15	0	96	9	0	0	0	0	0	0	0	0	0	0	0	0	105
21:30	0	55	5	0	0	0	0	0	0	0	0	0	0	0	0	60
21:45	0	25	4	0	0	0	0	0	0	0	0	0	0	0	0	29
22:00	0	23	1	0	0	0	0	0	0	0	0	0	0	0	0	24
Hour Total	0	199	19	0	0	0	0	0	0	0	0	0	0	0	0	218

22:15	0	26	3	0	0	0	0	0	0	0	0	0	0	0	0	29
22:30	0	48	10	0	1	0	0	0	0	0	0	0	0	0	0	59
22:45	0	46	15	0	2	0	0	0	0	0	0	0	0	0	0	63
23:00	0	13	0	0	0	0	0	0	0	0	0	0	0	0	0	13
Hour Total	0	133	28	0	3	0	0	0	0	0	0	0	0	0	0	164

23:15	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	10
23:30	0	9	1	0	0	0	0	0	0	0	0	0	0	0	0	10
23:45	0	8	3	0	0	0	0	0	0	0	0	0	0	0	0	11
24:00	0	6	4	0	0	0	0	0	0	0	0	0	0	0	0	10
Hour Total	0	33	8	0	0	0	0	0	0	0	0	0	0	0	0	41

DAY TOTAL	45	6154	908	61	144	66	16	20	8	1	0	0	0	0	0	7423
PERCENTS	0.7%	83.0%	12.3%	0.8%	1.9%	0.8%	0.2%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
Passenger Vehicles	95.7%															
	Trucks & Buses 4.2%															
AM Times	06:45	07:30	07:45	08:00	07:30	10:00	10:15	07:15	06:00							08:00
AM Peaks	6	536	69	13	13	8	3	3	2							634
PM Times	17:15	17:30	18:15	15:00	15:00	13:15	13:45	14:30	14:15	12:15					17:30	
PM Peaks	9	640	93	16	19	15	7	5	2	1					740	

Accurate Traffic Counts
 CLASSIFICATION SUMMARY
 Wed 1/15/2020

Site Ref: 00000000011
 Counter ID: 000000033594
 Location: Malabar Rd, E of Championshp Cir NW
 Direction: ROAD TOTAL

File: D0114001.prn
 City: Malabar
 County: Brevard

TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total
00:15	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	10
00:30	0	7	2	0	0	0	0	0	0	0	0	0	0	0	0	9
00:45	0	5	1	0	0	0	0	0	0	0	0	0	0	0	0	6
01:00	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	3
Hour Total	0	24	4	0	0	0	0	0	0	0	0	0	0	0	0	28
01:15	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
01:30	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	6
01:45	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	6
02:00	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Hour Total	0	18	0	0	0	0	0	0	0	0	0	0	0	0	0	18
02:15	0	2	0	0	0	0	0	1	0	0	0	0	0	0	0	3
02:30	0	2	1	0	0	0	0	1	0	0	0	0	0	0	0	4
02:45	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
03:00	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Hour Total	0	7	1	0	0	0	0	2	0	0	0	0	0	0	0	10
03:15	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	3
03:30	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2
03:45	0	2	0	0	1	0	0	0	0	0	0	0	0	0	0	3
04:00	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Hour Total	0	7	1	1	1	0	0	0	0	0	0	0	0	0	0	10
04:15	0	6	1	0	0	0	0	0	0	0	0	0	0	0	0	7
04:30	0	6	1	0	0	0	0	0	0	0	0	0	0	0	0	7
04:45	0	12	1	0	0	0	0	0	0	0	0	0	0	0	0	13
05:00	0	12	2	0	0	0	0	1	0	0	0	0	0	0	0	15
Hour Total	0	36	5	0	0	0	0	1	0	0	0	0	0	0	0	42
05:15	0	20	2	0	0	0	0	0	0	0	0	0	0	0	0	22
05:30	0	20	4	0	0	0	0	0	0	0	0	0	0	0	0	24
05:45	0	30	11	0	0	0	0	0	0	0	0	0	0	0	0	41
06:00	0	34	10	0	1	0	0	0	0	0	0	0	0	0	0	45
Hour Total	0	104	27	0	1	0	0	0	0	0	0	0	0	0	0	132
06:15	0	61	16	0	1	0	0	1	0	1	0	0	0	0	0	80
06:30	0	61	6	1	1	1	0	0	0	0	0	0	0	0	0	70
06:45	0	96	12	1	1	0	0	1	0	0	0	0	0	0	0	111
07:00	2	100	18	5	6	0	0	0	0	0	0	0	0	0	0	131
Hour Total	2	318	52	7	9	1	0	2	0	1	0	0	0	0	0	392
07:15	1	116	24	4	5	0	0	0	0	1	0	0	0	0	0	151
07:30	2	126	23	1	2	2	1	0	0	0	0	1	0	0	0	158
07:45	0	112	15	1	1	1	0	0	1	0	0	0	0	0	0	131
08:00	0	138	18	0	3	0	0	0	0	0	0	0	0	0	0	159
Hour Total	3	492	80	6	11	3	1	0	1	1	0	1	0	0	0	599
08:15	1	148	23	2	2	1	0	0	0	0	0	0	0	0	0	177
08:30	2	235	36	9	7	0	0	2	1	0	0	0	0	0	0	292
08:45	0	188	21	10	2	2	0	0	0	1	0	0	0	0	0	224
09:00	0	78	9	0	2	2	0	1	1	0	0	0	0	0	0	93

Accurate Traffic Counts
 CLASSIFICATION SUMMARY
 Wed 1/15/2020

Site Ref: 00000000011
 Counter ID: 000000033594
 Location: Malabar Rd, E of Championshp Cir NW
 Direction: ROAD TOTAL

File: D0114001.prn
 City: Malabar
 County: Brevard

TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total
Hour Total	3	649	89	21	13	5	0	3	2	1	0	0	0	0	0	786
09:15	0	65	13	0	4	0	0	0	0	0	0	0	0	0	0	82
09:30	0	55	13	1	2	4	0	2	1	0	0	0	0	0	0	78
09:45	2	64	11	1	1	2	0	0	0	0	0	0	0	0	0	81
10:00	0	62	13	0	2	2	0	0	0	0	0	0	0	0	0	79
Hour Total	2	246	50	2	9	8	0	2	1	0	0	0	0	0	0	320
10:15	0	67	8	0	0	3	0	0	0	0	0	0	0	0	0	78
10:30	0	52	6	0	3	2	1	0	1	0	0	0	0	0	0	65
10:45	0	50	18	0	1	4	0	0	2	0	0	0	0	0	0	75
11:00	1	71	13	0	2	2	1	2	1	0	0	0	0	0	0	93
Hour Total	1	240	45	0	6	11	2	2	4	0	0	0	0	0	0	311
11:15	0	63	11	1	3	1	0	1	0	0	0	0	0	0	0	80
11:30	1	72	11	0	2	1	0	1	0	0	0	0	0	0	0	88
11:45	0	71	16	0	2	2	0	1	0	0	0	0	0	0	0	92
12:00	0	62	16	0	3	3	0	1	2	0	0	0	0	0	0	87
Hour Total	1	268	54	1	10	7	0	4	2	0	0	0	0	0	0	347
12:15	0	48	7	0	0	0	1	0	1	0	0	0	0	0	0	57
12:30	0	63	9	1	5	3	2	1	0	0	0	0	0	0	0	84
12:45	0	54	11	0	2	3	0	0	0	0	0	0	0	0	0	70
13:00	0	53	10	0	2	2	1	1	0	0	0	0	0	0	0	69
Hour Total	0	218	37	1	9	8	4	2	1	0	0	0	0	0	0	280
13:15	0	43	10	0	1	1	0	0	1	0	0	0	0	0	0	56
13:30	1	49	10	0	0	4	0	1	0	0	0	0	0	0	0	65
13:45	1	57	6	2	3	0	2	0	2	0	0	0	0	0	0	73
14:00	0	64	12	1	3	6	0	1	0	0	0	0	0	0	0	87
Hour Total	2	213	38	3	7	11	2	2	3	0	0	0	0	0	0	281
14:15	0	65	9	5	5	2	0	1	2	0	0	0	0	0	0	89
14:30	3	56	11	1	1	1	2	1	0	0	0	0	0	0	0	76
14:45	1	73	14	1	1	2	0	0	1	0	0	0	0	0	0	93
15:00	1	86	13	2	5	3	0	0	0	0	0	0	0	0	0	110
Hour Total	5	280	47	9	12	8	2	2	3	0	0	0	0	0	0	368
15:15	5	92	17	5	5	2	1	0	1	0	0	0	0	0	0	128
15:30	1	89	18	3	6	1	1	1	1	0	0	0	0	0	0	121
15:45	0	174	12	10	6	0	0	0	1	0	0	0	0	0	0	203
16:00	0	162	21	0	4	3	0	0	0	0	0	0	0	0	0	190
Hour Total	6	517	68	18	21	6	2	1	3	0	0	0	0	0	0	642
16:15	0	122	10	1	3	2	0	1	0	0	0	0	0	0	0	139
16:30	4	102	21	0	1	0	0	1	0	0	0	0	0	0	0	129
16:45	3	119	25	2	4	0	0	0	0	0	0	0	0	0	0	153
17:00	1	105	13	3	4	0	0	1	0	0	0	0	0	0	0	127
Hour Total	8	448	69	6	12	2	0	3	0	0	0	0	0	0	0	548

Accurate Traffic Counts
 CLASSIFICATION SUMMARY
 Wed 1/15/2020

Site Ref: 00000000011
 Counter ID: 000000033594
 Location: Malabar Rd, E of Championshp Cir NW
 Direction: ROAD TOTAL

File: D0114001.prn
 City: Malabar
 County: Brevard

TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total

17:15	2	154	25	1	1	1	0	1	0	0	0	0	0	0	0	185
17:30	3	147	34	0	3	0	0	0	0	0	0	0	0	0	0	187
17:45	2	134	17	0	1	0	0	0	0	0	0	0	0	0	0	154
18:00	3	163	23	0	2	0	0	0	0	0	0	0	0	0	0	191
Hour Total	10	598	99	1	7	1	0	1	0	0	0	0	0	0	0	717

18:15	0	133	17	1	1	0	0	0	0	0	0	0	0	0	0	152
18:30	1	112	17	0	2	0	0	0	0	0	0	0	0	0	0	132
18:45	1	87	22	0	0	0	0	2	0	0	0	0	0	0	0	112
19:00	2	86	9	0	3	0	0	0	0	0	0	0	0	0	0	100
Hour Total	4	418	65	1	6	0	0	2	0	0	0	0	0	0	0	496

19:15	0	60	8	0	2	0	0	0	0	0	0	0	0	0	0	70
19:30	0	75	9	0	1	0	0	0	0	0	0	0	0	0	0	85
19:45	0	55	14	0	1	0	0	0	0	0	0	0	0	0	0	70
20:00	1	63	11	0	2	0	0	0	0	0	0	0	0	0	0	77
Hour Total	1	253	42	0	6	0	0	0	0	0	0	0	0	0	0	302

20:15	1	60	4	0	2	0	0	0	0	0	0	0	0	0	0	67
20:30	0	63	6	0	0	0	0	0	0	0	0	0	0	0	0	69
20:45	0	58	4	0	1	0	0	0	0	0	0	0	0	0	0	63
21:00	3	75	5	0	0	1	0	0	0	0	0	0	0	0	0	84
Hour Total	4	256	19	0	3	1	0	0	0	0	0	0	0	0	0	283

21:15	1	46	0	0	0	0	0	0	0	0	0	0	0	0	0	47
21:30	0	33	1	0	0	0	0	0	1	0	0	0	0	0	0	35
21:45	0	26	4	0	0	0	0	0	0	0	0	0	0	0	0	30
22:00	0	21	3	0	0	0	0	0	0	0	0	0	0	0	0	24
Hour Total	1	126	8	0	0	0	0	0	1	0	0	0	0	0	0	136

22:15	1	39	2	0	0	0	0	0	0	0	0	0	0	0	0	42
22:30	0	16	6	0	0	0	0	0	0	0	0	0	0	0	0	22
22:45	0	15	1	0	1	0	0	0	0	0	0	0	0	0	0	17
23:00	0	5	1	0	0	0	0	0	0	0	0	0	0	0	0	6
Hour Total	1	75	10	0	1	0	0	0	0	0	0	0	0	0	0	87

23:15	0	12	1	0	0	0	0	0	0	0	0	0	0	0	0	13
23:30	0	19	2	0	0	0	0	0	0	0	0	0	0	0	0	21
23:45	0	6	1	0	0	0	0	0	0	0	0	0	0	0	0	7
24:00	1	13	1	0	0	0	0	0	0	0	0	0	0	0	0	15
Hour Total	1	50	5	0	0	0	0	0	0	0	0	0	0	0	0	56

DAY TOTAL	55	5861	915	77	144	72	13	29	21	3	0	1	0	0	0	7191
PERCENTS	0.8%	81.6%	12.8%	1.1%	2.0%	1.0%	0.1%	0.4%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
Passenger Vehicles	95.9%															
	Trucks & Buses 5.0%															
AM Times	06:45	08:00	08:00	08:00	08:30	09:30	10:15	11:00	10:15	05:30		06:45				08:00
AM Peaks	5	709	98	21	15	11	2	5	4	1		1				852
PM Times	14:30	17:15	17:15	15:00	15:00	13:30	12:15	13:30	13:30							17:15
PM Peaks	10	598	99	20	22	12	4	3	4							717

Accurate Traffic Counts
 CLASSIFICATION SUMMARY
 Thu 1/16/2020

Site Ref: 00000000011
 Counter ID: 000000033594
 Location: Malabar Rd, E of Championshp Cir NW
 Direction: ROAD TOTAL

File: D0114001.prn
 City: Malabar
 County: Brevard

TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total
00:15	1	5	2	0	0	0	0	0	0	0	0	0	0	0	0	8
00:30	0	8	2	0	0	0	0	0	0	0	0	0	0	0	0	10
00:45	0	5	1	0	0	0	0	0	0	0	0	0	0	0	0	6
01:00	0	4	1	0	0	0	0	0	0	0	0	0	0	0	0	5
Hour Total	1	22	6	0	0	0	0	0	0	0	0	0	0	0	0	29
01:15	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	4
01:30	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
01:45	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
02:00	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Hour Total	0	10	1	0	0	0	0	0	0	0	0	0	0	0	0	11
02:15	0	3	0	0	0	0	0	1	0	0	0	0	0	0	0	4
02:30	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	4
02:45	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
03:00	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	4
Hour Total	0	12	2	0	0	0	0	1	0	0	0	0	0	0	0	15
03:15	0	3	0	0	1	0	0	0	0	0	0	0	0	0	0	4
03:30	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
03:45	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
04:00	2	5	0	0	0	0	0	0	0	0	0	0	0	0	0	7
Hour Total	3	8	0	1	1	0	0	0	0	0	0	0	0	0	0	13
04:15	0	4	1	0	0	0	0	0	0	0	0	0	0	0	0	5
04:30	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	3
04:45	0	14	1	0	0	0	0	0	0	0	0	0	0	0	0	15
05:00	0	15	1	0	0	0	0	0	0	0	0	0	0	0	0	16
Hour Total	0	35	4	0	0	0	0	0	0	0	0	0	0	0	0	39
05:15	0	20	5	0	0	0	0	0	0	0	0	0	0	0	0	25
05:30	0	18	5	0	0	0	0	0	0	0	0	0	0	0	0	23
05:45	0	34	13	0	0	1	0	0	0	0	0	0	0	0	0	48
06:00	0	34	12	0	1	0	0	0	0	0	0	0	0	0	0	47
Hour Total	0	106	35	0	1	1	0	0	0	0	0	0	0	0	0	143
06:15	1	50	8	0	1	0	0	0	0	0	0	0	0	0	0	60
06:30	0	69	19	0	2	1	0	0	0	0	0	0	0	0	0	91
06:45	0	79	18	1	2	0	0	0	0	0	0	0	0	0	0	100
07:00	2	103	16	5	5	2	0	0	0	0	0	0	0	0	0	133
Hour Total	3	301	61	6	10	3	0	0	0	0	0	0	0	0	0	384
07:15	0	116	14	4	4	0	0	0	0	0	0	0	0	0	0	138
07:30	0	133	28	2	1	1	2	0	0	0	0	0	0	0	0	167
07:45	0	133	9	0	2	1	1	0	2	0	0	0	0	0	0	148
08:00	0	149	19	1	1	1	0	1	0	0	0	0	0	0	0	172
Hour Total	0	531	70	7	8	3	3	1	2	0	0	0	0	0	0	625
08:15	1	158	25	2	2	0	0	2	1	0	0	0	0	0	0	191
08:30	0	208	23	6	6	1	1	0	2	0	0	0	0	0	0	247
08:45	3	201	15	7	4	4	1	1	0	0	0	0	0	0	0	236
09:00	2	70	13	0	2	4	0	1	0	0	0	0	0	0	0	92

Accurate Traffic Counts
 CLASSIFICATION SUMMARY
 Thu 1/16/2020

Site Ref: 00000000011
 Counter ID: 000000033594
 Location: Malabar Rd, E of Championshp Cir NW
 Direction: ROAD TOTAL

File: D0114001.prn
 City: Malabar
 County: Brevard

TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total
Hour Total	6	637	76	15	14	9	2	4	3	0	0	0	0	0	0	766
09:15	1	64	20	1	1	1	0	1	2	0	0	0	0	0	0	91
09:30	0	67	15	0	2	0	0	1	2	0	0	0	0	0	0	87
09:45	0	74	12	0	3	2	1	0	0	0	0	0	0	0	0	92
10:00	0	63	6	0	4	1	0	1	0	0	0	0	0	0	0	75
Hour Total	1	268	53	1	10	4	1	3	4	0	0	0	0	0	0	345
10:15	0	64	11	1	1	2	1	0	0	0	0	0	0	0	0	80
10:30	0	49	15	0	4	1	1	1	1	0	0	0	0	0	0	72
10:45	0	49	12	0	2	2	1	0	0	0	0	0	0	0	0	66
11:00	2	73	6	0	1	4	0	1	0	0	0	0	0	0	0	87
Hour Total	2	235	44	1	8	9	3	2	1	0	0	0	0	0	0	305
11:15	3	72	13	0	1	1	0	0	0	0	0	0	0	0	0	90
11:30	2	62	13	0	1	4	1	0	0	0	0	0	0	0	0	83
11:45	0	63	6	0	0	0	1	0	0	0	0	0	0	0	0	70
12:00	0	69	5	0	2	1	2	0	0	0	0	0	0	0	0	79
Hour Total	5	266	37	0	4	6	4	0	0	0	0	0	0	0	0	322
12:15	2	54	6	0	2	1	1	0	1	0	0	0	0	0	0	67
12:30	0	53	8	1	2	1	0	0	1	0	0	0	0	0	0	66
12:45	0	64	10	0	2	3	1	0	0	0	0	0	0	0	0	80
13:00	3	52	15	1	1	1	0	1	0	0	0	0	0	0	0	74
Hour Total	5	223	39	2	7	6	2	1	2	0	0	0	0	0	0	287
13:15	2	58	8	0	2	1	2	1	0	0	0	0	0	0	0	74
13:30	1	64	13	0	0	2	1	1	1	0	0	0	0	0	0	83
13:45	2	68	9	0	1	1	0	0	0	0	0	0	0	0	0	81
14:00	2	64	9	1	4	2	2	0	0	0	0	0	0	0	0	84
Hour Total	7	254	39	1	7	6	5	2	1	0	0	0	0	0	0	322
14:15	1	67	12	6	3	1	0	2	0	0	0	0	0	0	0	92
14:30	1	69	9	1	2	2	0	1	0	0	0	0	0	0	0	85
14:45	2	47	11	0	4	0	0	1	1	0	0	0	0	0	0	66
15:00	2	71	10	3	2	3	0	0	0	0	0	0	0	0	0	91
Hour Total	6	254	42	10	11	6	0	4	1	0	0	0	0	0	0	334
15:15	1	68	13	6	1	1	0	0	1	0	0	0	0	0	0	91
15:30	1	95	18	0	2	1	1	0	0	0	0	0	0	0	0	118
15:45	2	177	14	9	3	1	0	0	0	0	0	0	0	0	0	206
16:00	2	179	19	0	2	1	0	0	0	0	0	0	0	0	0	203
Hour Total	6	519	64	15	8	4	1	0	1	0	0	0	0	0	0	618
16:15	3	128	28	1	2	2	0	2	0	0	0	0	0	0	0	166
16:30	4	117	22	1	1	0	0	0	2	0	0	0	0	0	0	147
16:45	0	124	21	1	4	0	0	2	0	0	0	0	0	0	0	152
17:00	3	134	19	8	2	1	0	0	0	0	0	0	0	0	0	167
Hour Total	10	503	90	11	9	3	0	4	2	0	0	0	0	0	0	632

Accurate Traffic Counts
CLASSIFICATION SUMMARY
Thu 1/16/2020

Site Ref: 00000000011
Counter ID: 000000033594
Location: Malabar Rd, E of Championshp Cir NW
Direction: ROAD TOTAL

File: D0114001.prn
City: Malabar
County: Brevard

TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total

17:15	4	154	27	1	2	0	0	0	1	0	0	0	0	0	0	189
17:30	0	135	23	1	1	0	0	0	1	0	0	0	0	0	0	161
17:45	3	126	16	0	2	0	0	0	0	0	0	0	0	0	0	147
18:00	1	197	30	0	4	0	0	0	0	0	0	0	0	0	0	232
Hour Total	8	612	96	2	9	0	0	0	2	0	0	0	0	0	0	729

18:15	1	179	20	0	7	0	0	1	0	0	0	0	0	0	0	208
18:30	1	129	19	0	0	1	0	0	0	0	0	0	0	0	0	150
18:45	0	98	13	0	1	0	0	0	0	0	0	0	0	0	0	112
19:00	0	69	13	1	2	0	0	1	0	0	0	0	0	0	0	86
Hour Total	2	475	65	1	10	1	0	2	0	0	0	0	0	0	0	556

19:15	3	73	7	0	0	0	0	1	1	0	0	0	0	0	0	85
19:30	2	97	6	0	0	0	0	0	0	0	0	0	0	0	0	105
19:45	3	144	19	0	0	1	0	0	0	0	0	0	0	0	0	167
20:00	2	90	7	0	1	0	0	1	0	0	0	0	0	0	0	101
Hour Total	10	404	39	0	1	1	0	2	1	0	0	0	0	0	0	458

20:15	3	86	6	0	4	0	0	0	0	0	0	0	0	0	0	99
20:30	2	55	3	1	1	0	0	0	0	0	0	0	0	0	0	62
20:45	1	58	8	0	0	0	0	1	0	0	0	0	0	0	0	68
21:00	1	68	5	0	0	0	0	0	0	0	0	0	0	0	0	74
Hour Total	7	267	22	1	5	0	0	1	0	0	0	0	0	0	0	303

21:15	0	43	4	0	0	0	0	0	0	0	0	0	0	0	0	47
21:30	0	28	3	0	0	0	0	0	0	0	0	0	0	0	0	31
21:45	1	26	3	0	0	0	0	0	0	0	0	0	0	0	0	30
22:00	0	41	4	0	0	0	0	0	0	0	0	0	0	0	0	45
Hour Total	1	138	14	0	0	0	0	0	0	0	0	0	0	0	0	153

22:15	0	17	3	0	0	0	0	0	0	0	0	0	0	0	0	20
22:30	0	26	1	0	0	0	0	0	0	0	0	0	0	0	0	27
22:45	0	22	2	0	0	0	0	0	0	0	0	0	0	0	0	24
23:00	1	15	3	0	0	0	0	0	0	0	0	0	0	0	0	19
Hour Total	1	80	9	0	0	0	0	0	0	0	0	0	0	0	0	90

23:15	0	12	1	0	0	0	0	0	0	0	0	0	0	0	0	13
23:30	0	13	1	0	0	0	0	0	0	0	0	0	0	0	0	14
23:45	0	14	0	0	1	0	0	0	0	0	0	0	0	0	0	15
24:00	0	10	1	0	1	0	0	0	0	0	0	0	0	0	0	12
Hour Total	0	49	3	0	2	0	0	0	0	0	0	0	0	0	0	54

DAY TOTAL	84	6209	911	74	125	62	21	27	20	0	0	0	0	0	0	7533
PERCENTS	1.2%	82.5%	12.1%	1.0%	1.7%	0.8%	0.2%	0.3%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
Passenger Vehicles	95.6%															
	Trucks & Buses 4.3%															
AM Times	10:45	08:00	08:00	08:00	08:15	10:45	11:15	08:00	07:45							08:00
AM Peaks	7	716	82	16	14	11	4	4	5							846
PM Times	15:45	17:30	17:15	15:00	17:30	12:45	13:15	14:00	16:30							17:30
PM Peaks	11	637	96	18	14	7	5	4	3							748

SITE ID: 22

LOCATION: MALABAR ROAD, WEST OF US POST OFFICE

Accurate Traffic Counts
 CLASSIFICATION SUMMARY
 Tue 1/14/2020

Site Ref: 00000000022
 Counter ID: 000000033012
 Location: Malabar Rd, W of US Post Office
 Direction: EAST
 Lane: 1

File: D0114002.prn
 City: Malabar
 County: Brevard

TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total
00:15	0	7	1	0	0	0	0	0	1	0	0	0	0	0	0	9
00:30	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	5
00:45	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4
01:00	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2
Hour Total	0	17	2	0	0	0	0	0	1	0	0	0	0	0	0	20
01:15	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
01:30	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
01:45	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	4
02:00	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Hour Total	1	7	1	0	0	0	0	0	0	0	0	0	0	0	0	9
02:15	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	2
02:30	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	5
02:45	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2
03:00	0	4	1	0	0	0	0	0	0	0	0	0	0	0	0	5
Hour Total	0	11	2	0	0	0	0	1	0	0	0	0	0	0	0	14
03:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30	0	4	1	1	0	0	0	1	0	0	0	0	0	0	0	7
03:45	0	4	2	0	0	0	0	0	0	0	0	0	0	0	0	6
04:00	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	4
Hour Total	0	11	4	1	0	0	0	1	0	0	0	0	0	0	0	17
04:15	0	6	2	0	0	0	0	0	0	0	0	0	0	0	0	8
04:30	0	7	3	0	0	0	0	0	0	0	0	0	0	0	0	10
04:45	0	12	2	0	1	0	0	0	0	0	0	0	0	0	0	15
05:00	2	9	2	0	1	0	0	0	0	0	0	0	0	0	0	14
Hour Total	2	34	9	0	2	0	0	0	0	0	0	0	0	0	0	47
05:15	0	16	1	0	0	0	0	0	0	0	0	0	0	0	0	17
05:30	0	16	4	0	0	0	0	0	0	0	0	0	0	0	0	20
05:45	0	22	6	0	1	0	0	0	0	0	0	0	0	0	0	29
06:00	0	24	3	0	4	0	0	0	0	0	0	0	0	0	0	31
Hour Total	0	78	14	0	5	0	0	0	0	0	0	0	0	0	0	97
06:15	0	21	18	0	2	0	0	0	0	0	0	0	0	0	0	41
06:30	0	32	11	2	3	0	0	0	0	0	0	0	0	0	0	48
06:45	0	54	14	1	4	0	0	0	0	0	0	0	0	0	0	73
07:00	1	54	7	2	3	0	0	0	0	0	0	0	0	0	0	67
Hour Total	1	161	50	5	12	0	0	0	0	0	0	0	0	0	0	229
07:15	0	68	15	3	5	1	0	0	0	0	0	0	0	0	0	92
07:30	4	82	14	0	3	1	1	0	1	0	0	0	0	0	0	106
07:45	2	61	14	0	4	0	1	1	0	0	0	0	0	0	0	83
08:00	1	61	10	0	0	3	0	0	0	0	0	0	0	0	0	75
Hour Total	7	272	53	3	12	5	2	1	1	0	0	0	0	0	0	356
08:15	5	77	18	2	3	1	0	0	0	0	0	0	0	0	0	106
08:30	3	82	24	0	3	1	0	1	0	0	0	0	0	0	0	114
08:45	2	102	20	4	3	0	0	1	2	0	0	0	0	0	0	134
09:00	0	81	17	4	1	3	0	1	0	0	0	0	0	0	0	107

Accurate Traffic Counts
 CLASSIFICATION SUMMARY
 Tue 1/14/2020

Site Ref: 00000000022
 Counter ID: 000000033012
 Location: Malabar Rd, W of US Post Office
 Direction: EAST
 Lane: 1

File: D0114002.prn
 City: Malabar
 County: Brevard

TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total
-----	-----															
Hour Total	10	342	79	10	10	5	0	3	2	0	0	0	0	0	0	461
09:15	3	53	14	0	4	3	0	0	1	0	0	0	0	0	0	78
09:30	0	44	11	1	2	1	1	0	0	0	0	0	0	0	0	60
09:45	2	53	24	0	3	3	0	0	0	0	0	0	0	0	0	85
10:00	1	56	16	0	4	3	0	0	0	0	0	0	0	0	0	80
-----	-----															
Hour Total	6	206	65	1	13	10	1	0	1	0	0	0	0	0	0	303
10:15	0	51	11	0	3	1	0	0	0	0	0	0	0	0	0	66
10:30	1	49	17	0	3	0	0	2	0	0	0	0	0	0	0	72
10:45	1	57	14	2	1	1	1	1	0	0	0	0	0	0	0	78
11:00	3	53	19	0	3	3	1	0	0	0	0	0	0	0	0	82
-----	-----															
Hour Total	5	210	61	2	10	5	2	3	0	0	0	0	0	0	0	298
11:15	3	55	12	0	6	1	0	0	0	0	0	0	0	0	0	77
11:30	1	64	21	0	3	0	0	0	0	0	0	0	0	0	0	89
11:45	4	62	26	0	2	4	0	1	0	0	0	0	0	0	0	99
12:00	2	52	19	0	2	1	0	0	0	0	0	0	0	0	0	76
-----	-----															
Hour Total	10	233	78	0	13	6	0	1	0	0	0	0	0	0	0	341
12:15	1	43	15	1	1	0	0	0	0	0	0	0	0	0	0	61
12:30	1	51	10	0	3	3	1	0	1	0	0	0	0	0	0	70
12:45	0	38	18	2	0	2	3	0	0	0	0	0	0	0	0	63
13:00	1	51	12	0	6	1	1	0	0	0	0	0	0	0	0	72
-----	-----															
Hour Total	3	183	55	3	10	6	5	0	1	0	0	0	0	0	0	266
13:15	4	53	12	0	7	4	0	0	0	0	0	0	0	0	0	80
13:30	3	50	23	0	4	2	1	1	0	0	0	0	0	0	0	84
13:45	1	53	19	1	4	0	3	2	0	0	0	0	0	0	0	83
14:00	1	53	13	2	1	2	0	0	0	0	0	0	0	0	0	72
-----	-----															
Hour Total	9	209	67	3	16	8	4	3	0	0	0	0	0	0	0	319
14:15	1	65	14	5	2	1	1	0	0	0	0	0	0	0	0	89
14:30	2	39	23	2	0	2	1	1	0	0	0	0	0	0	0	70
14:45	3	53	18	0	2	2	1	1	0	0	0	0	0	0	0	80
15:00	3	52	22	2	0	1	0	0	1	0	0	0	0	0	0	81
-----	-----															
Hour Total	9	209	77	9	4	6	3	2	1	0	0	0	0	0	0	320
15:15	1	45	19	0	1	3	0	1	0	0	0	0	0	0	0	70
15:30	0	43	17	1	3	1	0	1	0	0	0	0	0	0	0	66
15:45	1	106	18	1	7	2	0	0	0	0	0	0	0	0	0	135
16:00	2	127	20	7	4	1	1	0	0	0	0	0	0	0	0	162
-----	-----															
Hour Total	4	321	74	9	15	7	1	2	0	0	0	0	0	0	0	433
16:15	3	70	32	0	3	1	0	0	0	0	0	0	0	0	0	109
16:30	0	60	18	2	3	0	0	1	1	0	0	0	0	0	0	85
16:45	6	68	16	0	3	0	0	1	0	0	0	0	0	0	0	94
17:00	2	72	21	0	4	0	0	0	0	0	0	0	0	0	0	99
-----	-----															
Hour Total	11	270	87	2	13	1	0	2	1	0	0	0	0	0	0	387

Accurate Traffic Counts
 CLASSIFICATION SUMMARY
 Tue 1/14/2020

Site Ref: 00000000022
 Counter ID: 000000033012
 Location: Malabar Rd, W of US Post Office
 Direction: EAST
 Lane: 1

File: D0114002.prn
 City: Malabar
 County: Brevard

TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total

17:15	1	101	19	1	4	0	0	0	0	0	0	0	0	0	0	126
17:30	1	112	31	0	2	0	0	0	0	0	0	0	0	0	0	146
17:45	3	66	15	0	3	0	0	0	0	0	0	0	0	0	0	87
18:00	0	74	21	1	2	0	0	0	0	0	0	0	0	0	0	98
Hour Total	5	353	86	2	11	0	0	0	0	0	0	0	0	0	0	457

18:15	0	107	18	0	3	0	0	0	0	0	0	0	0	0	0	128
18:30	2	69	18	0	4	0	0	0	0	0	0	0	0	0	0	93
18:45	2	59	24	0	4	0	0	0	0	0	0	0	0	0	0	89
19:00	1	61	18	0	2	0	0	0	0	0	0	0	0	0	0	82
Hour Total	5	296	78	0	13	0	0	0	0	0	0	0	0	0	0	392

19:15	0	48	15	0	3	0	0	1	0	0	0	0	0	0	0	67
19:30	1	40	13	0	2	0	0	1	0	0	0	0	0	0	0	57
19:45	2	48	13	0	3	0	0	0	0	0	0	0	0	0	0	66
20:00	2	38	11	0	3	0	0	0	0	0	0	0	0	0	0	54
Hour Total	5	174	52	0	11	0	0	2	0	0	0	0	0	0	0	244

20:15	1	31	8	0	6	0	0	0	0	0	0	0	0	0	0	46
20:30	0	46	12	0	0	0	0	0	0	0	0	0	0	0	0	58
20:45	1	57	10	0	0	0	0	0	0	0	0	0	0	0	0	68
21:00	0	40	6	0	2	0	0	0	0	0	0	0	0	0	0	48
Hour Total	2	174	36	0	8	0	0	0	0	0	0	0	0	0	0	220

21:15	1	58	20	0	2	0	0	0	0	0	0	0	0	0	0	81
21:30	1	49	7	0	0	0	0	0	0	0	0	0	0	0	0	57
21:45	0	42	5	0	0	0	0	0	0	0	0	0	0	0	0	47
22:00	0	21	1	0	0	0	0	0	0	0	0	0	0	0	0	22
Hour Total	2	170	33	0	2	0	0	0	0	0	0	0	0	0	0	207

22:15	0	14	6	0	0	0	0	0	0	0	0	0	0	0	0	20
22:30	0	36	5	0	1	0	0	0	0	0	0	0	0	0	0	42
22:45	0	41	10	0	4	0	0	0	0	0	0	0	0	0	0	55
23:00	0	16	7	0	4	0	0	0	0	0	0	0	0	0	0	27
Hour Total	0	107	28	0	9	0	0	0	0	0	0	0	0	0	0	144

23:15	0	4	2	0	0	0	0	0	0	0	0	0	0	0	0	6
23:30	2	8	0	0	0	0	0	0	0	0	0	0	0	0	0	10
23:45	0	5	3	0	0	0	0	0	0	0	0	0	0	0	0	8
24:00	0	9	2	0	1	0	0	0	0	0	0	0	0	0	0	12
Hour Total	2	26	7	0	1	0	0	0	0	0	0	0	0	0	0	36

DAY TOTAL	99	4074	1098	50	190	59	18	21	8	0	0	0	0	0	0	5617
PERCENTS	1.8%	72.6%	19.6%	0.9%	3.4%	1.0%	0.3%	0.3%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
Passenger Vehicles	93.8%															
																Trucks & Buses 6.1%
AM Times	07:30	08:15	08:15	08:15	06:30	09:00	07:00	08:15	08:30							08:15
AM Peaks	12	342	79	10	15	10	2	3	3							461
PM Times	16:00	15:45	15:45	13:45	13:00	12:30	12:15	13:00	12:15							15:45
PM Peaks	11	363	88	10	21	10	5	3	1							491

Accurate Traffic Counts
 CLASSIFICATION SUMMARY
 Wed 1/15/2020

Site Ref: 00000000022
 Counter ID: 000000033012
 Location: Malabar Rd, W of US Post Office
 Direction: EAST
 Lane: 1

File: D0114002.prn
 City: Malabar
 County: Brevard

TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total
00:15	0	8	1	0	0	0	0	0	0	0	0	0	0	0	0	9
00:30	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	3
00:45	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	4
01:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Hour Total	0	13	4	0	0	0	0	0	0	0	0	0	0	0	0	17
01:15	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
01:30	0	4	1	0	0	0	0	0	0	0	0	0	0	0	0	5
01:45	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4
02:00	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Hour Total	0	12	1	0	0	0	0	0	0	0	0	0	0	0	0	13
02:15	0	2	0	0	0	0	0	1	0	0	0	0	0	0	0	3
02:30	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	3
02:45	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	3
03:00	0	5	1	0	1	0	0	0	0	0	0	0	0	0	0	7
Hour Total	0	10	4	0	1	0	0	1	0	0	0	0	0	0	0	16
03:15	0	3	0	1	0	0	0	0	0	0	0	0	0	0	0	4
03:30	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0	3
03:45	0	4	4	0	0	0	0	0	0	0	0	0	0	0	0	8
04:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Hour Total	0	8	6	1	1	0	0	0	0	0	0	0	0	0	0	16
04:15	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
04:30	0	7	3	0	1	0	0	0	0	0	0	0	0	0	0	11
04:45	0	6	3	0	0	0	0	0	0	0	0	0	0	0	0	9
05:00	3	8	3	0	2	0	0	0	0	0	0	0	0	0	0	16
Hour Total	3	23	9	0	3	0	0	0	0	0	0	0	0	0	0	38
05:15	1	19	3	0	3	0	0	0	0	0	0	0	0	0	0	26
05:30	0	12	6	0	2	0	0	0	0	0	0	0	0	0	0	20
05:45	1	14	4	0	4	0	0	0	0	0	0	0	0	0	0	23
06:00	0	20	9	0	3	0	0	0	0	0	0	0	0	0	0	32
Hour Total	2	65	22	0	12	0	0	0	0	0	0	0	0	0	0	101
06:15	0	29	10	0	3	0	1	0	0	0	0	0	0	0	0	43
06:30	0	38	21	2	3	1	0	0	0	0	0	0	0	0	0	65
06:45	0	56	21	1	2	0	0	0	0	0	0	0	0	0	0	80
07:00	3	54	12	4	3	0	0	1	0	0	0	0	0	0	0	77
Hour Total	3	177	64	7	11	1	1	1	0	0	0	0	0	0	0	265
07:15	3	61	12	2	9	0	0	1	0	0	0	0	0	0	0	88
07:30	4	74	23	0	5	0	0	1	0	0	0	0	0	0	0	107
07:45	1	87	28	0	8	3	1	1	0	1	0	0	0	0	0	130
08:00	1	74	17	0	2	1	0	0	0	0	0	0	0	0	0	95
Hour Total	9	296	80	2	24	4	1	3	0	1	0	0	0	0	0	420
08:15	0	68	11	3	6	0	0	0	0	0	0	0	0	0	0	88
08:30	4	67	23	2	3	1	0	0	0	0	0	0	0	0	0	100
08:45	1	95	32	8	4	0	0	0	0	0	0	0	0	0	0	140
09:00	2	78	17	2	3	1	0	0	1	0	0	0	0	0	0	104

Accurate Traffic Counts
CLASSIFICATION SUMMARY
Wed 1/15/2020

Site Ref: 00000000022
Counter ID: 000000033012
Location: Malabar Rd, W of US Post Office
Direction: EAST
Lane: 1

File: D0114002.prn
City: Malabar
County: Brevard

TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total
-----	-----															
Hour Total	7	308	83	15	16	2	0	0	1	0	0	0	0	0	0	432
09:15	2	54	17	0	1	1	0	0	0	0	0	0	0	0	0	75
09:30	0	46	15	2	1	5	0	0	1	0	0	0	0	0	0	70
09:45	0	59	22	1	0	0	0	0	0	0	0	0	0	0	0	82
10:00	3	52	17	1	5	1	0	0	0	0	0	0	0	0	0	79
-----	-----															
Hour Total	5	211	71	4	7	7	0	0	1	0	0	0	0	0	0	306
10:15	0	46	26	0	2	0	0	0	0	0	0	0	0	0	0	74
10:30	1	47	12	1	2	1	1	0	0	0	0	0	0	0	0	65
10:45	1	52	27	4	3	1	0	0	1	0	0	0	0	0	0	89
11:00	0	47	11	0	3	1	1	0	0	0	0	0	0	0	0	63
-----	-----															
Hour Total	2	192	76	5	10	3	2	0	1	0	0	0	0	0	0	291
11:15	0	50	13	0	4	2	0	0	0	0	0	0	0	0	0	69
11:30	1	54	14	0	1	0	0	1	0	0	0	0	0	0	0	71
11:45	2	75	20	0	5	1	1	2	0	0	0	0	0	0	0	106
12:00	0	63	20	0	7	0	0	2	1	0	0	0	0	0	0	93
-----	-----															
Hour Total	3	242	67	0	17	3	1	5	1	0	0	0	0	0	0	339
12:15	1	42	20	0	1	2	1	1	0	0	0	0	0	0	0	68
12:30	0	37	17	0	1	2	1	0	0	0	0	0	0	0	0	58
12:45	4	40	18	0	2	1	0	0	0	0	0	0	0	0	0	65
13:00	1	48	16	1	3	0	1	0	0	0	0	0	0	0	0	70
-----	-----															
Hour Total	6	167	71	1	7	5	3	1	0	0	0	0	0	0	0	261
13:15	4	60	18	0	4	3	0	2	0	0	0	0	0	0	0	91
13:30	1	56	17	0	1	1	0	1	0	0	0	0	0	0	0	77
13:45	1	54	18	3	7	0	0	0	0	0	0	0	0	0	0	83
14:00	2	47	19	3	4	2	0	1	1	0	0	0	0	0	0	79
-----	-----															
Hour Total	8	217	72	6	16	6	0	4	1	0	0	0	0	0	0	330
14:15	6	49	24	1	5	3	0	1	0	0	0	0	0	0	0	89
14:30	2	48	18	4	6	1	0	0	0	0	0	0	0	0	0	79
14:45	2	51	22	1	3	0	1	1	1	0	0	0	0	0	0	82
15:00	3	54	21	1	3	1	0	0	0	0	0	0	0	0	0	83
-----	-----															
Hour Total	13	202	85	7	17	5	1	2	1	0	0	0	0	0	0	333
15:15	2	53	16	1	2	1	1	1	0	0	0	0	0	0	0	77
15:30	0	42	21	1	1	0	1	0	0	0	0	0	0	0	0	66
15:45	1	97	23	0	12	0	0	0	0	0	0	0	0	0	0	133
16:00	5	118	20	5	6	3	0	0	0	0	0	0	0	0	0	157
-----	-----															
Hour Total	8	310	80	7	21	4	2	1	0	0	0	0	0	0	0	433
16:15	2	68	14	1	1	0	0	0	1	0	0	0	0	0	0	87
16:30	5	65	19	1	8	1	0	0	1	0	0	0	0	0	0	100
16:45	0	72	16	0	3	0	0	0	0	0	0	0	0	0	0	91
17:00	2	71	21	0	4	1	0	0	0	0	0	0	0	0	0	99
-----	-----															
Hour Total	9	276	70	2	16	2	0	0	2	0	0	0	0	0	0	377

Accurate Traffic Counts
 CLASSIFICATION SUMMARY
 Wed 1/15/2020

Site Ref: 00000000022
 Counter ID: 000000033012
 Location: Malabar Rd, W of US Post Office
 Direction: EAST
 Lane: 1

File: D0114002.prn
 City: Malabar
 County: Brevard

TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total

17:15	2	104	23	1	3	0	0	0	0	0	0	0	0	0	0	133
17:30	1	77	28	0	3	1	0	1	0	0	0	0	0	0	0	111
17:45	4	76	30	0	2	0	0	0	0	0	0	0	0	0	0	112
18:00	2	70	33	0	6	1	0	0	0	0	0	0	0	0	0	112
Hour Total	9	327	114	1	14	2	0	1	0	0	0	0	0	0	0	468

18:15	3	88	21	0	3	0	0	0	0	0	0	0	0	0	0	115
18:30	0	76	20	0	4	0	0	0	0	0	0	0	0	0	0	100
18:45	3	59	24	0	5	0	0	1	0	0	0	0	0	0	0	92
19:00	4	42	14	0	5	0	0	0	0	0	0	0	0	0	0	65
Hour Total	10	265	79	0	17	0	0	1	0	0	0	0	0	0	0	372

19:15	0	44	12	0	4	0	0	0	0	0	0	0	0	0	0	60
19:30	2	53	8	0	2	0	0	0	0	0	0	0	0	0	0	65
19:45	0	32	20	0	3	0	0	0	0	0	0	0	0	0	0	55
20:00	0	38	13	0	1	0	0	0	0	0	0	0	0	0	0	52
Hour Total	2	167	53	0	10	0	0	0	0	0	0	0	0	0	0	232

20:15	1	37	11	0	1	0	0	0	0	0	0	0	0	0	0	50
20:30	0	32	12	0	0	0	0	0	0	0	0	0	0	0	0	44
20:45	0	35	7	0	0	0	0	0	0	0	0	0	0	0	0	42
21:00	0	39	9	0	2	0	0	0	0	0	0	0	0	0	0	50
Hour Total	1	143	39	0	3	0	0	0	0	0	0	0	0	0	0	186

21:15	2	41	4	0	1	0	0	0	0	0	0	0	0	0	0	48
21:30	0	19	3	0	1	0	0	0	0	0	0	0	0	0	0	23
21:45	0	20	1	0	0	0	0	0	0	0	0	0	0	0	0	21
22:00	0	17	3	0	0	0	0	0	0	0	0	0	0	0	0	20
Hour Total	2	97	11	0	2	0	0	0	0	0	0	0	0	0	0	112

22:15	0	25	5	0	2	0	0	0	0	0	0	0	0	0	0	32
22:30	0	18	0	0	1	0	0	0	0	0	0	0	0	0	0	19
22:45	0	10	4	0	0	0	0	0	0	0	0	0	0	0	0	14
23:00	0	10	1	0	0	0	0	0	0	0	0	0	0	0	0	11
Hour Total	0	63	10	0	3	0	0	0	0	0	0	0	0	0	0	76

23:15	0	4	1	0	0	0	0	0	0	0	0	0	0	0	0	5
23:30	0	13	5	0	0	0	0	0	0	0	0	0	0	0	0	18
23:45	0	5	1	0	1	0	0	0	0	0	0	0	0	0	0	7
24:00	0	4	2	0	0	0	0	0	0	0	0	0	0	0	0	6
Hour Total	0	26	9	0	1	0	0	0	0	0	0	0	0	0	0	36

DAY TOTAL	102	3817	1180	58	229	44	11	20	8	1	0	0	0	0	0	5470
PERCENTS	1.9%	69.8%	21.6%	1.1%	4.2%	0.8%	0.2%	0.3%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
Passenger Vehicles	93.2%															
	Trucks & Buses 6.7%															
AM Times	07:00	08:15	08:30	08:15	07:00	08:45	10:15	11:15	08:45	07:00						08:15
AM Peaks	11	308	89	15	25	7	2	5	2	1						432
PM Times	14:15	15:45	17:15	13:45	15:45	12:30	12:15	13:15	14:00							15:45
PM Peaks	13	348	114	11	27	6	3	4	2							477

Accurate Traffic Counts
 CLASSIFICATION SUMMARY
 Thu 1/16/2020

Site Ref: 00000000022
 Counter ID: 000000033012
 Location: Malabar Rd, W of US Post Office
 Direction: EAST
 Lane: 1

File: D0114002.prn
 City: Malabar
 County: Brevard

TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total
00:15	0	4	2	0	0	0	0	0	0	0	0	0	0	0	0	6
00:30	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4
00:45	0	6	1	0	0	0	0	0	0	0	0	0	0	0	0	7
01:00	0	5	1	0	0	0	0	0	0	0	0	0	0	0	0	6
Hour Total	0	19	4	0	0	0	0	0	0	0	0	0	0	0	0	23
01:15	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
01:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Hour Total	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	6
02:15	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
02:30	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
02:45	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
03:00	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
Hour Total	0	4	3	0	0	0	0	1	0	0	0	0	0	0	0	8
03:15	0	2	1	1	0	0	0	0	0	0	0	0	0	0	0	4
03:30	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
03:45	0	3	5	0	0	0	0	0	0	0	0	0	0	0	0	8
04:00	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	4
Hour Total	0	7	9	1	0	0	0	0	0	0	0	0	0	0	0	17
04:15	0	5	1	0	0	0	0	0	0	0	0	0	0	0	0	6
04:30	0	6	1	0	0	0	0	0	0	0	0	0	0	0	0	7
04:45	0	10	4	0	2	0	0	0	0	0	0	0	0	0	0	16
05:00	1	13	3	0	0	0	0	0	0	0	0	0	0	0	0	17
Hour Total	1	34	9	0	2	0	0	0	0	0	0	0	0	0	0	46
05:15	0	14	3	0	1	0	0	0	0	0	0	0	0	0	0	18
05:30	0	11	7	0	1	0	0	0	0	0	0	0	0	0	0	19
05:45	0	18	8	0	0	0	0	0	0	0	0	0	0	0	0	26
06:00	0	16	9	0	0	0	0	2	0	0	0	0	0	0	0	27
Hour Total	0	59	27	0	2	0	0	2	0	0	0	0	0	0	0	90
06:15	0	18	12	0	3	0	0	0	0	0	0	0	0	0	0	33
06:30	1	39	13	1	1	1	0	0	0	0	0	0	0	0	0	56
06:45	1	37	10	1	7	0	0	0	0	0	0	0	0	0	0	56
07:00	1	62	19	4	4	0	0	0	0	0	0	0	0	0	0	90
Hour Total	3	156	54	6	15	1	0	0	0	0	0	0	0	0	0	235
07:15	1	69	17	2	5	0	0	0	0	0	0	0	0	0	0	94
07:30	2	83	22	1	8	0	1	0	0	0	0	0	0	0	0	117
07:45	4	63	29	0	5	3	1	1	0	0	0	0	0	0	0	106
08:00	1	73	12	0	4	0	0	0	0	0	0	0	0	0	0	90
Hour Total	8	288	80	3	22	3	2	1	0	0	0	0	0	0	0	407
08:15	1	66	23	2	5	1	0	0	1	0	0	0	0	0	0	99
08:30	2	78	23	2	2	0	0	0	0	0	0	0	0	0	0	107
08:45	1	116	18	6	2	3	0	0	0	0	0	0	0	0	0	146
09:00	3	86	24	3	4	1	2	0	0	0	0	0	0	0	0	123

Accurate Traffic Counts
 CLASSIFICATION SUMMARY
 Thu 1/16/2020

Site Ref: 00000000022
 Counter ID: 000000033012
 Location: Malabar Rd, W of US Post Office
 Direction: EAST
 Lane: 1

File: D0114002.prn
 City: Malabar
 County: Brevard

TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total
-----	-----															
Hour Total	7	346	88	13	13	5	2	0	1	0	0	0	0	0	0	475
09:15	4	57	16	1	4	2	0	0	1	0	0	0	0	0	0	85
09:30	6	47	20	1	5	2	0	1	0	0	0	0	0	0	0	82
09:45	1	58	18	0	3	1	0	0	2	0	0	0	0	0	0	83
10:00	0	60	20	0	4	3	0	0	0	0	0	0	0	0	0	87
-----	-----															
Hour Total	11	222	74	2	16	8	0	1	3	0	0	0	0	0	0	337
10:15	0	50	20	0	6	0	0	0	0	0	0	0	0	0	0	76
10:30	0	46	16	0	6	1	1	0	2	0	0	0	0	0	0	72
10:45	1	36	21	3	5	2	1	0	0	0	0	0	0	0	0	69
11:00	2	45	13	0	3	0	0	0	0	0	0	0	0	0	0	63
-----	-----															
Hour Total	3	177	70	3	20	3	2	0	2	0	0	0	0	0	0	280
11:15	3	56	19	0	3	1	0	0	0	0	0	0	0	0	0	82
11:30	2	40	16	0	3	0	0	0	1	0	0	0	0	0	0	62
11:45	1	44	16	1	5	1	1	0	0	0	0	0	0	0	0	69
12:00	2	58	15	0	6	0	1	0	0	0	0	0	0	0	0	82
-----	-----															
Hour Total	8	198	66	1	17	2	2	0	1	0	0	0	0	0	0	295
12:15	1	69	17	1	3	1	1	0	0	0	0	0	0	0	0	93
12:30	1	50	22	0	0	0	0	0	0	0	0	0	0	0	0	73
12:45	2	41	9	0	0	0	1	1	0	0	0	0	0	0	0	54
13:00	1	45	18	0	4	0	0	1	0	0	0	0	0	0	0	69
-----	-----															
Hour Total	5	205	66	1	7	1	2	2	0	0	0	0	0	0	0	289
13:15	1	47	19	0	5	2	1	0	0	0	0	0	0	0	0	75
13:30	1	59	14	1	4	3	0	1	0	0	0	0	0	0	0	83
13:45	4	61	21	1	1	3	1	1	0	0	0	0	0	0	0	93
14:00	2	41	20	3	3	1	0	0	0	0	0	0	0	0	0	70
-----	-----															
Hour Total	8	208	74	5	13	9	2	2	0	0	0	0	0	0	0	321
14:15	3	51	14	4	8	0	1	0	0	0	0	0	0	0	0	81
14:30	1	49	18	4	6	0	1	0	1	0	0	0	0	0	0	80
14:45	2	60	15	0	7	1	0	0	0	0	0	0	0	0	0	85
15:00	1	61	17	0	5	2	0	0	0	0	0	0	0	0	0	86
-----	-----															
Hour Total	7	221	64	8	26	3	2	0	1	0	0	0	0	0	0	332
15:15	1	63	21	1	3	0	1	0	0	0	0	0	0	0	0	90
15:30	1	52	18	1	5	0	0	0	0	0	0	0	0	0	0	77
15:45	3	86	19	6	4	2	0	0	0	0	0	0	0	0	0	120
16:00	4	145	15	2	1	1	0	0	0	0	0	0	0	0	0	168
-----	-----															
Hour Total	9	346	73	10	13	3	1	0	0	0	0	0	0	0	0	455
16:15	2	80	18	1	1	1	0	2	0	0	0	0	0	0	0	105
16:30	0	58	19	1	4	0	0	1	0	0	0	0	0	0	0	83
16:45	2	61	25	0	5	2	0	0	0	0	0	0	0	0	0	95
17:00	1	77	19	1	2	0	0	0	0	0	0	0	0	0	0	100
-----	-----															
Hour Total	5	276	81	3	12	3	0	3	0	0	0	0	0	0	0	383

Accurate Traffic Counts
 CLASSIFICATION SUMMARY
 Thu 1/16/2020

Site Ref: 00000000022
 Counter ID: 000000033012
 Location: Malabar Rd, W of US Post Office
 Direction: EAST
 Lane: 1

File: D0114002.prn
 City: Malabar
 County: Brevard

TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total

17:15	1	73	24	0	3	0	0	0	1	0	0	0	0	0	0	102
17:30	4	80	31	1	4	0	0	1	0	0	0	0	0	0	0	121
17:45	2	80	25	0	4	0	0	0	0	0	0	0	0	0	0	111
18:00	4	77	24	0	3	0	0	0	0	0	0	0	0	0	0	108
Hour Total	11	310	104	1	14	0	0	1	1	0	0	0	0	0	0	442

18:15	4	85	20	0	3	0	0	1	0	0	0	0	0	0	0	113
18:30	1	90	19	0	5	0	0	0	0	0	0	0	0	0	0	115
18:45	1	62	15	0	1	0	0	0	0	0	0	0	0	0	0	79
19:00	0	46	17	0	6	0	0	0	0	0	0	0	0	0	0	69
Hour Total	6	283	71	0	15	0	0	1	0	0	0	0	0	0	0	376

19:15	2	47	20	0	4	0	0	0	1	0	0	0	0	0	0	74
19:30	1	63	8	0	0	0	0	0	0	0	0	0	0	0	0	72
19:45	1	116	19	0	4	0	0	0	0	0	0	0	0	0	0	140
20:00	1	62	16	0	1	0	0	0	0	0	0	0	0	0	0	80
Hour Total	5	288	63	0	9	0	0	0	1	0	0	0	0	0	0	366

20:15	0	48	25	0	2	0	0	0	0	0	0	0	0	0	0	75
20:30	1	42	10	0	0	0	0	0	0	0	0	0	0	0	0	53
20:45	1	31	12	1	7	0	0	2	0	0	0	0	0	0	0	54
21:00	1	43	6	0	0	0	0	0	0	0	0	0	0	0	0	50
Hour Total	3	164	53	1	9	0	0	2	0	0	0	0	0	0	0	232

21:15	0	22	7	0	0	0	0	0	0	0	0	0	0	0	0	29
21:30	0	18	2	0	0	0	0	0	0	0	0	0	0	0	0	20
21:45	1	17	4	0	1	0	0	0	0	0	0	0	0	0	0	23
22:00	0	30	6	0	1	0	0	0	0	0	0	0	0	0	0	37
Hour Total	1	87	19	0	2	0	0	0	0	0	0	0	0	0	0	109

22:15	0	9	6	0	0	0	0	0	0	0	0	0	0	0	0	15
22:30	0	13	1	0	0	0	0	0	0	0	0	0	0	0	0	14
22:45	0	14	1	0	0	0	0	0	0	0	0	0	0	0	0	15
23:00	0	6	2	0	1	0	0	0	0	0	0	0	0	0	0	9
Hour Total	0	42	10	0	1	0	0	0	0	0	0	0	0	0	0	53

23:15	0	5	1	0	0	0	0	0	0	0	0	0	0	0	0	6
23:30	0	6	1	0	1	0	0	1	0	0	0	0	0	0	0	9
23:45	0	4	3	0	1	0	0	0	0	0	0	0	0	0	0	8
24:00	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	3
Hour Total	0	17	6	0	2	0	0	1	0	0	0	0	0	0	0	26

DAY TOTAL	101	3963	1168	58	230	41	15	17	10	0	0	0	0	0	0	5603
PERCENTS	1.9%	70.8%	20.9%	1.0%	4.1%	0.7%	0.2%	0.3%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
Passenger Vehicles	93.3%															
	Trucks & Buses 6.6%															
AM Times	08:45	08:15	08:15	08:15	06:45	08:45	07:00	05:15	09:45							08:15
AM Peaks	14	346	88	13	24	8	2	2	4							475
PM Times	17:30	15:45	17:15	13:45	14:15	13:15	13:45	12:45	13:45							15:45
PM Peaks	14	369	104	12	26	9	3	3	1							476

Accurate Traffic Counts
 CLASSIFICATION SUMMARY
 Tue 1/14/2020

Site Ref: 00000000022
 Counter ID: 000000033012
 Location: Malabar Rd, W of US Post Office
 Direction: WEST
 Lane: 2

File: D0114002.prn
 City: Malabar
 County: Brevard

TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total
00:15	0	13	2	0	0	0	0	0	1	0	0	0	0	0	0	16
00:30	0	10	4	0	0	0	0	0	0	0	0	0	0	0	0	14
00:45	0	8	1	0	0	0	0	0	0	0	0	0	0	0	0	9
01:00	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	5
Hour Total	0	36	7	0	0	0	0	0	1	0	0	0	0	0	0	44
01:15	0	6	1	0	0	0	0	0	0	0	0	0	0	0	0	7
01:30	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	6
01:45	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	3
02:00	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Hour Total	0	16	2	0	0	0	0	0	0	0	0	0	0	0	0	18
02:15	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4
02:30	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
02:45	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
03:00	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2
Hour Total	0	6	1	0	0	0	0	1	0	0	0	0	0	0	0	8
03:15	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
03:30	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	3
03:45	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
04:00	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Hour Total	0	6	1	1	0	0	0	0	0	0	0	0	0	0	0	8
04:15	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	5
04:30	1	4	0	0	0	0	0	0	0	0	0	0	0	0	0	5
04:45	0	4	2	0	1	0	0	0	0	0	0	0	0	0	0	7
05:00	0	4	1	0	0	0	0	0	0	0	0	0	0	0	0	5
Hour Total	1	17	3	0	1	0	0	0	0	0	0	0	0	0	0	22
05:15	0	6	2	0	0	0	0	0	0	0	0	0	0	0	0	8
05:30	0	5	2	0	0	0	0	0	0	0	0	0	0	0	0	7
05:45	0	10	5	0	0	0	0	0	0	0	0	0	0	0	0	15
06:00	0	13	4	0	0	1	0	0	0	0	0	0	0	0	0	18
Hour Total	0	34	13	0	0	1	0	0	0	0	0	0	0	0	0	48
06:15	0	20	6	0	1	0	0	0	0	0	0	0	0	0	0	27
06:30	0	38	15	0	0	0	0	0	0	0	0	0	0	0	0	53
06:45	1	61	18	1	1	1	0	0	0	0	0	0	0	0	0	83
07:00	1	44	13	1	4	1	0	0	0	0	0	0	0	0	0	64
Hour Total	2	163	52	2	6	2	0	0	0	0	0	0	0	0	0	227
07:15	0	56	8	1	3	0	0	0	0	0	0	0	0	0	0	68
07:30	2	62	10	0	2	1	1	0	0	0	0	0	0	0	0	78
07:45	0	53	9	0	0	0	0	0	0	0	0	0	0	0	0	62
08:00	1	83	15	1	4	3	0	0	0	0	0	0	0	0	0	107
Hour Total	3	254	42	2	9	4	1	0	0	0	0	0	0	0	0	315
08:15	2	117	15	3	2	0	0	2	0	0	0	0	0	0	0	141
08:30	1	136	24	8	3	2	0	1	0	0	0	0	0	0	0	175
08:45	0	76	5	2	0	1	0	1	0	0	0	0	0	0	0	85
09:00	0	46	7	0	5	2	0	1	0	0	0	0	0	0	0	61

Accurate Traffic Counts
 CLASSIFICATION SUMMARY
 Tue 1/14/2020

Site Ref: 00000000022
 Counter ID: 000000033012
 Location: Malabar Rd, W of US Post Office
 Direction: WEST
 Lane: 2

File: D0114002.prn
 City: Malabar
 County: Brevard

TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total
-----	-----															
Hour Total	3	375	51	13	10	5	0	5	0	0	0	0	0	0	0	462
09:15	1	40	10	0	6	0	0	0	0	0	0	0	0	0	0	57
09:30	0	34	11	2	1	2	0	0	0	0	0	0	0	0	0	50
09:45	1	61	10	1	3	0	0	2	0	0	0	0	0	0	0	78
10:00	0	41	15	1	3	0	0	0	0	0	0	0	0	0	0	60
-----	-----															
Hour Total	2	176	46	4	13	2	0	2	0	0	0	0	0	0	0	245
10:15	0	39	6	0	1	4	1	0	0	0	0	0	0	0	0	51
10:30	2	43	6	0	2	3	1	0	0	0	0	0	0	0	0	57
10:45	0	58	9	0	1	0	0	0	1	0	0	0	0	0	0	69
11:00	3	62	6	0	3	0	0	0	0	0	0	0	0	0	0	74
-----	-----															
Hour Total	5	202	27	0	7	7	2	0	1	0	0	0	0	0	0	251
11:15	0	57	15	0	2	2	1	0	1	0	0	0	0	0	0	78
11:30	1	57	9	0	0	2	0	0	0	0	0	0	0	0	0	69
11:45	1	46	7	0	2	0	0	0	0	0	0	0	0	0	0	56
12:00	0	52	14	1	5	3	0	0	0	0	0	0	0	0	0	75
-----	-----															
Hour Total	2	212	45	1	9	7	1	0	1	0	0	0	0	0	0	278
12:15	1	55	13	2	1	7	0	0	1	0	0	0	0	0	0	80
12:30	0	54	11	0	5	1	0	0	1	0	0	0	0	0	0	72
12:45	0	60	13	0	0	4	0	0	1	0	0	0	0	0	0	78
13:00	1	56	14	1	4	2	1	0	0	0	0	0	0	0	0	79
-----	-----															
Hour Total	2	225	51	3	10	14	1	0	3	0	0	0	0	0	0	309
13:15	0	36	17	0	1	5	0	0	0	0	0	0	0	0	0	59
13:30	0	50	14	0	5	6	0	0	0	0	0	0	0	0	0	75
13:45	0	48	9	1	0	1	0	0	0	0	0	0	0	0	0	59
14:00	2	52	11	0	2	2	0	0	1	0	0	0	0	0	0	70
-----	-----															
Hour Total	2	186	51	1	8	14	0	0	1	0	0	0	0	0	0	263
14:15	2	41	14	0	1	5	0	1	0	0	0	0	0	0	0	64
14:30	1	51	11	0	1	2	0	0	0	0	0	0	0	0	0	66
14:45	0	60	24	1	1	3	0	1	1	0	0	0	0	0	0	91
15:00	3	74	20	1	5	2	0	0	1	0	0	0	0	0	0	106
-----	-----															
Hour Total	6	226	69	2	8	12	0	2	2	0	0	0	0	0	0	327
15:15	0	76	13	5	4	2	0	0	0	0	0	0	0	0	0	100
15:30	0	83	7	4	1	1	0	0	0	0	0	0	0	0	0	96
15:45	2	81	14	3	1	2	0	0	1	0	0	0	0	0	0	104
16:00	1	74	16	1	1	1	0	1	0	0	0	0	0	0	0	95
-----	-----															
Hour Total	3	314	50	13	7	6	0	1	1	0	0	0	0	0	0	395
16:15	2	98	24	2	1	3	0	0	0	0	0	0	0	0	0	130
16:30	2	83	16	0	3	0	1	0	0	0	0	0	0	0	0	105
16:45	0	89	15	1	4	0	0	1	0	0	0	0	0	0	0	110
17:00	0	94	26	4	6	0	0	1	0	0	0	0	0	0	0	131
-----	-----															
Hour Total	4	364	81	7	14	3	1	2	0	0	0	0	0	0	0	476

Accurate Traffic Counts
 CLASSIFICATION SUMMARY
 Tue 1/14/2020

Site Ref: 00000000022
 Counter ID: 000000033012
 Location: Malabar Rd, W of US Post Office
 Direction: WEST
 Lane: 2

File: D0114002.prn
 City: Malabar
 County: Brevard

TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total

17:15	0	103	20	1	2	0	0	0	1	0	0	0	0	0	0	127
17:30	0	83	11	1	0	0	0	0	0	0	0	0	0	0	0	95
17:45	1	133	26	0	1	0	0	1	0	0	0	0	0	0	0	162
18:00	0	108	20	0	4	0	0	0	0	0	0	0	0	0	0	132
Hour Total	1	427	77	2	7	0	0	1	1	0	0	0	0	0	0	516

18:15	1	114	13	0	2	0	0	0	0	0	0	0	0	0	0	130
18:30	1	96	16	0	1	0	0	0	0	0	0	0	0	0	0	114
18:45	2	111	18	0	0	0	0	0	0	0	0	0	0	0	0	131
19:00	0	82	20	0	4	0	0	0	0	0	0	0	0	0	0	106
Hour Total	4	403	67	0	7	0	0	0	0	0	0	0	0	0	0	481

19:15	0	82	8	0	2	0	0	0	0	0	0	0	0	0	0	92
19:30	2	70	9	0	1	0	0	1	0	0	0	0	0	0	0	83
19:45	1	67	3	0	0	0	0	0	0	0	0	0	0	0	0	71
20:00	0	57	10	0	2	0	0	0	0	0	0	0	0	0	0	69
Hour Total	3	276	30	0	5	0	0	1	0	0	0	0	0	0	0	315

20:15	0	52	2	0	1	0	0	0	0	0	0	0	0	0	0	55
20:30	2	65	6	0	1	0	0	1	0	0	0	0	0	0	0	75
20:45	0	61	11	0	0	0	0	0	0	0	0	0	0	0	0	72
21:00	0	39	3	0	0	0	0	0	0	0	0	0	0	0	0	42
Hour Total	2	217	22	0	2	0	0	1	0	0	0	0	0	0	0	244

21:15	2	30	4	0	0	0	0	0	0	0	0	0	0	0	0	36
21:30	0	45	6	0	0	0	0	0	0	0	0	0	0	0	0	51
21:45	0	30	2	0	0	0	0	0	0	0	0	0	0	0	0	32
22:00	0	29	0	0	0	0	0	0	0	0	0	0	0	0	0	29
Hour Total	2	134	12	0	0	0	0	0	0	0	0	0	0	0	0	148

22:15	0	24	6	0	0	0	0	0	0	0	0	0	0	0	0	30
22:30	0	17	4	0	1	0	0	0	0	0	0	0	0	0	0	22
22:45	1	24	2	0	0	0	0	0	0	0	0	0	0	0	0	27
23:00	0	8	3	0	0	0	0	0	0	0	0	0	0	0	0	11
Hour Total	1	73	15	0	1	0	0	0	0	0	0	0	0	0	0	90

23:15	1	15	1	0	0	0	0	0	0	0	0	0	0	0	0	17
23:30	0	16	0	0	0	0	0	0	0	0	0	0	0	0	0	16
23:45	0	14	2	0	0	0	0	0	0	0	0	0	0	0	0	16
24:00	0	9	1	0	0	0	0	0	0	0	0	0	0	0	0	10
Hour Total	1	54	4	0	0	0	0	0	0	0	0	0	0	0	0	59

DAY TOTAL	49	4396	819	51	124	77	6	16	11	0	0	0	0	0	0	5549
PERCENTS	0.9%	79.3%	14.8%	1.0%	2.3%	1.3%	0.1%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
Passenger Vehicles	94.8%															
																Trucks & Buses 5.1%
AM Times	07:30	08:00	07:45	08:00	09:00	09:45	09:45	08:15	10:30							08:00
AM Peaks	5	412	63	14	15	7	2	5	2							508
PM Times	15:45	17:45	17:00	15:00	16:30	12:45	12:15	14:00	12:15							17:45
PM Peaks	7	451	83	13	15	17	1	2	3							538

Accurate Traffic Counts
 CLASSIFICATION SUMMARY
 Wed 1/15/2020

Site Ref: 00000000022
 Counter ID: 000000033012
 Location: Malabar Rd, W of US Post Office
 Direction: WEST
 Lane: 2

File: D0114002.prn
 City: Malabar
 County: Brevard

TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total
00:15	0	9	1	0	0	0	0	0	0	0	0	0	0	0	0	10
00:30	0	12	2	0	0	0	0	0	0	0	0	0	0	0	0	14
00:45	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	5
01:00	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	5
Hour Total	0	31	3	0	0	0	0	0	0	0	0	0	0	0	0	34
01:15	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4
01:30	0	5	1	0	0	0	0	0	0	0	0	0	0	0	0	6
01:45	1	4	1	0	0	0	0	0	0	0	0	0	0	0	0	6
02:00	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	6
Hour Total	1	19	2	0	0	0	0	0	0	0	0	0	0	0	0	22
02:15	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4
02:30	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	2
02:45	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
03:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Hour Total	1	6	0	0	0	0	0	1	0	0	0	0	0	0	0	8
03:15	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
03:30	0	6	1	0	0	0	0	0	0	0	0	0	0	0	0	7
03:45	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	2
04:00	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Hour Total	0	9	2	1	0	0	0	0	0	0	0	0	0	0	0	12
04:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2
04:45	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
05:00	0	5	1	0	0	0	0	0	0	0	0	0	0	0	0	6
Hour Total	0	9	2	0	0	0	0	0	0	0	0	0	0	0	0	11
05:15	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
05:30	1	11	3	0	0	0	0	0	0	0	0	0	0	0	0	15
05:45	1	9	3	0	1	0	0	0	0	0	0	0	0	0	0	14
06:00	0	18	8	0	0	1	0	0	0	0	0	0	0	0	0	27
Hour Total	2	41	14	0	1	1	0	0	0	0	0	0	0	0	0	59
06:15	0	27	5	0	0	0	0	0	0	0	0	0	0	0	0	32
06:30	0	33	15	0	1	0	0	0	0	0	0	0	0	0	0	49
06:45	1	45	19	1	2	0	0	0	0	0	0	0	0	0	0	68
07:00	0	56	10	1	2	0	0	0	0	0	0	0	0	0	0	69
Hour Total	1	161	49	2	5	0	0	0	0	0	0	0	0	0	0	218
07:15	2	44	13	0	2	0	0	0	0	0	0	0	0	0	0	61
07:30	1	59	17	1	1	0	0	1	0	0	0	0	0	0	0	80
07:45	0	64	9	0	1	1	0	0	0	0	0	0	0	0	0	75
08:00	0	99	13	1	2	1	0	0	0	0	0	0	0	0	0	116
Hour Total	3	266	52	2	6	2	0	1	0	0	0	0	0	0	0	332
08:15	0	99	24	2	4	1	0	0	0	0	0	0	0	0	0	130
08:30	2	156	25	7	4	1	0	0	0	0	0	0	0	0	0	195
08:45	0	94	15	2	5	1	1	0	0	0	0	0	0	0	0	118
09:00	1	52	12	2	1	0	1	1	2	0	0	0	0	0	0	72

Accurate Traffic Counts
 CLASSIFICATION SUMMARY
 Wed 1/15/2020

Site Ref: 00000000022
 Counter ID: 000000033012
 Location: Malabar Rd, W of US Post Office
 Direction: WEST
 Lane: 2

File: D0114002.prn
 City: Malabar
 County: Brevard

TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total
-----	-----															
Hour Total	3	401	76	13	14	3	2	1	2	0	0	0	0	0	0	515
09:15	0	34	8	0	2	1	0	0	0	0	0	0	0	0	0	45
09:30	0	46	7	0	0	0	0	1	0	0	0	0	0	0	0	54
09:45	2	49	10	2	1	1	0	0	0	0	0	0	0	0	0	65
10:00	3	54	15	2	6	2	0	0	0	0	0	0	0	0	0	82
-----	-----															
Hour Total	5	183	40	4	9	4	0	1	0	0	0	0	0	0	0	246
10:15	1	47	10	0	2	3	0	0	0	0	0	0	0	0	0	63
10:30	0	54	8	0	1	3	0	0	0	0	0	0	0	0	0	66
10:45	2	36	7	0	3	1	0	1	0	0	0	0	0	0	0	50
11:00	1	60	15	0	2	1	0	0	0	0	0	0	0	0	0	79
-----	-----															
Hour Total	4	197	40	0	8	8	0	1	0	0	0	0	0	0	0	258
11:15	0	75	11	2	2	0	0	1	1	0	0	0	0	0	0	92
11:30	2	53	18	0	1	0	0	0	0	0	0	0	0	0	0	74
11:45	2	51	14	0	3	2	0	1	0	0	0	0	0	0	0	73
12:00	0	48	10	1	5	2	0	0	1	0	0	0	0	0	0	67
-----	-----															
Hour Total	4	227	53	3	11	4	0	2	2	0	0	0	0	0	0	306
12:15	1	50	12	0	1	0	0	0	0	0	0	0	0	0	0	64
12:30	3	72	15	2	4	1	0	0	0	0	0	0	0	0	0	97
12:45	0	52	16	1	1	2	0	0	0	0	0	0	0	0	0	72
13:00	0	46	14	0	1	1	0	0	1	0	0	0	0	0	0	63
-----	-----															
Hour Total	4	220	57	3	7	4	0	0	1	0	0	0	0	0	0	296
13:15	0	56	16	0	1	1	0	0	0	0	0	0	0	0	0	74
13:30	3	52	13	0	2	5	0	0	0	0	0	0	0	0	0	75
13:45	1	46	14	0	1	1	0	0	0	0	0	0	0	0	0	63
14:00	3	51	13	0	3	5	0	0	1	0	0	0	0	0	0	76
-----	-----															
Hour Total	7	205	56	0	7	12	0	0	1	0	0	0	0	0	0	288
14:15	0	44	13	0	2	2	0	0	0	0	0	0	0	0	0	61
14:30	1	50	14	0	1	0	0	0	0	0	0	0	0	0	0	66
14:45	1	66	12	1	3	3	0	1	0	0	0	0	0	0	0	87
15:00	1	72	16	2	5	2	0	0	1	0	0	0	0	0	0	99
-----	-----															
Hour Total	3	232	55	3	11	7	0	1	1	0	0	0	0	0	0	313
15:15	2	74	9	8	2	2	0	0	0	0	1	0	0	0	0	98
15:30	4	99	28	3	3	1	0	0	2	0	0	0	0	0	0	140
15:45	1	71	17	1	1	1	0	0	1	0	0	0	0	0	0	93
16:00	0	85	15	0	2	1	0	0	0	0	0	0	0	0	0	103
-----	-----															
Hour Total	7	329	69	12	8	5	0	0	3	0	1	0	0	0	0	434
16:15	0	82	11	4	2	1	0	0	0	0	0	0	0	0	0	100
16:30	4	90	25	1	1	0	0	0	0	0	0	0	0	0	0	121
16:45	0	80	17	3	5	0	0	2	0	0	0	0	0	0	0	107
17:00	2	87	27	3	3	0	0	1	0	0	0	0	0	0	0	123
-----	-----															
Hour Total	6	339	80	11	11	1	0	3	0	0	0	0	0	0	0	451

Accurate Traffic Counts
 CLASSIFICATION SUMMARY
 Wed 1/15/2020

Site Ref: 00000000022
 Counter ID: 000000033012
 Location: Malabar Rd, W of US Post Office
 Direction: WEST
 Lane: 2

File: D0114002.prn
 City: Malabar
 County: Brevard

TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total

17:15	4	100	14	1	0	0	1	0	0	0	0	0	0	0	0	120
17:30	1	75	14	0	1	0	0	0	0	0	0	0	0	0	0	91
17:45	2	95	12	0	2	0	1	0	0	0	0	0	0	0	0	112
18:00	0	102	15	0	3	0	0	0	0	0	0	0	0	0	0	120
Hour Total	7	372	55	1	6	0	2	0	0	0	0	0	0	0	0	443

18:15	2	95	13	0	1	0	0	0	0	0	0	0	0	0	0	111
18:30	0	82	17	0	0	0	0	0	0	0	0	0	0	0	0	99
18:45	2	79	13	0	1	0	0	0	0	0	0	0	0	0	0	95
19:00	3	87	11	0	2	0	0	0	0	0	0	0	0	0	0	103
Hour Total	7	343	54	0	4	0	0	0	0	0	0	0	0	0	0	408

19:15	1	77	13	0	2	0	0	0	0	0	0	0	0	0	0	93
19:30	3	59	6	0	1	0	0	0	0	0	0	0	0	0	0	69
19:45	0	61	11	0	0	0	0	0	0	0	0	0	0	0	0	72
20:00	1	57	11	0	2	0	0	0	1	0	0	0	0	0	0	72
Hour Total	5	254	41	0	5	0	0	0	1	0	0	0	0	0	0	306

20:15	0	77	10	0	0	0	0	0	0	0	0	0	0	0	0	87
20:30	0	71	5	0	0	0	0	0	0	0	0	0	0	0	0	76
20:45	1	53	7	0	0	0	0	0	0	0	0	0	0	0	0	61
21:00	0	55	7	0	0	0	0	0	0	0	0	0	0	0	0	62
Hour Total	1	256	29	0	0	0	0	0	0	0	0	0	0	0	0	286

21:15	0	45	5	0	1	0	0	0	0	0	0	0	0	0	0	51
21:30	0	37	4	0	0	0	0	0	0	0	0	0	0	0	0	41
21:45	0	31	3	0	0	0	0	0	0	0	0	0	0	0	0	34
22:00	1	30	1	0	1	0	0	0	0	0	0	0	0	0	0	33
Hour Total	1	143	13	0	2	0	0	0	0	0	0	0	0	0	0	159

22:15	0	26	7	0	1	0	0	0	0	0	0	0	0	0	0	34
22:30	0	20	2	0	0	0	0	0	0	0	0	0	0	0	0	22
22:45	0	14	1	1	0	0	0	0	0	0	0	0	0	0	0	16
23:00	1	14	1	0	0	0	0	0	0	0	0	0	0	0	0	16
Hour Total	1	74	11	1	1	0	0	0	0	0	0	0	0	0	0	88

23:15	0	12	1	0	0	0	0	0	0	0	0	0	0	0	0	13
23:30	0	19	3	0	0	0	0	0	0	0	0	0	0	0	0	22
23:45	0	12	1	0	0	0	0	0	0	0	0	0	0	0	0	13
24:00	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	10
Hour Total	0	53	5	0	0	0	0	0	0	0	0	0	0	0	0	58

DAY TOTAL	73	4370	858	56	116	51	4	11	11	0	1	0	0	0	0	5551
PERCENTS	1.4%	78.8%	15.5%	1.1%	2.1%	0.9%	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
Passenger Vehicles	95.4%															
	Trucks & Buses 4.5%															
AM Times	09:30	08:00	08:00	08:15	08:00	09:45	08:15	08:45	08:15							08:00
AM Peaks	6	448	77	13	15	9	2	2	2							559
PM Times	16:30	17:45	16:30	14:45	14:45	13:30	17:00	16:15	15:00	14:30						16:30
PM Peaks	10	374	83	14	13	13	2	3	4	1						471

Accurate Traffic Counts
 CLASSIFICATION SUMMARY
 Thu 1/16/2020

Site Ref: 00000000022
 Counter ID: 000000033012
 Location: Malabar Rd, W of US Post Office
 Direction: WEST
 Lane: 2

File: D0114002.prn
 City: Malabar
 County: Brevard

TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total
00:15	1	11	3	0	0	0	0	0	0	0	0	0	0	0	0	15
00:30	0	8	3	0	0	0	0	0	0	0	0	0	0	0	0	11
00:45	0	10	3	0	0	0	0	0	0	0	0	0	0	0	0	13
01:00	0	4	1	0	0	0	0	0	0	0	0	0	0	0	0	5
Hour Total	1	33	10	0	0	0	0	0	0	0	0	0	0	0	0	44
01:15	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
01:30	0	6	1	0	0	0	0	0	0	0	0	0	0	0	0	7
01:45	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4
02:00	0	4	1	0	0	0	0	0	0	0	0	0	0	0	0	5
Hour Total	0	17	2	0	0	0	0	0	0	0	0	0	0	0	0	19
02:15	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	4
02:30	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
02:45	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	3
03:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Hour Total	2	8	1	0	0	0	0	0	0	0	0	0	0	0	0	11
03:15	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
03:30	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
03:45	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
04:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Hour Total	0	5	0	1	0	0	0	0	0	0	0	0	0	0	0	6
04:15	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4
04:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
05:00	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	5
Hour Total	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	12
05:15	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	5
05:30	1	6	2	0	1	0	0	0	0	0	0	0	0	0	0	10
05:45	0	15	5	0	0	1	0	0	0	0	0	0	0	0	0	21
06:00	0	9	10	0	0	0	0	0	0	0	0	0	0	0	0	19
Hour Total	1	35	17	0	1	1	0	0	0	0	0	0	0	0	0	55
06:15	0	18	5	0	0	0	0	0	0	0	0	0	0	0	0	23
06:30	1	35	11	0	0	0	0	0	0	0	0	0	0	0	0	47
06:45	2	46	21	1	4	1	0	0	0	0	0	0	0	0	0	75
07:00	2	59	8	2	1	1	0	0	0	0	0	0	0	0	0	73
Hour Total	5	158	45	3	5	2	0	0	0	0	0	0	0	0	0	218
07:15	0	50	12	0	1	0	0	0	0	0	0	0	0	0	0	63
07:30	0	62	14	1	2	0	0	1	0	0	0	0	0	0	0	80
07:45	2	55	12	0	1	0	0	0	0	0	0	0	0	0	0	70
08:00	0	90	18	1	2	2	0	0	0	0	0	0	0	0	0	113
Hour Total	2	257	56	2	6	2	0	1	0	0	0	0	0	0	0	326
08:15	0	112	24	3	1	1	0	1	0	0	0	0	0	0	0	142
08:30	0	142	13	6	6	1	0	1	1	0	0	0	0	0	0	170
08:45	0	98	13	1	4	1	0	0	1	0	0	0	0	0	0	118
09:00	0	44	10	0	2	5	0	1	0	0	0	0	0	0	0	62

Accurate Traffic Counts
 CLASSIFICATION SUMMARY
 Thu 1/16/2020

Site Ref: 00000000022
 Counter ID: 000000033012
 Location: Malabar Rd, W of US Post Office
 Direction: WEST
 Lane: 2

File: D0114002.prn
 City: Malabar
 County: Brevard

TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total
-----	-----															
Hour Total	0	396	60	10	13	8	0	3	2	0	0	0	0	0	0	492
09:15	0	57	20	0	3	1	0	0	2	0	0	0	0	0	0	83
09:30	0	53	15	1	3	0	1	1	1	0	0	0	0	0	0	75
09:45	0	53	9	0	1	1	0	0	0	0	0	0	0	0	0	64
10:00	0	38	11	0	5	2	0	1	0	0	0	0	0	0	0	57
-----	-----															
Hour Total	0	201	55	1	12	4	1	2	3	0	0	0	0	0	0	279
10:15	0	44	9	1	1	0	0	0	0	0	0	0	0	0	0	55
10:30	0	53	10	0	1	0	0	1	0	0	0	0	0	0	0	65
10:45	0	55	15	0	2	0	0	1	0	0	0	0	0	0	0	73
11:00	1	50	6	0	1	5	0	0	1	0	0	0	0	0	0	64
-----	-----															
Hour Total	1	202	40	1	5	5	0	2	1	0	0	0	0	0	0	257
11:15	0	64	7	0	1	1	0	0	0	0	0	0	0	0	0	73
11:30	2	56	9	1	0	2	0	1	0	0	0	0	0	0	0	71
11:45	1	49	8	1	1	1	0	1	0	0	0	0	0	0	0	62
12:00	0	64	13	0	4	0	0	2	0	0	0	0	0	0	0	83
-----	-----															
Hour Total	3	233	37	2	6	4	0	4	0	0	0	0	0	0	0	289
12:15	3	41	12	0	3	1	0	1	2	0	0	0	0	0	0	63
12:30	0	49	20	2	5	1	0	0	0	0	0	0	0	0	0	77
12:45	0	52	13	0	2	3	0	0	0	0	0	0	0	0	0	70
13:00	3	55	14	0	2	2	0	0	0	0	0	0	0	0	0	76
-----	-----															
Hour Total	6	197	59	2	12	7	0	1	2	0	0	0	0	0	0	286
13:15	1	48	8	0	2	1	0	0	0	0	0	0	0	0	0	60
13:30	0	61	11	1	1	1	0	0	1	0	0	0	0	0	0	76
13:45	0	57	11	0	2	0	0	0	0	0	0	0	0	0	0	70
14:00	2	63	13	0	5	2	0	0	0	0	0	0	0	0	0	85
-----	-----															
Hour Total	3	229	43	1	10	4	0	0	1	0	0	0	0	0	0	291
14:15	2	67	7	0	1	3	0	0	1	0	0	0	0	0	0	81
14:30	1	62	7	0	2	3	0	0	0	0	0	0	0	0	0	75
14:45	1	62	19	0	0	4	0	1	1	0	0	0	0	0	0	88
15:00	0	73	16	2	4	0	0	0	0	0	0	0	0	0	0	95
-----	-----															
Hour Total	4	264	49	2	7	10	0	1	2	0	0	0	0	0	0	339
15:15	0	67	20	8	2	2	0	0	0	0	0	0	0	0	0	99
15:30	2	98	13	2	3	5	1	0	0	0	0	0	0	0	0	124
15:45	3	82	14	4	0	1	0	0	0	0	0	0	0	0	0	104
16:00	0	88	14	1	0	0	0	2	0	0	0	0	0	0	0	105
-----	-----															
Hour Total	5	335	61	15	5	8	1	2	0	0	0	0	0	0	0	432
16:15	0	71	17	2	4	2	0	0	2	0	0	0	0	0	0	98
16:30	2	67	17	1	2	2	0	0	1	0	0	0	0	0	0	92
16:45	3	91	24	2	5	3	0	2	0	0	0	0	0	0	0	130
17:00	0	85	11	3	1	0	0	2	0	0	0	0	0	0	0	102
-----	-----															
Hour Total	5	314	69	8	12	7	0	4	3	0	0	0	0	0	0	422

Accurate Traffic Counts
 CLASSIFICATION SUMMARY
 Thu 1/16/2020

Site Ref: 00000000022
 Counter ID: 000000033012
 Location: Malabar Rd, W of US Post Office
 Direction: WEST
 Lane: 2

File: D0114002.prn
 City: Malabar
 County: Brevard

TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total

17:15	2	75	16	0	2	0	0	0	0	0	0	0	0	0	0	95
17:30	2	95	21	1	0	0	0	0	0	0	0	0	0	0	0	119
17:45	0	122	22	0	1	0	0	0	0	0	0	0	0	0	0	145
18:00	0	142	12	0	2	0	0	0	0	0	0	0	0	0	0	156
Hour Total	4	434	71	1	5	0	0	0	0	0	0	0	0	0	0	515

18:15	2	134	13	0	3	0	0	0	0	0	0	0	0	0	0	152
18:30	0	107	25	0	1	0	0	0	0	0	0	0	0	0	0	133
18:45	1	85	12	0	0	0	0	0	0	0	0	0	0	0	0	98
19:00	3	85	8	0	1	0	0	1	0	0	0	0	0	0	0	98
Hour Total	6	411	58	0	5	0	0	1	0	0	0	0	0	0	0	481

19:15	1	63	9	0	1	0	0	0	0	0	0	0	0	0	0	74
19:30	2	77	11	0	0	0	0	0	0	0	0	0	0	0	0	90
19:45	2	62	10	0	2	0	0	0	0	0	0	0	0	0	0	76
20:00	0	46	11	0	3	0	0	1	0	0	0	0	0	0	0	61
Hour Total	5	248	41	0	6	0	0	1	0	0	0	0	0	0	0	301

20:15	0	55	10	0	1	0	0	0	0	0	0	0	0	0	0	66
20:30	1	49	5	0	0	0	0	0	0	0	0	0	0	0	0	55
20:45	0	49	8	0	0	0	0	0	0	0	0	0	0	0	0	57
21:00	0	44	5	0	1	0	0	0	0	0	0	0	0	0	0	50
Hour Total	1	197	28	0	2	0	0	0	0	0	0	0	0	0	0	228

21:15	0	36	3	0	0	0	0	0	0	0	0	0	0	0	0	39
21:30	0	44	8	0	0	0	0	0	0	0	0	0	0	0	0	52
21:45	1	39	5	0	0	0	0	0	0	0	0	0	0	0	0	45
22:00	0	23	2	0	0	0	0	0	0	0	0	0	0	0	0	25
Hour Total	1	142	18	0	0	0	0	0	0	0	0	0	0	0	0	161

22:15	0	27	0	0	0	0	0	0	0	0	0	0	0	0	0	27
22:30	0	29	2	0	0	0	0	0	0	0	0	0	0	0	0	31
22:45	0	24	1	0	0	0	0	0	0	0	0	0	0	0	0	25
23:00	2	17	2	0	0	0	0	0	0	0	0	0	0	0	0	21
Hour Total	2	97	5	0	0	0	0	0	0	0	0	0	0	0	0	104

23:15	0	11	2	0	0	0	0	0	0	0	0	0	0	0	0	13
23:30	0	15	1	0	0	0	0	0	0	0	0	0	0	0	0	16
23:45	0	15	2	0	1	0	0	0	0	0	0	0	0	0	0	18
24:00	0	9	1	0	0	0	0	0	0	0	0	0	0	0	0	10
Hour Total	0	50	6	0	1	0	0	0	0	0	0	0	0	0	0	57

DAY TOTAL	57	4475	831	49	113	62	2	22	14	0	0	0	0	0	0	5625
PERCENTS	1.1%	79.6%	14.8%	0.9%	2.0%	1.1%	0.0%	0.3%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
Passenger Vehicles	95.3%															
	Trucks & Buses 4.6%															
AM Times	06:15	08:00	07:30	08:00	08:30	11:00	08:45	11:15	08:30							08:00
AM Peaks	5	442	68	11	15	9	1	4	4							543
PM Times	19:00	17:45	16:00	15:00	12:15	14:00	14:45	16:00	15:45							17:45
PM Peaks	8	505	72	16	12	12	1	4	3							586

Accurate Traffic Counts
 CLASSIFICATION SUMMARY
 Tue 1/14/2020

Site Ref: 00000000022
 Counter ID: 000000033012
 Location: Malabar Rd, W of US Post Office
 Direction: ROAD TOTAL

File: D0114002.prn
 City: Malabar
 County: Brevard

TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total
00:15	0	20	3	0	0	0	0	0	2	0	0	0	0	0	0	25
00:30	0	15	4	0	0	0	0	0	0	0	0	0	0	0	0	19
00:45	0	12	1	0	0	0	0	0	0	0	0	0	0	0	0	13
01:00	0	6	1	0	0	0	0	0	0	0	0	0	0	0	0	7
Hour Total	0	53	9	0	0	0	0	0	2	0	0	0	0	0	0	64
01:15	0	7	1	0	0	0	0	0	0	0	0	0	0	0	0	8
01:30	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	7
01:45	1	4	2	0	0	0	0	0	0	0	0	0	0	0	0	7
02:00	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	5
Hour Total	1	23	3	0	0	0	0	0	0	0	0	0	0	0	0	27
02:15	0	5	0	0	0	0	0	1	0	0	0	0	0	0	0	6
02:30	0	5	0	0	0	0	0	1	0	0	0	0	0	0	0	6
02:45	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	3
03:00	0	5	2	0	0	0	0	0	0	0	0	0	0	0	0	7
Hour Total	0	17	3	0	0	0	0	2	0	0	0	0	0	0	0	22
03:15	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
03:30	0	6	2	1	0	0	0	1	0	0	0	0	0	0	0	10
03:45	0	4	2	1	0	0	0	0	0	0	0	0	0	0	0	7
04:00	0	6	1	0	0	0	0	0	0	0	0	0	0	0	0	7
Hour Total	0	17	5	2	0	0	0	1	0	0	0	0	0	0	0	25
04:15	0	11	2	0	0	0	0	0	0	0	0	0	0	0	0	13
04:30	1	11	3	0	0	0	0	0	0	0	0	0	0	0	0	15
04:45	0	16	4	0	2	0	0	0	0	0	0	0	0	0	0	22
05:00	2	13	3	0	1	0	0	0	0	0	0	0	0	0	0	19
Hour Total	3	51	12	0	3	0	0	0	0	0	0	0	0	0	0	69
05:15	0	22	3	0	0	0	0	0	0	0	0	0	0	0	0	25
05:30	0	21	6	0	0	0	0	0	0	0	0	0	0	0	0	27
05:45	0	32	11	0	1	0	0	0	0	0	0	0	0	0	0	44
06:00	0	37	7	0	4	1	0	0	0	0	0	0	0	0	0	49
Hour Total	0	112	27	0	5	1	0	0	0	0	0	0	0	0	0	145
06:15	0	41	24	0	3	0	0	0	0	0	0	0	0	0	0	68
06:30	0	70	26	2	3	0	0	0	0	0	0	0	0	0	0	101
06:45	1	115	32	2	5	1	0	0	0	0	0	0	0	0	0	156
07:00	2	98	20	3	7	1	0	0	0	0	0	0	0	0	0	131
Hour Total	3	324	102	7	18	2	0	0	0	0	0	0	0	0	0	456
07:15	0	124	23	4	8	1	0	0	0	0	0	0	0	0	0	160
07:30	6	144	24	0	5	2	2	0	1	0	0	0	0	0	0	184
07:45	2	114	23	0	4	0	1	1	0	0	0	0	0	0	0	145
08:00	2	144	25	1	4	6	0	0	0	0	0	0	0	0	0	182
Hour Total	10	526	95	5	21	9	3	1	1	0	0	0	0	0	0	671
08:15	7	194	33	5	5	1	0	2	0	0	0	0	0	0	0	247
08:30	4	218	48	8	6	3	0	2	0	0	0	0	0	0	0	289
08:45	2	178	25	6	3	1	0	2	2	0	0	0	0	0	0	219
09:00	0	127	24	4	6	5	0	2	0	0	0	0	0	0	0	168

Accurate Traffic Counts
 CLASSIFICATION SUMMARY
 Tue 1/14/2020

Site Ref: 00000000022
 Counter ID: 000000033012
 Location: Malabar Rd, W of US Post Office
 Direction: ROAD TOTAL

File: D0114002.prn
 City: Malabar
 County: Brevard

TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total
Hour Total	13	717	130	23	20	10	0	8	2	0	0	0	0	0	0	923
09:15	4	93	24	0	10	3	0	0	1	0	0	0	0	0	0	135
09:30	0	78	22	3	3	3	1	0	0	0	0	0	0	0	0	110
09:45	3	114	34	1	6	3	0	2	0	0	0	0	0	0	0	163
10:00	1	97	31	1	7	3	0	0	0	0	0	0	0	0	0	140
Hour Total	8	382	111	5	26	12	1	2	1	0	0	0	0	0	0	548
10:15	0	90	17	0	4	5	1	0	0	0	0	0	0	0	0	117
10:30	3	92	23	0	5	3	1	2	0	0	0	0	0	0	0	129
10:45	1	115	23	2	2	1	1	1	1	0	0	0	0	0	0	147
11:00	6	115	25	0	6	3	1	0	0	0	0	0	0	0	0	156
Hour Total	10	412	88	2	17	12	4	3	1	0	0	0	0	0	0	549
11:15	3	112	27	0	8	3	1	0	1	0	0	0	0	0	0	155
11:30	2	121	30	0	3	2	0	0	0	0	0	0	0	0	0	158
11:45	5	108	33	0	4	4	0	1	0	0	0	0	0	0	0	155
12:00	2	104	33	1	7	4	0	0	0	0	0	0	0	0	0	151
Hour Total	12	445	123	1	22	13	1	1	1	0	0	0	0	0	0	619
12:15	2	98	28	3	2	7	0	0	1	0	0	0	0	0	0	141
12:30	1	105	21	0	8	4	1	0	2	0	0	0	0	0	0	142
12:45	0	98	31	2	0	6	3	0	1	0	0	0	0	0	0	141
13:00	2	107	26	1	10	3	2	0	0	0	0	0	0	0	0	151
Hour Total	5	408	106	6	20	20	6	0	4	0	0	0	0	0	0	575
13:15	4	89	29	0	8	9	0	0	0	0	0	0	0	0	0	139
13:30	3	100	37	0	9	8	1	1	0	0	0	0	0	0	0	159
13:45	1	101	28	2	4	1	3	2	0	0	0	0	0	0	0	142
14:00	3	105	24	2	3	4	0	0	1	0	0	0	0	0	0	142
Hour Total	11	395	118	4	24	22	4	3	1	0	0	0	0	0	0	582
14:15	3	106	28	5	3	6	1	1	0	0	0	0	0	0	0	153
14:30	3	90	34	2	1	4	1	1	0	0	0	0	0	0	0	136
14:45	3	113	42	1	3	5	1	2	1	0	0	0	0	0	0	171
15:00	6	126	42	3	5	3	0	0	2	0	0	0	0	0	0	187
Hour Total	15	435	146	11	12	18	3	4	3	0	0	0	0	0	0	647
15:15	1	121	32	5	5	5	0	1	0	0	0	0	0	0	0	170
15:30	0	126	24	5	4	2	0	1	0	0	0	0	0	0	0	162
15:45	3	187	32	4	8	4	0	0	1	0	0	0	0	0	0	239
16:00	3	201	36	8	5	2	1	1	0	0	0	0	0	0	0	257
Hour Total	7	635	124	22	22	13	1	3	1	0	0	0	0	0	0	828
16:15	5	168	56	2	4	4	0	0	0	0	0	0	0	0	0	239
16:30	2	143	34	2	6	0	1	1	1	0	0	0	0	0	0	190
16:45	6	157	31	1	7	0	0	2	0	0	0	0	0	0	0	204
17:00	2	166	47	4	10	0	0	1	0	0	0	0	0	0	0	230
Hour Total	15	634	168	9	27	4	1	4	1	0	0	0	0	0	0	863

Accurate Traffic Counts
 CLASSIFICATION SUMMARY
 Tue 1/14/2020

Site Ref: 00000000022
 Counter ID: 000000033012
 Location: Malabar Rd, W of US Post Office
 Direction: ROAD TOTAL

File: D0114002.prn
 City: Malabar
 County: Brevard

TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total

17:15	1	204	39	2	6	0	0	0	1	0	0	0	0	0	0	253
17:30	1	195	42	1	2	0	0	0	0	0	0	0	0	0	0	241
17:45	4	199	41	0	4	0	0	1	0	0	0	0	0	0	0	249
18:00	0	182	41	1	6	0	0	0	0	0	0	0	0	0	0	230
Hour Total	6	780	163	4	18	0	0	1	1	0	0	0	0	0	0	973

18:15	1	221	31	0	5	0	0	0	0	0	0	0	0	0	0	258
18:30	3	165	34	0	5	0	0	0	0	0	0	0	0	0	0	207
18:45	4	170	42	0	4	0	0	0	0	0	0	0	0	0	0	220
19:00	1	143	38	0	6	0	0	0	0	0	0	0	0	0	0	188
Hour Total	9	699	145	0	20	0	0	0	0	0	0	0	0	0	0	873

19:15	0	130	23	0	5	0	0	1	0	0	0	0	0	0	0	159
19:30	3	110	22	0	3	0	0	2	0	0	0	0	0	0	0	140
19:45	3	115	16	0	3	0	0	0	0	0	0	0	0	0	0	137
20:00	2	95	21	0	5	0	0	0	0	0	0	0	0	0	0	123
Hour Total	8	450	82	0	16	0	0	3	0	0	0	0	0	0	0	559

20:15	1	83	10	0	7	0	0	0	0	0	0	0	0	0	0	101
20:30	2	111	18	0	1	0	0	1	0	0	0	0	0	0	0	133
20:45	1	118	21	0	0	0	0	0	0	0	0	0	0	0	0	140
21:00	0	79	9	0	2	0	0	0	0	0	0	0	0	0	0	90
Hour Total	4	391	58	0	10	0	0	1	0	0	0	0	0	0	0	464

21:15	3	88	24	0	2	0	0	0	0	0	0	0	0	0	0	117
21:30	1	94	13	0	0	0	0	0	0	0	0	0	0	0	0	108
21:45	0	72	7	0	0	0	0	0	0	0	0	0	0	0	0	79
22:00	0	50	1	0	0	0	0	0	0	0	0	0	0	0	0	51
Hour Total	4	304	45	0	2	0	0	0	0	0	0	0	0	0	0	355

22:15	0	38	12	0	0	0	0	0	0	0	0	0	0	0	0	50
22:30	0	53	9	0	2	0	0	0	0	0	0	0	0	0	0	64
22:45	1	65	12	0	4	0	0	0	0	0	0	0	0	0	0	82
23:00	0	24	10	0	4	0	0	0	0	0	0	0	0	0	0	38
Hour Total	1	180	43	0	10	0	0	0	0	0	0	0	0	0	0	234

23:15	1	19	3	0	0	0	0	0	0	0	0	0	0	0	0	23
23:30	2	24	0	0	0	0	0	0	0	0	0	0	0	0	0	26
23:45	0	19	5	0	0	0	0	0	0	0	0	0	0	0	0	24
24:00	0	18	3	0	1	0	0	0	0	0	0	0	0	0	0	22
Hour Total	3	80	11	0	1	0	0	0	0	0	0	0	0	0	0	95

DAY TOTAL	148	8470	1917	101	314	136	24	37	19	0	0	0	0	0	0	11166
PERCENTS	1.4%	75.9%	17.2%	0.9%	2.8%	1.2%	0.2%	0.3%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
Passenger Vehicles	94.3%															
	Trucks & Buses 5.6%															
AM Times	07:30	08:00	08:00	08:15	09:15	09:00	10:15	08:15	08:30							08:00
AM Peaks	17	734	131	23	26	14	4	8	3							937
PM Times	16:00	17:30	17:00	15:15	13:00	12:45	12:15	13:30	12:15							17:30
PM Peaks	16	797	169	22	31	26	6	4	4							978

Accurate Traffic Counts
 CLASSIFICATION SUMMARY
 Wed 1/15/2020

Site Ref: 00000000022
 Counter ID: 000000033012
 Location: Malabar Rd, W of US Post Office
 Direction: ROAD TOTAL

File: D0114002.prn
 City: Malabar
 County: Brevard

TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total
00:15	0	17	2	0	0	0	0	0	0	0	0	0	0	0	0	19
00:30	0	13	4	0	0	0	0	0	0	0	0	0	0	0	0	17
00:45	0	8	1	0	0	0	0	0	0	0	0	0	0	0	0	9
01:00	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	6
Hour Total	0	44	7	0	0	0	0	0	0	0	0	0	0	0	0	51
01:15	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	5
01:30	0	9	2	0	0	0	0	0	0	0	0	0	0	0	0	11
01:45	1	8	1	0	0	0	0	0	0	0	0	0	0	0	0	10
02:00	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	9
Hour Total	1	31	3	0	0	0	0	0	0	0	0	0	0	0	0	35
02:15	0	6	0	0	0	0	0	1	0	0	0	0	0	0	0	7
02:30	0	3	1	0	0	0	0	1	0	0	0	0	0	0	0	5
02:45	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	4
03:00	1	5	1	0	1	0	0	0	0	0	0	0	0	0	0	8
Hour Total	1	16	4	0	1	0	0	2	0	0	0	0	0	0	0	24
03:15	0	3	1	1	0	0	0	0	0	0	0	0	0	0	0	5
03:30	0	7	2	0	1	0	0	0	0	0	0	0	0	0	0	10
03:45	0	5	4	1	0	0	0	0	0	0	0	0	0	0	0	10
04:00	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	3
Hour Total	0	17	8	2	1	0	0	0	0	0	0	0	0	0	0	28
04:15	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
04:30	0	8	4	0	1	0	0	0	0	0	0	0	0	0	0	13
04:45	0	9	3	0	0	0	0	0	0	0	0	0	0	0	0	12
05:00	3	13	4	0	2	0	0	0	0	0	0	0	0	0	0	22
Hour Total	3	32	11	0	3	0	0	0	0	0	0	0	0	0	0	49
05:15	1	22	3	0	3	0	0	0	0	0	0	0	0	0	0	29
05:30	1	23	9	0	2	0	0	0	0	0	0	0	0	0	0	35
05:45	2	23	7	0	5	0	0	0	0	0	0	0	0	0	0	37
06:00	0	38	17	0	3	1	0	0	0	0	0	0	0	0	0	59
Hour Total	4	106	36	0	13	1	0	0	0	0	0	0	0	0	0	160
06:15	0	56	15	0	3	0	1	0	0	0	0	0	0	0	0	75
06:30	0	71	36	2	4	1	0	0	0	0	0	0	0	0	0	114
06:45	1	101	40	2	4	0	0	0	0	0	0	0	0	0	0	148
07:00	3	110	22	5	5	0	0	1	0	0	0	0	0	0	0	146
Hour Total	4	338	113	9	16	1	1	1	0	0	0	0	0	0	0	483
07:15	5	105	25	2	11	0	0	1	0	0	0	0	0	0	0	149
07:30	5	133	40	1	6	0	0	2	0	0	0	0	0	0	0	187
07:45	1	151	37	0	9	4	1	1	0	1	0	0	0	0	0	205
08:00	1	173	30	1	4	2	0	0	0	0	0	0	0	0	0	211
Hour Total	12	562	132	4	30	6	1	4	0	1	0	0	0	0	0	752
08:15	0	167	35	5	10	1	0	0	0	0	0	0	0	0	0	218
08:30	6	223	48	9	7	2	0	0	0	0	0	0	0	0	0	295
08:45	1	189	47	10	9	1	1	0	0	0	0	0	0	0	0	258
09:00	3	130	29	4	4	1	1	1	3	0	0	0	0	0	0	176

Accurate Traffic Counts
 CLASSIFICATION SUMMARY
 Wed 1/15/2020

Site Ref: 00000000022
 Counter ID: 000000033012
 Location: Malabar Rd, W of US Post Office
 Direction: ROAD TOTAL

File: D0114002.prn
 City: Malabar
 County: Brevard

TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total
Hour Total	10	709	159	28	30	5	2	1	3	0	0	0	0	0	0	947
09:15	2	88	25	0	3	2	0	0	0	0	0	0	0	0	0	120
09:30	0	92	22	2	1	5	0	1	1	0	0	0	0	0	0	124
09:45	2	108	32	3	1	1	0	0	0	0	0	0	0	0	0	147
10:00	6	106	32	3	11	3	0	0	0	0	0	0	0	0	0	161
Hour Total	10	394	111	8	16	11	0	1	1	0	0	0	0	0	0	552
10:15	1	93	36	0	4	3	0	0	0	0	0	0	0	0	0	137
10:30	1	101	20	1	3	4	1	0	0	0	0	0	0	0	0	131
10:45	3	88	34	4	6	2	0	1	1	0	0	0	0	0	0	139
11:00	1	107	26	0	5	2	1	0	0	0	0	0	0	0	0	142
Hour Total	6	389	116	5	18	11	2	1	1	0	0	0	0	0	0	549
11:15	0	125	24	2	6	2	0	1	1	0	0	0	0	0	0	161
11:30	3	107	32	0	2	0	0	1	0	0	0	0	0	0	0	145
11:45	4	126	34	0	8	3	1	3	0	0	0	0	0	0	0	179
12:00	0	111	30	1	12	2	0	2	2	0	0	0	0	0	0	160
Hour Total	7	469	120	3	28	7	1	7	3	0	0	0	0	0	0	645
12:15	2	92	32	0	2	2	1	1	0	0	0	0	0	0	0	132
12:30	3	109	32	2	5	3	1	0	0	0	0	0	0	0	0	155
12:45	4	92	34	1	3	3	0	0	0	0	0	0	0	0	0	137
13:00	1	94	30	1	4	1	1	0	1	0	0	0	0	0	0	133
Hour Total	10	387	128	4	14	9	3	1	1	0	0	0	0	0	0	557
13:15	4	116	34	0	5	4	0	2	0	0	0	0	0	0	0	165
13:30	4	108	30	0	3	6	0	1	0	0	0	0	0	0	0	152
13:45	2	100	32	3	8	1	0	0	0	0	0	0	0	0	0	146
14:00	5	98	32	3	7	7	0	1	2	0	0	0	0	0	0	155
Hour Total	15	422	128	6	23	18	0	4	2	0	0	0	0	0	0	618
14:15	6	93	37	1	7	5	0	1	0	0	0	0	0	0	0	150
14:30	3	98	32	4	7	1	0	0	0	0	0	0	0	0	0	145
14:45	3	117	34	2	6	3	1	2	1	0	0	0	0	0	0	169
15:00	4	126	37	3	8	3	0	0	1	0	0	0	0	0	0	182
Hour Total	16	434	140	10	28	12	1	3	2	0	0	0	0	0	0	646
15:15	4	127	25	9	4	3	1	1	0	0	1	0	0	0	0	175
15:30	4	141	49	4	4	1	1	0	2	0	0	0	0	0	0	206
15:45	2	168	40	1	13	1	0	0	1	0	0	0	0	0	0	226
16:00	5	203	35	5	8	4	0	0	0	0	0	0	0	0	0	260
Hour Total	15	639	149	19	29	9	2	1	3	0	1	0	0	0	0	867
16:15	2	150	25	5	3	1	0	0	1	0	0	0	0	0	0	187
16:30	9	155	44	2	9	1	0	0	1	0	0	0	0	0	0	221
16:45	0	152	33	3	8	0	0	2	0	0	0	0	0	0	0	198
17:00	4	158	48	3	7	1	0	1	0	0	0	0	0	0	0	222
Hour Total	15	615	150	13	27	3	0	3	2	0	0	0	0	0	0	828

Accurate Traffic Counts
 CLASSIFICATION SUMMARY
 Wed 1/15/2020

Site Ref: 00000000022
 Counter ID: 000000033012
 Location: Malabar Rd, W of US Post Office
 Direction: ROAD TOTAL

File: D0114002.prn
 City: Malabar
 County: Brevard

TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total

17:15	6	204	37	2	3	0	1	0	0	0	0	0	0	0	0	253
17:30	2	152	42	0	4	1	0	1	0	0	0	0	0	0	0	202
17:45	6	171	42	0	4	0	1	0	0	0	0	0	0	0	0	224
18:00	2	172	48	0	9	1	0	0	0	0	0	0	0	0	0	232
Hour Total	16	699	169	2	20	2	2	1	0	0	0	0	0	0	0	911

18:15	5	183	34	0	4	0	0	0	0	0	0	0	0	0	0	226
18:30	0	158	37	0	4	0	0	0	0	0	0	0	0	0	0	199
18:45	5	138	37	0	6	0	0	1	0	0	0	0	0	0	0	187
19:00	7	129	25	0	7	0	0	0	0	0	0	0	0	0	0	168
Hour Total	17	608	133	0	21	0	0	1	0	0	0	0	0	0	0	780

19:15	1	121	25	0	6	0	0	0	0	0	0	0	0	0	0	153
19:30	5	112	14	0	3	0	0	0	0	0	0	0	0	0	0	134
19:45	0	93	31	0	3	0	0	0	0	0	0	0	0	0	0	127
20:00	1	95	24	0	3	0	0	0	1	0	0	0	0	0	0	124
Hour Total	7	421	94	0	15	0	0	0	1	0	0	0	0	0	0	538

20:15	1	114	21	0	1	0	0	0	0	0	0	0	0	0	0	137
20:30	0	103	17	0	0	0	0	0	0	0	0	0	0	0	0	120
20:45	1	88	14	0	0	0	0	0	0	0	0	0	0	0	0	103
21:00	0	94	16	0	2	0	0	0	0	0	0	0	0	0	0	112
Hour Total	2	399	68	0	3	0	0	0	0	0	0	0	0	0	0	472

21:15	2	86	9	0	2	0	0	0	0	0	0	0	0	0	0	99
21:30	0	56	7	0	1	0	0	0	0	0	0	0	0	0	0	64
21:45	0	51	4	0	0	0	0	0	0	0	0	0	0	0	0	55
22:00	1	47	4	0	1	0	0	0	0	0	0	0	0	0	0	53
Hour Total	3	240	24	0	4	0	0	0	0	0	0	0	0	0	0	271

22:15	0	51	12	0	3	0	0	0	0	0	0	0	0	0	0	66
22:30	0	38	2	0	1	0	0	0	0	0	0	0	0	0	0	41
22:45	0	24	5	1	0	0	0	0	0	0	0	0	0	0	0	30
23:00	1	24	2	0	0	0	0	0	0	0	0	0	0	0	0	27
Hour Total	1	137	21	1	4	0	0	0	0	0	0	0	0	0	0	164

23:15	0	16	2	0	0	0	0	0	0	0	0	0	0	0	0	18
23:30	0	32	8	0	0	0	0	0	0	0	0	0	0	0	0	40
23:45	0	17	2	0	1	0	0	0	0	0	0	0	0	0	0	20
24:00	0	14	2	0	0	0	0	0	0	0	0	0	0	0	0	16
Hour Total	0	79	14	0	1	0	0	0	0	0	0	0	0	0	0	94

DAY TOTAL	175	8187	2038	114	345	95	15	31	19	1	1	0	0	0	0	11021
PERCENTS	1.6%	74.3%	18.5%	1.1%	3.2%	0.9%	0.1%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
Passenger Vehicles	94.3%															
																Trucks & Buses 5.6%
AM Times	06:45	08:00	08:00	08:15	07:00	09:30	08:15	11:15	08:45	07:00						08:00
AM Peaks	14	752	160	28	31	12	2	7	4	1						982
PM Times	16:30	17:15	17:00	15:15	15:45	13:30	12:15	13:15	14:45	14:30						17:15
PM Peaks	19	699	169	19	33	19	3	4	4	1						911

Accurate Traffic Counts
 CLASSIFICATION SUMMARY
 Thu 1/16/2020

Site Ref: 00000000022
 Counter ID: 000000033012
 Location: Malabar Rd, W of US Post Office
 Direction: ROAD TOTAL

File: D0114002.prn
 City: Malabar
 County: Brevard

TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total
00:15	1	15	5	0	0	0	0	0	0	0	0	0	0	0	0	21
00:30	0	12	3	0	0	0	0	0	0	0	0	0	0	0	0	15
00:45	0	16	4	0	0	0	0	0	0	0	0	0	0	0	0	20
01:00	0	9	2	0	0	0	0	0	0	0	0	0	0	0	0	11
Hour Total	1	52	14	0	0	0	0	0	0	0	0	0	0	0	0	67
01:15	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	6
01:30	0	6	1	0	0	0	0	0	0	0	0	0	0	0	0	7
01:45	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4
02:00	0	7	1	0	0	0	0	0	0	0	0	0	0	0	0	8
Hour Total	0	23	2	0	0	0	0	0	0	0	0	0	0	0	0	25
02:15	1	2	1	0	0	0	0	1	0	0	0	0	0	0	0	5
02:30	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	5
02:45	1	4	0	0	0	0	0	0	0	0	0	0	0	0	0	5
03:00	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	4
Hour Total	2	12	4	0	0	0	0	1	0	0	0	0	0	0	0	19
03:15	0	3	1	1	0	0	0	0	0	0	0	0	0	0	0	5
03:30	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	2
03:45	0	6	5	0	0	0	0	0	0	0	0	0	0	0	0	11
04:00	0	2	3	0	0	0	0	0	0	0	0	0	0	0	0	5
Hour Total	0	12	9	2	0	0	0	0	0	0	0	0	0	0	0	23
04:15	0	9	1	0	0	0	0	0	0	0	0	0	0	0	0	10
04:30	0	6	1	0	0	0	0	0	0	0	0	0	0	0	0	7
04:45	0	13	4	0	2	0	0	0	0	0	0	0	0	0	0	19
05:00	1	18	3	0	0	0	0	0	0	0	0	0	0	0	0	22
Hour Total	1	46	9	0	2	0	0	0	0	0	0	0	0	0	0	58
05:15	0	19	3	0	1	0	0	0	0	0	0	0	0	0	0	23
05:30	1	17	9	0	2	0	0	0	0	0	0	0	0	0	0	29
05:45	0	33	13	0	0	1	0	0	0	0	0	0	0	0	0	47
06:00	0	25	19	0	0	0	0	2	0	0	0	0	0	0	0	46
Hour Total	1	94	44	0	3	1	0	2	0	0	0	0	0	0	0	145
06:15	0	36	17	0	3	0	0	0	0	0	0	0	0	0	0	56
06:30	2	74	24	1	1	1	0	0	0	0	0	0	0	0	0	103
06:45	3	83	31	2	11	1	0	0	0	0	0	0	0	0	0	131
07:00	3	121	27	6	5	1	0	0	0	0	0	0	0	0	0	163
Hour Total	8	314	99	9	20	3	0	0	0	0	0	0	0	0	0	453
07:15	1	119	29	2	6	0	0	0	0	0	0	0	0	0	0	157
07:30	2	145	36	2	10	0	1	1	0	0	0	0	0	0	0	197
07:45	6	118	41	0	6	3	1	1	0	0	0	0	0	0	0	176
08:00	1	163	30	1	6	2	0	0	0	0	0	0	0	0	0	203
Hour Total	10	545	136	5	28	5	2	2	0	0	0	0	0	0	0	733
08:15	1	178	47	5	6	2	0	1	1	0	0	0	0	0	0	241
08:30	2	220	36	8	8	1	0	1	1	0	0	0	0	0	0	277
08:45	1	214	31	7	6	4	0	0	1	0	0	0	0	0	0	264
09:00	3	130	34	3	6	6	2	1	0	0	0	0	0	0	0	185

Accurate Traffic Counts
 CLASSIFICATION SUMMARY
 Thu 1/16/2020

Site Ref: 00000000022
 Counter ID: 000000033012
 Location: Malabar Rd, W of US Post Office
 Direction: ROAD TOTAL

File: D0114002.prn
 City: Malabar
 County: Brevard

TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total
Hour Total	7	742	148	23	26	13	2	3	3	0	0	0	0	0	0	967
09:15	4	114	36	1	7	3	0	0	3	0	0	0	0	0	0	168
09:30	6	100	35	2	8	2	1	2	1	0	0	0	0	0	0	157
09:45	1	111	27	0	4	2	0	0	2	0	0	0	0	0	0	147
10:00	0	98	31	0	9	5	0	1	0	0	0	0	0	0	0	144
Hour Total	11	423	129	3	28	12	1	3	6	0	0	0	0	0	0	616
10:15	0	94	29	1	7	0	0	0	0	0	0	0	0	0	0	131
10:30	0	99	26	0	7	1	1	1	2	0	0	0	0	0	0	137
10:45	1	91	36	3	7	2	1	1	0	0	0	0	0	0	0	142
11:00	3	95	19	0	4	5	0	0	1	0	0	0	0	0	0	127
Hour Total	4	379	110	4	25	8	2	2	3	0	0	0	0	0	0	537
11:15	3	120	26	0	4	2	0	0	0	0	0	0	0	0	0	155
11:30	4	96	25	1	3	2	0	1	1	0	0	0	0	0	0	133
11:45	2	93	24	2	6	2	1	1	0	0	0	0	0	0	0	131
12:00	2	122	28	0	10	0	1	2	0	0	0	0	0	0	0	165
Hour Total	11	431	103	3	23	6	2	4	1	0	0	0	0	0	0	584
12:15	4	110	29	1	6	2	1	1	2	0	0	0	0	0	0	156
12:30	1	99	42	2	5	1	0	0	0	0	0	0	0	0	0	150
12:45	2	93	22	0	2	3	1	1	0	0	0	0	0	0	0	124
13:00	4	100	32	0	6	2	0	1	0	0	0	0	0	0	0	145
Hour Total	11	402	125	3	19	8	2	3	2	0	0	0	0	0	0	575
13:15	2	95	27	0	7	3	1	0	0	0	0	0	0	0	0	135
13:30	1	120	25	2	5	4	0	1	1	0	0	0	0	0	0	159
13:45	4	118	32	1	3	3	1	1	0	0	0	0	0	0	0	163
14:00	4	104	33	3	8	3	0	0	0	0	0	0	0	0	0	155
Hour Total	11	437	117	6	23	13	2	2	1	0	0	0	0	0	0	612
14:15	5	118	21	4	9	3	1	0	1	0	0	0	0	0	0	162
14:30	2	111	25	4	8	3	1	0	1	0	0	0	0	0	0	155
14:45	3	122	34	0	7	5	0	1	1	0	0	0	0	0	0	173
15:00	1	134	33	2	9	2	0	0	0	0	0	0	0	0	0	181
Hour Total	11	485	113	10	33	13	2	1	3	0	0	0	0	0	0	671
15:15	1	130	41	9	5	2	1	0	0	0	0	0	0	0	0	189
15:30	3	150	31	3	8	5	1	0	0	0	0	0	0	0	0	201
15:45	6	168	33	10	4	3	0	0	0	0	0	0	0	0	0	224
16:00	4	233	29	3	1	1	0	2	0	0	0	0	0	0	0	273
Hour Total	14	681	134	25	18	11	2	2	0	0	0	0	0	0	0	887
16:15	2	151	35	3	5	3	0	2	2	0	0	0	0	0	0	203
16:30	2	125	36	2	6	2	0	1	1	0	0	0	0	0	0	175
16:45	5	152	49	2	10	5	0	2	0	0	0	0	0	0	0	225
17:00	1	162	30	4	3	0	0	2	0	0	0	0	0	0	0	202
Hour Total	10	590	150	11	24	10	0	7	3	0	0	0	0	0	0	805

Accurate Traffic Counts
 CLASSIFICATION SUMMARY
 Thu 1/16/2020

Site Ref: 00000000022
 Counter ID: 000000033012
 Location: Malabar Rd, W of US Post Office
 Direction: ROAD TOTAL

File: D0114002.prn
 City: Malabar
 County: Brevard

TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total

17:15	3	148	40	0	5	0	0	0	1	0	0	0	0	0	0	197
17:30	6	175	52	2	4	0	0	1	0	0	0	0	0	0	0	240
17:45	2	202	47	0	5	0	0	0	0	0	0	0	0	0	0	256
18:00	4	219	36	0	5	0	0	0	0	0	0	0	0	0	0	264
Hour Total	15	744	175	2	19	0	0	1	1	0	0	0	0	0	0	957

18:15	6	219	33	0	6	0	0	1	0	0	0	0	0	0	0	265
18:30	1	197	44	0	6	0	0	0	0	0	0	0	0	0	0	248
18:45	2	147	27	0	1	0	0	0	0	0	0	0	0	0	0	177
19:00	3	131	25	0	7	0	0	1	0	0	0	0	0	0	0	167
Hour Total	12	694	129	0	20	0	0	2	0	0	0	0	0	0	0	857

19:15	3	110	29	0	5	0	0	0	1	0	0	0	0	0	0	148
19:30	3	140	19	0	0	0	0	0	0	0	0	0	0	0	0	162
19:45	3	178	29	0	6	0	0	0	0	0	0	0	0	0	0	216
20:00	1	108	27	0	4	0	0	1	0	0	0	0	0	0	0	141
Hour Total	10	536	104	0	15	0	0	1	1	0	0	0	0	0	0	667

20:15	0	103	35	0	3	0	0	0	0	0	0	0	0	0	0	141
20:30	2	91	15	0	0	0	0	0	0	0	0	0	0	0	0	108
20:45	1	80	20	1	7	0	0	2	0	0	0	0	0	0	0	111
21:00	1	87	11	0	1	0	0	0	0	0	0	0	0	0	0	100
Hour Total	4	361	81	1	11	0	0	2	0	0	0	0	0	0	0	460

21:15	0	58	10	0	0	0	0	0	0	0	0	0	0	0	0	68
21:30	0	62	10	0	0	0	0	0	0	0	0	0	0	0	0	72
21:45	2	56	9	0	1	0	0	0	0	0	0	0	0	0	0	68
22:00	0	53	8	0	1	0	0	0	0	0	0	0	0	0	0	62
Hour Total	2	229	37	0	2	0	0	0	0	0	0	0	0	0	0	270

22:15	0	36	6	0	0	0	0	0	0	0	0	0	0	0	0	42
22:30	0	42	3	0	0	0	0	0	0	0	0	0	0	0	0	45
22:45	0	38	2	0	0	0	0	0	0	0	0	0	0	0	0	40
23:00	2	23	4	0	1	0	0	0	0	0	0	0	0	0	0	30
Hour Total	2	139	15	0	1	0	0	0	0	0	0	0	0	0	0	157

23:15	0	16	3	0	0	0	0	0	0	0	0	0	0	0	0	19
23:30	0	21	2	0	1	0	0	1	0	0	0	0	0	0	0	25
23:45	0	19	5	0	2	0	0	0	0	0	0	0	0	0	0	26
24:00	0	11	2	0	0	0	0	0	0	0	0	0	0	0	0	13
Hour Total	0	67	12	0	3	0	0	1	0	0	0	0	0	0	0	83

DAY TOTAL	158	8438	1999	107	343	103	17	39	24	0	0	0	0	0	0	11228
PERCENTS	1.5%	75.2%	17.9%	0.9%	3.0%	0.9%	0.1%	0.3%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
Passenger Vehicles	94.3%															
	Trucks & Buses 5.6%															
AM Times	08:45	08:00	07:30	08:15	06:45	08:45	08:45	11:15	09:00							08:00
AM Peaks	14	775	154	23	32	15	3	4	6							985
PM Times	17:30	17:45	17:15	15:15	14:15	14:00	13:45	16:00	14:00							17:45
PM Peaks	18	837	175	25	33	14	3	7	3							1033

SITE ID: 33

LOCATION: MALABAR ROAD, WEST OF DAFFODIL DRIVE

Accurate Traffic Counts
 CLASSIFICATION SUMMARY
 Tue 1/14/2020

Site Ref: 00000000033
 Counter ID: 000000033036
 Location: Malabar Rd, Wof Daffodil Dr
 Direction: EAST
 Lane: 1

File: D0114006.prn
 City: Malabar
 County: Brevard

TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total
00:15	0	25	5	0	0	0	0	0	0	0	0	0	0	0	0	30
00:30	1	24	3	0	0	0	0	0	0	0	0	0	0	0	0	28
00:45	0	11	1	0	0	0	0	0	0	0	0	0	0	0	0	12
01:00	0	13	2	0	0	0	0	0	0	0	0	0	0	0	0	15
Hour Total	1	73	11	0	0	0	0	0	0	0	0	0	0	0	0	85
01:15	0	16	1	0	0	0	0	0	0	0	0	0	0	0	0	17
01:30	0	6	1	0	0	0	0	0	0	0	0	0	0	0	0	7
01:45	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	6
02:00	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	10
Hour Total	0	38	2	0	0	0	0	0	0	0	0	0	0	0	0	40
02:15	0	8	1	0	0	0	0	0	0	0	0	0	0	0	0	9
02:30	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	10
02:45	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	6
03:00	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Hour Total	0	28	1	0	0	0	0	0	0	0	0	0	0	0	0	29
03:15	0	3	2	0	0	0	0	0	0	0	0	0	0	0	0	5
03:30	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	6
03:45	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4
04:00	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Hour Total	0	17	2	0	0	0	0	0	0	0	0	0	0	0	0	19
04:15	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	6
04:30	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
04:45	0	4	2	0	0	0	0	0	0	0	0	0	0	0	0	6
05:00	0	6	1	0	0	0	0	0	1	0	0	0	0	0	0	8
Hour Total	0	18	3	0	0	0	0	0	1	0	0	0	0	0	0	22
05:15	0	9	1	0	1	0	0	0	0	0	0	0	0	0	0	11
05:30	0	10	1	0	0	0	0	1	0	0	0	0	0	0	0	12
05:45	0	8	2	0	0	0	0	0	0	0	0	0	0	0	0	10
06:00	0	15	3	0	0	1	0	0	0	0	0	0	0	0	0	19
Hour Total	0	42	7	0	1	1	0	1	0	0	0	0	0	0	0	52
06:15	0	27	6	0	0	0	0	0	0	0	0	0	0	0	0	33
06:30	0	29	6	0	0	1	0	1	0	0	0	0	0	0	0	37
06:45	3	48	8	1	3	0	0	0	0	0	0	0	0	0	0	63
07:00	1	42	9	0	2	2	0	0	0	0	0	0	0	0	0	56
Hour Total	4	146	29	1	5	3	0	1	0	0	0	0	0	0	0	189
07:15	1	36	6	0	1	0	0	0	0	0	0	0	0	0	0	44
07:30	0	55	13	1	1	1	0	0	0	0	0	0	0	0	0	71
07:45	1	86	18	0	2	1	0	1	0	0	0	0	0	0	0	109
08:00	4	112	9	1	4	0	0	1	0	0	0	0	0	0	0	131
Hour Total	6	289	46	2	8	2	0	2	0	0	0	0	0	0	0	355
08:15	1	114	16	0	1	3	0	2	0	0	0	0	0	0	0	137
08:30	3	101	14	2	2	1	0	0	0	0	0	0	0	0	0	123
08:45	0	60	9	0	3	0	0	1	0	0	0	0	0	0	0	73
09:00	5	59	9	0	3	0	0	0	0	0	0	0	0	0	0	76

Accurate Traffic Counts
 CLASSIFICATION SUMMARY
 Tue 1/14/2020

Site Ref: 00000000033
 Counter ID: 000000033036
 Location: Malabar Rd, Wof Daffodil Dr
 Direction: EAST
 Lane: 1

File: D0114006.prn
 City: Malabar
 County: Brevard

TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total
-----	-----															
Hour Total	9	334	48	2	9	4	0	3	0	0	0	0	0	0	0	409
09:15	2	51	14	0	4	1	0	0	0	0	0	0	0	0	0	72
09:30	1	65	16	1	3	0	0	0	0	0	0	0	0	0	0	86
09:45	3	85	12	0	2	0	0	0	0	0	0	0	0	0	0	102
10:00	1	75	17	0	2	1	0	1	0	0	0	0	0	0	0	97
-----	-----															
Hour Total	7	276	59	1	11	2	0	1	0	0	0	0	0	0	0	357
10:15	2	51	8	0	1	1	1	0	0	0	0	0	0	0	0	64
10:30	1	73	9	0	1	0	0	0	0	0	0	0	0	0	0	84
10:45	2	95	8	0	1	0	0	0	0	0	0	0	0	0	0	106
11:00	0	85	12	0	5	1	0	0	0	0	0	0	0	0	0	103
-----	-----															
Hour Total	5	304	37	0	8	2	1	0	0	0	0	0	0	0	0	357
11:15	1	98	17	1	2	1	0	0	0	0	0	0	0	0	0	120
11:30	2	85	8	0	0	0	0	0	0	0	0	0	0	0	0	95
11:45	0	89	11	2	1	1	0	0	0	0	0	0	0	0	0	104
12:00	4	102	11	0	1	5	0	0	0	0	0	0	0	0	0	123
-----	-----															
Hour Total	7	374	47	3	4	7	0	0	0	0	0	0	0	0	0	442
12:15	2	88	21	0	7	2	0	0	0	0	0	0	0	0	0	120
12:30	3	93	16	0	2	1	0	2	0	0	0	0	0	0	0	117
12:45	3	104	11	0	2	2	1	0	1	0	0	0	0	0	0	124
13:00	1	96	17	0	3	1	0	0	0	0	0	0	0	0	0	118
-----	-----															
Hour Total	9	381	65	0	14	6	1	2	1	0	0	0	0	0	0	479
13:15	4	90	18	0	3	0	0	0	0	0	0	0	0	0	0	115
13:30	4	80	19	2	3	1	0	0	0	0	0	0	0	0	0	109
13:45	1	88	23	0	3	0	0	0	1	0	0	0	0	0	0	116
14:00	1	100	26	1	3	1	0	0	0	0	0	0	0	0	0	132
-----	-----															
Hour Total	10	358	86	3	12	2	0	0	1	0	0	0	0	0	0	472
14:15	1	91	10	0	0	0	0	0	0	0	0	0	0	0	0	102
14:30	2	114	20	0	2	3	0	0	0	0	0	0	0	0	0	141
14:45	3	134	18	0	0	0	0	0	1	0	0	0	0	0	0	156
15:00	0	126	22	1	4	2	0	0	0	0	0	0	0	0	0	155
-----	-----															
Hour Total	6	465	70	1	6	5	0	0	1	0	0	0	0	0	0	554
15:15	2	134	17	1	3	0	0	0	0	0	0	0	0	0	0	157
15:30	0	111	10	1	2	0	0	0	0	0	0	0	0	0	0	124
15:45	2	157	10	0	3	0	0	0	1	0	0	0	0	0	0	173
16:00	3	148	24	1	0	0	0	1	0	0	0	0	0	0	0	177
-----	-----															
Hour Total	7	550	61	3	8	0	0	1	1	0	0	0	0	0	0	631
16:15	2	154	25	0	2	2	0	0	0	0	0	0	0	0	0	185
16:30	2	158	21	1	0	0	0	0	0	0	0	0	0	0	0	182
16:45	4	152	25	2	3	0	0	0	0	0	0	0	0	0	0	186
17:00	5	168	25	0	2	0	0	0	0	0	0	0	0	0	0	200
-----	-----															
Hour Total	13	632	96	3	7	2	0	0	0	0	0	0	0	0	0	753

Accurate Traffic Counts
 CLASSIFICATION SUMMARY
 Tue 1/14/2020

Site Ref: 00000000033
 Counter ID: 000000033036
 Location: Malabar Rd, Wof Daffodil Dr
 Direction: EAST
 Lane: 1

File: D0114006.prn
 City: Malabar
 County: Brevard

TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total

17:15	3	156	23	0	1	0	0	0	0	0	0	0	0	0	0	183
17:30	4	179	20	1	1	0	0	0	0	0	0	0	0	0	0	205
17:45	1	172	23	0	0	0	0	1	0	0	0	0	0	0	0	197
18:00	0	169	24	0	2	0	0	1	0	0	0	0	0	0	0	196
Hour Total	8	676	90	1	4	0	0	2	0	0	0	0	0	0	0	781

18:15	2	162	16	0	3	1	0	1	0	0	0	0	0	0	0	185
18:30	1	173	22	0	3	0	0	0	0	0	0	0	0	0	0	199
18:45	1	150	15	0	2	0	0	0	0	0	0	0	0	0	0	168
19:00	2	148	22	0	3	0	0	0	0	0	0	0	0	0	0	175
Hour Total	6	633	75	0	11	1	0	1	0	0	0	0	0	0	0	727

19:15	4	144	14	0	2	0	0	0	0	0	0	0	0	0	0	164
19:30	1	120	11	0	1	0	0	0	0	0	0	0	0	0	0	133
19:45	4	100	12	0	1	0	0	0	0	0	0	0	0	0	0	117
20:00	1	105	14	0	2	0	0	0	0	0	0	0	0	0	0	122
Hour Total	10	469	51	0	6	0	0	0	0	0	0	0	0	0	0	536

20:15	1	99	12	0	1	0	0	0	0	0	0	0	0	0	0	113
20:30	1	109	13	0	3	0	0	0	0	0	0	0	0	0	0	126
20:45	3	101	18	0	0	0	0	0	0	0	0	0	0	0	0	122
21:00	1	83	4	0	1	0	0	0	0	0	0	0	0	0	0	89
Hour Total	6	392	47	0	5	0	0	0	0	0	0	0	0	0	0	450

21:15	1	91	6	0	0	0	0	0	0	0	0	0	0	0	0	98
21:30	1	75	8	0	1	0	0	0	0	0	0	0	0	0	0	85
21:45	1	64	4	0	1	1	0	0	0	0	0	0	0	0	0	71
22:00	1	64	2	0	0	0	0	0	0	0	0	0	0	0	0	67
Hour Total	4	294	20	0	2	1	0	0	0	0	0	0	0	0	0	321

22:15	0	53	6	0	1	0	0	0	0	0	0	0	0	0	0	60
22:30	0	40	7	0	0	0	0	0	0	0	0	0	0	0	0	47
22:45	1	45	4	0	0	0	0	0	0	0	0	0	0	0	0	50
23:00	0	36	5	0	1	0	0	1	0	0	0	0	0	0	0	43
Hour Total	1	174	22	0	2	0	0	1	0	0	0	0	0	0	0	200

23:15	0	42	1	0	0	0	0	0	0	0	0	0	0	0	0	43
23:30	0	36	1	0	0	0	0	0	0	0	0	0	0	0	0	37
23:45	0	24	5	0	0	0	0	0	0	0	0	0	0	0	0	29
24:00	0	23	2	0	0	0	0	0	0	0	0	0	0	0	0	25
Hour Total	0	125	9	0	0	0	0	0	0	0	0	0	0	0	0	134

DAY TOTAL	119	7088	984	20	123	38	2	15	5	0	0	0	0	0	0	8394
PERCENTS	1.5%	84.5%	11.8%	0.3%	1.4%	0.4%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
Passenger Vehicles	97.5%															
																Trucks & Buses 2.4%
AM Times	09:00	07:45	09:15	07:45	08:45	11:15	09:30	07:30	04:15							07:45
AM Peaks	11	413	59	3	13	7	1	4	1							500
PM Times	16:45	17:30	16:15	16:00	12:15	12:15	12:15	17:30	12:15							17:00
PM Peaks	16	682	96	4	14	6	1	3	1							785

Accurate Traffic Counts
 CLASSIFICATION SUMMARY
 Wed 1/15/2020

Site Ref: 00000000033
 Counter ID: 000000033036
 Location: Malabar Rd, Wof Daffodil Dr
 Direction: EAST
 Lane: 1

File: D0114006.prn
 City: Malabar
 County: Brevard

TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total
00:15	0	26	3	0	0	0	0	0	0	0	0	0	0	0	0	29
00:30	0	24	2	0	0	0	0	0	0	0	0	0	0	0	0	26
00:45	0	18	1	0	0	0	0	0	0	0	0	0	0	0	0	19
01:00	0	7	1	0	0	0	0	0	0	0	0	0	0	0	0	8
Hour Total	0	75	7	0	0	0	0	0	0	0	0	0	0	0	0	82
01:15	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	12
01:30	0	16	0	0	0	0	0	0	0	0	0	0	0	0	0	16
01:45	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	10
02:00	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	8
Hour Total	0	46	0	0	0	0	0	0	0	0	0	0	0	0	0	46
02:15	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	8
02:30	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	6
02:45	0	6	2	0	0	0	0	0	0	0	0	0	0	0	0	8
03:00	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	5
Hour Total	0	25	2	0	0	0	0	0	0	0	0	0	0	0	0	27
03:15	0	9	2	0	0	0	0	0	0	0	0	0	0	0	0	11
03:30	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	9
03:45	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4
04:00	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	6
Hour Total	0	28	2	0	0	0	0	0	0	0	0	0	0	0	0	30
04:15	0	5	2	0	0	0	0	0	0	0	0	0	0	0	0	7
04:30	0	3	1	0	0	0	0	0	1	0	0	0	0	0	0	5
04:45	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	4
05:00	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Hour Total	0	15	4	0	0	0	0	0	1	0	0	0	0	0	0	20
05:15	0	8	0	0	1	0	0	0	0	0	0	0	0	0	0	9
05:30	0	11	3	0	0	0	0	0	0	0	0	0	0	0	0	14
05:45	1	9	2	0	0	0	0	2	0	0	0	0	0	0	0	14
06:00	1	18	4	0	0	1	0	0	0	0	0	0	0	0	0	24
Hour Total	2	46	9	0	1	1	0	2	0	0	0	0	0	0	0	61
06:15	2	25	3	0	0	0	0	0	0	0	0	0	0	0	0	30
06:30	0	22	8	0	1	0	0	0	0	0	0	0	0	0	0	31
06:45	1	43	6	1	1	1	0	0	0	0	0	0	0	0	0	53
07:00	2	42	6	0	1	0	0	0	0	0	0	0	0	0	0	51
Hour Total	5	132	23	1	3	1	0	0	0	0	0	0	0	0	0	165
07:15	0	39	7	0	0	1	0	0	0	0	0	0	0	0	0	47
07:30	1	39	9	0	1	0	0	0	0	0	0	0	0	0	0	50
07:45	3	74	8	0	1	1	0	0	0	0	0	0	0	0	0	87
08:00	4	102	13	1	2	2	0	0	0	0	0	0	0	0	0	124
Hour Total	8	254	37	1	4	4	0	0	0	0	0	0	0	0	0	308
08:15	3	105	12	0	4	0	0	1	0	0	0	0	0	0	0	125
08:30	3	92	19	2	1	0	0	0	0	0	0	0	0	0	0	117
08:45	2	68	13	1	2	2	0	0	1	0	0	0	0	0	0	89
09:00	0	60	14	0	4	0	0	0	0	0	0	0	0	0	0	78

Accurate Traffic Counts
 CLASSIFICATION SUMMARY
 Wed 1/15/2020

Site Ref: 000000000033
 Counter ID: 000000033036
 Location: Malabar Rd, Wof Daffodil Dr
 Direction: EAST
 Lane: 1

File: D0114006.prn
 City: Malabar
 County: Brevard

TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total
Hour Total	8	325	58	3	11	2	0	1	1	0	0	0	0	0	0	409
09:15	2	38	3	0	3	1	0	0	0	0	0	0	0	0	0	47
09:30	1	60	19	0	0	0	0	0	0	0	0	0	0	0	0	80
09:45	1	82	15	1	2	1	0	2	0	0	0	0	0	0	0	104
10:00	0	73	10	0	3	1	0	0	1	0	0	0	0	0	0	88
Hour Total	4	253	47	1	8	3	0	2	1	0	0	0	0	0	0	319
10:15	1	71	11	0	1	1	0	1	0	0	0	0	0	0	0	86
10:30	0	66	8	1	1	1	0	0	0	0	0	0	0	0	0	77
10:45	0	76	12	0	1	0	0	1	0	0	0	0	0	0	0	90
11:00	4	77	10	0	3	0	0	0	0	0	0	0	0	0	0	94
Hour Total	5	290	41	1	6	2	0	2	0	0	0	0	0	0	0	347
11:15	1	90	13	0	0	1	0	2	0	0	0	0	0	0	0	107
11:30	3	76	13	0	4	0	0	1	0	0	0	0	0	0	0	97
11:45	5	89	12	1	2	0	0	1	0	0	0	0	0	0	0	110
12:00	3	94	24	0	1	1	0	2	0	0	0	0	0	0	0	125
Hour Total	12	349	62	1	7	2	0	6	0	0	0	0	0	0	0	439
12:15	3	85	15	0	1	0	0	0	0	0	0	0	0	0	0	104
12:30	4	109	14	0	0	0	0	0	0	0	0	0	0	0	0	127
12:45	1	89	16	1	1	4	0	0	0	0	0	0	0	0	0	112
13:00	3	95	18	0	4	0	0	0	0	0	0	0	0	0	0	120
Hour Total	11	378	63	1	6	4	0	0	0	0	0	0	0	0	0	463
13:15	1	103	14	0	2	2	0	0	0	0	0	0	0	0	0	122
13:30	0	84	9	0	1	1	0	0	0	0	1	0	0	0	0	96
13:45	4	94	14	0	0	1	0	0	0	0	0	0	0	0	0	113
14:00	5	92	26	0	3	3	0	1	1	0	0	0	0	0	0	131
Hour Total	10	373	63	0	6	7	0	1	1	0	1	0	0	0	0	462
14:15	4	101	23	0	1	1	0	0	0	0	0	0	0	0	0	130
14:30	1	118	13	0	0	0	0	0	0	0	0	0	0	0	0	132
14:45	0	106	26	0	0	2	0	0	0	0	0	0	0	0	0	134
15:00	1	116	13	1	4	1	0	0	0	0	0	0	0	0	0	136
Hour Total	6	441	75	1	5	4	0	0	0	0	0	0	0	0	0	532
15:15	2	129	15	0	2	1	0	1	0	0	0	0	0	0	0	150
15:30	3	152	17	1	2	0	0	1	1	0	0	0	0	0	0	177
15:45	3	150	14	1	0	0	0	0	0	0	0	0	0	0	0	168
16:00	2	120	13	2	1	2	0	1	0	0	0	0	0	0	0	141
Hour Total	10	551	59	4	5	3	0	3	1	0	0	0	0	0	0	636
16:15	3	140	18	0	1	1	0	0	0	0	0	0	0	0	0	163
16:30	4	128	20	2	2	0	0	2	0	0	0	0	0	0	0	158
16:45	3	155	30	0	3	0	0	0	0	0	0	0	0	0	0	191
17:00	2	149	28	0	3	0	0	0	0	0	0	0	0	0	0	182
Hour Total	12	572	96	2	9	1	0	2	0	0	0	0	0	0	0	694

Accurate Traffic Counts
 CLASSIFICATION SUMMARY
 Wed 1/15/2020

Site Ref: 00000000033
 Counter ID: 000000033036
 Location: Malabar Rd, Wof Daffodil Dr
 Direction: EAST
 Lane: 1

File: D0114006.prn
 City: Malabar
 County: Brevard

TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total

17:15	2	156	18	0	0	0	0	0	0	0	0	0	0	0	0	176
17:30	3	184	31	0	0	0	0	0	0	0	0	0	0	0	0	218
17:45	3	164	19	0	1	0	0	0	0	0	0	0	0	0	0	187
18:00	3	184	16	1	2	0	0	0	0	0	0	0	0	0	0	206
Hour Total	11	688	84	1	3	0	0	0	0	0	0	0	0	0	0	787

18:15	3	156	10	2	3	0	0	0	0	0	0	0	0	0	0	174
18:30	2	169	15	0	2	0	0	0	0	0	0	0	0	0	0	188
18:45	4	158	29	0	0	0	0	0	0	0	0	0	0	0	0	191
19:00	1	112	16	0	2	0	0	0	0	0	0	0	0	0	0	131
Hour Total	10	595	70	2	7	0	0	0	0	0	0	0	0	0	0	684

19:15	1	156	15	0	5	0	0	0	0	0	0	0	0	0	0	177
19:30	4	115	13	0	1	0	0	0	0	0	0	0	0	0	0	133
19:45	2	133	19	0	0	0	0	0	0	0	0	0	0	0	0	154
20:00	0	132	19	0	1	0	0	0	1	0	0	0	0	0	0	153
Hour Total	7	536	66	0	7	0	0	0	1	0	0	0	0	0	0	617

20:15	2	101	8	0	1	0	0	0	0	0	0	0	0	0	0	112
20:30	1	116	7	0	0	0	0	0	0	0	0	0	0	0	0	124
20:45	0	101	17	0	0	0	0	0	0	0	0	0	0	0	0	118
21:00	2	93	11	0	0	0	0	0	0	0	0	0	0	0	0	106
Hour Total	5	411	43	0	1	0	0	0	0	0	0	0	0	0	0	460

21:15	0	85	4	0	0	0	0	0	0	0	0	0	0	0	0	89
21:30	1	93	5	0	0	0	0	0	0	0	0	0	0	0	0	99
21:45	1	63	7	0	1	0	0	0	0	0	0	0	0	0	0	72
22:00	0	67	8	0	0	0	0	0	0	0	0	0	0	0	0	75
Hour Total	2	308	24	0	1	0	0	0	0	0	0	0	0	0	0	335

22:15	1	60	2	0	1	0	0	0	0	0	0	0	0	0	0	64
22:30	0	60	5	0	0	0	0	0	0	0	0	0	0	0	0	65
22:45	0	47	5	0	0	0	0	0	0	0	0	0	0	0	0	52
23:00	0	43	2	0	0	0	0	0	0	0	0	0	0	0	0	45
Hour Total	1	210	14	0	1	0	0	0	0	0	0	0	0	0	0	226

23:15	0	30	1	0	0	0	0	0	0	0	0	0	0	0	0	31
23:30	0	28	4	0	0	0	0	0	0	0	0	0	0	0	0	32
23:45	0	22	4	0	0	0	0	0	0	0	0	0	0	0	0	26
24:00	0	21	3	0	0	0	0	0	0	0	0	0	0	0	0	24
Hour Total	0	101	12	0	0	0	0	0	0	0	0	0	0	0	0	113

DAY TOTAL	129	7002	961	19	91	34	0	19	6	0	1	0	0	0	0	8262
PERCENTS	1.6%	84.8%	11.7%	0.2%	1.1%	0.4%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
Passenger Vehicles	97.9%															
																Trucks & Buses 2.0%

AM Times	07:45	07:45	11:15	08:00	08:15	07:15		11:15	03:45							08:00
AM Peaks	13	373	62	4	11	4		6	1							455

PM Times	13:45	17:15	16:45	15:45	16:15	12:45		15:15	13:15		12:45					17:15
PM Peaks	14	688	107	5	9	7		3	1		1					787

Accurate Traffic Counts
 CLASSIFICATION SUMMARY
 Thu 1/16/2020

Site Ref: 00000000033
 Counter ID: 000000033036
 Location: Malabar Rd, Wof Daffodil Dr
 Direction: EAST
 Lane: 1

File: D0114006.prn
 City: Malabar
 County: Brevard

TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total
00:15	1	21	2	0	0	0	0	0	0	0	0	0	0	0	0	24
00:30	0	21	2	0	0	0	0	0	0	0	0	0	0	0	0	23
00:45	0	20	3	0	0	0	0	0	0	0	0	0	0	0	0	23
01:00	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	11
Hour Total	1	73	7	0	0	0	0	0	0	0	0	0	0	0	0	81
01:15	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	7
01:30	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	11
01:45	0	9	1	0	0	0	0	0	0	0	0	0	0	0	0	10
02:00	0	5	1	0	0	0	0	0	0	0	0	0	0	0	0	6
Hour Total	0	32	2	0	0	0	0	0	0	0	0	0	0	0	0	34
02:15	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	10
02:30	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4
02:45	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	7
03:00	0	4	0	0	1	0	0	0	0	0	0	0	0	0	0	5
Hour Total	0	25	0	0	1	0	0	0	0	0	0	0	0	0	0	26
03:15	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4
03:30	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2
03:45	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	5
04:00	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	4
Hour Total	0	13	2	0	0	0	0	0	0	0	0	0	0	0	0	15
04:15	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	5
04:30	0	6	1	0	0	0	0	0	0	0	0	0	0	0	0	7
04:45	0	6	2	0	0	0	0	0	0	0	0	0	0	0	0	8
05:00	0	7	0	0	0	0	0	0	1	0	0	0	0	0	0	8
Hour Total	0	24	3	0	0	0	0	0	1	0	0	0	0	0	0	28
05:15	0	11	1	0	0	0	0	0	0	0	0	0	0	0	0	12
05:30	0	10	1	0	1	0	0	0	0	0	0	0	0	0	0	12
05:45	0	13	1	0	0	0	0	1	0	0	0	0	0	0	0	15
06:00	1	15	1	0	0	1	0	0	0	0	0	0	0	0	0	18
Hour Total	1	49	4	0	1	1	0	1	0	0	0	0	0	0	0	57
06:15	0	13	4	0	0	1	0	0	0	0	0	0	0	0	0	18
06:30	0	29	5	0	0	0	0	0	0	0	0	0	0	0	0	34
06:45	0	42	6	1	1	2	0	1	0	0	0	0	0	0	0	53
07:00	2	46	3	0	1	0	0	0	0	0	0	0	0	0	0	52
Hour Total	2	130	18	1	2	3	0	1	0	0	0	0	0	0	0	157
07:15	1	51	12	0	0	0	0	0	0	0	0	0	0	0	0	64
07:30	0	67	10	0	1	0	0	0	0	0	0	0	0	0	0	78
07:45	2	77	9	0	3	0	0	0	0	0	0	0	0	0	0	91
08:00	3	107	14	1	3	0	0	0	0	0	0	0	0	0	0	128
Hour Total	6	302	45	1	7	0	0	0	0	0	0	0	0	0	0	361
08:15	2	119	17	1	2	0	0	0	0	0	0	0	0	0	0	141
08:30	3	100	5	2	2	2	0	0	0	0	0	0	0	0	0	114
08:45	3	74	14	1	1	2	0	0	0	0	0	0	0	0	0	95
09:00	1	60	13	0	6	1	0	0	2	0	0	0	0	0	0	83

Accurate Traffic Counts
 CLASSIFICATION SUMMARY
 Thu 1/16/2020

Site Ref: 00000000033
 Counter ID: 000000033036
 Location: Malabar Rd, Wof Daffodil Dr
 Direction: EAST
 Lane: 1

File: D0114006.prn
 City: Malabar
 County: Brevard

TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total
Hour Total	9	353	49	4	11	5	0	0	2	0	0	0	0	0	0	433
09:15	2	65	16	0	1	0	0	0	0	0	0	0	0	0	0	84
09:30	2	73	7	0	3	0	0	0	0	0	0	0	0	0	0	85
09:45	0	78	7	0	1	0	0	0	0	0	0	0	0	0	0	86
10:00	2	62	8	0	3	0	0	1	0	0	0	0	0	0	0	76
Hour Total	6	278	38	0	8	0	0	1	0	0	0	0	0	0	0	331
10:15	0	66	17	0	3	0	0	1	0	0	0	0	0	0	0	87
10:30	1	88	11	0	0	0	0	0	0	0	0	0	0	0	0	100
10:45	4	98	4	0	2	0	0	0	0	0	0	0	0	0	0	108
11:00	2	89	13	0	1	1	0	0	0	0	0	0	0	0	0	106
Hour Total	7	341	45	0	6	1	0	1	0	0	0	0	0	0	0	401
11:15	2	95	16	1	1	0	0	0	0	0	0	0	0	0	0	115
11:30	4	68	9	0	1	0	0	0	0	0	0	0	0	0	0	82
11:45	2	89	10	0	0	0	0	0	1	0	0	0	0	0	0	102
12:00	8	87	15	0	2	0	0	0	0	0	0	0	0	0	0	112
Hour Total	16	339	50	1	4	0	0	0	1	0	0	0	0	0	0	411
12:15	5	115	14	0	2	0	0	0	0	0	0	0	0	0	0	136
12:30	1	92	18	0	4	0	0	0	0	0	0	0	0	0	0	115
12:45	1	116	11	0	2	0	0	0	0	0	0	0	0	0	0	130
13:00	7	81	12	0	5	0	0	0	0	0	0	0	0	0	0	105
Hour Total	14	404	55	0	13	0	0	0	0	0	0	0	0	0	0	486
13:15	3	81	11	0	2	0	0	0	0	0	0	0	0	0	0	97
13:30	6	82	6	0	1	0	0	0	0	0	0	0	0	0	0	95
13:45	3	84	14	0	2	0	0	0	0	0	0	0	0	0	0	103
14:00	2	110	18	0	3	0	0	1	0	0	0	0	0	0	0	134
Hour Total	14	357	49	0	8	0	0	1	0	0	0	0	0	0	0	429
14:15	3	89	10	0	2	0	0	0	0	0	0	0	0	0	0	104
14:30	0	114	16	0	1	0	0	1	0	0	0	0	0	0	0	132
14:45	1	111	18	0	1	1	0	0	0	0	0	0	0	0	0	132
15:00	2	107	13	0	4	0	0	0	0	0	0	0	0	0	0	126
Hour Total	6	421	57	0	8	1	0	1	0	0	0	0	0	0	0	494
15:15	4	130	26	0	1	0	0	0	0	0	0	0	0	0	0	161
15:30	3	143	15	2	2	0	0	0	0	0	0	0	0	0	0	165
15:45	2	162	20	1	1	0	0	0	0	0	0	0	0	0	0	186
16:00	2	60	7	0	0	0	0	0	0	0	0	0	0	0	0	69
Hour Total	11	495	68	3	4	0	0	0	0	0	0	0	0	0	0	581
16:15	4	143	18	1	4	0	0	0	0	0	0	0	0	0	0	170
16:30	3	143	21	2	2	0	0	1	0	0	0	0	0	0	0	172
16:45	2	154	17	1	4	1	0	1	0	0	0	0	0	0	0	180
17:00	3	131	22	0	3	0	0	0	0	0	0	0	0	0	0	159
Hour Total	12	571	78	4	13	1	0	2	0	0	0	0	0	0	0	681

Accurate Traffic Counts
 CLASSIFICATION SUMMARY
 Thu 1/16/2020

Site Ref: 000000000033
 Counter ID: 000000033036
 Location: Malabar Rd, Wof Daffodil Dr
 Direction: EAST
 Lane: 1

File: D0114006.prn
 City: Malabar
 County: Brevard

TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total

17:15	3	127	22	0	1	0	0	0	0	0	0	0	0	0	0	153
17:30	4	206	24	0	1	0	0	0	0	0	0	0	0	0	0	235
17:45	6	166	23	0	1	0	1	0	0	0	0	0	0	0	0	197
18:00	6	202	25	0	1	0	0	0	0	0	0	0	0	0	0	234
Hour Total	19	701	94	0	4	0	1	0	0	0	0	0	0	0	0	819

18:15	4	176	21	0	3	0	0	0	0	0	0	0	0	0	0	204
18:30	2	172	30	0	2	0	0	0	0	0	0	0	0	0	0	206
18:45	1	133	21	0	0	0	0	0	0	0	0	0	0	0	0	155
19:00	2	158	15	0	1	0	0	0	0	0	0	0	0	0	0	176
Hour Total	9	639	87	0	6	0	0	0	0	0	0	0	0	0	0	741

19:15	4	153	17	0	2	0	0	0	0	0	0	0	0	0	0	176
19:30	4	111	11	0	1	0	0	0	0	0	0	0	0	0	0	127
19:45	2	92	15	0	0	0	0	1	0	0	0	0	0	0	0	110
20:00	1	97	11	0	1	0	0	0	0	0	0	0	0	0	0	110
Hour Total	11	453	54	0	4	0	0	1	0	0	0	0	0	0	0	523

20:15	1	103	14	0	1	0	0	0	0	0	0	0	0	0	0	119
20:30	2	126	9	0	1	0	0	0	0	0	0	0	0	0	0	138
20:45	2	104	9	0	0	0	0	0	0	0	0	0	0	0	0	115
21:00	4	77	6	0	0	0	0	0	0	0	0	0	0	0	0	87
Hour Total	9	410	38	0	2	0	0	0	0	0	0	0	0	0	0	459

21:15	0	100	14	0	0	0	0	0	0	0	0	0	0	0	0	114
21:30	0	76	7	0	1	0	0	0	0	0	0	0	0	0	0	84
21:45	2	86	10	0	0	0	0	0	0	0	0	0	0	0	0	98
22:00	1	49	5	0	0	0	0	0	0	0	0	0	0	0	0	55
Hour Total	3	311	36	0	1	0	0	0	0	0	0	0	0	0	0	351

22:15	0	60	6	0	0	0	0	0	0	0	0	0	0	0	0	66
22:30	0	59	5	0	0	0	0	0	0	0	0	0	0	0	0	64
22:45	0	48	4	0	0	0	0	0	0	0	0	0	0	0	0	52
23:00	0	41	5	0	1	0	0	0	0	0	0	0	0	0	0	47
Hour Total	0	208	20	0	1	0	0	0	0	0	0	0	0	0	0	229

23:15	0	29	1	0	0	0	0	0	0	0	0	0	0	0	0	30
23:30	0	33	3	0	0	0	0	0	0	0	0	0	0	0	0	36
23:45	0	29	5	0	1	0	0	0	0	0	0	0	0	0	0	35
24:00	1	25	0	0	0	0	0	0	0	0	0	0	0	0	0	26
Hour Total	1	116	9	0	1	0	0	0	0	0	0	0	0	0	0	127

DAY TOTAL	157	7045	908	14	105	12	1	9	4	0	0	0	0	0	0	8255
PERCENTS	2.0%	85.4%	11.0%	0.2%	1.2%	0.1%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
Passenger Vehicles	98.2%															
																Trucks & Buses 1.7%
AM Times	11:15	07:45	07:30	08:00	08:15	08:15		09:30	08:15							08:00
AM Peaks	16	403	50	5	11	5		2	2							478
PM Times	17:30	17:30	17:45	15:30	12:15	14:00	17:00	13:45								17:30
PM Peaks	20	750	99	4	13	1	1	2								870

Accurate Traffic Counts
 CLASSIFICATION SUMMARY
 Tue 1/14/2020

Site Ref: 00000000033
 Counter ID: 000000033036
 Location: Malabar Rd, Wof Daffodil Dr
 Direction: WEST
 Lane: 2

File: D0114006.prn
 City: Malabar
 County: Brevard

TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total
00:15	0	12	1	0	0	0	0	1	0	0	0	0	0	0	0	14
00:30	0	7	1	0	0	0	0	0	0	0	0	0	0	0	0	8
00:45	0	9	2	0	0	0	0	0	0	0	0	0	0	0	0	11
01:00	0	6	2	0	0	0	0	0	0	0	0	0	0	0	0	8
Hour Total	0	34	6	0	0	0	0	1	0	0	0	0	0	0	0	41
01:15	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	8
01:30	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	6
01:45	0	6	1	0	0	0	0	0	0	0	0	0	0	0	0	7
02:00	0	8	1	0	1	0	0	0	0	0	0	0	0	0	0	10
Hour Total	0	28	2	0	1	0	0	0	0	0	0	0	0	0	0	31
02:15	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	6
02:30	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	8
02:45	0	9	2	0	0	0	0	0	0	0	0	0	0	0	0	11
03:00	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Hour Total	0	27	2	0	0	0	0	0	0	0	0	0	0	0	0	29
03:15	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	4
03:30	0	6	2	0	0	0	0	0	0	0	0	0	0	0	0	8
03:45	0	9	2	0	0	0	0	0	0	0	0	0	0	0	0	11
04:00	0	12	3	0	0	0	0	1	0	0	0	0	0	0	0	16
Hour Total	0	30	8	0	0	0	0	1	0	0	0	0	0	0	0	39
04:15	0	13	1	0	0	0	0	0	0	0	0	0	0	0	0	14
04:30	0	13	5	0	0	0	0	0	0	0	0	0	0	0	0	18
04:45	0	29	8	0	0	0	0	0	0	0	0	0	0	0	0	37
05:00	1	25	5	0	1	0	0	0	0	0	0	0	0	0	0	32
Hour Total	1	80	19	0	1	0	0	0	0	0	0	0	0	0	0	101
05:15	0	26	6	0	0	0	0	0	0	0	0	0	0	0	0	32
05:30	0	44	7	0	1	0	0	0	0	0	0	0	0	0	0	52
05:45	0	49	13	0	2	0	0	0	0	0	0	0	0	0	0	64
06:00	0	64	14	0	2	0	0	1	0	0	0	0	0	0	0	81
Hour Total	0	183	40	0	5	0	0	1	0	0	0	0	0	0	0	229
06:15	1	66	20	0	0	0	0	0	0	0	0	0	0	0	0	87
06:30	0	93	27	2	4	1	0	0	0	0	0	0	0	0	0	127
06:45	1	132	27	0	2	0	0	2	0	0	0	0	0	0	0	164
07:00	4	122	21	2	6	0	0	1	0	0	0	0	0	0	0	156
Hour Total	6	413	95	4	12	1	0	3	0	0	0	0	0	0	0	534
07:15	3	109	22	3	6	0	0	1	0	0	0	0	0	0	0	144
07:30	6	154	19	0	2	2	0	0	0	0	0	0	0	0	0	183
07:45	0	179	26	0	5	0	1	0	0	0	0	0	0	0	0	211
08:00	5	132	20	0	3	1	0	0	0	0	0	0	0	0	0	161
Hour Total	14	574	87	3	16	3	1	1	0	0	0	0	0	0	0	699
08:15	6	136	25	1	2	1	0	0	0	0	0	0	0	0	0	171
08:30	3	109	17	3	2	2	0	0	0	0	0	0	0	0	0	136
08:45	5	171	26	1	2	1	0	0	1	0	0	0	0	0	0	207
09:00	3	128	19	2	3	2	0	0	0	0	0	0	0	0	0	157

Accurate Traffic Counts
 CLASSIFICATION SUMMARY
 Tue 1/14/2020

Site Ref: 00000000033
 Counter ID: 000000033036
 Location: Malabar Rd, Wof Daffodil Dr
 Direction: WEST
 Lane: 2

File: D0114006.prn
 City: Malabar
 County: Brevard

TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total
Hour Total	17	544	87	7	9	6	0	0	1	0	0	0	0	0	0	671
09:15	4	113	19	1	3	3	0	2	1	0	0	0	0	0	0	146
09:30	1	122	17	1	2	0	0	0	0	0	0	0	0	0	0	143
09:45	1	91	30	0	3	1	0	0	0	0	0	0	0	0	0	126
10:00	2	108	19	1	4	2	0	1	0	0	0	0	0	0	0	137
Hour Total	8	434	85	3	12	6	0	3	1	0	0	0	0	0	0	552
10:15	1	114	24	0	2	1	0	0	0	0	0	0	0	0	0	142
10:30	1	100	20	0	0	0	1	2	0	0	0	0	0	0	0	124
10:45	2	122	18	0	2	1	0	0	0	0	0	0	0	0	0	145
11:00	1	103	22	0	3	2	0	1	0	0	0	0	0	0	0	132
Hour Total	5	439	84	0	7	4	1	3	0	0	0	0	0	0	0	543
11:15	2	110	12	0	5	0	0	0	0	0	0	0	0	0	0	129
11:30	2	107	20	0	3	0	0	0	0	0	0	0	0	0	0	132
11:45	1	105	31	0	4	3	0	0	0	0	0	0	0	0	0	144
12:00	3	94	17	1	2	1	0	0	0	0	0	0	0	0	0	118
Hour Total	8	416	80	1	14	4	0	0	0	0	0	0	0	0	0	523
12:15	2	96	18	1	2	0	0	0	0	0	0	0	0	0	0	119
12:30	5	95	18	0	1	3	0	0	0	0	0	0	0	0	0	122
12:45	5	79	12	1	1	0	2	0	0	0	0	0	0	0	0	100
13:00	0	100	22	0	3	1	0	1	0	0	0	0	0	0	0	127
Hour Total	12	370	70	2	7	4	2	1	0	0	0	0	0	0	0	468
13:15	1	105	23	0	3	2	0	1	1	0	0	0	0	0	0	136
13:30	5	93	19	0	5	4	0	0	0	0	0	0	0	0	0	126
13:45	2	97	17	0	3	0	0	3	0	0	0	0	0	0	0	122
14:00	1	86	16	1	0	0	0	1	1	0	0	0	0	0	0	106
Hour Total	9	381	75	1	11	6	0	5	2	0	0	0	0	0	0	490
14:15	0	114	20	1	5	3	0	0	0	0	0	0	0	0	0	143
14:30	1	87	16	1	1	0	0	0	0	0	0	0	0	0	0	106
14:45	3	120	19	0	2	0	0	1	0	0	0	0	0	0	0	145
15:00	3	123	17	0	1	1	0	0	1	0	0	0	0	0	0	146
Hour Total	7	444	72	2	9	4	0	1	1	0	0	0	0	0	0	540
15:15	1	121	18	1	1	1	0	0	0	0	0	0	0	0	0	143
15:30	0	70	13	3	0	0	0	2	0	0	0	0	0	0	0	88
15:45	1	116	17	1	0	1	0	0	0	0	0	0	0	0	0	136
16:00	4	141	14	4	6	0	0	0	0	0	0	0	0	0	0	169
Hour Total	6	448	62	9	7	2	0	2	0	0	0	0	0	0	0	536
16:15	1	128	23	3	1	0	0	0	0	0	0	0	0	0	0	156
16:30	3	106	17	0	1	0	0	0	1	0	0	0	0	0	0	128
16:45	2	106	18	1	2	1	0	3	0	0	0	0	0	0	0	133
17:00	3	114	16	0	4	0	0	1	0	0	0	0	0	0	0	138
Hour Total	9	454	74	4	8	1	0	4	1	0	0	0	0	0	0	555

Accurate Traffic Counts
 CLASSIFICATION SUMMARY
 Tue 1/14/2020

Site Ref: 00000000033
 Counter ID: 000000033036
 Location: Malabar Rd, Wof Daffodil Dr
 Direction: WEST
 Lane: 2

File: D0114006.prn
 City: Malabar
 County: Brevard

TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total

17:15	3	116	16	4	4	0	0	0	0	0	0	0	0	0	0	143
17:30	4	152	19	0	0	0	0	0	0	0	0	0	0	0	0	175
17:45	4	114	14	0	1	1	0	0	0	0	0	0	0	0	0	134
18:00	1	108	13	1	1	1	0	0	0	0	0	0	0	0	0	125
Hour Total	12	490	62	5	6	2	0	0	0	0	0	0	0	0	0	577

18:15	5	125	19	0	2	0	0	0	0	0	0	0	0	0	0	151
18:30	4	129	17	0	2	0	0	1	0	0	0	0	0	0	0	153
18:45	6	104	18	0	2	0	0	0	0	0	0	0	0	0	0	130
19:00	3	85	9	0	0	0	0	0	0	0	0	0	0	0	0	97
Hour Total	18	443	63	0	6	0	0	1	0	0	0	0	0	0	0	531

19:15	1	88	12	0	1	0	0	0	0	0	0	0	0	0	0	102
19:30	0	60	13	0	2	1	0	0	1	0	0	0	0	0	0	77
19:45	1	75	10	0	0	0	0	0	0	0	0	0	0	0	0	86
20:00	1	77	13	0	0	0	0	0	0	0	0	0	0	0	0	91
Hour Total	3	300	48	0	3	1	0	0	1	0	0	0	0	0	0	356

20:15	0	48	14	0	2	0	0	0	0	0	0	0	0	0	0	64
20:30	2	67	4	0	0	0	0	0	0	0	0	0	0	0	0	73
20:45	0	71	4	0	1	0	0	0	0	0	0	0	0	0	0	76
21:00	1	54	5	0	1	1	0	0	0	0	0	0	0	0	0	62
Hour Total	3	240	27	0	4	1	0	0	0	0	0	0	0	0	0	275

21:15	0	56	9	0	0	0	0	0	0	0	0	0	0	0	0	65
21:30	1	59	4	0	0	0	0	0	0	0	0	0	0	0	0	64
21:45	0	52	5	0	0	0	0	0	0	0	0	0	0	0	0	57
22:00	0	32	4	0	0	0	0	0	0	0	0	0	0	0	0	36
Hour Total	1	199	22	0	0	0	0	0	0	0	0	0	0	0	0	222

22:15	0	22	4	0	0	0	0	0	0	0	0	0	0	0	0	26
22:30	0	31	4	0	0	0	0	0	0	0	0	0	0	0	0	35
22:45	1	45	9	0	0	0	0	0	0	0	0	0	0	0	0	55
23:00	1	24	8	0	0	0	0	0	0	0	0	0	0	0	0	33
Hour Total	2	122	25	0	0	0	0	0	0	0	0	0	0	0	0	149

23:15	0	16	1	0	0	0	0	0	0	0	0	0	0	0	0	17
23:30	1	19	0	0	0	0	0	0	0	0	0	0	0	0	0	20
23:45	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	8
24:00	0	13	1	0	0	0	0	0	0	0	0	0	0	0	0	14
Hour Total	1	56	2	0	0	0	0	0	0	0	0	0	0	0	0	59

DAY TOTAL	142	7149	1197	41	138	45	4	27	7	0	0	0	0	0	0	8750
PERCENTS	1.7%	81.8%	13.7%	0.5%	1.5%	0.5%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
Passenger Vehicles	97.0%															
	Trucks & Buses 2.9%															
AM Times	08:00	07:30	06:30	06:30	07:00	08:30	07:00	06:30	08:30							07:30
AM Peaks	19	601	97	7	19	8	1	4	2							726
PM Times	18:15	17:30	13:00	15:30	13:00	12:45	12:15	13:00	13:15							17:00
PM Peaks	18	499	81	11	14	7	2	5	2							590

Accurate Traffic Counts
 CLASSIFICATION SUMMARY
 Wed 1/15/2020

Site Ref: 00000000033
 Counter ID: 000000033036
 Location: Malabar Rd, Wof Daffodil Dr
 Direction: WEST
 Lane: 2

File: D0114006.prn
 City: Malabar
 County: Brevard

TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total
00:15	0	14	1	0	0	0	0	0	0	0	0	0	0	0	0	15
00:30	0	8	2	0	0	0	0	0	0	0	0	0	0	0	0	10
00:45	0	8	2	0	0	0	0	0	0	0	0	0	0	0	0	10
01:00	0	7	1	0	0	0	0	0	0	0	0	0	0	0	0	8
Hour Total	0	37	6	0	0	0	0	0	0	0	0	0	0	0	0	43
01:15	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4
01:30	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	9
01:45	0	6	1	0	0	0	0	0	0	0	0	0	0	0	0	7
02:00	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	8
Hour Total	0	27	1	0	0	0	0	0	0	0	0	0	0	0	0	28
02:15	0	9	1	0	0	0	0	0	0	0	0	0	0	0	0	10
02:30	0	8	1	0	0	0	0	0	0	0	0	0	0	0	0	9
02:45	0	10	2	0	0	0	0	0	0	0	0	0	0	0	0	12
03:00	0	12	2	0	1	0	0	0	0	0	0	0	0	0	0	15
Hour Total	0	39	6	0	1	0	0	0	0	0	0	0	0	0	0	46
03:15	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	10
03:30	0	6	1	0	0	0	0	0	0	0	0	0	0	0	0	7
03:45	0	13	0	0	0	0	0	0	0	0	0	0	0	0	0	13
04:00	0	10	2	0	0	0	0	0	0	0	0	0	0	0	0	12
Hour Total	0	39	3	0	0	0	0	0	0	0	0	0	0	0	0	42
04:15	0	11	2	0	0	0	0	0	0	0	0	0	0	0	0	13
04:30	0	16	3	0	0	0	0	0	0	0	0	0	0	0	0	19
04:45	0	22	6	0	0	0	0	0	0	0	0	0	0	0	0	28
05:00	1	24	8	0	0	0	0	0	0	0	0	0	0	0	0	33
Hour Total	1	73	19	0	0	0	0	0	0	0	0	0	0	0	0	93
05:15	0	35	9	0	1	0	0	1	1	0	0	0	0	0	0	47
05:30	0	34	6	0	1	0	0	0	0	0	0	0	0	0	0	41
05:45	0	42	9	0	2	0	0	1	0	0	0	0	0	0	0	54
06:00	1	66	20	0	3	0	0	0	0	0	0	0	0	0	0	90
Hour Total	1	177	44	0	7	0	0	2	1	0	0	0	0	0	0	232
06:15	2	73	23	0	5	0	1	0	0	0	0	0	0	0	0	104
06:30	1	100	23	2	2	0	0	2	0	0	0	0	0	0	0	130
06:45	1	138	24	0	1	1	0	1	0	0	0	0	0	0	0	166
07:00	3	137	28	2	5	1	0	0	0	0	0	0	0	0	0	176
Hour Total	7	448	98	4	13	2	1	3	0	0	0	0	0	0	0	576
07:15	1	95	18	3	3	0	0	0	0	0	0	0	0	0	0	120
07:30	3	119	21	0	2	1	1	0	0	0	0	0	0	0	0	147
07:45	3	183	31	1	3	0	0	0	0	0	0	0	0	0	0	221
08:00	3	148	15	0	6	0	0	0	0	0	0	0	0	0	0	172
Hour Total	10	545	85	4	14	1	1	0	0	0	0	0	0	0	0	660
08:15	3	127	22	1	1	1	0	0	0	0	0	0	0	0	0	155
08:30	6	139	18	6	3	0	1	0	0	0	0	0	0	0	0	173
08:45	2	137	26	0	3	0	0	1	0	0	0	0	0	0	0	169
09:00	1	123	20	2	3	0	0	0	1	0	0	0	0	0	0	150

Accurate Traffic Counts
 CLASSIFICATION SUMMARY
 Wed 1/15/2020

Site Ref: 00000000033
 Counter ID: 000000033036
 Location: Malabar Rd, Wof Daffodil Dr
 Direction: WEST
 Lane: 2

File: D0114006.prn
 City: Malabar
 County: Brevard

TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total
Hour Total	12	526	86	9	10	1	1	1	1	0	0	0	0	0	0	647
09:15	3	112	20	1	2	1	0	0	0	0	0	0	0	0	0	139
09:30	0	108	16	0	3	4	0	0	0	0	0	0	0	0	0	131
09:45	0	116	14	0	0	0	0	0	1	0	0	0	0	0	0	131
10:00	1	105	22	1	4	0	0	1	0	0	0	0	0	0	0	134
Hour Total	4	441	72	2	9	5	0	1	1	0	0	0	0	0	0	535
10:15	2	94	23	1	3	0	0	0	0	0	0	0	0	0	0	123
10:30	2	118	14	0	1	1	0	1	0	0	0	0	0	0	0	137
10:45	1	114	23	2	1	1	0	0	0	0	0	0	0	0	0	142
11:00	3	92	14	0	2	3	0	0	0	0	0	0	0	0	0	114
Hour Total	8	418	74	3	7	5	0	1	0	0	0	0	0	0	0	516
11:15	3	82	18	0	2	0	0	0	1	0	0	0	0	0	0	106
11:30	1	90	10	0	1	3	0	1	0	0	0	0	0	0	0	106
11:45	3	144	27	0	1	0	0	2	0	0	0	0	0	0	0	177
12:00	3	112	15	0	8	1	0	0	1	0	0	0	0	0	0	140
Hour Total	10	428	70	0	12	4	0	3	2	0	0	0	0	0	0	529
12:15	2	88	20	0	3	1	1	1	0	0	0	0	0	0	0	116
12:30	2	96	20	0	0	1	0	0	0	0	0	0	0	0	0	119
12:45	0	79	19	0	0	1	1	0	0	0	0	0	0	0	0	100
13:00	0	107	21	1	1	1	1	1	0	0	0	0	0	0	0	133
Hour Total	4	370	80	1	4	4	3	2	0	0	0	0	0	0	0	468
13:15	0	109	19	0	2	1	1	2	0	0	0	0	0	0	0	134
13:30	2	82	19	0	3	1	0	1	0	0	0	0	0	0	0	108
13:45	4	97	15	0	2	0	0	0	0	0	0	0	0	0	0	118
14:00	1	96	19	0	2	2	1	0	0	0	0	0	0	0	0	121
Hour Total	7	384	72	0	9	4	2	3	0	0	0	0	0	0	0	481
14:15	4	87	20	0	0	2	0	1	0	0	0	0	0	0	0	114
14:30	4	104	18	2	6	1	0	0	0	0	0	0	0	0	0	135
14:45	3	121	16	0	3	0	2	1	0	0	0	0	0	0	0	146
15:00	3	102	13	1	3	1	0	0	1	0	0	0	0	0	0	124
Hour Total	14	414	67	3	12	4	2	2	1	0	0	0	0	0	0	519
15:15	1	112	20	0	4	1	0	0	0	0	0	0	0	0	0	138
15:30	1	83	14	0	0	1	1	0	0	0	1	0	0	0	0	101
15:45	4	131	14	0	3	1	0	0	0	0	0	0	0	0	0	153
16:00	0	125	17	4	3	2	0	1	0	0	0	0	0	0	0	152
Hour Total	6	451	65	4	10	5	1	1	0	0	1	0	0	0	0	544
16:15	7	113	14	1	1	2	0	1	0	0	0	0	0	0	0	139
16:30	2	97	16	0	3	0	0	0	1	0	0	0	0	0	0	119
16:45	1	94	14	1	1	1	1	1	0	0	0	0	0	0	0	114
17:00	2	107	14	0	4	1	0	1	0	0	0	0	0	0	0	129
Hour Total	12	411	58	2	9	4	1	3	1	0	0	0	0	0	0	501

Accurate Traffic Counts
 CLASSIFICATION SUMMARY
 Wed 1/15/2020

Site Ref: 00000000033
 Counter ID: 000000033036
 Location: Malabar Rd, Wof Daffodil Dr
 Direction: WEST
 Lane: 2

File: D0114006.prn
 City: Malabar
 County: Brevard

TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total

17:15	3	114	18	2	0	0	0	0	0	0	0	0	0	0	0	137
17:30	4	146	24	0	0	1	0	1	0	0	0	0	0	0	0	176
17:45	4	124	12	1	1	1	0	0	0	0	0	0	0	0	0	143
18:00	2	116	24	0	0	2	0	0	0	0	0	0	0	0	0	144
Hour Total	13	500	78	3	1	4	0	1	0	0	0	0	0	0	0	600

18:15	2	126	18	0	1	2	0	1	1	0	0	0	0	0	0	151
18:30	0	137	22	1	3	0	0	0	0	0	0	0	0	0	0	163
18:45	6	113	18	0	1	0	0	1	0	0	0	0	0	0	0	139
19:00	2	73	5	0	2	0	0	0	0	0	0	0	0	0	0	82
Hour Total	10	449	63	1	7	2	0	2	1	0	0	0	0	0	0	535

19:15	2	94	14	1	2	0	0	0	0	0	0	0	0	0	0	113
19:30	0	96	7	0	0	0	0	1	0	0	0	0	0	0	0	104
19:45	0	71	14	0	2	0	0	0	0	0	0	0	0	0	0	87
20:00	1	65	8	0	1	0	0	0	0	0	0	0	0	0	0	75
Hour Total	3	326	43	1	5	0	0	1	0	0	0	0	0	0	0	379

20:15	0	57	7	0	1	0	0	0	0	0	0	0	0	0	0	65
20:30	1	51	7	0	0	0	0	0	0	0	0	0	0	0	0	59
20:45	0	58	7	0	0	0	0	0	0	0	0	0	0	0	0	65
21:00	1	40	6	0	0	0	0	0	0	0	0	0	0	0	0	47
Hour Total	2	206	27	0	1	0	0	0	0	0	0	0	0	0	0	236

21:15	3	61	3	0	1	0	0	0	0	0	0	0	0	0	0	68
21:30	0	34	4	0	0	0	0	0	0	0	0	0	0	0	0	38
21:45	0	43	4	0	0	0	0	0	0	0	0	0	0	0	0	47
22:00	2	32	2	0	0	0	0	0	0	0	0	0	0	0	0	36
Hour Total	5	170	13	0	1	0	0	0	0	0	0	0	0	0	0	189

22:15	0	39	3	0	0	0	0	0	1	0	0	0	0	0	0	43
22:30	0	27	4	0	0	0	0	0	0	0	0	0	0	0	0	31
22:45	0	30	2	0	0	0	0	0	0	0	0	0	0	0	0	32
23:00	0	23	1	0	0	0	0	0	0	0	0	0	0	0	0	24
Hour Total	0	119	10	0	0	0	0	0	1	0	0	0	0	0	0	130

23:15	1	19	1	0	0	0	0	0	0	0	0	0	0	0	0	21
23:30	1	15	2	0	0	0	0	0	0	0	0	0	0	0	0	18
23:45	0	14	0	0	0	0	0	0	0	0	0	0	0	0	0	14
24:00	0	9	2	0	0	0	0	0	0	0	0	0	0	0	0	11
Hour Total	2	57	5	0	0	0	0	0	0	0	0	0	0	0	0	64

DAY TOTAL	131	7055	1145	37	132	45	12	26	9	0	1	0	0	0	0	8593
PERCENTS	1.6%	82.2%	13.3%	0.4%	1.5%	0.5%	0.1%	0.3%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
Passenger Vehicles	97.9%															
	Trucks & Buses 3.0%															
AM Times	07:45	07:45	06:15	08:15	07:15	10:45	05:30	05:45	09:00							07:45
AM Peaks	15	597	98	9	14	7	1	3	2							721
PM Times	14:15	17:30	18:00	16:00	14:30	15:30	12:15	12:45	14:15	14:45				17:30		
PM Peaks	14	512	82	6	16	6	3	4	1	1				614		

Accurate Traffic Counts
 CLASSIFICATION SUMMARY
 Thu 1/16/2020

Site Ref: 00000000033
 Counter ID: 000000033036
 Location: Malabar Rd, Wof Daffodil Dr
 Direction: WEST
 Lane: 2

File: D0114006.prn
 City: Malabar
 County: Brevard

TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total
00:15	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	11
00:30	0	8	1	0	0	0	0	0	0	0	0	0	0	0	0	9
00:45	0	6	1	0	0	0	0	0	0	0	0	0	0	0	0	7
01:00	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	5
Hour Total	0	30	2	0	0	0	0	0	0	0	0	0	0	0	0	32
01:15	1	5	0	0	0	0	0	0	0	0	0	0	0	0	0	6
01:30	0	4	1	0	0	0	0	0	0	0	0	0	0	0	0	5
01:45	0	5	0	0	1	0	0	0	0	0	0	0	0	0	0	6
02:00	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	7
Hour Total	1	21	1	0	1	0	0	0	0	0	0	0	0	0	0	24
02:15	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	5
02:30	0	7	1	0	0	0	0	0	0	0	0	0	0	0	0	8
02:45	0	4	1	0	0	0	0	0	0	0	0	0	0	0	0	5
03:00	0	5	1	0	0	0	0	0	0	0	0	0	0	0	0	6
Hour Total	0	21	3	0	0	0	0	0	0	0	0	0	0	0	0	24
03:15	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	7
03:30	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4
03:45	0	12	2	0	0	0	0	0	0	0	0	0	0	0	0	14
04:00	0	7	1	0	0	0	0	0	0	0	0	0	0	0	0	8
Hour Total	0	30	3	0	0	0	0	0	0	0	0	0	0	0	0	33
04:15	0	10	4	0	0	0	0	0	0	0	0	0	0	0	0	14
04:30	0	14	2	0	0	0	0	0	0	0	0	0	0	0	0	16
04:45	0	29	10	0	0	0	0	0	0	0	0	0	0	0	0	39
05:00	1	26	4	0	0	0	0	0	0	0	0	0	0	0	0	31
Hour Total	1	79	20	0	0	0	0	0	0	0	0	0	0	0	0	100
05:15	0	35	3	0	2	0	0	0	0	0	0	0	0	0	0	40
05:30	0	38	12	0	0	0	0	0	0	0	0	0	0	0	0	50
05:45	1	47	12	0	3	0	0	0	0	0	0	0	0	0	0	63
06:00	0	51	21	0	2	0	0	1	0	0	0	0	0	0	0	75
Hour Total	1	171	48	0	7	0	0	1	0	0	0	0	0	0	0	228
06:15	1	76	18	0	5	0	0	1	0	0	0	0	0	0	0	101
06:30	1	106	23	2	0	1	0	1	0	0	0	0	0	0	0	134
06:45	2	125	33	0	4	0	0	0	0	0	0	0	0	0	0	164
07:00	1	132	21	2	2	0	0	0	0	0	0	0	0	0	0	158
Hour Total	5	439	95	4	11	1	0	2	0	0	0	0	0	0	0	557
07:15	0	143	22	3	6	0	0	1	0	0	0	0	0	0	0	175
07:30	0	164	27	1	2	0	0	1	0	0	0	0	0	0	0	195
07:45	6	157	28	1	7	1	0	1	1	0	0	0	0	0	0	202
08:00	1	142	24	0	2	2	0	0	0	0	0	0	0	0	0	171
Hour Total	7	606	101	5	17	3	0	3	1	0	0	0	0	0	0	743
08:15	2	119	23	1	1	1	0	1	1	0	0	0	0	0	0	149
08:30	6	120	21	4	3	1	0	0	0	0	0	0	0	0	0	155
08:45	1	158	18	0	2	1	0	0	0	0	0	0	0	0	0	180
09:00	1	127	21	1	4	0	0	0	0	0	0	0	0	0	0	154

Accurate Traffic Counts
 CLASSIFICATION SUMMARY
 Thu 1/16/2020

Site Ref: 00000000033
 Counter ID: 000000033036
 Location: Malabar Rd, Wof Daffodil Dr
 Direction: WEST
 Lane: 2

File: D0114006.prn
 City: Malabar
 County: Brevard

TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total
Hour Total	10	524	83	6	10	3	0	1	1	0	0	0	0	0	0	638
09:15	4	141	20	1	1	2	0	0	1	0	0	0	0	0	0	170
09:30	4	120	14	0	0	1	0	1	0	0	0	0	0	0	0	140
09:45	1	124	21	0	3	1	0	2	1	0	0	0	0	0	0	153
10:00	1	111	27	0	3	1	0	0	0	0	0	0	0	0	0	143
Hour Total	10	496	82	1	7	5	0	3	2	0	0	0	0	0	0	606
10:15	2	119	14	0	2	0	1	0	0	0	0	0	0	0	0	138
10:30	3	107	15	0	3	1	0	0	1	0	0	0	0	0	0	130
10:45	2	118	21	0	2	0	0	0	0	0	0	0	0	0	0	143
11:00	1	91	8	0	2	1	0	0	0	0	0	0	0	0	0	103
Hour Total	8	435	58	0	9	2	1	0	1	0	0	0	0	0	0	514
11:15	3	111	15	1	1	0	0	0	0	0	0	0	0	0	0	131
11:30	1	73	16	0	0	0	1	0	1	0	0	0	0	0	0	92
11:45	1	109	11	1	3	0	0	0	0	0	0	0	0	0	0	125
12:00	6	110	18	1	3	1	0	0	0	0	0	0	0	0	0	139
Hour Total	11	403	60	3	7	1	1	0	1	0	0	0	0	0	0	487
12:15	4	86	11	0	1	0	0	0	0	0	0	0	0	0	0	102
12:30	0	104	13	0	1	1	0	0	0	0	0	0	0	0	0	119
12:45	3	109	13	0	3	0	0	1	1	0	0	0	0	0	0	130
13:00	2	97	23	0	3	0	0	0	0	0	0	0	0	0	0	125
Hour Total	9	396	60	0	8	1	0	1	1	0	0	0	0	0	0	476
13:15	2	98	17	0	2	0	0	1	0	0	0	0	0	0	0	120
13:30	2	98	16	0	4	0	0	0	0	0	0	0	0	0	0	120
13:45	3	93	11	0	1	0	0	0	0	0	0	0	0	0	0	108
14:00	1	90	13	0	2	0	0	0	0	0	0	0	0	0	0	106
Hour Total	8	379	57	0	9	0	0	1	0	0	0	0	0	0	0	454
14:15	3	116	14	0	1	0	0	0	0	0	0	0	0	0	0	134
14:30	2	91	15	4	3	0	0	0	0	0	0	0	0	0	0	115
14:45	7	102	14	0	3	0	0	0	0	0	0	0	0	0	0	126
15:00	6	137	23	1	3	0	0	0	0	0	0	0	0	0	0	170
Hour Total	18	446	66	5	10	0	0	0	0	0	0	0	0	0	0	545
15:15	4	124	22	0	4	1	0	0	0	0	0	0	0	0	0	155
15:30	2	102	17	1	2	1	0	0	0	0	0	0	0	0	0	125
15:45	3	86	13	3	1	1	0	0	0	0	0	0	0	0	0	107
16:00	3	48	5	2	1	1	0	0	0	0	0	0	0	0	0	60
Hour Total	12	360	57	6	8	4	0	0	0	0	0	0	0	0	0	447
16:15	6	132	17	1	1	0	0	0	0	0	0	0	0	0	0	157
16:30	4	114	17	0	2	1	0	2	0	0	0	0	0	0	0	140
16:45	3	92	17	1	2	1	0	0	0	0	0	0	0	0	0	116
17:00	5	100	12	0	1	0	0	1	0	0	0	0	0	0	0	119
Hour Total	18	438	63	2	6	2	0	3	0	0	0	0	0	0	0	532

Accurate Traffic Counts
CLASSIFICATION SUMMARY
Thu 1/16/2020

Site Ref: 00000000033
Counter ID: 000000033036
Location: Malabar Rd, Wof Daffodil Dr
Direction: WEST
Lane: 2

File: D0114006.prn
City: Malabar
County: Brevard

TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total

17:15	1	105	18	2	1	1	0	0	0	0	0	0	0	0	0	128
17:30	4	135	23	0	1	0	0	0	0	0	0	0	0	0	0	163
17:45	1	115	20	0	1	0	0	0	0	0	0	0	0	0	0	137
18:00	5	119	18	1	0	1	0	0	0	0	0	0	0	0	0	144
Hour Total	11	474	79	3	3	2	0	0	0	0	0	0	0	0	0	572

18:15	6	131	14	0	2	0	0	1	0	0	0	0	0	0	0	154
18:30	3	137	18	0	2	0	0	0	0	0	0	0	0	0	0	160
18:45	2	125	12	0	0	0	0	0	0	0	0	0	0	0	0	139
19:00	1	105	15	0	0	0	0	1	0	0	0	0	0	0	0	122
Hour Total	12	498	59	0	4	0	0	2	0	0	0	0	0	0	0	575

19:15	2	81	14	0	1	0	0	0	0	0	0	0	0	0	0	98
19:30	2	98	14	0	0	0	0	0	0	0	0	0	0	0	0	114
19:45	1	115	20	0	0	1	0	1	0	0	0	0	0	0	0	138
20:00	3	86	4	0	1	1	0	0	0	0	0	0	0	0	0	95
Hour Total	8	380	52	0	2	2	0	1	0	0	0	0	0	0	0	445

20:15	1	78	6	0	1	0	0	0	0	0	0	0	0	0	0	86
20:30	0	59	6	0	1	0	0	0	0	0	0	0	0	0	0	66
20:45	0	66	5	0	2	0	0	1	0	0	0	0	0	0	0	74
21:00	1	55	3	0	0	0	0	0	0	0	0	0	0	0	0	59
Hour Total	2	258	20	0	4	0	0	1	0	0	0	0	0	0	0	285

21:15	1	35	4	0	0	0	0	0	0	0	0	0	0	0	0	40
21:30	0	45	8	0	1	0	0	0	0	0	0	0	0	0	0	54
21:45	0	34	7	0	0	0	0	0	0	0	0	0	0	0	0	41
22:00	0	37	3	0	0	0	0	0	0	0	0	0	0	0	0	40
Hour Total	1	151	22	0	1	0	0	0	0	0	0	0	0	0	0	175

22:15	0	28	3	0	0	0	0	0	0	0	0	0	0	0	0	31
22:30	1	29	3	0	0	0	0	0	0	0	0	0	0	0	0	33
22:45	0	23	1	0	1	0	0	0	0	0	0	0	0	0	0	25
23:00	0	21	2	0	0	0	0	0	0	0	0	0	0	0	0	23
Hour Total	1	101	9	0	1	0	0	0	0	0	0	0	0	0	0	112

23:15	1	24	1	0	0	0	0	0	0	0	0	0	0	0	0	26
23:30	0	18	3	0	1	0	0	0	0	0	0	0	0	0	0	22
23:45	1	16	1	0	0	0	0	0	0	0	0	0	0	0	0	18
24:00	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	11
Hour Total	2	69	5	0	1	0	0	0	0	0	0	0	0	0	0	77

DAY TOTAL	156	7205	1105	35	126	26	2	19	7	0	0	0	0	0	0	8681
PERCENTS	1.8%	83.0%	12.8%	0.5%	1.5%	0.2%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
Passenger Vehicles	97.5%															
	Trucks & Buses															2.4%
AM Times	07:45	07:15	06:45	06:30	07:00	07:45	09:30	05:45	07:30							07:15
AM Peaks	15	606	103	7	17	5	1	3	2							743
PM Times	14:30	18:00	17:15	15:30	14:30	15:15	16:15	12:15							17:30	
PM Peaks	19	512	79	7	13	4	3	1							598	

Accurate Traffic Counts
 CLASSIFICATION SUMMARY
 Tue 1/14/2020

Site Ref: 000000000033
 Counter ID: 000000033036
 Location: Malabar Rd, Wof Daffodil Dr
 Direction: ROAD TOTAL

File: D0114006.prn
 City: Malabar
 County: Brevard

TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total
00:15	0	37	6	0	0	0	0	1	0	0	0	0	0	0	0	44
00:30	1	31	4	0	0	0	0	0	0	0	0	0	0	0	0	36
00:45	0	20	3	0	0	0	0	0	0	0	0	0	0	0	0	23
01:00	0	19	4	0	0	0	0	0	0	0	0	0	0	0	0	23
Hour Total	1	107	17	0	0	0	0	1	0	0	0	0	0	0	0	126
01:15	0	24	1	0	0	0	0	0	0	0	0	0	0	0	0	25
01:30	0	12	1	0	0	0	0	0	0	0	0	0	0	0	0	13
01:45	0	12	1	0	0	0	0	0	0	0	0	0	0	0	0	13
02:00	0	18	1	0	1	0	0	0	0	0	0	0	0	0	0	20
Hour Total	0	66	4	0	1	0	0	0	0	0	0	0	0	0	0	71
02:15	0	14	1	0	0	0	0	0	0	0	0	0	0	0	0	15
02:30	0	18	0	0	0	0	0	0	0	0	0	0	0	0	0	18
02:45	0	15	2	0	0	0	0	0	0	0	0	0	0	0	0	17
03:00	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	8
Hour Total	0	55	3	0	0	0	0	0	0	0	0	0	0	0	0	58
03:15	0	6	3	0	0	0	0	0	0	0	0	0	0	0	0	9
03:30	0	12	2	0	0	0	0	0	0	0	0	0	0	0	0	14
03:45	0	13	2	0	0	0	0	0	0	0	0	0	0	0	0	15
04:00	0	16	3	0	0	0	0	1	0	0	0	0	0	0	0	20
Hour Total	0	47	10	0	0	0	0	1	0	0	0	0	0	0	0	58
04:15	0	19	1	0	0	0	0	0	0	0	0	0	0	0	0	20
04:30	0	15	5	0	0	0	0	0	0	0	0	0	0	0	0	20
04:45	0	33	10	0	0	0	0	0	0	0	0	0	0	0	0	43
05:00	1	31	6	0	1	0	0	0	1	0	0	0	0	0	0	40
Hour Total	1	98	22	0	1	0	0	0	1	0	0	0	0	0	0	123
05:15	0	35	7	0	1	0	0	0	0	0	0	0	0	0	0	43
05:30	0	54	8	0	1	0	0	1	0	0	0	0	0	0	0	64
05:45	0	57	15	0	2	0	0	0	0	0	0	0	0	0	0	74
06:00	0	79	17	0	2	1	0	1	0	0	0	0	0	0	0	100
Hour Total	0	225	47	0	6	1	0	2	0	0	0	0	0	0	0	281
06:15	1	93	26	0	0	0	0	0	0	0	0	0	0	0	0	120
06:30	0	122	33	2	4	2	0	1	0	0	0	0	0	0	0	164
06:45	4	180	35	1	5	0	0	2	0	0	0	0	0	0	0	227
07:00	5	164	30	2	8	2	0	1	0	0	0	0	0	0	0	212
Hour Total	10	559	124	5	17	4	0	4	0	0	0	0	0	0	0	723
07:15	4	145	28	3	7	0	0	1	0	0	0	0	0	0	0	188
07:30	6	209	32	1	3	3	0	0	0	0	0	0	0	0	0	254
07:45	1	265	44	0	7	1	1	1	0	0	0	0	0	0	0	320
08:00	9	244	29	1	7	1	0	1	0	0	0	0	0	0	0	292
Hour Total	20	863	133	5	24	5	1	3	0	0	0	0	0	0	0	1054
08:15	7	250	41	1	3	4	0	2	0	0	0	0	0	0	0	308
08:30	6	210	31	5	4	3	0	0	0	0	0	0	0	0	0	259
08:45	5	231	35	1	5	1	0	1	1	0	0	0	0	0	0	280
09:00	8	187	28	2	6	2	0	0	0	0	0	0	0	0	0	233

Accurate Traffic Counts
 CLASSIFICATION SUMMARY
 Tue 1/14/2020

Site Ref: 00000000033
 Counter ID: 000000033036
 Location: Malabar Rd, Wof Daffodil Dr
 Direction: ROAD TOTAL

File: D0114006.prn
 City: Malabar
 County: Brevard

TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total
Hour Total	26	878	135	9	18	10	0	3	1	0	0	0	0	0	0	1080
09:15	6	164	33	1	7	4	0	2	1	0	0	0	0	0	0	218
09:30	2	187	33	2	5	0	0	0	0	0	0	0	0	0	0	229
09:45	4	176	42	0	5	1	0	0	0	0	0	0	0	0	0	228
10:00	3	183	36	1	6	3	0	2	0	0	0	0	0	0	0	234
Hour Total	15	710	144	4	23	8	0	4	1	0	0	0	0	0	0	909
10:15	3	165	32	0	3	2	1	0	0	0	0	0	0	0	0	206
10:30	2	173	29	0	1	0	1	2	0	0	0	0	0	0	0	208
10:45	4	217	26	0	3	1	0	0	0	0	0	0	0	0	0	251
11:00	1	188	34	0	8	3	0	1	0	0	0	0	0	0	0	235
Hour Total	10	743	121	0	15	6	2	3	0	0	0	0	0	0	0	900
11:15	3	208	29	1	7	1	0	0	0	0	0	0	0	0	0	249
11:30	4	192	28	0	3	0	0	0	0	0	0	0	0	0	0	227
11:45	1	194	42	2	5	4	0	0	0	0	0	0	0	0	0	248
12:00	7	196	28	1	3	6	0	0	0	0	0	0	0	0	0	241
Hour Total	15	790	127	4	18	11	0	0	0	0	0	0	0	0	0	965
12:15	4	184	39	1	9	2	0	0	0	0	0	0	0	0	0	239
12:30	8	188	34	0	3	4	0	2	0	0	0	0	0	0	0	239
12:45	8	183	23	1	3	2	3	0	1	0	0	0	0	0	0	224
13:00	1	196	39	0	6	2	0	1	0	0	0	0	0	0	0	245
Hour Total	21	751	135	2	21	10	3	3	1	0	0	0	0	0	0	947
13:15	5	195	41	0	6	2	0	1	1	0	0	0	0	0	0	251
13:30	9	173	38	2	8	5	0	0	0	0	0	0	0	0	0	235
13:45	3	185	40	0	6	0	0	3	1	0	0	0	0	0	0	238
14:00	2	186	42	2	3	1	0	1	1	0	0	0	0	0	0	238
Hour Total	19	739	161	4	23	8	0	5	3	0	0	0	0	0	0	962
14:15	1	205	30	1	5	3	0	0	0	0	0	0	0	0	0	245
14:30	3	201	36	1	3	3	0	0	0	0	0	0	0	0	0	247
14:45	6	254	37	0	2	0	0	1	1	0	0	0	0	0	0	301
15:00	3	249	39	1	5	3	0	0	1	0	0	0	0	0	0	301
Hour Total	13	909	142	3	15	9	0	1	2	0	0	0	0	0	0	1094
15:15	3	255	35	2	4	1	0	0	0	0	0	0	0	0	0	300
15:30	0	181	23	4	2	0	0	2	0	0	0	0	0	0	0	212
15:45	3	273	27	1	3	1	0	0	1	0	0	0	0	0	0	309
16:00	7	289	38	5	6	0	0	1	0	0	0	0	0	0	0	346
Hour Total	13	998	123	12	15	2	0	3	1	0	0	0	0	0	0	1167
16:15	3	282	48	3	3	2	0	0	0	0	0	0	0	0	0	341
16:30	5	264	38	1	1	0	0	0	1	0	0	0	0	0	0	310
16:45	6	258	43	3	5	1	0	3	0	0	0	0	0	0	0	319
17:00	8	282	41	0	6	0	0	1	0	0	0	0	0	0	0	338
Hour Total	22	1086	170	7	15	3	0	4	1	0	0	0	0	0	0	1308

Accurate Traffic Counts
 CLASSIFICATION SUMMARY
 Tue 1/14/2020

Site Ref: 00000000033
 Counter ID: 000000033036
 Location: Malabar Rd, Wof Daffodil Dr
 Direction: ROAD TOTAL

File: D0114006.prn
 City: Malabar
 County: Brevard

TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total

17:15	6	272	39	4	5	0	0	0	0	0	0	0	0	0	0	326
17:30	8	331	39	1	1	0	0	0	0	0	0	0	0	0	0	380
17:45	5	286	37	0	1	1	0	1	0	0	0	0	0	0	0	331
18:00	1	277	37	1	3	1	0	1	0	0	0	0	0	0	0	321
Hour Total	20	1166	152	6	10	2	0	2	0	0	0	0	0	0	0	1358

18:15	7	287	35	0	5	1	0	1	0	0	0	0	0	0	0	336
18:30	5	302	39	0	5	0	0	1	0	0	0	0	0	0	0	352
18:45	7	254	33	0	4	0	0	0	0	0	0	0	0	0	0	298
19:00	5	233	31	0	3	0	0	0	0	0	0	0	0	0	0	272
Hour Total	24	1076	138	0	17	1	0	2	0	0	0	0	0	0	0	1258

19:15	5	232	26	0	3	0	0	0	0	0	0	0	0	0	0	266
19:30	1	180	24	0	3	1	0	0	1	0	0	0	0	0	0	210
19:45	5	175	22	0	1	0	0	0	0	0	0	0	0	0	0	203
20:00	2	182	27	0	2	0	0	0	0	0	0	0	0	0	0	213
Hour Total	13	769	99	0	9	1	0	0	1	0	0	0	0	0	0	892

20:15	1	147	26	0	3	0	0	0	0	0	0	0	0	0	0	177
20:30	3	176	17	0	3	0	0	0	0	0	0	0	0	0	0	199
20:45	3	172	22	0	1	0	0	0	0	0	0	0	0	0	0	198
21:00	2	137	9	0	2	1	0	0	0	0	0	0	0	0	0	151
Hour Total	9	632	74	0	9	1	0	0	0	0	0	0	0	0	0	725

21:15	1	147	15	0	0	0	0	0	0	0	0	0	0	0	0	163
21:30	2	134	12	0	1	0	0	0	0	0	0	0	0	0	0	149
21:45	1	116	9	0	1	1	0	0	0	0	0	0	0	0	0	128
22:00	1	96	6	0	0	0	0	0	0	0	0	0	0	0	0	103
Hour Total	5	493	42	0	2	1	0	0	0	0	0	0	0	0	0	543

22:15	0	75	10	0	1	0	0	0	0	0	0	0	0	0	0	86
22:30	0	71	11	0	0	0	0	0	0	0	0	0	0	0	0	82
22:45	2	90	13	0	0	0	0	0	0	0	0	0	0	0	0	105
23:00	1	60	13	0	1	0	0	1	0	0	0	0	0	0	0	76
Hour Total	3	296	47	0	2	0	0	1	0	0	0	0	0	0	0	349

23:15	0	58	2	0	0	0	0	0	0	0	0	0	0	0	0	60
23:30	1	55	1	0	0	0	0	0	0	0	0	0	0	0	0	57
23:45	0	32	5	0	0	0	0	0	0	0	0	0	0	0	0	37
24:00	0	36	3	0	0	0	0	0	0	0	0	0	0	0	0	39
Hour Total	1	181	11	0	0	0	0	0	0	0	0	0	0	0	0	193

DAY TOTAL	261	14237	2181	61	261	83	6	42	12	0	0	0	0	0	0	17144
PERCENTS	1.6%	83.1%	12.8%	0.4%	1.5%	0.4%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
Passenger Vehicles	97.2%															
Trucks & Buses	2.7%															

AM Times	08:00	07:45	07:30	08:15	07:00	11:15	09:45	06:30	08:30							07:45
AM Peaks	27	969	146	9	25	11	2	5	2							1179

PM Times	16:45	17:30	16:15	15:30	13:00	12:45	12:15	13:00	13:15							17:00
PM Peaks	28	1181	170	13	26	11	3	5	3							1375

Accurate Traffic Counts
 CLASSIFICATION SUMMARY
 Wed 1/15/2020

Site Ref: 00000000033
 Counter ID: 000000033036
 Location: Malabar Rd, Wof Daffodil Dr
 Direction: ROAD TOTAL

File: D0114006.prn
 City: Malabar
 County: Brevard

TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total
00:15	0	40	4	0	0	0	0	0	0	0	0	0	0	0	0	44
00:30	0	32	4	0	0	0	0	0	0	0	0	0	0	0	0	36
00:45	0	26	3	0	0	0	0	0	0	0	0	0	0	0	0	29
01:00	0	14	2	0	0	0	0	0	0	0	0	0	0	0	0	16
Hour Total	0	112	13	0	0	0	0	0	0	0	0	0	0	0	0	125
01:15	0	16	0	0	0	0	0	0	0	0	0	0	0	0	0	16
01:30	0	25	0	0	0	0	0	0	0	0	0	0	0	0	0	25
01:45	0	16	1	0	0	0	0	0	0	0	0	0	0	0	0	17
02:00	0	16	0	0	0	0	0	0	0	0	0	0	0	0	0	16
Hour Total	0	73	1	0	0	0	0	0	0	0	0	0	0	0	0	74
02:15	0	17	1	0	0	0	0	0	0	0	0	0	0	0	0	18
02:30	0	14	1	0	0	0	0	0	0	0	0	0	0	0	0	15
02:45	0	16	4	0	0	0	0	0	0	0	0	0	0	0	0	20
03:00	0	17	2	0	1	0	0	0	0	0	0	0	0	0	0	20
Hour Total	0	64	8	0	1	0	0	0	0	0	0	0	0	0	0	73
03:15	0	19	2	0	0	0	0	0	0	0	0	0	0	0	0	21
03:30	0	15	1	0	0	0	0	0	0	0	0	0	0	0	0	16
03:45	0	17	0	0	0	0	0	0	0	0	0	0	0	0	0	17
04:00	0	16	2	0	0	0	0	0	0	0	0	0	0	0	0	18
Hour Total	0	67	5	0	0	0	0	0	0	0	0	0	0	0	0	72
04:15	0	16	4	0	0	0	0	0	0	0	0	0	0	0	0	20
04:30	0	19	4	0	0	0	0	0	1	0	0	0	0	0	0	24
04:45	0	25	7	0	0	0	0	0	0	0	0	0	0	0	0	32
05:00	1	28	8	0	0	0	0	0	0	0	0	0	0	0	0	37
Hour Total	1	88	23	0	0	0	0	0	1	0	0	0	0	0	0	113
05:15	0	43	9	0	2	0	0	1	1	0	0	0	0	0	0	56
05:30	0	45	9	0	1	0	0	0	0	0	0	0	0	0	0	55
05:45	1	51	11	0	2	0	0	3	0	0	0	0	0	0	0	68
06:00	2	84	24	0	3	1	0	0	0	0	0	0	0	0	0	114
Hour Total	3	223	53	0	8	1	0	4	1	0	0	0	0	0	0	293
06:15	4	98	26	0	5	0	1	0	0	0	0	0	0	0	0	134
06:30	1	122	31	2	3	0	0	2	0	0	0	0	0	0	0	161
06:45	2	181	30	1	2	2	0	1	0	0	0	0	0	0	0	219
07:00	5	179	34	2	6	1	0	0	0	0	0	0	0	0	0	227
Hour Total	12	580	121	5	16	3	1	3	0	0	0	0	0	0	0	741
07:15	1	134	25	3	3	1	0	0	0	0	0	0	0	0	0	167
07:30	4	158	30	0	3	1	1	0	0	0	0	0	0	0	0	197
07:45	6	257	39	1	4	1	0	0	0	0	0	0	0	0	0	308
08:00	7	250	28	1	8	2	0	0	0	0	0	0	0	0	0	296
Hour Total	18	799	122	5	18	5	1	0	0	0	0	0	0	0	0	968
08:15	6	232	34	1	5	1	0	1	0	0	0	0	0	0	0	280
08:30	9	231	37	8	4	0	1	0	0	0	0	0	0	0	0	290
08:45	4	205	39	1	5	2	0	1	1	0	0	0	0	0	0	258
09:00	1	183	34	2	7	0	0	0	1	0	0	0	0	0	0	228

Accurate Traffic Counts
 CLASSIFICATION SUMMARY
 Wed 1/15/2020

Site Ref: 00000000033
 Counter ID: 000000033036
 Location: Malabar Rd, Wof Daffodil Dr
 Direction: ROAD TOTAL

File: D0114006.prn
 City: Malabar
 County: Brevard

TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total
-----	-----															
Hour Total	20	851	144	12	21	3	1	2	2	0	0	0	0	0	0	1056
09:15	5	150	23	1	5	2	0	0	0	0	0	0	0	0	0	186
09:30	1	168	35	0	3	4	0	0	0	0	0	0	0	0	0	211
09:45	1	198	29	1	2	1	0	2	1	0	0	0	0	0	0	235
10:00	1	178	32	1	7	1	0	1	1	0	0	0	0	0	0	222
-----	-----															
Hour Total	8	694	119	3	17	8	0	3	2	0	0	0	0	0	0	854
10:15	3	165	34	1	4	1	0	1	0	0	0	0	0	0	0	209
10:30	2	184	22	1	2	2	0	1	0	0	0	0	0	0	0	214
10:45	1	190	35	2	2	1	0	1	0	0	0	0	0	0	0	232
11:00	7	169	24	0	5	3	0	0	0	0	0	0	0	0	0	208
-----	-----															
Hour Total	13	708	115	4	13	7	0	3	0	0	0	0	0	0	0	863
11:15	4	172	31	0	2	1	0	2	1	0	0	0	0	0	0	213
11:30	4	166	23	0	5	3	0	2	0	0	0	0	0	0	0	203
11:45	8	233	39	1	3	0	0	3	0	0	0	0	0	0	0	287
12:00	6	206	39	0	9	2	0	2	1	0	0	0	0	0	0	265
-----	-----															
Hour Total	22	777	132	1	19	6	0	9	2	0	0	0	0	0	0	968
12:15	5	173	35	0	4	1	1	1	0	0	0	0	0	0	0	220
12:30	6	205	34	0	0	1	0	0	0	0	0	0	0	0	0	246
12:45	1	168	35	1	1	5	1	0	0	0	0	0	0	0	0	212
13:00	3	202	39	1	5	1	1	1	0	0	0	0	0	0	0	253
-----	-----															
Hour Total	15	748	143	2	10	8	3	2	0	0	0	0	0	0	0	931
13:15	1	212	33	0	4	3	1	2	0	0	0	0	0	0	0	256
13:30	2	166	28	0	4	2	0	1	0	0	1	0	0	0	0	204
13:45	8	191	29	0	2	1	0	0	0	0	0	0	0	0	0	231
14:00	6	188	45	0	5	5	1	1	1	0	0	0	0	0	0	252
-----	-----															
Hour Total	17	757	135	0	15	11	2	4	1	0	1	0	0	0	0	943
14:15	8	188	43	0	1	3	0	1	0	0	0	0	0	0	0	244
14:30	5	222	31	2	6	1	0	0	0	0	0	0	0	0	0	267
14:45	3	227	42	0	3	2	2	1	0	0	0	0	0	0	0	280
15:00	4	218	26	2	7	2	0	0	1	0	0	0	0	0	0	260
-----	-----															
Hour Total	20	855	142	4	17	8	2	2	1	0	0	0	0	0	0	1051
15:15	3	241	35	0	6	2	0	1	0	0	0	0	0	0	0	288
15:30	4	235	31	1	2	1	1	1	1	0	1	0	0	0	0	278
15:45	7	281	28	1	3	1	0	0	0	0	0	0	0	0	0	321
16:00	2	245	30	6	4	4	0	2	0	0	0	0	0	0	0	293
-----	-----															
Hour Total	16	1002	124	8	15	8	1	4	1	0	1	0	0	0	0	1180
16:15	10	253	32	1	2	3	0	1	0	0	0	0	0	0	0	302
16:30	6	225	36	2	5	0	0	2	1	0	0	0	0	0	0	277
16:45	4	249	44	1	4	1	1	1	0	0	0	0	0	0	0	305
17:00	4	256	42	0	7	1	0	1	0	0	0	0	0	0	0	311
-----	-----															
Hour Total	24	983	154	4	18	5	1	5	1	0	0	0	0	0	0	1195

Accurate Traffic Counts
 CLASSIFICATION SUMMARY
 Wed 1/15/2020

Site Ref: 00000000033
 Counter ID: 000000033036
 Location: Malabar Rd, Wof Daffodil Dr
 Direction: ROAD TOTAL

File: D0114006.prn
 City: Malabar
 County: Brevard

TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total

17:15	5	270	36	2	0	0	0	0	0	0	0	0	0	0	0	313
17:30	7	330	55	0	0	1	0	1	0	0	0	0	0	0	0	394
17:45	7	288	31	1	2	1	0	0	0	0	0	0	0	0	0	330
18:00	5	300	40	1	2	2	0	0	0	0	0	0	0	0	0	350
Hour Total	24	1188	162	4	4	4	0	1	0	0	0	0	0	0	0	1387

18:15	5	282	28	2	4	2	0	1	1	0	0	0	0	0	0	325
18:30	2	306	37	1	5	0	0	0	0	0	0	0	0	0	0	351
18:45	10	271	47	0	1	0	0	1	0	0	0	0	0	0	0	330
19:00	3	185	21	0	4	0	0	0	0	0	0	0	0	0	0	213
Hour Total	20	1044	133	3	14	2	0	2	1	0	0	0	0	0	0	1219

19:15	3	250	29	1	7	0	0	0	0	0	0	0	0	0	0	290
19:30	4	211	20	0	1	0	0	1	0	0	0	0	0	0	0	237
19:45	2	204	33	0	2	0	0	0	0	0	0	0	0	0	0	241
20:00	1	197	27	0	2	0	0	0	1	0	0	0	0	0	0	228
Hour Total	10	862	109	1	12	0	0	1	1	0	0	0	0	0	0	996

20:15	2	158	15	0	2	0	0	0	0	0	0	0	0	0	0	177
20:30	2	167	14	0	0	0	0	0	0	0	0	0	0	0	0	183
20:45	0	159	24	0	0	0	0	0	0	0	0	0	0	0	0	183
21:00	3	133	17	0	0	0	0	0	0	0	0	0	0	0	0	153
Hour Total	7	617	70	0	2	0	0	0	0	0	0	0	0	0	0	696

21:15	3	146	7	0	1	0	0	0	0	0	0	0	0	0	0	157
21:30	1	127	9	0	0	0	0	0	0	0	0	0	0	0	0	137
21:45	1	106	11	0	1	0	0	0	0	0	0	0	0	0	0	119
22:00	2	99	10	0	0	0	0	0	0	0	0	0	0	0	0	111
Hour Total	7	478	37	0	2	0	0	0	0	0	0	0	0	0	0	524

22:15	1	99	5	0	1	0	0	0	1	0	0	0	0	0	0	107
22:30	0	87	9	0	0	0	0	0	0	0	0	0	0	0	0	96
22:45	0	77	7	0	0	0	0	0	0	0	0	0	0	0	0	84
23:00	0	66	3	0	0	0	0	0	0	0	0	0	0	0	0	69
Hour Total	1	329	24	0	1	0	0	0	1	0	0	0	0	0	0	356

23:15	1	49	2	0	0	0	0	0	0	0	0	0	0	0	0	52
23:30	1	43	6	0	0	0	0	0	0	0	0	0	0	0	0	50
23:45	0	36	4	0	0	0	0	0	0	0	0	0	0	0	0	40
24:00	0	30	5	0	0	0	0	0	0	0	0	0	0	0	0	35
Hour Total	2	158	17	0	0	0	0	0	0	0	0	0	0	0	0	177

DAY TOTAL	260	14057	2106	56	223	79	12	45	15	0	2	0	0	0	0	16855
PERCENTS	1.6%	83.4%	12.5%	0.4%	1.4%	0.5%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
Passenger Vehicles	97.4%															
	Trucks & Buses 2.5%															
AM Times	07:45	07:45	08:15	08:15	08:00	08:45	05:30	11:15	04:30							07:45
AM Peaks	28	970	144	12	22	8	1	9	2							1174
PM Times	13:45	17:30	16:45	15:45	14:30	12:45	12:15	16:00	14:45	12:45					17:30	
PM Peaks	27	1200	177	10	22	11	3	6	2	1					1399	

Accurate Traffic Counts
 CLASSIFICATION SUMMARY
 Thu 1/16/2020

Site Ref: 00000000033
 Counter ID: 000000033036
 Location: Malabar Rd, Wof Daffodil Dr
 Direction: ROAD TOTAL

File: D0114006.prn
 City: Malabar
 County: Brevard

TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total
00:15	1	32	2	0	0	0	0	0	0	0	0	0	0	0	0	35
00:30	0	29	3	0	0	0	0	0	0	0	0	0	0	0	0	32
00:45	0	26	4	0	0	0	0	0	0	0	0	0	0	0	0	30
01:00	0	16	0	0	0	0	0	0	0	0	0	0	0	0	0	16
Hour Total	1	103	9	0	0	0	0	0	0	0	0	0	0	0	0	113
01:15	1	12	0	0	0	0	0	0	0	0	0	0	0	0	0	13
01:30	0	15	1	0	0	0	0	0	0	0	0	0	0	0	0	16
01:45	0	14	1	0	1	0	0	0	0	0	0	0	0	0	0	16
02:00	0	12	1	0	0	0	0	0	0	0	0	0	0	0	0	13
Hour Total	1	53	3	0	1	0	0	0	0	0	0	0	0	0	0	58
02:15	0	15	0	0	0	0	0	0	0	0	0	0	0	0	0	15
02:30	0	11	1	0	0	0	0	0	0	0	0	0	0	0	0	12
02:45	0	11	1	0	0	0	0	0	0	0	0	0	0	0	0	12
03:00	0	9	1	0	1	0	0	0	0	0	0	0	0	0	0	11
Hour Total	0	46	3	0	1	0	0	0	0	0	0	0	0	0	0	50
03:15	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	11
03:30	0	5	1	0	0	0	0	0	0	0	0	0	0	0	0	6
03:45	0	17	2	0	0	0	0	0	0	0	0	0	0	0	0	19
04:00	0	10	2	0	0	0	0	0	0	0	0	0	0	0	0	12
Hour Total	0	43	5	0	0	0	0	0	0	0	0	0	0	0	0	48
04:15	0	15	4	0	0	0	0	0	0	0	0	0	0	0	0	19
04:30	0	20	3	0	0	0	0	0	0	0	0	0	0	0	0	23
04:45	0	35	12	0	0	0	0	0	0	0	0	0	0	0	0	47
05:00	1	33	4	0	0	0	0	0	1	0	0	0	0	0	0	39
Hour Total	1	103	23	0	0	0	0	0	1	0	0	0	0	0	0	128
05:15	0	46	4	0	2	0	0	0	0	0	0	0	0	0	0	52
05:30	0	48	13	0	1	0	0	0	0	0	0	0	0	0	0	62
05:45	1	60	13	0	3	0	0	1	0	0	0	0	0	0	0	78
06:00	1	66	22	0	2	1	0	1	0	0	0	0	0	0	0	93
Hour Total	2	220	52	0	8	1	0	2	0	0	0	0	0	0	0	285
06:15	1	89	22	0	5	1	0	1	0	0	0	0	0	0	0	119
06:30	1	135	28	2	0	1	0	1	0	0	0	0	0	0	0	168
06:45	2	167	39	1	5	2	0	1	0	0	0	0	0	0	0	217
07:00	3	178	24	2	3	0	0	0	0	0	0	0	0	0	0	210
Hour Total	7	569	113	5	13	4	0	3	0	0	0	0	0	0	0	714
07:15	1	194	34	3	6	0	0	1	0	0	0	0	0	0	0	239
07:30	0	231	37	1	3	0	0	1	0	0	0	0	0	0	0	273
07:45	8	234	37	1	10	1	0	1	1	0	0	0	0	0	0	293
08:00	4	249	38	1	5	2	0	0	0	0	0	0	0	0	0	299
Hour Total	13	908	146	6	24	3	0	3	1	0	0	0	0	0	0	1104
08:15	4	238	40	2	3	1	0	1	1	0	0	0	0	0	0	290
08:30	9	220	26	6	5	3	0	0	0	0	0	0	0	0	0	269
08:45	4	232	32	1	3	3	0	0	0	0	0	0	0	0	0	275
09:00	2	187	34	1	10	1	0	0	2	0	0	0	0	0	0	237

Accurate Traffic Counts
 CLASSIFICATION SUMMARY
 Thu 1/16/2020

Site Ref: 00000000033
 Counter ID: 000000033036
 Location: Malabar Rd, Wof Daffodil Dr
 Direction: ROAD TOTAL

File: D0114006.prn
 City: Malabar
 County: Brevard

TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total
-----	-----															
Hour Total	19	877	132	10	21	8	0	1	3	0	0	0	0	0	0	1071
09:15	6	206	36	1	2	2	0	0	1	0	0	0	0	0	0	254
09:30	6	193	21	0	3	1	0	1	0	0	0	0	0	0	0	225
09:45	1	202	28	0	4	1	0	2	1	0	0	0	0	0	0	239
10:00	3	173	35	0	6	1	0	1	0	0	0	0	0	0	0	219
-----	-----															
Hour Total	16	774	120	1	15	5	0	4	2	0	0	0	0	0	0	937
10:15	2	185	31	0	5	0	1	1	0	0	0	0	0	0	0	225
10:30	4	195	26	0	3	1	0	0	1	0	0	0	0	0	0	230
10:45	6	216	25	0	4	0	0	0	0	0	0	0	0	0	0	251
11:00	3	180	21	0	3	2	0	0	0	0	0	0	0	0	0	209
-----	-----															
Hour Total	15	776	103	0	15	3	1	1	1	0	0	0	0	0	0	915
11:15	5	206	31	2	2	0	0	0	0	0	0	0	0	0	0	246
11:30	5	141	25	0	1	0	1	0	1	0	0	0	0	0	0	174
11:45	3	198	21	1	3	0	0	0	1	0	0	0	0	0	0	227
12:00	14	197	33	1	5	1	0	0	0	0	0	0	0	0	0	251
-----	-----															
Hour Total	27	742	110	4	11	1	1	0	2	0	0	0	0	0	0	898
12:15	9	201	25	0	3	0	0	0	0	0	0	0	0	0	0	238
12:30	1	196	31	0	5	1	0	0	0	0	0	0	0	0	0	234
12:45	4	225	24	0	5	0	0	1	1	0	0	0	0	0	0	260
13:00	9	178	35	0	8	0	0	0	0	0	0	0	0	0	0	230
-----	-----															
Hour Total	23	800	115	0	21	1	0	1	1	0	0	0	0	0	0	962
13:15	5	179	28	0	4	0	0	1	0	0	0	0	0	0	0	217
13:30	8	180	22	0	5	0	0	0	0	0	0	0	0	0	0	215
13:45	6	177	25	0	3	0	0	0	0	0	0	0	0	0	0	211
14:00	3	200	31	0	5	0	0	1	0	0	0	0	0	0	0	240
-----	-----															
Hour Total	22	736	106	0	17	0	0	2	0	0	0	0	0	0	0	883
14:15	6	205	24	0	3	0	0	0	0	0	0	0	0	0	0	238
14:30	2	205	31	4	4	0	0	1	0	0	0	0	0	0	0	247
14:45	8	213	32	0	4	1	0	0	0	0	0	0	0	0	0	258
15:00	8	244	36	1	7	0	0	0	0	0	0	0	0	0	0	296
-----	-----															
Hour Total	24	867	123	5	18	1	0	1	0	0	0	0	0	0	0	1039
15:15	8	254	48	0	5	1	0	0	0	0	0	0	0	0	0	316
15:30	5	245	32	3	4	1	0	0	0	0	0	0	0	0	0	290
15:45	5	248	33	4	2	1	0	0	0	0	0	0	0	0	0	293
16:00	5	108	12	2	1	1	0	0	0	0	0	0	0	0	0	129
-----	-----															
Hour Total	23	855	125	9	12	4	0	0	0	0	0	0	0	0	0	1028
16:15	10	275	35	2	5	0	0	0	0	0	0	0	0	0	0	327
16:30	7	257	38	2	4	1	0	3	0	0	0	0	0	0	0	312
16:45	5	246	34	2	6	2	0	1	0	0	0	0	0	0	0	296
17:00	8	231	34	0	4	0	0	1	0	0	0	0	0	0	0	278
-----	-----															
Hour Total	30	1009	141	6	19	3	0	5	0	0	0	0	0	0	0	1213

Accurate Traffic Counts
CLASSIFICATION SUMMARY
Thu 1/16/2020

Site Ref: 00000000033
Counter ID: 000000033036
Location: Malabar Rd, Wof Daffodil Dr
Direction: ROAD TOTAL

File: D0114006.prn
City: Malabar
County: Brevard

TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total

17:15	4	232	40	2	2	1	0	0	0	0	0	0	0	0	0	281
17:30	8	341	47	0	2	0	0	0	0	0	0	0	0	0	0	398
17:45	7	281	43	0	2	0	1	0	0	0	0	0	0	0	0	334
18:00	11	321	43	1	1	1	0	0	0	0	0	0	0	0	0	378
Hour Total	30	1175	173	3	7	2	1	0	0	0	0	0	0	0	0	1391

18:15	10	307	35	0	5	0	0	1	0	0	0	0	0	0	0	358
18:30	5	309	48	0	4	0	0	0	0	0	0	0	0	0	0	366
18:45	3	258	33	0	0	0	0	0	0	0	0	0	0	0	0	294
19:00	3	263	30	0	1	0	0	1	0	0	0	0	0	0	0	298
Hour Total	21	1137	146	0	10	0	0	2	0	0	0	0	0	0	0	1316

19:15	6	234	31	0	3	0	0	0	0	0	0	0	0	0	0	274
19:30	6	209	25	0	1	0	0	0	0	0	0	0	0	0	0	241
19:45	3	207	35	0	0	1	0	2	0	0	0	0	0	0	0	248
20:00	4	183	15	0	2	1	0	0	0	0	0	0	0	0	0	205
Hour Total	19	833	106	0	6	2	0	2	0	0	0	0	0	0	0	968

20:15	2	181	20	0	2	0	0	0	0	0	0	0	0	0	0	205
20:30	2	185	15	0	2	0	0	0	0	0	0	0	0	0	0	204
20:45	2	170	14	0	2	0	0	1	0	0	0	0	0	0	0	189
21:00	5	132	9	0	0	0	0	0	0	0	0	0	0	0	0	146
Hour Total	11	668	58	0	6	0	0	1	0	0	0	0	0	0	0	744

21:15	1	135	18	0	0	0	0	0	0	0	0	0	0	0	0	154
21:30	0	121	15	0	2	0	0	0	0	0	0	0	0	0	0	138
21:45	2	120	17	0	0	0	0	0	0	0	0	0	0	0	0	139
22:00	1	86	8	0	0	0	0	0	0	0	0	0	0	0	0	95
Hour Total	4	462	58	0	2	0	0	0	0	0	0	0	0	0	0	526

22:15	0	88	9	0	0	0	0	0	0	0	0	0	0	0	0	97
22:30	1	88	8	0	0	0	0	0	0	0	0	0	0	0	0	97
22:45	0	71	5	0	1	0	0	0	0	0	0	0	0	0	0	77
23:00	0	62	7	0	1	0	0	0	0	0	0	0	0	0	0	70
Hour Total	1	309	29	0	2	0	0	0	0	0	0	0	0	0	0	341

23:15	1	53	2	0	0	0	0	0	0	0	0	0	0	0	0	56
23:30	0	51	6	0	1	0	0	0	0	0	0	0	0	0	0	58
23:45	1	45	6	0	1	0	0	0	0	0	0	0	0	0	0	53
24:00	1	36	0	0	0	0	0	0	0	0	0	0	0	0	0	37
Hour Total	3	185	14	0	2	0	0	0	0	0	0	0	0	0	0	204

DAY TOTAL	313	14250	2013	49	231	38	3	28	11	0	0	0	0	0	0	16936
PERCENTS	1.9%	84.2%	11.9%	0.3%	1.4%	0.2%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
Passenger Vehicles	97.8%															
	Trucks & Buses 2.1%															
AM Times	11:15	07:30	07:30	07:45	07:15	08:00	09:30	09:30	09:00							07:30
AM Peaks	27	952	152	10	24	9	1	5	4							1155
PM Times	17:30	17:30	17:15	15:30	12:30	15:15	17:00	16:15	12:15							17:30
PM Peaks	36	1250	173	11	22	4	1	5	1							1468

INTERSECTION TURNING MOVEMENT COUNTS

Accurate Traffic Counts, Inc.

1750 W Broadway St., Suite 115
Oviedo, FL 32765

Station: 001

File Name : Int 001_Malabar Rd at St Johns Heritage Pkwy_All Traffic

Counted by: Santiago

Site Code : 001-2331

Weather: Clear

Start Date : 1/16/2020

Location: Malabar Rd at St Johns Heritage Pkwy Page No : 1

Groups Printed- General Traffic - Truck Traffic - Turn

Start Time	St Johns Heritage Pkwy Southbound				Malabar Rd Westbound				Northbound				Malabar Rd Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00	10	0	7	17	0	17	97	114	0	0	0	0	10	9	0	19	150
07:15	21	0	15	36	0	11	132	143	0	0	0	0	4	4	0	8	187
07:30	23	0	17	40	0	20	99	119	0	0	0	0	6	6	0	12	171
07:45	23	0	24	47	0	30	77	107	0	0	0	0	3	10	0	13	167
Total	77	0	63	140	0	78	405	483	0	0	0	0	23	29	0	52	675
08:00	17	0	41	58	0	65	75	140	0	0	0	0	13	33	0	46	244
08:15	18	0	57	75	0	135	70	205	0	0	0	0	25	62	0	87	367
08:30	17	0	76	93	0	148	43	191	0	0	0	0	56	91	0	147	431
08:45	21	0	9	30	0	15	45	60	0	0	0	0	23	40	0	63	153
Total	73	0	183	256	0	363	233	596	0	0	0	0	117	226	0	343	1195
*** BREAK ***																	
16:00	63	0	11	74	0	8	29	37	0	0	0	0	27	20	0	47	158
16:15	75	0	10	85	0	16	26	42	0	0	0	0	8	10	0	18	145
16:30	73	0	12	85	0	19	21	40	0	0	0	0	17	32	0	49	174
16:45	78	0	27	105	0	30	27	57	0	0	0	0	11	20	0	31	193
Total	289	0	60	349	0	73	103	176	0	0	0	0	63	82	0	145	670
17:00	105	0	12	117	0	28	36	64	0	0	0	0	23	38	0	61	242
17:15	95	0	11	106	0	12	36	48	0	0	0	0	17	18	0	35	189
17:30	119	0	11	130	0	16	42	58	0	0	0	0	14	20	0	34	222
17:45	121	0	7	128	0	13	33	46	0	0	0	0	10	19	0	29	203
Total	440	0	41	481	0	69	147	216	0	0	0	0	64	95	0	159	856
Grand Total	879	0	347	1226	0	583	888	1471	0	0	0	0	267	432	0	699	3396
Apprch %	71.7	0	28.3		0	39.6	60.4		0	0	0		38.2	61.8	0		
Total %	25.9	0	10.2	36.1	0	17.2	26.1	43.3	0	0	0	0	7.9	12.7	0	20.6	
General Traffic	859	0	323	1182	0	549	868	1417	0	0	0	0	249	410	0	659	3258
% General Traffic	97.7	0	93.1	96.4	0	94.2	97.7	96.3	0	0	0	0	93.3	94.9	0	94.3	95.9
Truck Traffic	20	0	24	44	0	34	20	54	0	0	0	0	18	22	0	40	138
% Truck Traffic	2.3	0	6.9	3.6	0	5.8	2.3	3.7	0	0	0	0	6.7	5.1	0	5.7	4.1
U-Turn	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% U-Turn	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Accurate Traffic Counts, Inc.

1750 W Broadway St., Suite 115
Oviedo, FL 32765

Station: 001
Counted by: Santiago
Weather: Clear
Location: Malabar Rd at St Johns Heritage

File Name : Int 001_Malabar Rd at St Johns Heritage Pkwy_All Traffic
Site Code : 001-2331
Start Date : 1/16/2020
Page No : 2

Start Time	St Johns Heritage Pkwy Southbound				Malabar Rd Westbound				Northbound				Malabar Rd Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45																	
07:45	23	0	24	47	0	30	77	107	0	0	0	0	3	10	0	13	167
08:00	17	0	41	58	0	65	75	140	0	0	0	0	13	33	0	46	244
08:15	18	0	57	75	0	135	70	205	0	0	0	0	25	62	0	87	367
08:30	17	0	76	93	0	148	43	191	0	0	0	0	56	91	0	147	431
Total Volume	75	0	198	273	0	378	265	643	0	0	0	0	97	196	0	293	1209
% App. Total	27.5	0	72.5		0	58.8	41.2		0	0	0		33.1	66.9	0		
PHF	.815	.000	.651	.734	.000	.639	.860	.784	.000	.000	.000	.000	.433	.538	.000	.498	.701
General Traffic	66	0	185	251	0	361	257	618	0	0	0	0	86	185	0	271	1140
% General Traffic	88.0	0	93.4	91.9	0	95.5	97.0	96.1	0	0	0	0	88.7	94.4	0	92.5	94.3
Truck Traffic	9	0	13	22	0	17	8	25	0	0	0	0	11	11	0	22	69
% Truck Traffic	12.0	0	6.6	8.1	0	4.5	3.0	3.9	0	0	0	0	11.3	5.6	0	7.5	5.7
U-Turn	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% U-Turn	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 17:00																	
17:00	105	0	12	117	0	28	36	64	0	0	0	0	23	38	0	61	242
17:15	95	0	11	106	0	12	36	48	0	0	0	0	17	18	0	35	189
17:30	119	0	11	130	0	16	42	58	0	0	0	0	14	20	0	34	222
17:45	121	0	7	128	0	13	33	46	0	0	0	0	10	19	0	29	203
Total Volume	440	0	41	481	0	69	147	216	0	0	0	0	64	95	0	159	856
% App. Total	91.5	0	8.5		0	31.9	68.1		0	0	0		40.3	59.7	0		
PHF	.909	.000	.854	.925	.000	.616	.875	.844	.000	.000	.000	.000	.696	.625	.000	.652	.884
General Traffic	440	0	38	478	0	66	143	209	0	0	0	0	64	94	0	158	845
% General Traffic	100	0	92.7	99.4	0	95.7	97.3	96.8	0	0	0	0	100	98.9	0	99.4	98.7
Truck Traffic	0	0	3	3	0	3	4	7	0	0	0	0	0	1	0	1	11
% Truck Traffic	0	0	7.3	0.6	0	4.3	2.7	3.2	0	0	0	0	0	1.1	0	0.6	1.3
U-Turn	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% U-Turn	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Accurate Traffic Counts, Inc.

1750 W Broadway St., Suite 115
Oviedo, FL 32765

Station: 002
Counted by: Santiago
Weather: Clear
Location: Malabar Rd at Snapdragon Dr

File Name : Int 002_Malabar Rd at Snapdragon Dr_All Traffic
Site Code : 002-2331
Start Date : 1/16/2020
Page No : 1

Groups Printed- General Traffic - Truck Traffic - Turn

Start Time	Snapdragon Dr Southbound				Malabar Rd Westbound				Northbound				Malabar Rd Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00	8	0	12	20	0	104	2	106	0	0	0	0	2	17	0	19	145
07:15	11	0	17	28	0	117	4	121	0	0	0	0	1	22	0	23	172
07:30	15	0	6	21	0	125	1	126	0	0	0	0	1	32	0	33	180
07:45	14	0	8	22	0	97	10	107	0	0	0	0	1	28	0	29	158
Total	48	0	43	91	0	443	17	460	0	0	0	0	5	99	0	104	655
08:00	5	0	12	17	0	127	15	142	0	0	0	0	0	51	0	51	210
08:15	6	0	14	20	0	189	3	192	0	0	0	0	4	71	0	75	287
08:30	7	0	24	31	0	169	9	178	0	0	0	0	3	107	0	110	319
08:45	9	0	7	16	0	54	4	58	0	0	0	0	5	59	0	64	138
Total	27	0	57	84	0	539	31	570	0	0	0	0	12	288	0	300	954
*** BREAK ***																	
16:00	3	0	0	3	0	38	5	43	0	0	0	0	6	79	0	85	131
16:15	6	0	0	6	0	42	11	53	0	0	0	0	2	80	0	82	141
16:30	12	0	5	17	0	35	9	44	0	0	0	0	12	90	0	102	163
16:45	4	0	3	7	1	55	8	64	0	0	0	0	8	90	0	98	169
Total	25	0	8	33	1	170	33	204	0	0	0	0	28	339	0	367	604
17:00	6	0	2	8	0	63	10	73	0	0	0	0	9	132	0	141	222
17:15	13	0	6	19	0	43	13	56	0	0	0	0	13	103	0	116	191
17:30	3	0	3	6	0	56	10	66	0	0	0	0	14	124	0	138	210
17:45	3	0	4	7	0	46	8	54	0	0	0	0	12	125	0	137	198
Total	25	0	15	40	0	208	41	249	0	0	0	0	48	484	0	532	821
Grand Total	125	0	123	248	1	1360	122	1483	0	0	0	0	93	1210	0	1303	3034
Apprch %	50.4	0	49.6		0.1	91.7	8.2		0	0	0		7.1	92.9	0		
Total %	4.1	0	4.1	8.2	0	44.8	4	48.9	0	0	0	0	3.1	39.9	0	42.9	
General Traffic	124	0	123	247	1	1306	122	1429	0	0	0	0	92	1169	0	1261	2937
% General Traffic	99.2	0	100	99.6	100	96	100	96.4	0	0	0	0	98.9	96.6	0	96.8	96.8
Truck Traffic	1	0	0	1	0	54	0	54	0	0	0	0	1	41	0	42	97
% Truck Traffic	0.8	0	0	0.4	0	4	0	3.6	0	0	0	0	1.1	3.4	0	3.2	3.2
U-Turn	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% U-Turn	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Accurate Traffic Counts, Inc.

1750 W Broadway St., Suite 115
Oviedo, FL 32765

Station: 002
Counted by: Santiago
Weather: Clear
Location: Malabar Rd at Snapdragon Dr

File Name : Int 002_Malabar Rd at Snapdragon Dr_All Traffic
Site Code : 002-2331
Start Date : 1/16/2020
Page No : 2

Start Time	Snapdragon Dr Southbound				Malabar Rd Westbound				Northbound				Malabar Rd Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45																	
07:45	14	0	8	22	0	97	10	107	0	0	0	0	1	28	0	29	158
08:00	5	0	12	17	0	127	15	142	0	0	0	0	0	51	0	51	210
08:15	6	0	14	20	0	189	3	192	0	0	0	0	4	71	0	75	287
08:30	7	0	24	31	0	169	9	178	0	0	0	0	3	107	0	110	319
Total Volume	32	0	58	90	0	582	37	619	0	0	0	0	8	257	0	265	974
% App. Total	35.6	0	64.4		0	94	6		0	0	0		3	97	0		
PHF	.571	.000	.604	.726	.000	.770	.617	.806	.000	.000	.000	.000	.500	.600	.000	.602	.763
General Traffic	32	0	58	90	0	558	37	595	0	0	0	0	8	238	0	246	931
% General Traffic	100	0	100	100	0	95.9	100	96.1	0	0	0	0	100	92.6	0	92.8	95.6
Truck Traffic	0	0	0	0	0	24	0	24	0	0	0	0	0	19	0	19	43
% Truck Traffic	0	0	0	0	0	4.1	0	3.9	0	0	0	0	0	7.4	0	7.2	4.4
U-Turn	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% U-Turn	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 17:00																	
17:00	6	0	2	8	0	63	10	73	0	0	0	0	9	132	0	141	222
17:15	13	0	6	19	0	43	13	56	0	0	0	0	13	103	0	116	191
17:30	3	0	3	6	0	56	10	66	0	0	0	0	14	124	0	138	210
17:45	3	0	4	7	0	46	8	54	0	0	0	0	12	125	0	137	198
Total Volume	25	0	15	40	0	208	41	249	0	0	0	0	48	484	0	532	821
% App. Total	62.5	0	37.5		0	83.5	16.5		0	0	0		9	91	0		
PHF	.481	.000	.625	.526	.000	.825	.788	.853	.000	.000	.000	.000	.857	.917	.000	.943	.925
General Traffic	25	0	15	40	0	201	41	242	0	0	0	0	48	483	0	531	813
% General Traffic	100	0	100	100	0	96.6	100	97.2	0	0	0	0	100	99.8	0	99.8	99.0
Truck Traffic	0	0	0	0	0	7	0	7	0	0	0	0	0	1	0	1	8
% Truck Traffic	0	0	0	0	0	3.4	0	2.8	0	0	0	0	0	0.2	0	0.2	1.0
U-Turn	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% U-Turn	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Accurate Traffic Counts, Inc.

1750 W Broadway St., Suite 115
Oviedo, FL 32765

Station: 003 File Name : Int 003_Malabar Rd at Championship Cir NW_All Traffic
 Counted by: Santiago Site Code : 003-2294
 Weather: Clear Start Date : 1/16/2020
 Location: Malabar Rd at Championship Cir Page No : 1

Groups Printed- General Traffic - Truck Traffic - Turn

Start Time	Championship Cir NW Southbound				Malabar Rd Westbound				Northbound				Malabar Rd Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00	0	0	0	0	0	105	2	107	0	0	0	0	1	23	0	24	131
07:15	0	0	0	0	0	118	3	121	0	0	0	0	1	29	0	30	151
07:30	1	0	0	1	0	121	1	122	0	0	0	0	1	46	0	47	170
07:45	2	0	2	4	0	111	4	115	0	0	0	0	1	45	0	46	165
Total	3	0	2	5	0	455	10	465	0	0	0	0	4	143	0	147	617
08:00	2	0	0	2	0	144	3	147	0	0	0	0	1	54	0	55	204
08:15	1	0	0	1	0	192	3	195	0	0	0	0	1	72	0	73	269
08:30	1	0	1	2	0	174	1	175	0	0	0	0	1	117	0	118	295
08:45	3	0	0	3	0	59	6	65	0	0	0	0	3	64	0	67	135
Total	7	0	1	8	0	569	13	582	0	0	0	0	6	307	0	313	903
*** BREAK ***																	
16:00	5	0	1	6	0	42	2	44	0	0	0	0	1	78	0	79	129
16:15	1	0	1	2	0	54	7	61	0	0	0	0	2	85	0	87	150
16:30	2	0	0	2	0	42	1	43	0	0	0	0	0	99	0	99	144
16:45	2	0	6	8	0	62	6	68	0	0	0	0	5	87	0	92	168
Total	10	0	8	18	0	200	16	216	0	0	0	0	8	349	0	357	591
17:00	6	0	3	9	0	66	3	69	0	0	0	0	5	135	0	140	218
17:15	1	0	3	4	0	53	8	61	0	0	0	0	5	109	0	114	179
17:30	8	0	2	10	0	64	13	77	0	0	0	0	6	121	0	127	214
17:45	10	0	8	18	0	47	17	64	0	0	0	0	11	121	0	132	214
Total	25	0	16	41	0	230	41	271	0	0	0	0	27	486	0	513	825
Grand Total	45	0	27	72	0	1454	80	1534	0	0	0	0	45	1285	0	1330	2936
Apprch %	62.5	0	37.5		0	94.8	5.2		0	0	0		3.4	96.6	0		
Total %	1.5	0	0.9	2.5	0	49.5	2.7	52.2	0	0	0	0	1.5	43.8	0	45.3	
General Traffic	45	0	27	72	0	1402	80	1482	0	0	0	0	45	1243	0	1288	2842
% General Traffic	100	0	100	100	0	96.4	100	96.6	0	0	0	0	100	96.7	0	96.8	96.8
Truck Traffic	0	0	0	0	0	52	0	52	0	0	0	0	0	42	0	42	94
% Truck Traffic	0	0	0	0	0	3.6	0	3.4	0	0	0	0	0	3.3	0	3.2	3.2
U-Turn	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% U-Turn	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Accurate Traffic Counts, Inc.

1750 W Broadway St., Suite 115
Oviedo, FL 32765

Station: 003
Counted by: Santiago
Weather: Clear
Location: Malabar Rd at Championship Cir

File Name : Int 003_Malabar Rd at Championship Cir NW_All Traffic
Site Code : 003-2294
Start Date : 1/16/2020
Page No : 2

Start Time	Championship Cir NW Southbound				Malabar Rd Westbound				Northbound				Malabar Rd Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45																	
07:45	2	0	2	4	0	111	4	115	0	0	0	0	1	45	0	46	165
08:00	2	0	0	2	0	144	3	147	0	0	0	0	1	54	0	55	204
08:15	1	0	0	1	0	192	3	195	0	0	0	0	1	72	0	73	269
08:30	1	0	1	2	0	174	1	175	0	0	0	0	1	117	0	118	295
Total Volume	6	0	3	9	0	621	11	632	0	0	0	0	4	288	0	292	933
% App. Total	66.7	0	33.3		0	98.3	1.7		0	0	0		1.4	98.6	0		
PHF	.750	.000	.375	.563	.000	.809	.688	.810	.000	.000	.000	.000	1.00	.615	.000	.619	.791
General Traffic	6	0	3	9	0	596	11	607	0	0	0	0	4	269	0	273	889
% General Traffic	100	0	100	100	0	96.0	100	96.0	0	0	0	0	100	93.4	0	93.5	95.3
Truck Traffic	0	0	0	0	0	25	0	25	0	0	0	0	0	19	0	19	44
% Truck Traffic	0	0	0	0	0	4.0	0	4.0	0	0	0	0	0	6.6	0	6.5	4.7
U-Turn	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% U-Turn	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 17:00																	
17:00	6	0	3	9	0	66	3	69	0	0	0	0	5	135	0	140	218
17:15	1	0	3	4	0	53	8	61	0	0	0	0	5	109	0	114	179
17:30	8	0	2	10	0	64	13	77	0	0	0	0	6	121	0	127	214
17:45	10	0	8	18	0	47	17	64	0	0	0	0	11	121	0	132	214
Total Volume	25	0	16	41	0	230	41	271	0	0	0	0	27	486	0	513	825
% App. Total	61	0	39		0	84.9	15.1		0	0	0		5.3	94.7	0		
PHF	.625	.000	.500	.569	.000	.871	.603	.880	.000	.000	.000	.000	.614	.900	.000	.916	.946
General Traffic	25	0	16	41	0	224	41	265	0	0	0	0	27	485	0	512	818
% General Traffic	100	0	100	100	0	97.4	100	97.8	0	0	0	0	100	99.8	0	99.8	99.2
Truck Traffic	0	0	0	0	0	6	0	6	0	0	0	0	0	1	0	1	7
% Truck Traffic	0	0	0	0	0	2.6	0	2.2	0	0	0	0	0	0.2	0	0.2	0.8
U-Turn	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% U-Turn	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Accurate Traffic Counts, Inc.

1750 W Broadway St., Suite 115
Oviedo, FL 32765

Station: 004
Counted by: Santiago
Weather: Clear
Location: Malabar Rd at Bending Branch

File Name : Int 004_Malabar Rd at Bending Branch Lane_All Traffic
Site Code : 004-2331
Start Date : 1/16/2020
Page No : 1

Groups Printed- General Traffic - Truck Traffic - Turn

Start Time	Krassner Dr Southbound				Malabar Rd Westbound				Bending Branch Lane Northbound				Malabar Rd Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00	23	0	7	30	5	67	5	77	19	1	22	42	1	30	2	33	182
07:15	24	1	12	37	7	92	8	107	16	0	32	48	4	29	1	34	226
07:30	18	0	10	28	3	89	9	101	10	0	26	36	4	48	2	54	219
07:45	20	0	6	26	8	94	7	109	10	0	15	25	6	53	1	60	220
Total	85	1	35	121	23	342	29	394	55	1	95	151	15	160	6	181	847
08:00	14	0	16	30	12	132	12	156	12	0	10	22	1	54	2	57	265
08:15	16	0	8	24	8	163	9	180	8	1	8	17	2	68	7	77	298
08:30	18	1	8	27	7	133	6	146	16	1	14	31	5	111	4	120	324
08:45	12	0	8	20	6	52	8	66	4	0	17	21	1	71	4	76	183
Total	60	1	40	101	33	480	35	548	40	2	49	91	9	304	17	330	1070
*** BREAK ***																	
16:00	14	1	5	20	9	76	14	99	4	0	13	17	7	125	10	142	278
16:15	18	0	7	25	16	83	19	118	0	0	10	10	9	77	6	92	245
16:30	9	0	3	12	17	92	21	130	4	0	13	17	8	67	7	82	241
16:45	10	1	5	16	29	103	23	155	4	1	15	20	7	86	8	101	292
Total	51	2	20	73	71	354	77	502	12	1	51	64	31	355	31	417	1056
17:00	21	1	8	30	14	114	21	149	5	1	15	21	5	92	9	106	306
17:15	15	0	4	19	19	96	28	143	4	1	19	24	11	95	5	111	297
17:30	25	0	3	28	16	91	26	133	3	1	10	14	12	106	5	123	298
17:45	15	0	3	18	24	65	28	117	3	0	7	10	7	117	5	129	274
Total	76	1	18	95	73	366	103	542	15	3	51	69	35	410	24	469	1175
Grand Total	272	5	113	390	200	1542	244	1986	122	7	246	375	90	1229	78	1397	4148
Apprch %	69.7	1.3	29		10.1	77.6	12.3		32.5	1.9	65.6		6.4	88	5.6		
Total %	6.6	0.1	2.7	9.4	4.8	37.2	5.9	47.9	2.9	0.2	5.9	9	2.2	29.6	1.9	33.7	
General Traffic	264	3	107	374	196	1495	236	1927	119	4	236	359	88	1194	69	1351	4011
% General Traffic	97.1	60	94.7	95.9	98	97	96.7	97	97.5	57.1	95.9	95.7	97.8	97.2	88.5	96.7	96.7
Truck Traffic	8	2	6	16	4	47	8	59	3	3	10	16	2	35	9	46	137
% Truck Traffic	2.9	40	5.3	4.1	2	3	3.3	3	2.5	42.9	4.1	4.3	2.2	2.8	11.5	3.3	3.3
U-Turn	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% U-Turn	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Accurate Traffic Counts, Inc.

1750 W Broadway St., Suite 115
Oviedo, FL 32765

Station: 004
Counted by: Santiago
Weather: Clear
Location: Malabar Rd at Bending Branch

File Name : Int 004_Malabar Rd at Bending Branch Lane_All Traffic
Site Code : 004-2331
Start Date : 1/16/2020
Page No : 2

Start Time	Krassner Dr Southbound				Malabar Rd Westbound				Bending Branch Lane Northbound				Malabar Rd Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45																	
07:45	20	0	6	26	8	94	7	109	10	0	15	25	6	53	1	60	220
08:00	14	0	16	30	12	132	12	156	12	0	10	22	1	54	2	57	265
08:15	16	0	8	24	8	163	9	180	8	1	8	17	2	68	7	77	298
08:30	18	1	8	27	7	133	6	146	16	1	14	31	5	111	4	120	324
Total Volume	68	1	38	107	35	522	34	591	46	2	47	95	14	286	14	314	1107
% App. Total	63.6	0.9	35.5		5.9	88.3	5.8		48.4	2.1	49.5		4.5	91.1	4.5		
PHF	.850	.250	.594	.892	.729	.801	.708	.821	.719	.500	.783	.766	.583	.644	.500	.654	.854
General Traffic	67	1	37	105	33	498	33	564	44	1	46	91	13	270	11	294	1054
% General Traffic	98.5	100	97.4	98.1	94.3	95.4	97.1	95.4	95.7	50.0	97.9	95.8	92.9	94.4	78.6	93.6	95.2
Truck Traffic	1	0	1	2	2	24	1	27	2	1	1	4	1	16	3	20	53
% Truck Traffic	1.5	0	2.6	1.9	5.7	4.6	2.9	4.6	4.3	50.0	2.1	4.2	7.1	5.6	21.4	6.4	4.8
U-Turn	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% U-Turn	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 16:45																	
16:45	10	1	5	16	29	103	23	155	4	1	15	20	7	86	8	101	292
17:00	21	1	8	30	14	114	21	149	5	1	15	21	5	92	9	106	306
17:15	15	0	4	19	19	96	28	143	4	1	19	24	11	95	5	111	297
17:30	25	0	3	28	16	91	26	133	3	1	10	14	12	106	5	123	298
Total Volume	71	2	20	93	78	404	98	580	16	4	59	79	35	379	27	441	1193
% App. Total	76.3	2.2	21.5		13.4	69.7	16.9		20.3	5.1	74.7		7.9	85.9	6.1		
PHF	.710	.500	.625	.775	.672	.886	.875	.935	.800	1.00	.776	.823	.729	.894	.750	.896	.975
General Traffic	71	2	18	91	77	393	96	566	15	3	56	74	35	376	25	436	1167
% General Traffic	100	100	90.0	97.8	98.7	97.3	98.0	97.6	93.8	75.0	94.9	93.7	100	99.2	92.6	98.9	97.8
Truck Traffic	0	0	2	2	1	11	2	14	1	1	3	5	0	3	2	5	26
% Truck Traffic	0	0	10.0	2.2	1.3	2.7	2.0	2.4	6.3	25.0	5.1	6.3	0	0.8	7.4	1.1	2.2
U-Turn	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% U-Turn	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Accurate Traffic Counts, Inc.

1750 W Broadway St., Suite 115
Oviedo, FL 32765

Station: 005

Counted by: Santiago

Weather: Clear

Location: Malabar Rd at BavarianAv SW

File Name : Int 005_Malabar Rd at Bavarian Av SW_All Traffic

Site Code : 005-2294

Start Date : 1/16/2020

Page No : 1

Groups Printed- General Traffic - Truck Traffic - Turn

Start Time	Southbound				Malabar Rd Westbound				Northbound				Malabar Rd Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00	0	0	0	0	0	76	0	76	2	0	0	2	0	73	0	73	151
07:15	0	0	0	0	1	107	0	108	1	0	0	1	0	85	0	85	194
07:30	0	0	0	0	0	101	0	101	2	0	0	2	0	86	1	87	190
07:45	0	0	0	0	0	108	0	108	4	0	1	5	0	93	0	93	206
Total	0	0	0	0	1	392	0	393	9	0	1	10	0	337	1	338	741
08:00	0	0	0	0	0	156	0	156	1	0	1	2	0	78	1	79	237
08:15	0	0	0	0	0	179	0	179	1	0	0	1	0	85	0	85	265
08:30	0	0	0	0	0	144	0	144	0	0	0	0	0	143	0	143	287
08:45	0	0	0	0	0	70	0	70	1	0	0	1	0	100	0	100	171
Total	0	0	0	0	0	549	0	549	3	0	1	4	0	406	1	407	960
*** BREAK ***																	
16:00	0	0	0	0	0	115	0	115	2	0	0	2	0	167	1	168	285
16:15	0	0	0	0	1	135	0	136	0	0	1	1	0	114	0	114	251
16:30	0	0	0	0	0	117	0	117	0	0	0	0	0	86	1	87	204
16:45	0	0	0	0	0	141	0	141	0	0	0	0	0	100	2	102	243
Total	0	0	0	0	1	508	0	509	2	0	1	3	0	467	4	471	983
17:00	0	0	0	0	0	135	0	135	2	0	0	2	0	130	2	132	269
17:15	0	0	0	0	1	142	0	143	1	0	0	1	0	136	1	137	281
17:30	0	0	0	0	0	132	0	132	1	0	0	1	0	145	0	145	278
17:45	0	0	0	0	1	126	0	127	0	0	0	0	0	138	3	141	268
Total	0	0	0	0	2	535	0	537	4	0	0	4	0	549	6	555	1096
Grand Total	0	0	0	0	4	1984	0	1988	18	0	3	21	0	1759	12	1771	3780
Apprch %	0	0	0		0.2	99.8	0		85.7	0	14.3		0	99.3	0.7		
Total %	0	0	0		0.1	52.5	0	52.6	0.5	0	0.1	0.6	0	46.5	0.3	46.9	
General Traffic	0	0	0	0	4	1926	0	1930	17	0	3	20	0	1712	12	1724	3674
% General Traffic	0	0	0	0	100	97.1	0	97.1	94.4	0	100	95.2	0	97.3	100	97.3	97.2
Truck Traffic	0	0	0	0	0	58	0	58	1	0	0	1	0	47	0	47	106
% Truck Traffic	0	0	0	0	0	2.9	0	2.9	5.6	0	0	4.8	0	2.7	0	2.7	2.8
U-Turn	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% U-Turn	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Accurate Traffic Counts, Inc.

1750 W Broadway St., Suite 115
Oviedo, FL 32765

Station: 005
Counted by: Santiago
Weather: Clear
Location: Malabar Rd at BavarianAv SW

File Name : Int 005_Malabar Rd at Bavarian Av SW_All Traffic
Site Code : 005-2294
Start Date : 1/16/2020
Page No : 2

Start Time	Southbound				Malabar Rd Westbound				Northbound				Malabar Rd Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45																	
07:45	0	0	0	0	0	108	0	108	4	0	1	5	0	93	0	93	206
08:00	0	0	0	0	0	156	0	156	1	0	1	2	0	78	1	79	237
08:15	0	0	0	0	0	179	0	179	1	0	0	1	0	85	0	85	265
08:30	0	0	0	0	0	144	0	144	0	0	0	0	0	143	0	143	287
Total Volume	0	0	0	0	0	587	0	587	6	0	2	8	0	399	1	400	995
% App. Total	0	0	0	0	0	100	0	100	75	0	25	75	0	99.8	0.2	100	
PHF	.000	.000	.000	.000	.000	.820	.000	.820	.375	.000	.500	.400	.000	.698	.250	.699	.867
General Traffic	0	0	0	0	0	562	0	562	5	0	2	7	0	381	1	382	951
% General Traffic	0	0	0	0	0	95.7	0	95.7	83.3	0	100	87.5	0	95.5	100	95.5	95.6
Truck Traffic	0	0	0	0	0	25	0	25	1	0	0	1	0	18	0	18	44
% Truck Traffic	0	0	0	0	0	4.3	0	4.3	16.7	0	0	12.5	0	4.5	0	4.5	4.4
U-Turn	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% U-Turn	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 17:00																	
17:00	0	0	0	0	0	135	0	135	2	0	0	2	0	130	2	132	269
17:15	0	0	0	0	1	142	0	143	1	0	0	1	0	136	1	137	281
17:30	0	0	0	0	0	132	0	132	1	0	0	1	0	145	0	145	278
17:45	0	0	0	0	1	126	0	127	0	0	0	0	0	138	3	141	268
Total Volume	0	0	0	0	2	535	0	537	4	0	0	4	0	549	6	555	1096
% App. Total	0	0	0	0	0.4	99.6	0	99.6	100	0	0	100	0	98.9	1.1	100	
PHF	.000	.000	.000	.000	.500	.942	.000	.939	.500	.000	.000	.500	.000	.947	.500	.957	.975
General Traffic	0	0	0	0	2	528	0	530	4	0	0	4	0	547	6	553	1087
% General Traffic	0	0	0	0	100	98.7	0	98.7	100	0	0	100	0	99.6	100	99.6	99.2
Truck Traffic	0	0	0	0	0	7	0	7	0	0	0	0	0	2	0	2	9
% Truck Traffic	0	0	0	0	0	1.3	0	1.3	0	0	0	0	0	0.4	0	0.4	0.8
U-Turn	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% U-Turn	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Accurate Traffic Counts, Inc.

1750 W Broadway St., Suite 115
Oviedo, FL 32765

Station: 006
Counted by: Santiago
Weather: Clear
Location: Malabar Rd at Hurley Blvd

File Name : Int 006_Malabar Rd at Hurley Blvd SW
Site Code : 006-2294
Start Date : 1/16/2020
Page No : 1

Groups Printed- General Traffic - Truck Traffic - Turn

Start Time	Southbound				Malabar Rd Westbound				Hurley Blvd Northbound				Malabar Rd Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00	0	0	0	0	9	53	0	62	24	0	19	43	0	70	4	74	179
07:15	0	0	0	0	7	81	0	88	25	0	27	52	0	76	10	86	226
07:30	0	0	0	0	13	81	0	94	20	0	21	41	0	68	16	84	219
07:45	0	0	0	0	19	98	0	117	12	0	18	30	0	77	18	95	242
Total	0	0	0	0	48	313	0	361	81	0	85	166	0	291	48	339	866
08:00	0	0	0	0	20	128	0	148	29	0	16	45	0	71	6	77	270
08:15	0	0	0	0	10	162	0	172	21	0	11	32	0	81	5	86	290
08:30	0	0	0	0	11	126	0	137	17	0	15	32	0	131	10	141	310
08:45	0	0	0	0	14	51	0	65	16	0	22	38	0	98	6	104	207
Total	0	0	0	0	55	467	0	522	83	0	64	147	0	381	27	408	1077
*** BREAK ***																	
16:00	0	0	0	0	20	97	0	117	18	0	16	34	0	92	19	111	262
16:15	0	0	0	0	22	125	0	147	13	0	16	29	0	92	19	111	287
16:30	0	0	0	0	17	110	0	127	5	0	10	15	0	95	21	116	258
16:45	0	0	0	0	22	130	0	152	14	0	14	28	0	114	15	129	309
Total	0	0	0	0	81	462	0	543	50	0	56	106	0	393	74	467	1116
17:00	0	0	0	0	13	123	0	136	11	0	25	36	0	108	24	132	304
17:15	0	0	0	0	25	133	0	158	10	0	20	30	0	116	24	140	328
17:30	0	0	0	0	11	118	0	129	16	0	23	39	0	126	24	150	318
17:45	0	0	0	0	25	115	0	140	11	0	25	36	0	98	28	126	302
Total	0	0	0	0	74	489	0	563	48	0	93	141	0	448	100	548	1252
Grand Total	0	0	0	0	258	1731	0	1989	262	0	298	560	0	1513	249	1762	4311
Apprch %	0	0	0	0	13	87	0		46.8	0	53.2		0	85.9	14.1		
Total %	0	0	0	0	6	40.2	0	46.1	6.1	0	6.9	13	0	35.1	5.8	40.9	
General Traffic	0	0	0	0	251	1682	0	1933	255	0	295	550	0	1472	243	1715	4198
% General Traffic	0	0	0	0	97.3	97.2	0	97.2	97.3	0	99	98.2	0	97.3	97.6	97.3	97.4
Truck Traffic	0	0	0	0	7	49	0	56	7	0	3	10	0	41	6	47	113
% Truck Traffic	0	0	0	0	2.7	2.8	0	2.8	2.7	0	1	1.8	0	2.7	2.4	2.7	2.6
U-Turn	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% U-Turn	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Accurate Traffic Counts, Inc.

1750 W Broadway St., Suite 115
Oviedo, FL 32765

Station: 006
Counted by: Santiago
Weather: Clear
Location: Malabar Rd at Hurley Blvd

File Name : Int 006_Malabar Rd at Hurley Blvd SW
Site Code : 006-2294
Start Date : 1/16/2020
Page No : 2

Start Time	Southbound				Malabar Rd Westbound				Hurley Blvd Northbound				Malabar Rd Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45																	
07:45	0	0	0	0	19	98	0	117	12	0	18	30	0	77	18	95	242
08:00	0	0	0	0	20	128	0	148	29	0	16	45	0	71	6	77	270
08:15	0	0	0	0	10	162	0	172	21	0	11	32	0	81	5	86	290
08:30	0	0	0	0	11	126	0	137	17	0	15	32	0	131	10	141	310
Total Volume	0	0	0	0	60	514	0	574	79	0	60	139	0	360	39	399	1112
% App. Total	0	0	0	0	10.5	89.5	0		56.8	0	43.2		0	90.2	9.8		
PHF	.000	.000	.000	.000	.750	.793	.000	.834	.681	.000	.833	.772	.000	.687	.542	.707	.897
General Traffic	0	0	0	0	58	489	0	547	78	0	60	138	0	346	38	384	1069
% General Traffic	0	0	0	0	96.7	95.1	0	95.3	98.7	0	100	99.3	0	96.1	97.4	96.2	96.1
Truck Traffic	0	0	0	0	2	25	0	27	1	0	0	1	0	14	1	15	43
% Truck Traffic	0	0	0	0	3.3	4.9	0	4.7	1.3	0	0	0.7	0	3.9	2.6	3.8	3.9
U-Turn	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% U-Turn	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 16:45																	
16:45	0	0	0	0	22	130	0	152	14	0	14	28	0	114	15	129	309
17:00	0	0	0	0	13	123	0	136	11	0	25	36	0	108	24	132	304
17:15	0	0	0	0	25	133	0	158	10	0	20	30	0	116	24	140	328
17:30	0	0	0	0	11	118	0	129	16	0	23	39	0	126	24	150	318
Total Volume	0	0	0	0	71	504	0	575	51	0	82	133	0	464	87	551	1259
% App. Total	0	0	0	0	12.3	87.7	0		38.3	0	61.7		0	84.2	15.8		
PHF	.000	.000	.000	.000	.710	.947	.000	.910	.797	.000	.820	.853	.000	.921	.906	.918	.960
General Traffic	0	0	0	0	69	494	0	563	49	0	80	129	0	462	87	549	1241
% General Traffic	0	0	0	0	97.2	98.0	0	97.9	96.1	0	97.6	97.0	0	99.6	100	99.6	98.6
Truck Traffic	0	0	0	0	2	10	0	12	2	0	2	4	0	2	0	2	18
% Truck Traffic	0	0	0	0	2.8	2.0	0	2.1	3.9	0	2.4	3.0	0	0.4	0	0.4	1.4
U-Turn	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% U-Turn	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Accurate Traffic Counts, Inc.

1750 W Broadway St., Suite 115
Oviedo, FL 32765

Station: 007	File Name : Int 007_Malabar Rd at Public Works NW Access Entrance
Counted by: Santiago	Site Code : 007-2294
Weather: Clear	Start Date : 1/16/2020
Location: Malabar Rd at Public Works	Page No : 1

Groups Printed- General Traffic - Truck Traffic - Turn

Start Time	Southbound				Malabar Rd Westbound				Public Works NW Access Entrance Northbound				Malabar Rd Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00	0	0	0	0	3	53	0	56	0	0	5	5	0	100	0	100	161
07:15	0	0	0	0	2	71	0	73	1	0	1	2	0	110	0	110	185
07:30	0	0	0	0	1	86	0	87	1	0	13	14	0	104	0	104	205
07:45	0	0	0	0	0	104	0	104	0	0	1	1	0	98	0	98	203
Total	0	0	0	0	6	314	0	320	2	0	20	22	0	412	0	412	754
08:00	0	0	0	0	1	142	0	143	0	0	0	0	0	91	1	92	235
08:15	0	0	0	0	3	157	0	160	1	0	0	1	0	97	0	97	258
08:30	0	0	0	0	2	130	0	132	0	0	1	1	0	150	1	151	284
08:45	0	0	0	0	0	56	0	56	0	0	1	1	0	123	1	124	181
Total	0	0	0	0	6	485	0	491	1	0	2	3	0	461	3	464	958
*** BREAK ***																	
16:00	0	0	0	0	0	98	0	98	0	0	4	4	0	93	2	95	197
16:15	0	0	0	0	2	112	0	114	0	0	3	3	0	86	0	86	203
16:30	0	0	0	0	3	96	0	99	1	0	1	2	0	92	0	92	193
16:45	0	0	0	0	0	124	0	124	0	0	0	0	0	106	1	107	231
Total	0	0	0	0	5	430	0	435	1	0	8	9	0	377	3	380	824
17:00	0	0	0	0	1	123	0	124	2	0	1	3	0	128	0	128	255
17:15	0	0	0	0	0	122	0	122	6	0	37	43	0	117	0	117	282
17:30	0	0	0	0	0	122	0	122	2	0	3	5	0	140	0	140	267
17:45	0	0	0	0	0	118	0	118	1	0	1	2	0	110	0	110	230
Total	0	0	0	0	1	485	0	486	11	0	42	53	0	495	0	495	1034
Grand Total	0	0	0	0	18	1714	0	1732	15	0	72	87	0	1745	6	1751	3570
Apprch %	0	0	0		1	99	0		17.2	0	82.8		0	99.7	0.3		
Total %	0	0	0	0	0.5	48	0	48.5	0.4	0	2	2.4	0	48.9	0.2	49	
General Traffic	0	0	0	0	18	1666	0	1684	15	0	72	87	0	1701	6	1707	3478
% General Traffic	0	0	0	0	100	97.2	0	97.2	100	0	100	100	0	97.5	100	97.5	97.4
Truck Traffic	0	0	0	0	0	48	0	48	0	0	0	0	0	44	0	44	92
% Truck Traffic	0	0	0	0	0	2.8	0	2.8	0	0	0	0	0	2.5	0	2.5	2.6
U-Turn	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% U-Turn	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Accurate Traffic Counts, Inc.

1750 W Broadway St., Suite 115
Oviedo, FL 32765

Station: 007 File Name : Int 007_Malabar Rd at Public Works NW Access Entrance
 Counted by: Santiago Site Code : 007-2294
 Weather: Clear Start Date : 1/16/2020
 Location: Malabar Rd at Public Works Pkwy Plate No : 2

Start Time	Southbound				Malabar Rd Westbound				Public Works NW Access Entrance Northbound				Malabar Rd Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45																	
07:45	0	0	0	0	0	104	0	104	0	0	1	1	0	98	0	98	203
08:00	0	0	0	0	1	142	0	143	0	0	0	0	0	91	1	92	235
08:15	0	0	0	0	3	157	0	160	1	0	0	1	0	97	0	97	258
08:30	0	0	0	0	2	130	0	132	0	0	1	1	0	150	1	151	284
Total Volume	0	0	0	0	6	533	0	539	1	0	2	3	0	436	2	438	980
% App. Total	0	0	0	0	1.1	98.9	0	98.9	33.3	0	66.7	0	0	99.5	0.5	99.5	0
PHF	.000	.000	.000	.000	.500	.849	.000	.842	.250	.000	.500	.750	.000	.727	.500	.725	.863
General Traffic	0	0	0	0	6	508	0	514	1	0	2	3	0	421	2	423	940
% General Traffic	0	0	0	0	100	95.3	0	95.4	100	0	100	100	0	96.6	100	96.6	95.9
Truck Traffic	0	0	0	0	0	25	0	25	0	0	0	0	0	15	0	15	40
% Truck Traffic	0	0	0	0	0	4.7	0	4.6	0	0	0	0	0	3.4	0	3.4	4.1
U-Turn	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% U-Turn	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 16:45																	
16:45	0	0	0	0	0	124	0	124	0	0	0	0	0	106	1	107	231
17:00	0	0	0	0	1	123	0	124	2	0	1	3	0	128	0	128	255
17:15	0	0	0	0	0	122	0	122	6	0	37	43	0	117	0	117	282
17:30	0	0	0	0	0	122	0	122	2	0	3	5	0	140	0	140	267
Total Volume	0	0	0	0	1	491	0	492	10	0	41	51	0	491	1	492	1035
% App. Total	0	0	0	0	0.2	99.8	0	99.8	19.6	0	80.4	0	0	99.8	0.2	99.8	0
PHF	.000	.000	.000	.000	.250	.990	.000	.992	.417	.000	.277	.297	.000	.877	.250	.879	.918
General Traffic	0	0	0	0	1	482	0	483	10	0	41	51	0	486	1	487	1021
% General Traffic	0	0	0	0	100	98.2	0	98.2	100	0	100	100	0	99.0	100	99.0	98.6
Truck Traffic	0	0	0	0	0	9	0	9	0	0	0	0	0	5	0	5	14
% Truck Traffic	0	0	0	0	0	1.8	0	1.8	0	0	0	0	0	1.0	0	1.0	1.4
U-Turn	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% U-Turn	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Accurate Traffic Counts, Inc.

1750 W Broadway St., Suite 115
Oviedo, FL 32765

Station: 008
Counted by: Santiago
Weather: Clear
Location: Malabar Rd at US Post Office

File Name : Int 008_Malabar Rd at US Post Office
Site Code : 008-2294
Start Date : 1/16/2020
Page No : 1

Groups Printed- General Traffic - Truck Traffic - Turn

Start Time	Southbound				Malabar Rd Westbound				US Post Office Northbound				Malabar Rd Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00	0	0	0	0	0	59	0	59	0	0	1	1	0	104	0	104	164
07:15	0	0	0	0	0	81	0	81	0	0	1	1	0	123	1	124	206
07:30	0	0	0	0	1	83	0	84	0	0	1	1	0	128	0	128	213
07:45	0	0	0	0	2	115	0	117	0	0	3	3	0	99	1	100	220
Total	0	0	0	0	3	338	0	341	0	0	6	6	0	454	2	456	803
08:00	0	0	0	0	0	142	0	142	0	0	2	2	0	95	2	97	241
08:15	0	0	0	0	2	174	0	176	1	0	2	3	0	102	1	103	282
08:30	0	0	0	0	5	132	0	137	0	0	7	7	0	148	4	152	296
08:45	0	0	0	0	4	65	0	69	1	0	4	5	0	129	3	132	206
Total	0	0	0	0	11	513	0	524	2	0	15	17	0	474	10	484	1025
*** BREAK ***																	
16:00	0	0	0	0	9	103	0	112	1	0	12	13	0	96	4	100	225
16:15	0	0	0	0	17	130	0	147	1	0	19	20	0	85	4	89	256
16:30	0	1	0	1	6	117	1	124	1	0	15	16	0	93	2	95	236
16:45	0	0	0	0	7	127	0	134	2	0	8	10	0	109	0	109	253
Total	0	1	0	1	39	477	1	517	5	0	54	59	0	383	10	393	970
17:00	0	0	0	0	3	117	0	120	0	0	7	7	0	115	2	117	244
17:15	0	0	0	0	2	131	0	133	2	0	2	4	0	172	2	174	311
17:30	0	0	0	0	2	121	0	123	1	0	2	3	0	148	1	149	275
17:45	0	0	0	0	5	122	0	127	0	0	4	4	0	114	0	114	245
Total	0	0	0	0	12	491	0	503	3	0	15	18	0	549	5	554	1075
Grand Total	0	1	0	1	65	1819	1	1885	10	0	90	100	0	1860	27	1887	3873
Apprch %	0	100	0		3.4	96.5	0.1		10	0	90		0	98.6	1.4		
Total %	0	0	0	0	1.7	47	0	48.7	0.3	0	2.3	2.6	0	48	0.7	48.7	
General Traffic	0	1	0	1	65	1766	1	1832	10	0	90	100	0	1808	27	1835	3768
% General Traffic	0	100	0	100	100	97.1	100	97.2	100	0	100	100	0	97.2	100	97.2	97.3
Truck Traffic	0	0	0	0	0	53	0	53	0	0	0	0	0	52	0	52	105
% Truck Traffic	0	0	0	0	0	2.9	0	2.8	0	0	0	0	0	2.8	0	2.8	2.7
U-Turn	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% U-Turn	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Accurate Traffic Counts, Inc.

1750 W Broadway St., Suite 115
Oviedo, FL 32765

Station: 008
Counted by: Santiago
Weather: Clear
Location: Malabar Rd at US Post Office

File Name : Int 008_Malabar Rd at US Post Office
Site Code : 008-2294
Start Date : 1/16/2020
Page No : 2

Start Time	Southbound				Malabar Rd Westbound				US Post Office Northbound				Malabar Rd Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45																	
07:45	0	0	0	0	2	115	0	117	0	0	3	3	0	99	1	100	220
08:00	0	0	0	0	0	142	0	142	0	0	2	2	0	95	2	97	241
08:15	0	0	0	0	2	174	0	176	1	0	2	3	0	102	1	103	282
08:30	0	0	0	0	5	132	0	137	0	0	7	7	0	148	4	152	296
Total Volume	0	0	0	0	9	563	0	572	1	0	14	15	0	444	8	452	1039
% App. Total	0	0	0	0	1.6	98.4	0		6.7	0	93.3		0	98.2	1.8		
PHF	.000	.000	.000	.000	.450	.809	.000	.813	.250	.000	.500	.536	.000	.750	.500	.743	.878
General Traffic	0	0	0	0	9	537	0	546	1	0	14	15	0	427	8	435	996
% General Traffic	0	0	0	0	100	95.4	0	95.5	100	0	100	100	0	96.2	100	96.2	95.9
Truck Traffic	0	0	0	0	0	26	0	26	0	0	0	0	0	17	0	17	43
% Truck Traffic	0	0	0	0	0	4.6	0	4.5	0	0	0	0	0	3.8	0	3.8	4.1
U-Turn	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% U-Turn	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 16:45																	
16:45	0	0	0	0	7	127	0	134	2	0	8	10	0	109	0	109	253
17:00	0	0	0	0	3	117	0	120	0	0	7	7	0	115	2	117	244
17:15	0	0	0	0	2	131	0	133	2	0	2	4	0	172	2	174	311
17:30	0	0	0	0	2	121	0	123	1	0	2	3	0	148	1	149	275
Total Volume	0	0	0	0	14	496	0	510	5	0	19	24	0	544	5	549	1083
% App. Total	0	0	0	0	2.7	97.3	0		20.8	0	79.2		0	99.1	0.9		
PHF	.000	.000	.000	.000	.500	.947	.000	.951	.625	.000	.594	.600	.000	.791	.625	.789	.871
General Traffic	0	0	0	0	14	486	0	500	5	0	19	24	0	539	5	544	1068
% General Traffic	0	0	0	0	100	98.0	0	98.0	100	0	100	100	0	99.1	100	99.1	98.6
Truck Traffic	0	0	0	0	0	10	0	10	0	0	0	0	0	5	0	5	15
% Truck Traffic	0	0	0	0	0	2.0	0	2.0	0	0	0	0	0	0.9	0	0.9	1.4
U-Turn	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% U-Turn	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Accurate Traffic Counts, Inc.

1750 W Broadway St., Suite 115
Oviedo, FL 32765

Station: 009
Counted by: Santiago
Weather: Clear
Location: Malabar Rd at Jupiter Blvd

File Name : Int 009_Malabar Rd at Jupiter Blvd
Site Code : 009-2331
Start Date : 1/16/2020
Page No : 1

Groups Printed- General Traffic - Truck Traffic - Turn

Start Time	Jupiter Blvd Southbound				Malabar Rd Westbound				Jupiter Blvd Northbound				Malabar Rd Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00	33	27	6	66	13	26	15	54	26	25	8	59	28	68	16	112	291
07:15	39	37	7	83	21	41	22	84	33	43	12	88	32	70	19	121	376
07:30	64	52	7	123	25	48	24	97	26	35	21	82	32	65	23	120	422
07:45	41	52	13	106	19	56	35	110	39	61	24	124	20	64	27	111	451
Total	177	168	33	378	78	171	96	345	124	164	65	353	112	267	85	464	1540
08:00	36	33	22	91	16	79	37	132	43	39	23	105	18	63	16	97	425
08:15	53	23	16	92	10	76	22	108	75	33	8	116	12	67	10	89	405
08:30	41	19	19	79	7	77	28	112	41	13	3	57	34	97	38	169	417
08:45	50	22	11	83	6	40	26	72	16	24	11	51	20	87	24	131	337
Total	180	97	68	345	39	272	113	424	175	109	45	329	84	314	88	486	1584
*** BREAK ***																	
16:00	46	34	24	104	11	61	47	119	23	39	18	80	18	59	26	103	406
16:15	33	38	29	100	11	79	53	143	26	42	8	76	13	66	29	108	427
16:30	31	22	19	72	6	80	67	153	23	36	9	68	16	63	31	110	403
16:45	37	35	22	94	10	82	61	153	23	37	8	68	16	58	44	118	433
Total	147	129	94	370	38	302	228	568	95	154	43	292	63	246	130	439	1669
17:00	39	44	25	108	16	72	62	150	19	45	10	74	21	52	39	112	444
17:15	51	31	24	106	10	84	59	153	26	29	8	63	26	96	61	183	505
17:30	58	43	23	124	10	76	62	148	22	35	8	65	22	78	46	146	483
17:45	43	45	22	110	13	67	60	140	35	41	18	94	11	60	40	111	455
Total	191	163	94	448	49	299	243	591	102	150	44	296	80	286	186	552	1887
Grand Total	695	557	289	1541	204	1044	680	1928	496	577	197	1270	339	1113	489	1941	6680
Apprch %	45.1	36.1	18.8		10.6	54.1	35.3		39.1	45.4	15.5		17.5	57.3	25.2		
Total %	10.4	8.3	4.3	23.1	3.1	15.6	10.2	28.9	7.4	8.6	2.9	19	5.1	16.7	7.3	29.1	
General Traffic	682	543	280	1505	197	1019	672	1888	476	561	187	1224	334	1090	462	1886	6503
% General Traffic	98.1	97.5	96.9	97.7	96.6	97.6	98.8	97.9	96	97.2	94.9	96.4	98.5	97.9	94.5	97.2	97.4
Truck Traffic	13	14	9	36	7	25	8	40	20	16	10	46	5	23	27	55	177
% Truck Traffic	1.9	2.5	3.1	2.3	3.4	2.4	1.2	2.1	4	2.8	5.1	3.6	1.5	2.1	5.5	2.8	2.6
U-Turn	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% U-Turn	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Accurate Traffic Counts, Inc.

1750 W Broadway St., Suite 115
Oviedo, FL 32765

Station: 009
Counted by: Santiago
Weather: Clear
Location: Malabar Rd at Jupiter Blvd

File Name : Int 009_Malabar Rd at Jupiter Blvd
Site Code : 009-2331
Start Date : 1/16/2020
Page No : 2

Start Time	Jupiter Blvd Southbound				Malabar Rd Westbound				Jupiter Blvd Northbound				Malabar Rd Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30																	
07:30	64	52	7	123	25	48	24	97	26	35	21	82	32	65	23	120	422
07:45	41	52	13	106	19	56	35	110	39	61	24	124	20	64	27	111	451
08:00	36	33	22	91	16	79	37	132	43	39	23	105	18	63	16	97	425
08:15	53	23	16	92	10	76	22	108	75	33	8	116	12	67	10	89	405
Total Volume	194	160	58	412	70	259	118	447	183	168	76	427	82	259	76	417	1703
% App. Total	47.1	38.8	14.1		15.7	57.9	26.4		42.9	39.3	17.8		19.7	62.1	18.2		
PHF	.758	.769	.659	.837	.700	.820	.797	.847	.610	.689	.792	.861	.641	.966	.704	.869	.944
General Traffic	191	153	53	397	67	252	115	434	176	160	73	409	82	252	66	400	1640
% General Traffic	98.5	95.6	91.4	96.4	95.7	97.3	97.5	97.1	96.2	95.2	96.1	95.8	100	97.3	86.8	95.9	96.3
Truck Traffic	3	7	5	15	3	7	3	13	7	8	3	18	0	7	10	17	63
% Truck Traffic	1.5	4.4	8.6	3.6	4.3	2.7	2.5	2.9	3.8	4.8	3.9	4.2	0	2.7	13.2	4.1	3.7
U-Turn	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% U-Turn	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1
Peak Hour for Entire Intersection Begins at 17:00

17:00	39	44	25	108	16	72	62	150	19	45	10	74	21	52	39	112	444
17:15	51	31	24	106	10	84	59	153	26	29	8	63	26	96	61	183	505
17:30	58	43	23	124	10	76	62	148	22	35	8	65	22	78	46	146	483
17:45	43	45	22	110	13	67	60	140	35	41	18	94	11	60	40	111	455
Total Volume	191	163	94	448	49	299	243	591	102	150	44	296	80	286	186	552	1887
% App. Total	42.6	36.4	21		8.3	50.6	41.1		34.5	50.7	14.9		14.5	51.8	33.7		
PHF	.823	.906	.940	.903	.766	.890	.980	.966	.729	.833	.611	.787	.769	.745	.762	.754	.934
General Traffic	187	162	94	443	49	295	243	587	102	148	43	293	80	283	184	547	1870
% General Traffic	97.9	99.4	100	98.9	100	98.7	100	99.3	100	98.7	97.7	99.0	100	99.0	98.9	99.1	99.1
Truck Traffic	4	1	0	5	0	4	0	4	0	2	1	3	0	3	2	5	17
% Truck Traffic	2.1	0.6	0	1.1	0	1.3	0	0.7	0	1.3	2.3	1.0	0	1.0	1.1	0.9	0.9
U-Turn	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% U-Turn	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Accurate Traffic Counts, Inc.

1750 W Broadway St., Suite 115
Oviedo, FL 32765

Station: 010
Counted by: Santiago
Weather: Clear
Location: Malabar Rd at Santa Rosa Ave

File Name : Int 010_Malabar Rd at Santa Rosa Ave
Site Code : 010-2294
Start Date : 1/16/2020
Page No : 1

Groups Printed- General Traffic - Truck Traffic - Turn

Start Time	Santa Rosa Av Southbound				Malabar Rd Westbound				Santa Rosa Av Northbound				Malabar Rd Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00	0	0	0	0	3	54	0	57	0	0	3	3	0	113	2	115	175
07:15	0	0	0	0	1	86	0	87	1	0	2	3	0	123	0	123	213
07:30	0	0	0	0	1	113	0	114	0	0	4	4	0	164	0	164	282
07:45	0	0	0	0	1	148	0	149	1	0	1	2	0	134	0	134	285
Total	0	0	0	0	6	401	0	407	2	0	10	12	0	534	2	536	955
08:00	0	0	0	0	0	141	0	141	0	0	0	0	0	131	0	131	272
08:15	0	0	0	0	0	160	0	160	2	0	2	4	0	127	1	128	292
08:30	0	0	0	0	1	125	0	126	1	0	2	3	0	152	0	152	281
08:45	0	0	0	0	2	101	0	103	0	0	1	1	0	150	0	150	254
Total	0	0	0	0	3	527	0	530	3	0	5	8	0	560	1	561	1099
*** BREAK ***																	
16:00	0	0	0	0	1	167	0	168	0	0	2	2	0	128	0	128	298
16:15	0	0	0	0	2	192	0	194	1	0	4	5	0	111	1	112	311
16:30	0	0	0	0	0	195	1	196	1	0	1	2	0	103	0	103	301
16:45	0	1	1	2	2	199	0	201	0	0	1	1	0	97	0	97	301
Total	0	1	1	2	5	753	1	759	2	0	8	10	0	439	1	440	1211
17:00	0	0	1	1	6	203	0	209	0	0	4	4	0	117	0	117	331
17:15	0	0	0	0	0	199	0	199	0	0	4	4	0	154	0	154	357
17:30	0	0	0	0	0	236	0	236	2	0	1	3	0	152	0	152	391
17:45	0	0	0	0	0	194	0	194	0	0	1	1	0	127	2	129	324
Total	0	0	1	1	6	832	0	838	2	0	10	12	0	550	2	552	1403
Grand Total	0	1	2	3	20	2513	1	2534	9	0	33	42	0	2083	6	2089	4668
Apprch %	0	33.3	66.7		0.8	99.2	0		21.4	0	78.6		0	99.7	0.3		
Total %	0	0	0	0.1	0.4	53.8	0	54.3	0.2	0	0.7	0.9	0	44.6	0.1	44.8	
General Traffic	0	1	2	3	20	2474	1	2495	9	0	33	42	0	2039	5	2044	4584
% General Traffic	0	100	100	100	100	98.4	100	98.5	100	0	100	100	0	97.9	83.3	97.8	98.2
Truck Traffic	0	0	0	0	0	39	0	39	0	0	0	0	0	44	1	45	84
% Truck Traffic	0	0	0	0	0	1.6	0	1.5	0	0	0	0	0	2.1	16.7	2.2	1.8
U-Turn	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% U-Turn	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Accurate Traffic Counts, Inc.

1750 W Broadway St., Suite 115
Oviedo, FL 32765

Station: 010
Counted by: Santiago
Weather: Clear
Location: Malabar Rd at Santa Rosa Ave

File Name : Int 010_Malabar Rd at Santa Rosa Ave
Site Code : 010-2294
Start Date : 1/16/2020
Page No : 2

Start Time	Santa Rosa Av Southbound				Malabar Rd Westbound				Santa Rosa Av Northbound				Malabar Rd Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30																	
07:30	0	0	0	0	1	113	0	114	0	0	4	4	0	164	0	164	282
07:45	0	0	0	0	1	148	0	149	1	0	1	2	0	134	0	134	285
08:00	0	0	0	0	0	141	0	141	0	0	0	0	0	131	0	131	272
08:15	0	0	0	0	0	160	0	160	2	0	2	4	0	127	1	128	292
Total Volume	0	0	0	0	2	562	0	564	3	0	7	10	0	556	1	557	1131
% App. Total	0	0	0	0	0.4	99.6	0		30	0	70		0	99.8	0.2		
PHF	.000	.000	.000	.000	.500	.878	.000	.881	.375	.000	.438	.625	.000	.848	.250	.849	.968
General Traffic	0	0	0	0	2	551	0	553	3	0	7	10	0	544	1	545	1108
% General Traffic	0	0	0	0	100	98.0	0	98.0	100	0	100	100	0	97.8	100	97.8	98.0
Truck Traffic	0	0	0	0	0	11	0	11	0	0	0	0	0	12	0	12	23
% Truck Traffic	0	0	0	0	0	2.0	0	2.0	0	0	0	0	0	2.2	0	2.2	2.0
U-Turn	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% U-Turn	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 17:00																	
17:00	0	0	1	1	6	203	0	209	0	0	4	4	0	117	0	117	331
17:15	0	0	0	0	0	199	0	199	0	0	4	4	0	154	0	154	357
17:30	0	0	0	0	0	236	0	236	2	0	1	3	0	152	0	152	391
17:45	0	0	0	0	0	194	0	194	0	0	1	1	0	127	2	129	324
Total Volume	0	0	1	1	6	832	0	838	2	0	10	12	0	550	2	552	1403
% App. Total	0	0	100		0.7	99.3	0		16.7	0	83.3		0	99.6	0.4		
PHF	.000	.000	.250	.250	.250	.881	.000	.888	.250	.000	.625	.750	.000	.893	.250	.896	.897
General Traffic	0	0	1	1	6	828	0	834	2	0	10	12	0	542	2	544	1391
% General Traffic	0	0	100	100	100	99.5	0	99.5	100	0	100	100	0	98.5	100	98.6	99.1
Truck Traffic	0	0	0	0	0	4	0	4	0	0	0	0	0	8	0	8	12
% Truck Traffic	0	0	0	0	0	0.5	0	0.5	0	0	0	0	0	1.5	0	1.4	0.9
U-Turn	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% U-Turn	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Accurate Traffic Counts, Inc.

1750 W Broadway St., Suite 115
Oviedo, FL 32765

Station: 011
Counted by: Santiago
Weather: Clear
Location: Malabar Rd at Garvey Rd

File Name : Int 011_Malabar Rd at Garvey Rd
Site Code : 011-2331
Start Date : 1/16/2020
Page No : 1

Groups Printed- General Traffic - Truck Traffic - Turn

Start Time	Southbound				Malabar Rd Westbound				Garvey Rd Northbound				Malabar Rd Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00	0	0	0	0	7	61	0	68	3	0	30	33	0	118	2	120	221
07:15	0	0	0	0	12	87	0	99	2	0	25	27	0	122	9	131	257
07:30	0	0	0	0	19	115	0	134	3	0	33	36	0	164	10	174	344
07:45	0	0	0	0	24	144	0	168	2	0	54	56	0	128	7	135	359
Total	0	0	0	0	62	407	0	469	10	0	142	152	0	532	28	560	1181
08:00	0	0	0	0	17	123	0	140	4	0	29	33	0	129	6	135	308
08:15	0	0	0	0	13	135	0	148	5	0	21	26	0	123	6	129	303
08:30	0	0	0	0	9	120	0	129	3	0	22	25	0	145	3	148	302
08:45	0	0	0	0	14	99	0	113	0	0	17	17	0	138	7	145	275
Total	0	0	0	0	53	477	0	530	12	0	89	101	0	535	22	557	1188
09:00	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
*** BREAK ***																	
Total	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
*** BREAK ***																	
16:00	0	0	0	0	28	133	0	161	1	0	17	18	0	130	1	131	310
16:15	0	0	0	0	26	156	0	182	2	0	18	20	0	118	2	120	322
16:30	0	0	0	0	39	160	0	199	3	0	13	16	0	96	4	100	315
16:45	0	0	0	0	31	164	0	195	2	0	32	34	0	95	2	97	326
Total	0	0	0	0	124	613	0	737	8	0	80	88	0	439	9	448	1273
17:00	0	0	0	0	33	170	0	203	2	0	17	19	0	120	1	121	343
17:15	0	0	0	0	34	158	0	192	3	0	23	26	0	149	6	155	373
17:30	0	0	0	0	43	164	0	207	2	0	14	16	0	147	7	154	377
17:45	0	0	0	0	37	156	0	193	5	0	17	22	0	122	4	126	341
Total	0	0	0	0	147	648	0	795	12	0	71	83	0	538	18	556	1434
Grand Total	0	0	0	0	386	2146	0	2532	42	0	382	424	0	2044	77	2121	5077
Apprch %	0	0	0		15.2	84.8	0		9.9	0	90.1		0	96.4	3.6		
Total %	0	0	0		7.6	42.3	0	49.9	0.8	0	7.5	8.4	0	40.3	1.5	41.8	
General Traffic	0	0	0	0	382	2116	0	2498	40	0	372	412	0	2009	75	2084	4994
% General Traffic	0	0	0	0	99	98.6	0	98.7	95.2	0	97.4	97.2	0	98.3	97.4	98.3	98.4
Truck Traffic	0	0	0	0	4	30	0	34	2	0	10	12	0	35	2	37	83
% Truck Traffic	0	0	0	0	1	1.4	0	1.3	4.8	0	2.6	2.8	0	1.7	2.6	1.7	1.6
U-Turn	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% U-Turn	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Accurate Traffic Counts, Inc.

1750 W Broadway St., Suite 115
Oviedo, FL 32765

Station: 011
Counted by: Santiago
Weather: Clear
Location: Malabar Rd at Garvey Rd

File Name : Int 011_Malabar Rd at Garvey Rd
Site Code : 011-2331
Start Date : 1/16/2020
Page No : 2

Start Time	Southbound				Malabar Rd Westbound				Garvey Rd Northbound				Malabar Rd Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30																	
07:30	0	0	0	0	19	115	0	134	3	0	33	36	0	164	10	174	344
07:45	0	0	0	0	24	144	0	168	2	0	54	56	0	128	7	135	359
08:00	0	0	0	0	17	123	0	140	4	0	29	33	0	129	6	135	308
08:15	0	0	0	0	13	135	0	148	5	0	21	26	0	123	6	129	303
Total Volume	0	0	0	0	73	517	0	590	14	0	137	151	0	544	29	573	1314
% App. Total	0	0	0	0	12.4	87.6	0		9.3	0	90.7		0	94.9	5.1		
PHF	.000	.000	.000	.000	.760	.898	.000	.878	.700	.000	.634	.674	.000	.829	.725	.823	.915
General Traffic	0	0	0	0	72	506	0	578	14	0	134	148	0	534	28	562	1288
% General Traffic	0	0	0	0	98.6	97.9	0	98.0	100	0	97.8	98.0	0	98.2	96.6	98.1	98.0
Truck Traffic	0	0	0	0	1	11	0	12	0	0	3	3	0	10	1	11	26
% Truck Traffic	0	0	0	0	1.4	2.1	0	2.0	0	0	2.2	2.0	0	1.8	3.4	1.9	2.0
U-Turn	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% U-Turn	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 17:00																	
17:00	0	0	0	0	33	170	0	203	2	0	17	19	0	120	1	121	343
17:15	0	0	0	0	34	158	0	192	3	0	23	26	0	149	6	155	373
17:30	0	0	0	0	43	164	0	207	2	0	14	16	0	147	7	154	377
17:45	0	0	0	0	37	156	0	193	5	0	17	22	0	122	4	126	341
Total Volume	0	0	0	0	147	648	0	795	12	0	71	83	0	538	18	556	1434
% App. Total	0	0	0	0	18.5	81.5	0		14.5	0	85.5		0	96.8	3.2		
PHF	.000	.000	.000	.000	.855	.953	.000	.960	.600	.000	.772	.798	.000	.903	.643	.897	.951
General Traffic	0	0	0	0	147	645	0	792	12	0	70	82	0	530	18	548	1422
% General Traffic	0	0	0	0	100	99.5	0	99.6	100	0	98.6	98.8	0	98.5	100	98.6	99.2
Truck Traffic	0	0	0	0	0	3	0	3	0	0	1	1	0	8	0	8	12
% Truck Traffic	0	0	0	0	0	0.5	0	0.4	0	0	1.4	1.2	0	1.5	0	1.4	0.8
U-Turn	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% U-Turn	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Accurate Traffic Counts, Inc.

1750 W Broadway St., Suite 115
Oviedo, FL 32765

Station: 012
Counted by: Santiago
Weather: Clear
Location: Malabar Rd at Madalyn Landing

File Name : Int 012_Malabar Rd at Madalyn Landing Apartments
Site Code : 012-2294
Start Date : 1/16/2020
Page No : 1

Groups Printed- General Traffic - Truck Traffic - Turn

Start Time	Southbound				Malabar Rd Westbound				Madalyn Landing Apartments Northbound				Malabar Rd Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00	0	0	0	0	4	64	0	68	3	0	38	41	0	145	3	148	257
07:15	0	0	0	0	4	87	0	91	10	0	34	44	0	145	2	147	282
07:30	0	0	0	0	6	116	0	122	19	0	20	39	0	196	4	200	361
07:45	0	0	0	0	4	157	0	161	14	0	13	27	0	171	10	181	369
Total	0	0	0	0	18	424	0	442	46	0	105	151	0	657	19	676	1269
08:00	0	0	0	0	19	137	0	156	4	0	10	14	0	148	10	158	328
08:15	0	0	0	0	9	148	0	157	2	0	12	14	0	141	2	143	314
08:30	0	0	0	0	4	125	0	129	4	0	10	14	0	169	1	170	313
08:45	0	0	0	0	2	111	0	113	1	0	12	13	0	151	5	156	282
Total	0	0	0	0	34	521	0	555	11	0	44	55	0	609	18	627	1237
*** BREAK ***																	
16:00	0	0	0	0	14	167	0	181	0	0	10	10	0	142	9	151	342
16:15	0	0	0	0	11	186	0	197	4	0	12	16	0	131	4	135	348
16:30	0	0	0	0	14	201	0	215	2	0	9	11	0	108	3	111	337
16:45	0	0	0	0	18	181	0	199	2	0	7	9	0	119	6	125	333
Total	0	0	0	0	57	735	0	792	8	0	38	46	0	500	22	522	1360
17:00	0	0	0	0	14	203	0	217	3	0	14	17	0	137	4	141	375
17:15	0	0	0	0	21	190	0	211	1	0	7	8	0	165	3	168	387
17:30	0	0	0	0	25	212	0	237	3	0	9	12	0	157	7	164	413
17:45	0	0	0	0	20	188	0	208	3	0	5	8	0	130	5	135	351
Total	0	0	0	0	80	793	0	873	10	0	35	45	0	589	19	608	1526
Grand Total	0	0	0	0	189	2473	0	2662	75	0	222	297	0	2355	78	2433	5392
Apprch %	0	0	0		7.1	92.9	0		25.3	0	74.7		0	96.8	3.2		
Total %	0	0	0	0	3.5	45.9	0	49.4	1.4	0	4.1	5.5	0	43.7	1.4	45.1	
General Traffic	0	0	0	0	189	2436	0	2625	75	0	219	294	0	2312	76	2388	5307
% General Traffic	0	0	0	0	100	98.5	0	98.6	100	0	98.6	99	0	98.2	97.4	98.2	98.4
Truck Traffic	0	0	0	0	0	37	0	37	0	0	3	3	0	43	2	45	85
% Truck Traffic	0	0	0	0	0	1.5	0	1.4	0	0	1.4	1	0	1.8	2.6	1.8	1.6
U-Turn	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% U-Turn	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Accurate Traffic Counts, Inc.

1750 W Broadway St., Suite 115
Oviedo, FL 32765

Station: 012
Counted by: Santiago
Weather: Clear
Location: Malabar Rd at Madalyn Landing

File Name : Int 012_Malabar Rd at Madalyn Landing Apartments
Site Code : 012-2294
Start Date : 1/16/2020
Page No : 2

Start Time	Southbound				Malabar Rd Westbound				Madalyn Landing Apartments Northbound				Malabar Rd Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30																	
07:30	0	0	0	0	6	116	0	122	19	0	20	39	0	196	4	200	361
07:45	0	0	0	0	4	157	0	161	14	0	13	27	0	171	10	181	369
08:00	0	0	0	0	19	137	0	156	4	0	10	14	0	148	10	158	328
08:15	0	0	0	0	9	148	0	157	2	0	12	14	0	141	2	143	314
Total Volume	0	0	0	0	38	558	0	596	39	0	55	94	0	656	26	682	1372
% App. Total	0	0	0	0	6.4	93.6	0		41.5	0	58.5		0	96.2	3.8		
PHF	.000	.000	.000	.000	.500	.889	.000	.925	.513	.000	.688	.603	.000	.837	.650	.853	.930
General Traffic	0	0	0	0	38	546	0	584	39	0	54	93	0	644	25	669	1346
% General Traffic	0	0	0	0	100	97.8	0	98.0	100	0	98.2	98.9	0	98.2	96.2	98.1	98.1
Truck Traffic	0	0	0	0	0	12	0	12	0	0	1	1	0	12	1	13	26
% Truck Traffic	0	0	0	0	0	2.2	0	2.0	0	0	1.8	1.1	0	1.8	3.8	1.9	1.9
U-Turn	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% U-Turn	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 17:00																	
17:00	0	0	0	0	14	203	0	217	3	0	14	17	0	137	4	141	375
17:15	0	0	0	0	21	190	0	211	1	0	7	8	0	165	3	168	387
17:30	0	0	0	0	25	212	0	237	3	0	9	12	0	157	7	164	413
17:45	0	0	0	0	20	188	0	208	3	0	5	8	0	130	5	135	351
Total Volume	0	0	0	0	80	793	0	873	10	0	35	45	0	589	19	608	1526
% App. Total	0	0	0	0	9.2	90.8	0		22.2	0	77.8		0	96.9	3.1		
PHF	.000	.000	.000	.000	.800	.935	.000	.921	.833	.000	.625	.662	.000	.892	.679	.905	.924
General Traffic	0	0	0	0	80	788	0	868	10	0	35	45	0	581	19	600	1513
% General Traffic	0	0	0	0	100	99.4	0	99.4	100	0	100	100	0	98.6	100	98.7	99.1
Truck Traffic	0	0	0	0	0	5	0	5	0	0	0	0	0	8	0	8	13
% Truck Traffic	0	0	0	0	0	0.6	0	0.6	0	0	0	0	0	1.4	0	1.3	0.9
U-Turn	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% U-Turn	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Accurate Traffic Counts, Inc.

1750 W Broadway St., Suite 115
Oviedo, FL 32765

Station: 013
Counted by: Santiago
Weather: Clear
Location: Malabar Rd at Sutherland Dr

File Name : Int 013_Malabar Rd at Sutherland Dr
Site Code : 013-2294
Start Date : 1/16/2020
Page No : 1

Groups Printed- General Traffic - Truck Traffic - Turn

Start Time	Southbound				Malabar Rd Westbound				Sutherland Dr Northbound				Malabar Rd Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00	0	0	0	0	1	69	0	70	1	0	13	14	0	175	1	176	260
07:15	0	0	0	0	2	90	0	92	2	0	11	13	0	188	0	188	293
07:30	0	0	0	0	1	117	0	118	8	0	7	15	0	211	0	211	344
07:45	0	0	0	0	2	156	0	158	2	0	1	3	0	181	3	184	345
Total	0	0	0	0	6	432	0	438	13	0	32	45	0	755	4	759	1242
08:00	0	0	0	0	3	153	0	156	3	0	5	8	0	161	1	162	326
08:15	0	0	0	0	2	160	0	162	1	0	6	7	0	153	1	154	323
08:30	0	0	0	0	2	131	0	133	0	0	4	4	0	178	1	179	316
08:45	0	0	0	0	2	112	0	114	0	0	5	5	0	163	0	163	282
Total	0	0	0	0	9	556	0	565	4	0	20	24	0	655	3	658	1247
*** BREAK ***																	
16:00	0	0	0	0	8	171	0	179	1	0	4	5	0	156	1	157	341
16:15	0	0	0	0	7	185	0	192	1	0	3	4	0	145	1	146	342
16:30	0	0	0	0	4	230	0	234	0	0	4	4	0	115	0	115	353
16:45	0	0	0	0	7	201	0	208	1	0	6	7	0	123	2	125	340
Total	0	0	0	0	26	787	0	813	3	0	17	20	0	539	4	543	1376
17:00	0	0	0	0	9	220	0	229	0	0	0	0	0	150	1	151	380
17:15	0	0	0	0	7	215	0	222	1	0	9	10	0	172	0	172	404
17:30	0	0	0	0	12	232	0	244	2	0	4	6	0	167	1	168	418
17:45	0	0	0	0	7	204	0	211	0	0	9	9	0	136	0	136	356
Total	0	0	0	0	35	871	0	906	3	0	22	25	0	625	2	627	1558
Grand Total	0	0	0	0	76	2646	0	2722	23	0	91	114	0	2574	13	2587	5423
Apprch %	0	0	0	0	2.8	97.2	0		20.2	0	79.8		0	99.5	0.5		
Total %	0	0	0	0	1.4	48.8	0	50.2	0.4	0	1.7	2.1	0	47.5	0.2	47.7	
General Traffic	0	0	0	0	74	2611	0	2685	23	0	90	113	0	2526	13	2539	5337
% General Traffic	0	0	0	0	97.4	98.7	0	98.6	100	0	98.9	99.1	0	98.1	100	98.1	98.4
Truck Traffic	0	0	0	0	1	35	0	36	0	0	1	1	0	48	0	48	85
% Truck Traffic	0	0	0	0	1.3	1.3	0	1.3	0	0	1.1	0.9	0	1.9	0	1.9	1.6
U-Turn	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1
% U-Turn	0	0	0	0	1.3	0	0	0	0	0	0	0	0	0	0	0	0

Accurate Traffic Counts, Inc.

1750 W Broadway St., Suite 115
Oviedo, FL 32765

Station: 013
Counted by: Santiago
Weather: Clear
Location: Malabar Rd at Sutherland Dr

File Name : Int 013_Malabar Rd at Sutherland Dr
Site Code : 013-2294
Start Date : 1/16/2020
Page No : 2

Start Time	Southbound				Malabar Rd Westbound				Sutherland Dr Northbound				Malabar Rd Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30																	
07:30	0	0	0	0	1	117	0	118	8	0	7	15	0	211	0	211	344
07:45	0	0	0	0	2	156	0	158	2	0	1	3	0	181	3	184	345
08:00	0	0	0	0	3	153	0	156	3	0	5	8	0	161	1	162	326
08:15	0	0	0	0	2	160	0	162	1	0	6	7	0	153	1	154	323
Total Volume	0	0	0	0	8	586	0	594	14	0	19	33	0	706	5	711	1338
% App. Total	0	0	0	0	1.3	98.7	0		42.4	0	57.6		0	99.3	0.7		
PHF	.000	.000	.000	.000	.667	.916	.000	.917	.438	.000	.679	.550	.000	.836	.417	.842	.970
General Traffic	0	0	0	0	8	575	0	583	14	0	19	33	0	694	5	699	1315
% General Traffic	0	0	0	0	100	98.1	0	98.1	100	0	100	100	0	98.3	100	98.3	98.3
Truck Traffic	0	0	0	0	0	11	0	11	0	0	0	0	0	12	0	12	23
% Truck Traffic	0	0	0	0	0	1.9	0	1.9	0	0	0	0	0	1.7	0	1.7	1.7
U-Turn	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% U-Turn	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 17:00																	
17:00	0	0	0	0	9	220	0	229	0	0	0	0	0	150	1	151	380
17:15	0	0	0	0	7	215	0	222	1	0	9	10	0	172	0	172	404
17:30	0	0	0	0	12	232	0	244	2	0	4	6	0	167	1	168	418
17:45	0	0	0	0	7	204	0	211	0	0	9	9	0	136	0	136	356
Total Volume	0	0	0	0	35	871	0	906	3	0	22	25	0	625	2	627	1558
% App. Total	0	0	0	0	3.9	96.1	0		12	0	88		0	99.7	0.3		
PHF	.000	.000	.000	.000	.729	.939	.000	.928	.375	.000	.611	.625	.000	.908	.500	.911	.932
General Traffic	0	0	0	0	34	867	0	901	3	0	22	25	0	616	2	618	1544
% General Traffic	0	0	0	0	97.1	99.5	0	99.4	100	0	100	100	0	98.6	100	98.6	99.1
Truck Traffic	0	0	0	0	0	4	0	4	0	0	0	0	0	9	0	9	13
% Truck Traffic	0	0	0	0	0	0.5	0	0.4	0	0	0	0	0	1.4	0	1.4	0.8
U-Turn	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1
% U-Turn	0	0	0	0	2.9	0	0	0.1	0	0	0	0	0	0	0	0	0.1

Accurate Traffic Counts, Inc.

1750 W Broadway St., Suite 115
Oviedo, FL 32765

Station: 014

File Name : Int 014_Malabar Rd at Maywood Ave (N) - Daffodil Dr (S)

Counted by: Santiago

Site Code : 014-2294

Weather: Clear

Start Date : 1/16/2020

Location: Malabar Rd at Maywood Av Page No : 1

Groups Printed- General Traffic - Truck Traffic - Turn

Start Time	Maywood Av Southbound				Malabar Rd Westbound				Daffodil Dr Northbound				Malabar Rd Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00	10	1	10	21	5	59	5	69	3	0	14	17	0	182	2	184	291
07:15	21	0	21	42	7	65	9	81	3	2	16	21	1	205	0	206	350
07:30	20	0	20	40	8	97	18	123	3	1	18	22	3	212	0	215	400
07:45	17	0	17	34	9	136	18	163	5	0	12	17	3	188	4	195	409
Total	68	1	68	137	29	357	50	436	14	3	60	77	7	787	6	800	1450
08:00	14	0	14	28	10	138	11	159	2	0	8	10	0	151	4	155	352
08:15	6	0	7	13	8	152	18	178	3	0	9	12	3	150	4	157	360
08:30	10	0	11	21	5	119	11	135	4	0	11	15	2	176	1	179	350
08:45	9	0	11	20	5	107	12	124	0	0	7	7	4	164	4	172	323
Total	39	0	43	82	28	516	52	596	9	0	35	44	9	641	13	663	1385
*** BREAK ***																	
16:00	8	0	7	15	5	168	3	176	0	0	8	8	0	132	2	134	333
16:15	9	0	8	17	6	185	15	206	2	0	8	10	1	144	1	146	379
16:30	13	0	13	26	12	225	28	265	0	1	7	8	1	135	1	137	436
16:45	11	1	11	23	12	192	28	232	3	1	7	11	0	142	2	144	410
Total	41	1	39	81	35	770	74	879	5	2	30	37	2	553	6	561	1558
17:00	13	0	12	25	9	213	26	248	1	0	3	4	2	149	1	152	429
17:15	11	1	11	23	7	212	16	235	3	1	7	11	1	178	1	180	449
17:30	14	0	14	28	11	230	22	263	1	0	11	12	2	170	3	175	478
17:45	19	0	19	38	18	199	20	237	2	0	6	8	3	148	0	151	434
Total	57	1	56	114	45	854	84	983	7	1	27	35	8	645	5	658	1790
Grand Total	205	3	206	414	137	2497	260	2894	35	6	152	193	26	2626	30	2682	6183
Apprch %	49.5	0.7	49.8		4.7	86.3	9		18.1	3.1	78.8		1	97.9	1.1		
Total %	3.3	0	3.3	6.7	2.2	40.4	4.2	46.8	0.6	0.1	2.5	3.1	0.4	42.5	0.5	43.4	
General Traffic	201	2	201	404	136	2466	252	2854	34	6	148	188	23	2586	26	2635	6081
% General Traffic	98	66.7	97.6	97.6	99.3	98.8	96.9	98.6	97.1	100	97.4	97.4	88.5	98.5	86.7	98.2	98.4
Truck Traffic	4	1	5	10	1	31	8	40	1	0	4	5	3	40	4	47	102
% Truck Traffic	2	33.3	2.4	2.4	0.7	1.2	3.1	1.4	2.9	0	2.6	2.6	11.5	1.5	13.3	1.8	1.6
U-Turn	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% U-Turn	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Accurate Traffic Counts, Inc.

1750 W Broadway St., Suite 115
Oviedo, FL 32765

Station: 014

File Name : Int 014_Malabar Rd at Maywood Ave (N) - Daffodil Dr (S)

Counted by: Santiago

Site Code : 014-2294

Weather: Clear

Start Date : 1/16/2020

Location: Malabar Rd at Maywood Av Page No : 2

Start Time	Maywood Av Southbound				Malabar Rd Westbound				Daffodil Dr Northbound				Malabar Rd Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30																	
07:30	20	0	20	40	8	97	18	123	3	1	18	22	3	212	0	215	400
07:45	17	0	17	34	9	136	18	163	5	0	12	17	3	188	4	195	409
08:00	14	0	14	28	10	138	11	159	2	0	8	10	0	151	4	155	352
08:15	6	0	7	13	8	152	18	178	3	0	9	12	3	150	4	157	360
Total Volume	57	0	58	115	35	523	65	623	13	1	47	61	9	701	12	722	1521
% App. Total	49.6	0	50.4		5.6	83.9	10.4		21.3	1.6	77		1.2	97.1	1.7		
PHF	.713	.000	.725	.719	.875	.860	.903	.875	.650	.250	.653	.693	.750	.827	.750	.840	.930
General Traffic	57	0	57	114	35	512	63	610	12	1	46	59	8	690	11	709	1492
% General Traffic	100	0	98.3	99.1	100	97.9	96.9	97.9	92.3	100	97.9	96.7	88.9	98.4	91.7	98.2	98.1
Truck Traffic	0	0	1	1	0	11	2	13	1	0	1	2	1	11	1	13	29
% Truck Traffic	0	0	1.7	0.9	0	2.1	3.1	2.1	7.7	0	2.1	3.3	11.1	1.6	8.3	1.8	1.9
U-Turn	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% U-Turn	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 17:00

17:00	13	0	12	25	9	213	26	248	1	0	3	4	2	149	1	152	429
17:15	11	1	11	23	7	212	16	235	3	1	7	11	1	178	1	180	449
17:30	14	0	14	28	11	230	22	263	1	0	11	12	2	170	3	175	478
17:45	19	0	19	38	18	199	20	237	2	0	6	8	3	148	0	151	434
Total Volume	57	1	56	114	45	854	84	983	7	1	27	35	8	645	5	658	1790
% App. Total	50	0.9	49.1		4.6	86.9	8.5		20	2.9	77.1		1.2	98	0.8		
PHF	.750	.250	.737	.750	.625	.928	.808	.934	.583	.250	.614	.729	.667	.906	.417	.914	.936
General Traffic	56	1	56	113	45	851	84	980	7	1	27	35	7	637	5	649	1777
% General Traffic	98.2	100	100	99.1	100	99.6	100	99.7	100	100	100	100	87.5	98.8	100	98.6	99.3
Truck Traffic	1	0	0	1	0	3	0	3	0	0	0	0	1	8	0	9	13
% Truck Traffic	1.8	0	0	0.9	0	0.4	0	0.3	0	0	0	0	12.5	1.2	0	1.4	0.7
U-Turn	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% U-Turn	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Accurate Traffic Counts, Inc.

1750 W Broadway St., Suite 115
Oviedo, FL 32765

Station: 015
Counted by: Santiago
Weather: Clear
Location: Malabar Rd at Plaza Entrance

File Name : int 015_malabar rd at plaza entrance
Site Code : 015-2294
Start Date : 1/16/2020
Page No : 1

Groups Printed- General Traffic - Truck Traffic - Turn

Start Time	Plaza Entrance Southbound				Malabar Rd Westbound				Plaza Entrance Northbound				Malabar Rd Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00	0	0	0	0	4	74	0	78	7	0	4	11	0	192	6	198	287
07:15	2	0	1	3	2	92	0	94	18	0	5	23	3	230	13	246	366
07:30	2	0	1	3	4	107	0	111	12	1	4	17	0	227	9	236	367
07:45	2	1	1	4	11	128	1	140	19	1	7	27	0	210	11	221	392
Total	6	1	3	10	21	401	1	423	56	2	20	78	3	859	39	901	1412
08:00	3	0	5	8	13	141	0	154	19	0	7	26	4	174	12	190	378
08:15	1	3	5	9	12	148	0	160	17	2	16	35	2	149	7	158	362
08:30	1	0	3	4	19	135	0	154	16	0	8	24	2	191	14	207	389
08:45	1	0	2	3	13	103	1	117	13	3	10	26	4	165	12	181	327
Total	6	3	15	24	57	527	1	585	65	5	41	111	12	679	45	736	1456
*** BREAK ***																	
16:00	10	0	7	17	31	170	4	205	39	1	22	62	4	147	21	172	456
16:15	9	3	6	18	32	158	4	194	32	1	28	61	7	153	22	182	455
16:30	11	0	8	19	28	170	5	203	57	2	14	73	4	154	30	188	483
16:45	3	0	6	9	25	181	2	208	50	1	20	71	7	162	21	190	478
Total	33	3	27	63	116	679	15	810	178	5	84	267	22	616	94	732	1872
17:00	10	4	11	25	20	199	5	224	49	1	16	66	5	166	32	203	518
17:15	12	4	9	25	27	191	7	225	37	2	14	53	10	189	32	231	534
17:30	8	2	13	23	37	190	4	231	53	3	20	76	12	189	33	234	564
17:45	9	3	8	20	35	188	6	229	40	2	13	55	7	170	32	209	513
Total	39	13	41	93	119	768	22	909	179	8	63	250	34	714	129	877	2129
Grand Total	84	20	86	190	313	2375	39	2727	478	20	208	706	71	2868	307	3246	6869
Apprch %	44.2	10.5	45.3		11.5	87.1	1.4		67.7	2.8	29.5		2.2	88.4	9.5		
Total %	1.2	0.3	1.3	2.8	4.6	34.6	0.6	39.7	7	0.3	3	10.3	1	41.8	4.5	47.3	
General Traffic	82	20	86	188	313	2335	38	2686	478	19	207	704	71	2814	307	3192	6770
% General Traffic	97.6	100	100	98.9	100	98.3	97.4	98.5	100	95	99.5	99.7	100	98.1	100	98.3	98.6
Truck Traffic	2	0	0	2	0	40	1	41	0	1	1	2	0	54	0	54	99
% Truck Traffic	2.4	0	0	1.1	0	1.7	2.6	1.5	0	5	0.5	0.3	0	1.9	0	1.7	1.4
U-Turn	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% U-Turn	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Accurate Traffic Counts, Inc.

1750 W Broadway St., Suite 115
Oviedo, FL 32765

Station: 015
Counted by: Santiago
Weather: Clear
Location: Malabar Rd at Plaza Entrance

File Name : int 015_malabar rd at plaza entrance
Site Code : 015-2294
Start Date : 1/16/2020
Page No : 2

Start Time	Plaza Entrance Southbound				Malabar Rd Westbound				Plaza Entrance Northbound				Malabar Rd Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45																	
07:45	2	1	1	4	11	128	1	140	19	1	7	27	0	210	11	221	392
08:00	3	0	5	8	13	141	0	154	19	0	7	26	4	174	12	190	378
08:15	1	3	5	9	12	148	0	160	17	2	16	35	2	149	7	158	362
08:30	1	0	3	4	19	135	0	154	16	0	8	24	2	191	14	207	389
Total Volume	7	4	14	25	55	552	1	608	71	3	38	112	8	724	44	776	1521
% App. Total	28	16	56		9	90.8	0.2		63.4	2.7	33.9		1	93.3	5.7		
PHF	.583	.333	.700	.694	.724	.932	.250	.950	.934	.375	.594	.800	.500	.862	.786	.878	.970
General Traffic	7	4	14	25	55	538	1	594	71	3	38	112	8	712	44	764	1495
% General Traffic	100	100	100	100	100	97.5	100	97.7	100	100	100	100	100	98.3	100	98.5	98.3
Truck Traffic	0	0	0	0	0	14	0	14	0	0	0	0	0	12	0	12	26
% Truck Traffic	0	0	0	0	0	2.5	0	2.3	0	0	0	0	0	1.7	0	1.5	1.7
U-Turn	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% U-Turn	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 17:00																	
17:00	10	4	11	25	20	199	5	224	49	1	16	66	5	166	32	203	518
17:15	12	4	9	25	27	191	7	225	37	2	14	53	10	189	32	231	534
17:30	8	2	13	23	37	190	4	231	53	3	20	76	12	189	33	234	564
17:45	9	3	8	20	35	188	6	229	40	2	13	55	7	170	32	209	513
Total Volume	39	13	41	93	119	768	22	909	179	8	63	250	34	714	129	877	2129
% App. Total	41.9	14	44.1		13.1	84.5	2.4		71.6	3.2	25.2		3.9	81.4	14.7		
PHF	.813	.813	.788	.930	.804	.965	.786	.984	.844	.667	.788	.822	.708	.944	.977	.937	.944
General Traffic	38	13	41	92	119	765	21	905	179	8	63	250	34	705	129	868	2115
% General Traffic	97.4	100	100	98.9	100	99.6	95.5	99.6	100	100	100	100	100	98.7	100	99.0	99.3
Truck Traffic	1	0	0	1	0	3	1	4	0	0	0	0	0	9	0	9	14
% Truck Traffic	2.6	0	0	1.1	0	0.4	4.5	0.4	0	0	0	0	0	1.3	0	1.0	0.7
U-Turn	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% U-Turn	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Accurate Traffic Counts, Inc.

1750 W Broadway St., Suite 115
Oviedo, FL 32765

Station: 016
Counted by: Santiago
Weather: Clear
Location: Malabar Rd at Minton Rd

File Name : int 016_malabar rd at minton rd_all traffic
Site Code : 016-2294
Start Date : 1/16/2020
Page No : 1

Groups Printed- General Traffic - Truck Traffic - Turn

Start Time	Minton Rd Southbound				Malabar Rd Westbound				Minton Rd Northbound				Malabar Rd Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00	31	37	19	87	15	45	61	121	5	120	11	136	21	167	12	200	544
07:15	54	63	23	140	24	36	76	136	6	99	22	127	27	192	22	241	644
07:30	66	88	36	190	17	79	112	208	4	98	15	117	27	199	15	241	756
07:45	71	103	42	216	24	76	106	206	12	103	23	138	27	199	13	239	799
Total	222	291	120	633	80	236	355	671	27	420	71	518	102	757	62	921	2743
08:00	88	121	49	258	36	73	48	157	14	70	21	105	31	167	12	210	730
08:15	46	69	28	143	35	104	57	196	17	74	38	129	27	138	12	177	645
08:30	35	39	39	113	23	77	40	140	16	83	22	121	26	161	16	203	577
08:45	48	58	23	129	36	74	43	153	7	85	25	117	23	150	11	184	583
Total	217	287	139	643	130	328	188	646	54	312	106	472	107	616	51	774	2535
*** BREAK ***																	
16:00	93	100	66	259	56	125	54	235	33	79	11	123	62	97	8	167	784
16:15	80	130	72	282	48	117	40	205	24	83	12	119	66	112	12	190	796
16:30	65	131	68	264	53	112	36	201	19	90	16	125	59	112	11	182	772
16:45	71	114	71	256	66	120	63	249	29	73	10	112	45	122	12	179	796
Total	309	475	277	1061	223	474	193	890	105	325	49	479	232	443	43	718	3148
17:00	83	161	84	328	58	145	38	241	24	74	17	115	53	127	11	191	875
17:15	81	149	97	327	70	147	44	261	24	65	17	106	69	129	11	209	903
17:30	86	153	77	316	80	158	61	299	11	77	16	104	65	131	12	208	927
17:45	70	148	87	305	54	138	49	241	14	85	14	113	56	128	8	192	851
Total	320	611	345	1276	262	588	192	1042	73	301	64	438	243	515	42	800	3556
Grand Total	1068	1664	881	3613	695	1626	928	3249	259	1358	290	1907	684	2331	198	3213	11982
Apprch %	29.6	46.1	24.4		21.4	50	28.6		13.6	71.2	15.2		21.3	72.5	6.2		
Total %	8.9	13.9	7.4	30.2	5.8	13.6	7.7	27.1	2.2	11.3	2.4	15.9	5.7	19.5	1.7	26.8	
General Traffic	1063	1642	864	3569	678	1588	923	3189	257	1340	287	1884	670	2302	189	3161	11803
% General Traffic	99.5	98.7	98.1	98.8	97.6	97.7	99.5	98.2	99.2	98.7	99	98.8	98	98.8	95.5	98.4	98.5
Truck Traffic	5	22	17	44	6	37	5	48	2	18	3	23	12	29	9	50	165
% Truck Traffic	0.5	1.3	1.9	1.2	0.9	2.3	0.5	1.5	0.8	1.3	1	1.2	1.8	1.2	4.5	1.6	1.4
U-Turn	0	0	0	0	11	1	0	12	0	0	0	0	2	0	0	2	14
% U-Turn	0	0	0	0	1.6	0.1	0	0.4	0	0	0	0	0.3	0	0	0.1	0.1

Accurate Traffic Counts, Inc.

1750 W Broadway St., Suite 115
Oviedo, FL 32765

Station: 016
Counted by: Santiago
Weather: Clear
Location: Malabar Rd at Minton Rd

File Name : int 016_malabar rd at minton rd_all traffic
Site Code : 016-2294
Start Date : 1/16/2020
Page No : 2

Start Time	Minton Rd Southbound				Malabar Rd Westbound				Minton Rd Northbound				Malabar Rd Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30																	
07:30	66	88	36	190	17	79	112	208	4	98	15	117	27	199	15	241	756
07:45	71	103	42	216	24	76	106	206	12	103	23	138	27	199	13	239	799
08:00	88	121	49	258	36	73	48	157	14	70	21	105	31	167	12	210	730
08:15	46	69	28	143	35	104	57	196	17	74	38	129	27	138	12	177	645
Total Volume	271	381	155	807	112	332	323	767	47	345	97	489	112	703	52	867	2930
% App. Total	33.6	47.2	19.2		14.6	43.3	42.1		9.6	70.6	19.8		12.9	81.1	6		
PHF	.770	.787	.791	.782	.778	.798	.721	.922	.691	.837	.638	.886	.903	.883	.867	.899	.917
General Traffic	270	376	147	793	102	321	323	746	47	342	97	486	109	698	51	858	2883
% General Traffic	99.6	98.7	94.8	98.3	91.1	96.7	100	97.3	100	99.1	100	99.4	97.3	99.3	98.1	99.0	98.4
Truck Traffic	1	5	8	14	2	10	0	12	0	3	0	3	2	5	1	8	37
% Truck Traffic	0.4	1.3	5.2	1.7	1.8	3.0	0	1.6	0	0.9	0	0.6	1.8	0.7	1.9	0.9	1.3
U-Turn	0	0	0	0	8	1	0	9	0	0	0	0	1	0	0	1	10
% U-Turn	0	0	0	0	7.1	0.3	0	1.2	0	0	0	0	0.9	0	0	0.1	0.3

Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1
Peak Hour for Entire Intersection Begins at 17:00

17:00	83	161	84	328	58	145	38	241	24	74	17	115	53	127	11	191	875
17:15	81	149	97	327	70	147	44	261	24	65	17	106	69	129	11	209	903
17:30	86	153	77	316	80	158	61	299	11	77	16	104	65	131	12	208	927
17:45	70	148	87	305	54	138	49	241	14	85	14	113	56	128	8	192	851
Total Volume	320	611	345	1276	262	588	192	1042	73	301	64	438	243	515	42	800	3556
% App. Total	25.1	47.9	27		25.1	56.4	18.4		16.7	68.7	14.6		30.4	64.4	5.2		
PHF	.930	.949	.889	.973	.819	.930	.787	.871	.760	.885	.941	.952	.880	.983	.875	.957	.959
General Traffic	317	607	342	1266	260	583	191	1034	73	296	62	431	241	507	40	788	3519
% General Traffic	99.1	99.3	99.1	99.2	99.2	99.1	99.5	99.2	100	98.3	96.9	98.4	99.2	98.4	95.2	98.5	99.0
Truck Traffic	3	4	3	10	2	5	1	8	0	5	2	7	2	8	2	12	37
% Truck Traffic	0.9	0.7	0.9	0.8	0.8	0.9	0.5	0.8	0	1.7	3.1	1.6	0.8	1.6	4.8	1.5	1.0
U-Turn	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% U-Turn	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

APPENDIX F – FDOT FACTOR REPORTS

Contained in this Appendix –

- FDOT Seasonal Factor Report
 - FDOT Axle Correction Factor Report
-

FDOT SEASONAL FACTOR REPORT

2019 PEAK SEASON FACTOR CATEGORY REPORT - REPORT TYPE: ALL
 CATEGORY: 7000 BREVARD COUNTYWIDE

WEEK	DATES	SF	MOCF: 0.91 PSCF
1	01/01/2019 - 01/05/2019	1.03	1.13
2	01/06/2019 - 01/12/2019	1.00	1.10
3	01/13/2019 - 01/19/2019	0.97	1.07
4	01/20/2019 - 01/26/2019	0.96	1.05
* 5	01/27/2019 - 02/02/2019	0.94	1.03
* 6	02/03/2019 - 02/09/2019	0.92	1.01
* 7	02/10/2019 - 02/16/2019	0.90	0.99
* 8	02/17/2019 - 02/23/2019	0.90	0.99
* 9	02/24/2019 - 03/02/2019	0.89	0.98
*10	03/03/2019 - 03/09/2019	0.88	0.97
*11	03/10/2019 - 03/16/2019	0.88	0.97
*12	03/17/2019 - 03/23/2019	0.89	0.98
*13	03/24/2019 - 03/30/2019	0.90	0.99
*14	03/31/2019 - 04/06/2019	0.91	1.00
*15	04/07/2019 - 04/13/2019	0.92	1.01
*16	04/14/2019 - 04/20/2019	0.93	1.02
*17	04/21/2019 - 04/27/2019	0.94	1.03
18	04/28/2019 - 05/04/2019	0.96	1.05
19	05/05/2019 - 05/11/2019	0.98	1.08
20	05/12/2019 - 05/18/2019	0.99	1.09
21	05/19/2019 - 05/25/2019	1.01	1.11
22	05/26/2019 - 06/01/2019	1.02	1.12
23	06/02/2019 - 06/08/2019	1.03	1.13
24	06/09/2019 - 06/15/2019	1.05	1.15
25	06/16/2019 - 06/22/2019	1.05	1.15
26	06/23/2019 - 06/29/2019	1.05	1.15
27	06/30/2019 - 07/06/2019	1.05	1.15
28	07/07/2019 - 07/13/2019	1.05	1.15
29	07/14/2019 - 07/20/2019	1.06	1.16
30	07/21/2019 - 07/27/2019	1.06	1.16
31	07/28/2019 - 08/03/2019	1.07	1.18
32	08/04/2019 - 08/10/2019	1.08	1.19
33	08/11/2019 - 08/17/2019	1.08	1.19
34	08/18/2019 - 08/24/2019	1.10	1.21
35	08/25/2019 - 08/31/2019	1.11	1.22
36	09/01/2019 - 09/07/2019	1.12	1.23
37	09/08/2019 - 09/14/2019	1.13	1.24
38	09/15/2019 - 09/21/2019	1.14	1.25
39	09/22/2019 - 09/28/2019	1.12	1.23
40	09/29/2019 - 10/05/2019	1.10	1.21
41	10/06/2019 - 10/12/2019	1.07	1.18
42	10/13/2019 - 10/19/2019	1.05	1.15
43	10/20/2019 - 10/26/2019	1.05	1.15
44	10/27/2019 - 11/02/2019	1.04	1.14
45	11/03/2019 - 11/09/2019	1.04	1.14
46	11/10/2019 - 11/16/2019	1.03	1.13
47	11/17/2019 - 11/23/2019	1.03	1.13
48	11/24/2019 - 11/30/2019	1.03	1.13
49	12/01/2019 - 12/07/2019	1.03	1.13
50	12/08/2019 - 12/14/2019	1.03	1.13
51	12/15/2019 - 12/21/2019	1.03	1.13
52	12/22/2019 - 12/28/2019	1.00	1.10
53	12/29/2019 - 12/31/2019	0.97	1.07

* PEAK SEASON

14-FEB-2020 15:39:28

830UPD

5_7000_PKSEASON.TXT

2019 PEAK SEASON FACTOR CATEGORY REPORT - REPORT TYPE: ALL
 CATEGORY: 7095 BREVARD I95

WEEK	DATES	SF	MOCF: 0.96 PSCF
1	01/01/2019 - 01/05/2019	0.92	0.96
2	01/06/2019 - 01/12/2019	0.98	1.02
3	01/13/2019 - 01/19/2019	1.04	1.08
4	01/20/2019 - 01/26/2019	1.03	1.07
5	01/27/2019 - 02/02/2019	1.03	1.07
6	02/03/2019 - 02/09/2019	1.02	1.06
7	02/10/2019 - 02/16/2019	1.01	1.05
* 8	02/17/2019 - 02/23/2019	0.99	1.03
* 9	02/24/2019 - 03/02/2019	0.96	1.00
*10	03/03/2019 - 03/09/2019	0.94	0.98
*11	03/10/2019 - 03/16/2019	0.91	0.95
*12	03/17/2019 - 03/23/2019	0.92	0.96
*13	03/24/2019 - 03/30/2019	0.93	0.97
*14	03/31/2019 - 04/06/2019	0.94	0.98
*15	04/07/2019 - 04/13/2019	0.95	0.99
*16	04/14/2019 - 04/20/2019	0.97	1.01
*17	04/21/2019 - 04/27/2019	0.97	1.01
*18	04/28/2019 - 05/04/2019	0.98	1.02
*19	05/05/2019 - 05/11/2019	0.99	1.03
*20	05/12/2019 - 05/18/2019	1.00	1.04
21	05/19/2019 - 05/25/2019	1.00	1.04
22	05/26/2019 - 06/01/2019	1.00	1.04
23	06/02/2019 - 06/08/2019	0.99	1.03
24	06/09/2019 - 06/15/2019	0.99	1.03
25	06/16/2019 - 06/22/2019	0.99	1.03
26	06/23/2019 - 06/29/2019	0.99	1.03
27	06/30/2019 - 07/06/2019	0.99	1.03
28	07/07/2019 - 07/13/2019	0.99	1.03
29	07/14/2019 - 07/20/2019	0.99	1.03
30	07/21/2019 - 07/27/2019	1.01	1.05
31	07/28/2019 - 08/03/2019	1.02	1.06
32	08/04/2019 - 08/10/2019	1.04	1.08
33	08/11/2019 - 08/17/2019	1.06	1.10
34	08/18/2019 - 08/24/2019	1.09	1.14
35	08/25/2019 - 08/31/2019	1.12	1.17
36	09/01/2019 - 09/07/2019	1.15	1.20
37	09/08/2019 - 09/14/2019	1.18	1.23
38	09/15/2019 - 09/21/2019	1.22	1.27
39	09/22/2019 - 09/28/2019	1.17	1.22
40	09/29/2019 - 10/05/2019	1.13	1.18
41	10/06/2019 - 10/12/2019	1.08	1.13
42	10/13/2019 - 10/19/2019	1.04	1.08
43	10/20/2019 - 10/26/2019	1.02	1.06
44	10/27/2019 - 11/02/2019	1.00	1.04
45	11/03/2019 - 11/09/2019	0.98	1.02
46	11/10/2019 - 11/16/2019	0.97	1.01
47	11/17/2019 - 11/23/2019	0.96	1.00
48	11/24/2019 - 11/30/2019	0.95	0.99
49	12/01/2019 - 12/07/2019	0.94	0.98
50	12/08/2019 - 12/14/2019	0.93	0.97
51	12/15/2019 - 12/21/2019	0.92	0.96
52	12/22/2019 - 12/28/2019	0.98	1.02
53	12/29/2019 - 12/31/2019	1.04	1.08

* PEAK SEASON

14-FEB-2020 15:39:28

830UPD

5_7095_PKSEASON.TXT

FDOT AXLE CORRECTION FACTOR REPORT

2019 WEEKLY AXLE FACTOR CATEGORY REPORT - REPORT TYPE: ALL

COUNTY: 70 - BREVARD

WEEK	DATES	7001 BREVARD COUNTYWIDE	I95, SR520 - SR-44	7002 SR514	7003	SR46	7004
1	01/01/2019 - 01/05/2019	0.99		0.84	0.98		0.99
2	01/06/2019 - 01/12/2019	0.99		0.83	0.98		0.99
3	01/13/2019 - 01/19/2019	0.99		0.82	0.98		0.99
4	01/20/2019 - 01/26/2019	0.99		0.82	0.98		0.99
5	01/27/2019 - 02/02/2019	0.99		0.82	0.98		0.99
6	02/03/2019 - 02/09/2019	0.98		0.82	0.98		0.99
7	02/10/2019 - 02/16/2019	0.98		0.82	0.98		0.99
8	02/17/2019 - 02/23/2019	0.98		0.83	0.98		0.99
9	02/24/2019 - 03/02/2019	0.98		0.83	0.98		0.99
10	03/03/2019 - 03/09/2019	0.98		0.84	0.98		0.99
11	03/10/2019 - 03/16/2019	0.98		0.84	0.98		0.99
12	03/17/2019 - 03/23/2019	0.98		0.84	0.98		0.99
13	03/24/2019 - 03/30/2019	0.98		0.83	0.98		0.99
14	03/31/2019 - 04/06/2019	0.98		0.83	0.98		0.99
15	04/07/2019 - 04/13/2019	0.98		0.82	0.98		0.99
16	04/14/2019 - 04/20/2019	0.98		0.82	0.98		0.99
17	04/21/2019 - 04/27/2019	0.98		0.82	0.98		0.99
18	04/28/2019 - 05/04/2019	0.98		0.83	0.98		0.99
19	05/05/2019 - 05/11/2019	0.98		0.83	0.98		0.99
20	05/12/2019 - 05/18/2019	0.98		0.83	0.98		0.99
21	05/19/2019 - 05/25/2019	0.98		0.83	0.98		0.99
22	05/26/2019 - 06/01/2019	0.98		0.84	0.98		0.99
23	06/02/2019 - 06/08/2019	0.98		0.84	0.98		0.99
24	06/09/2019 - 06/15/2019	0.98		0.84	0.98		0.99
25	06/16/2019 - 06/22/2019	0.98		0.84	0.98		0.99
26	06/23/2019 - 06/29/2019	0.98		0.84	0.98		0.99
27	06/30/2019 - 07/06/2019	0.98		0.84	0.98		0.99
28	07/07/2019 - 07/13/2019	0.98		0.84	0.98		0.99
29	07/14/2019 - 07/20/2019	0.98		0.84	0.98		0.99
30	07/21/2019 - 07/27/2019	0.98		0.84	0.98		0.99
31	07/28/2019 - 08/03/2019	0.98		0.84	0.98		0.99
32	08/04/2019 - 08/10/2019	0.98		0.83	0.98		0.99
33	08/11/2019 - 08/17/2019	0.98		0.83	0.98		0.99
34	08/18/2019 - 08/24/2019	0.98		0.82	0.98		0.99
35	08/25/2019 - 08/31/2019	0.98		0.82	0.98		0.99
36	09/01/2019 - 09/07/2019	0.98		0.81	0.98		0.99
37	09/08/2019 - 09/14/2019	0.98		0.81	0.98		0.99
38	09/15/2019 - 09/21/2019	0.98		0.80	0.98		0.99
39	09/22/2019 - 09/28/2019	0.98		0.80	0.98		0.99
40	09/29/2019 - 10/05/2019	0.98		0.81	0.98		0.99
41	10/06/2019 - 10/12/2019	0.98		0.81	0.98		0.99
42	10/13/2019 - 10/19/2019	0.98		0.81	0.98		0.99
43	10/20/2019 - 10/26/2019	0.98		0.81	0.98		0.99
44	10/27/2019 - 11/02/2019	0.98		0.82	0.98		0.99
45	11/03/2019 - 11/09/2019	0.98		0.82	0.98		0.99
46	11/10/2019 - 11/16/2019	0.98		0.82	0.98		0.99
47	11/17/2019 - 11/23/2019	0.98		0.82	0.98		0.99
48	11/24/2019 - 11/30/2019	0.98		0.83	0.98		0.99
49	12/01/2019 - 12/07/2019	0.99		0.83	0.98		0.99
50	12/08/2019 - 12/14/2019	0.99		0.84	0.98		0.99
51	12/15/2019 - 12/21/2019	0.99		0.84	0.98		0.99
52	12/22/2019 - 12/28/2019	0.99		0.83	0.98		0.99
53	12/29/2019 - 12/31/2019	0.99		0.82	0.98		0.99

2019 WEEKLY AXLE FACTOR CATEGORY REPORT - REPORT TYPE: ALL

COUNTY: 70 - BREVARD

WEEK	DATES	7005 SR405, SR50 NE TO SR5	7006 SR507 & SR519	7007 SR50, ORANGE CO-I95	7008 SR524, SR-501
1	01/01/2019 - 01/05/2019	0.96	0.99	0.99	0.99
2	01/06/2019 - 01/12/2019	0.96	0.99	0.99	0.99
3	01/13/2019 - 01/19/2019	0.96	0.99	0.99	0.99
4	01/20/2019 - 01/26/2019	0.96	0.99	0.99	0.99
5	01/27/2019 - 02/02/2019	0.96	0.99	0.99	0.99
6	02/03/2019 - 02/09/2019	0.96	0.99	0.99	0.99
7	02/10/2019 - 02/16/2019	0.96	0.99	0.99	0.99
8	02/17/2019 - 02/23/2019	0.96	0.99	0.99	0.99
9	02/24/2019 - 03/02/2019	0.96	0.99	0.99	0.99
10	03/03/2019 - 03/09/2019	0.96	0.99	0.99	0.99
11	03/10/2019 - 03/16/2019	0.96	0.99	0.99	0.99
12	03/17/2019 - 03/23/2019	0.96	0.99	0.99	0.99
13	03/24/2019 - 03/30/2019	0.96	0.99	0.99	0.99
14	03/31/2019 - 04/06/2019	0.96	0.99	0.99	0.99
15	04/07/2019 - 04/13/2019	0.96	0.99	0.99	0.99
16	04/14/2019 - 04/20/2019	0.96	0.99	0.99	0.99
17	04/21/2019 - 04/27/2019	0.96	0.99	0.99	0.99
18	04/28/2019 - 05/04/2019	0.96	0.99	0.99	0.99
19	05/05/2019 - 05/11/2019	0.96	0.99	0.99	0.99
20	05/12/2019 - 05/18/2019	0.96	0.99	0.99	0.99
21	05/19/2019 - 05/25/2019	0.96	0.99	0.99	0.99
22	05/26/2019 - 06/01/2019	0.96	0.99	0.99	0.99
23	06/02/2019 - 06/08/2019	0.96	0.99	0.99	0.99
24	06/09/2019 - 06/15/2019	0.96	0.99	0.99	0.99
25	06/16/2019 - 06/22/2019	0.96	0.99	0.99	0.99
26	06/23/2019 - 06/29/2019	0.96	0.99	0.99	0.99
27	06/30/2019 - 07/06/2019	0.96	0.99	0.99	0.99
28	07/07/2019 - 07/13/2019	0.96	0.99	0.99	0.99
29	07/14/2019 - 07/20/2019	0.96	0.99	0.99	0.99
30	07/21/2019 - 07/27/2019	0.96	0.99	0.99	0.99
31	07/28/2019 - 08/03/2019	0.96	0.99	0.99	0.99
32	08/04/2019 - 08/10/2019	0.96	0.99	0.99	0.99
33	08/11/2019 - 08/17/2019	0.96	0.99	0.99	0.99
34	08/18/2019 - 08/24/2019	0.96	0.99	0.99	0.99
35	08/25/2019 - 08/31/2019	0.96	0.99	0.99	0.99
36	09/01/2019 - 09/07/2019	0.96	0.99	0.99	0.99
37	09/08/2019 - 09/14/2019	0.96	0.99	0.99	0.99
38	09/15/2019 - 09/21/2019	0.96	0.99	0.99	0.99
39	09/22/2019 - 09/28/2019	0.96	0.99	0.99	0.99
40	09/29/2019 - 10/05/2019	0.96	0.99	0.99	0.99
41	10/06/2019 - 10/12/2019	0.96	0.99	0.99	0.99
42	10/13/2019 - 10/19/2019	0.96	0.99	0.99	0.99
43	10/20/2019 - 10/26/2019	0.96	0.99	0.99	0.99
44	10/27/2019 - 11/02/2019	0.96	0.99	0.99	0.99
45	11/03/2019 - 11/09/2019	0.96	0.99	0.99	0.99
46	11/10/2019 - 11/16/2019	0.96	0.99	0.99	0.99
47	11/17/2019 - 11/23/2019	0.96	0.99	0.99	0.99
48	11/24/2019 - 11/30/2019	0.96	0.99	0.99	0.99
49	12/01/2019 - 12/07/2019	0.96	0.99	0.99	0.99
50	12/08/2019 - 12/14/2019	0.96	0.99	0.99	0.99
51	12/15/2019 - 12/21/2019	0.96	0.99	0.99	0.99
52	12/22/2019 - 12/28/2019	0.96	0.99	0.99	0.99
53	12/29/2019 - 12/31/2019	0.96	0.99	0.99	0.99

2019 WEEKLY AXLE FACTOR CATEGORY REPORT - REPORT TYPE: ALL

COUNTY: 70 - BREVARD

WEEK	DATES	SR50,I95 - US1	7009	SR404	7010	SR513	7011	US1, SR50 - VOLUSIA	7012
1	01/01/2019 - 01/05/2019		0.96		0.99		1.00		0.98
2	01/06/2019 - 01/12/2019		0.96		0.99		1.00		0.98
3	01/13/2019 - 01/19/2019		0.96		0.99		1.00		0.98
4	01/20/2019 - 01/26/2019		0.96		0.99		1.00		0.98
5	01/27/2019 - 02/02/2019		0.96		0.99		1.00		0.98
6	02/03/2019 - 02/09/2019		0.96		0.99		1.00		0.98
7	02/10/2019 - 02/16/2019		0.96		0.99		1.00		0.98
8	02/17/2019 - 02/23/2019		0.96		0.99		1.00		0.98
9	02/24/2019 - 03/02/2019		0.96		0.99		1.00		0.98
10	03/03/2019 - 03/09/2019		0.96		0.99		1.00		0.98
11	03/10/2019 - 03/16/2019		0.96		0.99		1.00		0.98
12	03/17/2019 - 03/23/2019		0.96		0.99		1.00		0.98
13	03/24/2019 - 03/30/2019		0.96		0.99		1.00		0.98
14	03/31/2019 - 04/06/2019		0.96		0.99		1.00		0.98
15	04/07/2019 - 04/13/2019		0.96		0.99		1.00		0.98
16	04/14/2019 - 04/20/2019		0.96		0.99		1.00		0.98
17	04/21/2019 - 04/27/2019		0.96		0.99		1.00		0.98
18	04/28/2019 - 05/04/2019		0.96		0.99		1.00		0.98
19	05/05/2019 - 05/11/2019		0.96		0.99		1.00		0.98
20	05/12/2019 - 05/18/2019		0.96		0.99		1.00		0.98
21	05/19/2019 - 05/25/2019		0.96		0.99		1.00		0.98
22	05/26/2019 - 06/01/2019		0.96		0.99		1.00		0.98
23	06/02/2019 - 06/08/2019		0.96		0.99		1.00		0.98
24	06/09/2019 - 06/15/2019		0.96		0.99		1.00		0.98
25	06/16/2019 - 06/22/2019		0.96		0.99		1.00		0.98
26	06/23/2019 - 06/29/2019		0.96		0.99		1.00		0.98
27	06/30/2019 - 07/06/2019		0.96		0.99		1.00		0.98
28	07/07/2019 - 07/13/2019		0.96		0.99		1.00		0.98
29	07/14/2019 - 07/20/2019		0.96		0.99		1.00		0.98
30	07/21/2019 - 07/27/2019		0.96		0.99		1.00		0.98
31	07/28/2019 - 08/03/2019		0.96		0.99		1.00		0.98
32	08/04/2019 - 08/10/2019		0.96		0.99		1.00		0.98
33	08/11/2019 - 08/17/2019		0.96		0.99		1.00		0.98
34	08/18/2019 - 08/24/2019		0.96		0.99		1.00		0.98
35	08/25/2019 - 08/31/2019		0.96		0.99		1.00		0.98
36	09/01/2019 - 09/07/2019		0.96		0.99		1.00		0.98
37	09/08/2019 - 09/14/2019		0.96		0.99		1.00		0.98
38	09/15/2019 - 09/21/2019		0.96		0.99		1.00		0.98
39	09/22/2019 - 09/28/2019		0.96		0.99		1.00		0.98
40	09/29/2019 - 10/05/2019		0.96		0.99		1.00		0.98
41	10/06/2019 - 10/12/2019		0.96		0.99		1.00		0.98
42	10/13/2019 - 10/19/2019		0.96		0.99		1.00		0.98
43	10/20/2019 - 10/26/2019		0.96		0.99		1.00		0.98
44	10/27/2019 - 11/02/2019		0.96		0.99		1.00		0.98
45	11/03/2019 - 11/09/2019		0.96		0.99		1.00		0.98
46	11/10/2019 - 11/16/2019		0.96		0.99		1.00		0.98
47	11/17/2019 - 11/23/2019		0.96		0.99		1.00		0.98
48	11/24/2019 - 11/30/2019		0.96		0.99		1.00		0.98
49	12/01/2019 - 12/07/2019		0.96		0.99		1.00		0.98
50	12/08/2019 - 12/14/2019		0.96		0.99		1.00		0.98
51	12/15/2019 - 12/21/2019		0.96		0.99		1.00		0.98
52	12/22/2019 - 12/28/2019		0.96		0.99		1.00		0.98
53	12/29/2019 - 12/31/2019		0.96		0.99		1.00		0.98

2019 WEEKLY AXLE FACTOR CATEGORY REPORT - REPORT TYPE: ALL

COUNTY: 70 - BREVARD

WEEK	DATES	7013 SR528,ORANGE CO-US1	7014 US1,IND RIV CO-SR518	SR508	7015	7016 SR518,US1 TO A1A
1	01/01/2019 - 01/05/2019	0.96	0.98		1.00	0.00
2	01/06/2019 - 01/12/2019	0.96	0.98		1.00	0.00
3	01/13/2019 - 01/19/2019	0.95	0.98		1.00	0.00
4	01/20/2019 - 01/26/2019	0.95	0.98		1.00	0.00
5	01/27/2019 - 02/02/2019	0.95	0.98		1.00	0.00
6	02/03/2019 - 02/09/2019	0.95	0.97		1.00	0.00
7	02/10/2019 - 02/16/2019	0.95	0.97		1.00	0.00
8	02/17/2019 - 02/23/2019	0.95	0.97		1.00	0.00
9	02/24/2019 - 03/02/2019	0.95	0.97		1.00	0.00
10	03/03/2019 - 03/09/2019	0.95	0.97		1.00	0.00
11	03/10/2019 - 03/16/2019	0.95	0.97		1.00	0.00
12	03/17/2019 - 03/23/2019	0.95	0.97		1.00	0.00
13	03/24/2019 - 03/30/2019	0.95	0.97		1.00	0.00
14	03/31/2019 - 04/06/2019	0.95	0.97		1.00	0.00
15	04/07/2019 - 04/13/2019	0.95	0.97		1.00	0.00
16	04/14/2019 - 04/20/2019	0.95	0.97		1.00	0.00
17	04/21/2019 - 04/27/2019	0.95	0.97		1.00	0.00
18	04/28/2019 - 05/04/2019	0.95	0.97		1.00	0.00
19	05/05/2019 - 05/11/2019	0.95	0.97		1.00	0.00
20	05/12/2019 - 05/18/2019	0.95	0.97		1.00	0.00
21	05/19/2019 - 05/25/2019	0.95	0.97		1.00	0.00
22	05/26/2019 - 06/01/2019	0.95	0.97		1.00	0.00
23	06/02/2019 - 06/08/2019	0.95	0.97		1.00	0.00
24	06/09/2019 - 06/15/2019	0.95	0.97		1.00	0.00
25	06/16/2019 - 06/22/2019	0.95	0.97		1.00	0.00
26	06/23/2019 - 06/29/2019	0.95	0.97		1.00	0.00
27	06/30/2019 - 07/06/2019	0.95	0.97		1.00	0.00
28	07/07/2019 - 07/13/2019	0.95	0.97		1.00	0.00
29	07/14/2019 - 07/20/2019	0.95	0.97		1.00	0.00
30	07/21/2019 - 07/27/2019	0.95	0.97		1.00	0.00
31	07/28/2019 - 08/03/2019	0.95	0.97		1.00	0.00
32	08/04/2019 - 08/10/2019	0.95	0.97		1.00	0.00
33	08/11/2019 - 08/17/2019	0.95	0.97		1.00	0.00
34	08/18/2019 - 08/24/2019	0.95	0.97		1.00	0.00
35	08/25/2019 - 08/31/2019	0.95	0.97		1.00	0.00
36	09/01/2019 - 09/07/2019	0.95	0.97		1.00	0.00
37	09/08/2019 - 09/14/2019	0.95	0.97		1.00	0.00
38	09/15/2019 - 09/21/2019	0.95	0.97		1.00	0.00
39	09/22/2019 - 09/28/2019	0.95	0.97		1.00	0.00
40	09/29/2019 - 10/05/2019	0.95	0.97		1.00	0.00
41	10/06/2019 - 10/12/2019	0.95	0.97		1.00	0.00
42	10/13/2019 - 10/19/2019	0.95	0.97		1.00	0.00
43	10/20/2019 - 10/26/2019	0.95	0.97		1.00	0.00
44	10/27/2019 - 11/02/2019	0.96	0.97		1.00	0.00
45	11/03/2019 - 11/09/2019	0.96	0.97		1.00	0.00
46	11/10/2019 - 11/16/2019	0.96	0.97		1.00	0.00
47	11/17/2019 - 11/23/2019	0.96	0.97		1.00	0.00
48	11/24/2019 - 11/30/2019	0.96	0.97		1.00	0.00
49	12/01/2019 - 12/07/2019	0.96	0.98		1.00	0.00
50	12/08/2019 - 12/14/2019	0.96	0.98		1.00	0.00
51	12/15/2019 - 12/21/2019	0.96	0.98		1.00	0.00
52	12/22/2019 - 12/28/2019	0.96	0.98		1.00	0.00
53	12/29/2019 - 12/31/2019	0.95	0.98		1.00	0.00

2019 WEEKLY AXLE FACTOR CATEGORY REPORT - REPORT TYPE: ALL

COUNTY: 70 - BREVARD

WEEK	DATES	SR405,SR50	7017 SE TO	US1	US192	7018	7019 SR520,US1-SR-3	SR406	7020
1	01/01/2019 - 01/05/2019		0.99			0.98	0.99		0.99
2	01/06/2019 - 01/12/2019		0.99			0.98	0.99		0.99
3	01/13/2019 - 01/19/2019		0.99			0.98	0.99		0.99
4	01/20/2019 - 01/26/2019		0.99			0.98	0.99		0.99
5	01/27/2019 - 02/02/2019		0.99			0.98	0.99		0.99
6	02/03/2019 - 02/09/2019		0.99			0.98	0.99		0.99
7	02/10/2019 - 02/16/2019		0.99			0.98	0.99		0.99
8	02/17/2019 - 02/23/2019		0.99			0.98	0.99		0.99
9	02/24/2019 - 03/02/2019		0.99			0.98	0.99		0.99
10	03/03/2019 - 03/09/2019		0.99			0.98	0.99		0.99
11	03/10/2019 - 03/16/2019		0.99			0.98	0.99		0.99
12	03/17/2019 - 03/23/2019		0.99			0.98	0.99		0.99
13	03/24/2019 - 03/30/2019		0.99			0.98	0.99		0.99
14	03/31/2019 - 04/06/2019		0.99			0.98	0.99		0.99
15	04/07/2019 - 04/13/2019		0.99			0.98	0.99		0.99
16	04/14/2019 - 04/20/2019		0.99			0.98	0.99		0.99
17	04/21/2019 - 04/27/2019		0.99			0.98	0.99		0.99
18	04/28/2019 - 05/04/2019		0.99			0.98	0.99		0.99
19	05/05/2019 - 05/11/2019		0.99			0.98	0.99		0.99
20	05/12/2019 - 05/18/2019		0.99			0.98	0.99		0.99
21	05/19/2019 - 05/25/2019		0.99			0.98	0.99		0.99
22	05/26/2019 - 06/01/2019		0.99			0.98	0.99		0.99
23	06/02/2019 - 06/08/2019		0.99			0.98	0.99		0.99
24	06/09/2019 - 06/15/2019		0.99			0.98	0.99		0.99
25	06/16/2019 - 06/22/2019		0.99			0.98	0.99		0.99
26	06/23/2019 - 06/29/2019		0.99			0.98	0.99		0.99
27	06/30/2019 - 07/06/2019		0.99			0.98	0.99		0.99
28	07/07/2019 - 07/13/2019		0.99			0.98	0.99		0.99
29	07/14/2019 - 07/20/2019		0.99			0.98	0.99		0.99
30	07/21/2019 - 07/27/2019		0.99			0.98	0.99		0.99
31	07/28/2019 - 08/03/2019		0.99			0.98	0.99		0.99
32	08/04/2019 - 08/10/2019		0.99			0.98	0.99		0.99
33	08/11/2019 - 08/17/2019		0.99			0.98	0.99		0.99
34	08/18/2019 - 08/24/2019		0.99			0.98	0.99		0.99
35	08/25/2019 - 08/31/2019		0.99			0.98	0.99		0.99
36	09/01/2019 - 09/07/2019		0.99			0.98	0.99		0.99
37	09/08/2019 - 09/14/2019		0.99			0.98	0.99		0.99
38	09/15/2019 - 09/21/2019		0.99			0.98	0.99		0.99
39	09/22/2019 - 09/28/2019		0.99			0.98	0.99		0.99
40	09/29/2019 - 10/05/2019		0.99			0.98	0.99		0.99
41	10/06/2019 - 10/12/2019		0.99			0.98	0.99		0.99
42	10/13/2019 - 10/19/2019		0.99			0.98	0.99		0.99
43	10/20/2019 - 10/26/2019		0.99			0.98	0.99		0.99
44	10/27/2019 - 11/02/2019		0.99			0.98	0.99		0.99
45	11/03/2019 - 11/09/2019		0.99			0.98	0.99		0.99
46	11/10/2019 - 11/16/2019		0.99			0.98	0.99		0.99
47	11/17/2019 - 11/23/2019		0.99			0.98	0.99		0.99
48	11/24/2019 - 11/30/2019		0.99			0.98	0.99		0.99
49	12/01/2019 - 12/07/2019		0.99			0.98	0.99		0.99
50	12/08/2019 - 12/14/2019		0.99			0.98	0.99		0.99
51	12/15/2019 - 12/21/2019		0.99			0.98	0.99		0.99
52	12/22/2019 - 12/28/2019		0.99			0.98	0.99		0.99
53	12/29/2019 - 12/31/2019		0.99			0.98	0.99		0.99

2019 WEEKLY AXLE FACTOR CATEGORY REPORT - REPORT TYPE: ALL

COUNTY: 70 - BREVARD

WEEK	DATES	7021 SR-518,I95 TO US1	7022 I95,INDN R.CO.-SR520	7023 US1,SR518 TO SR50	7024 SR3,SR-520 TO SR-528
1	01/01/2019 - 01/05/2019	0.88	0.95	0.98	0.00
2	01/06/2019 - 01/12/2019	0.87	0.96	0.98	0.00
3	01/13/2019 - 01/19/2019	0.85	0.96	0.98	0.00
4	01/20/2019 - 01/26/2019	0.85	0.96	0.98	0.00
5	01/27/2019 - 02/02/2019	0.85	0.97	0.98	0.00
6	02/03/2019 - 02/09/2019	0.85	0.97	0.98	0.00
7	02/10/2019 - 02/16/2019	0.85	0.97	0.98	0.00
8	02/17/2019 - 02/23/2019	0.85	0.97	0.98	0.00
9	02/24/2019 - 03/02/2019	0.86	0.96	0.98	0.00
10	03/03/2019 - 03/09/2019	0.86	0.96	0.98	0.00
11	03/10/2019 - 03/16/2019	0.86	0.95	0.98	0.00
12	03/17/2019 - 03/23/2019	0.86	0.95	0.98	0.00
13	03/24/2019 - 03/30/2019	0.86	0.96	0.98	0.00
14	03/31/2019 - 04/06/2019	0.85	0.96	0.98	0.00
15	04/07/2019 - 04/13/2019	0.85	0.97	0.98	0.00
16	04/14/2019 - 04/20/2019	0.85	0.97	0.98	0.00
17	04/21/2019 - 04/27/2019	0.85	0.97	0.98	0.00
18	04/28/2019 - 05/04/2019	0.85	0.97	0.98	0.00
19	05/05/2019 - 05/11/2019	0.85	0.97	0.98	0.00
20	05/12/2019 - 05/18/2019	0.85	0.97	0.98	0.00
21	05/19/2019 - 05/25/2019	0.86	0.96	0.98	0.00
22	05/26/2019 - 06/01/2019	0.86	0.96	0.98	0.00
23	06/02/2019 - 06/08/2019	0.87	0.95	0.98	0.00
24	06/09/2019 - 06/15/2019	0.87	0.94	0.98	0.00
25	06/16/2019 - 06/22/2019	0.87	0.94	0.98	0.00
26	06/23/2019 - 06/29/2019	0.87	0.94	0.98	0.00
27	06/30/2019 - 07/06/2019	0.87	0.94	0.98	0.00
28	07/07/2019 - 07/13/2019	0.87	0.94	0.98	0.00
29	07/14/2019 - 07/20/2019	0.87	0.94	0.98	0.00
30	07/21/2019 - 07/27/2019	0.87	0.94	0.98	0.00
31	07/28/2019 - 08/03/2019	0.87	0.94	0.98	0.00
32	08/04/2019 - 08/10/2019	0.86	0.94	0.98	0.00
33	08/11/2019 - 08/17/2019	0.86	0.94	0.98	0.00
34	08/18/2019 - 08/24/2019	0.86	0.94	0.98	0.00
35	08/25/2019 - 08/31/2019	0.86	0.94	0.98	0.00
36	09/01/2019 - 09/07/2019	0.85	0.95	0.98	0.00
37	09/08/2019 - 09/14/2019	0.85	0.95	0.98	0.00
38	09/15/2019 - 09/21/2019	0.85	0.95	0.98	0.00
39	09/22/2019 - 09/28/2019	0.85	0.95	0.98	0.00
40	09/29/2019 - 10/05/2019	0.85	0.95	0.98	0.00
41	10/06/2019 - 10/12/2019	0.84	0.94	0.98	0.00
42	10/13/2019 - 10/19/2019	0.84	0.94	0.98	0.00
43	10/20/2019 - 10/26/2019	0.85	0.94	0.98	0.00
44	10/27/2019 - 11/02/2019	0.85	0.94	0.98	0.00
45	11/03/2019 - 11/09/2019	0.86	0.94	0.98	0.00
46	11/10/2019 - 11/16/2019	0.86	0.94	0.98	0.00
47	11/17/2019 - 11/23/2019	0.86	0.94	0.98	0.00
48	11/24/2019 - 11/30/2019	0.87	0.94	0.98	0.00
49	12/01/2019 - 12/07/2019	0.87	0.95	0.98	0.00
50	12/08/2019 - 12/14/2019	0.88	0.95	0.98	0.00
51	12/15/2019 - 12/21/2019	0.88	0.95	0.98	0.00
52	12/22/2019 - 12/28/2019	0.87	0.96	0.98	0.00
53	12/29/2019 - 12/31/2019	0.85	0.96	0.98	0.00

2019 WEEKLY AXLE FACTOR CATEGORY REPORT - REPORT TYPE: ALL

COUNTY: 70 - BREVARD

WEEK	DATES	7025 SR528,US1 TO A1A	7026 A1A,IND.RIV.CO TO500	7027 A1A,SR520 TO SR528	7028 SR520,ORANGE CO-US1
1	01/01/2019 - 01/05/2019	0.96	1.00	0.96	0.98
2	01/06/2019 - 01/12/2019	0.96	1.00	0.96	0.98
3	01/13/2019 - 01/19/2019	0.95	1.00	0.95	0.98
4	01/20/2019 - 01/26/2019	0.95	1.00	0.95	0.98
5	01/27/2019 - 02/02/2019	0.95	1.00	0.95	0.98
6	02/03/2019 - 02/09/2019	0.95	1.00	0.95	0.98
7	02/10/2019 - 02/16/2019	0.95	1.00	0.95	0.98
8	02/17/2019 - 02/23/2019	0.95	1.00	0.95	0.98
9	02/24/2019 - 03/02/2019	0.95	1.00	0.95	0.98
10	03/03/2019 - 03/09/2019	0.95	1.00	0.95	0.98
11	03/10/2019 - 03/16/2019	0.95	1.00	0.95	0.98
12	03/17/2019 - 03/23/2019	0.95	1.00	0.95	0.98
13	03/24/2019 - 03/30/2019	0.95	1.00	0.95	0.98
14	03/31/2019 - 04/06/2019	0.95	1.00	0.95	0.98
15	04/07/2019 - 04/13/2019	0.95	1.00	0.95	0.98
16	04/14/2019 - 04/20/2019	0.95	1.00	0.95	0.98
17	04/21/2019 - 04/27/2019	0.95	1.00	0.95	0.98
18	04/28/2019 - 05/04/2019	0.95	1.00	0.95	0.98
19	05/05/2019 - 05/11/2019	0.95	1.00	0.95	0.98
20	05/12/2019 - 05/18/2019	0.95	1.00	0.95	0.98
21	05/19/2019 - 05/25/2019	0.95	1.00	0.95	0.98
22	05/26/2019 - 06/01/2019	0.95	1.00	0.95	0.98
23	06/02/2019 - 06/08/2019	0.95	1.00	0.95	0.98
24	06/09/2019 - 06/15/2019	0.95	1.00	0.95	0.98
25	06/16/2019 - 06/22/2019	0.95	1.00	0.95	0.98
26	06/23/2019 - 06/29/2019	0.95	1.00	0.95	0.98
27	06/30/2019 - 07/06/2019	0.95	1.00	0.95	0.98
28	07/07/2019 - 07/13/2019	0.95	1.00	0.95	0.98
29	07/14/2019 - 07/20/2019	0.95	1.00	0.95	0.98
30	07/21/2019 - 07/27/2019	0.95	1.00	0.95	0.98
31	07/28/2019 - 08/03/2019	0.95	1.00	0.95	0.98
32	08/04/2019 - 08/10/2019	0.95	1.00	0.95	0.98
33	08/11/2019 - 08/17/2019	0.95	1.00	0.95	0.98
34	08/18/2019 - 08/24/2019	0.95	1.00	0.95	0.98
35	08/25/2019 - 08/31/2019	0.95	1.00	0.95	0.98
36	09/01/2019 - 09/07/2019	0.95	1.00	0.95	0.98
37	09/08/2019 - 09/14/2019	0.95	1.00	0.95	0.98
38	09/15/2019 - 09/21/2019	0.95	1.00	0.95	0.98
39	09/22/2019 - 09/28/2019	0.95	1.00	0.96	0.98
40	09/29/2019 - 10/05/2019	0.95	1.00	0.96	0.98
41	10/06/2019 - 10/12/2019	0.95	1.00	0.97	0.98
42	10/13/2019 - 10/19/2019	0.95	1.00	0.97	0.98
43	10/20/2019 - 10/26/2019	0.95	1.00	0.97	0.98
44	10/27/2019 - 11/02/2019	0.96	1.00	0.97	0.98
45	11/03/2019 - 11/09/2019	0.96	1.00	0.96	0.98
46	11/10/2019 - 11/16/2019	0.96	1.00	0.96	0.98
47	11/17/2019 - 11/23/2019	0.96	1.00	0.96	0.98
48	11/24/2019 - 11/30/2019	0.96	1.00	0.96	0.98
49	12/01/2019 - 12/07/2019	0.96	1.00	0.96	0.98
50	12/08/2019 - 12/14/2019	0.96	1.00	0.96	0.98
51	12/15/2019 - 12/21/2019	0.96	1.00	0.96	0.98
52	12/22/2019 - 12/28/2019	0.96	1.00	0.96	0.98
53	12/29/2019 - 12/31/2019	0.95	1.00	0.95	0.98

2019 WEEKLY AXLE FACTOR CATEGORY REPORT - REPORT TYPE: ALL

COUNTY: 70 - BREVARD

WEEK	DATES	A1A, SR500 - SR520	SR-401	7030	SR-407	7031	SR3, SR528 TO KSC	7032
1	01/01/2019 - 01/05/2019	0.97		0.97		0.95		0.99
2	01/06/2019 - 01/12/2019	0.98		0.98		0.95		0.99
3	01/13/2019 - 01/19/2019	0.98		0.98		0.95		0.99
4	01/20/2019 - 01/26/2019	0.98		0.98		0.95		0.99
5	01/27/2019 - 02/02/2019	0.98		0.98		0.95		0.99
6	02/03/2019 - 02/09/2019	0.98		0.98		0.95		0.99
7	02/10/2019 - 02/16/2019	0.98		0.98		0.95		0.99
8	02/17/2019 - 02/23/2019	0.98		0.98		0.95		0.99
9	02/24/2019 - 03/02/2019	0.98		0.98		0.95		0.99
10	03/03/2019 - 03/09/2019	0.98		0.98		0.95		0.99
11	03/10/2019 - 03/16/2019	0.98		0.98		0.95		0.99
12	03/17/2019 - 03/23/2019	0.98		0.98		0.95		0.99
13	03/24/2019 - 03/30/2019	0.98		0.98		0.95		0.99
14	03/31/2019 - 04/06/2019	0.98		0.98		0.95		0.99
15	04/07/2019 - 04/13/2019	0.98		0.98		0.95		0.99
16	04/14/2019 - 04/20/2019	0.98		0.98		0.95		0.99
17	04/21/2019 - 04/27/2019	0.98		0.98		0.95		0.99
18	04/28/2019 - 05/04/2019	0.98		0.98		0.95		0.99
19	05/05/2019 - 05/11/2019	0.98		0.98		0.95		0.99
20	05/12/2019 - 05/18/2019	0.98		0.98		0.95		0.99
21	05/19/2019 - 05/25/2019	0.98		0.98		0.95		0.99
22	05/26/2019 - 06/01/2019	0.98		0.98		0.95		0.99
23	06/02/2019 - 06/08/2019	0.98		0.98		0.95		0.99
24	06/09/2019 - 06/15/2019	0.98		0.98		0.95		0.99
25	06/16/2019 - 06/22/2019	0.98		0.98		0.95		0.99
26	06/23/2019 - 06/29/2019	0.98		0.98		0.95		0.99
27	06/30/2019 - 07/06/2019	0.98		0.98		0.95		0.99
28	07/07/2019 - 07/13/2019	0.98		0.98		0.95		0.99
29	07/14/2019 - 07/20/2019	0.98		0.98		0.95		0.99
30	07/21/2019 - 07/27/2019	0.98		0.98		0.95		0.99
31	07/28/2019 - 08/03/2019	0.98		0.98		0.95		0.99
32	08/04/2019 - 08/10/2019	0.98		0.98		0.95		0.99
33	08/11/2019 - 08/17/2019	0.98		0.98		0.95		0.99
34	08/18/2019 - 08/24/2019	0.98		0.98		0.95		0.99
35	08/25/2019 - 08/31/2019	0.98		0.98		0.95		0.99
36	09/01/2019 - 09/07/2019	0.98		0.98		0.95		0.99
37	09/08/2019 - 09/14/2019	0.98		0.98		0.95		0.99
38	09/15/2019 - 09/21/2019	0.98		0.98		0.95		0.99
39	09/22/2019 - 09/28/2019	0.98		0.98		0.95		0.99
40	09/29/2019 - 10/05/2019	0.98		0.98		0.95		0.99
41	10/06/2019 - 10/12/2019	0.98		0.97		0.95		0.99
42	10/13/2019 - 10/19/2019	0.98		0.97		0.95		0.99
43	10/20/2019 - 10/26/2019	0.98		0.97		0.95		0.99
44	10/27/2019 - 11/02/2019	0.98		0.98		0.95		0.99
45	11/03/2019 - 11/09/2019	0.98		0.98		0.95		0.99
46	11/10/2019 - 11/16/2019	0.98		0.98		0.95		0.99
47	11/17/2019 - 11/23/2019	0.98		0.98		0.95		0.99
48	11/24/2019 - 11/30/2019	0.98		0.98		0.95		0.99
49	12/01/2019 - 12/07/2019	0.97		0.97		0.95		0.99
50	12/08/2019 - 12/14/2019	0.97		0.97		0.95		0.99
51	12/15/2019 - 12/21/2019	0.97		0.97		0.95		0.99
52	12/22/2019 - 12/28/2019	0.98		0.98		0.95		0.99
53	12/29/2019 - 12/31/2019	0.98		0.98		0.95		0.99

2019 WEEKLY AXLE FACTOR CATEGORY REPORT - REPORT TYPE: ALL

COUNTY: 70 - BREVARD

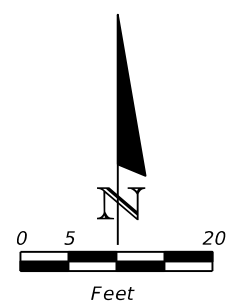
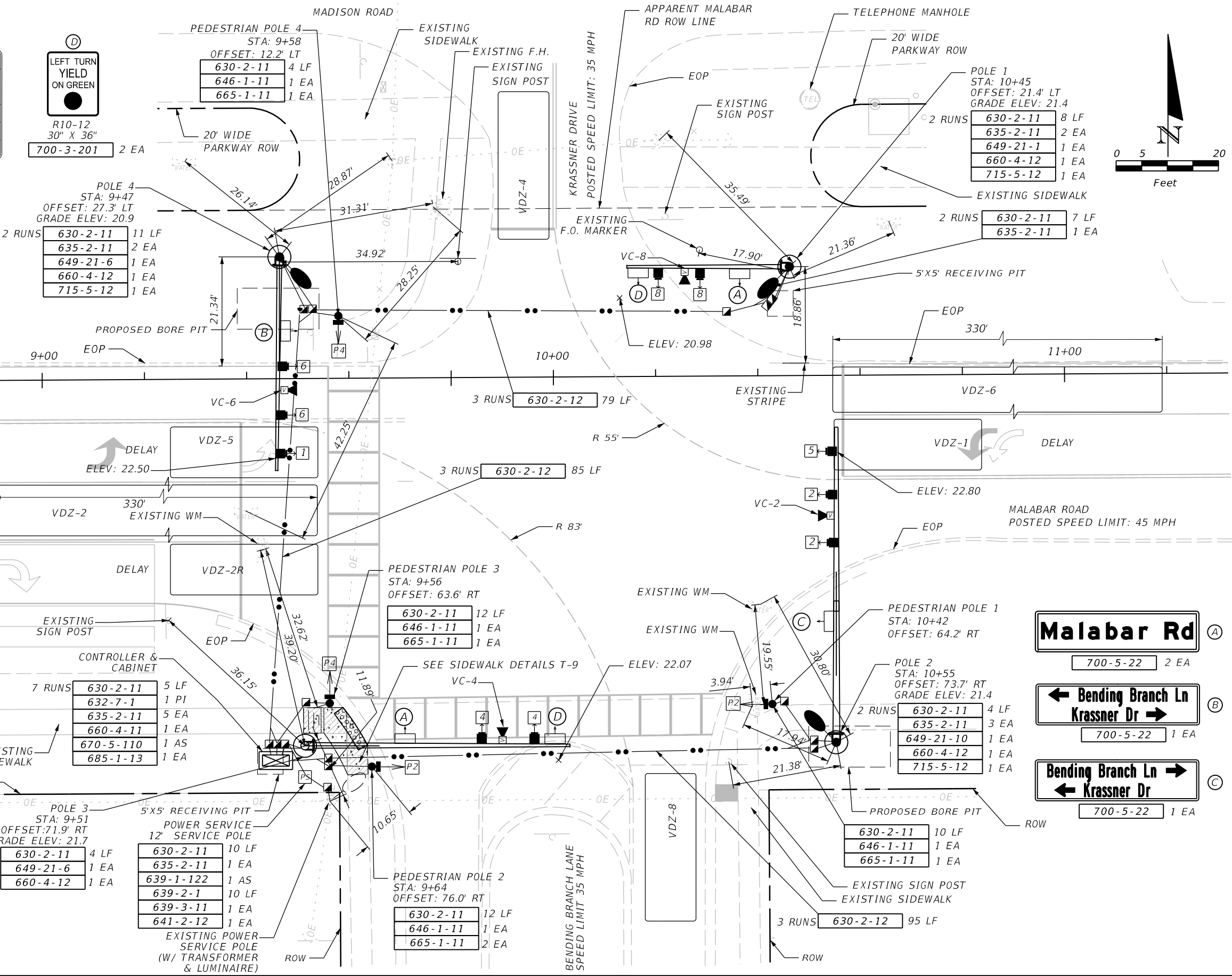
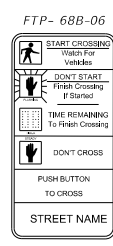
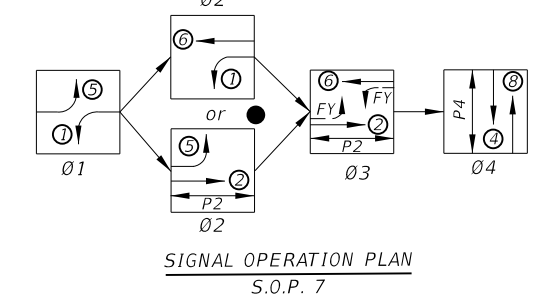
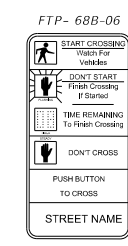
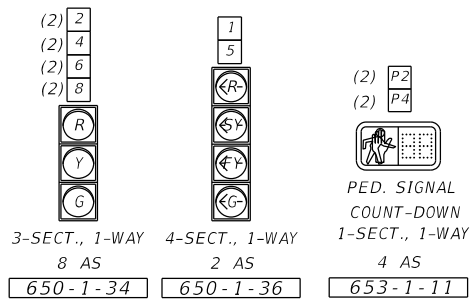
WEEK	DATES	7033 AIRPORT BLVD.	7034 I-95 REST AREAS	7035 SR-A1A, SR-520 TO SR-401	7036 SR-406 PARRISH PARK
1	01/01/2019 - 01/05/2019	1.00	0.79	0.98	0.97
2	01/06/2019 - 01/12/2019	1.00	0.79	0.98	0.97
3	01/13/2019 - 01/19/2019	1.00	0.79	0.98	0.97
4	01/20/2019 - 01/26/2019	1.00	0.79	0.98	0.97
5	01/27/2019 - 02/02/2019	1.00	0.79	0.98	0.97
6	02/03/2019 - 02/09/2019	1.00	0.79	0.98	0.97
7	02/10/2019 - 02/16/2019	1.00	0.79	0.98	0.97
8	02/17/2019 - 02/23/2019	1.00	0.79	0.98	0.97
9	02/24/2019 - 03/02/2019	1.00	0.79	0.98	0.97
10	03/03/2019 - 03/09/2019	1.00	0.79	0.98	0.97
11	03/10/2019 - 03/16/2019	1.00	0.79	0.98	0.97
12	03/17/2019 - 03/23/2019	1.00	0.79	0.98	0.97
13	03/24/2019 - 03/30/2019	1.00	0.79	0.98	0.97
14	03/31/2019 - 04/06/2019	1.00	0.79	0.98	0.97
15	04/07/2019 - 04/13/2019	1.00	0.79	0.98	0.97
16	04/14/2019 - 04/20/2019	1.00	0.79	0.98	0.97
17	04/21/2019 - 04/27/2019	1.00	0.79	0.98	0.97
18	04/28/2019 - 05/04/2019	1.00	0.79	0.98	0.97
19	05/05/2019 - 05/11/2019	1.00	0.79	0.98	0.97
20	05/12/2019 - 05/18/2019	1.00	0.79	0.98	0.97
21	05/19/2019 - 05/25/2019	1.00	0.79	0.98	0.97
22	05/26/2019 - 06/01/2019	1.00	0.79	0.98	0.97
23	06/02/2019 - 06/08/2019	1.00	0.79	0.98	0.97
24	06/09/2019 - 06/15/2019	1.00	0.79	0.98	0.97
25	06/16/2019 - 06/22/2019	1.00	0.79	0.98	0.97
26	06/23/2019 - 06/29/2019	1.00	0.79	0.98	0.97
27	06/30/2019 - 07/06/2019	1.00	0.79	0.98	0.97
28	07/07/2019 - 07/13/2019	1.00	0.79	0.98	0.97
29	07/14/2019 - 07/20/2019	1.00	0.79	0.98	0.97
30	07/21/2019 - 07/27/2019	1.00	0.79	0.98	0.97
31	07/28/2019 - 08/03/2019	1.00	0.79	0.98	0.97
32	08/04/2019 - 08/10/2019	1.00	0.79	0.98	0.97
33	08/11/2019 - 08/17/2019	1.00	0.79	0.98	0.97
34	08/18/2019 - 08/24/2019	1.00	0.79	0.98	0.97
35	08/25/2019 - 08/31/2019	1.00	0.79	0.98	0.97
36	09/01/2019 - 09/07/2019	1.00	0.79	0.98	0.97
37	09/08/2019 - 09/14/2019	1.00	0.79	0.98	0.97
38	09/15/2019 - 09/21/2019	1.00	0.79	0.98	0.97
39	09/22/2019 - 09/28/2019	1.00	0.79	0.98	0.97
40	09/29/2019 - 10/05/2019	1.00	0.79	0.98	0.97
41	10/06/2019 - 10/12/2019	1.00	0.79	0.98	0.97
42	10/13/2019 - 10/19/2019	1.00	0.79	0.98	0.97
43	10/20/2019 - 10/26/2019	1.00	0.79	0.98	0.97
44	10/27/2019 - 11/02/2019	1.00	0.79	0.98	0.97
45	11/03/2019 - 11/09/2019	1.00	0.79	0.98	0.97
46	11/10/2019 - 11/16/2019	1.00	0.79	0.98	0.97
47	11/17/2019 - 11/23/2019	1.00	0.79	0.98	0.97
48	11/24/2019 - 11/30/2019	1.00	0.79	0.98	0.97
49	12/01/2019 - 12/07/2019	1.00	0.79	0.98	0.97
50	12/08/2019 - 12/14/2019	1.00	0.79	0.98	0.97
51	12/15/2019 - 12/21/2019	1.00	0.79	0.98	0.97
52	12/22/2019 - 12/28/2019	1.00	0.79	0.98	0.97
53	12/29/2019 - 12/31/2019	1.00	0.79	0.98	0.97

APPENDIX G – SIGNAL TIMING PLANS

Contained in this Appendix –

- Malabar Road & Krassner Drive/Bending Branch Lane Signalization Plans
 - Malabar Road & Jupiter Boulevard Signal Timings
 - Malabar Road & Plaza Entrance Signal Timings
 - Malabar Road & Minton Road Signal Timings
-

MALABAR ROAD & KRASSNER DRIVE/BENDING BRANCH LANE
SIGNALIZATION PLANS



VIDEO VEHICLE DETECTION ASSIGNMENT			
VIDEO DETECTOR	DETECTION ZONE	COVERAGE AREA	DELAY (SEC.)
VC-2	VDZ-5	10' x 40'	5
	VDZ-2	11' x 330'	0
VC-4	VDZ-2R	10' x 40'	5
	VDZ-4	10' x 40'	0
VC-6	VDZ-1	10' x 40'	5
	VDZ-6	11' x 330'	0
VC-8	VDZ-8	10' x 40'	0

CONTROLLER TIMINGS								
TIMING FUNCTION								
MOVEMENT NUMBER	1	2	3	4	5	6	7	8
MINIMUM GREEN	5	12	-	7	5	12	-	7
EXTENSION	3	3	-	3.5	3	3	-	3.5
MAXIMUM GREEN 1	15	45	-	30	15	45	-	30
MAXIMUM GREEN 2	25	45	-	35	25	45	-	35
YELLOW CLEARANCE	3.4	4.8	-	4.0	3.4	4.8	-	4.0
ALL RED	2.0	2.0	-	2.0	2.6	2.0	-	2.1
PEDESTRIAN WALK	-	7	-	7	-	-	-	-
PED. CLEARANCE	-	21	-	20	-	-	-	-
RECALL		MIN.			MIN.			

SIGNAL TIMING PROVIDED IS INITIAL AND MAY REQUIRE TO BE ADJUSTED BY THE MAINTAINING AGENCY.

CONTROLLER OPERATIONS:

- MAJOR STREET IS MALABAR ROAD (MOVEMENT 2 AND 6).
- MINOR STREET IS BENDING BRANCH LANE/ KRASSNER DRIVE (MOVEMENT 4 AND 8).
- THE CONTROLLER CABINET SHALL BE FULLY WIRED AND FURNISHED WITH ALL EQUIPMENT NECESSARY TO RUN THE CONTROLLER AS S.O.P. 10, BUT SHALL BE INITIALLY PROGRAMMED TO MODIFIED S.O.P. 7.
- FLASHING OPERATION IS YELLOW FOR MOVEMENT 2 AND 6 AND RED FOR MOVEMENT 1, 5, 4, AND 8.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

ALTG Engineering & Planning
 GIL RAMIREZ
 P.E. No. 62600
 1970 DAIRY ROAD
 W. MELBOURNE, FLORIDA 32904
 PH: 321.499.4679 FAX: 321.499.4680
 CERTIFICATE OF AUTHORIZATION 9227

STATE OF FLORIDA
 DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
MALABAR ROAD	BREVARD COUNTY	

SIGNALIZATION PLAN

SHEET NO. G-3 T-8

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

MALABAR ROAD & JUPITER BOULEVARD SIGNAL TIMINGS

City of Palm Bay Signal Timing Sheet

INTERSECTION NAME: Malabar and Jupiter
PROGRAMMED BY: _____
CONTROLLER SERIAL #: _____

INTSALLATION/INSPECTION DATE: 1/16/2019
PROGRAM DATE: _____
SECURITY CODE: _____

INTERVAL	PHASE (ON/OFF)							
	1	2	3	4	5	6	7	8
	EBL	WB	SBL	NB	WBL	EB	NBL	SB
MEMORY								
EXT RECALL		ON				ON		
MAX RECALL								
PED RECALL								
CAN I								
CAN II								
FL WALK								
SOFT RECALL								
WALK REST								
COND PED								
FWTPCL								

INTERVAL	PHASE TIMINGS							
	1	2	3	4	5	6	7	8
	EBL	WB	SBL	NB	WBL	EB	NBL	SB
Min Green	6.0	10.0	6.0	10.0	6.0	10.0	11.0	10.0
PASSAGE	3.0	4.0	3.0	4.0	3.0	4.0	3.0	4.0
YELLOW	4.0	5.0	4.0	5.0	4.0	5.0	4.0	5.0
RED	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
MAX I	30.0	70.0	30.0	20.0	20.0	70.0	20.0	25.0
MAX II								
WALK		7.0		7.0		7.0		7.0
PED CLEAR		18.0		18.0		18.0		18.0
S/A								
TBK								
TTR								
MIN GAP								
MAX VI								
MAX EXT								
AUTO MAX								
AMR								

Xped	Yes	No
		x

PHASES USED								
	1	2	3	4	5	6	7	8
ON/OFF	x	x	x	x	x	x	x	x
SEQUENCE	2		1=SEG,2=DUAL RING,3-7=SPEC, 8=LEAD/LAG					
LEAD/LAG CODES (ONLY USED IF "8" WAS ENTERED FOR SQUENCE)								
PAIRS								

INITIALIZE/FLASH				
	INITIALIZE	ENTER FLASH	EXIT FLASH	INTERVAL CODES 1=RED 2=YELLOW 3=GREEN
RING 1 PHASE	2	4	2	
RING 2 PHASE	6	8	6	
INTERVAL	3	1	3	
POWER UP/RESTART TIMINGS				
MINIMUM FLASH	7	(0-9 OR 127 SEC)		
1ST ALL RED AFTER FLASH	0	(0-9 OR 127 SEC)		

MALABAR ROAD & PLAZA ENTRANCE SIGNAL TIMINGS

City of Palm Bay Signal Timing Sheet

INTERSECTION NAME: Malabar and Plaza
PROGRAMMED BY: _____
CONTROLLER SERIAL #: _____

INTSALLATION/INSPECTION DATE: 4/1/2020 Insp.
PROGRAM DATE: _____
SECURITY CODE: _____

INTERVAL	PHASE (ON/OFF)							
	1	2	3	4	5	6	7	8
	EBL	WB	SBL	NB	WBL	EB	NBL	SB
MEMORY								
EXT RECALL		ON				ON		
MAX RECALL								
PED RECALL								
CAN I								
CAN II								
FL WALK								
SOFT RECALL								
WALK REST								
COND PED								
FWTPCL								

INTERVAL	PHASE TIMINGS							
	1	2	3	4	5	6	7	8
	EBL	WB	SBL	NB	WBL	EB	NBL	SB
Min Green	4.0	15.0	4.0	5.0	4.0	15.0	4.0	5.0
PASSAGE	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
YELLOW	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
RED	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
MAX I	10.0	57.0	7.0	25.0	12.0	57.0	15.0	25.0
MAX II								
WALK		7.0		7.0				
PED CLEAR		28.0		21.0				
S/A								
TBK								
TTR								
MIN GAP								
MAX VI								
MAX EXT								
AUTO MAX								
AMR								

Xped	Yes	No
		x

PHASES USED								
	1	2	3	4	5	6	7	8
ON/OFF	x	x	x	x	x	x	x	x
SEQUENCE	2		1=SEG,2=DUAL RING,3-7=SPEC, 8=LEAD/LAG					
LEAD/LAG CODES (ONLY USED IF "8" WAS ENTERED FOR SQUENCE)								
PAIRS								

INITIALIZE/FLASH				
	INITIALIZE	ENTER FLASH	EXIT FLASH	INTERVAL CODES 1=RED 2=YELLOW 3=GREEN
RING 1 PHASE	2	4	2	
RING 2 PHASE	6	8	6	
INTERVAL	3	1	3	
POWER UP/RESTART TIMINGS				
MINIMUM FLASH	7	(0-9 OR 127 SEC)		
1ST ALL RED AFTER FLASH	0	(0-9 OR 127 SEC)		

MALABAR ROAD & MINTON ROAD SIGNAL TIMINGS

City of Palm Bay Signal Timing Sheet

INTERSECTION NAME: Malabar and Minton
PROGRAMMED BY: _____
CONTROLLER SERIAL #: _____

INTSALLATION/INSPECTION DATE: 4/1/2020 Insp.
PROGRAM DATE: _____
SECURITY CODE: _____

INTERVAL	PHASE (ON/OFF)							
	1	2	3	4	5	6	7	8
	EBL	WB	SBL	NB	WBL	EB	NBL	SB
MEMORY								
EXT RECALL		ON				ON		
MAX RECALL								
PED RECALL								
CAN I								
CAN II								
FL WALK								
SOFT RECALL								
WALK REST								
COND PED								
FWTPCL								

INTERVAL	PHASE TIMINGS							
	1	2	3	4	5	6	7	8
	EBL	WB	SBL	NB	WBL	EB	NBL	SB
Min Green	4.0	15.0	4.0	5.0	4.0	15.0	4.0	5.0
PASSAGE	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
YELLOW	4.0	4.0	4.0	5.0	4.0	4.0	4.0	5.0
RED	4.0	3.0	4.0	4.0	4.0	3.0	4.0	4.0
MAX I	20.0	54.0	22.0	35.0	20.0	54.0	10.0	47.0
MAX II	25.0	60.0	25.0	30.0	25.0	60.0	25.0	30.0
WALK		7.0		7.0		7.0		7.0
PED CLEAR		28.0		28.0		28.0		28.0
S/A								
TBK								
TTR								
MIN GAP								
MAX VI								
MAX EXT								
AUTO MAX								
AMR								

Xped	Yes	No
		x

PHASES USED								
	1	2	3	4	5	6	7	8
ON/OFF	x	x	x	x	x	x	x	x
SEQUENCE	2		1=SEG,2=DUAL RING,3-7=SPEC, 8=LEAD/LAG					
LEAD/LAG CODES (ONLY USED IF "8" WAS ENTERED FOR SQUENCE)								
PAIRS								

INITIALIZE/FLASH				
	INITIALIZE	ENTER FLASH	EXIT FLASH	INTERVAL CODES 1=RED 2=YELLOW 3=GREEN
RING 1 PHASE	2	4	2	
RING 2 PHASE	6	8	6	
INTERVAL	3	1	3	
POWER UP/RESTART TIMINGS				
MINIMUM FLASH	7	(0-9 OR 127 SEC)		
1ST ALL RED AFTER FLASH	0	(0-9 OR 127 SEC)		

APPENDIX H – EXISTING (2020) INTERSECTION OPERATIONS REPORTS

Contained in this Appendix –

- Existing 2020 AM Peak Hour Intersection Measures of Effectiveness (MOE) Tables
- Existing 2020 AM Peak Hour Intersection Operations Synchro Reports
- Existing 2020 PM Peak Hour Intersection Measures of Effectiveness (MOE) Tables
- Existing 2020 PM Peak Hour Intersection Operations Synchro Reports

EXISTING 2020 AM MOE TABLES

2020 AM Existing Unsignalized Network												
Malabar Rd. & St. Johns Heritage Pkwy.											Intersection ID: 1	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	-	-	-	0.19	-	-	-	-	-	0.326	-	0.51
HCM Control Delay (s)	-	-	-	11.1	-	-	-	-	-	21.6	-	18.2
HCM Lane LOS	-	-	-	B	-	-	-	-	-	C	-	C
HCM 95th Percentile Queue (veh/In)	-	-	-	0.7	-	-	-	-	-	1.4	-	2.8
Malabar Rd. & Snapdragon Dr.											Intersection ID: 2	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	-	-	-	0.01	-	-	-	-	-	-	-	0.35
HCM Control Delay (s)	-	-	-	9.4	0.0	-	-	-	-	-	-	22.1
HCM Lane LOS	-	-	-	A	A	-	-	-	-	-	-	C
HCM 95th Percentile Queue (veh/In)	-	-	-	0.0	-	-	-	-	-	-	-	1.5
Malabar Rd. & Championship Cir.											Intersection ID: 3	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	-	-	-	0.01	-	-	-	-	-	-	-	0.04
HCM Control Delay (s)	-	-	-	9.3	0.0	-	-	-	-	-	-	19.3
HCM Lane LOS	-	-	-	A	A	-	-	-	-	-	-	C
HCM 95th Percentile Queue (veh/In)	-	-	-	0.0	-	-	-	-	-	-	-	0.1
Malabar Rd. & Bavarian Ave.											Intersection ID: 5	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	0.04	-	-	-	-	-	-	-	-	-	-	-
HCM Control Delay (s)	19.3	-	-	-	-	-	0.0	-	-	-	-	-
HCM Lane LOS	C	-	-	-	-	-	A	-	-	-	-	-
HCM 95th Percentile Queue (veh/In)	0.1	-	-	-	-	-	0.0	-	-	-	-	-
Malabar Rd. & Hurley Blvd.											Intersection ID: 6	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	0.49	-	-	-	-	-	0.06	-	-	-	-	-
HCM Control Delay (s)	27.3	-	-	-	-	-	8.4	0.0	-	-	-	-
HCM Lane LOS	D	-	-	-	-	-	A	A	-	-	-	-
HCM 95th Percentile Queue (veh/In)	2.5	-	-	-	-	-	0.2	-	-	-	-	-
Malabar Rd. & Palm Bay Public Works (W)											Intersection ID: 7	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	0.01	-	-	-	-	-	0.01	-	-	-	-	-
HCM Control Delay (s)	14.7	-	-	-	-	-	8.4	0.0	-	-	-	-
HCM Lane LOS	B	-	-	-	-	-	A	A	-	-	-	-
HCM 95th Percentile Queue (veh/In)	0.0	-	-	-	-	-	0.0	-	-	-	-	-
Malabar Rd. & Palm Bay Public Works (E)											Intersection ID: 8	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	0.06	-	-	-	-	-	0.03	-	-	-	-	-
HCM Control Delay (s)	13.8	-	-	-	-	-	8.4	0.0	-	-	-	-
HCM Lane LOS	B	-	-	-	-	-	A	A	-	-	-	-
HCM 95th Percentile Queue (veh/In)	0.2	-	-	-	-	-	0.1	-	-	-	-	-
Malabar Rd. & Post Office											Intersection ID: 9	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	0.01	-	0.03	-	-	-	0.01	-	-	-	-	-
HCM Control Delay (s)	26.4	-	11.4	0.0	-	-	8.4	0.0	-	-	-	0.0
HCM Lane LOS	D	-	B	A	-	-	A	A	-	-	-	A
HCM 95th Percentile Queue (veh/In)	0.0	-	0.1	0.0	-	-	0.0	-	-	-	-	-
Malabar Rd. & Santa Rosa Ave.											Intersection ID: 11	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	0.03	-	-	-	-	-	0.00	-	-	-	-	-
HCM Control Delay (s)	17.3	-	-	0.0	-	-	8.5	0.0	-	-	-	0.0
HCM Lane LOS	C	-	-	A	-	-	A	A	-	-	-	A
HCM 95th Percentile Queue (veh/In)	0.1	-	-	0.0	-	-	0.0	-	-	-	-	-
Malabar Rd. & Garvey Rd.											Intersection ID: 12	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	0.32	-	-	-	-	-	0.07	-	-	-	-	-
HCM Control Delay (s)	16.2	-	-	-	-	-	8.9	-	-	-	-	-
HCM Lane LOS	C	-	-	-	-	-	A	-	-	-	-	-
HCM 95th Percentile Queue (veh/In)	1.4	-	-	-	-	-	0.2	-	-	-	-	-
Malabar Rd. & Madalyn Landing											Intersection ID: 13	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	0.09	-	0.11	-	-	-	0.04	-	-	-	-	-
HCM Control Delay (s)	P	-	14.1	-	-	-	9.2	-	-	-	-	-
HCM Lane LOS	C	-	B	-	-	-	A	-	-	-	-	-
HCM 95th Percentile Queue (veh/In)	0.3	-	0.4	-	-	-	0.1	-	-	-	-	-

2020 AM Existing Unsignalized Network												
Malabar Rd. & Sutherland Dr.											Intersection ID: 14	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	0.06			-	-	-	0.01	-	-	-		
HCM Control Delay (s)	14.4			-	-	-	9.0	-	-	-		
HCM Lane LOS	B			-	-	-	A	-	-	-		
HCM 95th Percentile Queue (veh/In)	0.2			-	-	-	0.0	-	-	-		
Malabar Rd. & Maywood Ave./Daffodil Dr.											Intersection ID: 15	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	0.17			0.01	-	-	0.04	-	-	0.35		
HCM Control Delay (s)	17.9			9.3	-	-	9.2	-	-	23.5		
HCM Lane LOS	C			A	-	-	A	-	-	C		
HCM 95th Percentile Queue (veh/In)	0.6			0.0	-	-	0.1	-	-	1.5		

2020 AM Existing Signalized Network												
Malabar Rd. & Krassner Dr./ Bending Branch Ln.											Intersection ID: 4	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	0.20	0.00	0.00	0.05	0.42	0.01	0.07	0.00	0.80	0.26	0.00	0.00
HCM Lane Group Delay (s)	18.6	0.0	0.0	9.2	9.5	7.6	7.0	0.0	13.2	18.6	0.0	0.0
HCM Lane LOS	B	A	A	A	A	A	A	A	B	B	A	A
HCM 95th Percentile Queue (veh/In)	0.9	0.0	0.0	0.1	2.8	0.0	0.2	0.0	7.1	1.4	0.0	0.0
HCM6 Intersection Ctrl Delay	12.5											
HCM6 Intersection LOS	B											
Malabar Rd. & Jupiter Blvd.											Intersection ID: 10	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	0.57	0.52	0.03	0.34	0.00	0.67	0.19	0.00	0.90	0.46	0.00	0.80
HCM Lane Group Delay (s)	27.3	32.7	28.8	20.9	0.0	26.4	18.9	0.0	40.6	27.0	0.0	44.7
HCM Lane LOS	C	C	C	C	A	C	B	A	D	C	A	D
HCM 95th Percentile Queue (veh/In)	5.8	4.8	0.2	1.8	0.0	9.9	1.3	0.0	15.0	5.0	0.0	7.0
HCM6 Intersection Ctrl Delay	32.5											
HCM6 Intersection LOS	C											
Malabar Rd. & Plaza Entrance											Intersection ID: 16	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	0.29	0.00	0.04	0.02	0.70	0.03	0.16	0.28	0.00	0.04	0.00	0.05
HCM Lane Group Delay (s)	37.4	0.0	36.1	9.0	18.8	9.4	12.1	10.0	8.2	38.9	0.0	40.3
HCM Lane LOS	D	A	D	A	B	A	B	B	A	D	A	D
HCM 95th Percentile Queue (veh/In)	2.6	0.0	0.3	0.1	15.0	0.4	0.7	4.3	0.0	0.3	0.0	0.2
HCM6 Intersection Ctrl Delay	16.1											
HCM6 Intersection LOS	B											
Malabar Rd. & Minton Rd.											Intersection ID: 17	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	0.25	0.81	0.04	0.67	0.75	0.75	0.83	0.37	0.11	0.78	0.61	0.08
HCM Lane Group Delay (s)	32.4	56.5	34.5	62.1	49.9	49.7	75.0	32.8	29.6	40.7	38.3	28.0
HCM Lane LOS	C	E	C	E	D	D	E	C	C	D	D	C
HCM 95th Percentile Queue (veh/In)	2.9	17.6	0.7	3.3	16.2	16.6	8.4	8.1	2.0	10.5	14.6	1.5
HCM6 Intersection Ctrl Delay	46.0											
HCM6 Intersection LOS	D											

EXISTING 2020 AM MALABAR ROAD SYNCHRO NETWORK

Intersection						
Int Delay, s/veh	5.2					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↘	↗	↗	↘	↘	↘
Traffic Vol, veh/h	94	190	367	257	73	192
Future Vol, veh/h	94	190	367	257	73	192
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	375	-	-	300	0	375
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	70	70	70	70	70	70
Heavy Vehicles, %	11	6	4	3	12	7
Mvmt Flow	134	271	524	367	104	274

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	891	0	-	0	1063 524
Stage 1	-	-	-	-	524 -
Stage 2	-	-	-	-	539 -
Critical Hdwy	4.21	-	-	-	6.52 6.27
Critical Hdwy Stg 1	-	-	-	-	5.52 -
Critical Hdwy Stg 2	-	-	-	-	5.52 -
Follow-up Hdwy	2.299	-	-	-	3.608 3.363
Pot Cap-1 Maneuver	724	-	-	-	237 543
Stage 1	-	-	-	-	574 -
Stage 2	-	-	-	-	565 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	724	-	-	-	193 543
Mov Cap-2 Maneuver	-	-	-	-	320 -
Stage 1	-	-	-	-	468 -
Stage 2	-	-	-	-	565 -

Approach	EB	WB	SB
HCM Control Delay, s	3.7	0	19.1
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	724	-	-	-	320	543
HCM Lane V/C Ratio	0.185	-	-	-	0.326	0.505
HCM Control Delay (s)	11.1	-	-	-	21.6	18.2
HCM Lane LOS	B	-	-	-	C	C
HCM 95th %tile Q(veh)	0.7	-	-	-	1.4	2.8

Intersection						
Int Delay, s/veh	2.1					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑	↑	↑	
Traffic Vol, veh/h	8	255	568	36	31	56
Future Vol, veh/h	8	255	568	36	31	56
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	225	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	76	76	76	76	76	76
Heavy Vehicles, %	0	7	4	0	0	0
Mvmt Flow	11	336	747	47	41	74

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	794	0	-	0	1105 747
Stage 1	-	-	-	-	747 -
Stage 2	-	-	-	-	358 -
Critical Hdwy	4.1	-	-	-	6.4 6.2
Critical Hdwy Stg 1	-	-	-	-	5.4 -
Critical Hdwy Stg 2	-	-	-	-	5.4 -
Follow-up Hdwy	2.2	-	-	-	3.5 3.3
Pot Cap-1 Maneuver	836	-	-	-	235 416
Stage 1	-	-	-	-	472 -
Stage 2	-	-	-	-	712 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	836	-	-	-	231 416
Mov Cap-2 Maneuver	-	-	-	-	231 -
Stage 1	-	-	-	-	464 -
Stage 2	-	-	-	-	712 -

Approach	EB	WB	SB
HCM Control Delay, s	0.3	0	22.1
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	836	-	-	-	324
HCM Lane V/C Ratio	0.013	-	-	-	0.353
HCM Control Delay (s)	9.4	0	-	-	22.1
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	1.5

HCM 6th TWSC
3: Malabar Rd. & Championship Cir.

07/30/2020

Intersection						
Int Delay, s/veh	0.2					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↶	↷		↶	
Traffic Vol, veh/h	4	282	600	11	6	3
Future Vol, veh/h	4	282	600	11	6	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	79	79	79	79	79	79
Heavy Vehicles, %	0	7	4	0	0	0
Mvmt Flow	5	357	759	14	8	4

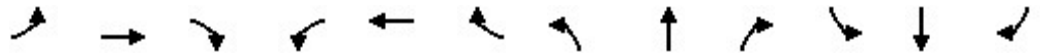
Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	773	0	0	1133	766
Stage 1	-	-	-	766	-
Stage 2	-	-	-	367	-
Critical Hdwy	4.1	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	3.5	3.3
Pot Cap-1 Maneuver	851	-	-	226	406
Stage 1	-	-	-	462	-
Stage 2	-	-	-	705	-
Platoon blocked, %		-	-		
Mov Cap-1 Maneuver	851	-	-	224	406
Mov Cap-2 Maneuver	-	-	-	224	-
Stage 1	-	-	-	459	-
Stage 2	-	-	-	705	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	19.3
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	851	-	-	-	263
HCM Lane V/C Ratio	0.006	-	-	-	0.043
HCM Control Delay (s)	9.3	0	-	-	19.3
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	0.1

HCM 6th Signalized Intersection Summary
 4: Krassner Dr./ Bending Branch Ln & Malabar Rd.

07/30/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	14	277	14	34	509	33	45	2	46	66	1	37
Future Volume (veh/h)	14	277	14	34	509	33	45	2	46	66	1	37
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	1796	1811	1589	1811	1826	1826	1159	1159	1159	1900	1900	1900
Adj Flow Rate, veh/h	16	326	7	40	599	35	53	2	0	78	1	12
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	7	6	21	6	5	5	50	50	50	0	0	0
Cap, veh/h	292	771	573	537	745	44	273	6	0	311	14	27
Arrive On Green	0.02	0.43	0.43	0.04	0.44	0.44	0.13	0.13	0.00	0.13	0.13	0.13
Sat Flow, veh/h	1711	1811	1346	1725	1708	100	909	49	0	1274	107	210
Grp Volume(v), veh/h	16	326	7	40	0	634	55	0	0	91	0	0
Grp Sat Flow(s),veh/h/ln	1711	1811	1346	1725	0	1808	958	0	0	1590	0	0
Q Serve(g_s), s	0.2	5.7	0.1	0.6	0.0	13.9	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.2	5.7	0.1	0.6	0.0	13.9	2.1	0.0	0.0	2.1	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.06	0.96		0.00	0.86		0.13
Lane Grp Cap(c), veh/h	292	771	573	537	0	788	279	0	0	352	0	0
V/C Ratio(X)	0.05	0.42	0.01	0.07	0.00	0.80	0.20	0.00	0.00	0.26	0.00	0.00
Avail Cap(c_a), veh/h	446	1573	1169	658	0	1554	682	0	0	1029	0	0
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(l)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	9.1	9.2	7.6	7.0	0.0	11.2	18.2	0.0	0.0	18.2	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.4	0.0	0.1	0.0	2.0	0.4	0.0	0.0	0.5	0.0	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(95%),veh/ln	0.1	2.8	0.0	0.2	0.0	7.1	0.9	0.0	0.0	1.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	9.2	9.5	7.6	7.0	0.0	13.2	18.6	0.0	0.0	18.6	0.0	0.0
LnGrp LOS	A	A	A	A	A	B	B	A	A	B	A	A
Approach Vol, veh/h		349			674			55			91	
Approach Delay, s/veh		9.5			12.8			18.6			18.6	
Approach LOS		A			B			B			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.4	26.2		12.0	6.9	26.7		12.0				
Change Period (Y+Rc), s	5.4	6.8		* 6.1	6.0	6.8		6.1				
Max Green Setting (Gmax), s	5.2	39.6		* 27	5.0	39.2		26.9				
Max Q Clear Time (g_c+I1), s	2.6	7.7		4.1	2.2	15.9		4.1				
Green Ext Time (p_c), s	0.0	1.8		0.5	0.0	4.0		0.3				

Intersection Summary

HCM 6th Ctrl Delay	12.5
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection						
Int Delay, s/veh	0.2					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	388	1	0	569	6	2
Future Vol, veh/h	388	1	0	569	6	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	5	0	0	4	17	0
Mvmt Flow	446	1	0	654	7	2

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	447	0	1101
Stage 1	-	-	-	-	447
Stage 2	-	-	-	-	654
Critical Hdwy	-	-	4.1	-	6.57
Critical Hdwy Stg 1	-	-	-	-	5.57
Critical Hdwy Stg 2	-	-	-	-	5.57
Follow-up Hdwy	-	-	2.2	-	3.653
Pot Cap-1 Maneuver	-	-	1124	-	219
Stage 1	-	-	-	-	614
Stage 2	-	-	-	-	490
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1124	-	219
Mov Cap-2 Maneuver	-	-	-	-	219
Stage 1	-	-	-	-	614
Stage 2	-	-	-	-	490

Approach	EB	WB	NB
HCM Control Delay, s	0	0	19.3
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	261	-	-	1124	-
HCM Lane V/C Ratio	0.035	-	-	-	-
HCM Control Delay (s)	19.3	-	-	0	-
HCM Lane LOS	C	-	-	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection						
Int Delay, s/veh	3.9					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	352	38	57	493	77	58
Future Vol, veh/h	352	38	57	493	77	58
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	4	3	3	5	1	0
Mvmt Flow	391	42	63	548	86	64

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	433	0	1086
Stage 1	-	-	-	-	412
Stage 2	-	-	-	-	674
Critical Hdwy	-	-	4.13	-	6.41
Critical Hdwy Stg 1	-	-	-	-	5.41
Critical Hdwy Stg 2	-	-	-	-	5.41
Follow-up Hdwy	-	-	2.227	-	3.509
Pot Cap-1 Maneuver	-	-	1121	-	240
Stage 1	-	-	-	-	671
Stage 2	-	-	-	-	508
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1121	-	221
Mov Cap-2 Maneuver	-	-	-	-	221
Stage 1	-	-	-	-	671
Stage 2	-	-	-	-	467

Approach	EB	WB	NB
HCM Control Delay, s	0	0.9	27.3
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	308	-	-	1121	-
HCM Lane V/C Ratio	0.487	-	-	0.056	-
HCM Control Delay (s)	27.3	-	-	8.4	0
HCM Lane LOS	D	-	-	A	A
HCM 95th %tile Q(veh)	2.5	-	-	0.2	-

Intersection						
Int Delay, s/veh	0.1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	423	2	6	552	1	2
Future Vol, veh/h	423	2	6	552	1	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	3	0	0	5	0	0
Mvmt Flow	492	2	7	642	1	2

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	494	0	1149
Stage 1	-	-	-	-	493
Stage 2	-	-	-	-	656
Critical Hdwy	-	-	4.1	-	6.4
Critical Hdwy Stg 1	-	-	-	-	5.4
Critical Hdwy Stg 2	-	-	-	-	5.4
Follow-up Hdwy	-	-	2.2	-	3.5
Pot Cap-1 Maneuver	-	-	1080	-	221
Stage 1	-	-	-	-	618
Stage 2	-	-	-	-	520
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1080	-	219
Mov Cap-2 Maneuver	-	-	-	-	219
Stage 1	-	-	-	-	618
Stage 2	-	-	-	-	515

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	14.7
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	374	-	-	1080	-
HCM Lane V/C Ratio	0.009	-	-	0.006	-
HCM Control Delay (s)	14.7	-	-	8.4	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection						
Int Delay, s/veh	0.5					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	419	6	30	552	4	20
Future Vol, veh/h	419	6	30	552	4	20
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	3	0	0	5	0	0
Mvmt Flow	487	7	35	642	5	23

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	494	0	1203
Stage 1	-	-	-	-	491
Stage 2	-	-	-	-	712
Critical Hdwy	-	-	4.1	-	6.4
Critical Hdwy Stg 1	-	-	-	-	5.4
Critical Hdwy Stg 2	-	-	-	-	5.4
Follow-up Hdwy	-	-	2.2	-	3.5
Pot Cap-1 Maneuver	-	-	1080	-	206
Stage 1	-	-	-	-	619
Stage 2	-	-	-	-	490
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1080	-	196
Mov Cap-2 Maneuver	-	-	-	-	196
Stage 1	-	-	-	-	619
Stage 2	-	-	-	-	466

Approach	EB	WB	NB
HCM Control Delay, s	0	0.4	13.8
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	438	-	-	1080	-
HCM Lane V/C Ratio	0.064	-	-	0.032	-
HCM Control Delay (s)	13.8	-	-	8.4	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.2	-	-	0.1	-

HCM 6th TWSC
9: Post Office & Malabar Rd.

07/30/2020

Intersection												
Int Delay, s/veh	0.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↖	↗		↔			↖	↗		↔	
Traffic Vol, veh/h	0	431	8	9	581	0	1	0	14	0	0	0
Future Vol, veh/h	0	431	8	9	581	0	1	0	14	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	175	-	-	-	-	-	50	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	0	4	0	0	5	0	0	0	0	0	0	0
Mvmt Flow	0	490	9	10	660	0	1	0	16	0	0	0

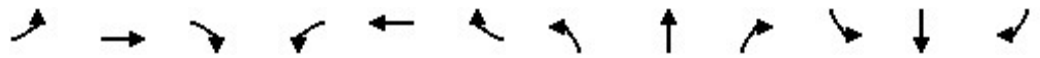
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	660	0	0	499	0	0	1170	1170	490	1183	1179	660
Stage 1	-	-	-	-	-	-	490	490	-	680	680	-
Stage 2	-	-	-	-	-	-	680	680	-	503	499	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	938	-	-	1075	-	-	171	195	582	168	192	467
Stage 1	-	-	-	-	-	-	564	552	-	444	454	-
Stage 2	-	-	-	-	-	-	444	454	-	555	547	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	938	-	-	1075	-	-	169	192	582	162	189	467
Mov Cap-2 Maneuver	-	-	-	-	-	-	169	192	-	162	189	-
Stage 1	-	-	-	-	-	-	564	552	-	444	447	-
Stage 2	-	-	-	-	-	-	437	447	-	540	547	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0.1			12.4			0		
HCM LOS							B			A		

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	169	582	938	-	-	1075	-	-	-
HCM Lane V/C Ratio	0.007	0.027	-	-	-	0.01	-	-	-
HCM Control Delay (s)	26.4	11.4	0	-	-	8.4	0	-	0
HCM Lane LOS	D	B	A	-	-	A	A	-	A
HCM 95th %tile Q(veh)	0	0.1	0	-	-	0	-	-	-

HCM 6th Signalized Intersection Summary
 10: Jupiter Blvd. & Malabar Rd.

07/30/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	78	279	85	56	330	132	192	142	56	166	123	68
Future Volume (veh/h)	78	279	85	56	330	132	192	142	56	166	123	68
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	1885	1870	1870	1811	1841	1841	1826	1841	1870	1870	1826	1826
Adj Flow Rate, veh/h	83	297	76	60	351	122	204	151	8	177	131	49
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	2	2	6	4	4	5	4	2	2	5	5
Cap, veh/h	242	443	113	309	392	136	358	288	248	381	163	61
Arrive On Green	0.06	0.31	0.31	0.06	0.30	0.30	0.14	0.16	0.16	0.11	0.13	0.13
Sat Flow, veh/h	1795	1437	368	1725	1305	454	1739	1841	1585	1781	1267	474
Grp Volume(v), veh/h	83	0	373	60	0	473	204	151	8	177	0	180
Grp Sat Flow(s),veh/h/ln	1795	0	1804	1725	0	1759	1739	1841	1585	1781	0	1741
Q Serve(g_s), s	2.5	0.0	14.5	1.9	0.0	20.7	7.9	6.1	0.3	6.8	0.0	8.1
Cycle Q Clear(g_c), s	2.5	0.0	14.5	1.9	0.0	20.7	7.9	6.1	0.3	6.8	0.0	8.1
Prop In Lane	1.00		0.20	1.00		0.26	1.00		1.00	1.00		0.27
Lane Grp Cap(c), veh/h	242	0	556	309	0	528	358	288	248	381	0	224
V/C Ratio(X)	0.34	0.00	0.67	0.19	0.00	0.90	0.57	0.52	0.03	0.46	0.00	0.80
Avail Cap(c_a), veh/h	263	0	650	343	0	634	361	343	295	410	0	303
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(l)	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	20.0	0.0	24.3	18.6	0.0	27.0	25.2	31.2	28.8	26.1	0.0	34.1
Incr Delay (d2), s/veh	0.8	0.0	2.2	0.3	0.0	13.7	2.1	1.5	0.1	0.9	0.0	10.6
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(95%),veh/ln	1.8	0.0	9.9	1.3	0.0	15.0	5.9	4.9	0.2	5.0	0.0	7.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.9	0.0	26.4	18.9	0.0	40.6	27.3	32.7	28.8	27.0	0.0	44.7
LnGrp LOS	C	A	C	B	A	D	C	C	C	C	A	D
Approach Vol, veh/h		456			533			363				357
Approach Delay, s/veh		25.4			38.2			29.6				35.9
Approach LOS		C			D			C				D
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	12.1	32.2	15.7	20.6	11.4	32.8	17.9	18.4				
Change Period (Y+Rc), s	7.0	8.0	7.0	8.0	7.0	8.0	7.0	8.0				
Max Green Setting (Gmax), s	6.0	29.0	10.0	15.0	6.0	29.0	11.0	14.0				
Max Q Clear Time (g_c+I1), s	4.5	22.7	8.8	8.1	3.9	16.5	9.9	10.1				
Green Ext Time (p_c), s	0.0	1.4	0.1	0.4	0.0	1.6	0.1	0.3				
Intersection Summary												
HCM 6th Ctrl Delay			32.5									
HCM 6th LOS			C									

Intersection												
Int Delay, s/veh	0.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	528	1	2	527	0	4	0	5	0	0	0
Future Vol, veh/h	0	528	1	2	527	0	4	0	5	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	0	2	0	0	3	0	0	0	0	0	0	0
Mvmt Flow	0	544	1	2	543	0	4	0	5	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	543	0	0	545	0	0	1092	1092	545	1094	1092	543
Stage 1	-	-	-	-	-	-	545	545	-	547	547	-
Stage 2	-	-	-	-	-	-	547	547	-	547	545	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1036	-	-	1034	-	-	194	216	542	193	216	544
Stage 1	-	-	-	-	-	-	526	522	-	525	521	-
Stage 2	-	-	-	-	-	-	525	521	-	525	522	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1036	-	-	1034	-	-	194	215	542	191	215	544
Mov Cap-2 Maneuver	-	-	-	-	-	-	194	215	-	191	215	-
Stage 1	-	-	-	-	-	-	526	522	-	525	519	-
Stage 2	-	-	-	-	-	-	523	519	-	520	522	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0			17.3			0		
HCM LOS							C			A		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	302	1036	-	-	1034	-	-	-
HCM Lane V/C Ratio	0.031	-	-	-	0.002	-	-	-
HCM Control Delay (s)	17.3	0	-	-	8.5	0	-	0
HCM Lane LOS	C	A	-	-	A	A	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	-

Intersection						
Int Delay, s/veh	2.2					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	509	21	61	512	14	122
Future Vol, veh/h	509	21	61	512	14	122
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	300	-	0	-
Veh in Median Storage, #	0	-	-	0	1	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	2	5	2	2	14	2
Mvmt Flow	572	24	69	575	16	137

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	596	0	1297
Stage 1	-	-	-	-	584
Stage 2	-	-	-	-	713
Critical Hdwy	-	-	4.12	-	6.54
Critical Hdwy Stg 1	-	-	-	-	5.54
Critical Hdwy Stg 2	-	-	-	-	5.54
Follow-up Hdwy	-	-	2.218	-	3.626
Pot Cap-1 Maneuver	-	-	980	-	169
Stage 1	-	-	-	-	535
Stage 2	-	-	-	-	465
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	980	-	157
Mov Cap-2 Maneuver	-	-	-	-	289
Stage 1	-	-	-	-	535
Stage 2	-	-	-	-	432

Approach	EB	WB	NB
HCM Control Delay, s	0	1	16.2
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	474	-	-	980	-
HCM Lane V/C Ratio	0.322	-	-	0.07	-
HCM Control Delay (s)	16.2	-	-	8.9	-
HCM Lane LOS	C	-	-	A	-
HCM 95th %tile Q(veh)	1.4	-	-	0.2	-

HCM 6th TWSC
13: Madalyn Landing & Malabar Rd.

07/30/2020

Intersection						
Int Delay, s/veh	1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↶		↷	↶	↷	↷
Traffic Vol, veh/h	609	22	35	550	23	44
Future Vol, veh/h	609	22	35	550	23	44
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	275	-	0	75
Veh in Median Storage, #	0	-	-	0	1	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	4	0	3	0	2
Mvmt Flow	677	24	39	611	26	49

Major/Minor	Major1	Major2	Minor1			
Conflicting Flow All	0	0	701	0	1378	689
Stage 1	-	-	-	-	689	-
Stage 2	-	-	-	-	689	-
Critical Hdwy	-	-	4.1	-	6.4	6.22
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.318
Pot Cap-1 Maneuver	-	-	905	-	161	446
Stage 1	-	-	-	-	502	-
Stage 2	-	-	-	-	502	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	905	-	154	446
Mov Cap-2 Maneuver	-	-	-	-	294	-
Stage 1	-	-	-	-	502	-
Stage 2	-	-	-	-	480	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.5	15.6
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	294	446	-	-	905	-
HCM Lane V/C Ratio	0.087	0.11	-	-	0.043	-
HCM Control Delay (s)	18.4	14.1	-	-	9.2	-
HCM Lane LOS	C	B	-	-	A	-
HCM 95th %tile Q(veh)	0.3	0.4	-	-	0.1	-

HCM 6th TWSC
14: Sutherland Dr. & Malabar Rd.

07/30/2020

Intersection						
Int Delay, s/veh	0.3					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↗	↖	↑	↘	↙
Traffic Vol, veh/h	646	6	9	579	6	16
Future Vol, veh/h	646	6	9	579	6	16
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	275	375	-	0	-
Veh in Median Storage, #	0	-	-	0	1	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	0	0	2	0	0
Mvmt Flow	680	6	9	609	6	17
Major/Minor	Major1	Major2	Minor1			
Conflicting Flow All	0	0	686	0	1307	680
Stage 1	-	-	-	-	680	-
Stage 2	-	-	-	-	627	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	917	-	178	454
Stage 1	-	-	-	-	507	-
Stage 2	-	-	-	-	536	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	917	-	176	454
Mov Cap-2 Maneuver	-	-	-	-	317	-
Stage 1	-	-	-	-	507	-
Stage 2	-	-	-	-	531	-
Approach	EB	WB	NB			
HCM Control Delay, s	0	0.1	14.4			
HCM LOS			B			
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	406	-	-	917	-	
HCM Lane V/C Ratio	0.057	-	-	0.01	-	
HCM Control Delay (s)	14.4	-	-	9	-	
HCM Lane LOS	B	-	-	A	-	
HCM 95th %tile Q(veh)	0.2	-	-	0	-	

HCM 6th TWSC
15: Maywood Ave./Daffodil Dr. & Malabar Rd.

07/30/2020

Intersection												
Int Delay, s/veh	2.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗			↕			↕	
Traffic Vol, veh/h	8	641	13	31	528	56	14	0	39	46	0	48
Future Vol, veh/h	8	641	13	31	528	56	14	0	39	46	0	48
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	325	-	-	375	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	25	1	8	0	2	5	7	0	0	0	0	4
Mvmt Flow	9	712	14	34	587	62	16	0	43	51	0	53























Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	649	0	0	726	0	0	1450	1454	719	1445	1430	618
Stage 1	-	-	-	-	-	-	737	737	-	686	686	-
Stage 2	-	-	-	-	-	-	713	717	-	759	744	-
Critical Hdwy	4.35	-	-	4.1	-	-	7.17	6.5	6.2	7.1	6.5	6.24
Critical Hdwy Stg 1	-	-	-	-	-	-	6.17	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.17	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.425	-	-	2.2	-	-	3.563	4	3.3	3.5	4	3.336
Pot Cap-1 Maneuver	837	-	-	886	-	-	106	131	432	111	136	486
Stage 1	-	-	-	-	-	-	402	428	-	441	451	-
Stage 2	-	-	-	-	-	-	415	437	-	402	424	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	837	-	-	886	-	-	91	125	432	96	129	486
Mov Cap-2 Maneuver	-	-	-	-	-	-	210	247	-	212	245	-
Stage 1	-	-	-	-	-	-	398	423	-	436	434	-
Stage 2	-	-	-	-	-	-	355	420	-	358	419	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.1			0.5			17.9			23.5		
HCM LOS							C			C		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	338	837	-	-	886	-	-	298
HCM Lane V/C Ratio	0.174	0.011	-	-	0.039	-	-	0.35
HCM Control Delay (s)	17.9	9.3	-	-	9.2	-	-	23.5
HCM Lane LOS	C	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0.6	0	-	-	0.1	-	-	1.5

HCM 6th Signalized Intersection Summary
 16: Plaza Entrance & Malabar Rd.

07/30/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	8	688	43	53	535	1	69	3	37	7	4	14
Future Volume (veh/h)	8	688	43	53	535	1	69	3	37	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	1900	1870	1900	1900	1856	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	8	709	23	55	552	1	71	3	4	7	4	1
Peak Hour 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
Percent Heavy Veh, %	0	2	0	0	3	0	0	0	0	0	0	0
Cap, veh/h	521	1017	876	337	2007	917	247	73	97	176	83	21
Arrive On Green	0.01	0.54	0.54	0.03	0.57	0.57	0.05	0.10	0.10	0.01	0.06	0.06
Sat Flow, veh/h	1810	1870	1610	1810	3526	1610	1810	738	984	1810	1467	367
Grp Volume(v), veh/h	8	709	23	55	552	1	71	0	7	7	0	5
Grp Sat Flow(s),veh/h/ln	1810	1870	1610	1810	1763	1610	1810	0	1723	1810	0	1834
Q Serve(g_s), s	0.2	24.6	0.6	1.2	7.1	0.0	3.2	0.0	0.3	0.3	0.0	0.2
Cycle Q Clear(g_c), s	0.2	24.6	0.6	1.2	7.1	0.0	3.2	0.0	0.3	0.3	0.0	0.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.57	1.00		0.20
Lane Grp Cap(c), veh/h	521	1017	876	337	2007	917	247	0	169	176	0	104
V/C Ratio(X)	0.02	0.70	0.03	0.16	0.28	0.00	0.29	0.00	0.04	0.04	0.00	0.05
Avail Cap(c_a), veh/h	589	1017	876	359	2007	917	262	0	169	245	0	104
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(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	9.0	14.8	9.3	11.8	9.7	8.2	36.8	0.0	36.0	38.8	0.0	39.4
Incr Delay (d2), s/veh	0.0	4.0	0.1	0.2	0.3	0.0	0.6	0.0	0.1	0.1	0.0	0.9
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(95%),veh/ln	0.1	15.6	0.4	0.8	4.6	0.0	2.6	0.0	0.3	0.3	0.0	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	9.0	18.8	9.4	12.1	10.0	8.2	37.4	0.0	36.1	38.9	0.0	40.3
LnGrp LOS	A	B	A	B	B	A	D	A	D	D	A	D
Approach Vol, veh/h		740			608			78				12
Approach Delay, s/veh		18.4			10.2			37.3				39.5
Approach LOS		B			B			D				D
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	7.7	57.2	7.6	15.7	10.0	55.0	11.3	12.0				
Change Period (Y+Rc), s	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0				
Max Green Setting (Gmax), s	4.0	48.0	4.0	6.0	4.0	48.0	5.0	5.0				
Max Q Clear Time (g_c+I1), s	2.2	9.1	2.3	2.3	3.2	26.6	5.2	2.2				
Green Ext Time (p_c), s	0.0	4.0	0.0	0.0	0.0	5.0	0.0	0.0				
Intersection Summary												
HCM 6th Ctrl Delay				16.1								
HCM 6th LOS				B								

HCM 6th Signalized Intersection Summary
 17: Minton Rd. & Malabar Rd.

07/30/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖↗	↕		↖	↕↕	↗	↖	↕	↗	↖	↕	↗
Traffic Volume (veh/h)	100	597	47	114	353	243	63	320	101	233	322	169
Future Volume (veh/h)	100	597	47	114	353	243	63	320	101	233	322	169
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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		No		No
Adj Sat Flow, veh/h/ln	1870	1885	1885	1870	1856	1900	1900	1885	1900	1900	1870	1826
Adj Flow Rate, veh/h	116	694	49	133	410	54	73	372	16	271	374	40
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	2	1	1	2	3	0	0	1	0	0	2	5
Cap, veh/h	173	922	65	160	1098	501	294	460	393	346	610	504
Arrive On Green	0.05	0.27	0.27	0.09	0.31	0.31	0.04	0.24	0.24	0.13	0.33	0.33
Sat Flow, veh/h	3456	3394	239	1781	3526	1610	1810	1885	1610	1810	1870	1547
Grp Volume(v), veh/h	116	366	377	133	410	54	73	372	16	271	374	40
Grp Sat Flow(s),veh/h/ln	1728	1791	1842	1781	1763	1610	1810	1885	1610	1810	1870	1547
Q Serve(g_s), s	3.9	22.2	22.3	8.7	10.8	2.8	3.6	22.1	0.9	12.8	20.0	2.1
Cycle Q Clear(g_c), s	3.9	22.2	22.3	8.7	10.8	2.8	3.6	22.1	0.9	12.8	20.0	2.1
Prop In Lane	1.00		0.13	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	173	487	501	160	1098	501	294	460	393	346	610	504
V/C Ratio(X)	0.67	0.75	0.75	0.83	0.37	0.11	0.25	0.81	0.04	0.78	0.61	0.08
Avail Cap(c_a), veh/h	204	487	501	195	1098	501	429	460	393	348	610	504
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.5	39.6	39.6	53.2	31.9	29.1	31.9	42.3	34.3	29.6	33.7	27.7
Incr Delay (d2), s/veh	6.6	10.3	10.0	21.8	1.0	0.4	0.4	14.2	0.2	11.1	4.6	0.3
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(95%),veh/ln	3.3	16.5	16.8	8.4	8.3	2.0	2.9	17.6	0.7	10.5	14.6	1.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	62.1	49.9	49.7	75.0	32.8	29.6	32.4	56.5	34.5	40.7	38.3	28.0
LnGrp LOS	E	D	D	E	C	C	C	E	C	D	D	C
Approach Vol, veh/h		859			597			461			685	
Approach Delay, s/veh		51.4			41.9			51.9			38.6	
Approach LOS		D			D			D			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	4.0	44.0	22.9	38.0	18.7	39.3	13.1	47.7				
Change Period (Y+Rc), s	8.0	7.0	8.0	9.0	8.0	7.0	8.0	9.0				
Max Green Setting (Gmax), s	37.0	15.0	29.0	13.0	31.0	14.0	30.0					
Max Q Clear Time (g_c+1/3), s	12.8	14.8	24.1	10.7	24.3	5.6	22.0					
Green Ext Time (p_c), s	0.0	2.8	0.0	1.0	0.1	2.5	0.1	1.3				
Intersection Summary												
HCM 6th Ctrl Delay											46.0	
HCM 6th LOS											D	

EXISTING 2020 PM MOE TABLES

2020 PM Existing Unsignalized Network												
Malabar Rd. & St. Johns Heritage Pkwy.											Intersection ID: 1	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	-	-	-	0.06	-	-	-	-	-	0.74	-	0.05
HCM Control Delay (s)	-	-	-	8.1	-	-	-	-	-	24.3	-	9.1
HCM Lane LOS	-	-	-	A	-	-	-	-	-	C	-	A
HCM 95th Percentile Queue (veh/In)	-	-	-	0.2	-	-	-	-	-	6.5	-	0.2
Malabar Rd. & Snapdragon Dr.											Intersection ID: 2	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	-	-	-	0.04	-	-	-	-	-	-	-	0.12
HCM Control Delay (s)	-	-	-	8.1	0.0	-	-	-	-	-	-	16.1
HCM Lane LOS	-	-	-	A	A	-	-	-	-	-	-	C
HCM 95th Percentile Queue (veh/In)	-	-	-	0.1	-	-	-	-	-	-	-	0.4
Malabar Rd. & Championship Cir.											Intersection ID: 3	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	-	-	-	0.02	-	-	-	-	-	-	-	0.11
HCM Control Delay (s)	-	-	-	8.1	0.0	-	-	-	-	-	-	15.6
HCM Lane LOS	-	-	-	A	A	-	-	-	-	-	-	C
HCM 95th Percentile Queue (veh/In)	-	-	-	0.1	-	-	-	-	-	-	-	0.4
Malabar Rd. & Bavarian Ave.											Intersection ID: 5	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	0.02	-	-	-	-	-	0.00	-	-	-	-	-
HCM Control Delay (s)	20.1	-	-	-	-	-	8.5	0.0	-	-	-	-
HCM Lane LOS	C	-	-	-	-	-	A	A	-	-	-	-
HCM 95th Percentile Queue (veh/In)	0.1	-	-	-	-	-	0.0	-	-	-	-	-
Malabar Rd. & Hurley Blvd.											Intersection ID: 6	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	0.42	-	-	-	-	-	0.08	-	-	-	-	-
HCM Control Delay (s)	23.0	-	-	-	-	-	8.9	0.0	-	-	-	-
HCM Lane LOS	C	-	-	-	-	-	A	A	-	-	-	-
HCM 95th Percentile Queue (veh/In)	2.0	-	-	-	-	-	0.2	-	-	-	-	-
Malabar Rd. & Palm Bay Public Works (W)											Intersection ID: 7	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	0.14	-	-	-	-	-	0.00	-	-	-	-	-
HCM Control Delay (s)	15.3	-	-	-	-	-	8.5	0.0	-	-	-	-
HCM Lane LOS	C	-	-	-	-	-	A	A	-	-	-	-
HCM 95th Percentile Queue (veh/In)	0.5	-	-	-	-	-	0.0	-	-	-	-	-
Malabar Rd. & Palm Bay Public Works (E)											Intersection ID: 8	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	0.11	-	-	-	-	-	0.00	-	-	-	-	-
HCM Control Delay (s)	13.7	-	-	-	-	-	8.8	0.0	-	-	-	-
HCM Lane LOS	B	-	-	-	-	-	A	A	-	-	-	-
HCM 95th Percentile Queue (veh/In)	0.4	-	-	-	-	-	0.0	-	-	-	-	-
Malabar Rd. & Post Office											Intersection ID: 9	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	0.03	-	0.04	-	-	-	0.02	-	-	-	-	-
HCM Control Delay (s)	32.6	-	13.1	0.0	-	-	8.9	0.0	-	-	-	0.0
HCM Lane LOS	D	-	B	A	-	-	A	A	-	-	-	A
HCM 95th Percentile Queue (veh/In)	0.1	-	0.1	0.0	-	-	0.0	-	-	-	-	-
Malabar Rd. & Santa Rosa Ave.											Intersection ID: 11	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	0.04	-	-	-	-	-	0.01	-	-	-	-	0.00
HCM Control Delay (s)	16.1	-	-	0.0	-	-	8.7	0.0	-	-	-	13.2
HCM Lane LOS	C	-	-	A	-	-	A	A	-	-	-	B
HCM 95th Percentile Queue (veh/In)	0.1	-	-	0.0	-	-	0.0	-	-	-	-	0.0
Malabar Rd. & Garvey Rd.											Intersection ID: 12	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	0.20	-	-	-	-	-	0.15	-	-	-	-	-
HCM Control Delay (s)	15.2	-	-	-	-	-	9.2	-	-	-	-	-
HCM Lane LOS	C	-	-	-	-	-	A	-	-	-	-	-
HCM 95th Percentile Queue (veh/In)	0.7	-	-	-	-	-	0.5	-	-	-	-	-
Malabar Rd. & Madalyn Landing											Intersection ID: 13	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	0.05	-	0.08	-	-	-	0.09	-	-	-	-	-
HCM Control Delay (s)	21.8	-	13.2	-	-	-	9.2	-	-	-	-	-
HCM Lane LOS	C	-	B	-	-	-	A	-	-	-	-	-
HCM 95th Percentile Queue (veh/In)	0.2	-	0.3	-	-	-	0.3	-	-	-	-	-

2020 PM Existing Unsignalized Network												
Malabar Rd. & Sutherland Dr.											Intersection ID: 14	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	0.06			-	-	-	0.04	-	-	-		
HCM Control Delay (s)	14.2			-	-	-	9.0	-	-	-		
HCM Lane LOS	B			-	-	-	A	-	-	-		
HCM 95th Percentile Queue (veh/In)	0.2			-	-	-	0.1	-	-	-		
Malabar Rd. & Maywood Ave./Daffodil Dr.											Intersection ID: 15	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	0.11			0.01	-	-	0.05	-	-	0.52		
HCM Control Delay (s)	17.9			10.4	-	-	9.1	-	-	36.6		
HCM Lane LOS	C			B	-	-	A	-	-	E		
HCM 95th Percentile Queue (veh/In)	0.4			0.0	-	-	0.2	-	-	2.7		

2020 PM Existing Signalized Network												
Malabar Rd. & Krassner Dr./ Bending Branch Ln.											Intersection ID: 4	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	0.08	0.00	0.00	0.11	0.68	0.02	0.17	0.00	0.74	0.23	0.00	0.00
HCM Lane Group Delay (s)	15.4	0.0	0.0	8.7	12.4	8.7	8.2	0.0	13.0	16.2	0.0	0.0
HCM Lane LOS	B	A	A	A	B	A	A	A	B	B	A	A
HCM 95th Percentile Queue (veh/In)	0.3	0.0	0.0	0.3	4.1	0.1	0.4	0.0	4.5	1.1	0.0	0.0
HCM6 Intersection Ctrl Delay	12.5											
HCM6 Intersection LOS	B											
Malabar Rd. & Jupiter Blvd.											Intersection ID: 10	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	0.44	0.51	0.02	0.40	0.00	0.77	0.21	0.00	0.91	0.53	0.00	0.87
HCM Lane Group Delay (s)	31.6	40.3	35.9	24.6	0.0	30.8	21.3	0.0	41.5	31.7	0.0	55.7
HCM Lane LOS	C	D	D	C	A	C	C	A	D	C	A	E
HCM 95th Percentile Queue (veh/In)	4.5	6.5	0.2	2.1	0.0	16.6	1.4	0.0	21.4	7.1	0.0	11.9
HCM6 Intersection Ctrl Delay	37.6											
HCM6 Intersection LOS	D											
Malabar Rd. & Plaza Entrance											Intersection ID: 16	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	0.55	0.00	0.06	0.09	0.73	0.07	0.39	0.46	0.01	0.19	0.00	0.14
HCM Lane Group Delay (s)	36.2	0.0	34.6	11.7	23.5	12.4	15.8	15.0	11.0	39.1	0.0	43.3
HCM Lane LOS	D	A	C	B	C	B	B	B	B	D	A	D
HCM 95th Percentile Queue (veh/In)	6.8	0.0	0.5	0.5	16.5	1.1	2.0	8.6	0.2	1.5	0.0	0.7
HCM6 Intersection Ctrl Delay	20.5											
HCM6 Intersection LOS	C											
Malabar Rd. & Minton Rd.											Intersection ID: 17	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	0.56	0.67	0.04	0.91	0.73	0.74	0.91	0.54	0.11	0.84	0.98	0.29
HCM Lane Group Delay (s)	41.9	49.0	35.0	88.3	57.0	56.9	79.1	37.8	31.5	46.4	71.7	30.8
HCM Lane LOS	D	D	C	F	E	E	E	D	C	D	E	C
HCM 95th Percentile Queue (veh/In)	3.1	13.9	0.6	8.2	13.2	13.5	15.2	11.4	2.0	13.0	30.6	6.0
HCM6 Intersection Ctrl Delay	56.7											
HCM6 Intersection LOS	E											

EXISTING 2020 PM MALABAR ROAD SYNCHRO NETWORK

Intersection

Int Delay, s/veh 12.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↘	↗	↗	↘	↘	↘
Traffic Vol, veh/h	62	92	96	204	427	40
Future Vol, veh/h	62	92	96	204	427	40
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	375	-	-	300	0	375
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	0	1	4	3	0	7
Mvmt Flow	70	105	109	232	485	45

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	341	0	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	4.1	-	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	2.2	-	-
Pot Cap-1 Maneuver	1229	-	-
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1229	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	3.3	0	23
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1229	-	-	-	657	931
HCM Lane V/C Ratio	0.057	-	-	-	0.739	0.049
HCM Control Delay (s)	8.1	-	-	-	24.3	9.1
HCM Lane LOS	A	-	-	-	C	A
HCM 95th %tile Q(veh)	0.2	-	-	-	6.5	0.2

Intersection						
Int Delay, s/veh	1.1					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↑	↗	↘	
Traffic Vol, veh/h	47	473	289	50	24	15
Future Vol, veh/h	47	473	289	50	24	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	225	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	51	514	314	54	26	16

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	368	0	-	0	930
Stage 1	-	-	-	-	314
Stage 2	-	-	-	-	616
Critical Hdwy	4.1	-	-	-	6.4
Critical Hdwy Stg 1	-	-	-	-	5.4
Critical Hdwy Stg 2	-	-	-	-	5.4
Follow-up Hdwy	2.2	-	-	-	3.5
Pot Cap-1 Maneuver	1202	-	-	-	299
Stage 1	-	-	-	-	745
Stage 2	-	-	-	-	543
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1202	-	-	-	281
Mov Cap-2 Maneuver	-	-	-	-	281
Stage 1	-	-	-	-	701
Stage 2	-	-	-	-	543

Approach	EB	WB	SB
HCM Control Delay, s	0.7	0	16.1
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1202	-	-	-	368
HCM Lane V/C Ratio	0.043	-	-	-	0.115
HCM Control Delay (s)	8.1	0	-	-	16.1
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	0.4

HCM 6th TWSC
3: Malabar Rd. & Championship Cir.

07/30/2020

Intersection						
Int Delay, s/veh	0.9					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↶	↷		↶	↷
Traffic Vol, veh/h	26	471	323	50	24	16
Future Vol, veh/h	26	471	323	50	24	16
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	3	0	0	0
Mvmt Flow	27	496	340	53	25	17

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	393	0	0	917	367
Stage 1	-	-	-	367	-
Stage 2	-	-	-	550	-
Critical Hdwy	4.1	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	3.5	3.3
Pot Cap-1 Maneuver	1177	-	-	304	683
Stage 1	-	-	-	705	-
Stage 2	-	-	-	582	-
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	1177	-	-	294	683
Mov Cap-2 Maneuver	-	-	-	294	-
Stage 1	-	-	-	682	-
Stage 2	-	-	-	582	-

Approach	EB	WB	SB
HCM Control Delay, s	0.4	0	15.6
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1177	-	-	-	381
HCM Lane V/C Ratio	0.023	-	-	-	0.111
HCM Control Delay (s)	8.1	0	-	-	15.6
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	0.4

HCM 6th Signalized Intersection Summary

4: Krassner Dr./ Bending Branch Ln & Malabar Rd.

07/30/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	39	415	28	71	351	100	15	3	49	74	1	17
Future Volume (veh/h)	39	415	28	71	351	100	15	3	49	74	1	17
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	1900	1885	1781	1885	1856	1856	1411	1411	1411	1900	1900	1900
Adj Flow Rate, veh/h	41	432	12	74	366	93	16	3	6	77	1	7
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	1	8	1	3	3	33	33	33	0	0	0
Cap, veh/h	382	637	510	445	495	126	225	41	36	335	11	15
Arrive On Green	0.05	0.34	0.34	0.07	0.35	0.35	0.12	0.12	0.12	0.12	0.12	0.12
Sat Flow, veh/h	1810	1885	1510	1795	1428	363	597	329	293	1285	90	123
Grp Volume(v), veh/h	41	432	12	74	0	459	25	0	0	85	0	0
Grp Sat Flow(s),veh/h/ln	1810	1885	1510	1795	0	1790	1219	0	0	1497	0	0
Q Serve(g_s), s	0.6	7.7	0.2	1.0	0.0	8.8	0.0	0.0	0.0	1.3	0.0	0.0
Cycle Q Clear(g_c), s	0.6	7.7	0.2	1.0	0.0	8.8	0.6	0.0	0.0	2.0	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.20	0.64		0.24	0.91		0.08
Lane Grp Cap(c), veh/h	382	637	510	445	0	621	303	0	0	362	0	0
V/C Ratio(X)	0.11	0.68	0.02	0.17	0.00	0.74	0.08	0.00	0.00	0.23	0.00	0.00
Avail Cap(c_a), veh/h	530	1905	1526	556	0	1791	935	0	0	1178	0	0
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(l)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	8.6	11.1	8.7	8.0	0.0	11.2	15.3	0.0	0.0	15.8	0.0	0.0
Incr Delay (d2), s/veh	0.1	1.3	0.0	0.2	0.0	1.7	0.1	0.0	0.0	0.4	0.0	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(95%),veh/ln	0.3	4.1	0.1	0.4	0.0	4.5	0.3	0.0	0.0	1.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	8.7	12.4	8.7	8.2	0.0	13.0	15.4	0.0	0.0	16.2	0.0	0.0
LnGrp LOS	A	B	A	A	A	B	B	A	A	B	A	A
Approach Vol, veh/h		485			533			25			85	
Approach Delay, s/veh		12.0			12.3			15.4			16.2	
Approach LOS		B			B			B			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.2	20.0		11.0	7.8	20.4		11.0				
Change Period (Y+Rc), s	5.4	6.8		* 6.1	6.0	6.8		6.1				
Max Green Setting (Gmax), s	5.2	39.6		* 27	5.0	39.2		26.9				
Max Q Clear Time (g_c+I1), s	3.0	9.7		4.0	2.6	10.8		2.6				
Green Ext Time (p_c), s	0.0	2.5		0.4	0.0	2.8		0.1				

Intersection Summary

HCM 6th Ctrl Delay	12.5
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection						
Int Delay, s/veh	0.1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	533	6	2	519	4	0
Future Vol, veh/h	533	6	2	519	4	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	0	0	0	1	0	0
Mvmt Flow	544	6	2	530	4	0

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	550	0	1081
Stage 1	-	-	-	-	547
Stage 2	-	-	-	-	534
Critical Hdwy	-	-	4.1	-	6.4
Critical Hdwy Stg 1	-	-	-	-	5.4
Critical Hdwy Stg 2	-	-	-	-	5.4
Follow-up Hdwy	-	-	2.2	-	3.5
Pot Cap-1 Maneuver	-	-	1030	-	243
Stage 1	-	-	-	-	584
Stage 2	-	-	-	-	592
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1030	-	242
Mov Cap-2 Maneuver	-	-	-	-	242
Stage 1	-	-	-	-	584
Stage 2	-	-	-	-	590

Approach	EB	WB	NB
HCM Control Delay, s	0	0	20.1
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	242	-	-	1030	-
HCM Lane V/C Ratio	0.017	-	-	0.002	-
HCM Control Delay (s)	20.1	-	-	8.5	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection						
Int Delay, s/veh	3.1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	435	97	72	474	47	90
Future Vol, veh/h	435	97	72	474	47	90
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	3	1	0	3
Mvmt Flow	458	102	76	499	49	95

Major/Minor	Major1	Major2	Minor1	Minor2
Conflicting Flow All	0	0	560	0
Stage 1	-	-	-	509
Stage 2	-	-	-	651
Critical Hdwy	-	-	4.13	-
Critical Hdwy Stg 1	-	-	-	5.4
Critical Hdwy Stg 2	-	-	-	5.4
Follow-up Hdwy	-	-	2.227	-
Pot Cap-1 Maneuver	-	-	1006	-
Stage 1	-	-	-	608
Stage 2	-	-	-	523
Platoon blocked, %	-	-	-	-
Mov Cap-1 Maneuver	-	-	1006	-
Mov Cap-2 Maneuver	-	-	-	195
Stage 1	-	-	-	608
Stage 2	-	-	-	468

Approach	EB	WB	NB
HCM Control Delay, s	0	1.2	23
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	342	-	-	1006	-
HCM Lane V/C Ratio	0.422	-	-	0.075	-
HCM Control Delay (s)	23	-	-	8.9	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	2	-	-	0.2	-

Intersection						
Int Delay, s/veh	0.7					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	520	0	2	537	11	41
Future Vol, veh/h	520	0	2	537	11	41
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	1	0	0	1	0	0
Mvmt Flow	565	0	2	584	12	45

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	565	0	1153
Stage 1	-	-	-	-	565
Stage 2	-	-	-	-	588
Critical Hdwy	-	-	4.1	-	6.4
Critical Hdwy Stg 1	-	-	-	-	5.4
Critical Hdwy Stg 2	-	-	-	-	5.4
Follow-up Hdwy	-	-	2.2	-	3.5
Pot Cap-1 Maneuver	-	-	1017	-	220
Stage 1	-	-	-	-	573
Stage 2	-	-	-	-	559
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1017	-	219
Mov Cap-2 Maneuver	-	-	-	-	219
Stage 1	-	-	-	-	573
Stage 2	-	-	-	-	557

Approach	EB	WB	NB
HCM Control Delay, s	0	0	15.3
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	407	-	-	1017	-
HCM Lane V/C Ratio	0.139	-	-	0.002	-
HCM Control Delay (s)	15.3	-	-	8.5	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	0.5	-	-	0	-

Intersection						
Int Delay, s/veh	0.5					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	537	25	1	538	1	41
Future Vol, veh/h	537	25	1	538	1	41
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	1	0	0	1	0	0
Mvmt Flow	624	29	1	626	1	48

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	653	0	1267
Stage 1	-	-	-	-	639
Stage 2	-	-	-	-	628
Critical Hdwy	-	-	4.1	-	6.4
Critical Hdwy Stg 1	-	-	-	-	5.4
Critical Hdwy Stg 2	-	-	-	-	5.4
Follow-up Hdwy	-	-	2.2	-	3.5
Pot Cap-1 Maneuver	-	-	943	-	188
Stage 1	-	-	-	-	530
Stage 2	-	-	-	-	536
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	943	-	188
Mov Cap-2 Maneuver	-	-	-	-	188
Stage 1	-	-	-	-	530
Stage 2	-	-	-	-	535

Approach	EB	WB	NB
HCM Control Delay, s	0	0	13.7
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	463	-	-	943	-
HCM Lane V/C Ratio	0.105	-	-	0.001	-
HCM Control Delay (s)	13.7	-	-	8.8	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.4	-	-	0	-

HCM 6th TWSC
9: Post Office & Malabar Rd.

07/30/2020

Intersection												
Int Delay, s/veh	0.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔	↔		↔			↔	↔		↔	
Traffic Vol, veh/h	0	573	5	12	536	0	3	0	15	0	0	0
Future Vol, veh/h	0	573	5	12	536	0	3	0	15	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	175	-	-	-	-	-	50	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	0	1	0	0	1	0	0	0	0	0	0	0
Mvmt Flow	0	666	6	14	623	0	3	0	17	0	0	0























Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	623	0	0	672	0	0	1317	1317	666	1329	1323	623
Stage 1	-	-	-	-	-	-	666	666	-	651	651	-
Stage 2	-	-	-	-	-	-	651	651	-	678	672	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	968	-	-	928	-	-	136	159	463	133	158	490
Stage 1	-	-	-	-	-	-	452	460	-	461	468	-
Stage 2	-	-	-	-	-	-	461	468	-	445	458	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	968	-	-	928	-	-	134	155	463	126	154	490
Mov Cap-2 Maneuver	-	-	-	-	-	-	134	155	-	126	154	-
Stage 1	-	-	-	-	-	-	452	460	-	461	457	-
Stage 2	-	-	-	-	-	-	450	457	-	428	458	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0.2			16.3			0		
HCM LOS							C			A		

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	134	463	968	-	-	928	-	-	-
HCM Lane V/C Ratio	0.026	0.038	-	-	-	0.015	-	-	-
HCM Control Delay (s)	32.6	13.1	0	-	-	8.9	0	-	0
HCM Lane LOS	D	B	A	-	-	A	A	-	A
HCM 95th %tile Q(veh)	0.1	0.1	0	-	-	0	-	-	-

HCM 6th Signalized Intersection Summary
 10: Jupiter Blvd. & Malabar Rd.

07/30/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	78	337	171	53	323	263	119	146	43	185	158	106
Future Volume (veh/h)	78	337	171	53	323	263	119	146	43	185	158	106
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	1900	1885	1885	1900	1885	1885	1900	1885	1870	1870	1885	1885
Adj Flow Rate, veh/h	84	362	167	57	347	255	128	157	5	199	170	92
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	1	1	0	1	1	0	1	2	2	1	1
Cap, veh/h	210	469	216	266	381	280	290	308	259	377	196	106
Arrive On Green	0.05	0.38	0.38	0.05	0.38	0.38	0.10	0.16	0.16	0.11	0.17	0.17
Sat Flow, veh/h	1810	1221	563	1810	1010	742	1810	1885	1585	1781	1150	623
Grp Volume(v), veh/h	84	0	529	57	0	602	128	157	5	199	0	262
Grp Sat Flow(s),veh/h/ln	1810	0	1784	1810	0	1752	1810	1885	1585	1781	0	1773
Q Serve(g_s), s	2.8	0.0	26.5	1.9	0.0	33.3	5.7	7.8	0.3	9.3	0.0	14.7
Cycle Q Clear(g_c), s	2.8	0.0	26.5	1.9	0.0	33.3	5.7	7.8	0.3	9.3	0.0	14.7
Prop In Lane	1.00		0.32	1.00		0.42	1.00		1.00	1.00		0.35
Lane Grp Cap(c), veh/h	210	0	685	266	0	662	290	308	259	377	0	302
V/C Ratio(X)	0.40	0.00	0.77	0.21	0.00	0.91	0.44	0.51	0.02	0.53	0.00	0.87
Avail Cap(c_a), veh/h	220	0	873	287	0	857	296	351	295	439	0	399
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(l)	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	23.4	0.0	27.6	21.0	0.0	30.1	30.5	39.0	35.9	30.6	0.0	41.2
Incr Delay (d2), s/veh	1.2	0.0	3.3	0.4	0.0	11.4	1.1	1.3	0.0	1.1	0.0	14.4
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(95%),veh/ln	2.1	0.0	16.6	1.4	0.0	21.4	4.5	6.5	0.2	7.2	0.0	12.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.6	0.0	30.9	21.4	0.0	41.6	31.6	40.3	35.9	31.7	0.0	55.6
LnGrp LOS	C	A	C	C	A	D	C	D	D	C	A	E
Approach Vol, veh/h		613			659			290				461
Approach Delay, s/veh		30.0			39.8			36.4				45.3
Approach LOS		C			D			D				D
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	12.4	46.6	18.5	24.7	11.8	47.2	17.7	25.4				
Change Period (Y+Rc), s	7.0	8.0	7.0	8.0	7.0	8.0	7.0	8.0				
Max Green Setting (Gmax), s	6.0	50.0	15.0	19.0	6.0	50.0	11.0	23.0				
Max Q Clear Time (g_c+I1), s	4.8	35.3	11.3	9.8	3.9	28.5	7.7	16.7				
Green Ext Time (p_c), s	0.0	3.3	0.2	0.5	0.0	3.2	0.1	0.7				
Intersection Summary												
HCM 6th Ctrl Delay			37.6									
HCM 6th LOS			D									

Intersection												
Int Delay, s/veh	0.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	549	2	6	632	0	2	0	10	0	0	1
Future Vol, veh/h	0	549	2	6	632	0	2	0	10	0	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	0	1	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	610	2	7	702	0	2	0	11	0	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	702	0	0	612	0	0	1328	1327	611	1333	1328	702
Stage 1	-	-	-	-	-	-	611	611	-	716	716	-
Stage 2	-	-	-	-	-	-	717	716	-	617	612	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	905	-	-	977	-	-	133	157	497	132	157	442
Stage 1	-	-	-	-	-	-	484	487	-	424	437	-
Stage 2	-	-	-	-	-	-	424	437	-	481	487	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	905	-	-	977	-	-	131	155	497	128	155	442
Mov Cap-2 Maneuver	-	-	-	-	-	-	131	155	-	128	155	-
Stage 1	-	-	-	-	-	-	484	487	-	424	432	-
Stage 2	-	-	-	-	-	-	418	432	-	470	487	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0.1			16.1			13.2		
HCM LOS							C			B		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	339	905	-	-	977	-	-	442
HCM Lane V/C Ratio	0.039	-	-	-	0.007	-	-	0.003
HCM Control Delay (s)	16.1	0	-	-	8.7	0	-	13.2
HCM Lane LOS	C	A	-	-	A	A	-	B
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0

HCM 6th TWSC
12: Garvey Rd. & Malabar Rd.

07/30/2020

Intersection						
Int Delay, s/veh	1.8					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	535	19	143	639	12	69
Future Vol, veh/h	535	19	143	639	12	69
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	300	-	0	-
Veh in Median Storage, #	0	-	-	0	1	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	1	0	0	0	0	1
Mvmt Flow	563	20	151	673	13	73

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	583	0	1548
Stage 1	-	-	-	-	573
Stage 2	-	-	-	-	975
Critical Hdwy	-	-	4.1	-	6.4
Critical Hdwy Stg 1	-	-	-	-	5.4
Critical Hdwy Stg 2	-	-	-	-	5.4
Follow-up Hdwy	-	-	2.2	-	3.5
Pot Cap-1 Maneuver	-	-	1001	-	127
Stage 1	-	-	-	-	568
Stage 2	-	-	-	-	369
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1001	-	108
Mov Cap-2 Maneuver	-	-	-	-	228
Stage 1	-	-	-	-	568
Stage 2	-	-	-	-	313

Approach	EB	WB	NB
HCM Control Delay, s	0	1.7	15.2
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	438	-	-	1001	-
HCM Lane V/C Ratio	0.195	-	-	0.15	-
HCM Control Delay (s)	15.2	-	-	9.2	-
HCM Lane LOS	C	-	-	A	-
HCM 95th %tile Q(veh)	0.7	-	-	0.5	-

HCM 6th TWSC
 13: Madalyn Landing & Malabar Rd.

07/30/2020

Intersection						
Int Delay, s/veh	0.9					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↶		↷	↶	↷	↷
Traffic Vol, veh/h	585	18	78	770	10	34
Future Vol, veh/h	585	18	78	770	10	34
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	275	-	0	75
Veh in Median Storage, #	0	-	-	0	1	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	1	0	0	1	0	0
Mvmt Flow	636	20	85	837	11	37

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	656	0	1653 646
Stage 1	-	-	-	-	646 -
Stage 2	-	-	-	-	1007 -
Critical Hdwy	-	-	4.1	-	6.4 6.2
Critical Hdwy Stg 1	-	-	-	-	5.4 -
Critical Hdwy Stg 2	-	-	-	-	5.4 -
Follow-up Hdwy	-	-	2.2	-	3.5 3.3
Pot Cap-1 Maneuver	-	-	941	-	109 475
Stage 1	-	-	-	-	526 -
Stage 2	-	-	-	-	356 -
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	941	-	99 475
Mov Cap-2 Maneuver	-	-	-	-	225 -
Stage 1	-	-	-	-	526 -
Stage 2	-	-	-	-	324 -

Approach	EB	WB	NB
HCM Control Delay, s	0	0.8	15.2
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	225	475	-	-	941	-
HCM Lane V/C Ratio	0.048	0.078	-	-	0.09	-
HCM Control Delay (s)	21.8	13.2	-	-	9.2	-
HCM Lane LOS	C	B	-	-	A	-
HCM 95th %tile Q(veh)	0.2	0.3	-	-	0.3	-

HCM 6th TWSC
14: Sutherland Dr. & Malabar Rd.

07/30/2020

Intersection						
Int Delay, s/veh	0.4					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↗	↖	↑	↘	↙
Traffic Vol, veh/h	617	2	34	845	3	21
Future Vol, veh/h	617	2	34	845	3	21
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	275	375	-	0	-
Veh in Median Storage, #	0	-	-	0	1	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	1	0	0	0	0	0
Mvmt Flow	663	2	37	909	3	23
Major/Minor	Major1	Major2	Minor1			
Conflicting Flow All	0	0	665	0	1646	663
Stage 1	-	-	-	-	663	-
Stage 2	-	-	-	-	983	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	934	-	111	465
Stage 1	-	-	-	-	516	-
Stage 2	-	-	-	-	366	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	934	-	107	465
Mov Cap-2 Maneuver	-	-	-	-	237	-
Stage 1	-	-	-	-	516	-
Stage 2	-	-	-	-	351	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0.3		14.2	
HCM LOS					B	
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	415	-	-	934	-	
HCM Lane V/C Ratio	0.062	-	-	0.039	-	
HCM Control Delay (s)	14.2	-	-	9	-	
HCM Lane LOS	B	-	-	A	-	
HCM 95th %tile Q(veh)	0.2	-	-	0.1	-	

HCM 6th TWSC
15: Maywood Ave./Daffodil Dr. & Malabar Rd.

07/30/2020

Intersection												
Int Delay, s/veh	2.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗			↕			↕	
Traffic Vol, veh/h	8	626	5	44	816	81	7	1	26	55	1	54
Future Vol, veh/h	8	626	5	44	816	81	7	1	26	55	1	54
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	325	-	-	375	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	13	1	0	0	0	0	0	0	0	2	0	0
Mvmt Flow	9	666	5	47	868	86	7	1	28	59	1	57

























Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	954	0	0	671	0	0	1721	1735	669	1706	1694	911
Stage 1	-	-	-	-	-	-	687	687	-	1005	1005	-
Stage 2	-	-	-	-	-	-	1034	1048	-	701	689	-
Critical Hdwy	4.23	-	-	4.1	-	-	7.1	6.5	6.2	7.12	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.12	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.12	5.5	-
Follow-up Hdwy	2.317	-	-	2.2	-	-	3.5	4	3.3	3.518	4	3.3
Pot Cap-1 Maneuver	678	-	-	929	-	-	71	89	461	72	94	335
Stage 1	-	-	-	-	-	-	440	450	-	291	322	-
Stage 2	-	-	-	-	-	-	283	307	-	429	450	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	678	-	-	929	-	-	56	83	461	64	88	335
Mov Cap-2 Maneuver	-	-	-	-	-	-	152	193	-	173	197	-
Stage 1	-	-	-	-	-	-	434	444	-	287	306	-
Stage 2	-	-	-	-	-	-	222	291	-	397	444	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.1			0.4			17.9			36.6		
HCM LOS							C			E		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	316	678	-	-	929	-	-	227
HCM Lane V/C Ratio	0.114	0.013	-	-	0.05	-	-	0.516
HCM Control Delay (s)	17.9	10.4	-	-	9.1	-	-	36.6
HCM Lane LOS	C	B	-	-	A	-	-	E
HCM 95th %tile Q(veh)	0.4	0	-	-	0.2	-	-	2.7

HCM 6th Signalized Intersection Summary
 16: Plaza Entrance & Malabar Rd.

07/30/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	636	115	115	790	21	169	8	61	38	13	35
Future Volume (veh/h)	30	636	115	115	790	21	169	8	61	38	13	35
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	1900	1885	1900	1900	1900	1826	1900	1900	1900	1856	1900	1900
Adj Flow Rate, veh/h	32	677	56	122	840	10	180	9	5	40	14	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	1	0	0	0	5	0	0	0	3	0	0
Cap, veh/h	361	922	787	309	1837	787	329	146	81	207	97	7
Arrive On Green	0.02	0.49	0.49	0.04	0.51	0.51	0.10	0.13	0.13	0.03	0.06	0.06
Sat Flow, veh/h	1810	1885	1610	1810	3610	1547	1810	1148	638	1767	1752	125
Grp Volume(v), veh/h	32	677	56	122	840	10	180	0	14	40	0	15
Grp Sat Flow(s),veh/h/ln	1810	1885	1610	1810	1805	1547	1810	0	1785	1767	0	1877
Q Serve(g_s), s	0.8	25.8	1.7	3.0	13.4	0.3	8.2	0.0	0.6	1.9	0.0	0.7
Cycle Q Clear(g_c), s	0.8	25.8	1.7	3.0	13.4	0.3	8.2	0.0	0.6	1.9	0.0	0.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.36	1.00		0.07
Lane Grp Cap(c), veh/h	361	922	787	309	1837	787	329	0	228	207	0	104
V/C Ratio(X)	0.09	0.73	0.07	0.39	0.46	0.01	0.55	0.00	0.06	0.19	0.00	0.14
Avail Cap(c_a), veh/h	398	922	787	309	1837	787	329	0	228	255	0	104
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	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	11.6	18.3	12.2	14.9	14.1	10.9	34.3	0.0	34.5	38.7	0.0	40.5
Incr Delay (d2), s/veh	0.1	5.2	0.2	0.8	0.8	0.0	1.9	0.0	0.1	0.5	0.0	2.9
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(95%),veh/ln	0.5	17.1	1.1	2.1	9.0	0.2	6.8	0.0	0.5	1.5	0.0	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	11.7	23.5	12.4	15.8	15.0	11.0	36.2	0.0	34.6	39.1	0.0	43.3
LnGrp LOS	B	C	B	B	B	B	D	A	C	D	A	D
Approach Vol, veh/h		765			972			194				55
Approach Delay, s/veh		22.2			15.0			36.1				40.3
Approach LOS		C			B			D				D
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.2	52.8	9.5	18.5	11.0	51.0	16.0	12.0				
Change Period (Y+Rc), s	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0				
Max Green Setting (Gmax), s	4.0	44.0	5.0	9.0	4.0	44.0	9.0	5.0				
Max Q Clear Time (g_c+I1), s	2.8	15.4	3.9	2.6	5.0	27.8	10.2	2.7				
Green Ext Time (p_c), s	0.0	6.4	0.0	0.0	0.0	4.3	0.0	0.0				
Intersection Summary												
HCM 6th Ctrl Delay			20.5									
HCM 6th LOS			C									

HCM 6th Signalized Intersection Summary
 17: Minton Rd. & Malabar Rd.

07/30/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖↗	↖↗		↖	↖↗	↖	↖	↖	↖	↖	↖	↖
Traffic Volume (veh/h)	228	484	40	254	544	186	68	292	62	310	593	320
Future Volume (veh/h)	228	484	40	254	544	186	68	292	62	310	593	320
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	1885	1870	1870	1885	1885	1885	1900	1870	1856	1885	1885	1885
Adj Flow Rate, veh/h	238	504	37	265	567	50	71	304	14	323	618	152
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	2	2	1	1	1	0	2	3	1	1	1
Cap, veh/h	261	687	50	291	1045	466	126	452	380	386	628	533
Arrive On Green	0.08	0.20	0.20	0.16	0.29	0.29	0.03	0.24	0.24	0.13	0.33	0.33
Sat Flow, veh/h	3483	3357	246	1795	3582	1598	1810	1870	1572	1795	1885	1598
Grp Volume(v), veh/h	238	266	275	265	567	50	71	304	14	323	618	152
Grp Sat Flow(s),veh/h/ln	1742	1777	1826	1795	1791	1598	1810	1870	1572	1795	1885	1598
Q Serve(g_s), s	8.1	16.8	16.9	17.4	16.0	2.7	3.6	17.7	0.8	15.0	39.0	8.4
Cycle Q Clear(g_c), s	8.1	16.8	16.9	17.4	16.0	2.7	3.6	17.7	0.8	15.0	39.0	8.4
Prop In Lane	1.00		0.13	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	261	363	373	291	1045	466	126	452	380	386	628	533
V/C Ratio(X)	0.91	0.73	0.74	0.91	0.54	0.11	0.56	0.67	0.04	0.84	0.98	0.29
Avail Cap(c_a), veh/h	261	363	373	299	1045	466	126	452	380	386	628	533
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.1	44.7	44.7	49.4	35.8	31.1	36.3	41.2	34.8	31.5	39.7	29.5
Incr Delay (d2), s/veh	33.2	12.3	12.2	29.7	2.0	0.5	5.6	7.8	0.2	14.9	32.1	1.3
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(95%),veh/ln	8.3	13.4	13.7	15.3	11.6	2.0	3.1	13.9	0.6	13.0	30.6	6.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	88.3	57.0	56.9	79.1	37.8	31.5	41.9	49.0	35.0	46.4	71.7	30.8
LnGrp LOS	F	E	E	E	D	C	D	D	C	D	E	C
Approach Vol, veh/h		779			882			389			1093	
Approach Delay, s/veh		66.5			49.8			47.2			58.6	
Approach LOS		E			D			D			E	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	7.0	42.0	23.0	38.0	27.5	31.5	12.0	49.0				
Change Period (Y+Rc), s	8.0	7.0	8.0	9.0	8.0	7.0	8.0	9.0				
Max Green Setting (Gmax), s	35.0	35.0	15.0	29.0	20.0	24.0	4.0	40.0				
Max Q Clear Time (g_c+110), s	18.0	18.0	17.0	19.7	19.4	18.9	5.6	41.0				
Green Ext Time (p_c), s	0.0	3.6	0.0	1.2	0.1	1.4	0.0	0.0				
Intersection Summary												
HCM 6th Ctrl Delay					56.7							
HCM 6th LOS					E							

APPENDIX I – EXISTING (2020) SEGMENT OPERATIONS REPORTS

Contained in this Appendix –

- Existing 2020 Uninterrupted Segment Analysis
- Existing 2020 Interrupted Segment Analysis

EXISTING 2020 UNINTERRUPTED SEGMENT ANALYSIS

AM Data

Roadway Segment	Direction	Volume at E Point	Volume at W Point	HCS Volume (Average)	Speed	BFFS	Shoulder Width	Lane Width	Segment Length	PHF	T Value	Access Points	Access Point Density	No Passing Distance	No Passing Zones
St. Johns Heritage Pkwy. to Krassner Dr./Bending Branch Ln.	WB	624	591	608	35, 45	50.6	0	11	1.28	0.775	4.5%	7	5.47	1.28	100.0%
	EB	263	305	284											

Phone: Fax:
E-Mail:

----- Directional Two-Lane Highway Segment Analysis -----

Analyst APG
Agency/Co. Kittelson
Date Performed 06/01/2020
Analysis Time Period AM Peak Hour
Highway Malabar Road
From/To SJHP to Krassner Dr. WB
Jurisdiction FDOT District Five
Analysis Year 2020
Description Malabar Road PD&E

----- Input Data -----

Highway class	Class 3	Peak hour factor, PHF	0.78
Shoulder width	0.0 ft	% Trucks and buses	5 %
Lane width	11.0 ft	% Trucks crawling	0.0 %
Segment length	1.3 mi	Truck crawl speed	0.0 mi/hr
Terrain type	Level	% Recreational vehicles	5 %
Grade: Length	- mi	% No-passing zones	100 %
Up/down	- %	Access point density	5 /mi

Analysis direction volume, Vd 608 veh/h
Opposing direction volume, Vo 284 veh/h

----- Average Travel Speed -----

Direction	Analysis (d)	Opposing (o)
PCE for trucks, ET	1.1	1.3
PCE for RVs, ER	1.0	1.0
Heavy-vehicle adj. factor, (note-5) fHV	0.995	0.985
Grade adj. factor, (note-1) fg	1.00	1.00
Directional flow rate, (note-2) vi	783 pc/h	370 pc/h

Free-Flow Speed from Field Measurement:

Field measured speed, (note-3) S FM - mi/h
Observed total demand, (note-3) V - veh/h

Estimated Free-Flow Speed:

Base free-flow speed, (note-3) BFFS 50.6 mi/h
Adj. for lane and shoulder width, (note-3) fLS 4.7 mi/h
Adj. for access point density, (note-3) fA 1.3 mi/h

Free-flow speed, FFSd 44.6 mi/h

Adjustment for no-passing zones, fnp 2.9 mi/h
Average travel speed, ATSD 32.8 mi/h
Percent Free Flow Speed, PFFS 73.5 %

----- Percent Time-Spent-Following -----

Direction	Analysis (d)	Opposing (o)	
PCE for trucks, ET	1.0	1.1	
PCE for RVs, ER	1.0	1.0	
Heavy-vehicle adjustment factor, fHV	1.000	0.995	
Grade adjustment factor, (note-1) fg	1.00	1.00	
Directional flow rate, (note-2) vi	779 pc/h	366 pc/h	
Base percent time-spent-following, (note-4) BPTSFD	64.4	%	
Adjustment for no-passing zones, fnp	28.9		
Percent time-spent-following, PTSFD	84.1	%	

----- Level of Service and Other Performance Measures -----

Level of service, LOS	D	
Volume to capacity ratio, v/c	0.46	
Peak 15-min vehicle-miles of travel, VMT15	253	veh-mi
Peak-hour vehicle-miles of travel, VMT60	790	veh-mi
Peak 15-min total travel time, TT15	7.7	veh-h
Capacity from ATS, CdATS	1700	veh/h
Capacity from PTSF, CdPTSF	1700	veh/h
Directional Capacity	1700	veh/h

----- Passing Lane Analysis -----

Total length of analysis segment, Lt	1.3	mi
Length of two-lane highway upstream of the passing lane, Lu	-	mi
Length of passing lane including tapers, Lpl	-	mi
Average travel speed, ATSD (from above)	32.8	mi/h
Percent time-spent-following, PTSFD (from above)	84.1	
Level of service, LOSd (from above)	D	

----- Average Travel Speed with Passing Lane -----

Downstream length of two-lane highway within effective length of passing lane for average travel speed, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for average travel speed, Ld	-	mi
Adj. factor for the effect of passing lane on average speed, fpl	-	
Average travel speed including passing lane, ATSpl	-	
Percent free flow speed including passing lane, PFFSpl	0.0	%

----- Percent Time-Spent-Following with Passing Lane -----

Downstream length of two-lane highway within effective length of passing lane for percent time-spent-following, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for percent time-spent-following, Ld	-	mi
Adj. factor for the effect of passing lane on percent time-spent-following, fpl	-	
Percent time-spent-following including passing lane, PTSFpl	-	%

----- Level of Service and Other Performance Measures with Passing Lane -----

Level of service including passing lane, LOSpl	E	
Peak 15-min total travel time, TT15	-	veh-h

----- Bicycle Level of Service -----

Posted speed limit, Sp	45
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	779.5
Effective width of outside lane, We	11.00
Effective speed factor, St	4.42
Bicycle LOS Score, BLOS	6.35
Bicycle LOS	F

Notes:

1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific downgrade segments are treated as level terrain.
2. If v_i (v_d or v_o) $\geq 1,700$ pc/h, terminate analysis-the LOS is F.
3. For the analysis direction only and for $v > 200$ veh/h.
4. For the analysis direction only.
5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

PM Data

Roadway Segment	Direction	Volume at E Point	Volume at W Point	HCS Volume (Average)	Speed	BFFS	Shoulder Width	Lane Width	Segment Length	PHF	T Value	Access Points	Access Point Density	No Passing Distance	No Passing Zones
St. Johns Heritage Pkwy. to Krassner Dr./Bending Branch Ln.	WB	300	383	342	35, 45	50.6	0	11	1.28	0.92	3.5%	7	5.47	1.28	100.0%
	EB	519	482	501											

Phone: Fax:
E-Mail:

----- Directional Two-Lane Highway Segment Analysis -----

Analyst APG
Agency/Co. Kittelson
Date Performed 06/01/2020
Analysis Time Period PM Peak Hour
Highway Malabar Road
From/To SJHP to Krassner Dr. WB
Jurisdiction FDOT District Five
Analysis Year 2020
Description Malabar Road PD&E

----- Input Data -----

Highway class	Class 3		Peak hour factor, PHF	0.92	
Shoulder width	0.0	ft	% Trucks and buses	4	%
Lane width	11.0	ft	% Trucks crawling	0.0	%
Segment length	1.3	mi	Truck crawl speed	0.0	mi/hr
Terrain type	Level		% Recreational vehicles	5	%
Grade: Length	-	mi	% No-passing zones	100	%
Up/down	-	%	Access point density	5	/mi

Analysis direction volume, Vd 342 veh/h
Opposing direction volume, Vo 501 veh/h

----- Average Travel Speed -----

Direction	Analysis (d)	Opposing (o)
PCE for trucks, ET	1.3	1.2
PCE for RVs, ER	1.0	1.0
Heavy-vehicle adj. factor, (note-5) fHV	0.988	0.992
Grade adj. factor, (note-1) fg	1.00	1.00
Directional flow rate, (note-2) vi	376 pc/h	549 pc/h

Free-Flow Speed from Field Measurement:

Field measured speed, (note-3) S FM - mi/h
Observed total demand, (note-3) V - veh/h

Estimated Free-Flow Speed:

Base free-flow speed, (note-3) BFfS 50.6 mi/h
Adj. for lane and shoulder width, (note-3) fLS 4.7 mi/h
Adj. for access point density, (note-3) fA 1.3 mi/h

Free-flow speed, FFfSd 44.6 mi/h

Adjustment for no-passing zones, fnp 2.0 mi/h
Average travel speed, ATfSd 35.4 mi/h
Percent Free Flow Speed, PFfS 79.4 %

----- Percent Time-Spent-Following -----

Direction	Analysis (d)	Opposing (o)	
PCE for trucks, ET	1.1	1.0	
PCE for RVs, ER	1.0	1.0	
Heavy-vehicle adjustment factor, fHV	0.996	1.000	
Grade adjustment factor, (note-1) fg	1.00	1.00	
Directional flow rate, (note-2) vi	373 pc/h	545 pc/h	
Base percent time-spent-following, (note-4) BPTSFD	43.2	%	
Adjustment for no-passing zones, fnp	38.8		
Percent time-spent-following, PTSFD	59.0	%	

----- Level of Service and Other Performance Measures -----

Level of service, LOS	C	
Volume to capacity ratio, v/c	0.22	
Peak 15-min vehicle-miles of travel, VMT15	121	veh-mi
Peak-hour vehicle-miles of travel, VMT60	445	veh-mi
Peak 15-min total travel time, TT15	3.4	veh-h
Capacity from ATS, CdATS	1700	veh/h
Capacity from PTSF, CdPTSF	1700	veh/h
Directional Capacity	1700	veh/h

----- Passing Lane Analysis -----

Total length of analysis segment, Lt	1.3	mi
Length of two-lane highway upstream of the passing lane, Lu	-	mi
Length of passing lane including tapers, Lpl	-	mi
Average travel speed, ATSD (from above)	35.4	mi/h
Percent time-spent-following, PTSFD (from above)	59.0	
Level of service, LOSd (from above)	C	

----- Average Travel Speed with Passing Lane -----

Downstream length of two-lane highway within effective length of passing lane for average travel speed, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for average travel speed, Ld	-	mi
Adj. factor for the effect of passing lane on average speed, fpl	-	
Average travel speed including passing lane, ATSpl	-	
Percent free flow speed including passing lane, PFFSpl	0.0	%

----- Percent Time-Spent-Following with Passing Lane -----

Downstream length of two-lane highway within effective length of passing lane for percent time-spent-following, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for percent time-spent-following, Ld	-	mi
Adj. factor for the effect of passing lane on percent time-spent-following, fpl	-	
Percent time-spent-following including passing lane, PTSFpl	-	%

----- Level of Service and Other Performance Measures with Passing Lane -----

Level of service including passing lane, LOSpl	E	
Peak 15-min total travel time, TT15	-	veh-h

----- Bicycle Level of Service -----

Posted speed limit, Sp	45
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	371.7
Effective width of outside lane, We	11.00
Effective speed factor, St	4.42
Bicycle LOS Score, BLOS	5.71
Bicycle LOS	F

Notes:

1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific downgrade segments are treated as level terrain.
2. If v_i (v_d or v_o) $\geq 1,700$ pc/h, terminate analysis-the LOS is F.
3. For the analysis direction only and for $v > 200$ veh/h.
4. For the analysis direction only.
5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

EXISTING 2020 INTERRUPTED SEGMENT ANALYSIS

 Arterial Level of Service: EB Malabar Rd.

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Krassner Dr./ Bendin	II	40	136.2	11.6	147.8	1.50	36.5	A
Jupiter Blvd.	II	45	96.2	32.5	128.7	1.20	33.7	B
Plaza Entrance	II	41	119.4	18.7	138.1	1.34	35.0	A
Minton Rd.	II	35	17.9	47.8	65.7	0.14	7.8	F
Total	II		369.7	110.6	480.3	4.19	31.4	B

 Arterial Level of Service: WB Malabar Rd.

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Minton Rd.	II	35	19.5	33.6	53.1	0.16	10.6	F
Plaza Entrance	II	35	17.9	7.9	25.8	0.14	20.0	D
Jupiter Blvd.	II	45	107.5	46.2	153.7	1.34	31.5	B
Krassner Dr./ Bendin	II	45	96.2	13.3	109.5	1.20	39.6	A
Total	II		241.1	101.0	342.1	2.85	30.0	B

Arterial Level of Service: EB Malabar Rd.

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Krassner Dr./ Bendin	II	40	136.2	14.1	150.3	1.50	35.9	A
Jupiter Blvd.	II	45	96.2	36.2	132.4	1.20	32.7	B
Plaza Entrance	II	41	119.4	24.3	143.7	1.34	33.7	B
Minton Rd.	II	35	17.9	52.5	70.4	0.14	7.3	F
Total	II		369.7	127.1	496.8	4.19	30.3	B

Arterial Level of Service: WB Malabar Rd.

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Minton Rd.	II	35	19.5	38.1	57.6	0.16	9.8	F
Plaza Entrance	II	35	17.9	14.3	32.2	0.14	16.0	E
Jupiter Blvd.	II	45	107.5	45.7	153.2	1.34	31.6	B
Krassner Dr./ Bendin	II	45	96.2	12.7	108.9	1.20	39.8	A
Total	II		241.1	110.8	351.9	2.85	29.1	B

Malabar Signalized Segment Analysis

Eastbound AM												
Base Free Flow Speed Calculation						Travel Speed as Percent of BFFS						
$S_{fb} = S_0 + S_{call} + f_{cs} + f_a + f_{pk}$						Using Synchro Travel Speed						
Link	S_0	S_{call}	f_{cs}	f_a	f_{pk}	S_{fb}	Link	S_{fb}	Synchro Speed	P_{FFS}	LOS	
St. Johns Heritage Pkwy. - Krassner Dr./Bending Branch Ln.	46.8	0.0	0.0	0.0	-0.4	0.0	46.4	St. Johns Heritage Pkwy. - Krassner Dr./Bending Branch Ln.	46.4	36.5	78.7% B	
Krassner Dr./Bending Branch Ln. - Jupiter Blvd.	46.8	0.0	0.0	0.0	-0.7	0.0	46.1	Krassner Dr./Bending Branch Ln. - Jupiter Blvd.	46.1	33.7	73.1% B	
Jupiter Blvd. - Plaza Entrance	46.2	0.0	0.0	0.0	-1.2	0.0	45.0	Jupiter Blvd. - Plaza Entrance	45.0	35.5	78.9% B	
Plaza Entrance - Minton Rd.	42.1	0.0	-2.7	-2.7	-2.6	0.0	36.8	Plaza Entrance - Minton Rd.	36.8	7.8	21.2% F	
						Facility Segment LOS						
						63.0% C						
Extra Calculations												
Link	Posted Speed	Length	Travel Direction	Access Points	Opposing Direction	Access Points	Center Median Length	P w/ CM	Curb Length	P w/ Curb	On Street Parking	P w/ OSP
St. Johns Heritage Pkwy. - Krassner Dr./Bending Branch Ln.	45	1.28		2		5	0.00	0.00	0.00	0.00	0.00	0.00
Krassner Dr./Bending Branch Ln. - Jupiter Blvd.	45	1.20		7		3	0.00	0.00	0.03	0.03	0.00	0.00
Jupiter Blvd. - Plaza Entrance	35/45	1.35		13		7	0.00	0.00	0.00	0.00	0.00	0.00
Plaza Entrance - Minton Rd.	35	0.14		2		2	0.14	1.00	0.14	1.00	0.00	0.00
Westbound AM												
Base Free Flow Speed Calculation						Travel Speed as Percent of BFFS						
$S_{wb} = S_0 + S_{call} + f_{cs} + f_a + f_{pk}$						Using Synchro Travel Speed						
Link	S_0	S_{call}	f_{cs}	f_a	f_{pk}	S_{wb}	Link	S_{wb}	Synchro Speed	P_{FFS}	LOS	
Krassner Dr./Bending Branch Ln. - Jupiter Blvd.	46.8	0.0	0.0	0.0	-0.7	0.0	46.1	Krassner Dr./Bending Branch Ln. - Jupiter Blvd.	46.1	31.5	68.3% B	
Jupiter Blvd. - Plaza Entrance	46.2	0.0	0.0	0.0	-1.2	0.0	45.0	Jupiter Blvd. - Plaza Entrance	45.0	20.0	44.5% D	
Plaza Entrance - Minton Rd.	42.1	0.0	-2.7	-2.7	-1.3	0.0	38.1	Plaza Entrance - Minton Rd.	38.1	10.6	27.8% F	
						Facility Segment LOS						
						46.9% D						
Extra Calculations												
Link	Posted Speed	Length	Travel Direction	Access Points	Opposing Direction	Access Points	Center Median Length	P w/ CM	Curb	P w/ Curb	On Street Parking	P w/ OSP
Krassner Dr./Bending Branch Ln. - Jupiter Blvd.	45	1.20		3		7	0.00	0.00	0.03	0.03	0.00	0.00
Jupiter Blvd. - Plaza Entrance	35/45	1.35		7		13	0.00	0.00	0.12	0.09	0.00	0.00
Plaza Entrance - Minton Rd.	35	0.14		2		2	0.14	1.00	0.14	1.00	0.00	0.00
Eastbound PM												
Base Free Flow Speed Calculation						Travel Speed as Percent of BFFS						
$S_{fb} = S_0 + S_{call} + f_{cs} + f_a + f_{pk}$						Using Synchro Travel Speed						
Link	S_0	S_{call}	f_{cs}	f_a	f_{pk}	S_{fb}	Link	S_{fb}	Synchro Speed	P_{FFS}	LOS	
St. Johns Heritage Pkwy. - Krassner Dr./Bending Branch Ln.	46.8	0.0	0.0	0.0	-0.4	0.0	46.4	St. Johns Heritage Pkwy. - Krassner Dr./Bending Branch Ln.	46.4	35.9	77.4% B	
Krassner Dr./Bending Branch Ln. - Jupiter Blvd.	46.8	0.0	0.0	0.0	-0.7	0.0	46.1	Krassner Dr./Bending Branch Ln. - Jupiter Blvd.	46.1	32.7	70.9% B	
Jupiter Blvd. - Plaza Entrance	46.2	0.0	0.0	0.0	-1.2	0.0	45.0	Jupiter Blvd. - Plaza Entrance	45.0	33.7	74.9% B	
Plaza Entrance - Minton Rd.	42.1	0.0	-2.7	-2.7	-2.6	0.0	36.8	Plaza Entrance - Minton Rd.	36.8	7.3	19.8% F	
						Facility Segment LOS						
						60.8% C						
Extra Calculations												
Link	Posted Speed	Length	Travel Direction	Access Points	Opposing Direction	Access Points	Center Median Length	P w/ CM	Curb	P w/ Curb	On Street Parking	P w/ OSP
St. Johns Heritage Pkwy. - Krassner Dr./Bending Branch Ln.	45	1.28		2		5	0.00	0.00	0.00	0.00	0.00	0.00
Krassner Dr./Bending Branch Ln. - Jupiter Blvd.	45	1.20		7		3	0.00	0.00	0.03	0.03	0.00	0.00
Jupiter Blvd. - Plaza Entrance	35/45	1.35		13		7	0.00	0.00	0.00	0.00	0.00	0.00
Plaza Entrance - Minton Rd.	35	0.14		2		2	0.14	1.00	0.14	1.00	0.00	0.00
Westbound PM												
Base Free Flow Speed Calculation						Travel Speed as Percent of BFFS						
$S_{wb} = S_0 + S_{call} + f_{cs} + f_a + f_{pk}$						Using Synchro Travel Speed						
Link	S_0	S_{call}	f_{cs}	f_a	f_{pk}	S_{wb}	Link	S_{wb}	Synchro Speed	P_{FFS}	LOS	
Krassner Dr./Bending Branch Ln. - Jupiter Blvd.	46.8	0.0	0.0	0.0	-0.7	0.0	46.1	Krassner Dr./Bending Branch Ln. - Jupiter Blvd.	46.1	31.6	68.5% B	
Jupiter Blvd. - Plaza Entrance	46.2	0.0	0.0	0.0	-1.2	0.0	45.2	Jupiter Blvd. - Plaza Entrance	45.2	16.0	35.4% E	
Plaza Entrance - Minton Rd.	42.1	0.0	-2.7	-2.7	-1.3	0.0	38.1	Plaza Entrance - Minton Rd.	38.1	9.8	25.7% F	
						Facility Segment LOS						
						43.2% D						
Extra Calculations												
Link	Posted Speed	Length	Travel Direction	Access Points	Opposing Direction	Access Points	Center Median Length	P w/ CM	Curb	P w/ Curb	On Street Parking	P w/ OSP
Krassner Dr./Bending Branch Ln. - Jupiter Blvd.	45	1.20		3		7	0.00	0.00	0.03	0.03	0.00	0.00
Jupiter Blvd. - Plaza Entrance	35/45	1.35		7		13	0.12	0.09	0.00	0.00	0.00	0.00
Plaza Entrance - Minton Rd.	35	0.14		2		2	0.14	1.00	0.14	1.00	0.00	0.00

APPENDIX J – BASE YEAR MODEL VALIDATION INFORMATION

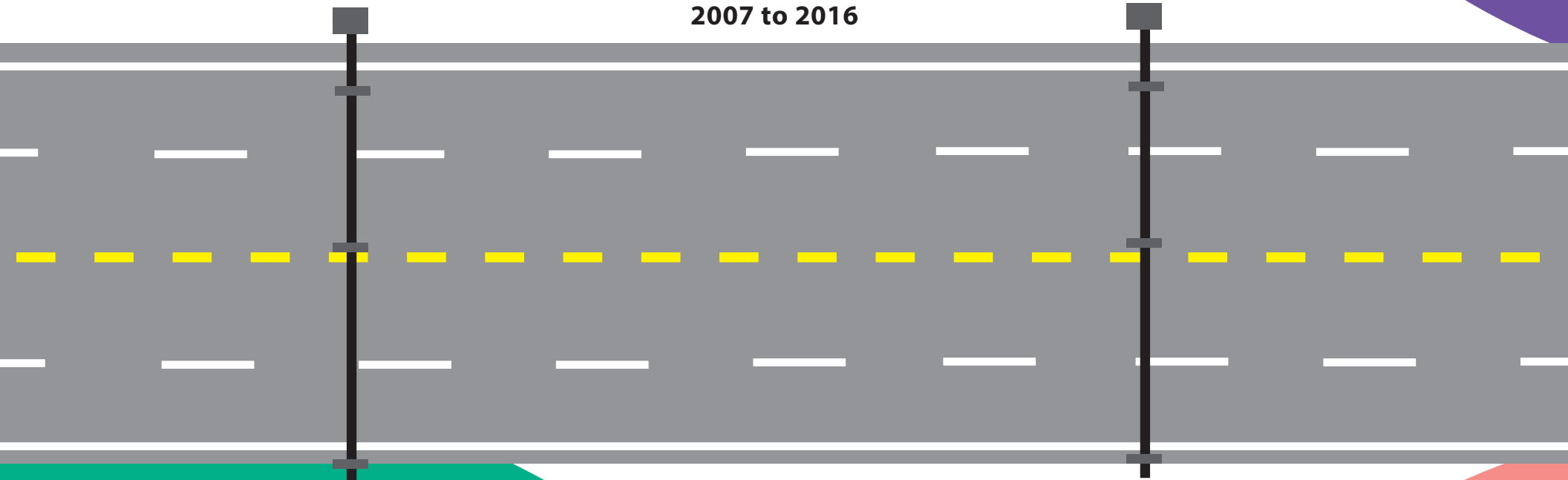
Contained in this Appendix –

- Traffic Counts
- Malabar v6 to v7
- Calibration Changes
- 2015 Brevard County MOCF
- RMSE% by Volume Group
- Model Plots
- Future Volumes Technical Memorandum

A	B	Unique Station	Road Name	Count Source	2015 AADT
40007	40010	519	Micco Rd	Brevard	1436
40052	42032	556	Fleming Grant Rd	Brevard	1628
40039	40046	520	Micco Rd	Brevard	3457
40033	42008	447	CR 507	Brevard	7196
40060	40071	518	Micco Rd	Brevard	8764
40067	40072	707008	CR 507	FDOT	9500
40080	41933	707057	CR 507	FDOT	11200
40110	41936	707015	Emerson Rd	FDOT	13000
40107	40135	707016	Minton Rd	FDOT	13100
40306	42000	701001	SR 514	FDOT	13200
40161	40175	551	Emerson Rd	Brevard	13668
40246	40269	700127	SR 514	FDOT	13800
40192	42006	565	US 1	Brevard	14026
40222	40232	494	SR 514	Brevard	14925
40306	41999	700114	US 1	FDOT (T)	15475
40152	40162	448	CR 507	Brevard	15499
40074	40125	417	US 1	Brevard	15649
40198	40206	449	CR 507	Brevard	18574
40211	40214	700379	SR 514	FDOT	19600
40132	40144	371	Malabar Rd	Brevard	20950
40180	41899	564	San Filippo Dr	Brevard	21317
40157	40167	707041	Malabar Rd	FDOT	22100
40219	40206	369	CR 507	Brevard	30498
40175	40181	513	Malabar Rd	Brevard	36050
40202	40206	700427	SR 514	FDOT	37500
40201	40202	493	SR 514	Brevard	39744
40100	98395	700134	I 95	FDOT (T)	40653
40190	40195	492	Malabar Rd	Brevard	46423
40484	40501	700408	W Eau Gallie Blvd (SR-518) W of CR-5054	FDOT	28500
40338	40363	700381	US-192 E of I-95	FDOT	30000
40205	40236	700428	I-95 North of SR-514	FDOT	59500
41992	41994	700090	SR-500 W of I-95	FDOT	8100
40610	40626	700422	SR-518 NE of CR-5054	FDOT	19000
40486	42068	700415	I-95 N of SR-518	FDOT	81000
40414	42020	708074	Ellis Road East of John Rhodes Blvd	FDOT	11200
40319	41997	707091	John Rhodes Blvd N of US-192	FDOT	10500
40091	40103	708142	Malabar Rd East of Hurley Blvd	FDOT	10000
40253	40299	700371	I-95 N of CR-516	FDOT	72000
40228	41970	707085	Milton Rd N of Americana Blvd	FDOT	24000
40163	40176	707084	Milton Rd N of Malabar Rd	FDOT	18500
40701	40742	701005	SR-518 W of SR-513	FDOT	34500
40452	40460	700124	US-1 S of SR-500	FDOT	31000

SPACE COAST TRANSPORTATION PLANNING ORGANIZATION TRAFFIC COUNTS

Historical Counts from
2007 to 2016



2725 Judge Fran Jamieson Way
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Interactive On-Line Counts:

[http://brevard.ms2soft.com/tcds/tsearch.
asp?loc=Brevard&mod=](http://brevard.ms2soft.com/tcds/tsearch.asp?loc=Brevard&mod=)

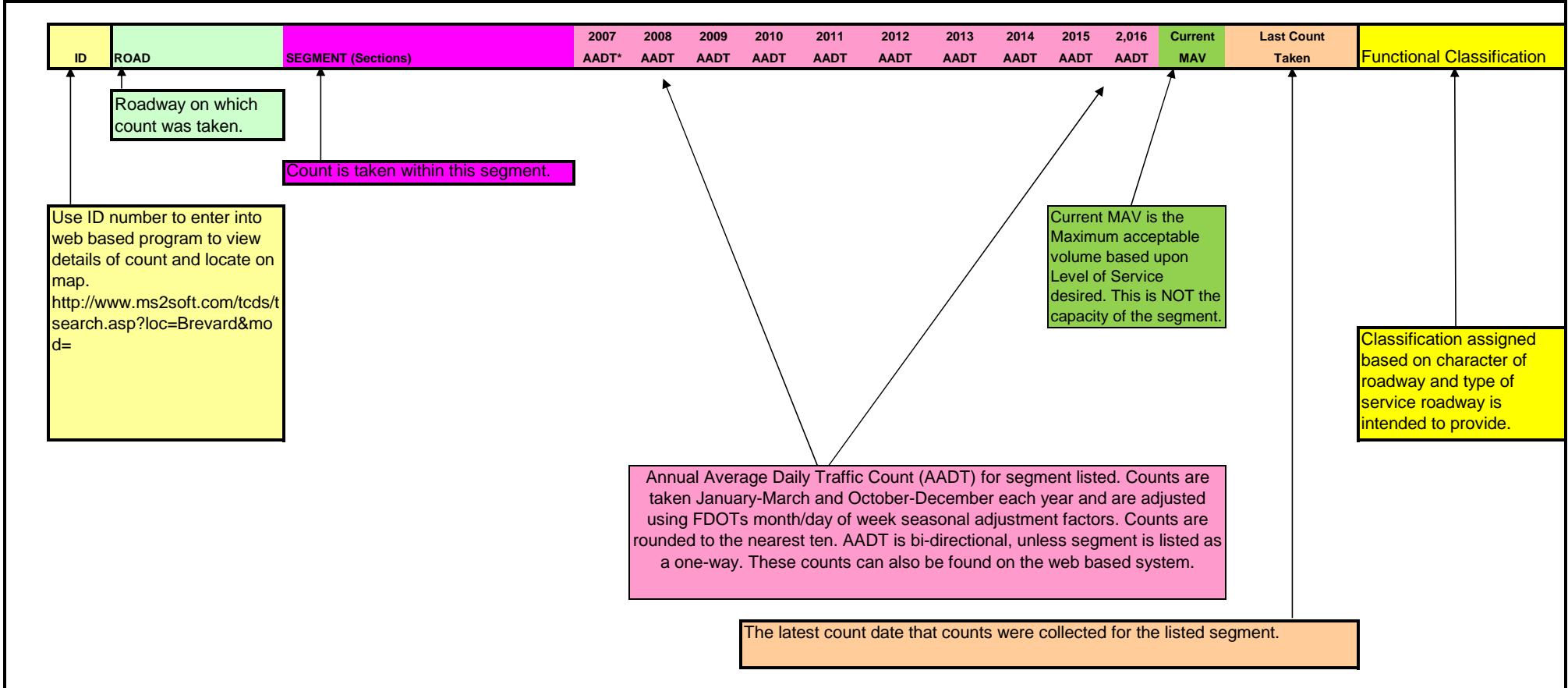
June 13, 2017

SPACE COAST TRANSPORTATION PLANNING ORGANIZATION TRAFFIC COUNTS

Questions? Please contact TPO staff at 321-690-6890

The Space Coast Transportation Planning Organization annually collects traffic counts that are used for a variety of transportation monitoring programs, local government concurrency management systems, the Florida Department of Transportation, private citizens and local businesses. The TPO's consultant collects forty-eight (48) hour directional traffic counts by fifteen (15) minute intervals at specified locations. All counts are taken during the weekday period from 12:01 AM , Monday through 12:00 Noon Friday.

Explanation of header information:



*AADTs: Counts are calculated based on FDOT seasonal factors. It should also be noted that a reduced seasonal adjustment is applied on lower level roads (local and collectors) that experience less seasonal fluctuation in traffic.

SPACE COAST TRANSPORTATION PLANNING ORGANIZATION TRAFFIC COUNTS: 2007 - 2016

ID	ROAD	SEGMENT (Sections)	2007 AADT	2008 AADT	2009 AADT	2010 AADT	2011 AADT	2012 AADT	2013 AADT	2014 AADT	2015 AADT	2016 AADT	Current MAV	Last Count Taken	Functional Classification
AREA: CENTRAL															
	US 1	EYSTER-ROSA JONES	35,543	37,540	36,867	UC	34,867	34,703	34,977	35,303	36,267	35,167			
34	US 1	Eyster-Barton	32,580	35,330	35,040	UC	32,330	32,860	33,220	32,820	34,440	33,650	62,900	2/16/2016	Urban Principal Arterial-Other
33	US 1	Barton-Florida	40,710	43,050	42,760	UC	39,440	38,510	38,070	40,180	40,480	39,840	62,900	1/27/2016	Urban Principal Arterial-Other
88	US 1	Florida-Rosa Jones (Poinsett)	33,340	34,240	32,800	UC	32,830	32,740	33,640	32,910	33,880	32,010	62,900	2/24/2016	Urban Principal Arterial-Other
	US 1	ROSA JONES-PEACHTREE	29,050	28,765	22,700	UC	26,940	26,360	26,795	25,375	33,480	30,220			
24	US 1	Rosa Jones (Poinsett)-SR 520	33,930	34,010	UC	UC	32,590	32,430	32,840	32,890	33,480	30,220	62,900	2/24/2016	Urban Principal Arterial-Other
23	US 1	SR 520-Peachtree	24,170	23,520	22,700	UC	21,290	20,290	20,750	17,860	UC	UC	62,900	1/22/2014	Urban Principal Arterial-Other
	US 1	PEACHTREE-SR 528	30,375	29,778	30,400	27,443	28,365	27,363	27,025						
22	US 1	Peachtree-Forrest	23,450	23,590	22,470	18,880	21,080	20,330	20,560	UC	UC	UC	41,790	1/8/2013	Urban Principal Arterial-Other
21	US 1	Forrest-Dixon	33,360	33,250	32,260	29,770	30,260	29,860	29,460	UC	UC	UC	41,790	1/8/2013	Urban Principal Arterial-Other
20	US 1	Dixon-Michigan	31,710	29,730	31,070	28,860	31,080	28,020	28,510	UC	UC	UC	41,790	1/8/2013	Urban Principal Arterial-Other
19	US 1	Michigan-SR 528	32,980	32,540	35,800	32,260	31,040	31,240	29,570	UC	UC	UC	41,790	1/8/2013	Urban Principal Arterial-Other
572	VIERA BLVD	Tavistock-Stadium							7,070	7,160	NC	8,190	39,800	1/26/2016	Urban Local
	VIERA BLVD	STADIUM-HOLIDAY SPRINGS	9,290	10,055	12,245	12,880	13,820	13,240	13,930	14,490	15,950	16,780			
536	VIERA BLVD	STADIUM-MURRELL		8,030	10,740	12,010	12,790	12,650	13,760	14,600	15,980	17,450	39,800	1/26/2016	Urban Minor Arterial
58	VIERA BLVD	Murrell-Holiday Springs	9,290	12,080	13,750	13,750	14,850	13,830	14,100	14,380	15,920	16,110	39,800	1/26/2016	Urban Minor Arterial
537	VIERA BLVD	Holiday Springs-US 1		10,550	11,420	11,960	12,830	11,850	12,130	12,190	13,280	13,930	15,600	2/16/2016	Urban Minor Arterial
AREA: SOUTH															
	AIRPORT	US 192-APOLLO	11,650	11,177	10,597	10,990	10,390	10,657	10,570	11,747	11,100	11,993			
503	AIRPORT	US 192-HIBISCUS	11,050	10,670	9,720	9,620	9,590	10,080	9,760	11,200	9,720	10,060	32,400	10/31/2016	Urban Minor Arterial
502	AIRPORT	HIBISCUS-NASA	10,560	9,740	9,450	9,760	9,250	9,500	9,350	10,570	NC	10,900	34,020	12/6/2016	Urban Minor Arterial
501	AIRPORT	NASA-APOLLO	13,340	13,120	12,620	13,590	12,330	12,390	12,600	13,470	12,480	15,020	39,800	10/17/2016	Urban Minor Arterial
	APOLLO	AIRPORT-SARNO	20,955	20,040	20,490	20,370	19,120	19,020	19,350	19,020		22,120			
510	APOLLO	Airport-St. Michaels	20,600	20,040	NC	20,370	NC	19,020	NC	19,020	NC	21,980	41,790	11/28/2016	Urban Minor Arterial
538	APOLLO	St. Michaels - Sarno	21,310	NC	20,490	NC	19,120	NC	19,350	NC	NC	22,260	41,790	11/8/2016	Urban Minor Arterial
571	APOLLO	Sarno - Eau Gallie Blvd						2,330	2,160	UC	UC	10,200	33,800	10/26/2016	Urban Minor Arterial
	AURORA	JOHN RODES-WICKHAM	9,240	8,955	8,395	8,265	7,670	7,670	7,765	6,865	6,845	6,540			
507	AURORA	J Rodes-Turtlemound	11,170	10,900	9,910	9,820	9,040	9,020	8,800	7,800	7,430	7,490	15,600	11/8/2016	Urban Major Collector
514	AURORA	Turtlemound-Wickham	7,310	7,010	6,880	6,710	6,300	6,320	6,730	5,930	6,260	5,590	17,700	11/8/2016	Urban Major Collector
	AURORA	WICKHAM-US 1	11,663	11,297	11,353	10,947	10,857	10,730	11,023	10,713	10,780	11,080			
515	AURORA	WICKHAM-CROTON	12,000	11,710	11,750	11,380	11,370	11,320	11,600	10,840	11,600	11,160	39,800	11/8/2016	Urban Minor Arterial
366	AURORA	Croton-Stewart	12,130	11,630	11,560	11,080	11,010	10,800	11,150	11,140	10,910	11,750	39,800	10/24/2016	Urban Minor Arterial
376	AURORA	Stewart-US 1	10,860	10,550	10,750	10,380	10,190	10,070	10,320	10,160	9,830	10,330	39,800	10/26/2016	Urban Minor Arterial
	BABCOCK	IND RVR CO-GRANT	3,160	2,625	2,745	2,560	2,570	2,500	2,615	2,720	2,375	3,160			
446	BABCOCK	Indian Rv Co-Micco	2,340	1,950	2,280	1,930	1,800	1,780	1,870	1,980	1,920	2,300	14,200	10/4/2016	Rural Major Collector
370	BABCOCK	Micco-Grant	3,980	3,300	3,210	3,190	3,340	3,220	3,360	3,460	2,830	4,020	14,200	10/31/2016	Rural Major Collector
	BABCOCK	GRANT-MALABAR	17,345	18,490	14,807	14,307	14,570	14,077	14,117	13,678	13,213	15,268			
447	BABCOCK	Grant-Valkaria			7,360	6,950	7,250	7,010	7,060	7,140	7,200	7,820	17,700	11/29/2016	Urban Major Collector
597	BABCOCK	VALKARIA-WACO								11,720	11,580	13,630	17,700	10/31/2016	Urban Minor Arterial
448	BABCOCK	WACO-FOUNDATION PK	13,060	16,580	16,550	16,100	16,150	15,720	15,560	16,110	15,500	17,700	17,700	10/4/2016	Urban Minor Arterial
449	BABCOCK	FOUNDATION PK-MALABAR	21,630	20,400	20,510	19,870	20,310	19,500	19,730	19,740	18,570	21,920	17,700	11/29/2016	Urban Minor Arterial
	BABCOCK	MALABAR-PALM BAY RD	33,497	30,810	33,610	32,865	33,630	33,235	32,880	31,985	34,340	31,825			
369	BABCOCK	Malabar-Charles	33,330	33,600	NC	34,300	NC	34,850	NC	31,920	NC	29,850	41,790	10/4/2016	Urban Principal Arterial-Other
368	BABCOCK	Charles-Pt Malabar	35,130	NC	35,710	NC	35,500	NC	33,510	NC	36,180	NC	41,790	11/11/2015	Urban Principal Arterial-Other
443	BABCOCK	Pt Malabar-Palm Bay	32,030	28,020	31,510	31,430	31,740	31,620	32,260	32,050	32,500	33,800	41,790	10/11/2016	Urban Principal Arterial-Other

*Note: 2016 AADT's Beaches area were counted twice in 2016 and the AADT listed is the average of the two counts.
NC=Not Counted; UC=Under Construction

SPACE COAST TRANSPORTATION PLANNING ORGANIZATION TRAFFIC COUNTS: 2007 - 2016

ID	ROAD	SEGMENT (Sections)	2007 AADT	2008 AADT	2009 AADT	2010 AADT	2011 AADT	2012 AADT	2013 AADT	2014 AADT	2015 AADT	2016 AADT	Current MAV	Last Count Taken	Functional Classification
AREA: SOUTH															
	BABCOCK	PALM BAY-US 192	31,978	29,996	31,910	31,686	31,888	31,360	30,644	29,686	31,670	33,796			
444	BABCOCK	Palm Bay-Eber	31,620	27,870	31,380	30,550	30,460	30,000	29,660	29,670	29,380	32,700	41,790	10/11/2016	Urban Principal Arterial-Other
367	BABCOCK	Eber-Florida	32,800	30,490	33,270	32,330	31,820	31,280	31,280	31,250	34,150	36,120	41,790	10/11/2016	Urban Principal Arterial-Other
445	BABCOCK	Florida-University	34,790	32,860	34,170	34,950	34,950	34,180	33,830	33,650	35,680	36,270	41,790	10/11/2016	Urban Principal Arterial-Other
459	BABCOCK	University-Melbourne	32,180	31,410	32,250	31,360	32,280	31,380	30,610	28,580	31,980	33,840	41,790	11/8/2016	Urban Principal Arterial-Other
460	BABCOCK	Melbourne-US 192	28,500	27,350	28,480	29,240	29,110	29,420	27,840	25,280	27,160	30,050	41,790	10/17/2016	Urban Principal Arterial-Other
	BABCOCK	US 192-APOLLO	25,070	23,958	24,090	24,287	24,000	23,560	23,303	21,585	24,850	24,850			
461	BABCOCK	US 192-FEE	25,840	24,540	26,850	NC	26,030	NC	25,200	NC	27,340	NC	33,800	12/2/2015	Urban Minor Arterial
462	BABCOCK	Fee-Hibiscus	26,770	25,790	NC	27,130	NC	25,600	NC	UC	NC	27,650	33,800	10/17/2016	Urban Minor Arterial
463	BABCOCK	Hibiscus-Sheridan	25,420	24,020	24,280	NC	24,410	NC	23,760	NC	25,380	NC	33,800	11/4/2015	Urban Minor Arterial
375	BABCOCK	Sheridan-NASA	25,240	24,450	NC	24,380	NC	24,220	NC	23,030	NC	24,740	33,800	10/17/2016	Urban Minor Arterial
464	BABCOCK	NASA-APOLLO	22,080	20,990	21,140	21,350	21,560	20,860	20,950	20,140	21,830	22,160	33,800	10/17/2016	Urban Minor Arterial
	CROTON	SARNO-LAKE WASHINGTON	14,097	14,457	13,840	13,713	13,080	13,100	12,755	13,377	1,235	14,000			
335	CROTON	SARNO-EAU GALLIE	15,370	15,180	14,850	14,610	14,170	13,960	13,920	14,250	13,710	15,870	33,800	10/25/2016	Urban Minor Arterial
334	CROTON	EAU GALLIE-AURORA	14,650	15,360	14,590	14,280	13,970	14,060	NC	14,080	14,690	13,560	33,800	10/25/2016	Urban Minor Arterial
333	CROTON	AURORA-LK WASHINGTON	12,270	12,830	12,080	12,250	11,100	11,280	11,590	11,800	NC	12,570	33,800	10/25/2016	Urban Minor Arterial
	CROTON	LAKE WASHINGTON-POST	7,865	9,140	7,060	8,290	6,450	8,180	6,840	8,690	7,190	9,670			
332	CROTON	Lk Washington-Parkway	8,470	9,140	NC	8,290	NC	8,180	NC	8,690	NC	9,670	15,600	10/25/2016	Urban Major Collector
377	CROTON	Parkway-Post	7,260	NC	7,060	NC	6,450	NC	6,840	NC	7,190	NC	15,600	10/21/2015	Urban Major Collector
	DAIRY	PALM BAY-US 192	21,008	21,450	19,180	20,268	21,435	20,535	21,240	25,308	24,835	22,998			
472	DAIRY	Palm Bay-Eber	18,350	19,040	15,160	17,350	18,610	18,350	19,110	20,920	20,380	20,620	39,800	10/11/2016	Urban Minor Arterial
473	DAIRY	Eber-Florida	22,200	22,390	19,750	20,870	22,130	21,350	22,390	25,670	NC	25,480	39,800	10/11/2016	Urban Minor Arterial
474	DAIRY	Florida-Edgewood	20,780	21,460	19,870	20,730	21,830	21,080	21,730	28,120	NC	20,660	39,800	10/11/2016	Urban Minor Arterial
356	DAIRY	Edgewood-US 192	22,700	22,910	21,940	22,120	23,170	21,360	21,730	26,520	29,290	25,230	39,800	11/29/2016	Urban Minor Arterial
355	DAIRY	US 192-HIBISCUS	11,240	10,560	10,180	10,420	10,750	10,210	10,660	12,690	12,490	13,300	15,600	12/6/2016	Urban Major Collector
	EAU GALLIE	I-95-WICKHAM	20,995	23,730	25,317	23,903	23,133	23,067	23,950	24,737	26,023	28,647			
438	EAU GALLIE	I-95-John Rodes		30,840	34,670	31,120	30,760	30,940	31,910	31,780	33,550	37,940	41,790	10/24/2016	Urban Principal Arterial-Other
439	EAU GALLIE	John Rodes-Sarno	26,960	26,350	26,530	25,990	24,990	24,710	25,240	26,650	27,910	30,750	41,790	10/24/2016	Urban Principal Arterial-Other
440	EAU GALLIE	Sarno-Wickham	15,030	14,000	14,750	14,600	13,650	13,550	14,700	15,780	16,610	17,250	41,790	11/8/2016	Urban Principal Arterial-Other
	EAU GALLIE	WICKHAM-US 1	20,390	20,595	21,933	20,227	20,763	20,167	19,943	18,893	19,523	20,063			
359	EAU GALLIE	WICKHAM-CROTON	21,700	22,260	23,130	20,850	21,400	20,790	20,760	19,310	18,990	22,690	41,790	10/25/2016	Urban Principal Arterial-Other
441	EAU GALLIE	Croton-Commodore	21,570	22,000	22,870	21,530	22,080	21,760	21,410	20,530	19,240	21,430	41,790	11/28/2016	Urban Principal Arterial-Other
360	EAU GALLIE	Commodore-Stewart Av	18,980	19,660	19,800	NC	18,810	NC	17,660	NC	20,340	NC	41,790	10/28/2015	Urban Principal Arterial-Other
455	EAU GALLIE	Stewart Av-US 1	19,310	18,460	NC	18,300	NC	17,950	NC	16,840	NC	16,070	41,790	11/28/2016	Urban Principal Arterial-Other
	EAU GALLIE (EASTBOUND)	US 1-CAUSEWAY (EB)	16,680	16,777	18,115	17,610	17,075	17,745	17,105	17,020	16,580	17,250			
361	EAU GALLIE	US 1-Highland	16,080	16,380	17,440	NC	16,320	NC	16,340	NC	15,410	NC	19,440	10/12/2015	Urban Principal Arterial-Other
382	EAU GALLIE	Highland-Pineapple	15,750	16,340	NC	16,800	NC	16,870	NC	16,310	NC	16,620	19,440	11/1/2016	Urban Principal Arterial-Other
457	EAU GALLIE	Pineapple-Causeway	18,210	17,610	18,790	18,420	17,830	18,620	17,870	17,730	17,750	17,880	19,440	11/28/2016	Urban Principal Arterial-Other
	EAU GALLIE (WESTBOUND)	CAUSEWAY-US 1 (WB)	16,283	16,000	17,455	17,375	16,430	18,010	16,700	16,525	16,095	17,035			
456	EAU GALLIE	Causeway-Pineapple	17,990	17,470	18,710	17,820	17,680	19,050	18,070	17,620	18,950	18,520	19,440	11/1/2016	Urban Principal Arterial-Other
380	EAU GALLIE	Pineapple-Highland	14,960	15,340	16,200	NC	15,180	NC	15,330	NC	13,240	NC	19,440	10/12/2015	Urban Principal Arterial-Other
458	EAU GALLIE	Highland-US 1	15,900	15,190	NC	16,930	NC	16,970	NC	15,430	NC	15,550	19,440	11/1/2016	Urban Principal Arterial-Other
	EBER	MINTON-DAIRY	10,515	12,120	12,280	9,945	10,175	8,450	9,280	10,055	10,530	11,545			
484	EBER	Minton-Hollywood	8,720	9,940	11,000	9,030	9,500	7,560	NC	9,560	NC	10,730	15,600	10/11/2016	Urban Major Collector
485	EBER	Hollywood-Dairy	12,310	14,300	13,560	10,860	10,850	9,340	9,280	10,550	10,530	12,360	15,600	10/11/2016	Urban Major Collector
	ELLIS	J RODES-WICKHAM	9,250	8,775	10,340	UC	10,695	NC	11,640	10,930	12,290	12,760			
322	ELLIS	John Rodes-East Dr	9,070	7,410	NC	UC	9,490	NC	10,770	10,930	NC	12,760	15,600	10/24/2016	Urban Minor Arterial
321	ELLIS	East Dr-Wickham	9,430	10,140	10,340	UC	11,900	NC	12,510	NC	12,290	NC	15,600	11/4/2015	Urban Minor Arterial

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ID	ROAD	SEGMENT (Sections)	2007 AADT	2008 AADT	2009 AADT	2010 AADT	2011 AADT	2012 AADT	2013 AADT	2014 AADT	2015 AADT	2016 AADT	Current MAV	Last Count Taken	Functional Classification
AREA: SOUTH															
551	EMERSON	Jupiter-Malabar		11,550	11,860	11,830	12,090	12,150	12,410	12,670	13,670	12,700	39,800	11/9/2016	Urban Minor Arterial
	EMERSON	MALABAR-MINTON	8,307	8,107	7,653	7,763	7,517	7,433	7,760	9,415	8,903				
552	EMERSON	Malabar-Americana Blvd	9,510	9,620	9,060	9,250	9,100	9,040	9,360	9,300	10,990	17,700	10/31/2016	Urban Minor Arterial	
553	EMERSON	Americana Blvd-Culver	9,090	9,000	8,920	9,170	8,860	8,830	9,170	9,530	10,440	17,700	10/17/2016	Urban Minor Arterial	
554	EMERSON	Culver-Minton	6,320	5,700	4,980	4,870	4,590	4,430	4,750	NC	5,280	17,700	10/31/2016	Urban Minor Arterial	
555	EMERSON	Minton-Jupiter	25,360	25,220	25,160	25,580	24,980	24,800	25,720	27,480	28,150	39,800	10/11/2016	Urban Minor Arterial	
	EVANS	US 192-NASA	17,810	17,705	17,980	17,130	18,535	18,630	19,055	18,385	16,510	19,905			
315	EVANS	US 192-Hibiscus	19,710	19,270	19,890	19,650	20,580	20,260	21,000	19,520	NC	20,990	39,800	10/18/2016	Urban Minor Arterial
319	EVANS	Hibiscus-NASA	15,910	16,140	16,070	14,610	16,490	17,000	17,110	17,250	16,510	18,820	39,800	11/29/2016	Urban Minor Arterial
556	FLEMING GRANT	KIWI DR-MICCO	1,570	NC	1,490	NC	1,330	NC	1,360	NC	1,720	14,200	10/31/2016	Rural Minor Collector	
579	GATEWAY DRIVE	HIBISCUS-NASA					3,450	3,550	NC	NC	NC	33,800	10/15/2013	Urban Minor Collector	
558	GRANT	BABCOCK-OLD DIXIE	2,240	NC	NC	2,130	NC	2,260	NC	NC	2,590	14,200	11/29/2016	Rural Major Collector	
566	HARLOCK	AURORA-LK WASHINGTON	2,020	NC	NC	2,480	NC	2,150	NC	NC	NC	15,600	10/9/2013	Urban Minor Collector	
	HENRY	MINTON-DAIRY						7,265	7,060	7,890	7,460				
585	HENRY	Minton Rd-Hollywood						8,120	NC	7,890	NC	15,600	11/3/2015	Urban Major Collector	
591	HENRY	Hollywood-Dairy						6,410	7,060	NC	7,460	15,600	10/18/2016	Urban Major Collector	
	HIBISCUS BLVD	EVANS-APOLLO	16,860	16,563	16,230	16,887	16,137	16,910	16,997	17,800	20,327				
559	HIBISCUS BLVD	EVANS-DAIRY	16,620	16,340	16,470	17,160	16,100	17,130	17,010	17,320	21,120	39,800	10/18/2016	Urban Minor Arterial	
560	HIBISCUS BLVD	DAIRY-BABCOCK	17,140	16,880	16,840	17,400	16,120	17,360	17,310	18,680	21,730	33,800	10/17/2016	Urban Minor Arterial	
561	HIBISCUS BLVD	BABCOCK-APOLLO	16,820	16,470	15,380	16,100	16,190	16,240	16,670	17,400	18,130	33,800	11/8/2016	Urban Minor Arterial	
	HICKORY	US 192-NASA					6,230	3,363	2,400	3,735	NC				
587	HICKORY	US 192-Fee						1,860	NC	1,710	NC	15,600	11/3/2015	Urban Major Collector	
588	HICKORY	Fee-Hibiscus						2,350	2,400	NC	NC	15,600	11/19/2014	Urban Major Collector	
580	HICKORY	Hibiscus-NASA					6,230	5,880	NC	5,760	NC	15,600	11/4/2015	Urban Major Collector	
	HOLLYWOOD	PALM BAY RD-US 192	12,385	12,755	12,605	12,708	13,875	13,055	13,045	13,230	15,195				
318	HOLLYWOOD	PALM BAY RD-EBER	13,180	13,710	13,880	13,840	14,670	13,570	12,560	UC	15,060	16,900	17,700	10/31/2016	Urban Minor Arterial
317	HOLLYWOOD	Eber-Florida/Wingate	12,490	12,890	12,600	12,910	14,170	13,300	13,080	UC	13,190	14,820	17,700	10/11/2016	Urban Minor Arterial
374	HOLLYWOOD	Florida/Wingate-Henry	12,950	13,310	12,940	13,160	13,440	13,710	14,240	UC	12,960	15,220	17,700	10/18/2016	Urban Minor Arterial
316	HOLLYWOOD	Henry-US 192	10,920	11,110	11,000	10,920	13,220	11,640	12,300	UC	11,710	13,840	15,600	10/18/2016	Urban Minor Arterial
	INTERLACHEN	ST. ANDREWS-WICKHAM	5,925	7,600	4,960	7,550	5,050	6,760	4,420	6,770	4,340	7,730			
354	INTERLACHEN	St. Andrews-Baytree	4,860	NC	4,960	NC	5,050	NC	4,420	NC	4,340	NC	15,600	12/2/2015	Urban Minor Collector
353	INTERLACHEN	Baytree-Wickham	6,990	7,600	NC	7,550	NC	6,760	NC	6,770	NC	7,730	15,600	10/3/2016	Urban Minor Collector
	JOHN RODES	US 192-EAU GALLIE	11,397	11,047	UC	11,450	11,790	12,025	12,145	11,850	12,215	12,540			
511	JOHN RODES	US 192-Sheridan	10,640	10,340	UC	10,420	10,690	10,830	NC	10,620	NC	11,520	17,700	10/24/2016	Urban Minor Arterial
504	JOHN RODES	Sheridan-Ellis	11,020	10,720	UC	NC	10,940	NC	11,040	NC	10,990	NC	17,700	12/8/2015	Urban Minor Arterial
505	JOHN RODES	Ellis-Eau Gallie	12,530	12,080	UC	12,480	13,740	13,220	13,250	13,080	13,440	13,560	17,700	11/28/2016	Urban Minor Arterial
506	JOHN RODES	EAU GALLIE-AURORA	13,630	12,060	11,670	11,760	10,830	10,750	10,120	9,220	8,950	9,570	15,600	11/28/2016	Urban Major Collector
323	JORDAN BLASS	ST ANDREWS (J BLASS) - WICKHAM	6,920	7,060	6,700	6,620	6,630	5,480	6,310	5,900	5,810	6,150	15,600	10/3/2016	Urban Minor Collector
573	JUPITER BLVD	DEGROODT-MALABAR						6,210	6,120	6,260	6,220	6,630	17,700	11/29/2016	Urban Minor Arterial
574	JUPITER BLVD	AMERICANA-PACE						12,090	12,060	12,350	NC	11,580	17,700	11/9/2016	Urban Minor Arterial
	LAKE ANDREW	TRAFFORD-WICKHAM	3,190	3,230	5,570	5,860	6,320	6,670	6,520		5,295	6,670			
605	LAKE ANDREW	TRAFFORD-IVANHOE									3,390	5,540	39,800	10/3/2016	Urban Local
79	LAKE ANDREW	IVANHOE DR-WICKHAM	3,190	3,230	5,570	5,860	6,320	6,670	6,520	6,270	7,200	7,800	39,800	10/3/2016	Urban Major Collector
	LAKE WASHINGTON	THE LAKE-WICKHAM	5,057	6,310	5,535	5,720	5,765	5,650	5,770	5,910	6,000	6,435			
351	LAKE WASHINGTON	WEST OF HARLOCK	2,760	NC	2,440	NC	3,660	NC	3,580	NC	4,240	NC	17,700	10/12/2015	Urban Minor Collector
344	LAKE WASHINGTON	HARLOCK-TURTLEMOUND	3,560	3,720	NC	3,340	NC	3,250	NC	3,440	NC	4,180	17,700	10/25/2016	Urban Minor Collector
338	LAKE WASHINGTON	TURTLEMOUND-WICKHAM	8,850	8,900	8,630	8,100	7,870	8,050	7,960	8,380	7,760	8,690	17,700	11/8/2016	Urban Major Collector
557	MAIN	CENTRAL-US 1 (MAIN)		1,430	1,850	NC	2,120	NC	1,970	NC	1,960	2,560	15,600	10/4/2016	Urban Major Collector

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AREA: SOUTH															
	MALABAR	SJHP-MINTON	18,800	20,050	20,050	19,520	20,560	20,900	15,570	16,455	15,950	15,675			
589	MALABAR	SJHP-Jupiter							11,310	11,900	10,950	12,310	17,700	10/12/2016	Urban Minor Arterial
371	MALABAR	JUPITER-MINTON	18,800	20,050	20,050	19,520	20,560	20,900	19,830	21,010	20,950	19,040	17,700	10/12/2016	Urban Principal Arterial-Other
491	MALABAR	Minton-Emerson	22,980	23,460	23,370	22,080	22,500	22,190	21,500	22,420	22,560	24,510	39,800	10/12/2016	Urban Principal Arterial-Other
513	MALABAR	Emerson-San Fillippo	33,580	35,970	35,710	34,110	34,240	34,560	33,710	34,330	36,050	37,860	50,900	10/17/2016	Urban Principal Arterial-Other
492	MALABAR	SAN FILLIPPO-I-95	49,500	48,870	46,540	45,490	46,620	46,600	46,320	48,840	46,420	52,940	50,900	11/29/2016	Urban Principal Arterial-Other
493	MALABAR	I-95-BABCOCK	40,140	38,080	37,390	35,830	37,330	35,840	36,400	38,620	NC	39,270	59,900	10/4/2016	Urban Principal Arterial-Other
	MALABAR	BABCOCK-US 1	13,475	13,780	14,370	11,450	13,470	10,790	12,840	12,430	14,930	14,090			
494	MALABAR	Babcock-Corey	13,980	14,150	14,370	NC	13,470	NC	12,840	NC	14,930	NC	24,200	10/21/2015	Urban Minor Arterial
516	MALABAR	Corey-US 1	12,970	13,410	NC	11,450	NC	10,790	NC	12,430	NC	14,090	14,800	10/11/2016	Urban Minor Arterial
598	MELBOURNE AVE	US 1 OVERPASS-FRONT STREET								4,110	NC	NC	15,600	12/3/2014	Urban Minor Collector
	MICCO	BABCOCK-US 1	3,820	1,240	4,127	4,007	4,023	3,790	3,963	4,033	4,553	4,850			
519	MICCO	Babcock-Dottie Ln	1,290	1,240	1,740	1,320	1,380	1,330	1,440	1,470	1,440	1,800	14,200	10/4/2016	Rural Major Collector
520	MICCO	Dottie Ln-Fleming Grant	2,640	UC	3,080	3,130	3,100	2,840	3,090	3,220	3,460	3,740	17,700	10/4/2016	Urban Major Collector
518	MICCO	FLEMMING GRANT-US 1	7,530	UC	7,560	7,570	7,590	7,200	7,360	7,410	8,760	9,010	17,700	10/4/2016	Urban Major Collector
	MINTON	MALABAR-PALM BAY RD	31,270	29,440	28,570	29,133	29,903	28,923	27,917	29,260	22,645	29,183			
490	MINTON	Malabar-Americana	20,160	19,670	18,590	18,970	19,010	18,750	17,890	18,820	20,030	21,090	39,800	10/12/2016	Urban Principal Arterial-Other
489	MINTON	Americana-Emerson	24,210	24,370	22,250	22,710	23,130	22,880	22,390	22,780	25,260	25,730	39,800	10/11/2016	Urban Principal Arterial-Other
488	MINTON	EMERSON-PALM BAY	49,440	44,280	44,870	45,720	47,570	45,140	43,470	46,180	NC	40,730	33,800	10/31/2016	Urban Principal Arterial-Other
	MINTON	PALM BAY-US 192	31,275	31,842	32,092	31,212	28,410	28,926	27,334	33,058	30,676	32,255			
487	MINTON	Palm Bay-Hield	28,970	30,190	29,300	NC	24,790	NC	23,890	NC	27,650	NC	33,800	12/2/2015	Urban Principal Arterial-Other
486	MINTON	Hield-Eber	30,050	30,920	NC	30,560	NC	28,290	NC	30,970	NC	32,910	39,800	10/11/2016	Urban Principal Arterial-Other
372	MINTON	Eber-Wingate	30,180	30,600	31,200	30,100	25,550	28,330	27,960	31,750	29,920	31,890	39,800	10/11/2016	Urban Principal Arterial-Other
483	MINTON	Wingate-Milwaukee	32,430	33,900	33,910	32,310	31,080	30,370	28,470	35,690	32,990	NC	39,800	12/8/2015	Urban Principal Arterial-Other
482	MINTON	Milwaukee-Henry	34,520	34,530	34,160	32,710	31,160	29,770	29,490	35,790	32,650	33,410	39,800	10/11/2016	Urban Principal Arterial-Other
481	MINTON	Henry-US 192	31,500	30,910	31,890	30,380	29,470	27,870	26,860	31,090	30,170	30,810	39,800	11/1/2016	Urban Principal Arterial-Other
	NASA	WICKHAM-EDDIE ALLEN						18,670	18,930	15,010	25,420				
575	NASA	Wickham-Evans						22,430	22,950	NC	25,420	NC	39,800	12/2/2015	Urban Principal Arterial-Other
576	NASA	Evans-Eddie Allen						14,910	14,910	15,010	NC	UC	39,800	10/22/2014	Urban Principal Arterial-Other
	NASA	EDDIE ALLEN-US 1	14,453	14,237	14,097	14,440	13,907	14,247	13,687	14,720	14,763				
346	NASA	Eddie Allen-Airport	17,530	16,200	16,510	17,120	17,300	17,050	16,930	17,000	17,050	UC	32,400	12/8/2015	Urban Principal Arterial-Other
345	NASA	Airport-Babcock	12,600	12,300	NC	12,550	NC	12,450	NC	12,810	NC	UC	32,400	10/22/2014	Urban Principal Arterial-Other
349	NASA	Babcock-Apollo	12,960	NC	12,290	NC	11,560	NC	11,130	NC	12,530	UC	32,400	11/4/2015	Urban Principal Arterial-Other
342	NASA	Apollo-US 1	14,720	14,210	13,490	13,650	12,860	13,240	13,000	14,350	14,710	UC	32,400	12/8/2015	Urban Principal Arterial-Other
600	NORFOLK PARKWAY	PALM BAY ROAD-TARGET SIGNAL								13,460	15,120	15,740	33,800	10/11/2016	Urban Major Collector
	PALM BAY	MINTON-HOLLYWOOD	35,848	UC	UC	37,100	40,623	39,310	39,947	37,998	31,890	44,303			
478	PALM BAY	MINTON-ATHENS	27,320	UC	UC					26,820	27,710	NC	59,900	10/12/2015	Urban Principal Arterial-Other
479	PALM BAY	ATHENS-CULVER	30,670	UC	UC	27,260	28,840	28,680	28,750	28,040	36,070	31,750	59,900	10/11/2016	Urban Principal Arterial-Other
465	PALM BAY	Culver-I-95 E Ramp	37,510	UC	UC	39,460	44,290	42,480	41,900	47,320	NC	44,300	59,900	10/11/2016	Urban Principal Arterial-Other
466	PALM BAY	I-95 E Ramp-Hollywood	47,890	UC	UC	44,580	48,740	46,770	49,190	49,810	NC	56,860	59,900	11/29/2016	Urban Principal Arterial-Other
	PALM BAY	HOLLYWOOD-BABCOCK	36,272	UC	UC	31,654	33,160	33,443	37,220	36,140	39,880	37,913			
467	PALM BAY	Hollywood-Dairy	41,710	UC	UC	36,800	40,070	40,830	41,820	42,180	NC	46,190	59,900	10/11/2016	Urban Principal Arterial-Other
468	PALM BAY	Dairy-Port Malabar	40,340	UC	UC	35,310	NC	NC	38,460	37,600	NC	42,080	59,900	10/11/2016	Urban Principal Arterial-Other
469	PALM BAY	Port Malabar-Stack	33,660	UC	UC	28,100	28,840	29,690	NC	31,870	NC	27,450	59,900	10/31/2016	Urban Principal Arterial-Other
477	PALM BAY	Stack-Riviera	33,420	UC	UC	29,090	NC	NC	31,380	NC	39,880	NC	59,900	12/2/2015	Urban Principal Arterial-Other
470	PALM BAY	Riviera-Babcock	32,230	UC	UC	28,970	30,570	29,810	NC	32,910	NC	35,930	59,900	10/31/2016	Urban Principal Arterial-Other
	PALM BAY	BABCOCK-ROBT CONLAN	28,748	UC	UC	22,853	22,663	23,360	26,953	22,710	27,120	24,287			
480	PALM BAY	Babcock-Knect	34,580	UC	UC	28,840	29,820	31,130	33,120	31,190	32,740	34,250	59,900	11/29/2016	Urban Principal Arterial-Other
475	PALM BAY	Knect-Lipscomb	32,910	UC	UC	26,120	NC	NC	29,370	NC	30,910	NC	59,900	11/3/2015	Urban Principal Arterial-Other
476	PALM BAY	Lipscomb-Troutman	24,900	UC	UC	19,480	20,460	20,170	NC	19,610	NC	19,530	59,900	10/11/2016	Urban Principal Arterial-Other
471	PALM BAY	Troutman-R Conlan	22,600	UC	UC	16,970	17,710	18,780	18,370	17,330	17,710	19,080	59,900	10/11/2016	Urban Principal Arterial-Other

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ID	ROAD	SEGMENT (Sections)	2007 AADT	2008 AADT	2009 AADT	2010 AADT	2011 AADT	2012 AADT	2013 AADT	2014 AADT	2015 AADT	2016 AADT	Current MAV	Last Count Taken	Functional Classification
AREA: SOUTH															
330	PARKWAY	TURTLEMOUND-WICKHAM	5,080	5,570	5,200	5,110	4,880	5,020	4,840	4,810	4,960	5,460	17,700	11/8/2016	Urban Major Collector
601	PINEAPPLE	EAU GALLIE BLVD-AURORA								5,610	NC	6,100	15,600	11/28/2016	Urban Major Collector
	PINEDA CSWY	I-95-US 1	12,540	UC	12,655	13,010	21,530	23,120	24,193	25,537	27,623	28,127			
570	PINEDA CSWY	I-95-ST ANDREWS					18,340	19,900	21,650	23,780	27,070	27,640	41,790	10/3/2016	Urban Minor Arterial
328	PINEDA CSWY	ST ANDREWS-WICKHAM	4,850	UC	5,470	5,510	18,910	21,330	23,210	24,860	25,360	28,950	41,790	10/3/2016	Urban Minor Arterial
327	PINEDA CSWY	WICKHAM-US 1	20,230	UC	19,840	20,510	27,340	28,130	27,720	27,970	30,440	27,790	41,790	10/3/2016	Urban Principal Arterial-Other
352	PINEHURST	WICKHAM-ST. ANDREWS		2,410	2,350	2,360	2,380	2,520	2,310	2,240	2,220	2,540	15,600	11/28/2016	Urban Minor Collector
	PORT MALABAR	BABCOCK-US 1	14,395	19,280	11,870	16,210	11,340	15,820	10,810	15,820	14,590	17,160			
339	PORT MALABAR	BABCOCK-TROUTMAN	16,540	19,280	NC	16,210	NC	15,820	NC	15,820	NC	17,160	17,700	10/11/2016	Urban Minor Arterial
340	PORT MALABAR	TROUTMAN-US 1	12,250		11,870	NC	11,340	NC	10,810	NC	14,590	NC	17,700	11/11/2015	Urban Minor Arterial
329	POST	PINECONE-WICKHAM	10,220	10,330	9,650	9,580	8,790	8,840	8,560	9,030	8,890	9,660	15,600	10/25/2016	Urban Major Collector
	RJ CONLAN	PALM BAY RD-US 1		11,545	9,925	10,500	11,135	10,570	10,270	10,640	10,225	11,300			
562	RJ CONLAN	PALM BAY RD-COMMERCE		11,330	9,310	10,440	11,340	10,870	10,410	10,550	9,720	11,250	39,800	10/11/2016	Urban Principal Arterial-Other
563	RJ CONLAN	COMMERCE-US 1		11,760	10,540	10,560	10,930	10,270	10,130	10,730	10,730	11,350	39,800	10/11/2016	Urban Principal Arterial-Other
495	SARNO	EAU GALLIE-WICKHAM	17,000	15,110	15,440	15,110	14,180	14,080	14,530	15,050	14,390	16,870	41,790	10/24/2016	Urban Minor Arterial
	SARNO	WICKHAM-US 1	22,535	21,428	21,818	21,470	19,663	19,263	19,797	20,840	19,577	19,688			
358	SARNO	WICKHAM-CROTON	22,250	20,480	21,360	20,660	20,640	20,200	20,370	20,490	21,240	21,610	41,790	11/8/2016	Urban Minor Arterial
496	SARNO	Croton-Garfield	24,810	24,150	24,300	23,910	23,030	22,340	NC	23,580	23,110	20,210	41,790	10/24/2016	Urban Minor Arterial
498	SARNO	Garfield-Apollo	26,480	25,550	25,540	25,220	NC	NC	23,960	23,800	NC	21,710	41,790	11/8/2016	Urban Minor Arterial
499	SARNO	APOLLO-US 1	16,600	15,530	16,070	16,090	15,320	15,250	15,060	15,490	14,380	15,220	33,800	10/24/2016	Urban Minor Arterial
581	SHERIDAN	JOHN RODES-WICKHAM						2,870	NC	NC	NC	NC	15,600	11/27/2012	Urban Minor Collector
	ST ANDREWS	PINEDA CSWY -WICKHAM	5,145	4,560	4,710	5,490	4,570	3,815	3,390	3,417	3,335	3,240			
381	ST ANDREWS	Pineda Causeway-Interlachen	4,560		4,710	NC	4,570	3,450	3,390	4,080	4,460	NC	15,600	10/21/2015	Urban Minor Collector
325	ST ANDREWS	Interlachen-Pinehurst	5,730	5,740		5,490	NC	4,180	NC	3,990	NC	4,480	15,600	10/3/2016	Urban Minor Collector
326	ST ANDREWS	PINEHURST-WICKHAM		3,380						2,180	2,210	2,000	15,600	10/3/2016	Urban Minor Collector
	ST JOHNS HERITAGE PKWY	MALABAR-EMERSON										1,905			
609	ST JOHNS HERITAGE PKWY	MALABAR-PACE										2,210		10/12/2016	TO BE CLASSIFIED
610	ST JOHNS HERITAGE PKWY	PACE-EMERSON										1,600		10/12/2016	TO BE CLASSIFIED
564	SAN FILLIPPO	JUPITER-MALABAR		18,640	17,440	17,190	17,390	18,180	18,690	18,990	NC	21,400	17,700	11/29/2016	Urban Minor Arterial
324	SUNTREE	WICKHAM-US 1	16,710	16,060	17,240	17,660	15,370	15,350	15,250	16,500	18,040	16,140	15,600	11/1/2016	Urban Minor Collector
	TURTLEMOUND	EAU GALLIE BLVD-PINE CONE RD	7,583	7,295	6,820	6,660	5,890	5,835	5,907	6,630	5,480	6,743			
611	TURTLEMOUND	EAU GALLIE-AURORA									4,590	4,750	15,600	11/8/2016	Urban Major Collector
379	TURTLEMOUND	AURORA-LAKE WASHINGTON	9,170	8,840		8,220	NC	7,200	7,290	8,370	NC	10,070	15,600	10/25/2016	Urban Minor Collector
331	TURTLEMOUND	Lk Washington-Parkway	7,510		6,820	NC	5,890	NC	5,890	NC	6,370	NC	15,600	10/12/2015	Urban Major Collector
378	TURTLEMOUND	Parkway-Pine Cone Rd	6,070	5,750		5,100	NC	4,470	4,540	4,890	NC	5,410	15,600	10/25/2016	Urban Major Collector
569	UNIVERSITY	BABCOCK-US 1	8,750		7,980	NC	7,340	NC	7,880	NC	7,840	NC	33,800	10/12/2015	Urban Major Collector
	US 1	IND RVR CO-MALABAR	16,220	14,903	15,463	15,480	15,648	15,355	16,008	16,195	17,135	17,723			
416	US 1	Ind Rvr CL-Micco	19,390	18,440	19,180	19,040	19,500	19,610	20,140	21,130	21,610	22,840	41,790	10/4/2016	Urban Principal Arterial-Other
417	US 1	Micco-First St	13,240	13,020	13,470	13,620	13,750	13,210	14,120	13,930	15,650	15,920	41,790	10/4/2016	Urban Principal Arterial-Other
565	US 1	First St-Valkaria		12,680	13,000	13,140	12,930	12,900	13,740	13,530	14,030	14,010	41,790	10/4/2016	Urban Principal Arterial-Other
418	US 1	VALKARIA-MALABAR	16,030	15,470	16,200	16,120	16,410	15,700	16,030	16,190	17,250	18,120	41,790	10/11/2016	Urban Principal Arterial-Other
	US 1	MALABAR-RJ CONLAN	22,223	22,253	22,323	21,480	21,237	21,120	20,817	21,903	23,505	23,853			
419	US 1	Malabar-Port Malabar	20,490	20,280	20,620	19,830	20,140	UC	19,100	19,520	21,820	22,130	41,790	10/31/2016	Urban Principal Arterial-Other
420	US 1	Port Malabar-Palm Bay	24,300	23,550	24,060	23,170	22,610	22,230	22,680	24,320	25,190	25,990	39,800	10/31/2016	Urban Principal Arterial-Other
539	US 1	Palm Bay-RJ Conlan	21,880	22,930	22,290	21,440	20,960	20,010	20,670	21,870	NC	23,440	39,800	10/11/2016	Urban Principal Arterial-Other
	US 1	RJ CONLAN-STRAWBRIDGE	31,993	32,303	32,243	30,950	31,067	31,380	29,260	32,567	30,600	33,773			
343	US 1	RJ CONLAN-UNIVERSITY	30,670	31,240	30,330	29,940	29,570	28,310	29,260	30,750	30,770	32,480	59,900	10/11/2016	Urban Principal Arterial-Other
348	US 1	University-New Haven	37,860	36,620	37,560	35,020	35,820	34,450	UC	38,210	NC	39,310	59,900	10/31/2016	Urban Principal Arterial-Other
384	US 1	New Haven-Strawbridge	27,450	29,050	28,840	27,890	27,810	UC	UC	28,740	30,430	29,530	59,900	10/31/2016	Urban Principal Arterial-Other

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AREA: SOUTH															
	US 1	STRAWBRIDGE-SARNO	37,584	36,426	36,830	35,562	36,258	UC	UC	37,888	37,934	36,606			
385	US 1	Strawbridge-Hibiscus	39,640	36,710	40,590	38,170	38,860	UC	UC	41,310	40,480	40,730	59,900	10/17/2016	Urban Principal Arterial-Other
431	US 1	Hibiscus-NASA	31,140	32,880	33,750	32,260	33,800	UC	UC	35,120	34,430	32,230	59,900	11/28/2016	Urban Principal Arterial-Other
432	US 1	NASA-Cherry	38,180	35,890	34,550	32,260	32,740	UC	UC	35,480	34,840	32,700	59,900	11/28/2016	Urban Principal Arterial-Other
433	US 1	Cherry-Ballard	32,200	31,970	28,170	30,990	32,310	UC	UC	33,640	32,920	31,240	59,900	11/28/2016	Urban Principal Arterial-Other
434	US 1	Ballard-Sarno	46,760	44,680	47,090	44,130	43,580	UC	UC	43,890	47,000	46,130	59,900	11/1/2016	Urban Principal Arterial-Other
	US 1	SARNO-PINEDA	40,585	40,673	39,695	39,327	39,238	35,453	35,315	40,158	42,062	40,128			
435	US 1	Sarno-Eau Gallie	54,210	50,000	49,740	52,210	52,110	UC	UC	52,660	52,460	36,440	59,900	11/28/2016	Urban Principal Arterial-Other
442	US 1	EAU GALLIE-AURORA	42,590	42,720	40,480	38,570	37,960	UC	UC	38,490	40,440	41,280	59,900	10/26/2016	Urban Principal Arterial-Other
450	US 1	Aurora-LkWashington	36,520	39,190	38,050	36,920	36,940	UC	36,260	37,200	38,610	37,060	59,900	11/8/2016	Urban Principal Arterial-Other
436	US 1	LkWashington-Parkway	37,080	36,400	36,490	35,720	35,820	34,570	32,620	35,870	37,300	43,400	59,900	10/26/2016	Urban Principal Arterial-Other
437	US 1	Parkway-Post	36,020	37,160	37,230	36,550	36,160	34,790	36,230	36,570	37,880	40,260	59,900	11/1/2016	Urban Principal Arterial-Other
415	US 1	POST-PINEDA	37,090	38,570	36,180	35,990	36,440	37,000	36,150	NC	45,680	42,330	59,900	11/1/2016	Urban Principal Arterial-Other
	US 192	OSCEOLA CO-I-95	7,370	7,310	7,690	7,510	7,490	7,370	7,300	7,710	8,745	8,755			
590	US 192	OSCEOLA CO-SIMON RD							7,390	7,700	8,390	7,930	49,600	10/18/2016	Rural Principal Arterial Other
362	US 192	SIMON RD-I-95	7,370	7,310	7,690	7,510	7,490	7,370	7,210	7,720	9,100	9,580	41,790	10/18/2016	Urban Principal Arterial-Other
	US 192	I-95-WICKHAM	26,420	25,735	24,300	24,105	25,050	25,580	25,410	26,890	29,090	30,030			
421	US 192	I-95-John Rodes	24,430	24,050	22,740	22,140	23,860	24,880	24,800	26,690	29,320	30,180	39,800	10/18/2016	Urban Principal Arterial-Other
422	US 192	John Rodes-Wickham	28,410	27,420	25,860	26,070	26,240	26,280	26,020	27,090	28,860	29,880	39,800	10/18/2016	Urban Principal Arterial-Other
	US 192	WICKHAM-BABCOCK	33,870	34,743	34,597	33,600	33,137	32,157	31,103	32,006	32,833	32,717			
424	US 192	Wickham-Dayton	36,540	37,380	36,150	35,680	36,260	33,300	32,410	35,650	35,700	35,340	39,800	10/19/2016	Urban Principal Arterial-Other
388	US 192	Dayton-Windover Sq ent	38,580	40,640	40,160	38,270	40,280	37,650	36,980	38,730	38,270	37,160	39,800	11/1/2016	Urban Principal Arterial-Other
425	US 192	Windover Sq-Hollywood	38,620	37,460	36,750	36,100	37,800	34,680	34,200	34,650	35,740	33,970	39,800	10/19/2016	Urban Principal Arterial-Other
363	US 192	Hollywood-McClain (W Mall ent)	33,310	33,190	NC	32,820	33,360	30,450	NC	29,620	NC	31,390	39,800	10/19/2016	Urban Principal Arterial-Other
426	US 192	McClain (W Mall ent)-Sunset (E Mall ent)	32,520		32,360	NC	32,010	NC	27,570	NC	28,680	NC	39,800	11/3/2015	Urban Principal Arterial-Other
427	US 192	Sunset (E Mall ent)-Dairy	36,020	35,480	34,670	32,970	34,510	31,750	30,910	33,680	33,320	32,590	39,800	10/19/2016	Urban Principal Arterial-Other
428	US 192	Dairy-Airport	33,770	32,480	31,230	32,830	30,650	31,750	30,250	29,400	30,670	31,680	39,800	10/17/2016	Urban Principal Arterial-Other
373	US 192	Airport-Country Club	28,260		30,860	NC	27,480	NC	25,400	NC	27,450	NC	39,800	10/21/2015	Urban Principal Arterial-Other
429	US 192	Country Club-Babcock	27,210	26,570	NC	26,530	25,880	25,520	NC	22,310	NC	26,890	39,800	10/17/2016	Urban Principal Arterial-Other
	US 192	BABCOCK-NEW HAVEN	18,640	19,245	18,548	19,080	18,444	18,198	17,722	17,828	20,058	20,585			
430	US 192	Babcock-New Haven	22,730	22,020	22,670	21,920	20,660	21,450	20,630	19,680	20,430	22,190	32,400	11/29/2016	Urban Principal Arterial-Other
451	US 192	New Haven-Pine	17,070		16,120	NC	18,920	NC	16,360	NC	20,670	NC	32,400	12/9/2015	Urban Principal Arterial-Other
452	US 192	Pine-Hickory	17,270	16,840	NC	16,500	NC	16,370	NC	15,450	NC	19,640	32,400	10/12/2016	Urban Principal Arterial-Other
453	US 192	Hickory-Livingston	16,870		14,750	NC	15,950	NC	15,390	NC	16,350	NC	32,400	10/12/2015	Urban Principal Arterial-Other
454	US 192	Livingston-Waverly	16,880	16,420	NC	16,570	NC	15,890	NC	15,090	NC	17,160	32,400	10/31/2016	Urban Principal Arterial-Other
508	US 192	Waverly-US 1	17,210		17,030	NC	16,330	NC	15,560	NC	NC	NC	32,400	10/1/2013	Urban Principal Arterial-Other
509	US 192	US 1-NEW HAVEN	22,450	21,700	22,170	21,330	20,360	19,080	20,670	21,090	22,780	23,350	32,400	10/12/2016	Urban Principal Arterial-Other
	VALKARIA	BABCOCK-US 1	3,085	2,835	3,530	2,100	3,250	1,940	3,440	2,270	3,600	2,520			
517	VALKARIA	Babcock-Corey	3,650	3,430	3,530	NC	3,250	NC	3,440	NC	3,600	NC	14,200	10/21/2015	Rural Major Collector
512	VALKARIA	Corey-US 1	2,520	2,240	NC	2,100	NC	1,940	NC	2,270	NC	2,520	14,200	11/29/2016	Rural Major Collector
	WICKHAM	US 192-NASA	28,460	27,713	30,230	25,793	26,080	UC	UC	23,790	25,907	24,643			
404	WICKHAM	US 192-Sheridan	27,700	26,930	31,100	25,810	26,050	UC	UC	23,730	25,700	22,840	39,800	10/19/2016	Urban Principal Arterial-Other
405	WICKHAM	Sheridan-Greenboro	28,840	28,370	29,880	25,970	26,030	UC	UC	23,500	25,880	24,650	39,800	11/8/2016	Urban Principal Arterial-Other
406	WICKHAM	Greenboro-NASA	28,840	27,840	29,710	25,600	26,160	UC	UC	24,140	26,140	26,440	39,800	10/19/2016	Urban Principal Arterial-Other

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AREA: SOUTH															
	WICKHAM	NASA-SARNO	37,755	38,375	38,498	35,935	37,368	35,233	33,435	35,715	36,240	33,643			
407	WICKHAM	NASA-Harper	37,500	38,020	37,320	34,810	36,270	34,170	32,900	35,200	NC	37,660	39,800	10/19/2016	Urban Principal Arterial-Other
408	WICKHAM	Harper-Wright	37,970	37,080	36,990	34,960	36,640	34,270	NC	34,370	NC	33,360	39,800	10/24/2016	Urban Principal Arterial-Other
365	WICKHAM	Wright-Fountainhead	37,160	39,050	39,820	36,440	37,950	35,360	33,970	35,770	36,240	29,510	39,800	10/24/2016	Urban Principal Arterial-Other
350	WICKHAM	Fountainhead-Sarno	38,390	39,350	39,860	37,530	38,610	37,130	NC	37,520	NC	38,060	33,800	10/24/2016	Urban Principal Arterial-Other
	WICKHAM	SARNO-PARKWAY	35,203	36,423	38,168	35,463	35,788	34,593	33,193	32,853	35,965	34,953			
409	WICKHAM	Sarno-Eau Gallie	36,920	38,680	38,970	36,750	38,000	36,970	34,630	34,420	36,290	36,870	33,800	10/24/2016	Urban Principal Arterial-Other
410	WICKHAM	Eau Gallie-Aurora	36,210	37,210	39,700	37,260	36,980	35,820	34,290	33,200	43,090	33,020	33,800	11/28/2016	Urban Principal Arterial-Other
411	WICKHAM	Aurora-Lake Washington	35,430	36,670	38,500	35,650	35,920	34,520	33,290	33,340	34,210	35,880	33,800	10/24/2016	Urban Principal Arterial-Other
412	WICKHAM	LkWashington-Parkway	32,250	33,130	35,500	32,190	32,250	31,060	30,560	30,450	30,270	34,040	39,800	10/25/2016	Urban Principal Arterial-Other
	WICKHAM	PARKWAY-PINEDA CSWY	34,468	35,678	36,276	34,152	36,006	34,832	33,928	34,016	34,962	35,882			
413	WICKHAM	Parkway-Post	32,550	33,540	36,160	31,910	33,800	32,200	31,000	31,750	32,140	34,330	39,800	10/25/2016	Urban Principal Arterial-Other
414	WICKHAM	Post-Kensington	36,340	38,330	37,430	35,380	36,870	35,540	34,320	34,850	36,000	34,510	39,800	10/25/2016	Urban Principal Arterial-Other
389	WICKHAM	Kensington-Mariah Dr	34,870	35,890	37,290	34,710	37,020	35,010	34,230	33,960	34,880	34,240	39,800	11/9/2016	Urban Principal Arterial-Other
540	WICKHAM	Mariah Dr-Business Ctr.	34,720	35,250	35,320	34,530	36,530	35,240	34,740	34,380	35,170	36,870	39,800	10/25/2016	Urban Principal Arterial-Other
364	WICKHAM	Business Ctr.-Pineda Cswy.	33,860	35,380	35,180	34,230	35,810	36,170	35,350	35,140	36,620	39,460	39,800	10/25/2016	Urban Principal Arterial-Other
	WICKHAM	PINEDA CSWY-SUNTREE BLVD	30,653	31,133	30,863	29,323	26,927	24,910	24,243	23,790	23,733	27,197			
403	WICKHAM	Pineda Cswy.-Jordan Blass	33,570	33,850	33,490	32,200	30,490	27,700	26,570	25,620	26,540	29,660	39,800	10/3/2016	Urban Principal Arterial-Other
402	WICKHAM	Jordan Blass-St Andrews	28,620	29,420	29,600	27,460	24,640	22,950	22,200	21,940	20,720	25,370	39,800	10/3/2016	Urban Principal Arterial-Other
401	WICKHAM	St. Andrews-Suntree	29,770	30,130	29,500	28,310	25,650	24,080	23,960	23,810	23,940	26,560	39,800	10/3/2016	Urban Principal Arterial-Other
	WICKHAM	SUNTREE-MURRELL	36,265	36,338	37,315	36,650	31,480	29,190	29,028	29,358	29,620	31,723			
400	WICKHAM	Suntree-Pinehurst (N)	37,100	38,680	37,660	37,030	31,720	29,670	29,070	29,980	30,300	32,590	39,800	10/3/2016	Urban Principal Arterial-Other
399	WICKHAM	Pinehurst (N)-Interlachen		34,480	35,550	35,020	29,950	27,850	28,010	28,810	28,360	30,710	39,800	10/3/2016	Urban Principal Arterial-Other
397	WICKHAM	Interlachen-Baytree		36,940	38,570	37,900	32,650	30,160	29,960	29,400	30,220	32,870	39,800	10/3/2016	Urban Principal Arterial-Other
396	WICKHAM	Baytree-Murrell	35,430	35,250	37,480	36,650	31,600	29,080	29,070	29,240	29,600	30,720	39,800	10/3/2016	Urban Principal Arterial-Other
	WICKHAM	MURRELL-LAKE ANDREW	33,667	31,110	34,030	34,133	34,253	33,680	34,143	34,713					
395	WICKHAM	MURRELL-I-95	41,120	38,740	42,690	41,410	37,960	34,390	34,220	34,400	UC	UC	39,800	10/22/2014	Urban Principal Arterial-Other
394	WICKHAM	I-95-Wal-Mart/Target Ent. (signal)	36,090	32,650	35,500	35,780	37,570	38,640	39,240	39,960	UC	UC	39,800	10/22/14	Urban Principal Arterial-Other
393	WICKHAM	Wal-Mart/Target Ent.-Lake Andrew	23,790	21,940	23,900	25,210	27,230	28,010	28,970	29,780	UC	UC	39,800	10/22/2014	Urban Minor Arterial
	WICKHAM	LAKE ANDREW-LEGACY		5,435	8,270	4,150	8,900	4,150	9,970	5,010	11,320	NC			
392	WICKHAM	Lake Andrew-Stadium		7,090	8,270	NC	8,900	NC	9,970	NC	11,320	NC	17,700	12/9/2015	Urban Local
391	WICKHAM	Stadium-Legacy		3,780	NC	4,150	NC	4,150	NC	5,010	NC	NC	17,700	10/22/2014	Urban Local
582	WOODY BURKE	Hibiscus-NASA						4,370	NC	NC	NC	NC	15,600	10/16/2012	Urban Major Collector
AREA: BEACHES - NOTE: No counts were taken in 2015.															
	CENTRAL	SR A1A-RIDGEWOOD	3,840	4,540	2,670	4,320	2,510	4,100	2,660	4,300		3,945			
303	CENTRAL	SR A1A-N Atlantic	4,820	4,540	NC	4,320	NC	4,100	NC	4,300		5,290	15,600	11/15/2016	Urban Minor Collector
301	CENTRAL	N Atlantic-Ridgewood	2,860		2,670	NC	2,510	NC	2,660	NC		2,600	15,600	1/20/2016	Urban Minor Collector
	EAU GALLIE	CAUSEWAY-SR A1A	32,375	32,465	31,180	30,685	31,370	30,790	29,930	30,830		31,215			
312	EAU GALLIE	CAUSEWAY	37,780	38,430	36,980	36,540	37,120	36,810	35,670	36,000		38,280	41,790	11/30/2016	Urban Principal Arterial-Other
293	EAU GALLIE	S PATRICK-SR A1A	26,970	26,500	25,380	24,830	25,620	24,770	24,190	25,660		24,150	41,790	11/16/2016	Urban Principal Arterial-Other
310	GEORGE KING	DAVE NISBET-N ATLANTIC		8,600	NC	7,920	NC	7,190	NC	7,480		NC	33,800	12/9/2014	Urban Minor Collector
	N. ATLANTIC	SR A1A-GEORGE KING	7,897	7,640	6,020	6,770	5,990	6,710	6,045	7,255		5,975			
298	N. ATLANTIC	SR A1A-Canaveral Bch	9,400	8,950	NC	8,330	NC	8,120	NC	8,580		NC	15,600	11/12/2014	Urban Minor Collector
299	N. ATLANTIC	Canaveral Bch-Central	7,700		6,650	NC	6,600	NC	6,570	NC		6,000	15,600	1/13/2016	Urban Minor Collector
300	N. ATLANTIC	Central-George King	6,590	6,330	5,390	5,210	5,380	5,300	5,520	5,930		5,950	15,600	1/20/2016	Urban Minor Collector

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SPACE COAST TRANSPORTATION PLANNING ORGANIZATION TRAFFIC COUNTS: 2007 - 2016

ID	ROAD	SEGMENT (Sections)	2007 AADT	2008 AADT	2009 AADT	2010 AADT	2011 AADT	2012 AADT	2013 AADT	2014 AADT	2015 AADT	2016 AADT	Current MAV	Last Count Taken	Functional Classification
AREA: BEACHES - NOTE: No counts were taken in 2015.															
	OAK ST.	SR A1A-OCEAN	3,457	3,510	4,100	3,285	4,060	3,175	4,190	3,035		3,270			
314	OAK ST.	SR A1A-Bonita	2,010	1,990	NC	1,830	NC	1,870	NC	1,660		1,840	15,600	11/30/2016	Urban Major Collector
306	OAK ST.	Bonita-Surf	3,440		3,510	NC	3,430	NC	3,390	NC		3,190	15,600	11/12/2016	Urban Major Collector
305	OAK ST.	Surf-SR A1A/Ocean	4,920	5,030	4,690	4,740	4,690	4,480	4,990	4,410		4,780	15,600	11/30/2016	Urban Major Collector
307	OCEAN BEACH	VOLUSIA LN-YOUNG	3,720	3,770	3,460	UC	3,350	3,240	3,510	3,670		4,210	15,600	11/15/2016	Urban Minor Collector
	PINEDA CSWY	US 1-SR A1A	29,673	30,140	30,120	29,227	31,240	31,060	31,430	32,730		33,680			
267	PINEDA CSWY	US 1-S TROPICAL	37,670	38,680	38,130	36,740	38,590	38,760	39,870	41,210		42,750	65,600	11/15/2016	Urban Principal Arterial-Other
266	PINEDA CSWY	S TROPICAL-S PATRICK	34,760	33,960	34,240	33,890	36,770	36,480	35,960	37,510		37,930	65,600	11/15/2016	Urban Principal Arterial-Other
268	PINEDA CSWY	S PATRICK-SR A1A	16,590	17,780	17,990	17,050	18,360	17,940	18,460	19,470		20,360	41,790	11/15/2016	Urban Principal Arterial-Other
302	RIDGEWOOD	YOUNG-CENTRAL		2,180	NC	UC	UC	1,930	NC	2,000		2,360	15,600	11/30/2016	Urban Minor Collector
	RIVERSIDE	US 192-EAU GALLIE	10,037	10,107	9,865	9,610	9,740	9,380	9,780	7,575		10,323			
292	RIVERSIDE	US 192-Riviera	9,990	9,920	9,520	NC	9,270	NC	9,260	NC		9,380	15,600	1/12/2016	Urban Minor Arterial
286	RIVERSIDE	Riviera-Paradise	9,670	9,710	NC	9,220	NC	8,940	NC	7,700		10,230	15,600	11/16/2016	Urban Minor Arterial
313	RIVERSIDE	Paradise-Eau Gallie	10,450	10,690	10,210	10,000	10,210	9,820	10,300	7,450		11,360	15,600	11/16/2016	Urban Minor Arterial
	S. PATRICK	EAU GALLIE-BANANA RVR	UC	24,545	21,400	23,840	22,350	24,130	21,440	22,660		22,960			
251	S. PATRICK	Eau Gallie-Yacht Club	UC	25,710	NC	23,840	NC	24,130	NC	22,660		24,030	41,790	11/16/2016	Urban Minor Arterial
253	S. PATRICK	Yacht Club-Banana Rvr Dr	UC	23,380	21,400	NC	22,350	NC	21,440	NC		21,890	41,790	11/12/2016	Urban Minor Arterial
	S. PATRICK	BANANA RVR-PINEDA	15,050	15,903	14,663	15,908	15,807	16,375	14,953	15,790		15,361			
541	S. PATRICK	BANANA RVR DR-DESOTO	18,240		NC	19,340	NC	19,680	NC	18,320		18,670	19,470	11/16/2016	Urban Minor Arterial
259	S. PATRICK	DESOTO-JACKSON	15,790	17,720	15,430	NC	17,400	NC	16,510	NC		15,230	18,590	1/12/2016	Urban Minor Arterial
262	S. PATRICK	Jackson-Titan	14,770	15,940	NC	15,340	NC	15,560	NC	14,980		15,530	19,470	11/16/2016	Urban Minor Arterial
263	S. PATRICK	Titan-Shearwater Pkwy	13,690		14,180	NC	15,050	NC	14,240	NC		13,790	19,470	1/12/2016	Urban Minor Arterial
264	S. PATRICK	Shearwater Pkwy-Berkeley	13,920	14,750	NC	14,330	NC	15,030	NC	14,530		14,990	19,470	11/16/2016	Urban Minor Arterial
265	S. PATRICK	Berkeley-Ocean	14,050		14,380	NC	14,970	NC	14,110	NC		13,540	18,590	1/12/2016	Urban Minor Arterial
287	S. PATRICK	Ocean-Pineda S Ramps	14,890	15,200	NC	14,620	NC	15,230	NC	15,330		15,780	18,590	11/15/2016	Urban Minor Arterial
	SR AIA	INDIAN RVR CO-US 192	11,796	10,926	10,486	10,386	10,517	10,934	10,720	10,773		11,487			
295	SR AIA	Ind Rvr Co-Strawberry Ln.	3,150	2,700	2,350	2,640	2,450	2,550	2,580	2,460		3,000	24,200	12/6/2016	Urban Minor Arterial
249	SR AIA	Strawberry Ln.-Heron Dr.	5,130	4,630	4,320	4,450	4,450	4,390	4,550	4,570		4,920	24,200	12/6/2016	Urban Minor Arterial
542	SR AIA	HERON-MARLEN	9,390	8,530	8,400	8,260	8,350	8,280	8,310	8,210		9,350	24,200	12/6/2016	Urban Minor Arterial
296	SR AIA	MarLen Dr-Oak	14,930	13,560	12,780	12,670	12,870	13,080	12,690	12,870		14,410	24,200	12/6/2016	Urban Minor Arterial
260	SR AIA	Oak-Ocean	13,370	12,130	11,490	11,400	11,490	11,940	11,440	11,660		13,180	17,700	12/6/2016	Urban Minor Arterial
248	SR AIA	Ocean-Miami	17,700	16,750	16,240	16,010	16,170	17,010	16,620	16,400		16,830	17,700	11/30/2016	Urban Minor Arterial
383	SR AIA	Miami-US192	18,900	18,180	17,820	17,270	17,840	19,290	18,850	19,240		18,720	17,700	11/16/2016	Urban Minor Arterial
	SR AIA	US 192-EAU GALLIE	26,845	26,070	25,450	25,560	25,555	25,455	25,060	26,425		25,550			
250	SR AIA	US 192-Paradise	26,670	25,420	25,070	25,000	25,200	24,840	25,150	25,480		24,280	41,790	11/16/2016	Urban Principal Arterial-Other
294	SR AIA	Paradise-Eau Gallie	27,020	26,720	25,830	26,120	25,910	26,070	24,970	27,370		26,820	41,790	11/30/2016	Urban Principal Arterial-Other

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ID	ROAD	SEGMENT (Sections)	2007 AADT	2008 AADT	2009 AADT	2010 AADT	2011 AADT	2012 AADT	2013 AADT	2014 AADT	2015 AADT	2016 AADT	Current MAV	Last Count Taken	Functional Classification
AREA: BEACHES - NOTE: No counts were taken in 2015.															
	SR AIA	EAU GALLIE-PINEDA	25,019	23,320	24,358	22,803	23,446	23,505	22,344	22,863		24,300			
252	SR AIA	Eau Gallie-Palm Springs	29,420	NC	27,430	NC	27,410	NC	25,640	NC		27,350	41,790	3/9/2016	Urban Principal Arterial-Other
254	SR AIA	Palm Springs-Pine Tree	28,120	25,940	NC	25,480	NC	26,600	NC	25,540		NC	41,790	11/18/2014	Urban Principal Arterial-Other
255	SR AIA	Pine Tree-DeSoto	27,530	NC	27,610	NC	26,950	NC	25,160	NC		26,770	41,790	1/13/2016	Urban Principal Arterial-Other
256	SR AIA	DeSoto-Cassia	26,530	23,810	NC	23,830	NC	24,350	NC	23,630		NC	41,790	11/18/2014	Urban Principal Arterial-Other
257	SR AIA	Cassia-Jackson	26,340	NC	25,490	NC	24,400	NC	22,810	NC		24,160	41,790	3/1/2016	Urban Principal Arterial-Other
543	SR AIA	Jackson-Patrick	23,940	22,630	NC	21,850	NC	22,580	NC	22,120		NC	41,790	11/18/2014	Urban Principal Arterial-Other
258	SR AIA	Patrick-Berkeley	23,170	NC	22,410	NC	21,610	NC	20,510	NC		23,320	41,790	1/12/2016	Urban Principal Arterial-Other
544	SR AIA	Berkeley-Ocean	21,810	20,900	NC	20,050	NC	20,490	NC	20,160		NC	41,790	11/18/2014	Urban Principal Arterial-Other
545	SR AIA	Ocean-Pineda	18,310	NC	18,850	NC	16,860	NC	17,600	NC		19,900	41,790	1/13/2016	Urban Principal Arterial-Other
	SR AIA	PINEDA-S END ONE-WAY	18,180	18,480	18,115	17,850	17,950	17,595	17,095	17,560		18,455			
261	SR AIA	Pineda-Main Gate	18,920	19,360	19,050	19,040	18,780	18,440	17,840	18,490		20,170	41,790	11/15/2016	Urban Principal Arterial-Other
387	SR AIA	Main Gate-S End One Way	17,440	17,600	17,180	16,660	17,120	16,750	16,350	16,630		16,740	41,790	11/30/2016	Urban Principal Arterial-Other
	SR AIA (NORTHBOUND)	ONE WAY NORTH	14,270	14,225	12,370	12,005	12,270	11,675	11,945	11,465		12,030			
269	SR AIA	S End-Minutemen Cswy	12,270	12,660	11,250	10,880	11,100	10,620	10,860	10,530		10,530	19,440	2/17/2016	Urban Principal Arterial-Other
272	SR AIA	Minutemen-N End One Way	16,270	15,790	13,490	13,130	13,440	12,730	13,030	12,400		13,530	19,440	1/12/2016	Urban Principal Arterial-Other
	SR AIA (SOUTHBOUND)	ONE WAY SOUTH	11,700	12,135	12,700	12,210	11,730	12,240	12,000	11,675		11,935			
270	SR AIA	N End One Way-Minutemen	13,900	14,690	13,980	13,550	12,990	13,510	13,090	12,690		12,690	19,440	2/17/2016	Urban Principal Arterial-Other
546	SR AIA	Minutemen-S End One Way	9,500	9,580	11,420	10,870	10,470	10,970	10,910	10,660		11,180	19,440	1/14/2016	Urban Principal Arterial-Other
	SR AIA	N END ONE WAY-SR 520	35,178	35,452	34,076	32,090		32,452	31,816	30,930		33,743			
273	SR AIA	Cocoa Isles-Tulip	32,700	33,960	32,600	30,130	UC	31,730	30,660	29,760		31,270	34,020	11/15/2016	Urban Principal Arterial-Other
274	SR AIA	Tulip-Bahama Blvd	35,480	34,880	33,290	31,580	UC	31,840	31,620	30,210		35,710	34,020	11/15/2016	Urban Principal Arterial-Other
275	SR AIA	Bahama Blvd-S Banana		34,920	NC	32,310	UC	32,390	NC	30,890		NC	34,020	11/18/2014	Urban Principal Arterial-Other
276	SR AIA	S Banana-Fisher Park	36,200	NC	34,260	NC	UC	NC	33,150	NC		34,830	34,020	2/3/2016	Urban Principal Arterial-Other
277	SR AIA	Fisher Park-St Lucie	37,500	37,490	36,070	33,780	UC	33,730	32,470	32,670		34,880	34,020	11/15/2016	Urban Principal Arterial-Other
278	SR AIA	St Lucie-Marion	35,990	36,010	NC	32,650	UC	32,570	NC	31,120		31,900	34,020	11/15/2016	Urban Principal Arterial-Other
279	SR AIA	Marion-SR 520	33,200	NC	34,160	NC	UC	NC	31,180	NC		33,870	34,020	3/1/2016	Urban Principal Arterial-Other
	SR AIA	SR 520-N ATLANTIC	33,584	34,145	31,793	30,758	29,325	29,905	29,350	30,078		30,070			
280	SR AIA	SR 520-Osceola	31,490	34,750	30,910	29,880	26,330	28,370	28,300	28,450		27,780	39,800	11/15/2016	Urban Principal Arterial-Other
281	SR AIA	Osceola-Shepard	31,610	32,520	30,120	28,920	28,480	28,210	28,110	28,360		28,390	39,800	11/16/2016	Urban Principal Arterial-Other
282	SR AIA	Shepard-McKinley	35,440	35,020	NC	32,450	NC	32,460	NC	32,150		30,790	39,800	11/16/2016	Urban Principal Arterial-Other
297	SR AIA	McKinley-Buchanan	35,090	NC	33,310	NC	31,510	NC	30,620	NC		32,990	39,800	1/13/2016	Urban Principal Arterial-Other
283	SR AIA	Buchanan-N Atlantic	34,290	34,290	32,830	31,780	30,980	30,580	30,370	31,350		30,400	39,800	11/16/2016	Urban Principal Arterial-Other
	SR AIA	N ATLANTIC-SR 401	31,495	30,835	29,305	28,310	26,900	26,840	28,310	28,550		28,205			
285	SR AIA	N Atlantic-Central	26,800	27,810	26,590	25,210	24,470	23,920	24,840	24,680		25,490	41,790	12/6/2016	Urban Principal Arterial-Other
284	SR AIA	Central-SR 401	36,190	33,860	32,020	31,410	29,330	29,760	31,780	32,420		30,920	39,800	11/16/2016	Urban Principal Arterial-Other
309	SR 401	SR 528-CCAFS	11,520	10,720	11,840	12,660	11,190	10,830	11,860	12,110		12,860	39,800	11/16/2016	Urban Minor Arterial
	SR 520	W M.I. CAUSEWAY-SR A1A	26,895	26,580	26,225	24,975	25,055	24,000	24,130	24,685		24,925			
288	SR 520	CAUSEWAY	27,110	27,180	27,200	25,720	25,570	24,180	24,610	25,520		25,640	39,800	11/15/2016	Urban Principal Arterial-Other
311	SR 520	E END CSWY-SR A1A	26,680	25,980	25,250	24,230	24,540	23,820	23,650	23,850		24,210	34,020	11/15/2016	Urban Principal Arterial-Other
	US 192	CAUSEWAY-SR A1A	30,710	29,560	28,540	27,415	29,230	26,290	27,680	28,385		29,195			
289	US 192	CAUSEWAY	37,460	35,690	34,180	32,600	35,030	31,270	33,360	34,140		35,000	41,790	11/16/2016	Urban Principal Arterial-Other
290	US 192	RIVERSIDE-SR A1A	23,960	23,430	22,900	22,230	23,430	21,310	22,000	22,630		23,390	34,020	11/16/2016	Urban Principal Arterial-Other

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INTERSTATE 95 - COUNTS PROVIDED BY FLORIDA DEPARTMENT OF TRANSPORTATION															
70-0134	INTERSTATE 95	INDIAN RIVER COUNTY - MALABAR (SR 514	37,809	33,390	35,648	35,519	34,330	35,277	35,000	39,614	40,650	42,760	64,000		Rural Principal Arterial-Interstate
70-0428	INTERSTATE 95	MALABAR (SR 514) - PALM BAY	59,500	77,500	49,500	48,500	48,500	48,500	31,500	55,000	59,500	64,500	111,800		Urban Principal Arterial-Interstate
70-0371	INTERSTATE 95	PALM BAY - US 192	83,000	80,000	78,000	77,000	68,000	68,000	65,000	67,500	72,000	81,500	111,800		Urban Principal Arterial-Interstate
70-0372	INTERSTATE 95	US 192 - EAU GALLIE (SR 518)	74,000	81,500	79,500	78,000	68,000	68,000		41,000	43,500	68,500	111,800		Urban Principal Arterial-Interstate
70-0415	INTERSTATE 95	EAU GALLIE (SR 518)-WICKHAM	86,000	83,000	69,500	68,500	68,500	69,500	76,000	76,500	81,000	82,500	111,800		Urban Principal Arterial-Interstate
70-0388	INTERSTATE 95	WICKHAM-FISKE	80,000	77,000	70,000	69,000	55,000	57,500	55,000	57,000	60,500	68,000	111,800		Urban Principal Arterial-Interstate
70-9919	INTERSTATE 95	FISKE-SR 520	40,500	39,500	63,609	63,600	63,291	64,312	67,139	71,181	77,120	81,760	111,800		Urban Principal Arterial-Interstate
70-0366	INTERSTATE 95	SR 520-SR 524	65,000	63,000	61,400	61,400	61,400			37,500	40,000	42,000	111,800		Urban Principal Arterial-Interstate
70-0368	INTERSTATE 95	SR 524-SR 528	57,500	55,500	54,500	54,500	52,000	53,000	50,500	54,000	57,000	65,000	111,800		Urban Principal Arterial-Interstate
70-0439	INTERSTATE 95	SR 528-PORT ST. JOHNS	42,000	48,500	45,500	36,500	36,500	36,500	21,900	23,000	24,500	84,500	111,800		Urban Principal Arterial-Interstate
70-0401	INTERSTATE 95	PORT ST. JOHN CONNECTOR-SR 407	45,000	41,000	38,500	39,000	53,500	53,500	37,000	38,500	42,000	45,000	111,800		Urban Principal Arterial-Interstate
70-0402	INTERSTATE 95	SR 407-SR 50	40,000	39,500	39,000	39,000	39,000	39,000	23,400	24,200	25,700	36,500	111,800		Urban Principal Arterial-Interstate
70-0364	INTERSTATE 95	SR 50-SR 406	41,000	42,500	39,500	39,500	52,500	52,500	36,000	37,500	39,500	26,500	111,800		Urban Principal Arterial-Interstate
70-0363	INTERSTATE 95	SR 406-SR 46	34,500	33,000	34,500	31,000	31,500	29,500	38,500	40,000	34,000	39,500	74,400		Urban Principal Arterial-Interstate
70-0322	INTERSTATE 95	SR 46-DEERING PARKWAY	29,342	27,122	27,654	27,800	26,524	26,283	26,000	25,000	25,500	32,680	43,000		Rural Principal Arterial-Interstate
70-0436	INTERSTATE 95	DEERING PARKWAY-VOLUSIA CO.	27000	24500	26000	24,500	30,500	30,000	26,500	27,500	36,000	29,000	43,000		Rural Principal Arterial-Interstate

*Note: 2016 AADT's Beaches area were counted twice in 2016 and the AADT listed is the average of the two counts.
 NC=Not Counted; UC=Under Construction

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COUNTY: 70 - BREVARD

SITE: 0090 - SR-500/US-192, 0.979 MI. W OF I-95 HPMS '17

YEAR	AADT		DIRECTION 1		DIRECTION 2		*K FACTOR	D FACTOR	T FACTOR
2020	10300	C	E	5000	W	5300	9.50	55.00	18.20
2019	7700	F	E	4200	W	3500	9.50	54.70	16.40
2018	7700	C	E	4200	W	3500	9.50	54.10	16.40
2017	9300	C	E	4700	W	4600	9.50	54.30	12.40
2016	8800	C	E	4800	W	4000	9.50	53.40	16.20
2015	8100	C	E	3800	W	4300	9.50	53.80	17.20
2014	7000	C	E	3500	W	3500	9.50	53.80	16.10
2013	6600	C	E	3300	W	3300	9.50	54.20	16.60
2012	6200	C	E	3100	W	3100	9.50	53.60	17.40
2011	6300	C	E	3100	W	3200	9.50	54.30	14.30
2010	6100	C	E	3000	W	3100	10.91	56.02	18.70
2009	6200	C	E	3100	W	3100	11.80	61.02	14.10
2008	5600	C	E	2800	W	2800	11.37	57.79	22.80
2007	5800	C	E	2900	W	2900	10.58	60.32	20.90
2006	5700	C	E	2800	W	2900	11.35	57.22	23.30
2005	6000	C	E	3000	W	3000	11.30	53.80	11.40

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
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 V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN

*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

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COUNTY: 70 - BREVARD

SITE: 0114 - SR-5/US-1, 0.2 MI S OF SR-514, MALABAR, BREVARD CO.

YEAR	AADT		DIRECTION 1		DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2020	15236	C	N 7640		S 7596	9.00	55.20	6.30
2019	17016	C	N 8564		S 8452	9.00	55.10	5.50
2018	17061	C	N 8600		S 8461	9.00	54.70	5.50
2017	16799	C	N 8474		S 8325	9.00	54.20	5.30
2016	16290	C	N 8187		S 8103	9.00	53.30	5.10
2015	15475	C	N 7787		S 7688	9.00	52.70	5.10
2014	14831	C	N 7457		S 7374	9.00	53.50	5.00
2013	14191	C	N 7117		S 7074	9.00	53.10	5.00
2012	13779	C	N 6982		S 6797	9.00	52.60	4.80
2011	13914	C	N 6983		S 6931	9.00	51.90	4.80
2010	14008	C	N 7025		S 6983	10.74	53.66	4.90
2009	13890	C	N 6950		S 6940	11.24	54.44	4.90
2008	14009	C	N 6998		S 7011	11.24	54.44	5.30
2007	14595	C	N 7315		S 7280	10.50	54.76	5.20
2006	15391	C	N 7702		S 7689	10.75	51.77	5.80
2005	15398	C	N 7692		S 7706	9.10	53.90	6.10

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
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COUNTY: 70 - BREVARD

SITE: 0124 - US-1, 1.188 MI. S OF SR-500/US-192 NW

YEAR	AADT		DIRECTION 1		DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2020	34500	F	N 16500		S 18000	9.00	55.00	6.30
2019	35500	C	N 17000		S 18500	9.00	54.70	5.50
2018	33500	C	N 16500		S 17000	9.00	54.10	5.20
2017	36500	C	N 18000		S 18500	9.00	54.30	4.00
2016	34000	C	N 17000		S 17000	9.00	53.40	4.60
2015	31000	C	N 15000		S 16000	9.00	53.80	4.20
2014	31000	C	N 15500		S 15500	9.00	53.80	4.40
2013	29500	C	N 14500		S 15000	9.00	54.20	4.90
2012	31500	C	N 15500		S 16000	9.00	53.60	4.90
2011	28500	C	N 14500		S 14000	9.00	54.30	5.40
2010	31500	C	N 15500		S 16000	10.91	56.02	4.90
2009	32000	C	N 16000		S 16000	11.80	61.02	5.10
2008	34500	C	N 17000		S 17500	11.37	57.79	5.00
2007	34500	C	N 17000		S 17500	9.20	54.21	4.70
2006	36000	C	N 18000		S 18000	11.35	57.22	6.20
2005	35000	C	N 17500		S 17500	11.30	53.80	6.10

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
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COUNTY: 70 - BREVARD

SITE: 0127 - SR-514, 1.097 MI. W OF SR 5/US 1

YEAR	AADT		DIRECTION 1		DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR	
2020	12900	C	E	6100	W	6800	9.00	55.00	2.60
2019	14900	F	E	7600	W	7300	9.00	54.70	9.40
2018	14700	C	E	7500	W	7200	9.00	54.10	13.80
2017	13100	F	E	6400	W	6700	9.00	54.30	8.00
2016	12500	C	E	6100	W	6400	9.00	53.40	11.20
2015	13800	C	E	6600	W	7200	9.00	53.80	5.70
2014	12900	C	E	6200	W	6700	9.00	53.80	6.50
2013	10600	C	E	5000	W	5600	9.00	54.20	6.70
2012	12500	C	E	6500	W	6000	9.00	53.60	7.30
2011	11400	C	E	5400	W	6000	9.00	54.30	5.40
2010	12800	C	E	6600	W	6200	10.91	56.02	5.40
2009	12900	C	E	6300	W	6600	11.80	61.02	5.60
2008	14000	C	E	7200	W	6800	11.37	57.79	6.30
2007	13100	C	E	6800	W	6300	10.03	55.54	7.10
2006	13100	C	E	6800	W	6300	11.35	57.22	23.50
2005	13000	C	E	6700	W	6300	11.30	53.80	7.60

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
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 V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN

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COUNTY: 70 - BREVARD

SITE: 0379 - ON SR-514, 0.463 MI. E OF SR-507 (UVL)

YEAR	AADT		DIRECTION 1		DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2020	18400	F	E 8900		W 9500	9.00	55.00	10.90
2019	18800	C	E 9100		W 9700	9.00	54.70	10.90
2018	20500	C	E 10000		W 10500	9.00	54.10	13.80
2017	22000	C	E 10500		W 11500	9.00	54.30	8.00
2016	19700	C	E 9700		W 10000	9.00	53.40	11.20
2015	19600	C	E 9100		W 10500	9.00	53.80	5.70
2014	19300	C	E 9500		W 9800	9.00	53.80	6.50
2013	18500	C	E 9000		W 9500	9.00	54.20	6.70
2012	17000	C	E 7200		W 9800	9.00	53.60	7.30
2011	17200	C	E 7600		W 9600	9.00	54.30	5.40
2010	17000	C	E 7300		W 9700	10.91	56.02	5.40
2009	17600	C	E 8500		W 9100	11.80	61.02	5.60
2008	18600	C	E 8100		W 10500	11.37	57.79	6.30
2007	17200	C	E 7400		W 9800	10.03	55.54	7.10
2006	16900	C	E 7200		W 9700	11.35	57.22	23.50
2005	16500	C	E 7100		W 9400	11.30	53.80	7.60

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
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 V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN

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COUNTY: 70 - BREVARD

SITE: 0381 - ON US-192, 1.673 MI. E OF I-95 (UVL)

YEAR	AADT		DIRECTION 1		DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2020	32000	F	E 15000		W 17000	9.00	55.00	18.20
2019	33000	C	E 15500		W 17500	9.00	54.70	5.50
2018	34500	C	E 16000		W 18500	9.00	54.10	11.00
2017	35500	F	E 16500		W 19000	9.00	54.30	10.40
2016	33500	C	E 15500		W 18000	9.00	53.40	10.60
2015	30000	C	E 15000		W 15000	9.00	53.80	12.20
2014	28000	C	E 14000		W 14000	9.00	53.80	9.40
2013	28000	C	E 14000		W 14000	9.00	54.20	9.40
2012	27500	C	E 13000		W 14500	9.00	53.60	12.60
2011	27500	C	E 13500		W 14000	9.00	54.30	9.20
2010	27500	C	E 13500		W 14000	10.91	56.02	11.30
2009	28500	C	E 14000		W 14500	11.80	61.02	8.50
2008	33500	C	E 16500		W 17000	11.37	57.79	11.80
2007	29500	C	E 14500		W 15000	9.20	54.21	15.40
2006	30500	C	E 15000		W 15500	11.35	57.22	17.90
2005	34500	C	E 17000		W 17500	11.30	53.80	4.80

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COUNTY: 70 - BREVARD

SITE: 0408 - ON SR-518, 0.15 MI. W OF CR-5054 (UVL)

YEAR	AADT		DIRECTION 1		DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2020	32500	F	E 17500		W 15000	9.00	55.00	8.00
2019	33500	C	E 18000		W 15500	9.00	54.70	8.00
2018	29000	C	E 15500		W 13500	9.00	54.10	8.00
2017	30500	C	E 16000		W 14500	9.00	54.30	7.50
2016	29000	C	E 16000		W 13000	9.00	53.40	7.40
2015	28500	C	E 15000		W 13500	9.00	53.80	7.00
2014	28000	C	E 14500		W 13500	9.00	53.80	7.40
2013	26500	C	E 13500		W 13000	9.00	54.20	6.80
2012	26500	C	E 13500		W 13000	9.00	53.60	6.80
2011	23000	C	E 10500		W 12500	9.00	54.30	5.80
2010	27500	C	E 13500		W 14000	10.91	56.02	6.20
2009	27000	C	E 14000		W 13000	11.80	61.02	7.60
2008	29500	C	E 15000		W 14500	11.37	57.79	4.90
2007	29000	C	E 15000		W 14000	9.20	54.21	7.00
2006	27500	C	E 15000		W 12500	11.35	57.22	7.90
2005	27500	C	E 14000		W 13500	11.30	53.80	4.80

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
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COUNTY: 70 - BREVARD

SITE: 0422 - ON SR-518, 2.57 MI. NE OF CR-5054 (UVL)

YEAR	AADT		DIRECTION 1		DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2020	23000	F	E 11500		W 11500	9.00	55.00	18.20
2019	24000	C	E 12000		W 12000	9.00	54.70	15.80
2018	24000	F	E 12000		W 12000	9.00	54.10	10.00
2017	23000	C	E 11500		W 11500	9.00	54.30	7.50
2016	24500	C	E 13500		W 11000	9.00	53.40	7.40
2015	19000	C	E 9700		W 9300	9.00	53.80	7.00
2014	18600	C	E 8600		W 10000	9.00	53.80	7.40
2013	20500	C	E 10500		W 10000	9.00	54.20	6.80
2012	21000	C	E 10500		W 10500	9.00	53.60	6.80
2011	21000	C	E 10500		W 10500	9.00	54.30	5.80
2010	22000	C	E 11000		W 11000	10.91	56.02	6.20
2009	21500	C	E 11000		W 10500	11.80	61.02	7.60
2008	26500	C	E 14500		W 12000	11.37	57.79	4.90
2007	23500	C	E 12000		W 11500	9.20	54.21	7.00
2006	25000	C	E 13500		W 11500	11.35	57.22	7.90
2005	23500	C	E 12500		W 11000	11.30	53.80	4.80

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
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COUNTY: 70 - BREVARD

SITE: 0427 - ON SR-514, 0.331 MI. E OF I-95 (UCLP)

YEAR	AADT		DIRECTION 1		DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2020	51500	F	E 29000		W 22500	9.00	55.00	14.30
2019	52500	C	E 29500		W 23000	9.00	54.70	14.30
2018	43500	C	E 22000		W 21500	9.00	54.10	13.80
2017	49000	C	E 23500		W 25500	9.00	54.30	5.60
2016	42500	C	E 22000		W 20500	9.00	53.40	5.20
2015	37500	C	E 17000		W 20500	9.00	53.80	4.40
2014	39000	C	E 19000		W 20000	9.00	53.80	6.00
2013	36500	C	E 18000		W 18500	9.00	54.20	7.80
2012	37000	C	E 18500		W 18500	9.00	53.60	7.80
2011	38500	C	E 19500		W 19000	9.00	54.30	4.90
2010	39500	C	E 20000		W 19500	10.91	56.02	5.40
2009	38500	C	E 19500		W 19000	11.80	61.02	4.50
2008	38500	C	E 18000		W 20500	11.37	57.79	5.50
2007	40500	C	E 18000		W 22500	10.03	55.54	6.60
2006	38000	C	E 17500		W 20500	11.35	57.22	38.10
2005	39500	C	E 20000		W 19500	11.30	53.80	6.80

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
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COUNTY: 70 - BREVARD

SITE: 1001 - ON SR-514, 0.119 MI. W OF US-1 (UCLP)

YEAR	AADT		DIRECTION 1		DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2020	14000	F	E 6500		W 7500	9.00	55.00	4.40
2019	14400	C	E 6700		W 7700	9.00	54.70	4.40
2018	14300	F	E 6800		W 7500	9.00	54.10	10.40
2017	13900	C	E 6600		W 7300	9.00	54.30	10.40
2016	14000	C	E 6700		W 7300	9.00	53.40	17.10
2015	13200	C	E 6400		W 6800	9.00	53.80	7.10
2014	13400	C	E 6500		W 6900	9.00	53.80	7.00
2013	11800	C	E 5700		W 6100	9.00	54.20	5.60
2012	11800	C	E 5700		W 6100	9.00	53.60	6.70
2011	11800	C	E 5600		W 6200	9.00	54.30	5.80
2010	13400	C	E 6700		W 6700	10.91	56.02	6.70
2009	13400	C	E 6600		W 6800	11.80	61.02	6.70
2008	14100	C	E 6900		W 7200	11.37	57.79	7.00
2007	12900	C	E 6000		W 6900	10.03	55.54	7.60
2006	13300	C	E 6400		W 6900	11.35	57.22	8.90
2005	13200	C	E 6400		W 6800	11.30	53.80	8.90

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
 S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
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COUNTY: 70 - BREVARD

SITE: 1005 - ON SR-518, 0.27 MI. W OF SR-513 (UC)

YEAR	AADT		DIRECTION 1		DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2020	36500	C	E 17500		W 19000	9.00	55.00	4.70
2019	38000	F	E 19000		W 19000	9.00	54.70	3.50
2018	38000	C	E 19000		W 19000	9.00	54.10	3.50
2017	40000	C	E 20000		W 20000	9.00	54.30	5.00
2016	35500	C	E 16000		W 19500	9.00	53.40	14.30
2015	34500	C	E 19500		W 15000	9.00	53.80	15.50
2014	40500	C	E 20500		W 20000	9.00	53.80	11.00
2013	37500	C	E 19000		W 18500	9.00	54.20	3.40
2012	35000	C	E 16500		W 18500	9.00	53.60	4.20
2011	37500	C	E 19500		W 18000	9.00	54.30	4.70
2010	38500	C	E 19500		W 19000	10.91	56.02	4.90
2009	36000	C	E 20000		W 16000	11.80	61.02	4.10
2008	38000	C	E 18500		W 19500	11.37	57.79	6.20
2007	39500	C	E 20500		W 19000	9.20	54.21	3.00
2006	41000	C	E 21000		W 20000	11.35	57.22	2.50
2005	42500	C	E 21500		W 21000	11.30	53.80	3.40

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
 S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
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COUNTY: 70 - BREVARD

SITE: 7008 - BABCOCK ST, 0.45 MI S OF VALKARIA RD (HPMS)

YEAR	AADT		DIRECTION 1		DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR	
2020	10500	F	N	5300	S	5200	9.00	55.00	9.90
2019	10700	C	N	5400	S	5300	9.00	54.70	9.90
2018	10700	S	N	5400	S	5300	9.00	54.10	7.60
2017	10500	F	N	5300	S	5200	9.00	54.30	7.60
2016	10100	C	N	5100	S	5000	9.00	53.40	7.60
2015	9500	S	N	4800	S	4700	9.00	53.80	8.00
2014	9100	F	N	4600	S	4500	9.00	53.80	8.00
2013	9100	C	N	4600	S	4500	9.00	54.20	8.00
2012	9500	F	N	4700	S	4800	9.00	53.60	4.50
2011	9700	C	N	4800	S	4900	9.00	54.30	3.70
2010	6800	C	N	3400	S	3400	10.91	56.02	3.60
2009	6700	F	N	3300	S	3400	11.80	61.02	3.30
2008	6900	C	N	3400	S	3500	11.37	57.79	3.20

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
 S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
 V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN

*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION
 TRANSPORTATION STATISTICS OFFICE
 2020 HISTORICAL AADT REPORT

COUNTY: 70 - BREVARD

SITE: 7015 - EMERSON DR, 0.5 MI S OF JUPITER BLVD (HPMS)

YEAR	AADT		DIRECTION 1		DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2020	19200	F	N 8200		S 11000	9.00	55.00	6.60
2019	19900	C	N 8400		S 11500	9.00	54.70	6.60
2018	17400	S	N 8800		S 8600	9.00	54.10	4.10
2017	17000	F	N 8600		S 8400	9.00	54.30	4.10
2016	16200	C	N 8200		S 8000	9.00	53.40	4.10
2015	13000	E				9.00	53.80	6.20
2014	12600	S	N 6300		S 6300	9.00	53.80	2.00
2013	12400	F	N 6200		S 6200	9.00	54.20	2.00
2012	12400	C	N 6200		S 6200	9.00	53.60	2.00
2011	11900	C	N 5900		S 6000	9.00	54.30	3.70
2010	9900	C	N 4700		S 5200	10.91	56.02	3.60
2009	7300	F	N 3700		S 3600	11.80	61.02	3.30
2008	7500	C	N 3800		S 3700	11.37	57.79	3.20

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
 S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
 V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN

*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION
 TRANSPORTATION STATISTICS OFFICE
 2020 HISTORICAL AADT REPORT

COUNTY: 70 - BREVARD

SITE: 7016 - MINTON ROAD, JUPITER BLVD. TO MALABAR ROAD (HPMS)

YEAR	AADT		DIRECTION 1		DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR	
2020	16000	F	N	7300	S	8700	9.00	55.00	3.20
2019	16400	C	N	7500	S	8900	9.00	54.70	3.20
2018	15100	S	N	7100	S	8000	9.00	54.10	6.20
2017	14700	F	N	6900	S	7800	9.00	54.30	6.20
2016	14000	C	N	6600	S	7400	9.00	53.40	6.20
2015	13100	S	N	6300	S	6800	9.00	53.80	9.70
2014	12700	F	N	6100	S	6600	9.00	53.80	9.70
2013	12500	C	N	6000	S	6500	9.00	54.20	9.70
2012	13400	F	N	6400	S	7000	9.00	53.60	4.50
2011	13600	C	N	6500	S	7100	9.00	54.30	3.70
2010	11700	C	N	5400	S	6300	10.91	56.02	3.60
2009	19100	F	N	9100	S	10000	11.80	61.02	3.30
2008	19900	C	N	9400	S	10500	11.37	57.79	3.20

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
 S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
 V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN

*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION
 TRANSPORTATION STATISTICS OFFICE
 2020 HISTORICAL AADT REPORT

COUNTY: 70 - BREVARD

SITE: 7041 - MALABAR ROAD, 0.1 MI E OF ELDRON BLVD. (HPMS)

YEAR	AADT		DIRECTION 1		DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2020	23000	C	E 11000		W 12000	9.00	55.00	16.40
2019	26000	S	E 13000		W 13000	9.00	54.70	4.50
2018	26000	F	E 13000		W 13000	9.00	54.10	4.50
2017	25000	C	E 12500		W 12500	9.00	54.30	4.50
2016	23000	S	E 13000		W 10000	9.00	53.40	12.90
2015	22100	F	E 12500		W 9600	9.00	53.80	12.90
2014	21300	C	E 12000		W 9300	9.00	53.80	12.90
2013	25000	F	E 12500		W 12500	9.00	54.20	2.20
2012	25000	C	E 12500		W 12500	9.00	53.60	2.20
2011	35000	C	E 18000		W 17000	9.00	54.30	3.70
2010	33500	S	E 17500		W 16000	10.91	56.02	3.60
2009	34500	F	E 18000		W 16500	11.80	61.02	3.30
2008	35500	C	E 18500		W 17000	11.37	57.79	3.20

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
 S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
 V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN

*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION
 TRANSPORTATION STATISTICS OFFICE
 2020 HISTORICAL AADT REPORT

COUNTY: 70 - BREVARD

SITE: 7057 - ON BABCOCK STREET, 0.22 MI N OF VALKARIA ROAD (HPMS)

YEAR	AADT		DIRECTION 1		DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR	
2020	12200	F	N	6000	S	6200	9.00	55.00	5.70
2019	12600	C	N	6200	S	6400	9.00	54.70	5.70
2018	13200	S	N	6700	S	6500	9.00	54.10	15.80
2017	12800	F	N	6500	S	6300	9.00	54.30	15.80
2016	12200	C	N	6200	S	6000	9.00	53.40	15.80
2015	11200	E					9.00	53.80	6.20
2014	11000	S	N	5400	S	5600	9.00	53.80	7.20
2013	10900	F	N	5400	S	5500	9.00	54.20	7.20
2012	10900	C	N	5400	S	5500	9.00	53.60	7.20
2010	11600	F	N	5900	S	5700	10.91	56.02	3.60
2009	11800	C	N	6000	S	5800	11.80	61.02	3.30

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
 S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
 V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN

*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION
 TRANSPORTATION STATISTICS OFFICE
 2020 HISTORICAL AADT REPORT

COUNTY: 70 - BREVARD

SITE: 7084 - MILTON RD, 0.49 MI N OF MALABAR RD (HPMS)

YEAR	AADT		DIRECTION 1		DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2020	20500	F	N 10000		S 10500	9.00	55.00	2.80
2019	21500	C	N 10500		S 11000	9.00	54.70	2.80
2018	25000	S	N 11500		S 13500	9.00	54.10	3.50
2017	24000	F	N 11000		S 13000	9.00	54.30	3.50
2016	23000	C	N 10500		S 12500	9.00	53.40	3.50
2015	18500	E				9.00	53.80	5.50
2014	18200	S	N 8700		S 9500	9.00	53.80	2.20
2013	18000	F	N 8600		S 9400	9.00	54.20	2.20
2012	18200	C	N 8700		S 9500	9.00	53.60	2.20
2010	18000	F	N 8700		S 9300	10.91	56.02	4.40
2009	18400	C	N 8900		S 9500	11.80	61.02	2.30

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
 S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
 V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN

*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION
 TRANSPORTATION STATISTICS OFFICE
 2020 HISTORICAL AADT REPORT

COUNTY: 70 - BREVARD

SITE: 7085 - MILTON RD, 0.63 MI N OF AMERICANA BLVD, (HPMS)

YEAR	AADT		DIRECTION 1		DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2020	25500	F	N 12000		S 13500	9.00	55.00	3.90
2019	26500	C	N 12500		S 14000	9.00	54.70	3.90
2018	27000	S	N 14500		S 12500	9.00	54.10	5.10
2017	26000	F	N 14000		S 12000	9.00	54.30	5.10
2016	25000	C	N 13500		S 11500	9.00	53.40	5.10
2015	24000	E				9.00	53.80	7.00
2014	23500	S	N 11500		S 12000	9.00	53.80	2.90
2013	23500	F	N 11500		S 12000	9.00	54.20	2.90
2012	23500	C	N 11500		S 12000	9.00	53.60	2.90
2010	19200	F	N 10500		S 8700	10.91	56.02	6.20
2009	19400	C	N 10500		S 8900	11.80	61.02	7.60

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
 S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
 V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN

*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION
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 2020 HISTORICAL AADT REPORT

COUNTY: 70 - BREVARD

SITE: 7091 - JOHN RODES BLVD, 0.47 MI N OF US-192/NEW HAVEN (HPMS)

YEAR	AADT		DIRECTION 1		DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR	
2020	6400	F	N	3200	S	3200	9.00	55.00	5.70
2019	6600	C	N	3300	S	3300	9.00	54.70	5.70
2018	11600	S	N	5400	S	6200	9.00	54.10	14.20
2017	11300	F	N	5300	S	6000	9.00	54.30	14.20
2016	10800	C	N	5100	S	5700	9.00	53.40	14.20
2015	10500	E					9.00	53.80	7.00
2014	10300	S	N	5200	S	5100	9.00	53.80	6.90
2013	10300	F	N	5200	S	5100	9.00	54.20	6.90
2012	10300	C	N	5200	S	5100	9.00	53.60	6.90
2010	9700	F	N	5100	S	4600	10.91	56.02	6.20
2009	9900	C	N	5200	S	4700	11.80	61.02	7.60

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
 S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
 V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN

*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION
 TRANSPORTATION STATISTICS OFFICE
 2020 HISTORICAL AADT REPORT

COUNTY: 70 - BREVARD

SITE: 8074 - ELLIS ROAD, EAST OF JOHN RODES BLVD. - OFF SYSTEM

YEAR	AADT		DIRECTION 1		DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR	
2020	18800	S	E	9500	W	9300	9.00	55.00	4.60
2019	19200	F	E	9700	W	9500	9.00	54.70	4.40
2018	19000	C	E	9600	W	9400	9.00	54.10	4.20
2017	12400	R	E	6200	W	6200	9.00	54.30	5.00
2016	11800	T	E	5900	W	5900	9.00	53.40	5.60
2015	11200	S	E	5600	W	5600	9.00	53.80	6.20
2014	10800	F	E	5400	W	5400	9.00	53.80	4.90
2013	10800	C	E	5400	W	5400	9.00	54.20	3.80
2012	7300	F		0		0	9.00	53.60	4.50
2011	7400	C	E	0	W	0	9.00	54.30	3.70

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
 S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
 V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN

*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION
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 2020 HISTORICAL AADT REPORT

COUNTY: 70 - BREVARD

SITE: 8142 - MALABAR RD, 0.32 MI E OF HURLEY BLVD - OFF SYSTEM

YEAR	AADT		DIRECTION 1		DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2020	12600	T	E 6300		W 6300	9.00	55.00	4.60
2019	13000	S	E 6500		W 6500	9.00	54.70	4.40
2018	12800	F	E 6400		W 6400	9.00	54.10	4.20
2017	12400	C	E 6200		W 6200	9.00	54.30	5.00
2016	10600	T	E 5300		W 5300	9.00	53.40	5.60
2015	10000	S	E 5000		W 5000	9.00	53.80	6.20
2014	9600	F	E 4800		W 4800	9.00	53.80	4.90
2013	9600	C	E 4800		W 4800	9.00	54.20	3.80
2012	9100	C	E 0		W 0	9.00	53.60	4.50

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
 S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
 V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN

*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

MALABAR RD v6 TO v7

CFRPM v7 Zone	CFRPM v6.1 TAZ Included within CFRPM v7 Zone							CFRPM v6.1 TAZ Included within CFRPM v7 Zone						
	TAZ 1	% of TAZ 1 Included in CFRPM v7 Zone	TAZ 2	% of TAZ 2 Included in CFRPM v7 Zone	TAZ 3	% of TAZ 3 Included in CFRPM v7 Zone	TAZ 4	% of TAZ 4 Included in CFRPM v7 Zone	TAZ 5	% of TAZ 5 Included in CFRPM v7 Zone	TAZ 6	% of TAZ 6 Included in CFRPM v7 Zone	TAZ 7	% of TAZ 7 Included in CFRPM v7 Zone
5706	3592	100%	2982	100%	3433	100%	3596	100%	3593	50%	3597	20 - 80%	3434	30 - 80%
40	3444	100%												
5718	3439	100%	3599	100%	3597	20-80%								
3206	3441	100%												
5719	3598	100%	3435	100%	3434	20-70%								
7541	3440	40%												
7535	3440	60%												
7543	3436	10-100%												
7542	3436	0-20%												
5728	3431	100%	3589	100%										
7553	3591	100%	3432	10%										
45	3436	0-70%												
49	3587	100%	3432	80%										
5729	3432	10%												
5751	3584	100%	3585	100%	3428	50%								
5705	3429	100%	3586	100%	3424	100%								
50	3425	100%	3448	100%										
52	3423	100%	3579	0-60%										
5753	3428	50%												
5755	3579	40-100%												
5742	3580	100%												
5757	3581	60-100%												
58	3412	100%												
68	3413	60-70%	3393	70-100%										
57	3414	100%	3413	30-40%										
5756	3568	100%												
53	3411	100%	3581	0-40%										
5758	3567	100%												
5759	3410	30-60%												
5760	3410	20-30%												
56	3410	10-50%												
5766	3560	45-100%												
73	3560	0-45%												
5765	3400	100%												
4836	3392	100%	3393	0%										
67	3394	100%	3393	0-30%										
5769	3558	100%	3560	0-20%										
5768														
72	3391	100%												
5767	3390	100%												
71														
69														
81														

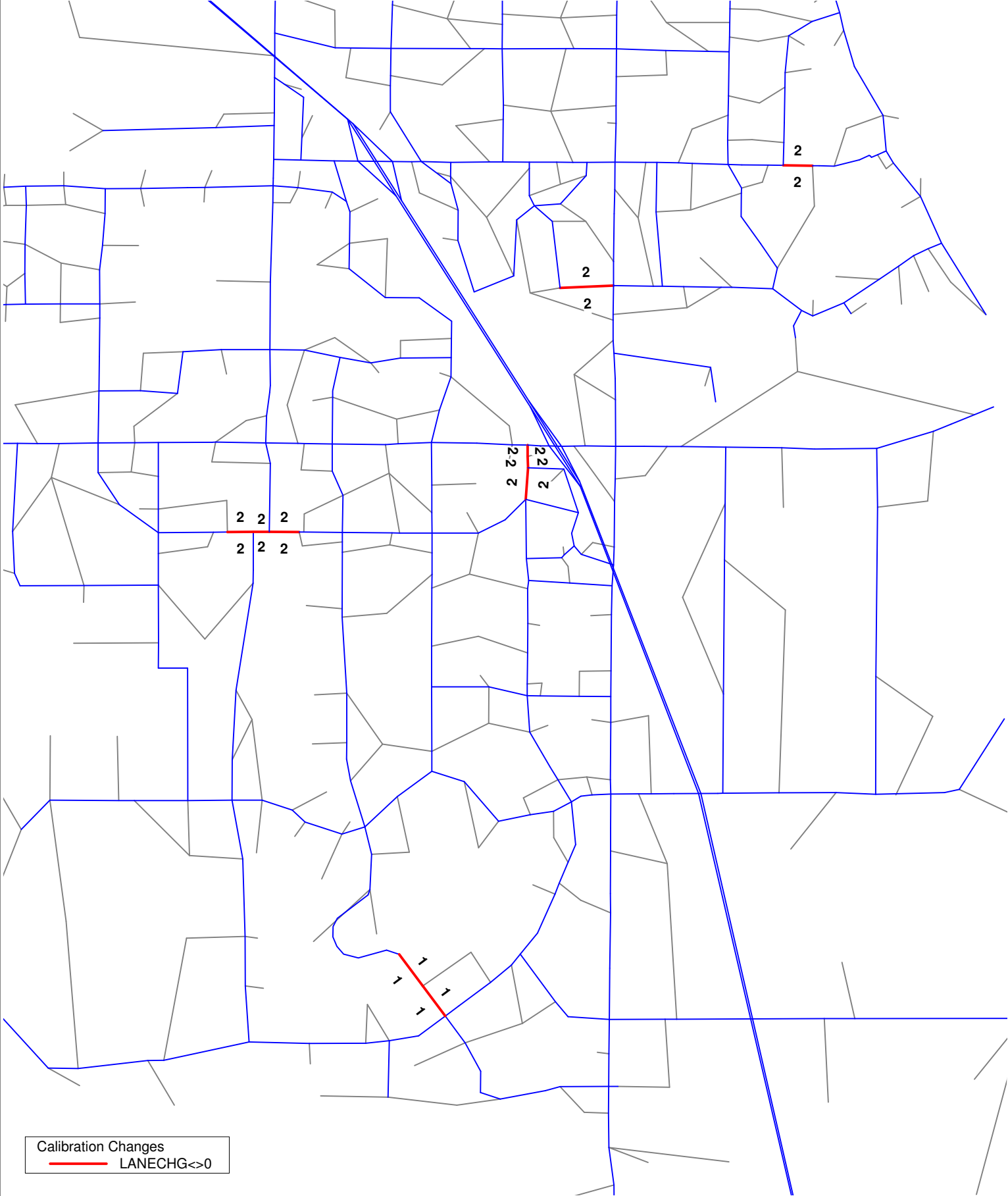
CFRPM v7 Zone	CFRPM v6.1 TAZ Included within CFRPM v7 Zone							CFRPM v6.1 TAZ Included within CFRPM v7 Zone						
	TAZ 1	% of TAZ 1 Included in CFRPM v7 Zone	TAZ 2	% of TAZ 2 Included in CFRPM v7 Zone	TAZ 3	% of TAZ 3 Included in CFRPM v7 Zone	TAZ 4	% of TAZ 4 Included in CFRPM v7 Zone	TAZ 5	% of TAZ 5 Included in CFRPM v7 Zone	TAZ 6	% of TAZ 6 Included in CFRPM v7 Zone	TAZ 7	% of TAZ 7 Included in CFRPM v7 Zone
97	3377	100%												
85	3379	100%	3539	100%	3378	0-100%								
5670	3351	100%	3378	0-100%										
4839	3364	100%												

*Some CFRPM v6.1 TAZ were divided according to different proportions for dwelling units and employment in order to more accurately reflect the existing condition.

*Some CFRPM v6.1 TAZ were divided according to different proportions for dwelling units and employment in order to more accurately reflect the existing condition.

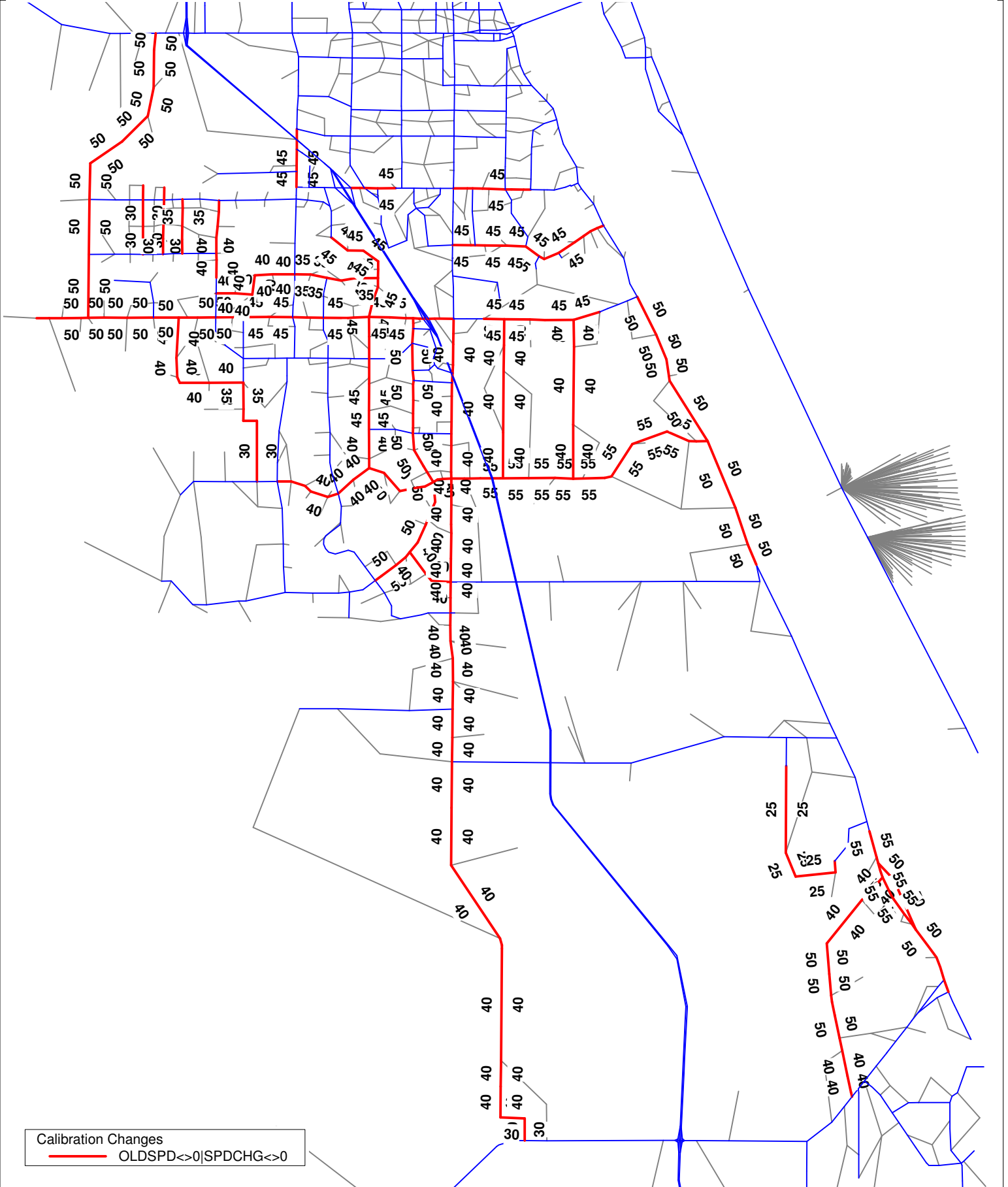
CALIBRATION CHANGES

CFRPMV6.1 Subarea Model Development Calibration Updates - Number of Lane Change



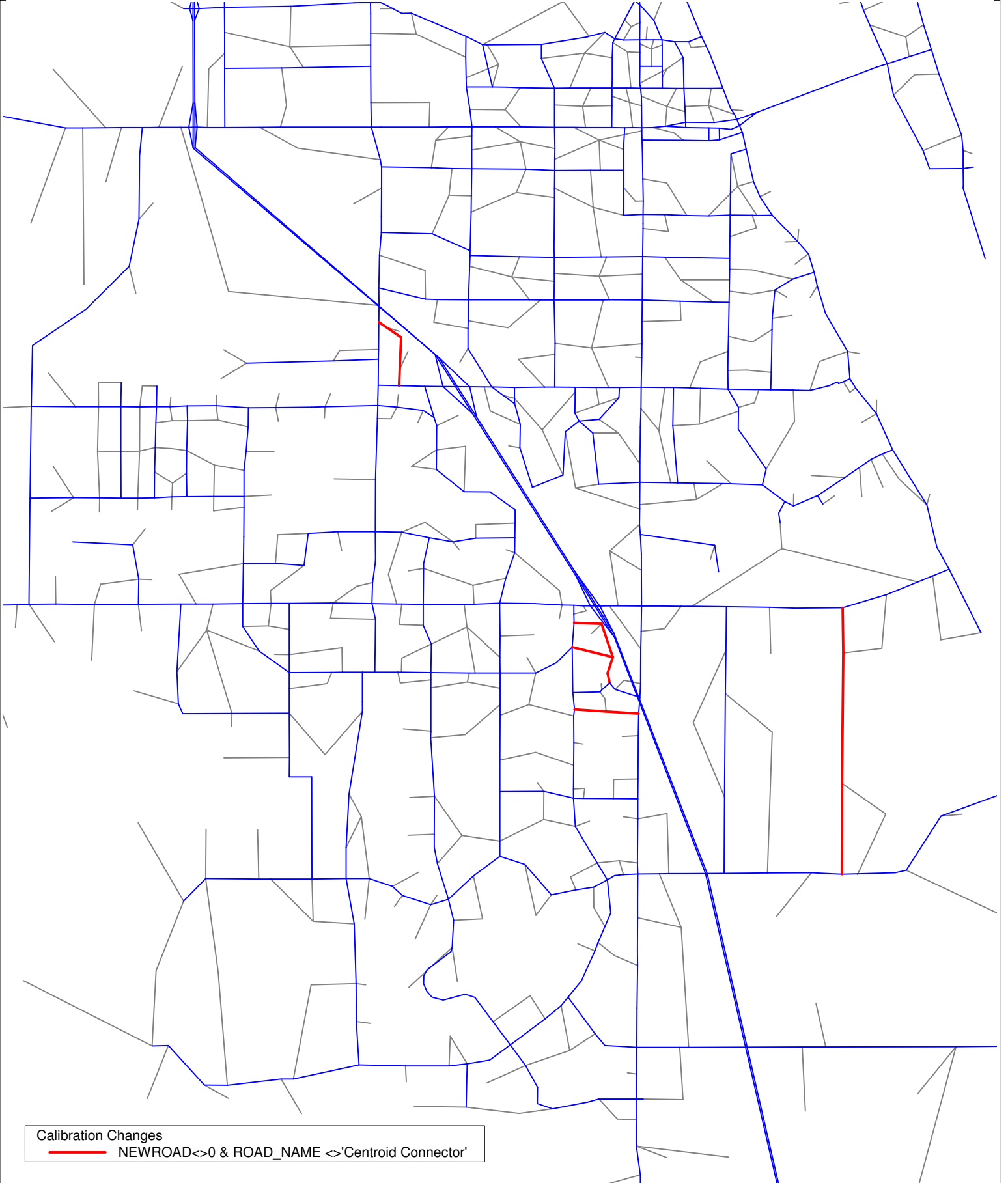
Calibration Changes
— LANECHG<>0

CFRPMV6.1 Subarea Model Development Calibration Updates - Speed Change



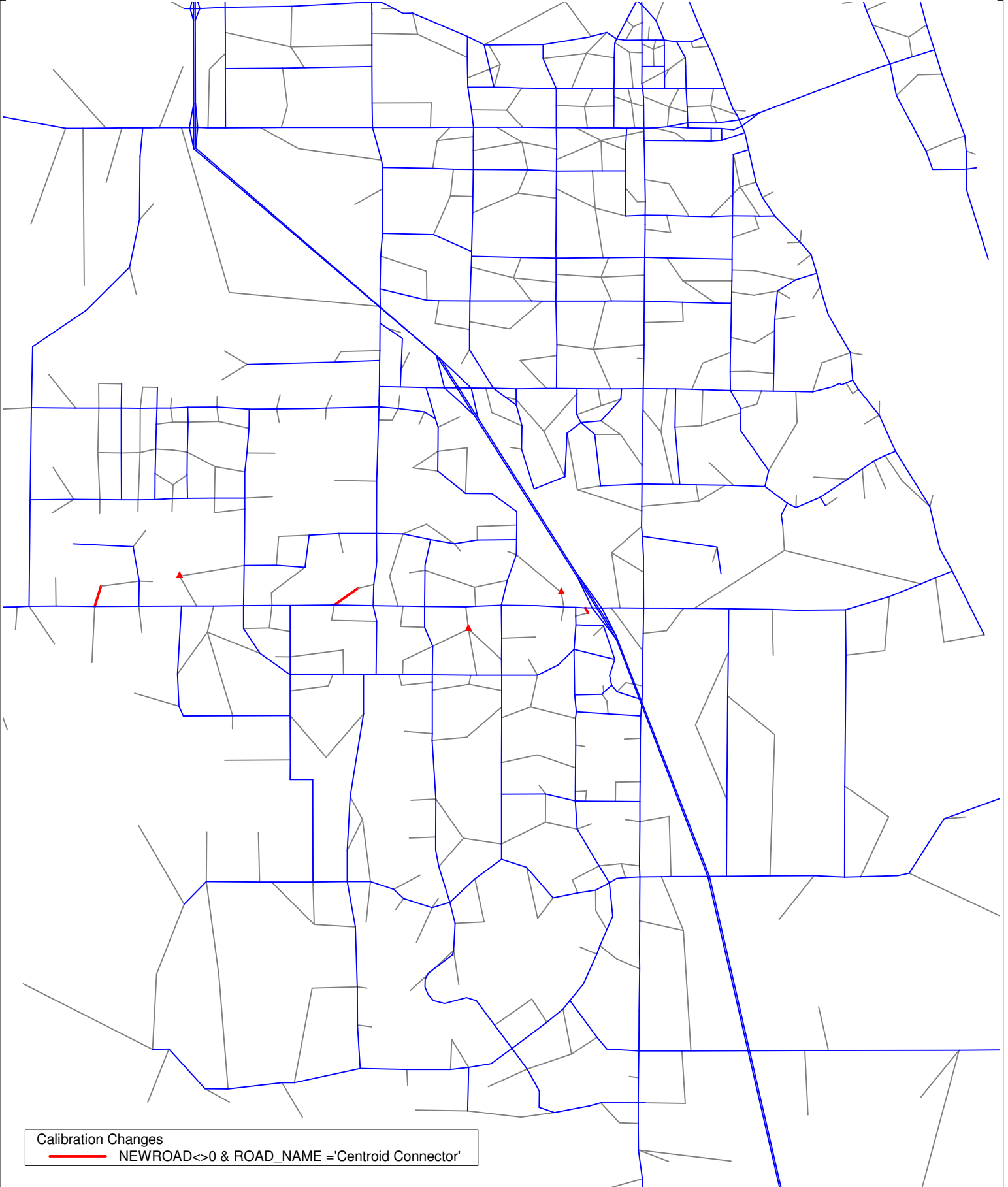
Calibration Changes
— OLDSPD > 0 | SPDCHG < 0

CFRPMV6.1 Subarea Model Development Calibration Updates - New Road



Calibration Changes
NEWROAD<->0 & ROAD_NAME <->'Centroid Connector'

CFRPMV6.1 Subarea Model Development Calibration Updates - New Centroid Connector and Moved TAZ Centroid



Calibration Changes
NEWROAD<->0 & ROAD_NAME = 'Centroid Connector'

10156 10137 10116 1 -1
10127 10139 10158 1 -1
10315 10289 10278 1 -1
10276 10302 10322 1 -1
10369 10367 10361 1 -1
10590 10588 10564 1 -1
10594 10592 10595 1 -1
10560 10594 10591 1 -1
10560 10594 10608 1 -1
10592 10594 10591 1 -1
10592 10594 10608 1 -1
10680 10682 10685 2 1
10863 10838 10824 1 -1
10761 10841 10849 1 -1
10844 10841 10849 1 -1
10841 10844 10849 1 -1
10845 10848 10830 2 1
10845 10848 10853 2 1
15001 15003 15008 1 15
15008 15003 15001 1 15
15018 15014 15016 1 -1
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15052 15036 15039 1 -1
15061 15060 15068 1 -1
15064 15063 15067 1 -1
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2015 BREVARD COUNTY MOCF

MOCF: 0.94

Week	Dates	SF	PSCF
1	01/01/2015 - 01/03/2015	1.01	1.07
2	01/04/2015 - 01/10/2015	1.02	1.09
3	01/11/2015 - 01/17/2015	1.04	1.11
4	01/18/2015 - 01/24/2015	1.01	1.07
5	01/25/2015 - 01/31/2015	0.99	1.05
* 6	02/01/2015 - 02/07/2015	0.97	1.03
* 7	02/08/2015 - 02/14/2015	0.95	1.01
* 8	02/15/2015 - 02/21/2015	0.94	1.00
* 9	02/22/2015 - 02/28/2015	0.92	0.98
*10	03/01/2015 - 03/07/2015	0.91	0.97
*11	03/08/2015 - 03/14/2015	0.90	0.96
*12	03/15/2015 - 03/21/2015	0.91	0.97
*13	03/22/2015 - 03/28/2015	0.93	0.99
*14	03/29/2015 - 04/04/2015	0.94	1.00
*15	04/05/2015 - 04/11/2015	0.96	1.02
*16	04/12/2015 - 04/18/2015	0.97	1.03
*17	04/19/2015 - 04/25/2015	0.98	1.04
*18	04/26/2015 - 05/02/2015	0.99	1.05
19	05/03/2015 - 05/09/2015	1.00	1.06
20	05/10/2015 - 05/16/2015	1.01	1.07
21	05/17/2015 - 05/23/2015	1.01	1.07
22	05/24/2015 - 05/30/2015	1.02	1.09
23	05/31/2015 - 06/06/2015	1.03	1.10
24	06/07/2015 - 06/13/2015	1.04	1.11
25	06/14/2015 - 06/20/2015	1.04	1.11
26	06/21/2015 - 06/27/2015	1.04	1.11
27	06/28/2015 - 07/04/2015	1.04	1.11
28	07/05/2015 - 07/11/2015	1.04	1.11
29	07/12/2015 - 07/18/2015	1.05	1.12
30	07/19/2015 - 07/25/2015	1.05	1.12
31	07/26/2015 - 08/01/2015	1.05	1.12
32	08/02/2015 - 08/08/2015	1.06	1.13
33	08/09/2015 - 08/15/2015	1.06	1.13
34	08/16/2015 - 08/22/2015	1.06	1.13
35	08/23/2015 - 08/29/2015	1.06	1.13
36	08/30/2015 - 09/05/2015	1.06	1.13
37	09/06/2015 - 09/12/2015	1.06	1.13
38	09/13/2015 - 09/19/2015	1.06	1.13
39	09/20/2015 - 09/26/2015	1.05	1.12
40	09/27/2015 - 10/03/2015	1.04	1.11
41	10/04/2015 - 10/10/2015	1.03	1.10
42	10/11/2015 - 10/17/2015	1.02	1.09
43	10/18/2015 - 10/24/2015	1.02	1.09
44	10/25/2015 - 10/31/2015	1.02	1.09
45	11/01/2015 - 11/07/2015	1.02	1.09
46	11/08/2015 - 11/14/2015	1.02	1.09
47	11/15/2015 - 11/21/2015	1.02	1.09
48	11/22/2015 - 11/28/2015	1.01	1.07
49	11/29/2015 - 12/05/2015	1.01	1.07
50	12/06/2015 - 12/12/2015	1.01	1.07
51	12/13/2015 - 12/19/2015	1.02	1.09
52	12/20/2015 - 12/26/2015	1.03	1.10
53	12/27/2015 - 12/31/2015	1.04	1.11

* Peak Season

MOCF: 0.97

Week	Dates	SF	PSCF
1	01/01/2015 - 01/03/2015	0.95	0.98
2	01/04/2015 - 01/10/2015	1.01	1.04
3	01/11/2015 - 01/17/2015	1.06	1.09
4	01/18/2015 - 01/24/2015	1.05	1.08
5	01/25/2015 - 01/31/2015	1.04	1.07
6	02/01/2015 - 02/07/2015	1.02	1.05
* 7	02/08/2015 - 02/14/2015	1.01	1.04
* 8	02/15/2015 - 02/21/2015	0.99	1.02
* 9	02/22/2015 - 02/28/2015	0.97	1.00
*10	03/01/2015 - 03/07/2015	0.95	0.98
*11	03/08/2015 - 03/14/2015	0.93	0.96
*12	03/15/2015 - 03/21/2015	0.94	0.97
*13	03/22/2015 - 03/28/2015	0.95	0.98
*14	03/29/2015 - 04/04/2015	0.96	0.99
*15	04/05/2015 - 04/11/2015	0.97	1.00
*16	04/12/2015 - 04/18/2015	0.98	1.01
*17	04/19/2015 - 04/25/2015	0.99	1.02
*18	04/26/2015 - 05/02/2015	1.00	1.03
*19	05/03/2015 - 05/09/2015	1.01	1.04
20	05/10/2015 - 05/16/2015	1.02	1.05
21	05/17/2015 - 05/23/2015	1.02	1.05
22	05/24/2015 - 05/30/2015	1.03	1.06
23	05/31/2015 - 06/06/2015	1.03	1.06
24	06/07/2015 - 06/13/2015	1.03	1.06
25	06/14/2015 - 06/20/2015	1.03	1.06
26	06/21/2015 - 06/27/2015	1.02	1.05
27	06/28/2015 - 07/04/2015	1.02	1.05
28	07/05/2015 - 07/11/2015	1.01	1.04
29	07/12/2015 - 07/18/2015	1.02	1.05
30	07/19/2015 - 07/25/2015	1.02	1.05
31	07/26/2015 - 08/01/2015	1.03	1.06
32	08/02/2015 - 08/08/2015	1.03	1.06
33	08/09/2015 - 08/15/2015	1.04	1.07
34	08/16/2015 - 08/22/2015	1.05	1.08
35	08/23/2015 - 08/29/2015	1.06	1.09
36	08/30/2015 - 09/05/2015	1.06	1.09
37	09/06/2015 - 09/12/2015	1.07	1.10
38	09/13/2015 - 09/19/2015	1.06	1.09
39	09/20/2015 - 09/26/2015	1.05	1.08
40	09/27/2015 - 10/03/2015	1.04	1.07
41	10/04/2015 - 10/10/2015	1.03	1.06
42	10/11/2015 - 10/17/2015	1.02	1.05
43	10/18/2015 - 10/24/2015	1.01	1.04
44	10/25/2015 - 10/31/2015	0.99	1.02
45	11/01/2015 - 11/07/2015	0.98	1.01
46	11/08/2015 - 11/14/2015	0.96	0.99
47	11/15/2015 - 11/21/2015	0.96	0.99
48	11/22/2015 - 11/28/2015	0.96	0.99
49	11/29/2015 - 12/05/2015	0.95	0.98
50	12/06/2015 - 12/12/2015	0.95	0.98
51	12/13/2015 - 12/19/2015	0.99	1.02
52	12/20/2015 - 12/26/2015	1.02	1.05
53	12/27/2015 - 12/31/2015	1.06	1.09

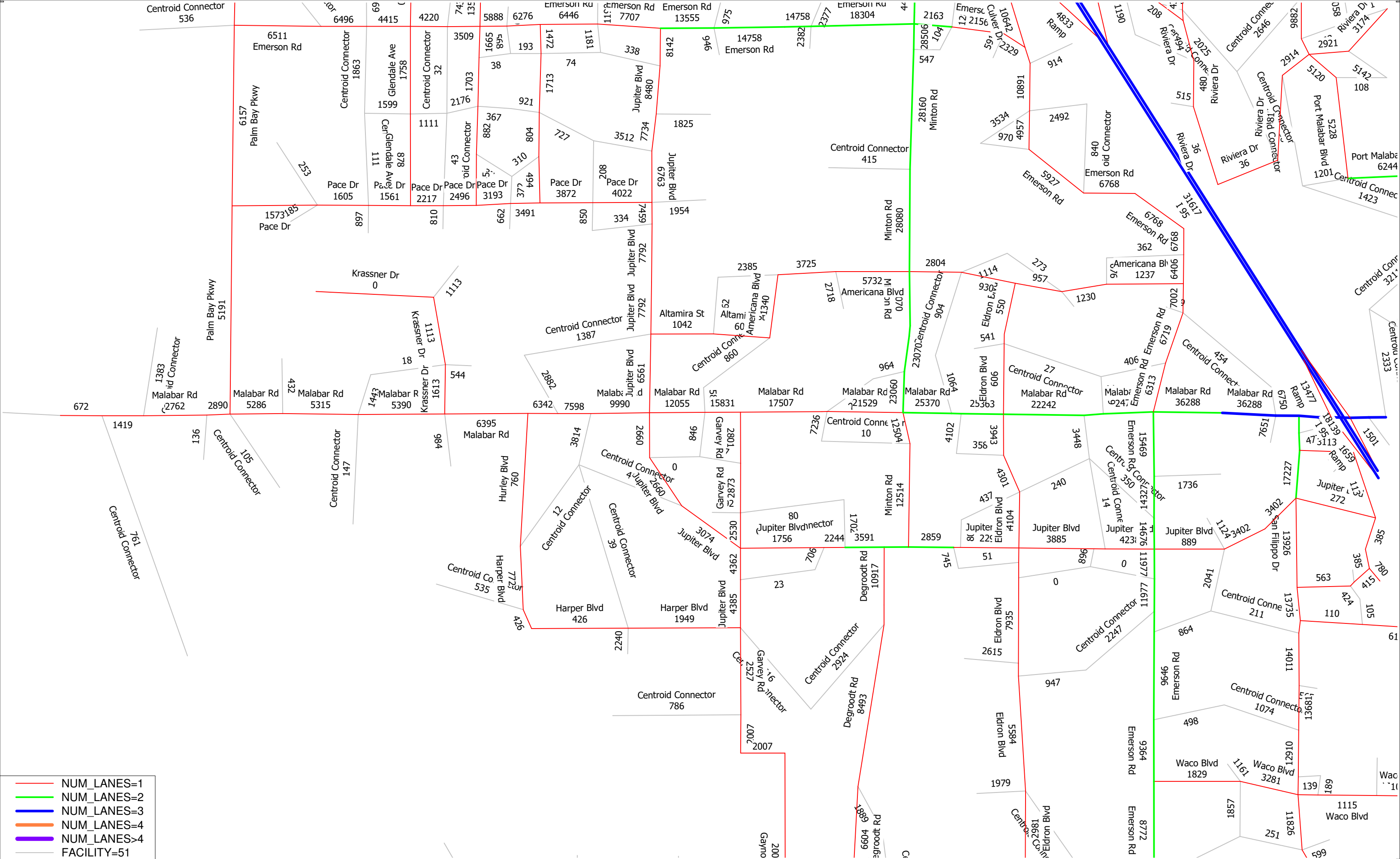
* Peak Season

RMSE% BY VOLUME GROUP

RMSE% by Volume Group

Group	Volume Range (vehicles/day)	FSUTMS Standards		Number of Observations	original	calibrated
		Acceptable	Preferable			
1	Less than 5,000	100%	45%	3	142%	51%
2	5,000 - 9,999	45%	35%	4	113%	35%
3	10,000-14,999	35%	27%	11	30%	20%
4	15,000-19,999	30%	25%	7	31%	14%
5	20,000-29999	27%	15%	5	32%	11%
6	30,000-49,999	25%	15%	9	20%	14%
7	50,000-59,999	20%	10%	1	5%	3%
8	60,000+	19%	10%	2	4%	8%
Total		45%	35%	42	24%	13.8%

MODEL PLOTS



- NUM_LANES=1
- NUM_LANES=2
- NUM_LANES=3
- NUM_LANES=4
- NUM_LANES>4
- FACILITY=51

FUTURE VOLUMES TECHNICAL MEMORANDUM

Future Volumes Technical Memorandum

Malabar Road PD&E Study

From St. Johns Heritage Parkway to Minton Road

Financial Project Identification Number: 437210-1-28-01
City of Palm Bay Contract Number: 23-0-2019

Palm Bay, Florida

Prepared For:
City of Palm Bay
120 Malabar Road
Palm Bay, FL 32907

Prepared By:
Kittelson & Associates, Inc.
225 E. Robinson Street, Suite 355
Orlando, FL 32801
(407) 540-0555

August 2020

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1. INTRODUCTION

Opening and design year traffic volumes were developed for the Malabar Road PD&E consistent with the approved traffic analysis methodology. Volumes were developed using the travel demand model outputs and compared to historical and projected growth rates (Florida Traffic Online (FTO) Database for historical counts; Bureau of Economic and Business Research (BEBR) projections for projected growth) for reasonableness. Future volumes are being developed for 2030 (Opening Year) and 2050 (Design Year). This memorandum summarizes the project traffic forecasting activities through the development of turning movement volumes.

2. SUBAREA TRAVEL DEMAND MODEL DEVELOPMENT

The Central Florida Regional Planning Model (CFRPM) version 6.1 is FDOT's latest adopted regional planning model for use within Brevard County, and it reflects transportation improvements identified within the Space Coast Transportation Planning Organization (SCTPO) Long Range Transportation Plan (LRTP). In support of this study, a subarea model of the CFRPM v6.1, with a base year of 2015, was calibrated and validated to meet Florida Standard Urban Transportation Model Structure (FSUTMS) subarea model calibration and validation standards to improve the traffic forecasting reliability in the area. The subarea model calibration and validation followed the procedures outlined in Florida Department of Transportation (FDOT) *2019 Project Traffic Forecasting Handbook*. The calibration adjustments conducted for base year were also applied to the future year modeling scenarios (year 2030 and 2045). The 2045 future year modeling scenario used the CFRPM v6.1 2040 roadway network and TAZ zone structure with the SCTPO approved 2045 socioeconomic data.

This section summarizes the data collection effort, subarea model development, calibration procedures, and model validation results.

2.1. Subarea Model Boundary

The boundary of the subarea model, as shown in **Figure 1**, was selected to include the major facilities in the vicinity of the study corridor. It generally includes the area bounded by Lake Washington Road on the north, the Brevard/Indian River County Line on the south; the St. Johns River on the west; and US 1 on the east.

2.2. Subarea Model Data Collection

To support the model subarea refinement and calibration, traffic count data, roadway network data, and land use data from 2015 were collected.

2.2.1. TRAFFIC COUNT DATA

The subarea model was validated to year 2015. Thus, the currently available year 2015 traffic count data were obtained from FDOT and Brevard County and listed in **Appendix A**.

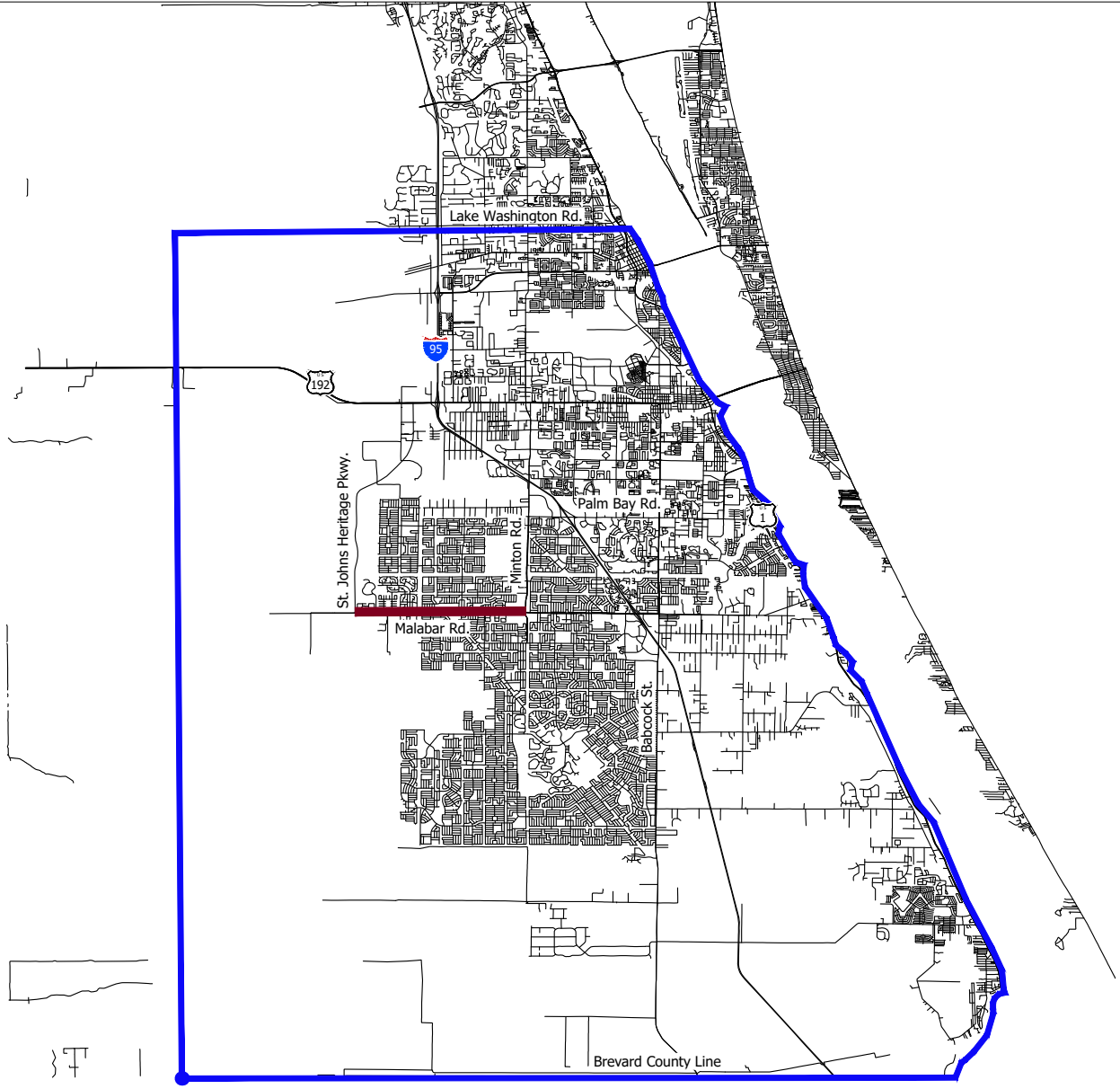
2.2.2. ROADWAY NETWORK DATA



The base year (2015) and future years (2030 and 2040) roadway network within the subarea were updated using available network data listed below:

- 2015 Google Earth historical imagery;
- 2015 Roadway Shapefile from FTI DVD; and
- The approved and planned 2030 and 2040 roadway network improvements information available from the SCTPO LRTP and City of Palm Bay.

These changes are documented in **Appendix A** and the **Roadway Network Assumptions** section.

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-  Study Roadway
-  Subarea Boundary

Subarea Model Boundary

Not to Scale

Figure
1

2.2.3. LAND USE DATA

The base year (2015) and future years (2030 and 2045) land use data for Traffic Analysis Zones (TAZs) within the subarea were updated using information listed below:

- 2015 Google Earth historical imagery;
- The approved and planned development programs in the study area vicinity; and
- The approved land use data sets supporting the ongoing 2045 SCTPO LRTP.

2.3. Base Year (2015) Subarea Model Calibration

The FDOT and Brevard County traffic count station locations were originally coded in the CFRPM v6.1. A review of the base year (2015) count station locations and traffic counts was conducted before the subarea model calibration process to improve the count data accountability. The following screening criteria and updates were made to the 2015 count data:

- Duplicate counts on the roadway segments were removed to avoid double counting.
- Count stations sometimes do not have year 2015 Annual Average Daily Traffic (AADT) data available. Linear regression analysis was applied to approximate the 2015 AADT for stations using data from the previous and subsequent years.
- Count stations that no longer existed in 2015 in the FDOT and Brevard County count database were removed.

The subarea model calibration process involved a comprehensive review of the base year (2015) socioeconomic (land use) data and transportation network data within the subarea. The 2015 land use data were taken from CFRPM v6.1. The 2015 land use data of zones near the study corridor were further refined based on the existing known development. At the time of model calibration, the CFRPM v7 zone structure for Brevard County was available. After reviewing the new and old TAZ structures, zones within a half-mile of the study corridor were converted to the CFRPM v7 zone structure. This process is documented in **Table 1**. The TAZ conversion details and land use changes for 2015 are shown in **Appendix A**.

Table 1: Subarea Model Scenario Summary

Year	Outside Subarea Boundary	Inside Subarea Boundary
Base 2015	<ul style="list-style-type: none"> • Use CFRPM v6.1 2015 TAZ structure and network as start • Modify roadway network to reflect 2015 roadway # lanes within Brevard County • No update for roadway network outside Brevard County 	<ul style="list-style-type: none"> • Use CFRPM v6.1 2015 TAZ structure and network as start • Review the land use in 2015 and update SE data • Modify roadway network to reflect 2015 roadway # lanes • Conduct subarea validation updates.

The subarea model network was adjusted, where needed, to reflect year 2015 conditions. The following iterative steps were applied for calibration until the subarea model met acceptable FSUTMS thresholds.

1. TAZ centroid connectors were added, deleted, or moved based on loading patterns determined from the 2015 Google Earth historical imagery to more accurately reflect the traffic distribution of parcels.
2. The existing (2015) numbers of lanes were assessed for all roads within the study area for correctness and updated if necessary.
3. The facility types were refined based on the roadway characteristics.
4. The posted speeds on roads were increased or decreased within 10 miles per hour (mph) to reflect the realistic route choice pattern of travelers.
5. New roadway segments were added to better represent the base year 2015 network within the subarea.

In addition, link and turning time penalties were added to replicate the existing travel patterns. The number of trips in external zones were updated based on the counts for base year (2015). The network and turning penalty modifications to the base year (2015) model scenario during the calibration effort are detailed within **Appendix A**.

2.4. Base Year (2015) Subarea Model Validation

After the model calibration, the model validation was documented by comparing model estimates of base year traffic to base year traffic counts. Daily volumes were obtained from the base year (2015) subarea model. However, the daily volumes in CFRPM v6.1 represent peak season weekday average daily traffic (PSWADT) and the 2015 count data is AADT. The PSWADT values were converted to AADT by applying the model output conversion factor (MOCF):

$$\text{AADT} = \text{PSWADT} * \text{MOCF}$$

In the subarea, two different MOCFs, as shown in **Table 2**, were applied for factoring AADT. The MOCF reports obtained from the 2015 FTI data are included in **Appendix A**.

Table 2: Model MOCF

County	Category	MOCF
Brevard County	Countywide	0.94
	I-95	0.97

2.4.1. SUBAREA VALIDATION

The validation for the entire subarea is based primarily on the percent root mean square error (RMSE%) between the 2015 model AADTs and count AADTs. The RMSE% results were compared with the standards outlined in Figure 3.3 of the *2019 FDOT Project Traffic Forecasting Handbook* and Table 2-11 of the *FSUTMS-Cube Model Calibration and Validation Standards*. **Table 3** summarizes the RMSE% calculation of the original CFRPM v6.1 model prior to adjustments and the calibrated subarea model. More detailed data for this analysis can be found in **Appendix A**.

Table 3: RMSE% by Volume Group of the Subarea Model

Group	Volume Range (vehicles/day)	FSUTMS Standards		Number of Observations	Original Subarea	Calibrated Subarea
		Acceptable	Preferable			
1	Less than 5,000	100%	45%	3	142%	51%
2	5,000 - 9,999	45%	35%	4	113%	35%
3	10,000-14,999	35%	27%	11	30%	20%
4	15,000-19,999	30%	25%	7	31%	14%
5	20,000-29999	27%	15%	5	32%	11%
6	30,000-49,999	25%	15%	9	20%	14%
7	50,000-59,999	20%	10%	1	5%	3%
8	60,000+	19%	10%	2	4%	8%
Total		45%	35%	42	24%	13.8%

Based on **Table 3**, 42 traffic count locations were used to evaluate the areawide RMSE%. The overall subarea model RMSE% is 13.8%, which is better than the FSUTMS preferable standard of 35%. The subarea model RMSE% for most of the volume groups are better than the original subarea model and the applicable FSUTMS acceptable standard.

2.4.2. MALABAR ROAD STUDY CORRIDOR VALIDATION

Table 4 shows the comparison of observed counts, original model AADT, and calibrated subarea model AADT on the Malabar Road study corridor and I-95. The calibrated subarea model volumes are generally closer to the actual 2015 counts than the original subarea model.

Based on the evaluation displayed in **Table 3** and **Table 4**, the calibrated subarea model meets the FSUTMS standards, produces a reasonable approximation of 2015 traffic volumes, and is expected to generate a reasonable future traffic projection.

Table 4: Study Corridor Volume to Count Ratio of the Subarea Model

Category	Location	2015 Count			Original Subarea		Calibrated Subarea	
		Source	Station ID	AADT	Model AADT	V/C Ratio	Model AADT	V/C Ratio
Arterial	Malabar Rd West of Minton Rd	Brevard County	371	20,950	13,799	-34%	20,285	-3%
	Malabar Rd West of Emerson Dr	FDOT	707041	22,100	11,520	-48%	20,974	-5%
	Malabar Rd East of Emerson Dr	Brevard County	513	36,050	20,095	-44%	34,127	-5%
	Malabar Rd East of Hurley Blvd	FDOT	708142	10,000	6,995	-30%	9,435	-6%
	Summation				89,100	52,410	-41%	84,821
Freeway	I-95, Between Malabar Rd. and Fellesmere Rd.	FDOT	700134	40,653	43,773	8%	38,843	-4%
	Summation				40,653	43,773	8%	38,843

2.5. Future Years Subarea Model Development

To support the design year analysis, the design year traffic volumes are forecasted based on the future year (2030 and 2045) subarea models, which were built based on the CFRPM v6.1 Year 2030 and 2040 Cost Feasible scenarios. The following updates discussed in this subsection were included during the future year subarea model development.

2.5.1. ROADWAY NETWORK ASSUMPTIONS

Network modifications made during the base year (2015) model calibration process were applied to the CFRPM v6.1 Year 2040 road network to build the future year 2045 subarea model, as the modifications are anticipated to remain valid in the future years. The following future road improvements were also assumed in the future road networks:

- Babcock Street between Palm Bay Road and Malabar Road was widened to six lanes.
- St. Johns Heritage Parkway between Ellis Road and Micco Road was completed as a four-lane facility.
- The St. Johns Heritage Parkway interchange with I-95 was added north of Micco Road on St. Johns Heritage Parkway.
- Minton Road was originally coded as a six-lane road in the CFRPM v6.1 Year 2040 model. It was changed back to a four-lane road based on the recent SCTPO Minton Road Feasibility Study, which suggests the road will stay as a four-lane facility in the future.

- Other projects programmed in SCTPO’s LRTP and FDOT’s Five-Year Work Program were checked and updated accordingly within the study area.

2.5.2. FUTURE LAND USE DATA UPDATES

The 2045 land use and socioeconomic data were developed using two steps. First, the housing and employment variables were factored to 2045 levels. Second, the land use inputs within the Malabar Road study area were updated to include known specific development projects.

2045 Regional Forecasts. The CFRPM v6.1 Year 2040 land use and socioeconomic data were factored to match 2045 population and employment totals for each county consistent with the more current forecasts being used for CFRPM v7. Within Brevard County, the 2040 data were first factored to 2045 subarea socioeconomic data based on the ongoing SCTPO LRTP, with separate factors applied within the study subarea and outside the subarea boundary. The factors for each county and Brevard County subarea are listed in Appendix B. For TAZs within the subarea boundary, an additional step was taken after the factoring process – if the factoring process led to land use decreases from 2015 to 2045, 2015 socioeconomic data was used for 2045 model.

Specific Development Projects. Based on a review of future development plans and Transportation Impact Analyses (TIAs) for proposed developments obtained from the City of Palm Bay and Brevard County, the future years (2030 and 2045) socio-economic data were further updated to include and reflect the following development plans:

- Avery Springs
- Brentwood Lakes
- Chapparal
- Crown Square
- Malabar Mini Storage
- Cypress Bay Preserve
- Emerald Lakes
- Space Coast Town Center
- St. Johns Preserve – Commercial
- St. Johns Preserve - Housing Units
- Waterstone and Rolling Meadows

The increments of land use associated with the above new developments were compared to the 2015 to 2030 or 2045 growth increments in the future year land use for the corresponding TAZs. If the 2030 or 2045 TAZ growth increment was less than the proposed development land use, the 2030 and 2045 housing and employment inputs for that TAZ were increased to account for the planned development. Detailed land use changes can be found in **Appendix B**.

2.6. Model Forecasts

The year 2015 and 2045 subarea models were developed following FSUTMS procedures and standards. Based on the base year calibration and validation, and the updates to future input assumptions, the models were expected to generate reasonable traffic volumes for the PD&E design traffic process. The AADTs for study segments within the subarea from the future year subarea model are included in **Appendix C**.

3. TRAFFIC FORECASTING

Traffic volumes were collected for the present year (2020) and forecasted for the design year (twenty years from project opening). Opening year volumes will be forecasted after the approval of this document.

- Opening year – 2030
- Design year – 2050

The forecasts presented herein reflect the Malabar Road “build” conditions. Separate travel model forecasts were not run for the “no build” conditions. One set of future model volumes were selected as there are not viable or convenient parallel alternative routes to Malabar Road and diversions due to potential congestion in the no-build scenario are not expected to be significant. Additionally, with Malabar Road modeled as a four-lane facility under the “build scenario”, a clearer understanding of demand traffic volumes can be realized as the model would not divert potential demand traffic due to perceived capacity constraints. For the design year, the 2045 model’s growth rates were used to create a 2050 forecast to determine the 2050 design year volumes.

This section presents the future-year daily traffic volume forecasts for the 2050 design year and the process by which they were determined. The methodology for the 2030 opening year will be similar.

3.1. Methodology

An annual growth rate was selected for each roadway segment based upon comparison of model growth rates and historical volume trends. Future intersection turning movements were projected using accepted methodologies from the FDOT Project Traffic Forecasting Handbook.

3.2. Historic Growth Rates

Historic growth rates were evaluated using FDOT standard spreadsheets for linear trend analysis. Evaluations were conducted for six SCTPO count locations and four FDOT count locations along and adjacent to the corridor. Historic growth rates for the Malabar Road study segments and other segments within the study area are shown in **Table 5** and **Table 6**. Linear growth rates trended between -0.3 percent and 33.3 percent along Malabar Road and between -1.2 and 103.1 percent along minor streets. Historic trends analyses are provided in **Appendix D**.

Table 5: Summary of FDOT Historic Growth Rates within the Study Area

Year	Malabar Road, East of Hurley Blvd.	St. Johns Heritage Parkway, North of Malabar Rd.	Minton Road, North of Malabar Rd.	Minton Road, South of Malabar Rd.
	FDOT Site: 708142	FDOT Site: 708156	FDOT Site: 707084	FDOT Site: 707016
2019	13,000	5,900	21,500	16,400
2018	12,800	5,900	25,000	15,100
2017	12,400	3,400	24,000	14,700
2016	10,600	3,300	23,000	14,000
2015	10,000	-	18,500	13,100
2014	9,600	-	18,200	12,700
2013	9,600	-	18,000	12,500
2012	9,100	-	18,200	13,400
2011	-	-	18,100	13,600
2010	-	-	18,000	11,700
2009	-	-	18,400	-
Annual Linear Growth Rate	7.09%	33.33%	3.87%	3.24%
R ²	91.53%	81.51%	61.56%	72.46%

Table 6: Summary of SCTPO Historic Growth Rates within Study Area

Year	Malabar Road, West of Jupiter Blvd.	Malabar Road, West of Minton Rd.	Malabar Road, East of Minton Rd.	St. Johns Heritage Parkway, North of Malabar Rd.	Jupiter Boulevard, North of Malabar Rd.	Jupiter Boulevard, South of Malabar Rd.	Minton Road, North of Malabar Rd.
	SCTPO Site: 589	SCTPO Site: 371	SCTPO Site: 491	SCTPO Site: 609	SCTPO Site: 620	SCTPO Site: 573	SCTPO Site: 490
2019	11,400	22,100	25,400	-	11,400	7,800	22,800
2018	11,100	20,000	23,400	5,500	11,000	7,800	21,700
2017	11,400	20,200	23,800	2,000	-	7,100	21,600
2016	12,300	19,000	24,500	2,200	-	6,600	21,100
2015	11,000	21,000	22,600	-	-	6,200	20,000
2014	11,900	21,000	22,400	-	-	6,300	18,800
2013	11,300	19,800	21,500	-	-	6,100	17,900
2012	-	20,900	22,200	-	-	6,200	18,700
2011	-	20,600	22,500	-	-	-	19,000
2010	-	19,500	22,100	-	-	-	19,000
2009	-	20,100	23,400	-	-	-	18,600
2008	-	20,100	23,500	-	-	-	19,700
2007	-	18,800	23,000	-	-	-	20,200
2006	-	-	25,400	-	-	-	20,500
Annual Linear Growth Rate	-0.29%	0.55%	0.17%	103.13%	3.64%	4.68%	0.98%
R ²	2.28%	20.81%	1.58%	70.47%	100.00%	84.20%	29.83%

3.3. Annual Model Volume Growth Rates

Annual model volume growth rates were calculated by using the model volume growth in each modeled time period. The annual volume growth was determined from 2015 to 2045. A volume growth rate determined from 2015 to 2030 will be used when 2030 future volumes are forecasted. The MOCF used was 0.94. The model AADT (with MOCF applied) and annual model volume growth rates for the Malabar Road study segments and major cross streets are summarized in **Table 7**. Model plots are included in **Appendix C**.

Table 7: Model Growth Rates for Malabar Road

Roadway Segment	2015 Base Year Model AADT	2015-2045 Annual Model Volume Growth	2045 Model AADT
Malabar Road, West of St. Johns Heritage Pkwy.	2,867	230	9,768
Malabar Road, St. Johns Heritage Pkwy. to Krassner Dr./ Bending Branch Ln.	5,302	299	14,270
Malabar Road, Krassner Dr./ Bending Branch Ln. to Jupiter Blvd.	7,571	354	18,197
Malabar Road, Jupiter Blvd. to Minton Rd.	16,782	391	28,514
Malabar Road, East of Minton Rd.	25,394	-45	24,030
St. Johns Heritage Parkway, north of Malabar Rd.	5,164	508	20,404
St. Johns Heritage Parkway, south of Malabar Rd.	0	338	10,137
Jupiter Boulevard, north of Malabar Rd.	6,515	62	8,380
Jupiter Boulevard, south of Malabar Rd.	2,658	63	4,561
Garvey Road, south of Malabar Rd.	2,817	151	7,356
Minton Road, north of Malabar Rd.	23,139	118	26,664
Minton Road, south of Malabar Rd.	12,489	-40	11,288

3.4. Recommended Growth Rates and Future AADTs

Recommended growth rates were determined based on an evaluation of historic and model predicted growth rates. **Table 8** summarizes the recommended volume growth rates used in both the no-build and build scenarios for the Malabar Road study segments and major cross street segments. Future 2050 AADTs are also summarized in **Table 8**. Existing and projected future AADTs are displayed in **Figure 2**.

As previously described, model volume growth rates were calculated by using the model volume growth in each modelled time period. Results from this model-based growth forecast were compared against historical AADT trends to verify reasonableness, which are provided in **Appendix D**. Growth rate recommendations primarily reflect the model-based growth rates. Growth rates were evaluated on an individual segment basis.

On most minor streets, model growth rates were evaluated for roads with projected model volumes available. For some minor streets and streets not coded into the model, a zero-percent growth rate was applied because these streets serve areas where development is fully built out and side street volume growth is not expected. However, forecasts for the minor street intersections at Krassner Drive/Bending Branch Lane and Wisteria Avenue/Krassner Drive were developed based on developer information because of expected growth from the developments, as shown in the next section and **Appendix E**.

Future AADTs were calculated by using the annual model volume growth for each time period and applying this growth to the traffic counts collected during the study. Therefore, to calculate the 2050 AADTs the annual model volume growth from 2015 to 2045 was multiplied by the years of the growth period (2020 to 2050 would be 30 years) and added to the 2020 AADTs. A similar method will be used when 2030 AADTs are calculated. In some cases, the annual model volume growth was negative. This was assumed to be due to the opening of a new regional roadway in the form of the St. Johns Heritage Parkway extension and traffic diversion to that roadway. In these cases, a zero-growth rate was used to be conservative.

3.4.1. ST. JOHNS HERITAGE PARKWAY GROWTH

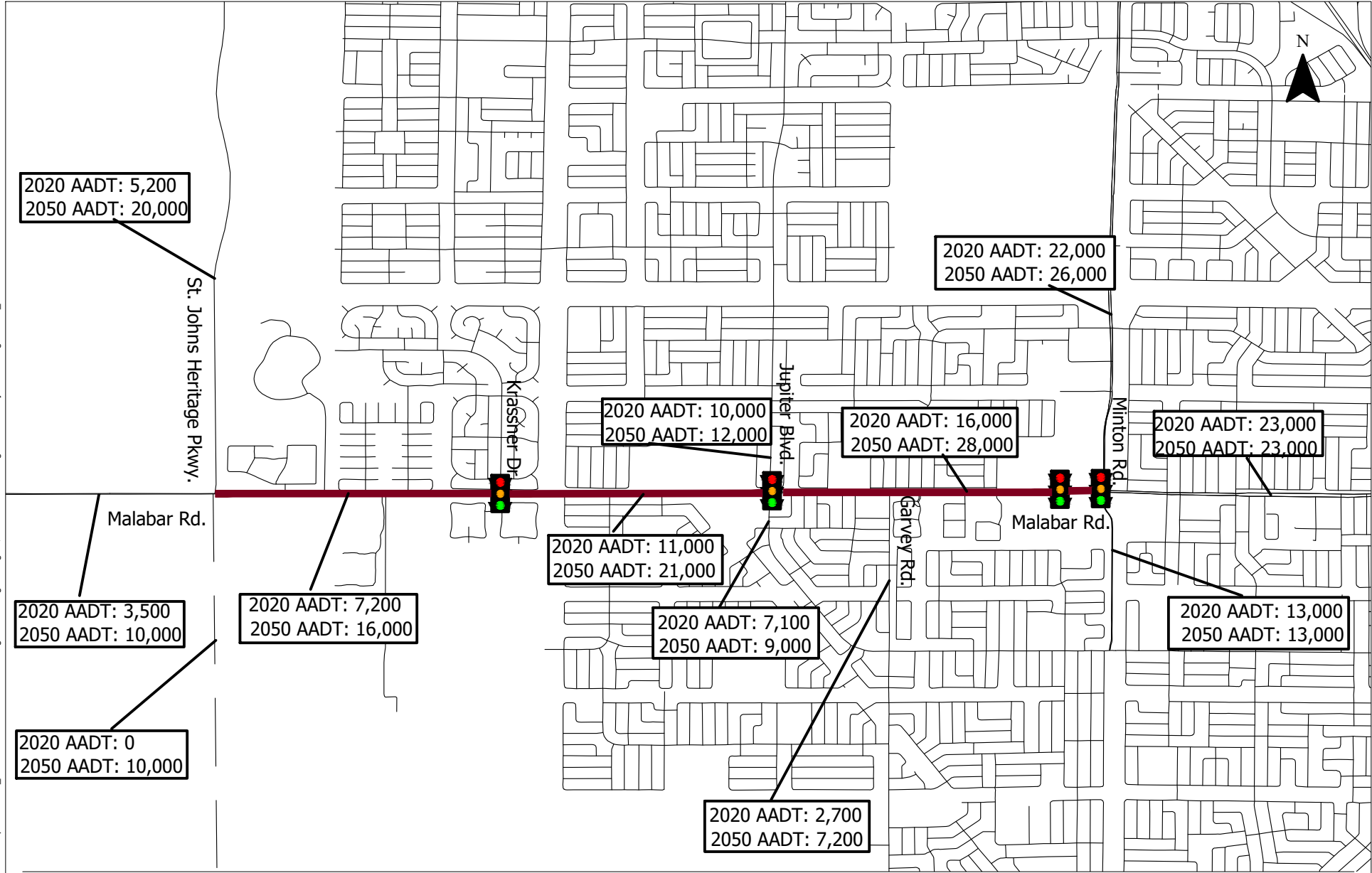
The proposed southern leg of the St. Johns Heritage Parkway intersection with Malabar Road is anticipated to be constructed after the opening year (2030) of the proposed Malabar Road widening. Therefore, the 2030 forecast volumes will not include this proposed connection. The proposed southern leg is expected to be completed between 2030 and 2050 and therefore the 2050 forecast volumes include this proposed connection.




Table 8: Future Year Growth and AADT Projections

Roadway	2020 AADT	2020-2050 Annual Volume Growth	2020-2050 Annual Volume Growth Rate	2050 Projected AADT
Malabar Road, West of St. Johns Heritage Pkwy.	3,500	230	6.57%	10,000
Malabar Road, St. Johns Heritage Pkwy. to Krassner Dr./ Bending Branch Ln.	7,200	299	4.18%	16,000
Malabar Road, Krassner Dr./ Bending Branch Ln. to Jupiter Blvd.	11,000	354	3.28%	21,000
Malabar Road, Jupiter Blvd. to Minton Rd.	16,000	391	2.37%	28,000
Malabar Road, East of Minton Rd.	23,000	0	0.00%	23,000
St. Johns Heritage Parkway, north of Malabar Rd.	5,200	508	9.82%	20,000
St. Johns Heritage Parkway, south of Malabar Rd.	0	338	-*	10,000
Jupiter Boulevard, north of Malabar Rd.	10,000	62	0.60%	12,000
Jupiter Boulevard, south of Malabar Rd.	7,100	63	0.89%	9,000
Garvey Road, south of Malabar Rd.	2,700	151	5.57%	7,200
Minton Road, north of Malabar Rd.	22,000	118	0.54%	26,000
Minton Road, south of Malabar Rd.	13,000	0	0.00%	13,000

*Roadway segment will not be built until after 2030. Growth from 2020-2050 is not applicable.

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-  Study Corridor
-  Proposed Roadway
-  Signalized Intersection

Existing and Future AADTs along Malabar Road

Not to Scale

Figure 2

3.5. Future Intersection Turning Movement Volumes Development

Future intersection turning movement volumes for the 2050 peak hours were developed following procedures described in NCHRP Report 255. This effort was completed for the four intersections with regional connectivity and expected to experience the highest level of growth.

1. Malabar Road and St. Johns Heritage Parkway.
2. Malabar Road and Jupiter Boulevard
3. Malabar Road and Garvey Road
4. Malabar Road and Minton Road

Spreadsheet tools were utilized that implement the NCHRP Report 255 turn movement forecasting procedures. This is consistent with acceptable tools described in the *FDOT 2019 Project Traffic Forecasting Handbook*. Forecast AADTs were converted to directional design hourly volumes (DDHVs) utilizing the identified K and D factors. The DDHVs and existing turning movement percentages were then used as inputs to generate the future turning movement volumes. This was done independently for the AM and PM peak hour. The inputs and outputs generated from the applied spreadsheet tools are provided in **Appendix F**.

Existing turning movement volumes to/from minor side streets are not expected to experience growth due to existing built-out conditions. Therefore, the future approach and departure volumes calculated for the four intersections along Malabar Road noted above were combined with the existing turning movement volumes to/from the side street to forecast future turning movement volumes for the rest of the study intersections.

Through this procedure, future 2050 turning movement volumes were determined. These are shown in **Figure 3**.

3.5.1. ST. JOHNS HERITAGE PARKWAY INTERSECTION GROWTH

The spreadsheet tools utilized to implement the NCHRP Report 255 procedures require input of initial-estimates inputs of turning movement percentages for all movements (typically, these would be the existing turn movement counts). However, the intersection of Malabar Road and St. Johns Heritage Parkway changes from a three-leg intersection in the existing condition to a four-leg intersection in the future 2050 condition. Initial seed turning movement volumes were calculated based on the forecasted approach and departure volumes from the adjacent roadway segments. This procedure, which is documented in **Appendix F**, was used to determine the initial turning movement percentages. From there, the NCHRP tool was used to calculate future turning movement volumes. This is also documented in **Appendix F**. Additionally, the St. Johns Preserve development on the northwest corner of the intersection will contribute to future intersection volumes. This is accounted for in the forecasted approach and departure volumes.

3.5.2. WISTERIA AVENUE/ABILENE DRIVE INTERSECTION GROWTH

The intersection of Malabar Road and Wisteria Avenue/Abilene Drive is an additional intersection that will be studied in the future condition because of the Chaparral development being built on the south leg of the intersection. While this development is currently approved for the construction of more than 100 homes, this development is expected to have more than 200 homes when it is built out (per a 2007 Traffic Impact Study shown in **Appendix F**). While more it is currently approved for construction Since this intersection was not originally included as a study intersection, standard trip generation rates were used to estimate the number of trips entering and exiting both the northern and southern leg of the intersection in the AM and PM peak hours. The number of homes served by the southern leg of the intersection was determined from the Chaparral Traffic Impact Study, while the number of homes served by the northern leg of the intersection was determined by counting homes in the quadrant adjacent to Wisteria Avenue. Then the directional factors determined for Malabar Road in this area were applied to these entering and exiting trips to estimate minor street turning movement volumes. Once minor street volumes were determined, mainline volumes on Malabar Road were added to the intersection based on the volumes forecasted at the four intersections described above. This process is described more fully in **Appendix F**.

3.5.3. KRASSNER DRIVE/BENDING BRANCH LANE INTERSECTION GROWTH

The intersection of Malabar Road and Krassner Drive/Bending Branch Lane is the location of the Brentwood Lakes development. The development is on the southern leg of the intersection (Bending Branch Lane). Currently 332 homes have been built in the development (based on a May 2020 field review), while another 97 homes remain to be built. Since the existing traffic volumes collected at this intersection do not account for the additional homes to be built at the intersection, trip generation was used to estimate the additional number of trips entering and exiting the southern leg of the intersection in the AM and PM peak hours. The number of homes served by the southern leg of the intersection was determined from the Brentwood Lakes site plan. Then the directional factors determined for Malabar Road in this area were applied to these entering and exiting trips to determine minor street turning movement volumes. Once minor street volumes were determined, mainline volumes on Malabar Road were added to the intersection based on the volumes forecasted at the four intersections described above. This process is described more fully in **Appendix F**.

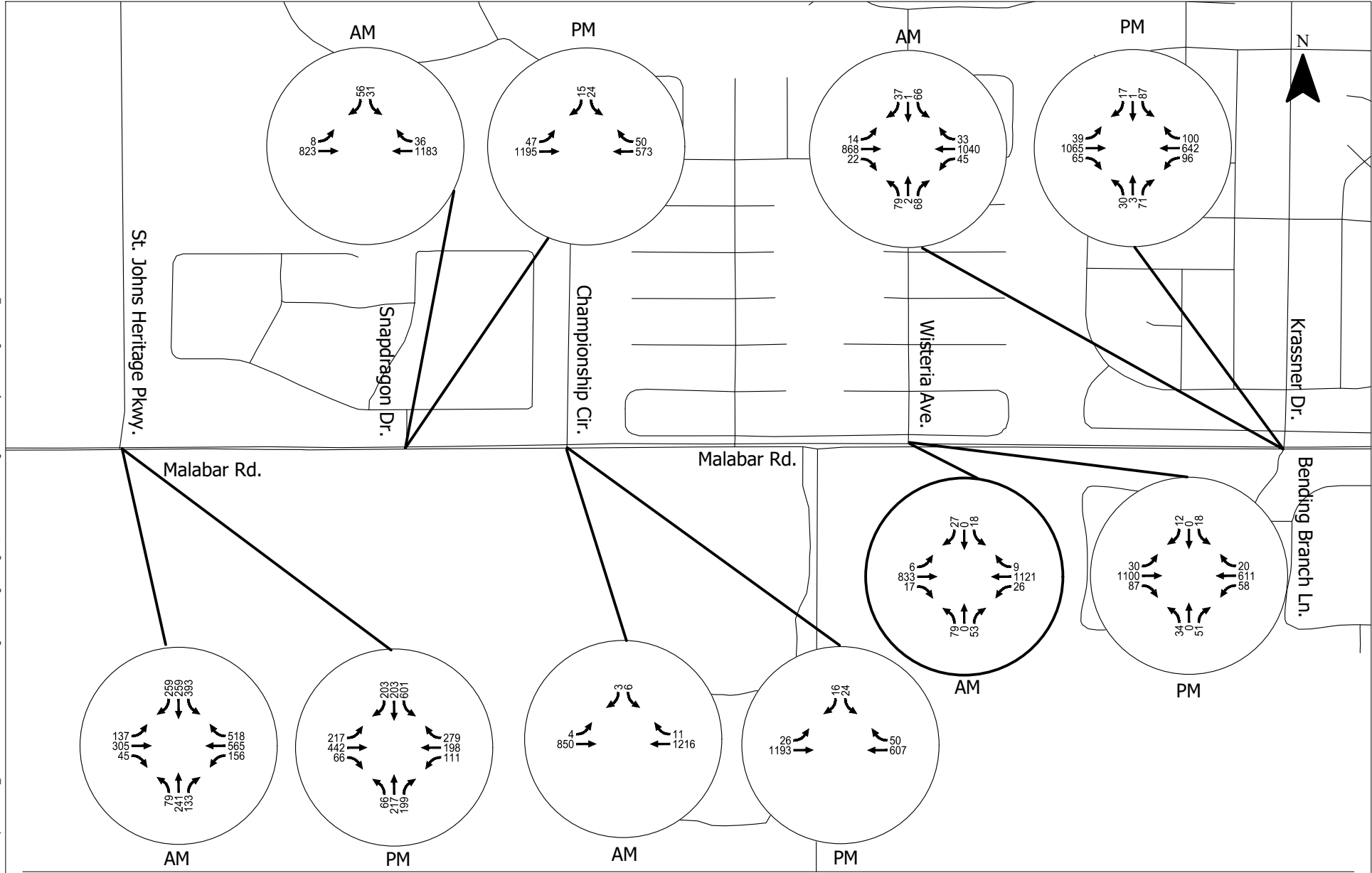
3.5.4. POST OFFICE INTERSECTION GROWTH

The intersection of Malabar Road and Post Office is the location of the Post Office that serves western Palm Bay. While the Post Office is not expected to expand its capacity or facilities, the increased development along the western portion of the corridor is expected to increase the trips to the Post Office. Therefore, the existing entering and exiting volumes at this intersection were doubled in the 2050 future condition to reflect this expected growth, with two-thirds of growth moving from and towards the west where the growth is expected to occur.

3.5.5. GARVEY ROAD INTERSECTION GROWTH

The intersection of Malabar Road and Garvey Road is a three-leg intersection and requires a different NCHRP tool than the tool used for four-leg intersections. This three-leg tool requires DDHVs as an input like the four-leg tool, but it also requires an estimated future turning movement volume. Since a new supermarket is proposed for the southwest corner of this intersection, trip generation was used to estimate one of the northbound turning movement. The model growth rate was applied to the turning movements from the south leg, then the trips calculated for the supermarket were also added to the northbound movements with appropriate trip distribution. With these estimated future turning movements, the TURNS tool was used to calculate the rest of the future turning movement volumes. This process is described more fully in **Appendix F**.

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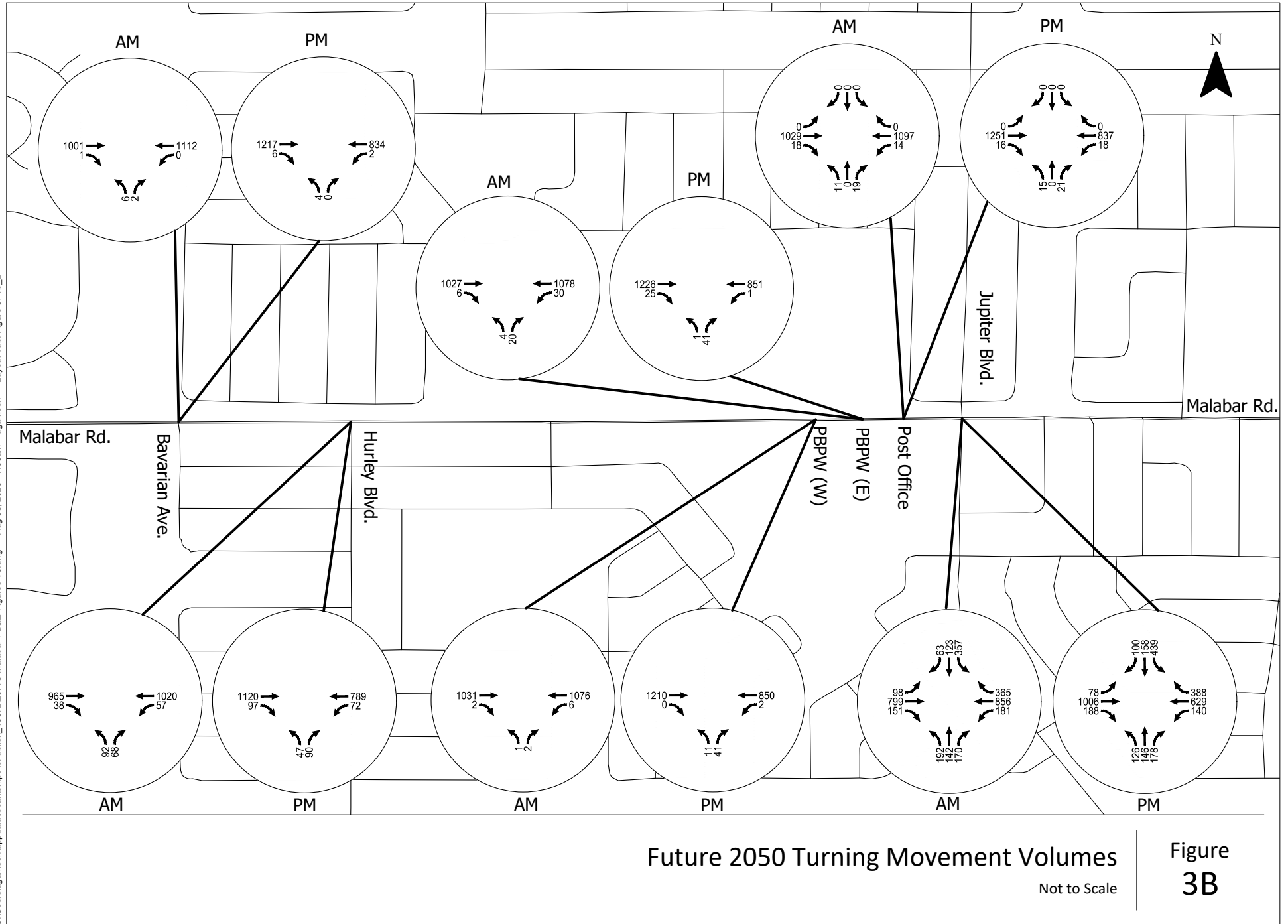


Future 2050 Turning Movement Volumes

Not to Scale

Figure 3A

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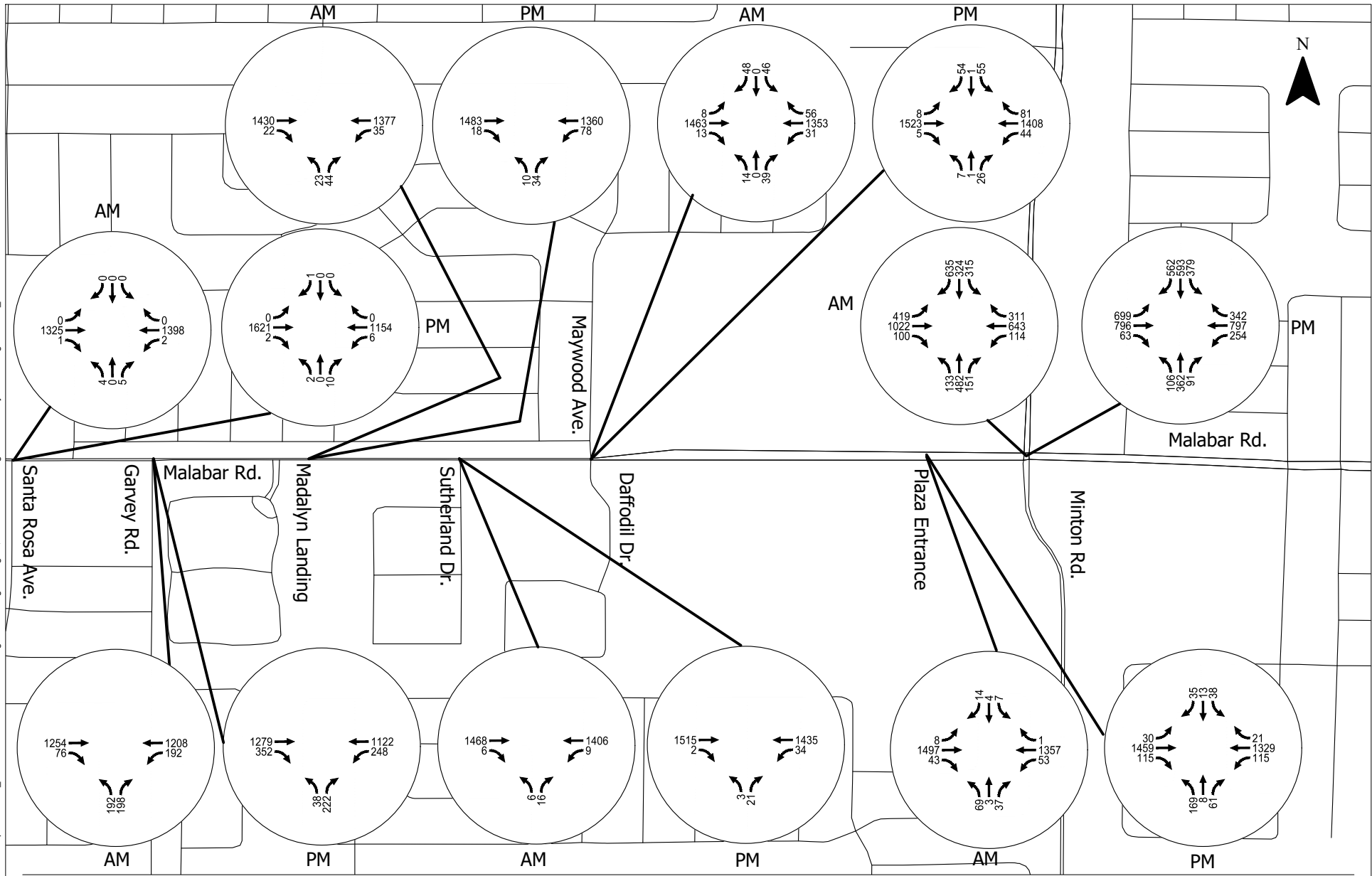


Future 2050 Turning Movement Volumes

Not to Scale

Figure 3B

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Future 2050 Turning Movement Volumes

Not to Scale

Figure 3C

4. SUMMARY/NEXT STEPS

This technical memorandum documents the data and assumptions which were used to develop the opening and design year volumes for the Malabar Road PD&E. Upon approval by the City of Palm Bay and FDOT, these volumes will be used for future conditions analyses conditions during the opening and design year.

APPENDIX A – BASE YEAR MODEL VALIDATION INFORMATION

Contained in this Appendix –

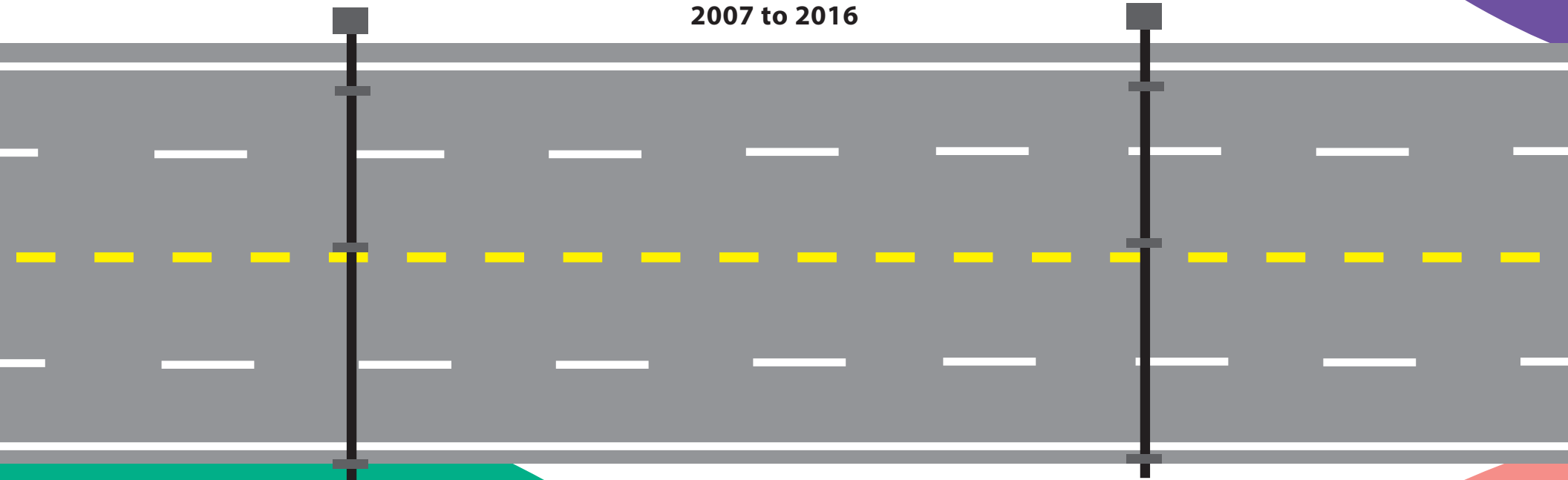
- Traffic Counts
- Malabar v6 to v7
- Calibration Changes
- 2015 Brevard County MOCF
- RMSE% by Volume Group
- Future Land Use
- Model Plots

TRAFFIC COUNTS

A	B	Unique Station	Road Name	Count Source	2015 AADT
40007	40010	519	Micco Rd	Brevard	1436
40052	42032	556	Fleming Grant Rd	Brevard	1628
40039	40046	520	Micco Rd	Brevard	3457
40033	42008	447	CR 507	Brevard	7196
40060	40071	518	Micco Rd	Brevard	8764
40067	40072	707008	CR 507	FDOT	9500
40080	41933	707057	CR 507	FDOT	11200
40110	41936	707015	Emerson Rd	FDOT	13000
40107	40135	707016	Minton Rd	FDOT	13100
40306	42000	701001	SR 514	FDOT	13200
40161	40175	551	Emerson Rd	Brevard	13668
40246	40269	700127	SR 514	FDOT	13800
40192	42006	565	US 1	Brevard	14026
40222	40232	494	SR 514	Brevard	14925
40306	41999	700114	US 1	FDOT (T)	15475
40152	40162	448	CR 507	Brevard	15499
40074	40125	417	US 1	Brevard	15649
40198	40206	449	CR 507	Brevard	18574
40211	40214	700379	SR 514	FDOT	19600
40132	40144	371	Malabar Rd	Brevard	20950
40180	41899	564	San Filippo Dr	Brevard	21317
40157	40167	707041	Malabar Rd	FDOT	22100
40219	40206	369	CR 507	Brevard	30498
40175	40181	513	Malabar Rd	Brevard	36050
40202	40206	700427	SR 514	FDOT	37500
40201	40202	493	SR 514	Brevard	39744
40100	98395	700134	I 95	FDOT (T)	40653
40190	40195	492	Malabar Rd	Brevard	46423
40484	40501	700408	W Eau Gallie Blvd (SR-518) W of CR-5054	FDOT	28500
40338	40363	700381	US-192 E of I-95	FDOT	30000
40205	40236	700428	I-95 North of SR-514	FDOT	59500
41992	41994	700090	SR-500 W of I-95	FDOT	8100
40610	40626	700422	SR-518 NE of CR-5054	FDOT	19000
40486	42068	700415	I-95 N of SR-518	FDOT	81000
40414	42020	708074	Ellis Road East of John Rhodes Blvd	FDOT	11200
40319	41997	707091	John Rhodes Blvd N of US-192	FDOT	10500
40091	40103	708142	Malabar Rd East of Hurley Blvd	FDOT	10000
40253	40299	700371	I-95 N of CR-516	FDOT	72000
40228	41970	707085	Milton Rd N of Americana Blvd	FDOT	24000
40163	40176	707084	Milton Rd N of Malabar Rd	FDOT	18500
40701	40742	701005	SR-518 W of SR-513	FDOT	34500
40452	40460	700124	US-1 S of SR-500	FDOT	31000

SPACE COAST TRANSPORTATION PLANNING ORGANIZATION TRAFFIC COUNTS

Historical Counts from
2007 to 2016



2725 Judge Fran Jamieson Way
Melbourne, FL 32940
P: 321-690-6890
F: 321-690-6827
www.spacecoasttpo.com
tpostaff@spacecoasttpo.com

Interactive On-Line Counts:

[http://brevard.ms2soft.com/tcds/tsearch.
asp?loc=Brevard&mod=](http://brevard.ms2soft.com/tcds/tsearch.asp?loc=Brevard&mod=)

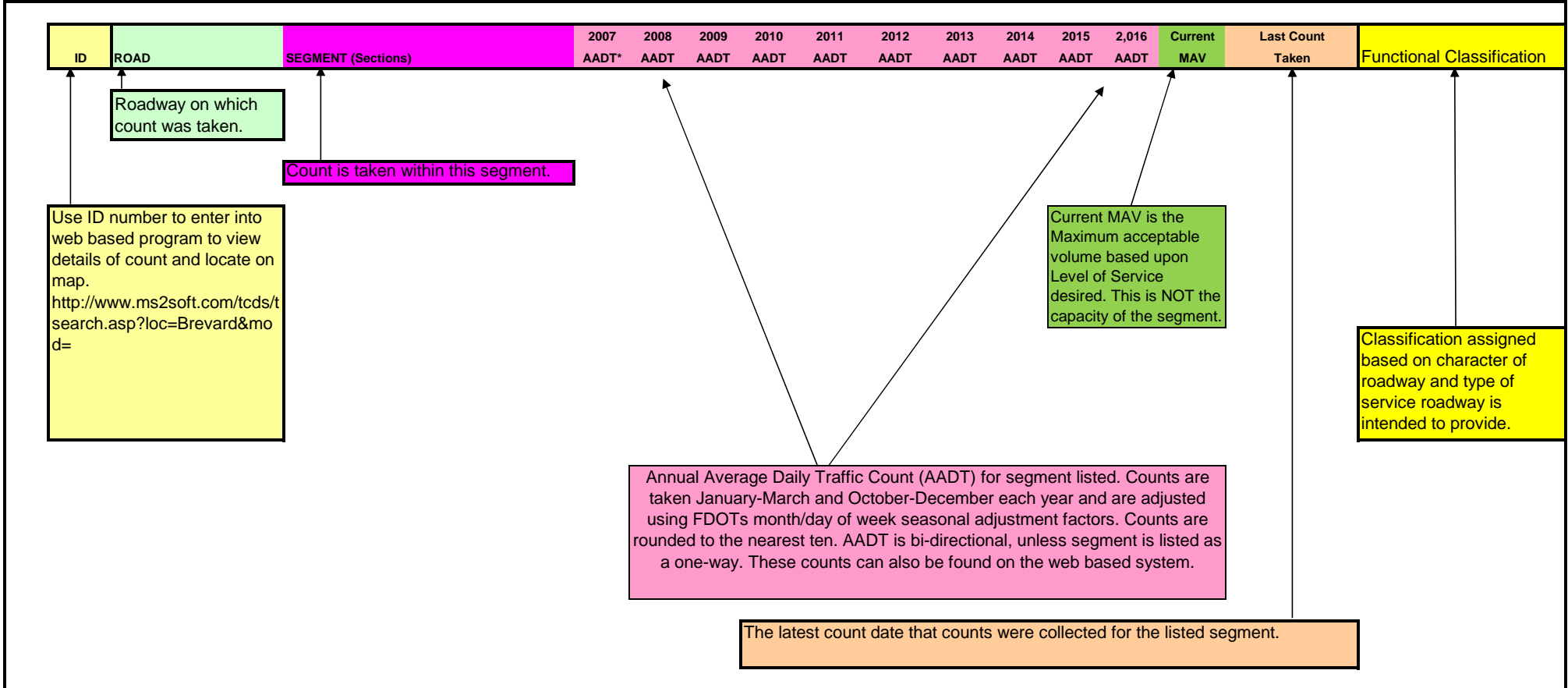
June 13, 2017

SPACE COAST TRANSPORTATION PLANNING ORGANIZATION TRAFFIC COUNTS

Questions? Please contact TPO staff at 321-690-6890

The Space Coast Transportation Planning Organization annually collects traffic counts that are used for a variety of transportation monitoring programs, local government concurrency management systems, the Florida Department of Transportation, private citizens and local businesses. The TPO's consultant collects forty-eight (48) hour directional traffic counts by fifteen (15) minute intervals at specified locations. All counts are taken during the weekday period from 12:01 AM, Monday through 12:00 Noon Friday.

Explanation of header information:



*AADTs: Counts are calculated based on FDOT seasonal factors. It should also be noted that a reduced seasonal adjustment is applied on lower level roads (local and collectors) that experience less seasonal fluctuation in traffic.

SPACE COAST TRANSPORTATION PLANNING ORGANIZATION TRAFFIC COUNTS: 2007 - 2016

ID	ROAD	SEGMENT (Sections)	2007 AADT	2008 AADT	2009 AADT	2010 AADT	2011 AADT	2012 AADT	2013 AADT	2014 AADT	2015 AADT	2016 AADT	Current MAV	Last Count Taken	Functional Classification
AREA: CENTRAL															
	US 1	EYSTER-ROSA JONES	35,543	37,540	36,867	UC	34,867	34,703	34,977	35,303	36,267	35,167			
34	US 1	Eyster-Barton	32,580	35,330	35,040	UC	32,330	32,860	33,220	32,820	34,440	33,650	62,900	2/16/2016	Urban Principal Arterial-Other
33	US 1	Barton-Florida	40,710	43,050	42,760	UC	39,440	38,510	38,070	40,180	40,480	39,840	62,900	1/27/2016	Urban Principal Arterial-Other
88	US 1	Florida-Rosa Jones (Poinsett)	33,340	34,240	32,800	UC	32,830	32,740	33,640	32,910	33,880	32,010	62,900	2/24/2016	Urban Principal Arterial-Other
	US 1	ROSA JONES-PEACHTREE	29,050	28,765	22,700	UC	26,940	26,360	26,795	25,375	33,480	30,220			
24	US 1	Rosa Jones (Poinsett)-SR 520	33,930	34,010	UC	UC	32,590	32,430	32,840	32,890	33,480	30,220	62,900	2/24/2016	Urban Principal Arterial-Other
23	US 1	SR 520-Peachtree	24,170	23,520	22,700	UC	21,290	20,290	20,750	17,860	UC	UC	62,900	1/22/2014	Urban Principal Arterial-Other
	US 1	PEACHTREE-SR 528	30,375	29,778	30,400	27,443	28,365	27,363	27,025						
22	US 1	Peachtree-Forrest	23,450	23,590	22,470	18,880	21,080	20,330	20,560	UC	UC	UC	41,790	1/8/2013	Urban Principal Arterial-Other
21	US 1	Forrest-Dixon	33,360	33,250	32,260	29,770	30,260	29,860	29,460	UC	UC	UC	41,790	1/8/2013	Urban Principal Arterial-Other
20	US 1	Dixon-Michigan	31,710	29,730	31,070	28,860	31,080	28,020	28,510	UC	UC	UC	41,790	1/8/2013	Urban Principal Arterial-Other
19	US 1	Michigan-SR 528	32,980	32,540	35,800	32,260	31,040	31,240	29,570	UC	UC	UC	41,790	1/8/2013	Urban Principal Arterial-Other
572	VIERA BLVD	Tavistock-Stadium							7,070	7,160	NC	8,190	39,800	1/26/2016	Urban Local
	VIERA BLVD	STADIUM-HOLIDAY SPRINGS	9,290	10,055	12,245	12,880	13,820	13,240	13,930	14,490	15,950	16,780			
536	VIERA BLVD	STADIUM-MURRELL		8,030	10,740	12,010	12,790	12,650	13,760	14,600	15,980	17,450	39,800	1/26/2016	Urban Minor Arterial
58	VIERA BLVD	Murrell-Holiday Springs	9,290	12,080	13,750	13,750	14,850	13,830	14,100	14,380	15,920	16,110	39,800	1/26/2016	Urban Minor Arterial
537	VIERA BLVD	Holiday Springs-US 1		10,550	11,420	11,960	12,830	11,850	12,130	12,190	13,280	13,930	15,600	2/16/2016	Urban Minor Arterial
AREA: SOUTH															
	AIRPORT	US 192-APOLLO	11,650	11,177	10,597	10,990	10,390	10,657	10,570	11,747	11,100	11,993			
503	AIRPORT	US 192-HIBISCUS	11,050	10,670	9,720	9,620	9,590	10,080	9,760	11,200	9,720	10,060	32,400	10/31/2016	Urban Minor Arterial
502	AIRPORT	HIBISCUS-NASA	10,560	9,740	9,450	9,760	9,250	9,500	9,350	10,570	NC	10,900	34,020	12/6/2016	Urban Minor Arterial
501	AIRPORT	NASA-APOLLO	13,340	13,120	12,620	13,590	12,330	12,390	12,600	13,470	12,480	15,020	39,800	10/17/2016	Urban Minor Arterial
	APOLLO	AIRPORT-SARNO	20,955	20,040	20,490	20,370	19,120	19,020	19,350	19,020		22,120			
510	APOLLO	Airport-St. Michaels	20,600	20,040	NC	20,370	NC	19,020	NC	19,020	NC	21,980	41,790	11/28/2016	Urban Minor Arterial
538	APOLLO	St. Michaels - Sarno	21,310	NC	20,490	NC	19,120	NC	19,350	NC	NC	22,260	41,790	11/8/2016	Urban Minor Arterial
571	APOLLO	Sarno - Eau Gallie Blvd						2,330	2,160	UC	UC	10,200	33,800	10/26/2016	Urban Minor Arterial
	AURORA	JOHN RODES-WICKHAM	9,240	8,955	8,395	8,265	7,670	7,670	7,765	6,865	6,845	6,540			
507	AURORA	J Rodes-Turtlemound	11,170	10,900	9,910	9,820	9,040	9,020	8,800	7,800	7,430	7,490	15,600	11/8/2016	Urban Major Collector
514	AURORA	Turtlemound-Wickham	7,310	7,010	6,880	6,710	6,300	6,320	6,730	5,930	6,260	5,590	17,700	11/8/2016	Urban Major Collector
	AURORA	WICKHAM-US 1	11,663	11,297	11,353	10,947	10,857	10,730	11,023	10,713	10,780	11,080			
515	AURORA	WICKHAM-CROTON	12,000	11,710	11,750	11,380	11,370	11,320	11,600	10,840	11,600	11,160	39,800	11/8/2016	Urban Minor Arterial
366	AURORA	Croton-Stewart	12,130	11,630	11,560	11,080	11,010	10,800	11,150	11,140	10,910	11,750	39,800	10/24/2016	Urban Minor Arterial
376	AURORA	Stewart-US 1	10,860	10,550	10,750	10,380	10,190	10,070	10,320	10,160	9,830	10,330	39,800	10/26/2016	Urban Minor Arterial
	BABCOCK	IND RVR CO-GRANT	3,160	2,625	2,745	2,560	2,570	2,500	2,615	2,720	2,375	3,160			
446	BABCOCK	Indian Rv Co-Micco	2,340	1,950	2,280	1,930	1,800	1,780	1,870	1,980	1,920	2,300	14,200	10/4/2016	Rural Major Collector
370	BABCOCK	Micco-Grant	3,980	3,300	3,210	3,190	3,340	3,220	3,360	3,460	2,830	4,020	14,200	10/31/2016	Rural Major Collector
	BABCOCK	GRANT-MALABAR	17,345	18,490	14,807	14,307	14,570	14,077	14,117	13,678	13,213	15,268			
447	BABCOCK	Grant-Valkaria			7,360	6,950	7,250	7,010	7,060	7,140	7,200	7,820	17,700	11/29/2016	Urban Major Collector
597	BABCOCK	VALKARIA-WACO								11,720	11,580	13,630	17,700	10/31/2016	Urban Minor Arterial
448	BABCOCK	WACO-FOUNDATION PK	13,060	16,580	16,550	16,100	16,150	15,720	15,560	16,110	15,500	17,700	17,700	10/4/2016	Urban Minor Arterial
449	BABCOCK	FOUNDATION PK-MALABAR	21,630	20,400	20,510	19,870	20,310	19,500	19,730	19,740	18,570	21,920	17,700	11/29/2016	Urban Minor Arterial
	BABCOCK	MALABAR-PALM BAY RD	33,497	30,810	33,610	32,865	33,630	33,235	32,880	31,985	34,340	31,825			
369	BABCOCK	Malabar-Charles	33,330	33,600	NC	34,300	NC	34,850	NC	31,920	NC	29,850	41,790	10/4/2016	Urban Principal Arterial-Other
368	BABCOCK	Charles-Pt Malabar	35,130	NC	35,710	NC	35,500	NC	33,510	NC	36,180	NC	41,790	11/11/2015	Urban Principal Arterial-Other
443	BABCOCK	Pt Malabar-Palm Bay	32,030	28,020	31,510	31,430	31,740	31,620	32,260	32,050	32,500	33,800	41,790	10/11/2016	Urban Principal Arterial-Other

*Note: 2016 AADT's Beaches area were counted twice in 2016 and the AADT listed is the average of the two counts.
NC=Not Counted; UC=Under Construction

SPACE COAST TRANSPORTATION PLANNING ORGANIZATION TRAFFIC COUNTS: 2007 - 2016

ID	ROAD	SEGMENT (Sections)	2007 AADT	2008 AADT	2009 AADT	2010 AADT	2011 AADT	2012 AADT	2013 AADT	2014 AADT	2015 AADT	2016 AADT	Current MAV	Last Count Taken	Functional Classification
AREA: SOUTH															
	BABCOCK	PALM BAY-US 192	31,978	29,996	31,910	31,686	31,888	31,360	30,644	29,686	31,670	33,796			
444	BABCOCK	Palm Bay-Eber	31,620	27,870	31,380	30,550	30,460	30,000	29,660	29,670	29,380	32,700	41,790	10/11/2016	Urban Principal Arterial-Other
367	BABCOCK	Eber-Florida	32,800	30,490	33,270	32,330	32,640	31,820	31,280	31,250	34,150	36,120	41,790	10/11/2016	Urban Principal Arterial-Other
445	BABCOCK	Florida-University	34,790	32,860	34,170	34,950	34,950	34,180	33,830	33,650	35,680	36,270	41,790	10/11/2016	Urban Principal Arterial-Other
459	BABCOCK	University-Melbourne	32,180	31,410	32,250	31,360	32,280	31,380	30,610	28,580	31,980	33,840	41,790	11/8/2016	Urban Principal Arterial-Other
460	BABCOCK	Melbourne-US 192	28,500	27,350	28,480	29,240	29,110	29,420	27,840	25,280	27,160	30,050	41,790	10/17/2016	Urban Principal Arterial-Other
	BABCOCK	US 192-APOLLO	25,070	23,958	24,090	24,287	24,000	23,560	23,303	21,585	24,850	24,850			
461	BABCOCK	US 192-FEE	25,840	24,540	26,850	NC	26,030	NC	25,200	NC	27,340	NC	33,800	12/2/2015	Urban Minor Arterial
462	BABCOCK	Fee-Hibiscus	26,770	25,790	NC	27,130	NC	25,600	NC	UC	NC	27,650	33,800	10/17/2016	Urban Minor Arterial
463	BABCOCK	Hibiscus-Sheridan	25,420	24,020	24,280	NC	24,410	NC	23,760	NC	25,380	NC	33,800	11/4/2015	Urban Minor Arterial
375	BABCOCK	Sheridan-NASA	25,240	24,450	NC	24,380	NC	24,220	NC	23,030	NC	24,740	33,800	10/17/2016	Urban Minor Arterial
464	BABCOCK	NASA-APOLLO	22,080	20,990	21,140	21,350	21,560	20,860	20,950	20,140	21,830	22,160	33,800	10/17/2016	Urban Minor Arterial
	CROTON	SARNO-LAKE WASHINGTON	14,097	14,457	13,840	13,713	13,080	13,100	12,755	13,377	1,235	14,000			
335	CROTON	SARNO-EAU GALLIE	15,370	15,180	14,850	14,610	14,170	13,960	13,920	14,250	13,710	15,870	33,800	10/25/2016	Urban Minor Arterial
334	CROTON	EAU GALLIE-AURORA	14,650	15,360	14,590	14,280	13,970	14,060	NC	14,080	14,690	13,560	33,800	10/25/2016	Urban Minor Arterial
333	CROTON	AURORA-LK WASHINGTON	12,270	12,830	12,080	12,250	11,100	11,280	11,590	11,800	NC	12,570	33,800	10/25/2016	Urban Minor Arterial
	CROTON	LAKE WASHINGTON-POST	7,865	9,140	7,060	8,290	6,450	8,180	6,840	8,690	7,190	9,670			
332	CROTON	Lk Washington-Parkway	8,470	9,140	NC	8,290	NC	8,180	NC	8,690	NC	9,670	15,600	10/25/2016	Urban Major Collector
377	CROTON	Parkway-Post	7,260	NC	7,060	NC	6,450	NC	6,840	NC	7,190	NC	15,600	10/21/2015	Urban Major Collector
	DAIRY	PALM BAY-US 192	21,008	21,450	19,180	20,268	21,435	20,535	21,240	25,308	24,835	22,998			
472	DAIRY	Palm Bay-Eber	18,350	19,040	15,160	17,350	18,610	18,350	19,110	20,920	20,380	20,620	39,800	10/11/2016	Urban Minor Arterial
473	DAIRY	Eber-Florida	22,200	22,390	19,750	20,870	22,130	21,350	22,390	25,670	NC	25,480	39,800	10/11/2016	Urban Minor Arterial
474	DAIRY	Florida-Edgewood	20,780	21,460	19,870	20,730	21,830	21,080	21,730	28,120	NC	20,660	39,800	10/11/2016	Urban Minor Arterial
356	DAIRY	Edgewood-US 192	22,700	22,910	21,940	22,120	23,170	21,360	21,730	26,520	29,290	25,230	39,800	11/29/2016	Urban Minor Arterial
355	DAIRY	US 192-HIBISCUS	11,240	10,560	10,180	10,420	10,750	10,210	10,660	12,690	12,490	13,300	15,600	12/6/2016	Urban Major Collector
	EAU GALLIE	I-95-WICKHAM	20,995	23,730	25,317	23,903	23,133	23,067	23,950	24,737	26,023	28,647			
438	EAU GALLIE	I-95-John Rodes		30,840	34,670	31,120	30,760	30,940	31,910	31,780	33,550	37,940	41,790	10/24/2016	Urban Principal Arterial-Other
439	EAU GALLIE	John Rodes-Sarno	26,960	26,350	26,530	25,990	24,990	24,710	25,240	26,650	27,910	30,750	41,790	10/24/2016	Urban Principal Arterial-Other
440	EAU GALLIE	Sarno-Wickham	15,030	14,000	14,750	14,600	13,650	13,550	14,700	15,780	16,610	17,250	41,790	11/8/2016	Urban Principal Arterial-Other
	EAU GALLIE	WICKHAM-US 1	20,390	20,595	21,933	20,227	20,763	20,167	19,943	18,893	19,523	20,063			
359	EAU GALLIE	WICKHAM-CROTON	21,700	22,260	23,130	20,850	21,400	20,790	20,760	19,310	18,990	22,690	41,790	10/25/2016	Urban Principal Arterial-Other
441	EAU GALLIE	Croton-Commodore	21,570	22,000	22,870	21,530	22,080	21,760	21,410	20,530	19,240	21,430	41,790	11/28/2016	Urban Principal Arterial-Other
360	EAU GALLIE	Commodore-Stewart Av	18,980	19,660	19,800	NC	18,810	NC	17,660	NC	20,340	NC	41,790	10/28/2015	Urban Principal Arterial-Other
455	EAU GALLIE	Stewart Av-US 1	19,310	18,460	NC	18,300	NC	17,950	NC	16,840	NC	16,070	41,790	11/28/2016	Urban Principal Arterial-Other
	EAU GALLIE (EASTBOUND)	US 1-CAUSEWAY (EB)	16,680	16,777	18,115	17,610	17,075	17,745	17,105	17,020	16,580	17,250			
361	EAU GALLIE	US 1-Highland	16,080	16,380	17,440	NC	16,320	NC	16,340	NC	15,410	NC	19,440	10/12/2015	Urban Principal Arterial-Other
382	EAU GALLIE	Highland-Pineapple	15,750	16,340	NC	16,800	NC	16,870	NC	16,310	NC	16,620	19,440	11/1/2016	Urban Principal Arterial-Other
457	EAU GALLIE	Pineapple-Causeway	18,210	17,610	18,790	18,420	17,830	18,620	17,870	17,730	17,750	17,880	19,440	11/28/2016	Urban Principal Arterial-Other
	EAU GALLIE (WESTBOUND)	CAUSEWAY-US 1 (WB)	16,283	16,000	17,455	17,375	16,430	18,010	16,700	16,525	16,095	17,035			
456	EAU GALLIE	Causeway-Pineapple	17,990	17,470	18,710	17,820	17,680	19,050	18,070	17,620	18,950	18,520	19,440	11/1/2016	Urban Principal Arterial-Other
380	EAU GALLIE	Pineapple-Highland	14,960	15,340	16,200	NC	15,180	NC	15,330	NC	13,240	NC	19,440	10/12/2015	Urban Principal Arterial-Other
458	EAU GALLIE	Highland-US 1	15,900	15,190	NC	16,930	NC	16,970	NC	15,430	NC	15,550	19,440	11/1/2016	Urban Principal Arterial-Other
	EBER	MINTON-DAIRY	10,515	12,120	12,280	9,945	10,175	8,450	9,280	10,055	10,530	11,545			
484	EBER	Minton-Hollywood	8,720	9,940	11,000	9,030	9,500	7,560	NC	9,560	NC	10,730	15,600	10/11/2016	Urban Major Collector
485	EBER	Hollywood-Dairy	12,310	14,300	13,560	10,860	10,850	9,340	9,280	10,550	10,530	12,360	15,600	10/11/2016	Urban Major Collector
	ELLIS	J RODES-WICKHAM	9,250	8,775	10,340	UC	10,695	NC	11,640	10,930	12,290	12,760			
322	ELLIS	John Rodes-East Dr	9,070	7,410	NC	UC	9,490	NC	10,770	10,930	NC	12,760	15,600	10/24/2016	Urban Minor Arterial
321	ELLIS	East Dr-Wickham	9,430	10,140	10,340	UC	11,900	NC	12,510	NC	12,290	NC	15,600	11/4/2015	Urban Minor Arterial

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AREA: SOUTH															
551	EMERSON	Jupiter-Malabar		11,550	11,860	11,830	12,090	12,150	12,410	12,670	13,670	12,700	39,800	11/9/2016	Urban Minor Arterial
	EMERSON	MALABAR-MINTON	8,307	8,107	7,653	7,763	7,517	7,433	7,760	9,415	8,903				
552	EMERSON	Malabar-Americana Blvd	9,510	9,620	9,060	9,250	9,100	9,040	9,360	9,300	10,990	17,700	10/31/2016	Urban Minor Arterial	
553	EMERSON	Americana Blvd-Culver	9,090	9,000	8,920	9,170	8,860	8,830	9,170	9,530	10,440	17,700	10/17/2016	Urban Minor Arterial	
554	EMERSON	Culver-Minton	6,320	5,700	4,980	4,870	4,590	4,430	4,750	NC	5,280	17,700	10/31/2016	Urban Minor Arterial	
555	EMERSON	Minton-Jupiter	25,360	25,220	25,160	25,580	24,980	24,800	25,720	27,480	28,150	39,800	10/11/2016	Urban Minor Arterial	
	EVANS	US 192-NASA	17,810	17,705	17,980	17,130	18,535	18,630	19,055	18,385	16,510	19,905			
315	EVANS	US 192-Hibiscus	19,710	19,270	19,890	19,650	20,580	20,260	21,000	19,520	NC	20,990	39,800	10/18/2016	Urban Minor Arterial
319	EVANS	Hibiscus-NASA	15,910	16,140	16,070	14,610	16,490	17,000	17,110	17,250	16,510	18,820	39,800	11/29/2016	Urban Minor Arterial
556	FLEMING GRANT	KIWI DR-MICCO	1,570	NC	1,490	NC	1,330	NC	1,360	NC	1,720	14,200	10/31/2016	Rural Minor Collector	
579	GATEWAY DRIVE	HIBISCUS-NASA					3,450	3,550	NC	NC	NC	33,800	10/15/2013	Urban Minor Collector	
558	GRANT	BABCOCK-OLD DIXIE	2,240	NC	NC	2,130	NC	2,260	NC	NC	2,590	14,200	11/29/2016	Rural Major Collector	
566	HARLOCK	AURORA-LK WASHINGTON	2,020	NC	NC	2,480	NC	2,150	NC	NC	NC	15,600	10/9/2013	Urban Minor Collector	
	HENRY	MINTON-DAIRY						7,265	7,060	7,890	7,460				
585	HENRY	Minton Rd-Hollywood						8,120	NC	7,890	NC	15,600	11/3/2015	Urban Major Collector	
591	HENRY	Hollywood-Dairy						6,410	7,060	NC	7,460	15,600	10/18/2016	Urban Major Collector	
	HIBISCUS BLVD	EVANS-APOLLO	16,860	16,563	16,230	16,887	16,137	16,910	16,997	17,800	20,327				
559	HIBISCUS BLVD	EVANS-DAIRY	16,620	16,340	16,470	17,160	16,100	17,130	17,010	17,320	21,120	39,800	10/18/2016	Urban Minor Arterial	
560	HIBISCUS BLVD	DAIRY-BABCOCK	17,140	16,880	16,840	17,400	16,120	17,360	17,310	18,680	21,730	33,800	10/17/2016	Urban Minor Arterial	
561	HIBISCUS BLVD	BABCOCK-APOLLO	16,820	16,470	15,380	16,100	16,190	16,240	16,670	17,400	18,130	33,800	11/8/2016	Urban Minor Arterial	
	HICKORY	US 192-NASA					6,230	3,363	2,400	3,735	NC				
587	HICKORY	US 192-Fee						1,860	NC	1,710	NC	15,600	11/3/2015	Urban Major Collector	
588	HICKORY	Fee-Hibiscus						2,350	2,400	NC	NC	15,600	11/19/2014	Urban Major Collector	
580	HICKORY	Hibiscus-NASA					6,230	5,880	NC	5,760	NC	15,600	11/4/2015	Urban Major Collector	
	HOLLYWOOD	PALM BAY RD-US 192	12,385	12,755	12,605	12,708	13,875	13,055	13,045	13,230	15,195				
318	HOLLYWOOD	PALM BAY RD-EBER	13,180	13,710	13,880	13,840	14,670	13,570	12,560	UC	15,060	16,900	17,700	10/31/2016	Urban Minor Arterial
317	HOLLYWOOD	Eber-Florida/Wingate	12,490	12,890	12,600	12,910	14,170	13,300	13,080	UC	13,190	14,820	17,700	10/11/2016	Urban Minor Arterial
374	HOLLYWOOD	Florida/Wingate-Henry	12,950	13,310	12,940	13,160	13,440	13,710	14,240	UC	12,960	15,220	17,700	10/18/2016	Urban Minor Arterial
316	HOLLYWOOD	Henry-US 192	10,920	11,110	11,000	10,920	13,220	11,640	12,300	UC	11,710	13,840	15,600	10/18/2016	Urban Minor Arterial
	INTERLACHEN	ST. ANDREWS-WICKHAM	5,925	7,600	4,960	7,550	5,050	6,760	4,420	6,770	4,340	7,730			
354	INTERLACHEN	St. Andrews-Baytree	4,860	NC	4,960	NC	5,050	NC	4,420	NC	4,340	NC	15,600	12/2/2015	Urban Minor Collector
353	INTERLACHEN	Baytree-Wickham	6,990	7,600	NC	7,550	NC	6,760	NC	6,770	NC	7,730	15,600	10/3/2016	Urban Minor Collector
	JOHN RODES	US 192-EAU GALLIE	11,397	11,047	UC	11,450	11,790	12,025	12,145	11,850	12,215	12,540			
511	JOHN RODES	US 192-Sheridan	10,640	10,340	UC	10,420	10,690	10,830	NC	10,620	NC	11,520	17,700	10/24/2016	Urban Minor Arterial
504	JOHN RODES	Sheridan-Ellis	11,020	10,720	UC	NC	10,940	NC	11,040	NC	10,990	NC	17,700	12/8/2015	Urban Minor Arterial
505	JOHN RODES	Ellis-Eau Gallie	12,530	12,080	UC	12,480	13,740	13,220	13,250	13,080	13,440	13,560	17,700	11/28/2016	Urban Minor Arterial
506	JOHN RODES	EAU GALLIE-AURORA	13,630	12,060	11,670	11,760	10,830	10,750	10,120	9,220	8,950	9,570	15,600	11/28/2016	Urban Major Collector
323	JORDAN BLASS	ST ANDREWS (J BLASS) - WICKHAM	6,920	7,060	6,700	6,620	6,630	5,480	6,310	5,900	5,810	6,150	15,600	10/3/2016	Urban Minor Collector
573	JUPITER BLVD	DEGROODT-MALABAR						6,210	6,120	6,260	6,220	6,630	17,700	11/29/2016	Urban Minor Arterial
574	JUPITER BLVD	AMERICANA-PACE						12,090	12,060	12,350	NC	11,580	17,700	11/9/2016	Urban Minor Arterial
	LAKE ANDREW	TRAFFORD-WICKHAM	3,190	3,230	5,570	5,860	6,320	6,670	6,520		5,295	6,670			
605	LAKE ANDREW	TRAFFORD-IVANHOE									3,390	5,540	39,800	10/3/2016	Urban Local
79	LAKE ANDREW	IVANHOE DR-WICKHAM	3,190	3,230	5,570	5,860	6,320	6,670	6,520	6,270	7,200	7,800	39,800	10/3/2016	Urban Major Collector
	LAKE WASHINGTON	THE LAKE-WICKHAM	5,057	6,310	5,535	5,720	5,765	5,650	5,770	5,910	6,000	6,435			
351	LAKE WASHINGTON	WEST OF HARLOCK	2,760	NC	2,440	NC	3,660	NC	3,580	NC	4,240	NC	17,700	10/12/2015	Urban Minor Collector
344	LAKE WASHINGTON	HARLOCK-TURTLEMOUND	3,560	3,720	NC	3,340	NC	3,250	NC	3,440	NC	4,180	17,700	10/25/2016	Urban Minor Collector
338	LAKE WASHINGTON	TURTLEMOUND-WICKHAM	8,850	8,900	8,630	8,100	7,870	8,050	7,960	8,380	7,760	8,690	17,700	11/8/2016	Urban Major Collector
557	MAIN	CENTRAL-US 1 (MAIN)		1,430	1,850	NC	2,120	NC	1,970	NC	1,960	2,560	15,600	10/4/2016	Urban Major Collector

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AREA: SOUTH															
	MALABAR	SJHP-MINTON	18,800	20,050	20,050	19,520	20,560	20,900	15,570	16,455	15,950	15,675			
589	MALABAR	SJHP-Jupiter							11,310	11,900	10,950	12,310	17,700	10/12/2016	Urban Minor Arterial
371	MALABAR	JUPITER-MINTON	18,800	20,050	20,050	19,520	20,560	20,900	19,830	21,010	20,950	19,040	17,700	10/12/2016	Urban Principal Arterial-Other
491	MALABAR	Minton-Emerson	22,980	23,460	23,370	22,080	22,500	22,190	21,500	22,420	22,560	24,510	39,800	10/12/2016	Urban Principal Arterial-Other
513	MALABAR	Emerson-San Fillippo	33,580	35,970	35,710	34,110	34,240	34,560	33,710	34,330	36,050	37,860	50,900	10/17/2016	Urban Principal Arterial-Other
492	MALABAR	SAN FILLIPPO-I-95	49,500	48,870	46,540	45,490	46,620	46,600	46,320	48,840	46,420	52,940	50,900	11/29/2016	Urban Principal Arterial-Other
493	MALABAR	I-95-BABCOCK	40,140	38,080	37,390	35,830	37,330	35,840	36,400	38,620	NC	39,270	59,900	10/4/2016	Urban Principal Arterial-Other
	MALABAR	BABCOCK-US 1	13,475	13,780	14,370	11,450	13,470	10,790	12,840	12,430	14,930	14,090			
494	MALABAR	Babcock-Corey	13,980	14,150	14,370	NC	13,470	NC	12,840	NC	14,930	NC	24,200	10/21/2015	Urban Minor Arterial
516	MALABAR	Corey-US 1	12,970	13,410	NC	11,450	NC	10,790	NC	12,430	NC	14,090	14,800	10/11/2016	Urban Minor Arterial
598	MELBOURNE AVE	US 1 OVERPASS-FRONT STREET								4,110	NC	NC	15,600	12/3/2014	Urban Minor Collector
	MICCO	BABCOCK-US 1	3,820	1,240	4,127	4,007	4,023	3,790	3,963	4,033	4,553	4,850			
519	MICCO	Babcock-Dottie Ln	1,290	1,240	1,740	1,320	1,380	1,330	1,440	1,470	1,440	1,800	14,200	10/4/2016	Rural Major Collector
520	MICCO	Dottie Ln-Fleming Grant	2,640	UC	3,080	3,130	3,100	2,840	3,090	3,220	3,460	3,740	17,700	10/4/2016	Urban Major Collector
518	MICCO	FLEMMING GRANT-US 1	7,530	UC	7,560	7,570	7,590	7,200	7,360	7,410	8,760	9,010	17,700	10/4/2016	Urban Major Collector
	MINTON	MALABAR-PALM BAY RD	31,270	29,440	28,570	29,133	29,903	28,923	27,917	29,260	22,645	29,183			
490	MINTON	Malabar-Americana	20,160	19,670	18,590	18,970	19,010	18,750	17,890	18,820	20,030	21,090	39,800	10/12/2016	Urban Principal Arterial-Other
489	MINTON	Americana-Emerson	24,210	24,370	22,250	22,710	23,130	22,880	22,390	22,780	25,260	25,730	39,800	10/11/2016	Urban Principal Arterial-Other
488	MINTON	EMERSON-PALM BAY	49,440	44,280	44,870	45,720	47,570	45,140	43,470	46,180	NC	40,730	33,800	10/31/2016	Urban Principal Arterial-Other
	MINTON	PALM BAY-US 192	31,275	31,842	32,092	31,212	28,410	28,926	27,334	33,058	30,676	32,255			
487	MINTON	Palm Bay-Hield	28,970	30,190	29,300	NC	24,790	NC	23,890	NC	27,650	NC	33,800	12/2/2015	Urban Principal Arterial-Other
486	MINTON	Hield-Eber	30,050	30,920	NC	30,560	NC	28,290	NC	30,970	NC	32,910	39,800	10/11/2016	Urban Principal Arterial-Other
372	MINTON	Eber-Wingate	30,180	30,600	31,200	30,100	25,550	28,330	27,960	31,750	29,920	31,890	39,800	10/11/2016	Urban Principal Arterial-Other
483	MINTON	Wingate-Milwaukee	32,430	33,900	33,910	32,310	31,080	30,370	28,470	35,690	32,990	NC	39,800	12/8/2015	Urban Principal Arterial-Other
482	MINTON	Milwaukee-Henry	34,520	34,530	34,160	32,710	31,160	29,770	29,490	35,790	32,650	33,410	39,800	10/11/2016	Urban Principal Arterial-Other
481	MINTON	Henry-US 192	31,500	30,910	31,890	30,380	29,470	27,870	26,860	31,090	30,170	30,810	39,800	11/1/2016	Urban Principal Arterial-Other
	NASA	WICKHAM-EDDIE ALLEN						18,670	18,930	15,010	25,420				
575	NASA	Wickham-Evans						22,430	22,950	NC	25,420	NC	39,800	12/2/2015	Urban Principal Arterial-Other
576	NASA	Evans-Eddie Allen						14,910	14,910	15,010	NC	UC	39,800	10/22/2014	Urban Principal Arterial-Other
	NASA	EDDIE ALLEN-US 1	14,453	14,237	14,097	14,440	13,907	14,247	13,687	14,720	14,763				
346	NASA	Eddie Allen-Airport	17,530	16,200	16,510	17,120	17,300	17,050	16,930	17,000	17,050	UC	32,400	12/8/2015	Urban Principal Arterial-Other
345	NASA	Airport-Babcock	12,600	12,300	NC	12,550	NC	12,450	NC	12,810	NC	UC	32,400	10/22/2014	Urban Principal Arterial-Other
349	NASA	Babcock-Apollo	12,960	NC	12,290	NC	11,560	NC	11,130	NC	12,530	UC	32,400	11/4/2015	Urban Principal Arterial-Other
342	NASA	Apollo-US 1	14,720	14,210	13,490	13,650	12,860	13,240	13,000	14,350	14,710	UC	32,400	12/8/2015	Urban Principal Arterial-Other
600	NORFOLK PARKWAY	PALM BAY ROAD-TARGET SIGNAL								13,460	15,120	15,740	33,800	10/11/2016	Urban Major Collector
	PALM BAY	MINTON-HOLLYWOOD	35,848	UC	UC	37,100	40,623	39,310	39,947	37,998	31,890	44,303			
478	PALM BAY	MINTON-ATHENS	27,320	UC	UC					26,820	27,710	NC	59,900	10/12/2015	Urban Principal Arterial-Other
479	PALM BAY	ATHENS-CULVER	30,670	UC	UC	27,260	28,840	28,680	28,750	28,040	36,070	31,750	59,900	10/11/2016	Urban Principal Arterial-Other
465	PALM BAY	Culver-I-95 E Ramp	37,510	UC	UC	39,460	44,290	42,480	41,900	47,320	NC	44,300	59,900	10/11/2016	Urban Principal Arterial-Other
466	PALM BAY	I-95 E Ramp-Hollywood	47,890	UC	UC	44,580	48,740	46,770	49,190	49,810	NC	56,860	59,900	11/29/2016	Urban Principal Arterial-Other
	PALM BAY	HOLLYWOOD-BABCOCK	36,272	UC	UC	31,654	33,160	33,443	37,220	36,140	39,880	37,913			
467	PALM BAY	Hollywood-Dairy	41,710	UC	UC	36,800	40,070	40,830	41,820	42,180	NC	46,190	59,900	10/11/2016	Urban Principal Arterial-Other
468	PALM BAY	Dairy-Port Malabar	40,340	UC	UC	35,310	NC	NC	38,460	37,600	NC	42,080	59,900	10/11/2016	Urban Principal Arterial-Other
469	PALM BAY	Port Malabar-Stack	33,660	UC	UC	28,100	28,840	29,690	NC	31,870	NC	27,450	59,900	10/31/2016	Urban Principal Arterial-Other
477	PALM BAY	Stack-Riviera	33,420	UC	UC	29,090	NC	NC	31,380	NC	39,880	NC	59,900	12/2/2015	Urban Principal Arterial-Other
470	PALM BAY	Riviera-Babcock	32,230	UC	UC	28,970	30,570	29,810	NC	32,910	NC	35,930	59,900	10/31/2016	Urban Principal Arterial-Other
	PALM BAY	BABCOCK-ROBT CONLAN	28,748	UC	UC	22,853	22,663	23,360	26,953	22,710	27,120	24,287			
480	PALM BAY	Babcock-Knect	34,580	UC	UC	28,840	29,820	31,130	33,120	31,190	32,740	34,250	59,900	11/29/2016	Urban Principal Arterial-Other
475	PALM BAY	Knect-Lipscomb	32,910	UC	UC	26,120	NC	NC	29,370	NC	30,910	NC	59,900	11/3/2015	Urban Principal Arterial-Other
476	PALM BAY	Lipscomb-Troutman	24,900	UC	UC	19,480	20,460	20,170	NC	19,610	NC	19,530	59,900	10/11/2016	Urban Principal Arterial-Other
471	PALM BAY	Troutman-R Conlan	22,600	UC	UC	16,970	17,710	18,780	18,370	17,330	17,710	19,080	59,900	10/11/2016	Urban Principal Arterial-Other

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AREA: SOUTH															
330	PARKWAY	TURTLEMOUND-WICKHAM	5,080	5,570	5,200	5,110	4,880	5,020	4,840	4,810	4,960	5,460	17,700	11/8/2016	Urban Major Collector
601	PINEAPPLE	EAU GALLIE BLVD-AURORA								5,610	NC	6,100	15,600	11/28/2016	Urban Major Collector
	PINEDA CSWY	I-95-US 1	12,540	UC	12,655	13,010	21,530	23,120	24,193	25,537	27,623	28,127			
570	PINEDA CSWY	I-95-ST ANDREWS					18,340	19,900	21,650	23,780	27,070	27,640	41,790	10/3/2016	Urban Minor Arterial
328	PINEDA CSWY	ST ANDREWS-WICKHAM	4,850	UC	5,470	5,510	18,910	21,330	23,210	24,860	25,360	28,950	41,790	10/3/2016	Urban Minor Arterial
327	PINEDA CSWY	WICKHAM-US 1	20,230	UC	19,840	20,510	27,340	28,130	27,720	27,970	30,440	27,790	41,790	10/3/2016	Urban Principal Arterial-Other
352	PINEHURST	WICKHAM-ST. ANDREWS		2,410	2,350	2,360	2,380	2,520	2,310	2,240	2,220	2,540	15,600	11/28/2016	Urban Minor Collector
	PORT MALABAR	BABCOCK-US 1	14,395	19,280	11,870	16,210	11,340	15,820	10,810	15,820	14,590	17,160			
339	PORT MALABAR	BABCOCK-TROUTMAN	16,540	19,280	NC	16,210	NC	15,820	NC	15,820	NC	17,160	17,700	10/11/2016	Urban Minor Arterial
340	PORT MALABAR	TROUTMAN-US 1	12,250		11,870	NC	11,340	NC	10,810	NC	14,590	NC	17,700	11/11/2015	Urban Minor Arterial
329	POST	PINECONE-WICKHAM	10,220	10,330	9,650	9,580	8,790	8,840	8,560	9,030	8,890	9,660	15,600	10/25/2016	Urban Major Collector
	RJ CONLAN	PALM BAY RD-US 1		11,545	9,925	10,500	11,135	10,570	10,270	10,640	10,225	11,300			
562	RJ CONLAN	PALM BAY RD-COMMERCE		11,330	9,310	10,440	11,340	10,870	10,410	10,550	9,720	11,250	39,800	10/11/2016	Urban Principal Arterial-Other
563	RJ CONLAN	COMMERCE-US 1		11,760	10,540	10,560	10,930	10,270	10,130	10,730	10,730	11,350	39,800	10/11/2016	Urban Principal Arterial-Other
495	SARNO	EAU GALLIE-WICKHAM	17,000	15,110	15,440	15,110	14,180	14,080	14,530	15,050	14,390	16,870	41,790	10/24/2016	Urban Minor Arterial
	SARNO	WICKHAM-US 1	22,535	21,428	21,818	21,470	19,663	19,263	19,797	20,840	19,577	19,688			
358	SARNO	WICKHAM-CROTON	22,250	20,480	21,360	20,660	20,640	20,200	20,370	20,490	21,240	21,610	41,790	11/8/2016	Urban Minor Arterial
496	SARNO	Croton-Garfield	24,810	24,150	24,300	23,910	23,030	22,340	NC	23,580	23,110	20,210	41,790	10/24/2016	Urban Minor Arterial
498	SARNO	Garfield-Apollo	26,480	25,550	25,540	25,220	NC	NC	23,960	23,800	NC	21,710	41,790	11/8/2016	Urban Minor Arterial
499	SARNO	APOLLO-US 1	16,600	15,530	16,070	16,090	15,320	15,250	15,060	15,490	14,380	15,220	33,800	10/24/2016	Urban Minor Arterial
581	SHERIDAN	JOHN RODES-WICKHAM						2,870	NC	NC	NC	NC	15,600	11/27/2012	Urban Minor Collector
	ST ANDREWS	PINEDA CSWY -WICKHAM	5,145	4,560	4,710	5,490	4,570	3,815	3,390	3,417	3,335	3,240			
381	ST ANDREWS	Pineda Causeway-Interlachen	4,560		4,710	NC	4,570	3,450	3,390	4,080	4,460	NC	15,600	10/21/2015	Urban Minor Collector
325	ST ANDREWS	Interlachen-Pinehurst	5,730	5,740		5,490	NC	4,180	NC	3,990	NC	4,480	15,600	10/3/2016	Urban Minor Collector
326	ST ANDREWS	PINEHURST-WICKHAM		3,380						2,180	2,210	2,000	15,600	10/3/2016	Urban Minor Collector
	ST JOHNS HERITAGE PKWY	MALABAR-EMERSON										1,905			
609	ST JOHNS HERITAGE PKWY	MALABAR-PACE										2,210		10/12/2016	TO BE CLASSIFIED
610	ST JOHNS HERITAGE PKWY	PACE-EMERSON										1,600		10/12/2016	TO BE CLASSIFIED
564	SAN FILLIPPO	JUPITER-MALABAR		18,640	17,440	17,190	17,390	18,180	18,690	18,990	NC	21,400	17,700	11/29/2016	Urban Minor Arterial
324	SUNTREE	WICKHAM-US 1	16,710	16,060	17,240	17,660	15,370	15,350	15,250	16,500	18,040	16,140	15,600	11/1/2016	Urban Minor Collector
	TURTLEMOUND	EAU GALLIE BLVD-PINE CONE RD	7,583	7,295	6,820	6,660	5,890	5,835	5,907	6,630	5,480	6,743			
611	TURTLEMOUND	EAU GALLIE-AURORA									4,590	4,750	15,600	11/8/2016	Urban Major Collector
379	TURTLEMOUND	AURORA-LAKE WASHINGTON	9,170	8,840		8,220	NC	7,200	7,290	8,370	NC	10,070	15,600	10/25/2016	Urban Minor Collector
331	TURTLEMOUND	Lk Washington-Parkway	7,510		6,820	NC	5,890	NC	5,890	NC	6,370	NC	15,600	10/12/2015	Urban Major Collector
378	TURTLEMOUND	Parkway-Pine Cone Rd	6,070	5,750		5,100	NC	4,470	4,540	4,890	NC	5,410	15,600	10/25/2016	Urban Major Collector
569	UNIVERSITY	BABCOCK-US 1	8,750		7,980	NC	7,340	NC	7,880	NC	7,840	NC	33,800	10/12/2015	Urban Major Collector
	US 1	IND RVR CO-MALABAR	16,220	14,903	15,463	15,480	15,648	15,355	16,008	16,195	17,135	17,723			
416	US 1	Ind Rvr CL-Micco	19,390	18,440	19,180	19,040	19,500	19,610	20,140	21,130	21,610	22,840	41,790	10/4/2016	Urban Principal Arterial-Other
417	US 1	Micco-First St	13,240	13,020	13,470	13,620	13,750	13,210	14,120	13,930	15,650	15,920	41,790	10/4/2016	Urban Principal Arterial-Other
565	US 1	First St-Valkaria		12,680	13,000	13,140	12,930	12,900	13,740	13,530	14,030	14,010	41,790	10/4/2016	Urban Principal Arterial-Other
418	US 1	VALKARIA-MALABAR	16,030	15,470	16,200	16,120	16,410	15,700	16,030	16,190	17,250	18,120	41,790	10/11/2016	Urban Principal Arterial-Other
	US 1	MALABAR-RJ CONLAN	22,223	22,253	22,323	21,480	21,237	21,120	20,817	21,903	23,505	23,853			
419	US 1	Malabar-Port Malabar	20,490	20,280	20,620	19,830	20,140	UC	19,100	19,520	21,820	22,130	41,790	10/31/2016	Urban Principal Arterial-Other
420	US 1	Port Malabar-Palm Bay	24,300	23,550	24,060	23,170	22,610	22,230	22,680	24,320	25,190	25,990	39,800	10/31/2016	Urban Principal Arterial-Other
539	US 1	Palm Bay-RJ Conlan	21,880	22,930	22,290	21,440	20,960	20,010	20,670	21,870	NC	23,440	39,800	10/11/2016	Urban Principal Arterial-Other
	US 1	RJ CONLAN-STRAWBRIDGE	31,993	32,303	32,243	30,950	31,067	31,380	29,260	32,567	30,600	33,773			
343	US 1	RJ CONLAN-UNIVERSITY	30,670	31,240	30,330	29,940	29,570	28,310	29,260	30,750	30,770	32,480	59,900	10/11/2016	Urban Principal Arterial-Other
348	US 1	University-New Haven	37,860	36,620	37,560	35,020	35,820	34,450	UC	38,210	NC	39,310	59,900	10/31/2016	Urban Principal Arterial-Other
384	US 1	New Haven-Strawbridge	27,450	29,050	28,840	27,890	27,810	UC	UC	28,740	30,430	29,530	59,900	10/31/2016	Urban Principal Arterial-Other

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SPACE COAST TRANSPORTATION PLANNING ORGANIZATION TRAFFIC COUNTS: 2007 - 2016

ID	ROAD	SEGMENT (Sections)	2007 AADT	2008 AADT	2009 AADT	2010 AADT	2011 AADT	2012 AADT	2013 AADT	2014 AADT	2015 AADT	2016 AADT	Current MAV	Last Count Taken	Functional Classification
AREA: SOUTH															
	US 1	STRAWBRIDGE-SARNO	37,584	36,426	36,830	35,562	36,258	UC	UC	37,888	37,934	36,606			
385	US 1	Strawbridge-Hibiscus	39,640	36,710	40,590	38,170	38,860	UC	UC	41,310	40,480	40,730	59,900	10/17/2016	Urban Principal Arterial-Other
431	US 1	Hibiscus-NASA	31,140	32,880	33,750	32,260	33,800	UC	UC	35,120	34,430	32,230	59,900	11/28/2016	Urban Principal Arterial-Other
432	US 1	NASA-Cherry	38,180	35,890	34,550	32,260	32,740	UC	UC	35,480	34,840	32,700	59,900	11/28/2016	Urban Principal Arterial-Other
433	US 1	Cherry-Ballard	32,200	31,970	28,170	30,990	32,310	UC	UC	33,640	32,920	31,240	59,900	11/28/2016	Urban Principal Arterial-Other
434	US 1	Ballard-Sarno	46,760	44,680	47,090	44,130	43,580	UC	UC	43,890	47,000	46,130	59,900	11/1/2016	Urban Principal Arterial-Other
	US 1	SARNO-PINEDA	40,585	40,673	39,695	39,327	39,238	35,453	35,315	40,158	42,062	40,128			
435	US 1	Sarno-Eau Gallie	54,210	50,000	49,740	52,210	52,110	UC	UC	52,660	52,460	36,440	59,900	11/28/2016	Urban Principal Arterial-Other
442	US 1	EAU GALLIE-AURORA	42,590	42,720	40,480	38,570	37,960	UC	UC	38,490	40,440	41,280	59,900	10/26/2016	Urban Principal Arterial-Other
450	US 1	Aurora-LkWashington	36,520	39,190	38,050	36,920	36,940	UC	36,260	37,200	38,610	37,060	59,900	11/8/2016	Urban Principal Arterial-Other
436	US 1	LkWashington-Parkway	37,080	36,400	36,490	35,720	35,820	34,570	32,620	35,870	37,300	43,400	59,900	10/26/2016	Urban Principal Arterial-Other
437	US 1	Parkway-Post	36,020	37,160	37,230	36,550	36,160	34,790	36,230	36,570	37,880	40,260	59,900	11/1/2016	Urban Principal Arterial-Other
415	US 1	POST-PINEDA	37,090	38,570	36,180	35,990	36,440	37,000	36,150	NC	45,680	42,330	59,900	11/1/2016	Urban Principal Arterial-Other
	US 192	OSCEOLA CO-I-95	7,370	7,310	7,690	7,510	7,490	7,370	7,300	7,710	8,745	8,755			
590	US 192	OSCEOLA CO-SIMON RD							7,390	7,700	8,390	7,930	49,600	10/18/2016	Rural Principal Arterial Other
362	US 192	SIMON RD-I-95	7,370	7,310	7,690	7,510	7,490	7,370	7,210	7,720	9,100	9,580	41,790	10/18/2016	Urban Principal Arterial-Other
	US 192	I-95-WICKHAM	26,420	25,735	24,300	24,105	25,050	25,580	25,410	26,890	29,090	30,030			
421	US 192	I-95-John Rodes	24,430	24,050	22,740	22,140	23,860	24,880	24,800	26,690	29,320	30,180	39,800	10/18/2016	Urban Principal Arterial-Other
422	US 192	John Rodes-Wickham	28,410	27,420	25,860	26,070	26,240	26,280	26,020	27,090	28,860	29,880	39,800	10/18/2016	Urban Principal Arterial-Other
	US 192	WICKHAM-BABCOCK	33,870	34,743	34,597	33,600	33,137	32,157	31,103	32,006	32,833	32,717			
424	US 192	Wickham-Dayton	36,540	37,380	36,150	35,680	36,260	33,300	32,410	35,650	35,700	35,340	39,800	10/19/2016	Urban Principal Arterial-Other
388	US 192	Dayton-Windover Sq ent	38,580	40,640	40,160	38,270	40,280	37,650	36,980	38,730	38,270	37,160	39,800	11/1/2016	Urban Principal Arterial-Other
425	US 192	Windover Sq-Hollywood	38,620	37,460	36,750	36,100	37,800	34,680	34,200	34,650	35,740	33,970	39,800	10/19/2016	Urban Principal Arterial-Other
363	US 192	Hollywood-McClain (W Mall ent)	33,310	33,190	NC	32,820	33,360	30,450	NC	29,620	NC	31,390	39,800	10/19/2016	Urban Principal Arterial-Other
426	US 192	McClain (W Mall ent)-Sunset (E Mall ent)	32,520		32,360	NC	32,010	NC	27,570	NC	28,680	NC	39,800	11/3/2015	Urban Principal Arterial-Other
427	US 192	Sunset (E Mall ent)-Dairy	36,020	35,480	34,670	32,970	34,510	31,750	30,910	33,680	33,320	32,590	39,800	10/19/2016	Urban Principal Arterial-Other
428	US 192	Dairy-Airport	33,770	32,480	31,230	32,830	30,650	31,750	30,250	29,400	30,670	31,680	39,800	10/17/2016	Urban Principal Arterial-Other
373	US 192	Airport-Country Club	28,260		30,860	NC	27,480	NC	25,400	NC	27,450	NC	39,800	10/21/2015	Urban Principal Arterial-Other
429	US 192	Country Club-Babcock	27,210	26,570	NC	26,530	25,880	25,520	NC	22,310	NC	26,890	39,800	10/17/2016	Urban Principal Arterial-Other
	US 192	BABCOCK-NEW HAVEN	18,640	19,245	18,548	19,080	18,444	18,198	17,722	17,828	20,058	20,585			
430	US 192	Babcock-New Haven	22,730	22,020	22,670	21,920	20,660	21,450	20,630	19,680	20,430	22,190	32,400	11/29/2016	Urban Principal Arterial-Other
451	US 192	New Haven-Pine	17,070		16,120	NC	18,920	NC	16,360	NC	20,670	NC	32,400	12/9/2015	Urban Principal Arterial-Other
452	US 192	Pine-Hickory	17,270	16,840	NC	16,500	NC	16,370	NC	15,450	NC	19,640	32,400	10/12/2016	Urban Principal Arterial-Other
453	US 192	Hickory-Livingston	16,870		14,750	NC	15,950	NC	15,390	NC	16,350	NC	32,400	10/12/2015	Urban Principal Arterial-Other
454	US 192	Livingston-Waverly	16,880	16,420	NC	16,570	NC	15,890	NC	15,090	NC	17,160	32,400	10/31/2016	Urban Principal Arterial-Other
508	US 192	Waverly-US 1	17,210		17,030	NC	16,330	NC	15,560	NC	NC	NC	32,400	10/1/2013	Urban Principal Arterial-Other
509	US 192	US 1-NEW HAVEN	22,450	21,700	22,170	21,330	20,360	19,080	20,670	21,090	22,780	23,350	32,400	10/12/2016	Urban Principal Arterial-Other
	VALKARIA	BABCOCK-US 1	3,085	2,835	3,530	2,100	3,250	1,940	3,440	2,270	3,600	2,520			
517	VALKARIA	Babcock-Corey	3,650	3,430	3,530	NC	3,250	NC	3,440	NC	3,600	NC	14,200	10/21/2015	Rural Major Collector
512	VALKARIA	Corey-US 1	2,520	2,240	NC	2,100	NC	1,940	NC	2,270	NC	2,520	14,200	11/29/2016	Rural Major Collector
	WICKHAM	US 192-NASA	28,460	27,713	30,230	25,793	26,080	UC	UC	23,790	25,907	24,643			
404	WICKHAM	US 192-Sheridan	27,700	26,930	31,100	25,810	26,050	UC	UC	23,730	25,700	22,840	39,800	10/19/2016	Urban Principal Arterial-Other
405	WICKHAM	Sheridan-Greenboro	28,840	28,370	29,880	25,970	26,030	UC	UC	23,500	25,880	24,650	39,800	11/8/2016	Urban Principal Arterial-Other
406	WICKHAM	Greenboro-NASA	28,840	27,840	29,710	25,600	26,160	UC	UC	24,140	26,140	26,440	39,800	10/19/2016	Urban Principal Arterial-Other

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SPACE COAST TRANSPORTATION PLANNING ORGANIZATION TRAFFIC COUNTS: 2007 - 2016

ID	ROAD	SEGMENT (Sections)	2007 AADT	2008 AADT	2009 AADT	2010 AADT	2011 AADT	2012 AADT	2013 AADT	2014 AADT	2015 AADT	2016 AADT	Current MAV	Last Count Taken	Functional Classification
AREA: SOUTH															
	WICKHAM	NASA-SARNO	37,755	38,375	38,498	35,935	37,368	35,233	33,435	35,715	36,240	33,643			
407	WICKHAM	NASA-Harper	37,500	38,020	37,320	34,810	36,270	34,170	32,900	35,200	NC	37,660	39,800	10/19/2016	Urban Principal Arterial-Other
408	WICKHAM	Harper-Wright	37,970	37,080	36,990	34,960	36,640	34,270	NC	34,370	NC	33,360	39,800	10/24/2016	Urban Principal Arterial-Other
365	WICKHAM	Wright-Fountainhead	37,160	39,050	39,820	36,440	37,950	35,360	33,970	35,770	36,240	29,510	39,800	10/24/2016	Urban Principal Arterial-Other
350	WICKHAM	Fountainhead-Sarno	38,390	39,350	39,860	37,530	38,610	37,130	NC	37,520	NC	38,060	33,800	10/24/2016	Urban Principal Arterial-Other
	WICKHAM	SARNO-PARKWAY	35,203	36,423	38,168	35,463	35,788	34,593	33,193	32,853	35,965	34,953			
409	WICKHAM	Sarno-Eau Gallie	36,920	38,680	38,970	36,750	38,000	36,970	34,630	34,420	36,290	36,870	33,800	10/24/2016	Urban Principal Arterial-Other
410	WICKHAM	Eau Gallie-Aurora	36,210	37,210	39,700	37,260	36,980	35,820	34,290	33,200	43,090	33,020	33,800	11/28/2016	Urban Principal Arterial-Other
411	WICKHAM	Aurora-Lake Washington	35,430	36,670	38,500	35,650	35,920	34,520	33,290	33,340	34,210	35,880	33,800	10/24/2016	Urban Principal Arterial-Other
412	WICKHAM	LkWashington-Parkway	32,250	33,130	35,500	32,190	32,250	31,060	30,560	30,450	30,270	34,040	39,800	10/25/2016	Urban Principal Arterial-Other
	WICKHAM	PARKWAY-PINEDA CSWY	34,468	35,678	36,276	34,152	36,006	34,832	33,928	34,016	34,962	35,882			
413	WICKHAM	Parkway-Post	32,550	33,540	36,160	31,910	33,800	32,200	31,000	31,750	32,140	34,330	39,800	10/25/2016	Urban Principal Arterial-Other
414	WICKHAM	Post-Kensington	36,340	38,330	37,430	35,380	36,870	35,540	34,320	34,850	36,000	34,510	39,800	10/25/2016	Urban Principal Arterial-Other
389	WICKHAM	Kensington-Mariah Dr	34,870	35,890	37,290	34,710	37,020	35,010	34,230	33,960	34,880	34,240	39,800	11/9/2016	Urban Principal Arterial-Other
540	WICKHAM	Mariah Dr-Business Ctr.	34,720	35,250	35,320	34,530	36,530	35,240	34,740	34,380	35,170	36,870	39,800	10/25/2016	Urban Principal Arterial-Other
364	WICKHAM	Business Ctr.-Pineda Cswy.	33,860	35,380	35,180	34,230	35,810	36,170	35,350	35,140	36,620	39,460	39,800	10/25/2016	Urban Principal Arterial-Other
	WICKHAM	PINEDA CSWY-SUNTREE BLVD	30,653	31,133	30,863	29,323	26,927	24,910	24,243	23,790	23,733	27,197			
403	WICKHAM	Pineda Cswy.-Jordan Blass	33,570	33,850	33,490	32,200	30,490	27,700	26,570	25,620	26,540	29,660	39,800	10/3/2016	Urban Principal Arterial-Other
402	WICKHAM	Jordan Blass-St Andrews	28,620	29,420	29,600	27,460	24,640	22,950	22,200	21,940	20,720	25,370	39,800	10/3/2016	Urban Principal Arterial-Other
401	WICKHAM	St. Andrews-Suntree	29,770	30,130	29,500	28,310	25,650	24,080	23,960	23,810	23,940	26,560	39,800	10/3/2016	Urban Principal Arterial-Other
	WICKHAM	SUNTREE-MURRELL	36,265	36,338	37,315	36,650	31,480	29,190	29,028	29,358	29,620	31,723			
400	WICKHAM	Suntree-Pinehurst (N)	37,100	38,680	37,660	37,030	31,720	29,670	29,070	29,980	30,300	32,590	39,800	10/3/2016	Urban Principal Arterial-Other
399	WICKHAM	Pinehurst (N)-Interlachen		34,480	35,550	35,020	29,950	27,850	28,010	28,810	28,360	30,710	39,800	10/3/2016	Urban Principal Arterial-Other
397	WICKHAM	Interlachen-Baytree		36,940	38,570	37,900	32,650	30,160	29,960	29,400	30,220	32,870	39,800	10/3/2016	Urban Principal Arterial-Other
396	WICKHAM	Baytree-Murrell	35,430	35,250	37,480	36,650	31,600	29,080	29,070	29,240	29,600	30,720	39,800	10/3/2016	Urban Principal Arterial-Other
	WICKHAM	MURRELL-LAKE ANDREW	33,667	31,110	34,030	34,133	34,253	33,680	34,143	34,713					
395	WICKHAM	MURRELL-I-95	41,120	38,740	42,690	41,410	37,960	34,390	34,220	34,400	UC	UC	39,800	10/22/2014	Urban Principal Arterial-Other
394	WICKHAM	I-95-Wal-Mart/Target Ent. (signal)	36,090	32,650	35,500	35,780	37,570	38,640	39,240	39,960	UC	UC	39,800	10/22/14	Urban Principal Arterial-Other
393	WICKHAM	Wal-Mart/Target Ent.-Lake Andrew	23,790	21,940	23,900	25,210	27,230	28,010	28,970	29,780	UC	UC	39,800	10/22/2014	Urban Minor Arterial
	WICKHAM	LAKE ANDREW-LEGACY		5,435	8,270	4,150	8,900	4,150	9,970	5,010	11,320	NC			
392	WICKHAM	Lake Andrew-Stadium		7,090	8,270	NC	8,900	NC	9,970	NC	11,320	NC	17,700	12/9/2015	Urban Local
391	WICKHAM	Stadium-Legacy		3,780	NC	4,150	NC	4,150	NC	5,010	NC	NC	17,700	10/22/2014	Urban Local
582	WOODY BURKE	Hibiscus-NASA						4,370	NC	NC	NC	NC	15,600	10/16/2012	Urban Major Collector
AREA: BEACHES - NOTE: No counts were taken in 2015.															
	CENTRAL	SR A1A-RIDGEWOOD	3,840	4,540	2,670	4,320	2,510	4,100	2,660	4,300		3,945			
303	CENTRAL	SR A1A-N Atlantic	4,820	4,540	NC	4,320	NC	4,100	NC	4,300		5,290	15,600	11/15/2016	Urban Minor Collector
301	CENTRAL	N Atlantic-Ridgewood	2,860		2,670	NC	2,510	NC	2,660	NC		2,600	15,600	1/20/2016	Urban Minor Collector
	EAU GALLIE	CAUSEWAY-SR A1A	32,375	32,465	31,180	30,685	31,370	30,790	29,930	30,830		31,215			
312	EAU GALLIE	CAUSEWAY	37,780	38,430	36,980	36,540	37,120	36,810	35,670	36,000		38,280	41,790	11/30/2016	Urban Principal Arterial-Other
293	EAU GALLIE	S PATRICK-SR A1A	26,970	26,500	25,380	24,830	25,620	24,770	24,190	25,660		24,150	41,790	11/16/2016	Urban Principal Arterial-Other
310	GEORGE KING	DAVE NISBET-N ATLANTIC		8,600	NC	7,920	NC	7,190	NC	7,480		NC	33,800	12/9/2014	Urban Minor Collector
	N. ATLANTIC	SR A1A-GEORGE KING	7,897	7,640	6,020	6,770	5,990	6,710	6,045	7,255		5,975			
298	N. ATLANTIC	SR A1A-Canaveral Bch	9,400	8,950	NC	8,330	NC	8,120	NC	8,580		NC	15,600	11/12/2014	Urban Minor Collector
299	N. ATLANTIC	Canaveral Bch-Central	7,700		6,650	NC	6,600	NC	6,570	NC		6,000	15,600	1/13/2016	Urban Minor Collector
300	N. ATLANTIC	Central-George King	6,590	6,330	5,390	5,210	5,380	5,300	5,520	5,930		5,950	15,600	1/20/2016	Urban Minor Collector

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SPACE COAST TRANSPORTATION PLANNING ORGANIZATION TRAFFIC COUNTS: 2007 - 2016

ID	ROAD	SEGMENT (Sections)	2007 AADT	2008 AADT	2009 AADT	2010 AADT	2011 AADT	2012 AADT	2013 AADT	2014 AADT	2015 AADT	2016 AADT	Current MAV	Last Count Taken	Functional Classification
AREA: BEACHES - NOTE: No counts were taken in 2015.															
	OAK ST.	SR A1A-OCEAN	3,457	3,510	4,100	3,285	4,060	3,175	4,190	3,035		3,270			
314	OAK ST.	SR A1A-Bonita	2,010	1,990	NC	1,830	NC	1,870	NC	1,660		1,840	15,600	11/30/2016	Urban Major Collector
306	OAK ST.	Bonita-Surf	3,440		3,510	NC	3,430	NC	3,390	NC		3,190	15,600	11/12/2016	Urban Major Collector
305	OAK ST.	Surf-SR A1A/Ocean	4,920	5,030	4,690	4,740	4,690	4,480	4,990	4,410		4,780	15,600	11/30/2016	Urban Major Collector
307	OCEAN BEACH	VOLUSIA LN-YOUNG	3,720	3,770	3,460	UC	3,350	3,240	3,510	3,670		4,210	15,600	11/15/2016	Urban Minor Collector
	PINEDA CSWY	US 1-SR A1A	29,673	30,140	30,120	29,227	31,240	31,060	31,430	32,730		33,680			
267	PINEDA CSWY	US 1-S TROPICAL	37,670	38,680	38,130	36,740	38,590	38,760	39,870	41,210		42,750	65,600	11/15/2016	Urban Principal Arterial-Other
266	PINEDA CSWY	S TROPICAL-S PATRICK	34,760	33,960	34,240	33,890	36,770	36,480	35,960	37,510		37,930	65,600	11/15/2016	Urban Principal Arterial-Other
268	PINEDA CSWY	S PATRICK-SR A1A	16,590	17,780	17,990	17,050	18,360	17,940	18,460	19,470		20,360	41,790	11/15/2016	Urban Principal Arterial-Other
302	RIDGEWOOD	YOUNG-CENTRAL		2,180	NC	UC	UC	1,930	NC	2,000		2,360	15,600	11/30/2016	Urban Minor Collector
	RIVERSIDE	US 192-EAU GALLIE	10,037	10,107	9,865	9,610	9,740	9,380	9,780	7,575		10,323			
292	RIVERSIDE	US 192-Riviera	9,990	9,920	9,520	NC	9,270	NC	9,260	NC		9,380	15,600	1/12/2016	Urban Minor Arterial
286	RIVERSIDE	Riviera-Paradise	9,670	9,710	NC	9,220	NC	8,940	NC	7,700		10,230	15,600	11/16/2016	Urban Minor Arterial
313	RIVERSIDE	Paradise-Eau Gallie	10,450	10,690	10,210	10,000	10,210	9,820	10,300	7,450		11,360	15,600	11/16/2016	Urban Minor Arterial
	S. PATRICK	EAU GALLIE-BANANA RVR	UC	24,545	21,400	23,840	22,350	24,130	21,440	22,660		22,960			
251	S. PATRICK	Eau Gallie-Yacht Club	UC	25,710	NC	23,840	NC	24,130	NC	22,660		24,030	41,790	11/16/2016	Urban Minor Arterial
253	S. PATRICK	Yacht Club-Banana Rvr Dr	UC	23,380	21,400	NC	22,350	NC	21,440	NC		21,890	41,790	11/12/2016	Urban Minor Arterial
	S. PATRICK	BANANA RVR-PINEDA	15,050	15,903	14,663	15,908	15,807	16,375	14,953	15,790		15,361			
541	S. PATRICK	BANANA RVR DR-DESOTO	18,240		NC	19,340	NC	19,680	NC	18,320		18,670	19,470	11/16/2016	Urban Minor Arterial
259	S. PATRICK	DESOTO-JACKSON	15,790	17,720	15,430	NC	17,400	NC	16,510	NC		15,230	18,590	1/12/2016	Urban Minor Arterial
262	S. PATRICK	Jackson-Titan	14,770	15,940	NC	15,340	NC	15,560	NC	14,980		15,530	19,470	11/16/2016	Urban Minor Arterial
263	S. PATRICK	Titan-Shearwater Pkwy	13,690		14,180	NC	15,050	NC	14,240	NC		13,790	19,470	1/12/2016	Urban Minor Arterial
264	S. PATRICK	Shearwater Pkwy-Berkeley	13,920	14,750	NC	14,330	NC	15,030	NC	14,530		14,990	19,470	11/16/2016	Urban Minor Arterial
265	S. PATRICK	Berkeley-Ocean	14,050		14,380	NC	14,970	NC	14,110	NC		13,540	18,590	1/12/2016	Urban Minor Arterial
287	S. PATRICK	Ocean-Pineda S Ramps	14,890	15,200	NC	14,620	NC	15,230	NC	15,330		15,780	18,590	11/15/2016	Urban Minor Arterial
	SR AIA	INDIAN RVR CO-US 192	11,796	10,926	10,486	10,386	10,517	10,934	10,720	10,773		11,487			
295	SR AIA	Ind Rvr Co-Strawberry Ln.	3,150	2,700	2,350	2,640	2,450	2,550	2,580	2,460		3,000	24,200	12/6/2016	Urban Minor Arterial
249	SR AIA	Strawberry Ln.-Heron Dr.	5,130	4,630	4,320	4,450	4,450	4,390	4,550	4,570		4,920	24,200	12/6/2016	Urban Minor Arterial
542	SR AIA	HERON-MARLEN	9,390	8,530	8,400	8,260	8,350	8,280	8,310	8,210		9,350	24,200	12/6/2016	Urban Minor Arterial
296	SR AIA	MarLen Dr-Oak	14,930	13,560	12,780	12,670	12,870	13,080	12,690	12,870		14,410	24,200	12/6/2016	Urban Minor Arterial
260	SR AIA	Oak-Ocean	13,370	12,130	11,490	11,400	11,490	11,940	11,440	11,660		13,180	17,700	12/6/2016	Urban Minor Arterial
248	SR AIA	Ocean-Miami	17,700	16,750	16,240	16,010	16,170	17,010	16,620	16,400		16,830	17,700	11/30/2016	Urban Minor Arterial
383	SR AIA	Miami-US192	18,900	18,180	17,820	17,270	17,840	19,290	18,850	19,240		18,720	17,700	11/16/2016	Urban Minor Arterial
	SR AIA	US 192-EAU GALLIE	26,845	26,070	25,450	25,560	25,555	25,455	25,060	26,425		25,550			
250	SR AIA	US 192-Paradise	26,670	25,420	25,070	25,000	25,200	24,840	25,150	25,480		24,280	41,790	11/16/2016	Urban Principal Arterial-Other
294	SR AIA	Paradise-Eau Gallie	27,020	26,720	25,830	26,120	25,910	26,070	24,970	27,370		26,820	41,790	11/30/2016	Urban Principal Arterial-Other

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ID	ROAD	SEGMENT (Sections)	2007 AADT	2008 AADT	2009 AADT	2010 AADT	2011 AADT	2012 AADT	2013 AADT	2014 AADT	2015 AADT	2016 AADT	Current MAV	Last Count Taken	Functional Classification
AREA: BEACHES - NOTE: No counts were taken in 2015.															
	SR AIA	EAU GALLIE-PINEDA	25,019	23,320	24,358	22,803	23,446	23,505	22,344	22,863		24,300			
252	SR AIA	Eau Gallie-Palm Springs	29,420	NC	27,430	NC	27,410	NC	25,640	NC		27,350	41,790	3/9/2016	Urban Principal Arterial-Other
254	SR AIA	Palm Springs-Pine Tree	28,120	25,940	NC	25,480	NC	26,600	NC	25,540		NC	41,790	11/18/2014	Urban Principal Arterial-Other
255	SR AIA	Pine Tree-DeSoto	27,530	NC	27,610	NC	26,950	NC	25,160	NC		26,770	41,790	1/13/2016	Urban Principal Arterial-Other
256	SR AIA	DeSoto-Cassia	26,530	23,810	NC	23,830	NC	24,350	NC	23,630		NC	41,790	11/18/2014	Urban Principal Arterial-Other
257	SR AIA	Cassia-Jackson	26,340	NC	25,490	NC	24,400	NC	22,810	NC		24,160	41,790	3/1/2016	Urban Principal Arterial-Other
543	SR AIA	Jackson-Patrick	23,940	22,630	NC	21,850	NC	22,580	NC	22,120		NC	41,790	11/18/2014	Urban Principal Arterial-Other
258	SR AIA	Patrick-Berkeley	23,170	NC	22,410	NC	21,610	NC	20,510	NC		23,320	41,790	1/12/2016	Urban Principal Arterial-Other
544	SR AIA	Berkeley-Ocean	21,810	20,900	NC	20,050	NC	20,490	NC	20,160		NC	41,790	11/18/2014	Urban Principal Arterial-Other
545	SR AIA	Ocean-Pineda	18,310	NC	18,850	NC	16,860	NC	17,600	NC		19,900	41,790	1/13/2016	Urban Principal Arterial-Other
	SR AIA	PINEDA-S END ONE-WAY	18,180	18,480	18,115	17,850	17,950	17,595	17,095	17,560		18,455			
261	SR AIA	Pineda-Main Gate	18,920	19,360	19,050	19,040	18,780	18,440	17,840	18,490		20,170	41,790	11/15/2016	Urban Principal Arterial-Other
387	SR AIA	Main Gate-S End One Way	17,440	17,600	17,180	16,660	17,120	16,750	16,350	16,630		16,740	41,790	11/30/2016	Urban Principal Arterial-Other
	SR AIA (NORTHBOUND)	ONE WAY NORTH	14,270	14,225	12,370	12,005	12,270	11,675	11,945	11,465		12,030			
269	SR AIA	S End-Minutemen Cswy	12,270	12,660	11,250	10,880	11,100	10,620	10,860	10,530		10,530	19,440	2/17/2016	Urban Principal Arterial-Other
272	SR AIA	Minutemen-N End One Way	16,270	15,790	13,490	13,130	13,440	12,730	13,030	12,400		13,530	19,440	1/12/2016	Urban Principal Arterial-Other
	SR AIA (SOUTHBOUND)	ONE WAY SOUTH	11,700	12,135	12,700	12,210	11,730	12,240	12,000	11,675		11,935			
270	SR AIA	N End One Way-Minutemen	13,900	14,690	13,980	13,550	12,990	13,510	13,090	12,690		12,690	19,440	2/17/2016	Urban Principal Arterial-Other
546	SR AIA	Minutemen-S End One Way	9,500	9,580	11,420	10,870	10,470	10,970	10,910	10,660		11,180	19,440	1/14/2016	Urban Principal Arterial-Other
	SR AIA	N END ONE WAY-SR 520	35,178	35,452	34,076	32,090		32,452	31,816	30,930		33,743			
273	SR AIA	Cocoa Isles-Tulip	32,700	33,960	32,600	30,130	UC	31,730	30,660	29,760		31,270	34,020	11/15/2016	Urban Principal Arterial-Other
274	SR AIA	Tulip-Bahama Blvd	35,480	34,880	33,290	31,580	UC	31,840	31,620	30,210		35,710	34,020	11/15/2016	Urban Principal Arterial-Other
275	SR AIA	Bahama Blvd-S Banana		34,920	NC	32,310	UC	32,390	NC	30,890		NC	34,020	11/18/2014	Urban Principal Arterial-Other
276	SR AIA	S Banana-Fisher Park	36,200	NC	34,260	NC	UC	NC	33,150	NC		34,830	34,020	2/3/2016	Urban Principal Arterial-Other
277	SR AIA	Fisher Park-St Lucie	37,500	37,490	36,070	33,780	UC	33,730	32,470	32,670		34,880	34,020	11/15/2016	Urban Principal Arterial-Other
278	SR AIA	St Lucie-Marion	35,990	36,010	NC	32,650	UC	32,570	NC	31,120		31,900	34,020	11/15/2016	Urban Principal Arterial-Other
279	SR AIA	Marion-SR 520	33,200	NC	34,160	NC	UC	NC	31,180	NC		33,870	34,020	3/1/2016	Urban Principal Arterial-Other
	SR AIA	SR 520-N ATLANTIC	33,584	34,145	31,793	30,758	29,325	29,905	29,350	30,078		30,070			
280	SR AIA	SR 520-Osceola	31,490	34,750	30,910	29,880	26,330	28,370	28,300	28,450		27,780	39,800	11/15/2016	Urban Principal Arterial-Other
281	SR AIA	Osceola-Shepard	31,610	32,520	30,120	28,920	28,480	28,210	28,110	28,360		28,390	39,800	11/16/2016	Urban Principal Arterial-Other
282	SR AIA	Shepard-McKinley	35,440	35,020	NC	32,450	NC	32,460	NC	32,150		30,790	39,800	11/16/2016	Urban Principal Arterial-Other
297	SR AIA	McKinley-Buchanan	35,090	NC	33,310	NC	31,510	NC	30,620	NC		32,990	39,800	1/13/2016	Urban Principal Arterial-Other
283	SR AIA	Buchanan-N Atlantic	34,290	34,290	32,830	31,780	30,980	30,580	30,370	31,350		30,400	39,800	11/16/2016	Urban Principal Arterial-Other
	SR AIA	N ATLANTIC-SR 401	31,495	30,835	29,305	28,310	26,900	26,840	28,310	28,550		28,205			
285	SR AIA	N Atlantic-Central	26,800	27,810	26,590	25,210	24,470	23,920	24,840	24,680		25,490	41,790	12/6/2016	Urban Principal Arterial-Other
284	SR AIA	Central-SR 401	36,190	33,860	32,020	31,410	29,330	29,760	31,780	32,420		30,920	39,800	11/16/2016	Urban Principal Arterial-Other
309	SR 401	SR 528-CCAFS	11,520	10,720	11,840	12,660	11,190	10,830	11,860	12,110		12,860	39,800	11/16/2016	Urban Minor Arterial
	SR 520	W M.I. CAUSEWAY-SR A1A	26,895	26,580	26,225	24,975	25,055	24,000	24,130	24,685		24,925			
288	SR 520	CAUSEWAY	27,110	27,180	27,200	25,720	25,570	24,180	24,610	25,520		25,640	39,800	11/15/2016	Urban Principal Arterial-Other
311	SR 520	E END CSWY-SR A1A	26,680	25,980	25,250	24,230	24,540	23,820	23,650	23,850		24,210	34,020	11/15/2016	Urban Principal Arterial-Other
	US 192	CAUSEWAY-SR A1A	30,710	29,560	28,540	27,415	29,230	26,290	27,680	28,385		29,195			
289	US 192	CAUSEWAY	37,460	35,690	34,180	32,600	35,030	31,270	33,360	34,140		35,000	41,790	11/16/2016	Urban Principal Arterial-Other
290	US 192	RIVERSIDE-SR A1A	23,960	23,430	22,900	22,230	23,430	21,310	22,000	22,630		23,390	34,020	11/16/2016	Urban Principal Arterial-Other

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INTERSTATE 95 - COUNTS PROVIDED BY FLORIDA DEPARTMENT OF TRANSPORTATION															
70-0134	INTERSTATE 95	INDIAN RIVER COUNTY - MALABAR (SR 514	37,809	33,390	35,648	35,519	34,330	35,277	35,000	39,614	40,650	42,760	64,000		Rural Principal Arterial-Interstate
70-0428	INTERSTATE 95	MALABAR (SR 514) - PALM BAY	59,500	77,500	49,500	48,500	48,500	48,500	31,500	55,000	59,500	64,500	111,800		Urban Principal Arterial-Interstate
70-0371	INTERSTATE 95	PALM BAY - US 192	83,000	80,000	78,000	77,000	68,000	68,000	65,000	67,500	72,000	81,500	111,800		Urban Principal Arterial-Interstate
70-0372	INTERSTATE 95	US 192 - EAU GALLIE (SR 518)	74,000	81,500	79,500	78,000	68,000	68,000		41,000	43,500	68,500	111,800		Urban Principal Arterial-Interstate
70-0415	INTERSTATE 95	EAU GALLIE (SR 518)-WICKHAM	86,000	83,000	69,500	68,500	68,500	69,500	76,000	76,500	81,000	82,500	111,800		Urban Principal Arterial-Interstate
70-0388	INTERSTATE 95	WICKHAM-FISKE	80,000	77,000	70,000	69,000	55,000	57,500	55,000	57,000	60,500	68,000	111,800		Urban Principal Arterial-Interstate
70-9919	INTERSTATE 95	FISKE-SR 520	40,500	39,500	63,609	63,600	63,291	64,312	67,139	71,181	77,120	81,760	111,800		Urban Principal Arterial-Interstate
70-0366	INTERSTATE 95	SR 520-SR 524	65,000	63,000	61,400	61,400	61,400			37,500	40,000	42,000	111,800		Urban Principal Arterial-Interstate
70-0368	INTERSTATE 95	SR 524-SR 528	57,500	55,500	54,500	54,500	52,000	53,000	50,500	54,000	57,000	65,000	111,800		Urban Principal Arterial-Interstate
70-0439	INTERSTATE 95	SR 528-PORT ST. JOHNS	42,000	48,500	45,500	36,500	36,500	36,500	21,900	23,000	24,500	84,500	111,800		Urban Principal Arterial-Interstate
70-0401	INTERSTATE 95	PORT ST. JOHN CONNECTOR-SR 407	45,000	41,000	38,500	39,000	53,500	53,500	37,000	38,500	42,000	45,000	111,800		Urban Principal Arterial-Interstate
70-0402	INTERSTATE 95	SR 407-SR 50	40,000	39,500	39,000	39,000	39,000	39,000	23,400	24,200	25,700	36,500	111,800		Urban Principal Arterial-Interstate
70-0364	INTERSTATE 95	SR 50-SR 406	41,000	42,500	39,500	39,500	52,500	52,500	36,000	37,500	39,500	26,500	111,800		Urban Principal Arterial-Interstate
70-0363	INTERSTATE 95	SR 406-SR 46	34,500	33,000	34,500	31,000	31,500	29,500	38,500	40,000	34,000	39,500	74,400		Urban Principal Arterial-Interstate
70-0322	INTERSTATE 95	SR 46-DEERING PARKWAY	29,342	27,122	27,654	27,800	26,524	26,283	26,000	25,000	25,500	32,680	43,000		Rural Principal Arterial-Interstate
70-0436	INTERSTATE 95	DEERING PARKWAY-VOLUSIA CO.	27000	24500	26000	24,500	30,500	30,000	26,500	27,500	36,000	29,000	43,000		Rural Principal Arterial-Interstate

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FLORIDA DEPARTMENT OF TRANSPORTATION
 TRANSPORTATION STATISTICS OFFICE
 2020 HISTORICAL AADT REPORT

COUNTY: 70 - BREVARD

SITE: 0090 - SR-500/US-192, 0.979 MI. W OF I-95 HPMS '17

YEAR	AADT		DIRECTION 1		DIRECTION 2		*K FACTOR	D FACTOR	T FACTOR
2020	10300	C	E	5000	W	5300	9.50	55.00	18.20
2019	7700	F	E	4200	W	3500	9.50	54.70	16.40
2018	7700	C	E	4200	W	3500	9.50	54.10	16.40
2017	9300	C	E	4700	W	4600	9.50	54.30	12.40
2016	8800	C	E	4800	W	4000	9.50	53.40	16.20
2015	8100	C	E	3800	W	4300	9.50	53.80	17.20
2014	7000	C	E	3500	W	3500	9.50	53.80	16.10
2013	6600	C	E	3300	W	3300	9.50	54.20	16.60
2012	6200	C	E	3100	W	3100	9.50	53.60	17.40
2011	6300	C	E	3100	W	3200	9.50	54.30	14.30
2010	6100	C	E	3000	W	3100	10.91	56.02	18.70
2009	6200	C	E	3100	W	3100	11.80	61.02	14.10
2008	5600	C	E	2800	W	2800	11.37	57.79	22.80
2007	5800	C	E	2900	W	2900	10.58	60.32	20.90
2006	5700	C	E	2800	W	2900	11.35	57.22	23.30
2005	6000	C	E	3000	W	3000	11.30	53.80	11.40

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
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*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

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COUNTY: 70 - BREVARD

SITE: 0114 - SR-5/US-1, 0.2 MI S OF SR-514, MALABAR, BREVARD CO.

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2020	15236 C	N 7640	S 7596	9.00	55.20	6.30
2019	17016 C	N 8564	S 8452	9.00	55.10	5.50
2018	17061 C	N 8600	S 8461	9.00	54.70	5.50
2017	16799 C	N 8474	S 8325	9.00	54.20	5.30
2016	16290 C	N 8187	S 8103	9.00	53.30	5.10
2015	15475 C	N 7787	S 7688	9.00	52.70	5.10
2014	14831 C	N 7457	S 7374	9.00	53.50	5.00
2013	14191 C	N 7117	S 7074	9.00	53.10	5.00
2012	13779 C	N 6982	S 6797	9.00	52.60	4.80
2011	13914 C	N 6983	S 6931	9.00	51.90	4.80
2010	14008 C	N 7025	S 6983	10.74	53.66	4.90
2009	13890 C	N 6950	S 6940	11.24	54.44	4.90
2008	14009 C	N 6998	S 7011	11.24	54.44	5.30
2007	14595 C	N 7315	S 7280	10.50	54.76	5.20
2006	15391 C	N 7702	S 7689	10.75	51.77	5.80
2005	15398 C	N 7692	S 7706	9.10	53.90	6.10

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COUNTY: 70 - BREVARD

SITE: 0124 - US-1, 1.188 MI. S OF SR-500/US-192 NW

YEAR	AADT		DIRECTION 1		DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2020	34500	F	N 16500		S 18000	9.00	55.00	6.30
2019	35500	C	N 17000		S 18500	9.00	54.70	5.50
2018	33500	C	N 16500		S 17000	9.00	54.10	5.20
2017	36500	C	N 18000		S 18500	9.00	54.30	4.00
2016	34000	C	N 17000		S 17000	9.00	53.40	4.60
2015	31000	C	N 15000		S 16000	9.00	53.80	4.20
2014	31000	C	N 15500		S 15500	9.00	53.80	4.40
2013	29500	C	N 14500		S 15000	9.00	54.20	4.90
2012	31500	C	N 15500		S 16000	9.00	53.60	4.90
2011	28500	C	N 14500		S 14000	9.00	54.30	5.40
2010	31500	C	N 15500		S 16000	10.91	56.02	4.90
2009	32000	C	N 16000		S 16000	11.80	61.02	5.10
2008	34500	C	N 17000		S 17500	11.37	57.79	5.00
2007	34500	C	N 17000		S 17500	9.20	54.21	4.70
2006	36000	C	N 18000		S 18000	11.35	57.22	6.20
2005	35000	C	N 17500		S 17500	11.30	53.80	6.10

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COUNTY: 70 - BREVARD

SITE: 0127 - SR-514, 1.097 MI. W OF SR 5/US 1

YEAR	AADT		DIRECTION 1		DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR	
2020	12900	C	E	6100	W	6800	9.00	55.00	2.60
2019	14900	F	E	7600	W	7300	9.00	54.70	9.40
2018	14700	C	E	7500	W	7200	9.00	54.10	13.80
2017	13100	F	E	6400	W	6700	9.00	54.30	8.00
2016	12500	C	E	6100	W	6400	9.00	53.40	11.20
2015	13800	C	E	6600	W	7200	9.00	53.80	5.70
2014	12900	C	E	6200	W	6700	9.00	53.80	6.50
2013	10600	C	E	5000	W	5600	9.00	54.20	6.70
2012	12500	C	E	6500	W	6000	9.00	53.60	7.30
2011	11400	C	E	5400	W	6000	9.00	54.30	5.40
2010	12800	C	E	6600	W	6200	10.91	56.02	5.40
2009	12900	C	E	6300	W	6600	11.80	61.02	5.60
2008	14000	C	E	7200	W	6800	11.37	57.79	6.30
2007	13100	C	E	6800	W	6300	10.03	55.54	7.10
2006	13100	C	E	6800	W	6300	11.35	57.22	23.50
2005	13000	C	E	6700	W	6300	11.30	53.80	7.60

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COUNTY: 70 - BREVARD

SITE: 0379 - ON SR-514, 0.463 MI. E OF SR-507 (UVL)

YEAR	AADT		DIRECTION 1		DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR	
2020	18400	F	E	8900	W	9500	9.00	55.00	10.90
2019	18800	C	E	9100	W	9700	9.00	54.70	10.90
2018	20500	C	E	10000	W	10500	9.00	54.10	13.80
2017	22000	C	E	10500	W	11500	9.00	54.30	8.00
2016	19700	C	E	9700	W	10000	9.00	53.40	11.20
2015	19600	C	E	9100	W	10500	9.00	53.80	5.70
2014	19300	C	E	9500	W	9800	9.00	53.80	6.50
2013	18500	C	E	9000	W	9500	9.00	54.20	6.70
2012	17000	C	E	7200	W	9800	9.00	53.60	7.30
2011	17200	C	E	7600	W	9600	9.00	54.30	5.40
2010	17000	C	E	7300	W	9700	10.91	56.02	5.40
2009	17600	C	E	8500	W	9100	11.80	61.02	5.60
2008	18600	C	E	8100	W	10500	11.37	57.79	6.30
2007	17200	C	E	7400	W	9800	10.03	55.54	7.10
2006	16900	C	E	7200	W	9700	11.35	57.22	23.50
2005	16500	C	E	7100	W	9400	11.30	53.80	7.60

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COUNTY: 70 - BREVARD

SITE: 0381 - ON US-192, 1.673 MI. E OF I-95 (UVL)

YEAR	AADT		DIRECTION 1		DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2020	32000	F	E 15000		W 17000	9.00	55.00	18.20
2019	33000	C	E 15500		W 17500	9.00	54.70	5.50
2018	34500	C	E 16000		W 18500	9.00	54.10	11.00
2017	35500	F	E 16500		W 19000	9.00	54.30	10.40
2016	33500	C	E 15500		W 18000	9.00	53.40	10.60
2015	30000	C	E 15000		W 15000	9.00	53.80	12.20
2014	28000	C	E 14000		W 14000	9.00	53.80	9.40
2013	28000	C	E 14000		W 14000	9.00	54.20	9.40
2012	27500	C	E 13000		W 14500	9.00	53.60	12.60
2011	27500	C	E 13500		W 14000	9.00	54.30	9.20
2010	27500	C	E 13500		W 14000	10.91	56.02	11.30
2009	28500	C	E 14000		W 14500	11.80	61.02	8.50
2008	33500	C	E 16500		W 17000	11.37	57.79	11.80
2007	29500	C	E 14500		W 15000	9.20	54.21	15.40
2006	30500	C	E 15000		W 15500	11.35	57.22	17.90
2005	34500	C	E 17000		W 17500	11.30	53.80	4.80

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COUNTY: 70 - BREVARD

SITE: 0408 - ON SR-518, 0.15 MI. W OF CR-5054 (UVL)

YEAR	AADT		DIRECTION 1		DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2020	32500	F	E 17500		W 15000	9.00	55.00	8.00
2019	33500	C	E 18000		W 15500	9.00	54.70	8.00
2018	29000	C	E 15500		W 13500	9.00	54.10	8.00
2017	30500	C	E 16000		W 14500	9.00	54.30	7.50
2016	29000	C	E 16000		W 13000	9.00	53.40	7.40
2015	28500	C	E 15000		W 13500	9.00	53.80	7.00
2014	28000	C	E 14500		W 13500	9.00	53.80	7.40
2013	26500	C	E 13500		W 13000	9.00	54.20	6.80
2012	26500	C	E 13500		W 13000	9.00	53.60	6.80
2011	23000	C	E 10500		W 12500	9.00	54.30	5.80
2010	27500	C	E 13500		W 14000	10.91	56.02	6.20
2009	27000	C	E 14000		W 13000	11.80	61.02	7.60
2008	29500	C	E 15000		W 14500	11.37	57.79	4.90
2007	29000	C	E 15000		W 14000	9.20	54.21	7.00
2006	27500	C	E 15000		W 12500	11.35	57.22	7.90
2005	27500	C	E 14000		W 13500	11.30	53.80	4.80

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COUNTY: 70 - BREVARD

SITE: 0422 - ON SR-518, 2.57 MI. NE OF CR-5054 (UVL)

YEAR	AADT		DIRECTION 1		DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2020	23000	F	E 11500		W 11500	9.00	55.00	18.20
2019	24000	C	E 12000		W 12000	9.00	54.70	15.80
2018	24000	F	E 12000		W 12000	9.00	54.10	10.00
2017	23000	C	E 11500		W 11500	9.00	54.30	7.50
2016	24500	C	E 13500		W 11000	9.00	53.40	7.40
2015	19000	C	E 9700		W 9300	9.00	53.80	7.00
2014	18600	C	E 8600		W 10000	9.00	53.80	7.40
2013	20500	C	E 10500		W 10000	9.00	54.20	6.80
2012	21000	C	E 10500		W 10500	9.00	53.60	6.80
2011	21000	C	E 10500		W 10500	9.00	54.30	5.80
2010	22000	C	E 11000		W 11000	10.91	56.02	6.20
2009	21500	C	E 11000		W 10500	11.80	61.02	7.60
2008	26500	C	E 14500		W 12000	11.37	57.79	4.90
2007	23500	C	E 12000		W 11500	9.20	54.21	7.00
2006	25000	C	E 13500		W 11500	11.35	57.22	7.90
2005	23500	C	E 12500		W 11000	11.30	53.80	4.80

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COUNTY: 70 - BREVARD

SITE: 0427 - ON SR-514, 0.331 MI. E OF I-95 (UCLP)

YEAR	AADT		DIRECTION 1		DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2020	51500	F	E 29000		W 22500	9.00	55.00	14.30
2019	52500	C	E 29500		W 23000	9.00	54.70	14.30
2018	43500	C	E 22000		W 21500	9.00	54.10	13.80
2017	49000	C	E 23500		W 25500	9.00	54.30	5.60
2016	42500	C	E 22000		W 20500	9.00	53.40	5.20
2015	37500	C	E 17000		W 20500	9.00	53.80	4.40
2014	39000	C	E 19000		W 20000	9.00	53.80	6.00
2013	36500	C	E 18000		W 18500	9.00	54.20	7.80
2012	37000	C	E 18500		W 18500	9.00	53.60	7.80
2011	38500	C	E 19500		W 19000	9.00	54.30	4.90
2010	39500	C	E 20000		W 19500	10.91	56.02	5.40
2009	38500	C	E 19500		W 19000	11.80	61.02	4.50
2008	38500	C	E 18000		W 20500	11.37	57.79	5.50
2007	40500	C	E 18000		W 22500	10.03	55.54	6.60
2006	38000	C	E 17500		W 20500	11.35	57.22	38.10
2005	39500	C	E 20000		W 19500	11.30	53.80	6.80

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
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COUNTY: 70 - BREVARD

SITE: 1001 - ON SR-514, 0.119 MI. W OF US-1 (UCLP)

YEAR	AADT		DIRECTION 1		DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2020	14000	F	E 6500		W 7500	9.00	55.00	4.40
2019	14400	C	E 6700		W 7700	9.00	54.70	4.40
2018	14300	F	E 6800		W 7500	9.00	54.10	10.40
2017	13900	C	E 6600		W 7300	9.00	54.30	10.40
2016	14000	C	E 6700		W 7300	9.00	53.40	17.10
2015	13200	C	E 6400		W 6800	9.00	53.80	7.10
2014	13400	C	E 6500		W 6900	9.00	53.80	7.00
2013	11800	C	E 5700		W 6100	9.00	54.20	5.60
2012	11800	C	E 5700		W 6100	9.00	53.60	6.70
2011	11800	C	E 5600		W 6200	9.00	54.30	5.80
2010	13400	C	E 6700		W 6700	10.91	56.02	6.70
2009	13400	C	E 6600		W 6800	11.80	61.02	6.70
2008	14100	C	E 6900		W 7200	11.37	57.79	7.00
2007	12900	C	E 6000		W 6900	10.03	55.54	7.60
2006	13300	C	E 6400		W 6900	11.35	57.22	8.90
2005	13200	C	E 6400		W 6800	11.30	53.80	8.90

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COUNTY: 70 - BREVARD

SITE: 1005 - ON SR-518, 0.27 MI. W OF SR-513 (UC)

YEAR	AADT		DIRECTION 1		DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2020	36500	C	E 17500		W 19000	9.00	55.00	4.70
2019	38000	F	E 19000		W 19000	9.00	54.70	3.50
2018	38000	C	E 19000		W 19000	9.00	54.10	3.50
2017	40000	C	E 20000		W 20000	9.00	54.30	5.00
2016	35500	C	E 16000		W 19500	9.00	53.40	14.30
2015	34500	C	E 19500		W 15000	9.00	53.80	15.50
2014	40500	C	E 20500		W 20000	9.00	53.80	11.00
2013	37500	C	E 19000		W 18500	9.00	54.20	3.40
2012	35000	C	E 16500		W 18500	9.00	53.60	4.20
2011	37500	C	E 19500		W 18000	9.00	54.30	4.70
2010	38500	C	E 19500		W 19000	10.91	56.02	4.90
2009	36000	C	E 20000		W 16000	11.80	61.02	4.10
2008	38000	C	E 18500		W 19500	11.37	57.79	6.20
2007	39500	C	E 20500		W 19000	9.20	54.21	3.00
2006	41000	C	E 21000		W 20000	11.35	57.22	2.50
2005	42500	C	E 21500		W 21000	11.30	53.80	3.40

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COUNTY: 70 - BREVARD

SITE: 7008 - BABCOCK ST, 0.45 MI S OF VALKARIA RD (HPMS)

YEAR	AADT		DIRECTION 1		DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR	
2020	10500	F	N	5300	S	5200	9.00	55.00	9.90
2019	10700	C	N	5400	S	5300	9.00	54.70	9.90
2018	10700	S	N	5400	S	5300	9.00	54.10	7.60
2017	10500	F	N	5300	S	5200	9.00	54.30	7.60
2016	10100	C	N	5100	S	5000	9.00	53.40	7.60
2015	9500	S	N	4800	S	4700	9.00	53.80	8.00
2014	9100	F	N	4600	S	4500	9.00	53.80	8.00
2013	9100	C	N	4600	S	4500	9.00	54.20	8.00
2012	9500	F	N	4700	S	4800	9.00	53.60	4.50
2011	9700	C	N	4800	S	4900	9.00	54.30	3.70
2010	6800	C	N	3400	S	3400	10.91	56.02	3.60
2009	6700	F	N	3300	S	3400	11.80	61.02	3.30
2008	6900	C	N	3400	S	3500	11.37	57.79	3.20

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
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COUNTY: 70 - BREVARD

SITE: 7015 - EMERSON DR, 0.5 MI S OF JUPITER BLVD (HPMS)

YEAR	AADT		DIRECTION 1		DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR	
2020	19200	F	N	8200	S	11000	9.00	55.00	6.60
2019	19900	C	N	8400	S	11500	9.00	54.70	6.60
2018	17400	S	N	8800	S	8600	9.00	54.10	4.10
2017	17000	F	N	8600	S	8400	9.00	54.30	4.10
2016	16200	C	N	8200	S	8000	9.00	53.40	4.10
2015	13000	E					9.00	53.80	6.20
2014	12600	S	N	6300	S	6300	9.00	53.80	2.00
2013	12400	F	N	6200	S	6200	9.00	54.20	2.00
2012	12400	C	N	6200	S	6200	9.00	53.60	2.00
2011	11900	C	N	5900	S	6000	9.00	54.30	3.70
2010	9900	C	N	4700	S	5200	10.91	56.02	3.60
2009	7300	F	N	3700	S	3600	11.80	61.02	3.30
2008	7500	C	N	3800	S	3700	11.37	57.79	3.20

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
 S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
 V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN

*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2020 HISTORICAL AADT REPORT

COUNTY: 70 - BREVARD

SITE: 7016 - MINTON ROAD, JUPITER BLVD. TO MALABAR ROAD (HPMS)

YEAR	AADT		DIRECTION 1		DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR	
2020	16000	F	N	7300	S	8700	9.00	55.00	3.20
2019	16400	C	N	7500	S	8900	9.00	54.70	3.20
2018	15100	S	N	7100	S	8000	9.00	54.10	6.20
2017	14700	F	N	6900	S	7800	9.00	54.30	6.20
2016	14000	C	N	6600	S	7400	9.00	53.40	6.20
2015	13100	S	N	6300	S	6800	9.00	53.80	9.70
2014	12700	F	N	6100	S	6600	9.00	53.80	9.70
2013	12500	C	N	6000	S	6500	9.00	54.20	9.70
2012	13400	F	N	6400	S	7000	9.00	53.60	4.50
2011	13600	C	N	6500	S	7100	9.00	54.30	3.70
2010	11700	C	N	5400	S	6300	10.91	56.02	3.60
2009	19100	F	N	9100	S	10000	11.80	61.02	3.30
2008	19900	C	N	9400	S	10500	11.37	57.79	3.20

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN

*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION
 TRANSPORTATION STATISTICS OFFICE
 2020 HISTORICAL AADT REPORT

COUNTY: 70 - BREVARD

SITE: 7041 - MALABAR ROAD, 0.1 MI E OF ELDRON BLVD. (HPMS)

YEAR	AADT		DIRECTION 1		DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2020	23000	C	E 11000		W 12000	9.00	55.00	16.40
2019	26000	S	E 13000		W 13000	9.00	54.70	4.50
2018	26000	F	E 13000		W 13000	9.00	54.10	4.50
2017	25000	C	E 12500		W 12500	9.00	54.30	4.50
2016	23000	S	E 13000		W 10000	9.00	53.40	12.90
2015	22100	F	E 12500		W 9600	9.00	53.80	12.90
2014	21300	C	E 12000		W 9300	9.00	53.80	12.90
2013	25000	F	E 12500		W 12500	9.00	54.20	2.20
2012	25000	C	E 12500		W 12500	9.00	53.60	2.20
2011	35000	C	E 18000		W 17000	9.00	54.30	3.70
2010	33500	S	E 17500		W 16000	10.91	56.02	3.60
2009	34500	F	E 18000		W 16500	11.80	61.02	3.30
2008	35500	C	E 18500		W 17000	11.37	57.79	3.20

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
 S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
 V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN

*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION
 TRANSPORTATION STATISTICS OFFICE
 2020 HISTORICAL AADT REPORT

COUNTY: 70 - BREVARD

SITE: 7057 - ON BABCOCK STREET, 0.22 MI N OF VALKARIA ROAD (HPMS)

YEAR	AADT		DIRECTION 1		DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR	
2020	12200	F	N	6000	S	6200	9.00	55.00	5.70
2019	12600	C	N	6200	S	6400	9.00	54.70	5.70
2018	13200	S	N	6700	S	6500	9.00	54.10	15.80
2017	12800	F	N	6500	S	6300	9.00	54.30	15.80
2016	12200	C	N	6200	S	6000	9.00	53.40	15.80
2015	11200	E					9.00	53.80	6.20
2014	11000	S	N	5400	S	5600	9.00	53.80	7.20
2013	10900	F	N	5400	S	5500	9.00	54.20	7.20
2012	10900	C	N	5400	S	5500	9.00	53.60	7.20
2010	11600	F	N	5900	S	5700	10.91	56.02	3.60
2009	11800	C	N	6000	S	5800	11.80	61.02	3.30

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
 S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
 V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN

*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION
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COUNTY: 70 - BREVARD

SITE: 7084 - MILTON RD, 0.49 MI N OF MALABAR RD (HPMS)

YEAR	AADT		DIRECTION 1		DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2020	20500	F	N 10000		S 10500	9.00	55.00	2.80
2019	21500	C	N 10500		S 11000	9.00	54.70	2.80
2018	25000	S	N 11500		S 13500	9.00	54.10	3.50
2017	24000	F	N 11000		S 13000	9.00	54.30	3.50
2016	23000	C	N 10500		S 12500	9.00	53.40	3.50
2015	18500	E				9.00	53.80	5.50
2014	18200	S	N 8700		S 9500	9.00	53.80	2.20
2013	18000	F	N 8600		S 9400	9.00	54.20	2.20
2012	18200	C	N 8700		S 9500	9.00	53.60	2.20
2010	18000	F	N 8700		S 9300	10.91	56.02	4.40
2009	18400	C	N 8900		S 9500	11.80	61.02	2.30

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
 S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
 V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN

*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION
 TRANSPORTATION STATISTICS OFFICE
 2020 HISTORICAL AADT REPORT

COUNTY: 70 - BREVARD

SITE: 7085 - MILTON RD, 0.63 MI N OF AMERICANA BLVD, (HPMS)

YEAR	AADT		DIRECTION 1		DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2020	25500	F	N 12000		S 13500	9.00	55.00	3.90
2019	26500	C	N 12500		S 14000	9.00	54.70	3.90
2018	27000	S	N 14500		S 12500	9.00	54.10	5.10
2017	26000	F	N 14000		S 12000	9.00	54.30	5.10
2016	25000	C	N 13500		S 11500	9.00	53.40	5.10
2015	24000	E				9.00	53.80	7.00
2014	23500	S	N 11500		S 12000	9.00	53.80	2.90
2013	23500	F	N 11500		S 12000	9.00	54.20	2.90
2012	23500	C	N 11500		S 12000	9.00	53.60	2.90
2010	19200	F	N 10500		S 8700	10.91	56.02	6.20
2009	19400	C	N 10500		S 8900	11.80	61.02	7.60

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
 S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
 V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN

*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION
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COUNTY: 70 - BREVARD

SITE: 7091 - JOHN RODES BLVD, 0.47 MI N OF US-192/NEW HAVEN (HPMS)

YEAR	AADT		DIRECTION 1		DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR	
2020	6400	F	N	3200	S	3200	9.00	55.00	5.70
2019	6600	C	N	3300	S	3300	9.00	54.70	5.70
2018	11600	S	N	5400	S	6200	9.00	54.10	14.20
2017	11300	F	N	5300	S	6000	9.00	54.30	14.20
2016	10800	C	N	5100	S	5700	9.00	53.40	14.20
2015	10500	E					9.00	53.80	7.00
2014	10300	S	N	5200	S	5100	9.00	53.80	6.90
2013	10300	F	N	5200	S	5100	9.00	54.20	6.90
2012	10300	C	N	5200	S	5100	9.00	53.60	6.90
2010	9700	F	N	5100	S	4600	10.91	56.02	6.20
2009	9900	C	N	5200	S	4700	11.80	61.02	7.60

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN

*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION
 TRANSPORTATION STATISTICS OFFICE
 2020 HISTORICAL AADT REPORT

COUNTY: 70 - BREVARD

SITE: 8074 - ELLIS ROAD, EAST OF JOHN RODES BLVD. - OFF SYSTEM

YEAR	AADT		DIRECTION 1		DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR	
2020	18800	S	E	9500	W	9300	9.00	55.00	4.60
2019	19200	F	E	9700	W	9500	9.00	54.70	4.40
2018	19000	C	E	9600	W	9400	9.00	54.10	4.20
2017	12400	R	E	6200	W	6200	9.00	54.30	5.00
2016	11800	T	E	5900	W	5900	9.00	53.40	5.60
2015	11200	S	E	5600	W	5600	9.00	53.80	6.20
2014	10800	F	E	5400	W	5400	9.00	53.80	4.90
2013	10800	C	E	5400	W	5400	9.00	54.20	3.80
2012	7300	F		0		0	9.00	53.60	4.50
2011	7400	C	E	0	W	0	9.00	54.30	3.70

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
 S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
 V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN

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FLORIDA DEPARTMENT OF TRANSPORTATION
 TRANSPORTATION STATISTICS OFFICE
 2020 HISTORICAL AADT REPORT

COUNTY: 70 - BREVARD

SITE: 8142 - MALABAR RD, 0.32 MI E OF HURLEY BLVD - OFF SYSTEM

YEAR	AADT		DIRECTION 1		DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2020	12600	T	E 6300		W 6300	9.00	55.00	4.60
2019	13000	S	E 6500		W 6500	9.00	54.70	4.40
2018	12800	F	E 6400		W 6400	9.00	54.10	4.20
2017	12400	C	E 6200		W 6200	9.00	54.30	5.00
2016	10600	T	E 5300		W 5300	9.00	53.40	5.60
2015	10000	S	E 5000		W 5000	9.00	53.80	6.20
2014	9600	F	E 4800		W 4800	9.00	53.80	4.90
2013	9600	C	E 4800		W 4800	9.00	54.20	3.80
2012	9100	C	E 0		W 0	9.00	53.60	4.50

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
 S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
 V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN

*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

MALABAR v6 TO v7

CFRPM v7 Zone	CFRPM v6.1 TAZ Included within CFRPM v7 Zone							CFRPM v6.1 TAZ Included within CFRPM v7 Zone						
	TAZ 1	% of TAZ 1 Included in CFRPM v7 Zone	TAZ 2	% of TAZ 2 Included in CFRPM v7 Zone	TAZ 3	% of TAZ 3 Included in CFRPM v7 Zone	TAZ 4	% of TAZ 4 Included in CFRPM v7 Zone	TAZ 5	% of TAZ 5 Included in CFRPM v7 Zone	TAZ 6	% of TAZ 6 Included in CFRPM v7 Zone	TAZ 7	% of TAZ 7 Included in CFRPM v7 Zone
5706	3592	100%	2982	100%	3433	100%	3596	100%	3593	50%	3597	20 - 80%	3434	30 - 80%
40	3444	100%												
5718	3439	100%	3599	100%	3597	20-80%								
3206	3441	100%												
5719	3598	100%	3435	100%	3434	20-70%								
7541	3440	40%												
7535	3440	60%												
7543	3436	10-100%												
7542	3436	0-20%												
5728	3431	100%	3589	100%										
7553	3591	100%	3432	10%										
45	3436	0-70%												
49	3587	100%	3432	80%										
5729	3432	10%												
5751	3584	100%	3585	100%	3428	50%								
5705	3429	100%	3586	100%	3424	100%								
50	3425	100%	3448	100%										
52	3423	100%	3579	0-60%										
5753	3428	50%												
5755	3579	40-100%												
5742	3580	100%												
5757	3581	60-100%												
58	3412	100%												
68	3413	60-70%	3393	70-100%										
57	3414	100%	3413	30-40%										
5756	3568	100%												
53	3411	100%	3581	0-40%										
5758	3567	100%												
5759	3410	30-60%												
5760	3410	20-30%												
56	3410	10-50%												
5766	3560	45-100%												
73	3560	0-45%												
5765	3400	100%												
4836	3392	100%	3393	0%										
67	3394	100%	3393	0-30%										
5769	3558	100%	3560	0-20%										
5768														
72	3391	100%												
5767	3390	100%												
71														
69														
81														

CFRPM v7 Zone	CFRPM v6.1 TAZ Included within CFRPM v7 Zone							CFRPM v6.1 TAZ Included within CFRPM v7 Zone						
	TAZ 1	% of TAZ 1 Included in CFRPM v7 Zone	TAZ 2	% of TAZ 2 Included in CFRPM v7 Zone	TAZ 3	% of TAZ 3 Included in CFRPM v7 Zone	TAZ 4	% of TAZ 4 Included in CFRPM v7 Zone	TAZ 5	% of TAZ 5 Included in CFRPM v7 Zone	TAZ 6	% of TAZ 6 Included in CFRPM v7 Zone	TAZ 7	% of TAZ 7 Included in CFRPM v7 Zone
97	3377	100%												
85	3379	100%	3539	100%	3378	0-100%								
5670	3351	100%	3378	0-100%										
4839	3364	100%												

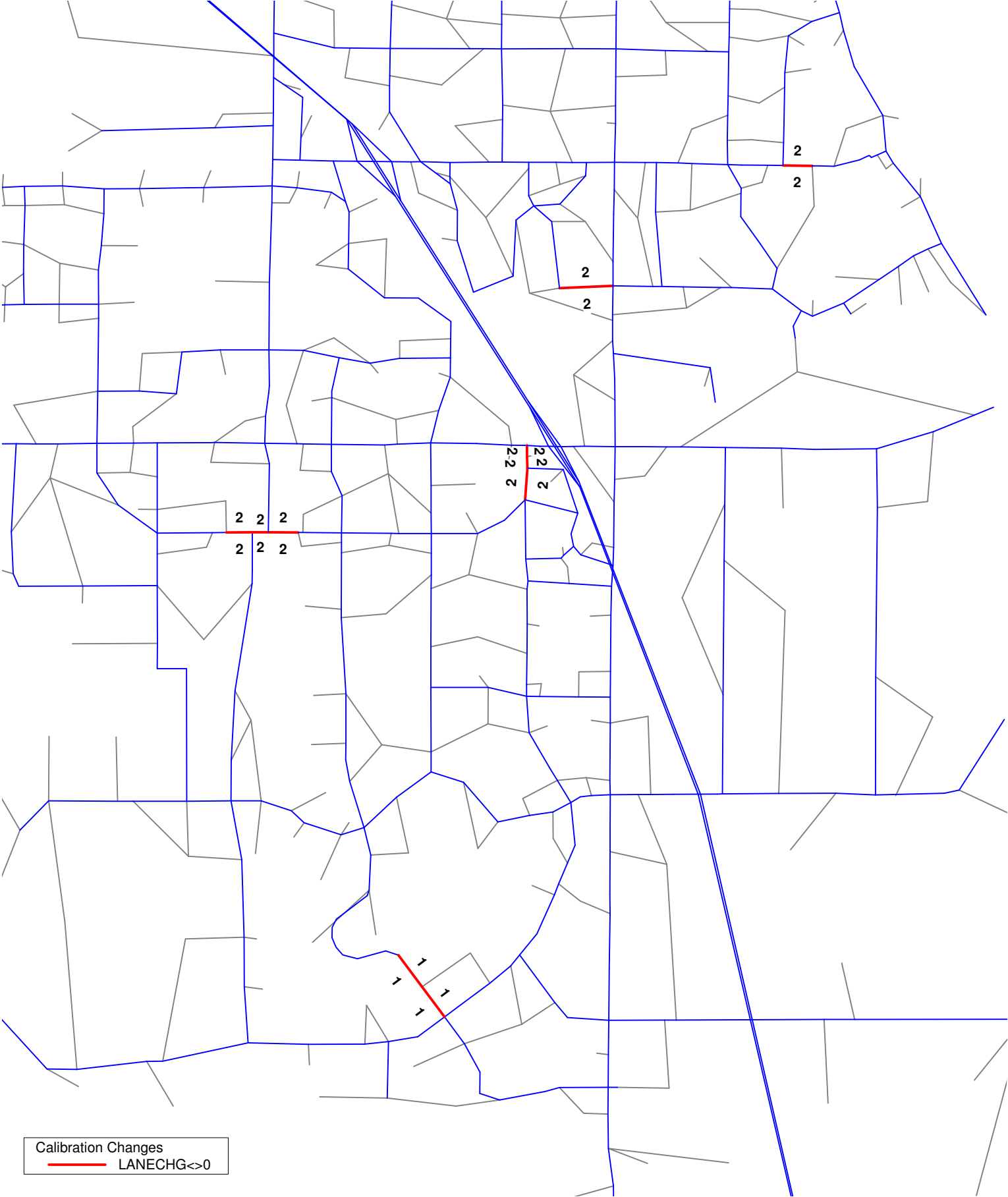
*Some CFRPM v6.1 TAZ were divided according to different proportions for dwelling units and employment in order to more accurately reflect the existing condition.

*Some CFRPM v6.1 TAZ were divided according to different proportions for dwelling units and employment in order to more accurately reflect the existing condition.

CALIBRATION CHANGES

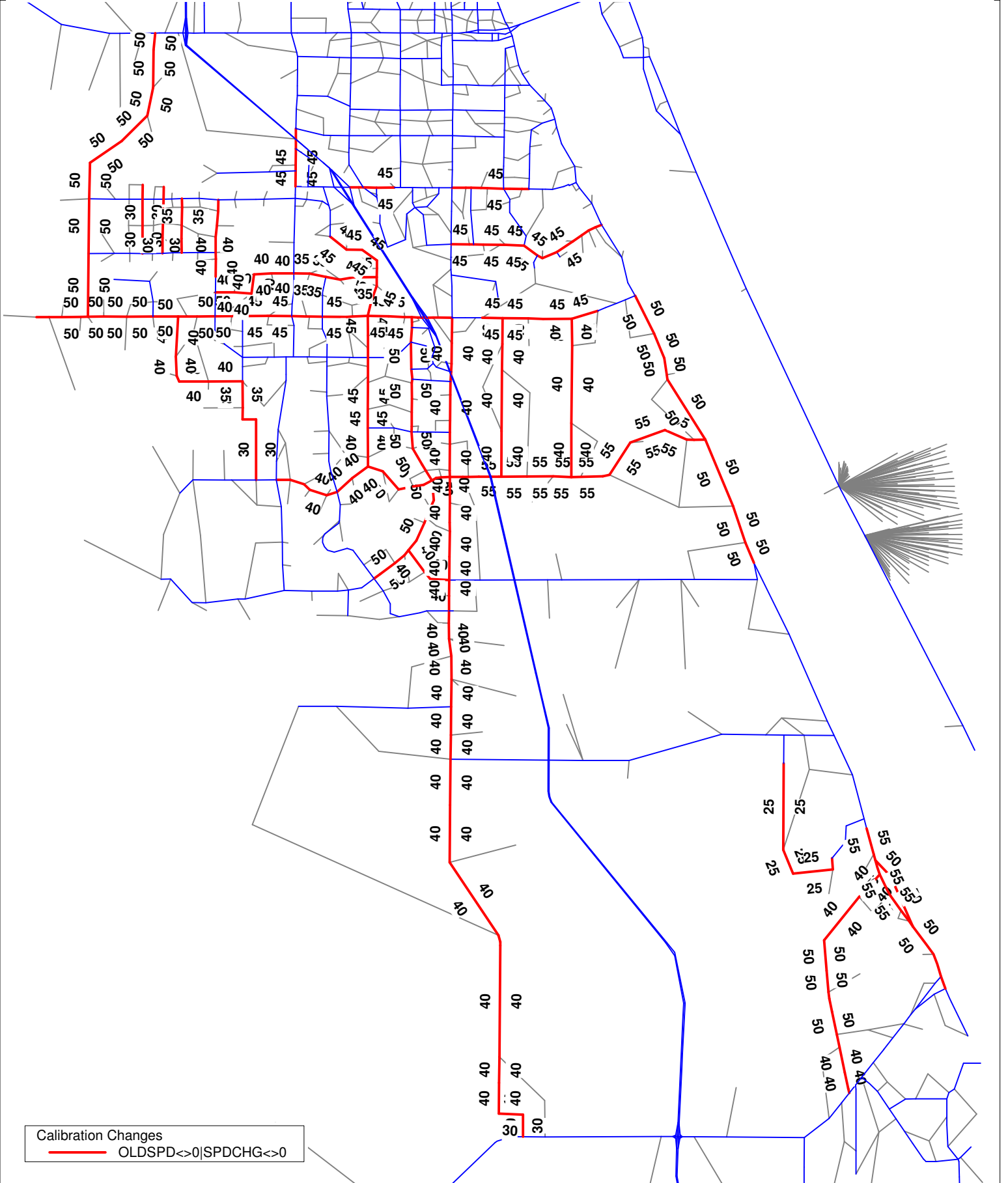
TAZ	2015 Model	2015 Model Changes	Source
3368	Heritage High School: School enrollment: 0	Heritage High School: School enrollment:1825 and 150 service job	https://www.schooldigger.com/ge
3390	Hotel DU is 0 but has Hotel DU Population is 208 /No HM occupancy #	Change Hotel&Motel Dwelling Units to corresponding numbers /Changed HM occupancy to 72	2015 model
3390	Commerical employment: 276	Commerical at least 210K sq ft. Increase commerical employee # by area*2 Per 1K sq ft. and change to 420	2014/12 Google earth image
3557	Commerical employment: 486	Commerical at least 400K sq ft. Increase commerical employee # by area*2 Per 1K sq ft.and change to 800	2014/12 Google earth image
3385	Commerical employment: 71	Commerical at least 300K sq ft. Increase commerical employee # by area*2 Per 1K sq ft.and change to 600	2014/12 Google earth image
3376	No HM occupancy #	Changed HM occupancy to 72	2014/12 Google earth image
3558	No school enrollment for Eastern Florida State College - Palm Bay Campus	Increase the school enrollment for Eastern Florida State College - Palm Bay Campus by 5000 student and 500 staff member	2014/12 Google earth image
3545	No commerical employment	Commerical at least 45K sq ft. Increase commerical employee # by area*2 Per 1K sq ft.and change to 90	2014/12 Google earth image

CFRPMV6.1 Subarea Model Development Calibration Updates - Number of Lane Change



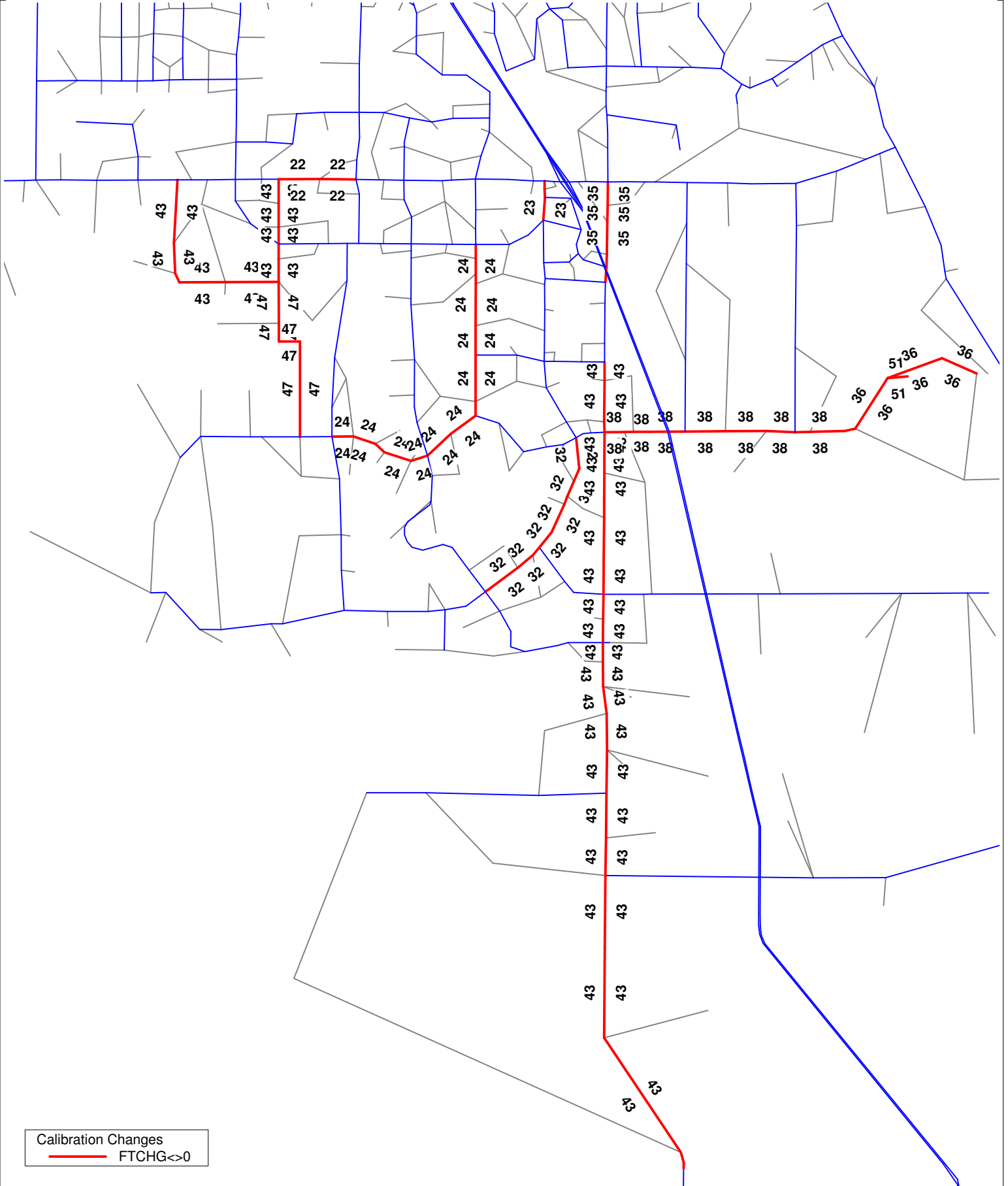
Calibration Changes
— LANECHG $\neq 0$

CFRPMV6.1 Subarea Model Development Calibration Updates - Speed Change



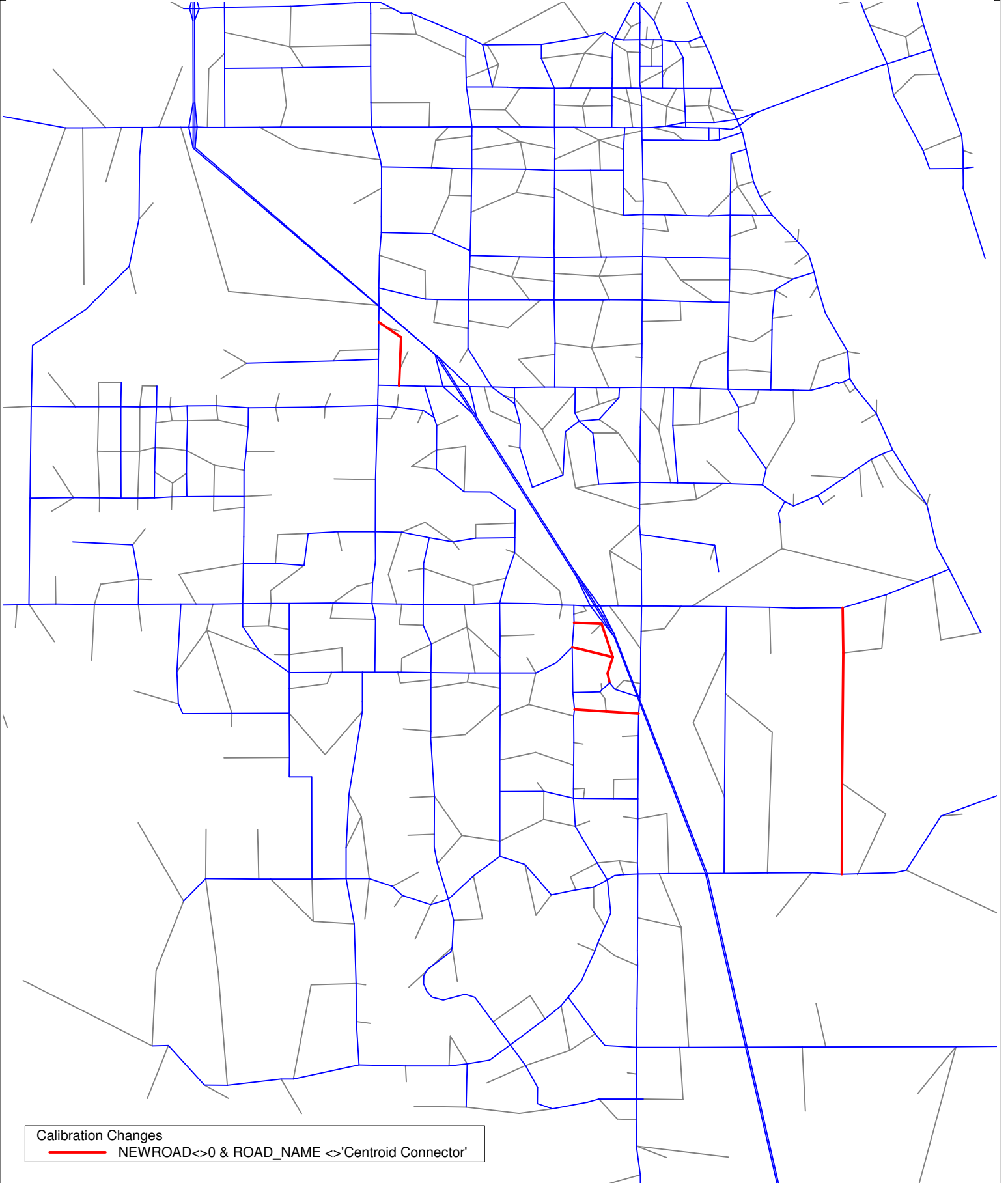
Calibration Changes
— OLDSPD<>0|SPDCHG<>0

CFRPMV6.1 Subarea Model Development Calibration Updates - Facility Type Change



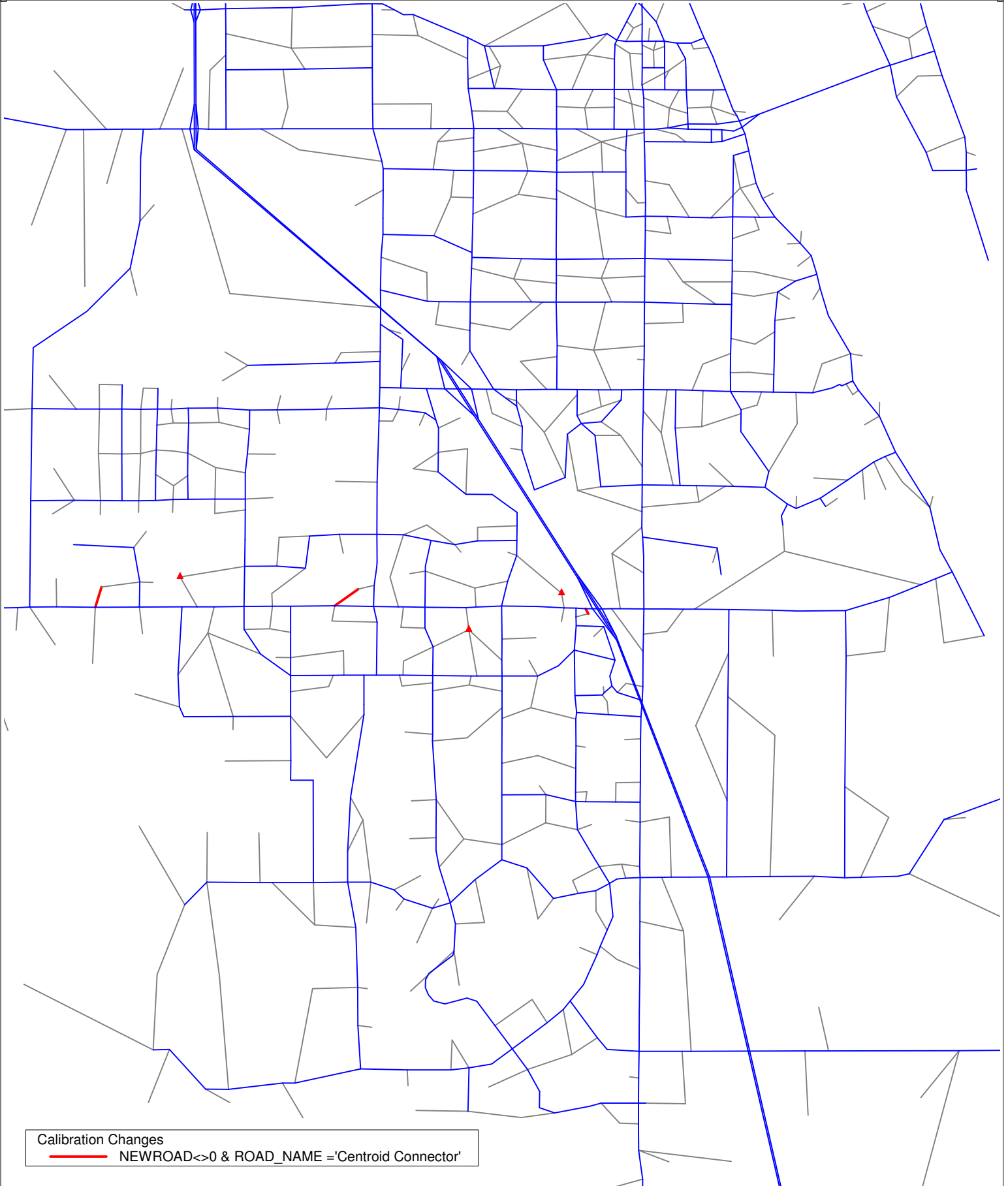
Calibration Changes
FTCHG<=>0

CFRPMV6.1 Subarea Model Development Calibration Updates - New Road



Calibration Changes
NEWROAD<->0 & ROAD_NAME <->'Centroid Connector'

CFRPMV6.1 Subarea Model Development Calibration Updates - New Centroid Connector and Moved TAZ Centroid



Calibration Changes
NEWROAD<>0 & ROAD_NAME ='Centroid Connector'

10156 10137 10116 1 -1
10127 10139 10158 1 -1
10315 10289 10278 1 -1
10276 10302 10322 1 -1
10369 10367 10361 1 -1
10590 10588 10564 1 -1
10594 10592 10595 1 -1
10560 10594 10591 1 -1
10560 10594 10608 1 -1
10592 10594 10591 1 -1
10592 10594 10608 1 -1
10680 10682 10685 2 1
10863 10838 10824 1 -1
10761 10841 10849 1 -1
10844 10841 10849 1 -1
10841 10844 10849 1 -1
10845 10848 10830 2 1
10845 10848 10853 2 1
15001 15003 15008 1 15
15008 15003 15001 1 15
15018 15014 15016 1 -1
15039 15036 15052 1 -1
15052 15036 15039 1 -1
15061 15060 15068 1 -1
15064 15063 15067 1 -1
15054 15064 15066 1 -1
15064 15066 15053 1 -1
15082 15066 15053 1 -1
15082 15066 15064 1 -1
15041 15068 15060 1 -1
15041 15068 15075 1 -1
15060 15068 15075 1 -1
15096 15087 15090 1 -1
15103 15119 15142 1 -1
15116 15119 15142 2 2
15124 15119 15142 1 -1
15121 15120 15117 1 -1
15119 15124 15118 1 -1
15132 15124 15118 2 2
15134 15132 15130 1 -1
15137 15132 15130 1 -1
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2015 BREVARD COUNTY MOCF

MOCF: 0.94

Week	Dates	SF	PSCF
1	01/01/2015 - 01/03/2015	1.01	1.07
2	01/04/2015 - 01/10/2015	1.02	1.09
3	01/11/2015 - 01/17/2015	1.04	1.11
4	01/18/2015 - 01/24/2015	1.01	1.07
5	01/25/2015 - 01/31/2015	0.99	1.05
* 6	02/01/2015 - 02/07/2015	0.97	1.03
* 7	02/08/2015 - 02/14/2015	0.95	1.01
* 8	02/15/2015 - 02/21/2015	0.94	1.00
* 9	02/22/2015 - 02/28/2015	0.92	0.98
*10	03/01/2015 - 03/07/2015	0.91	0.97
*11	03/08/2015 - 03/14/2015	0.90	0.96
*12	03/15/2015 - 03/21/2015	0.91	0.97
*13	03/22/2015 - 03/28/2015	0.93	0.99
*14	03/29/2015 - 04/04/2015	0.94	1.00
*15	04/05/2015 - 04/11/2015	0.96	1.02
*16	04/12/2015 - 04/18/2015	0.97	1.03
*17	04/19/2015 - 04/25/2015	0.98	1.04
*18	04/26/2015 - 05/02/2015	0.99	1.05
19	05/03/2015 - 05/09/2015	1.00	1.06
20	05/10/2015 - 05/16/2015	1.01	1.07
21	05/17/2015 - 05/23/2015	1.01	1.07
22	05/24/2015 - 05/30/2015	1.02	1.09
23	05/31/2015 - 06/06/2015	1.03	1.10
24	06/07/2015 - 06/13/2015	1.04	1.11
25	06/14/2015 - 06/20/2015	1.04	1.11
26	06/21/2015 - 06/27/2015	1.04	1.11
27	06/28/2015 - 07/04/2015	1.04	1.11
28	07/05/2015 - 07/11/2015	1.04	1.11
29	07/12/2015 - 07/18/2015	1.05	1.12
30	07/19/2015 - 07/25/2015	1.05	1.12
31	07/26/2015 - 08/01/2015	1.05	1.12
32	08/02/2015 - 08/08/2015	1.06	1.13
33	08/09/2015 - 08/15/2015	1.06	1.13
34	08/16/2015 - 08/22/2015	1.06	1.13
35	08/23/2015 - 08/29/2015	1.06	1.13
36	08/30/2015 - 09/05/2015	1.06	1.13
37	09/06/2015 - 09/12/2015	1.06	1.13
38	09/13/2015 - 09/19/2015	1.06	1.13
39	09/20/2015 - 09/26/2015	1.05	1.12
40	09/27/2015 - 10/03/2015	1.04	1.11
41	10/04/2015 - 10/10/2015	1.03	1.10
42	10/11/2015 - 10/17/2015	1.02	1.09
43	10/18/2015 - 10/24/2015	1.02	1.09
44	10/25/2015 - 10/31/2015	1.02	1.09
45	11/01/2015 - 11/07/2015	1.02	1.09
46	11/08/2015 - 11/14/2015	1.02	1.09
47	11/15/2015 - 11/21/2015	1.02	1.09
48	11/22/2015 - 11/28/2015	1.01	1.07
49	11/29/2015 - 12/05/2015	1.01	1.07
50	12/06/2015 - 12/12/2015	1.01	1.07
51	12/13/2015 - 12/19/2015	1.02	1.09
52	12/20/2015 - 12/26/2015	1.03	1.10
53	12/27/2015 - 12/31/2015	1.04	1.11

* Peak Season

MOCF: 0.97

Week	Dates	SF	PSCF
1	01/01/2015 - 01/03/2015	0.95	0.98
2	01/04/2015 - 01/10/2015	1.01	1.04
3	01/11/2015 - 01/17/2015	1.06	1.09
4	01/18/2015 - 01/24/2015	1.05	1.08
5	01/25/2015 - 01/31/2015	1.04	1.07
6	02/01/2015 - 02/07/2015	1.02	1.05
* 7	02/08/2015 - 02/14/2015	1.01	1.04
* 8	02/15/2015 - 02/21/2015	0.99	1.02
* 9	02/22/2015 - 02/28/2015	0.97	1.00
*10	03/01/2015 - 03/07/2015	0.95	0.98
*11	03/08/2015 - 03/14/2015	0.93	0.96
*12	03/15/2015 - 03/21/2015	0.94	0.97
*13	03/22/2015 - 03/28/2015	0.95	0.98
*14	03/29/2015 - 04/04/2015	0.96	0.99
*15	04/05/2015 - 04/11/2015	0.97	1.00
*16	04/12/2015 - 04/18/2015	0.98	1.01
*17	04/19/2015 - 04/25/2015	0.99	1.02
*18	04/26/2015 - 05/02/2015	1.00	1.03
*19	05/03/2015 - 05/09/2015	1.01	1.04
20	05/10/2015 - 05/16/2015	1.02	1.05
21	05/17/2015 - 05/23/2015	1.02	1.05
22	05/24/2015 - 05/30/2015	1.03	1.06
23	05/31/2015 - 06/06/2015	1.03	1.06
24	06/07/2015 - 06/13/2015	1.03	1.06
25	06/14/2015 - 06/20/2015	1.03	1.06
26	06/21/2015 - 06/27/2015	1.02	1.05
27	06/28/2015 - 07/04/2015	1.02	1.05
28	07/05/2015 - 07/11/2015	1.01	1.04
29	07/12/2015 - 07/18/2015	1.02	1.05
30	07/19/2015 - 07/25/2015	1.02	1.05
31	07/26/2015 - 08/01/2015	1.03	1.06
32	08/02/2015 - 08/08/2015	1.03	1.06
33	08/09/2015 - 08/15/2015	1.04	1.07
34	08/16/2015 - 08/22/2015	1.05	1.08
35	08/23/2015 - 08/29/2015	1.06	1.09
36	08/30/2015 - 09/05/2015	1.06	1.09
37	09/06/2015 - 09/12/2015	1.07	1.10
38	09/13/2015 - 09/19/2015	1.06	1.09
39	09/20/2015 - 09/26/2015	1.05	1.08
40	09/27/2015 - 10/03/2015	1.04	1.07
41	10/04/2015 - 10/10/2015	1.03	1.06
42	10/11/2015 - 10/17/2015	1.02	1.05
43	10/18/2015 - 10/24/2015	1.01	1.04
44	10/25/2015 - 10/31/2015	0.99	1.02
45	11/01/2015 - 11/07/2015	0.98	1.01
46	11/08/2015 - 11/14/2015	0.96	0.99
47	11/15/2015 - 11/21/2015	0.96	0.99
48	11/22/2015 - 11/28/2015	0.96	0.99
49	11/29/2015 - 12/05/2015	0.95	0.98
50	12/06/2015 - 12/12/2015	0.95	0.98
51	12/13/2015 - 12/19/2015	0.99	1.02
52	12/20/2015 - 12/26/2015	1.02	1.05
53	12/27/2015 - 12/31/2015	1.06	1.09

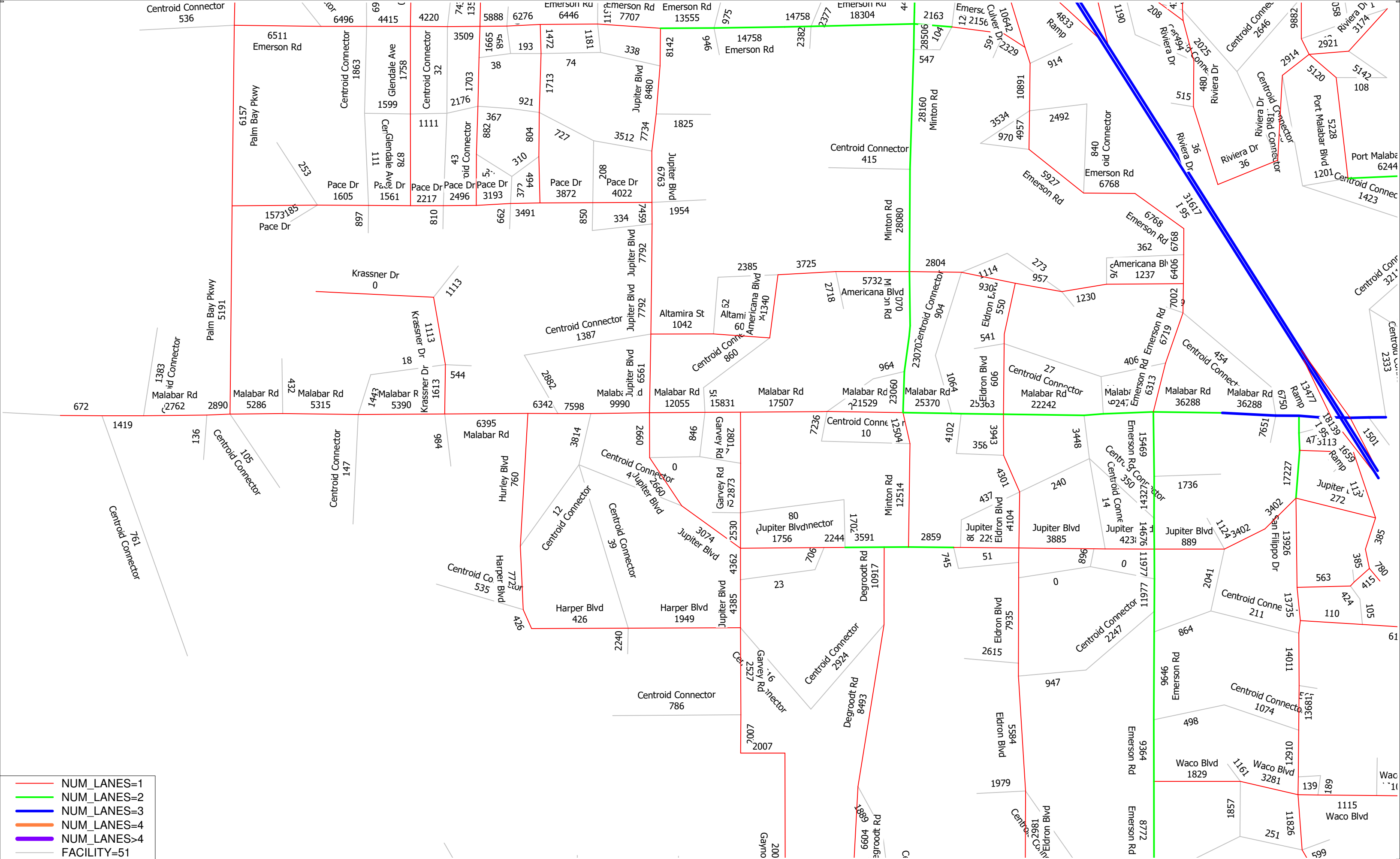
* Peak Season

RMSE% BY VOLUME GROUP

RMSE% by Volume Group

Group	Volume Range (vehicles/day)	FSUTMS Standards		Number of Observations	original	calibrated
		Acceptable	Preferable			
1	Less than 5,000	100%	45%	3	142%	51%
2	5,000 - 9,999	45%	35%	4	113%	35%
3	10,000-14,999	35%	27%	11	30%	20%
4	15,000-19,999	30%	25%	7	31%	14%
5	20,000-29999	27%	15%	5	32%	11%
6	30,000-49,999	25%	15%	9	20%	14%
7	50,000-59,999	20%	10%	1	5%	3%
8	60,000+	19%	10%	2	4%	8%
Total		45%	35%	42	24%	13.8%

MODEL PLOTS



- NUM_LANES=1
- NUM_LANES=2
- NUM_LANES=3
- NUM_LANES=4
- NUM_LANES>4
- FACILITY=51

APPENDIX B – FUTURE LAND USE MODEL INFORMATION

Contained in this Appendix –

- Future Land Use Model Information

SECTOR	County	RPMv6POP20	RPMv6Emp20	RPMv7POP20	CFRPMv7Emp2045	PopFactor	EmpFactor
1	Seminole	550,357	372,311	588,817	364,445	1.07	0.98
2	Orange	1,704,572	1,155,981	1,974,372	1,364,417	1.16	1.18
3	Osceola	609,025	269,821	655,199	276,453	1.08	1.02
4	Lake	547,506	226,292	511,433	252,743	1.00	1.00
5	Volusia	608,292	288,250	698,777	305,529	1.15	1.06
6	Brevard	748,793	329,886	705,162	371,095		
7	Marion	532,937	251,895	444,911	174,481	1.00	1.00
8	Sumter	241,201	89,329	223,979	71,336	1.00	1.00
9	Flagler	203,825	51,727	182,148	50,167	1.00	1.00
10	Polk	985,732	435,693	917,298	434,262	1.00	1.00
11	Indian River	71,046	43,286	66,822	18,653	1.00	1.00

Subarea

SECTOR	County	RPMv6POP20	RPMv6Emp20	RPMv7POP20	CFRPMv7Emp2045	PopFactor	EmpFactor
6	Brevard_Malabarsubarea	299254	135111	267,991	137,706	0.90	1.02
6	Brevard_Malabarsubarea_Outside	449539	194775	437171	233389	0.97	1.20

Name	Land Use Info
Avery Springs	140 Single Family Dwellings 226 Single Family Dwellings (Phase As Built) 202 Dwellings in Phase 1 and 2
Brentwood Lakes Phase 3 and 4 Chapparal	Entire Development is 429 dwellings 116 Single Family Dwellings 6100 SF Restaurant 12050 SF Retail 20450 SF Grocery
Crown Square	240 Multi-Family Dwelling Units
Malabar Mini Storage	64000 SF Storage
St. Johns Preserve - Housing Units	~625 Dwelling Units
St. Johns Preserve - Commercial	24800 SF Commercial 670000 SF Commercial 350000 SF Office 700 Rooms Hotel 300 Beds Hospital
Emerald Lakes	1263 Single Family DU 1237 Multi-Family DU 210000 SF Commercial 80000 SF Office 250 Single Family DU 260 Multifamily DU 30000 SF Church
Cypress Bay Preserve	2000 Bed Nursing Home 205000 SF Commercial 30000 SF Office 1471 Single Family DU
Waterstone	482 Multifamily DU 304000 SF Commercial 1815 Single Family DU
Rolling Meadows	248 Multifamily DU 365000 SF Commercial 750000 SF Industrial 300 Bed Hospital
Space Coast Town Center	2445 Multifamily DU

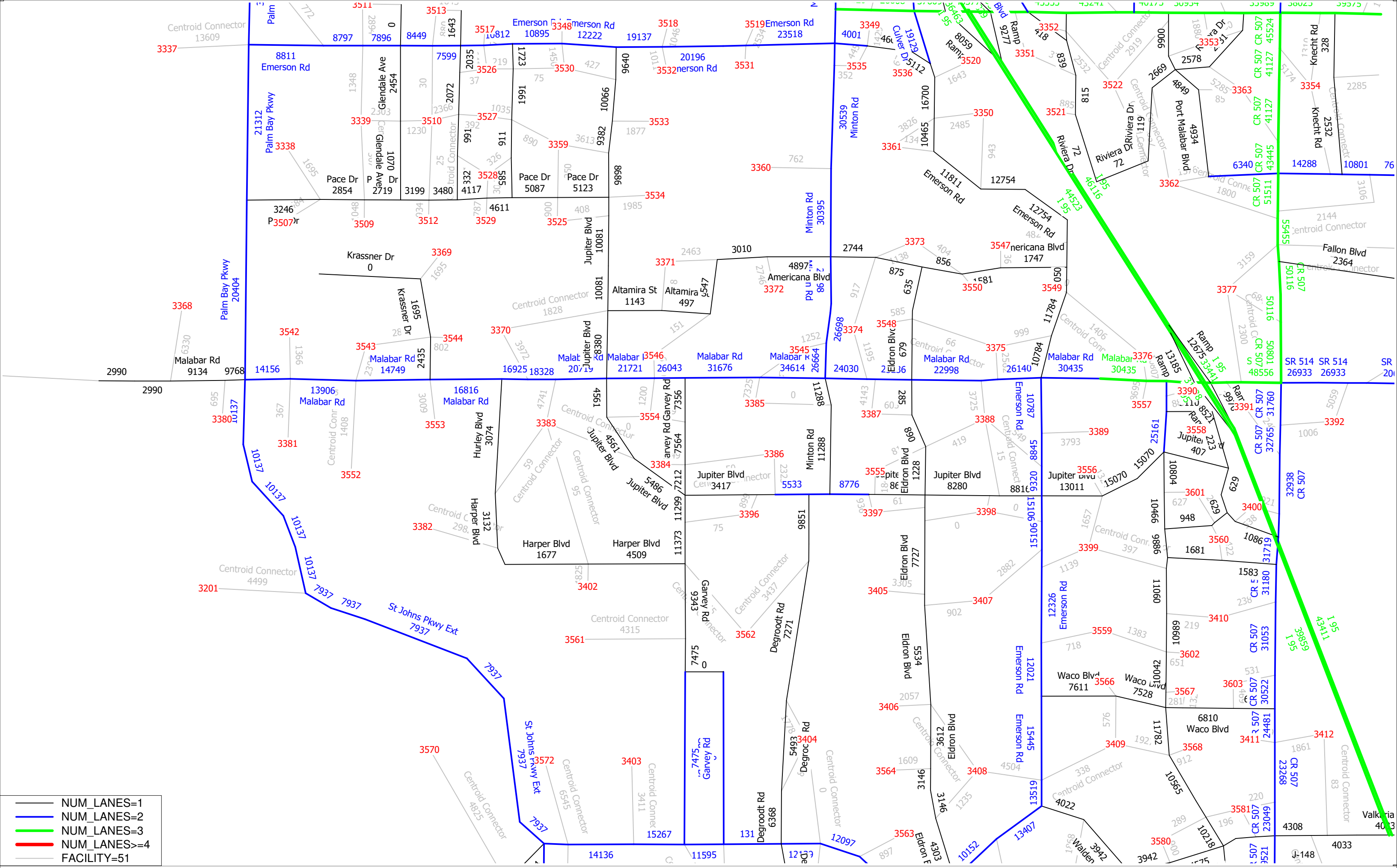
TAZ	Developments	2040 Model										2045 Model (Factored from 2040 SE data)										New 2045 Model									
		SFDU	SFPOP	MFDU	MFPOP	HMDU	HMPOP	INDEMP	COMEMP	SEREMP	TOTEMP	SFDU	SFPOP	MFDU	MFPOP	HMDU	HMPOP	INDEMP	COMEMP	SEREMP	TOTEMP	SFDU	SFPOP	MFDU	MFPOP	HMDU	HMPOP	INDEMP	COMEMP	SEREMP	TOTEMP
3370	Avery Springs	887	2,225	-	-	-	-	145	16	239	400	798	2,002	-	-	-	-	148	16	244	408	938	2,422	-	-	-	-	148	16	244	408
3553	Brentwood Lakes	166	518	16	48	-	-	-	-	-	-	149	466	14	43	-	-	-	-	-	-	578	1,753	14	43	-	-	-	-	-	-
3552	Chapparral	177	470	2	6	-	-	-	-	-	-	159	423	2	5	-	-	-	-	-	-	275	771	2	5	-	-	-	-	-	-
3557	Crown Square and Malabar Mini Storage	2	5	-	-	-	-	6	666	162	834	2	4	-	-	-	-	6	679	165	850	2	4	240	480	-	-	6	800	165	971
3606	Cypress Bay Preserve	12	30	11	21	-	-	8	12	1	21	12	29	11	20	-	-	10	14	1	25	262	779	271	540	-	-	10	434	381	825
3440	Emeral Lake (1/3 of Emeral Lake development assigned)	23	55	-	-	-	-	21	39	-	60	21	50	-	-	-	-	21	40	-	61	442	462	-	-	-	-	21	487	767	1,274
3605	Emeral Lake (1/3 of Emeral Lake development assigned)	710	2,130	757	1,514	-	-	-	1,457	1,767	3,224	689	2,066	734	1,469	-	-	-	1,748	2,120	3,868	689	2,066	734	1,469	-	-	-	1,748	2,120	3,868
5338	Emeral Lake (1/3 of Emeral Lake development assigned)	428	1,284	746	1,492	120	181	-	201	316	517	428	1,284	746	1,492	120	181	-	201	316	517	428	1,284	746	1,492	700	840	-	201	316	517
3204	Space Coast Town Center (1/2 of Space Coast Town Center development assigned)	137	340	2	4	-	-	-	35	11	46	123	306	2	4	-	-	-	36	11	47	123	306	1,225	2,449	-	-	750	401	56	1,207
3206	Space Coast Town Center (1/2 of Space Coast Town Center development assigned)	985	2,471	4	8	-	-	21	72	109	202	886	2,224	4	7	-	-	21	73	111	205	886	2,224	1,227	2,452	-	-	771	438	156	1,365
3368	St. Johns Preserve - Commercial and St. Johns Preserve - Housing Units	636	1,594	1	3	-	-	-	-	-	-	572	1,435	1	3	-	-	-	-	-	-	1,197	3,310	1	3	-	-	-	-	200	200
3435	Waterstone and Rolling Meadows	4,261	10,579	17	32	-	-	27	759	1,026	1,812	3,835	9,521	15	29	-	-	28	774	1,047	1,849	3,835	9,521	745	1,489	-	-	28	774	1,047	1,849

*Land use replaces existing CFRPM land use values

APPENDIX C – FUTURE YEAR SUBAREA MODEL VOLUMES

Contained in this Appendix –

- Future Land Use Model Information



- NUM_LANES=1
- NUM_LANES=2
- NUM_LANES=3
- NUM_LANES>=4
- FACILITY=51

APPENDIX D – HISTORIC TRENDS ANALYSES

Contained in this Appendix –

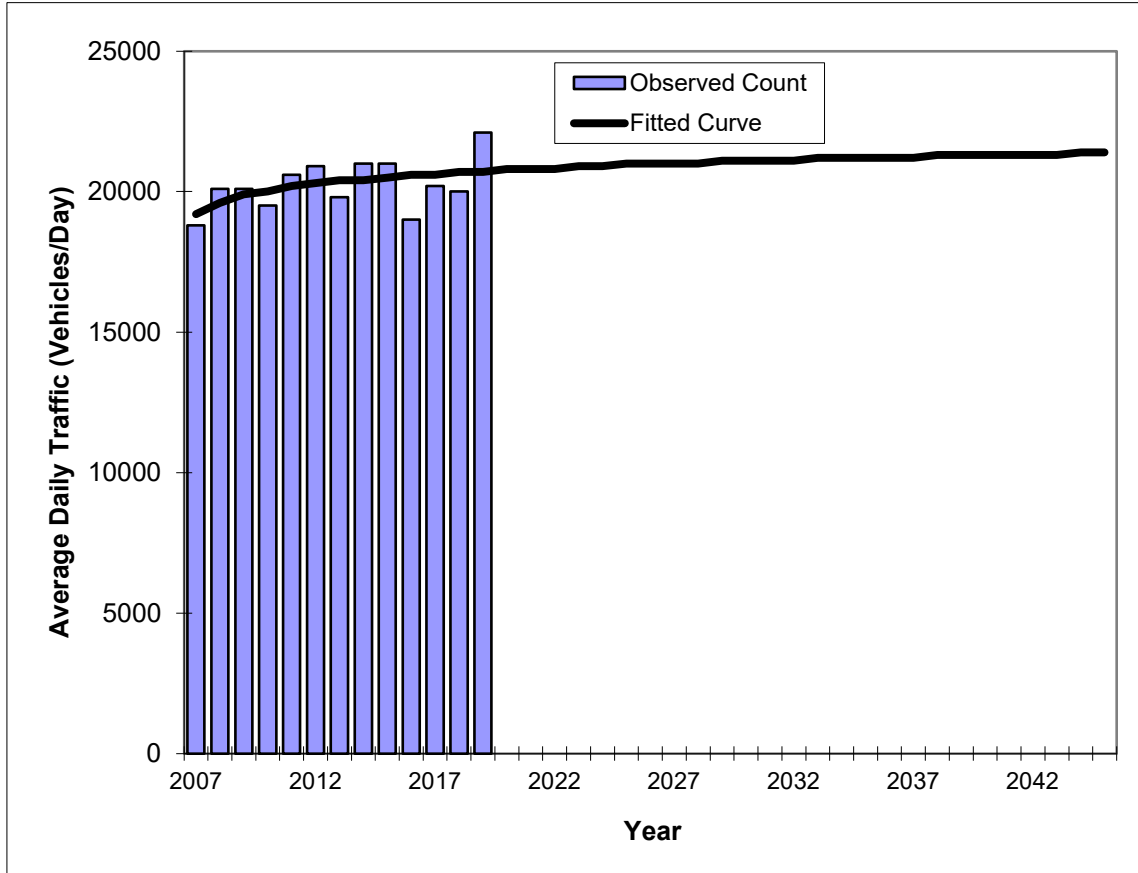
- Historic Trends Analyses

Traffic Trends - V3.0

MALABAR RD. -- W OF MINTON RD

FIN#	1234
Location	1

County:	Brevard (70)
Station #:	371
Highway:	MALABAR RD.



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2007	18800	19200
2008	20100	19600
2009	20100	19900
2010	19500	20000
2011	20600	20200
2012	20900	20300
2013	19800	20400
2014	21000	20400
2015	21000	20500
2016	19000	20600
2017	20200	20600
2018	20000	20700
2019	22100	20700
2025 Opening Year Trend		
2025	N/A	21000
2035 Mid-Year Trend		
2035	N/A	21200
2045 Design Year Trend		
2045	N/A	21400
TRANPLAN Forecasts/Trends		

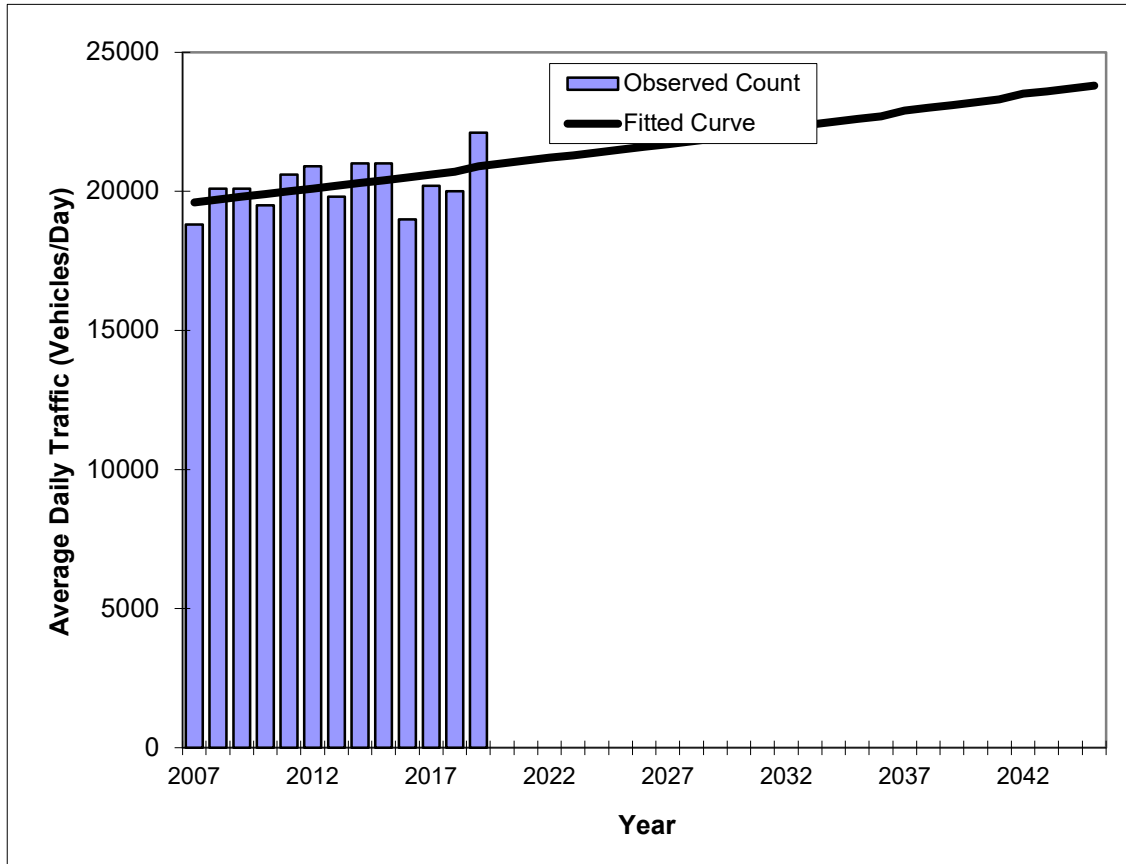
Trend R-squared:	25.28%
Compounded Annual Historic Growth Rate:	0.63%
Compounded Growth Rate (2019 to Design Year):	0.13%
Printed:	4-Jun-20
Decaying Exponential Growth Option	

*Axle-Adjusted

Traffic Trends - V3.0 MALABAR RD. -- W OF MINTON RD

FIN#	1234
Location	1

County:	Brevard (70)
Station #:	371
Highway:	MALABAR RD.



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2007	18800	19600
2008	20100	19700
2009	20100	19800
2010	19500	19900
2011	20600	20000
2012	20900	20100
2013	19800	20200
2014	21000	20300
2015	21000	20400
2016	19000	20500
2017	20200	20600
2018	20000	20700
2019	22100	20900
2025 Opening Year Trend		
2025	N/A	21500
2035 Mid-Year Trend		
2035	N/A	22600
2045 Design Year Trend		
2045	N/A	23800
TRANPLAN Forecasts/Trends		

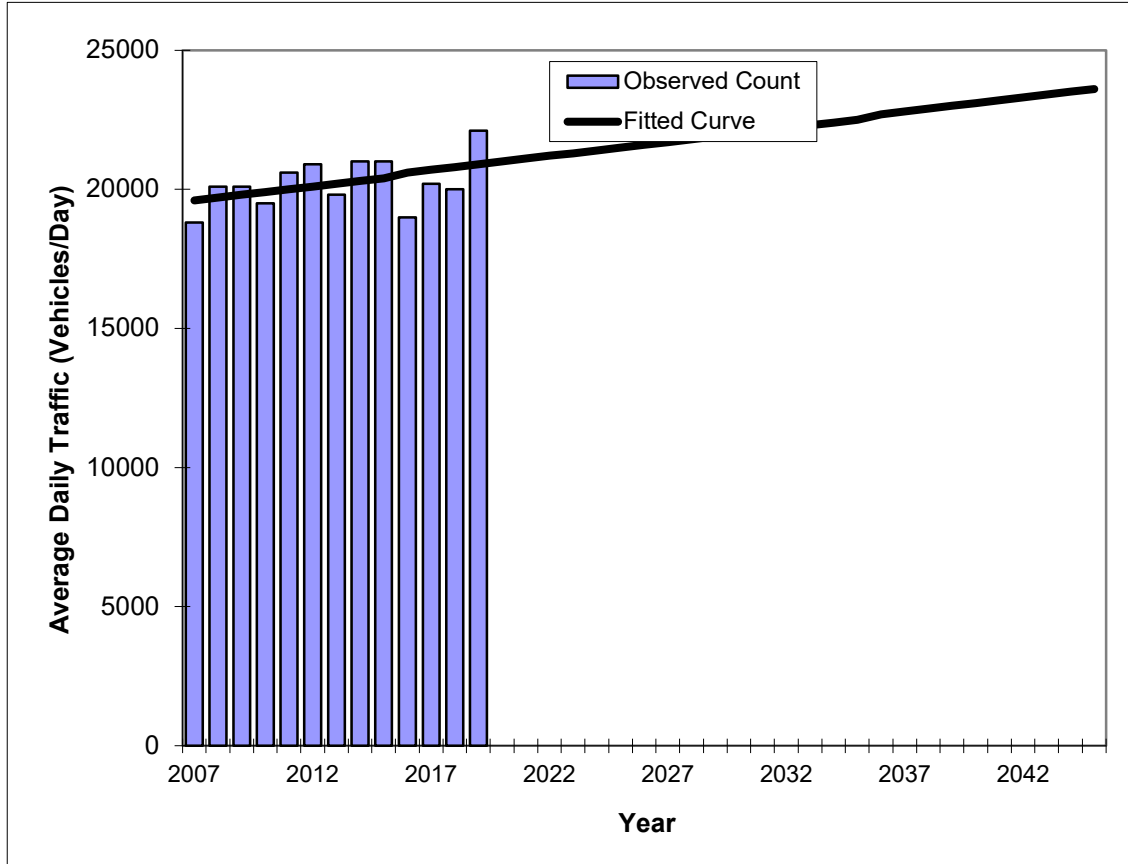
Trend R-squared:	20.39%
Compounded Annual Historic Growth Rate:	0.54%
Compounded Growth Rate (2019 to Design Year):	0.50%
Printed:	4-Jun-20
Exponential Growth Option	

*Axle-Adjusted

Traffic Trends - V3.0 MALABAR RD. -- W OF MINTON RD

FIN#	1234
Location	1

County:	Brevard (70)
Station #:	371
Highway:	MALABAR RD.



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2007	18800	19600
2008	20100	19700
2009	20100	19800
2010	19500	19900
2011	20600	20000
2012	20900	20100
2013	19800	20200
2014	21000	20300
2015	21000	20400
2016	19000	20600
2017	20200	20700
2018	20000	20800
2019	22100	20900
2025 Opening Year Trend		
2025	N/A	21500
2035 Mid-Year Trend		
2035	N/A	22500
2045 Design Year Trend		
2045	N/A	23600
TRANPLAN Forecasts/Trends		

** Annual Trend Increase:	105
Trend R-squared:	20.81%
Trend Annual Historic Growth Rate:	0.55%
Trend Growth Rate (2019 to Design Year):	0.50%
Printed:	4-Jun-20
Straight Line Growth Option	

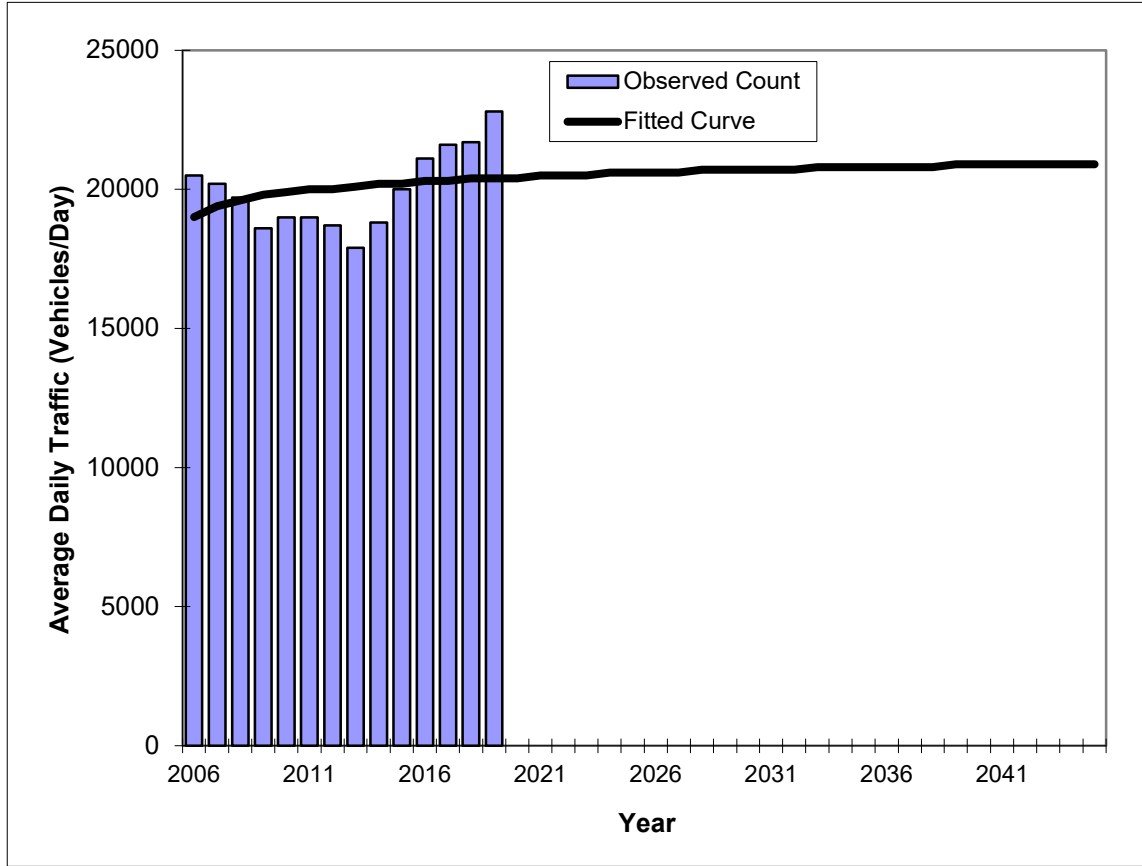
*Axle-Adjusted

Traffic Trends - V3.0

MINTON RD. -- N. OF MALABAR RD.

FIN#	1234
Location	1

County:	Brevard (70)
Station #:	490
Highway:	MINTON RD.



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2006	20500	19000
2007	20200	19400
2008	19700	19600
2009	18600	19800
2010	19000	19900
2011	19000	20000
2012	18700	20000
2013	17900	20100
2014	18800	20200
2015	20000	20200
2016	21100	20300
2017	21600	20300
2018	21700	20400
2019	22800	20400
2025 Opening Year Trend		
2025	N/A	20600
2035 Mid-Year Trend		
2035	N/A	20800
2045 Design Year Trend		
2045	N/A	20900
TRANPLAN Forecasts/Trends		

Trend R-squared:	7.86%
Compounded Annual Historic Growth Rate:	0.55%
Compounded Growth Rate (2019 to Design Year):	0.09%
Printed:	4-Jun-20
Decaying Exponential Growth Option	

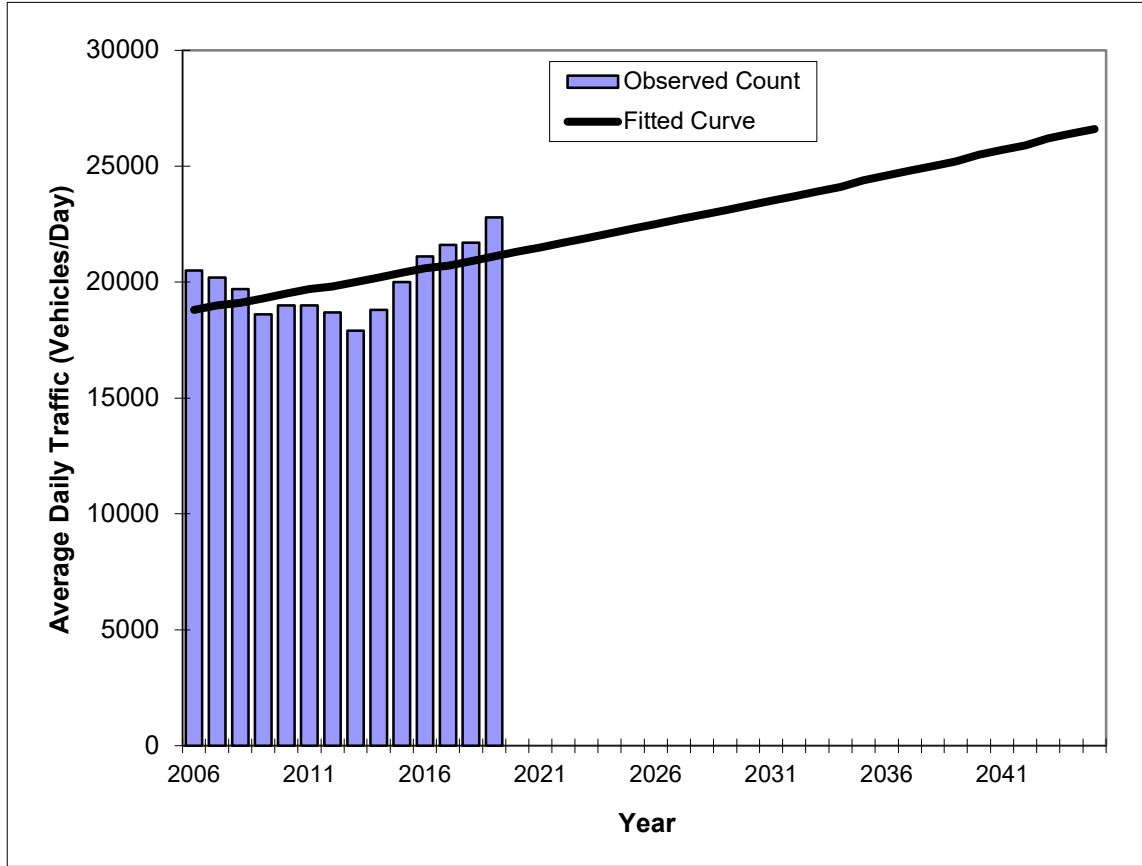
*Axle-Adjusted

Traffic Trends - V3.0

MINTON RD. -- N. OF MALABAR RD.

FIN#	1234
Location	1

County:	Brevard (70)
Station #:	490
Highway:	MINTON RD.



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2006	20500	18800
2007	20200	19000
2008	19700	19100
2009	18600	19300
2010	19000	19500
2011	19000	19700
2012	18700	19800
2013	17900	20000
2014	18800	20200
2015	20000	20400
2016	21100	20600
2017	21600	20700
2018	21700	20900
2019	22800	21100
2025 Opening Year Trend		
2025	N/A	22300
2035 Mid-Year Trend		
2035	N/A	24400
2045 Design Year Trend		
2045	N/A	26600
TRANPLAN Forecasts/Trends		

Trend R-squared:	28.11%
Compounded Annual Historic Growth Rate:	0.89%
Compounded Growth Rate (2019 to Design Year):	0.89%
Printed:	4-Jun-20
Exponential Growth Option	

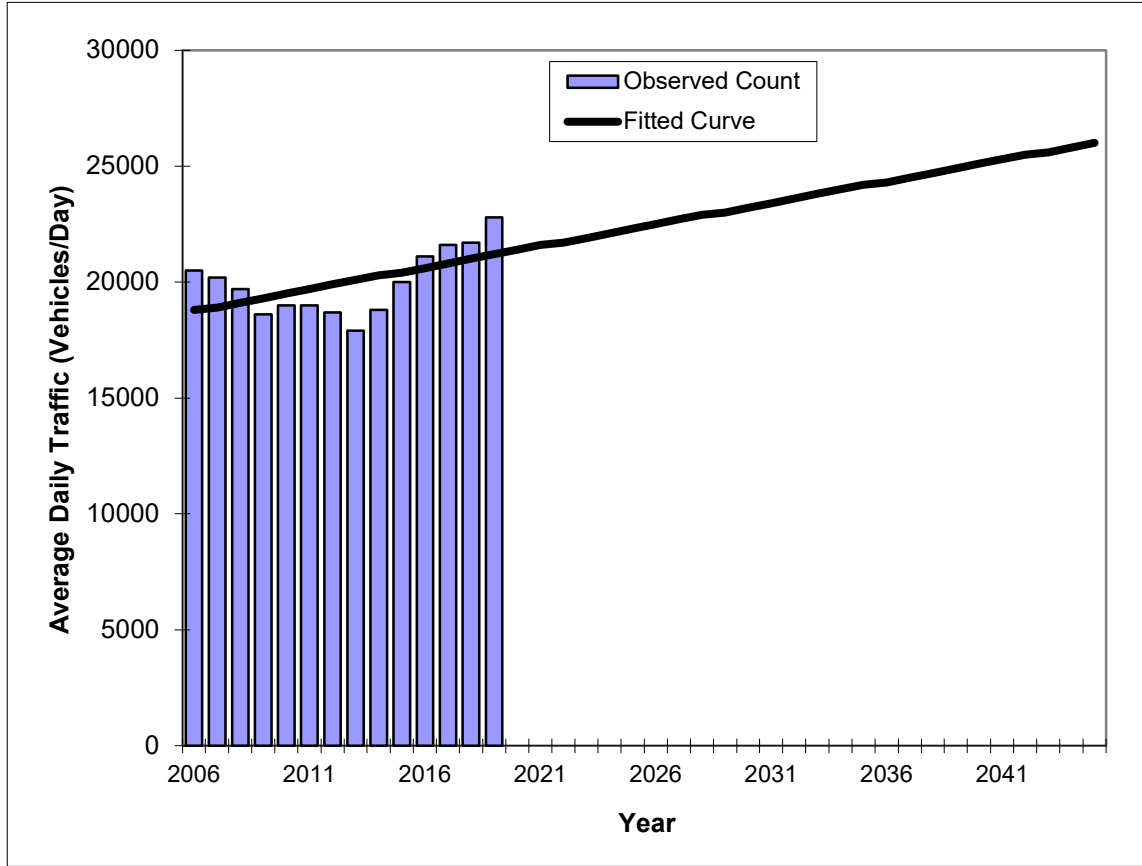
*Axle-Adjusted

Traffic Trends - V3.0

MINTON RD. -- N. OF MALABAR RD.

FIN#	1234
Location	1

County:	Brevard (70)
Station #:	490
Highway:	MINTON RD.



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2006	20500	18800
2007	20200	18900
2008	19700	19100
2009	18600	19300
2010	19000	19500
2011	19000	19700
2012	18700	19900
2013	17900	20100
2014	18800	20300
2015	20000	20400
2016	21100	20600
2017	21600	20800
2018	21700	21000
2019	22800	21200
2025 Opening Year Trend		
2025	N/A	22300
2035 Mid-Year Trend		
2035	N/A	24200
2045 Design Year Trend		
2045	N/A	26000
TRANPLAN Forecasts/Trends		

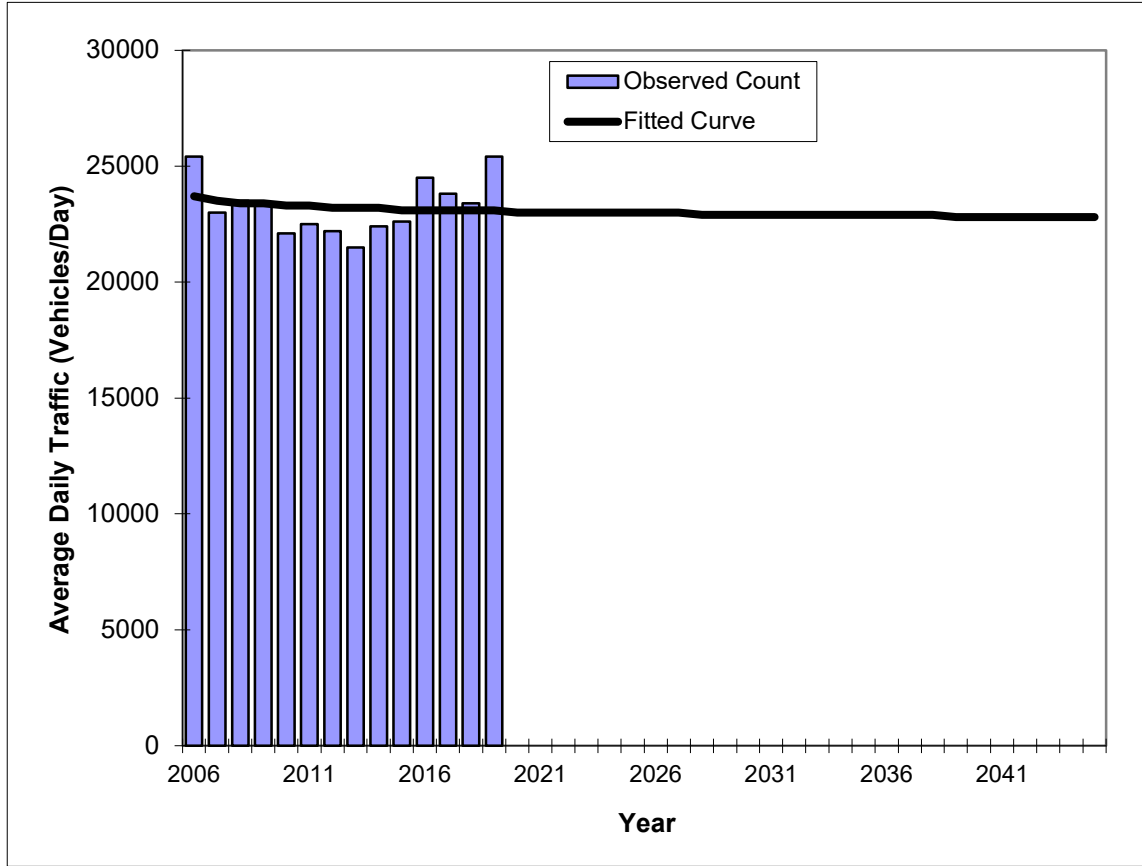
** Annual Trend Increase:	186
Trend R-squared:	29.83%
Trend Annual Historic Growth Rate:	0.98%
Trend Growth Rate (2019 to Design Year):	0.87%
Printed:	4-Jun-20
Straight Line Growth Option	

*Axle-Adjusted

Traffic Trends - V3.0 MALABAR RD. -- E OF MINTON RD

FIN#	1234
Location	1

County:	Brevard (70)
Station #:	491
Highway:	MALABAR RD.



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2006	25400	23700
2007	23000	23500
2008	23500	23400
2009	23400	23400
2010	22100	23300
2011	22500	23300
2012	22200	23200
2013	21500	23200
2014	22400	23200
2015	22600	23100
2016	24500	23100
2017	23800	23100
2018	23400	23100
2019	25400	23100
2025 Opening Year Trend		
2025	N/A	23000
2035 Mid-Year Trend		
2035	N/A	22900
2045 Design Year Trend		
2045	N/A	22800
TRANPLAN Forecasts/Trends		

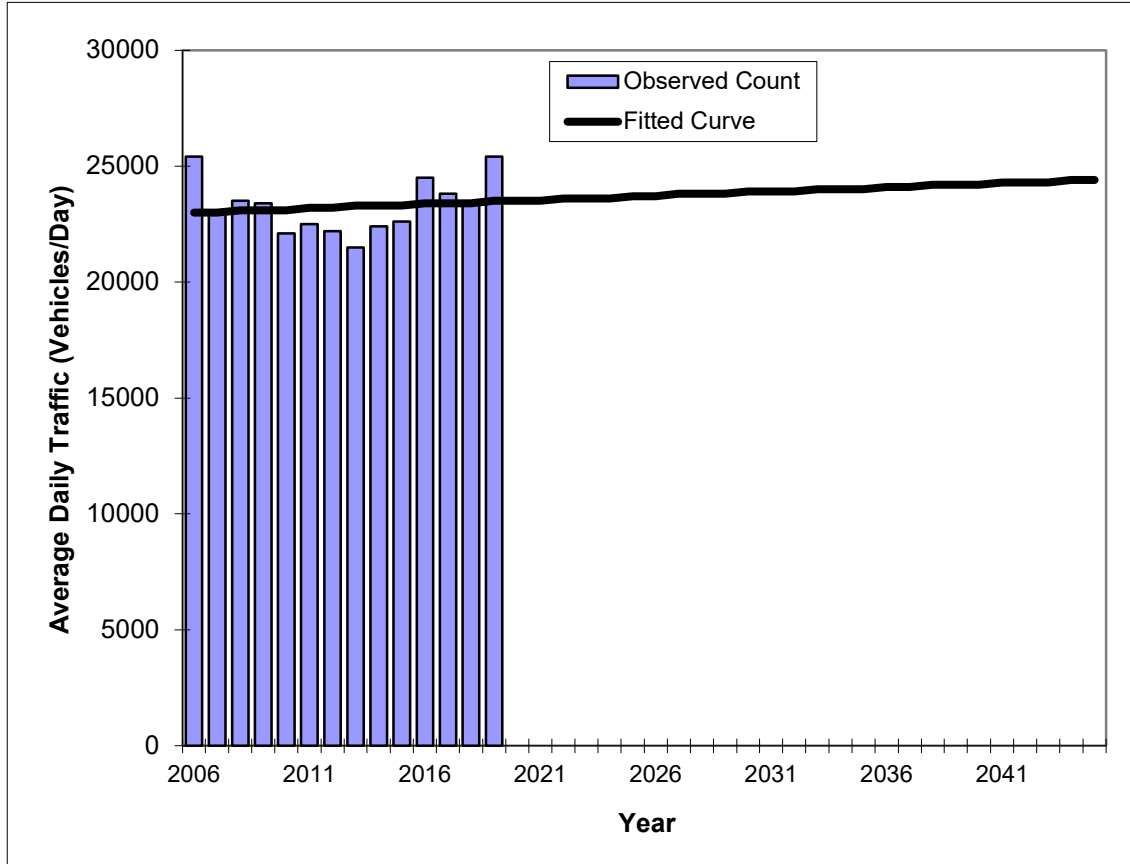
Trend R-squared:	2.43%
Compounded Annual Historic Growth Rate:	-0.20%
Compounded Growth Rate (2019 to Design Year):	-0.05%
Printed:	4-Jun-20
Decaying Exponential Growth Option	

*Axle-Adjusted

Traffic Trends - V3.0 MALABAR RD. -- E OF MINTON RD

FIN#	1234
Location	1

County:	Brevard (70)
Station #:	491
Highway:	MALABAR RD.



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2006	25400	23000
2007	23000	23000
2008	23500	23100
2009	23400	23100
2010	22100	23100
2011	22500	23200
2012	22200	23200
2013	21500	23300
2014	22400	23300
2015	22600	23300
2016	24500	23400
2017	23800	23400
2018	23400	23400
2019	25400	23500
2025 Opening Year Trend		
2025	N/A	23700
2035 Mid-Year Trend		
2035	N/A	24000
2045 Design Year Trend		
2045	N/A	24400
TRANPLAN Forecasts/Trends		

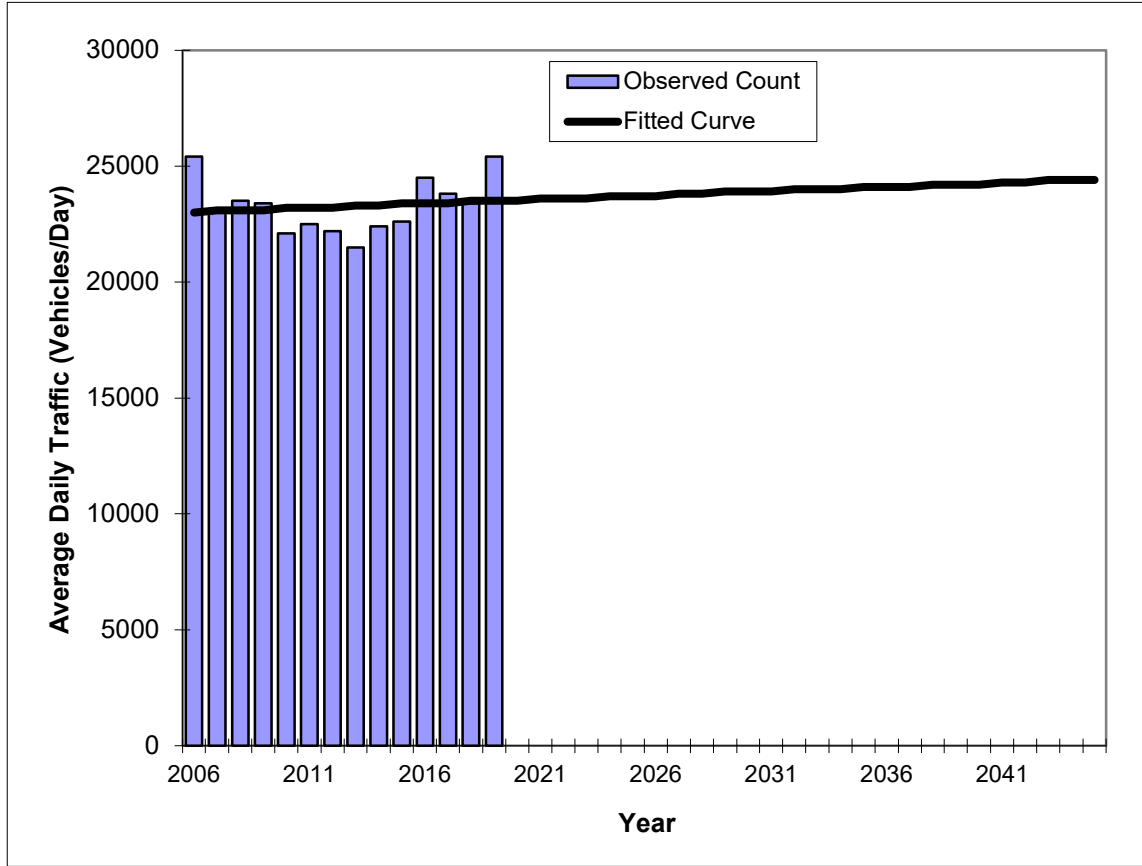
Trend R-squared:	1.58%
Compounded Annual Historic Growth Rate:	0.17%
Compounded Growth Rate (2019 to Design Year):	0.14%
Printed:	4-Jun-20
Exponential Growth Option	

*Axle-Adjusted

Traffic Trends - V3.0 MALABAR RD. -- E OF MINTON RD

FIN#	1234
Location	1

County:	Brevard (70)
Station #:	491
Highway:	MALABAR RD.



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2006	25400	23000
2007	23000	23100
2008	23500	23100
2009	23400	23100
2010	22100	23200
2011	22500	23200
2012	22200	23200
2013	21500	23300
2014	22400	23300
2015	22600	23400
2016	24500	23400
2017	23800	23400
2018	23400	23500
2019	25400	23500
2025 Opening Year Trend		
2025	N/A	23700
2035 Mid-Year Trend		
2035	N/A	24100
2045 Design Year Trend		
2045	N/A	24400
TRANPLAN Forecasts/Trends		

** Annual Trend Increase:	36
Trend R-squared:	1.58%
Trend Annual Historic Growth Rate:	0.17%
Trend Growth Rate (2019 to Design Year):	0.15%
Printed:	4-Jun-20
Straight Line Growth Option	

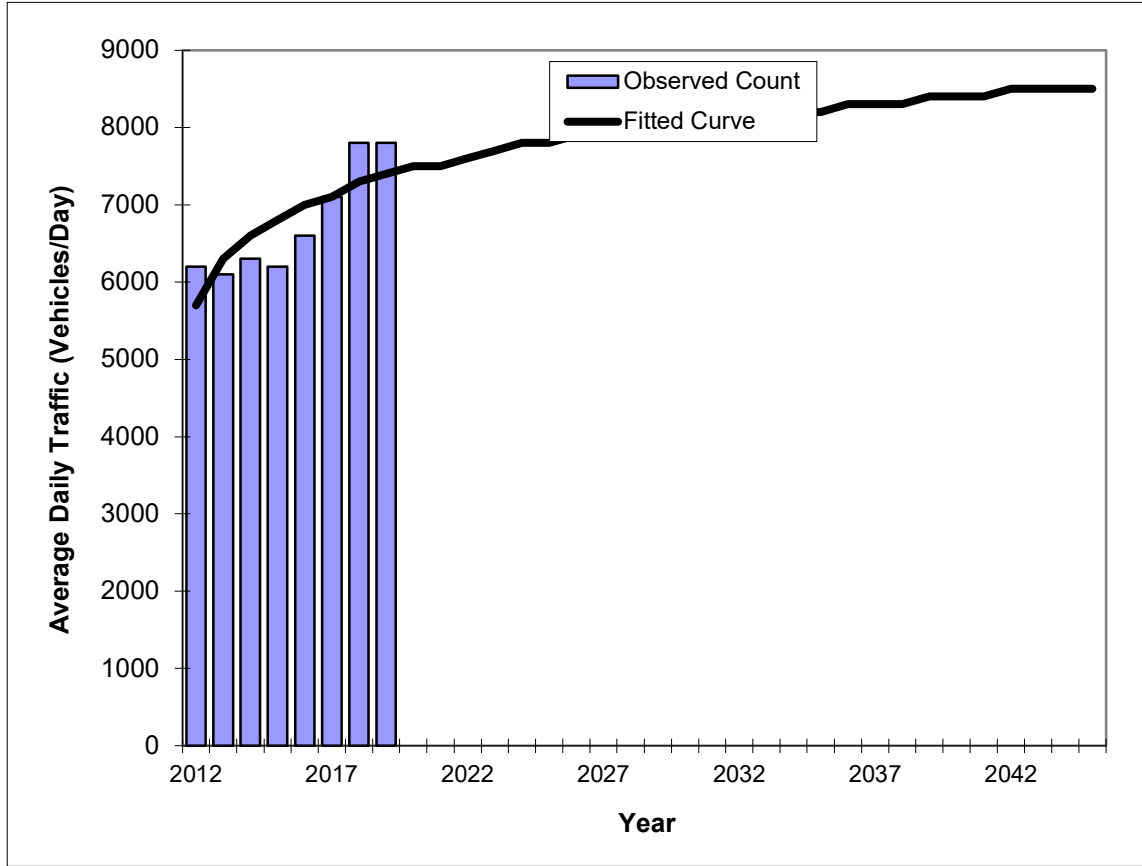
*Axle-Adjusted

Traffic Trends - V3.0

JUPITER BLVD. -- S. OF MALABAR RD.

FIN#	1234
Location	1

County:	Brevard (70)
Station #:	573
Highway:	JUPITER BLVD.



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2012	6200	5700
2013	6100	6300
2014	6300	6600
2015	6200	6800
2016	6600	7000
2017	7100	7100
2018	7800	7300
2019	7800	7400
2025 Opening Year Trend		
2025	N/A	7800
2035 Mid-Year Trend		
2035	N/A	8200
2045 Design Year Trend		
2045	N/A	8500
TRANPLAN Forecasts/Trends		

Trend R-squared:	62.01%
Compounded Annual Historic Growth Rate:	4.21%
Compounded Growth Rate (2018 to Design Year):	0.57%
Printed:	4-Jun-20
Decaying Exponential Growth Option	

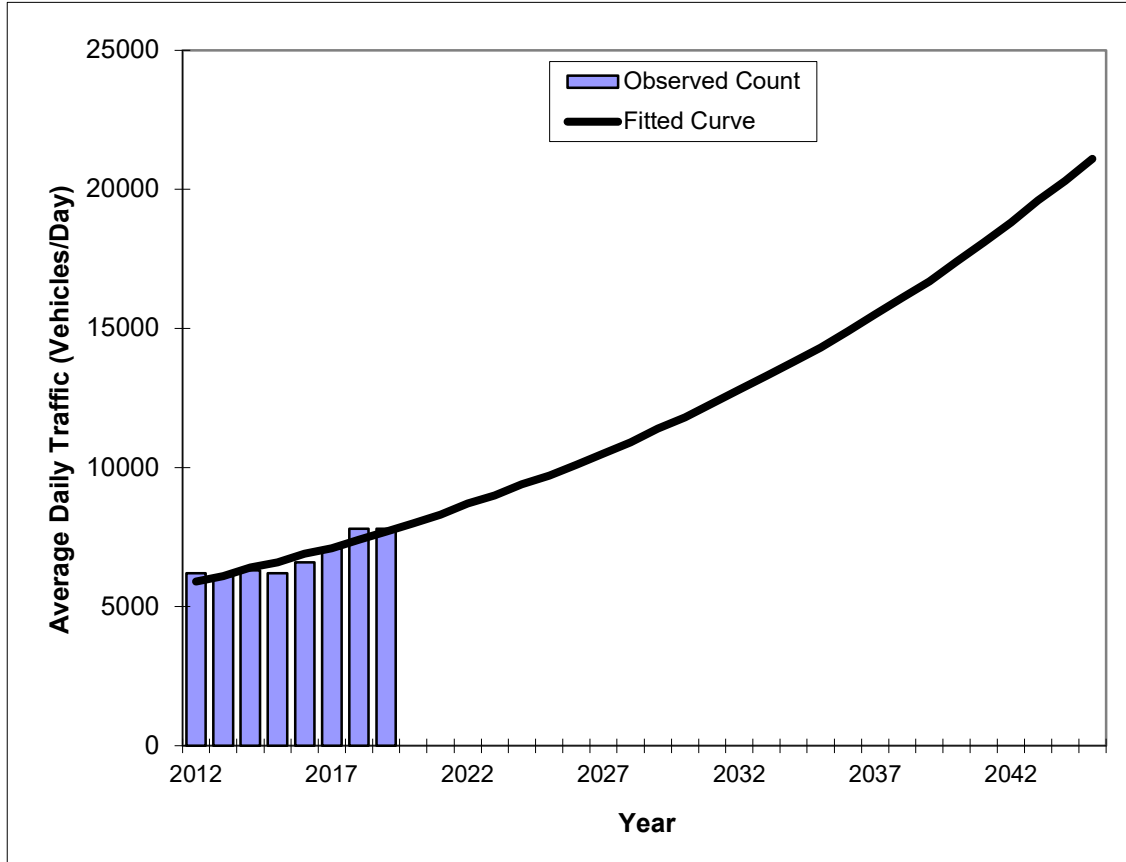
*Axle-Adjusted

Traffic Trends - V3.0

JUPITER BLVD. -- S. OF MALABAR RD.

FIN#	1234
Location	1

County:	Brevard (70)
Station #:	573
Highway:	JUPITER BLVD.



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2012	6200	5900
2013	6100	6100
2014	6300	6400
2015	6200	6600
2016	6600	6900
2017	7100	7100
2018	7800	7400
2019	7800	7700
2025 Opening Year Trend		
2025	N/A	9700
2035 Mid-Year Trend		
2035	N/A	14300
2045 Design Year Trend		
2045	N/A	21100
TRANPLAN Forecasts/Trends		

Trend R-squared:	85.05%
Compounded Annual Historic Growth Rate:	3.88%
Compounded Growth Rate (2019 to Design Year):	3.95%
Printed:	4-Jun-20
Exponential Growth Option	

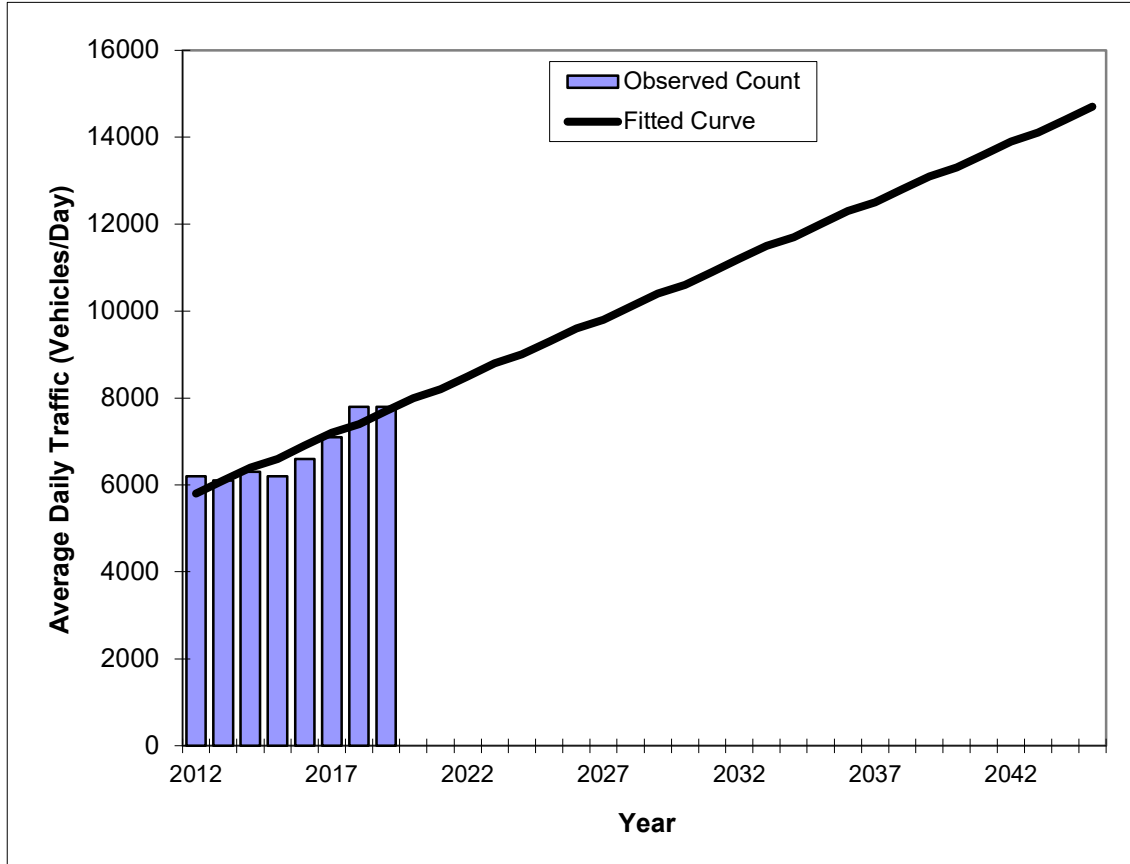
*Axle-Adjusted

Traffic Trends - V3.0

JUPITER BLVD. -- S. OF MALABAR RD.

FIN#	1234
Location	1

County:	Brevard (70)
Station #:	573
Highway:	JUPITER BLVD.



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2012	6200	5800
2013	6100	6100
2014	6300	6400
2015	6200	6600
2016	6600	6900
2017	7100	7200
2018	7800	7400
2019	7800	7700
2025 Opening Year Trend		
2025	N/A	9300
2035 Mid-Year Trend		
2035	N/A	12000
2045 Design Year Trend		
2045	N/A	14700
TRANPLAN Forecasts/Trends		

** Annual Trend Increase:	268
Trend R-squared:	84.20%
Trend Annual Historic Growth Rate:	4.68%
Trend Growth Rate (2019 to Design Year):	3.50%
Printed:	4-Jun-20
Straight Line Growth Option	

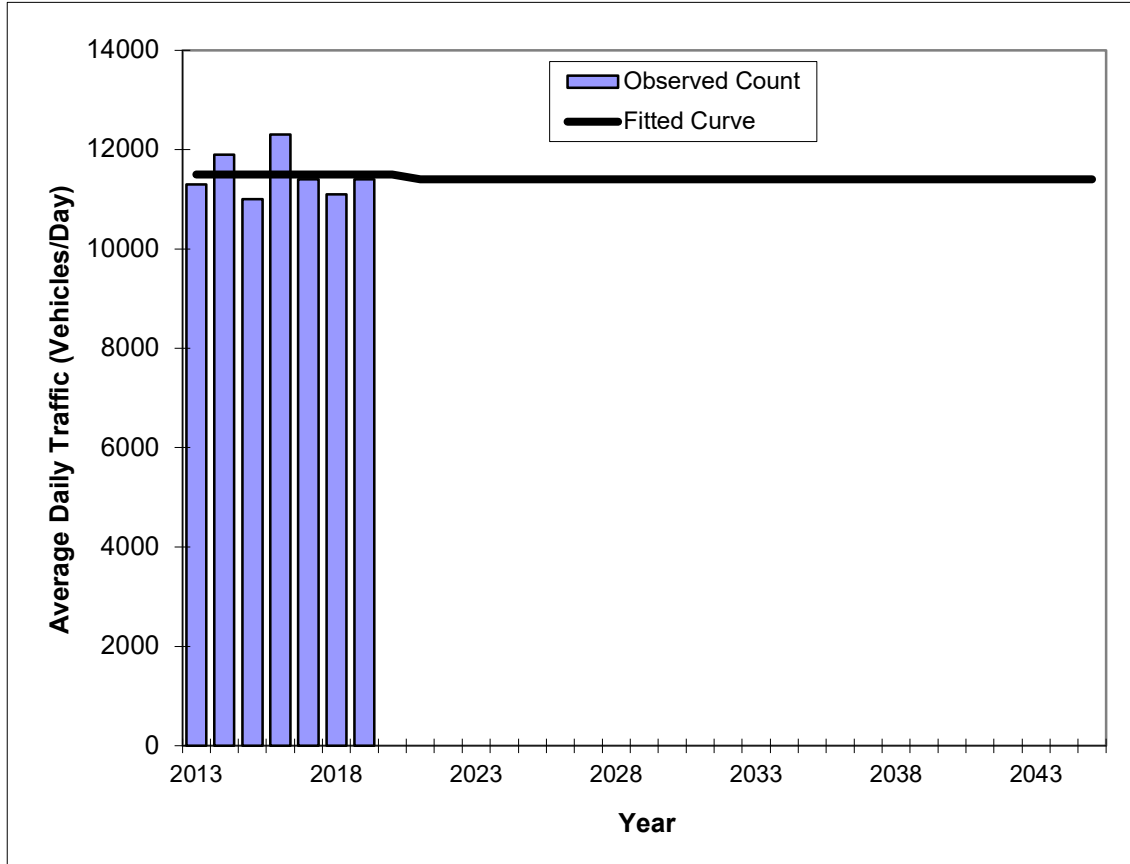
*Axle-Adjusted

Traffic Trends - V3.0

MALABAR RD. -- W OF JUPITER BLVD

FIN#	1234
Location	1

County:	Brevard (70)
Station #:	589
Highway:	MALABAR RD.



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2013	11300	11500
2014	11900	11500
2015	11000	11500
2016	12300	11500
2017	11400	11500
2018	11100	11500
2019	11400	11500
2025 Opening Year Trend		
2025	N/A	11400
2035 Mid-Year Trend		
2035	N/A	11400
2045 Design Year Trend		
2045	N/A	11400
TRANPLAN Forecasts/Trends		

Trend R-squared:	0.36%
Compounded Annual Historic Growth Rate:	0.00%
Compounded Growth Rate (2019 to Design Year):	-0.03%
Printed:	4-Jun-20
Decaying Exponential Growth Option	

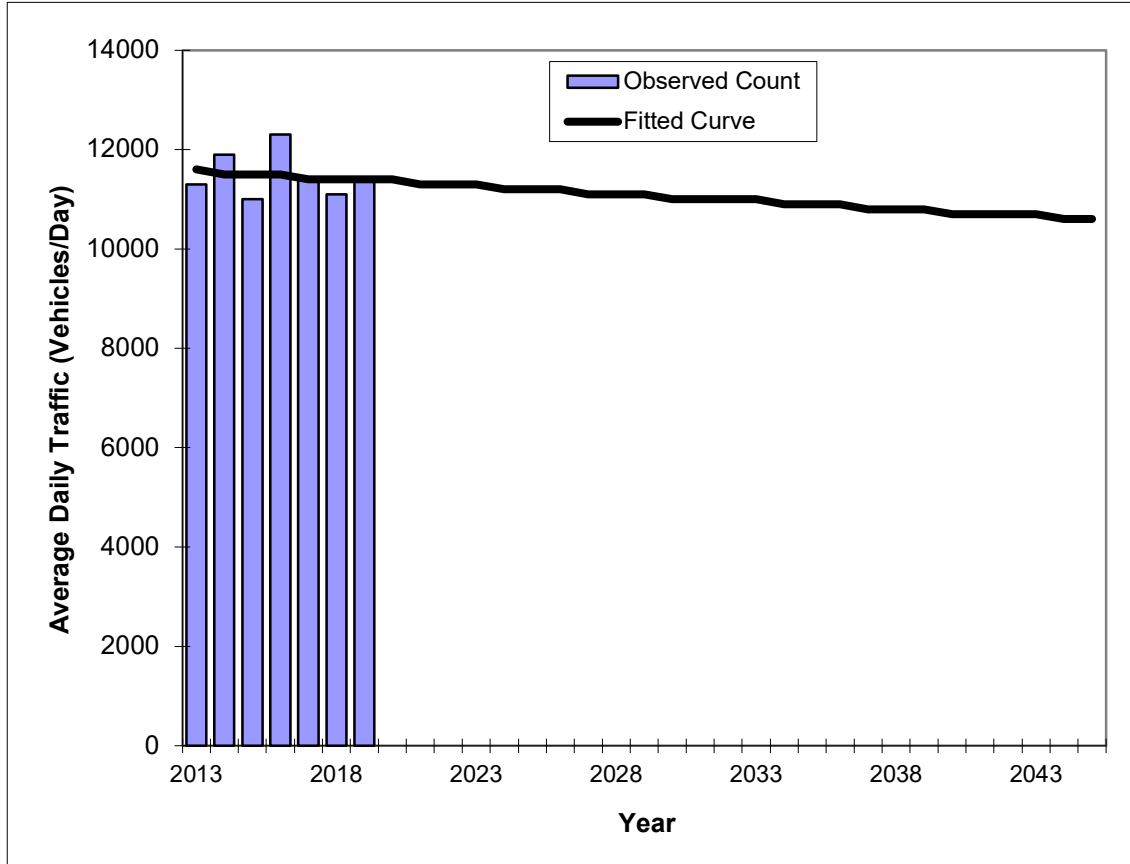
*Axle-Adjusted

Traffic Trends - V3.0

MALABAR RD. -- W OF JUPITER BLVD

FIN#	1234
Location	1

County:	Brevard (70)
Station #:	589
Highway:	MALABAR RD.



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2013	11300	11600
2014	11900	11500
2015	11000	11500
2016	12300	11500
2017	11400	11400
2018	11100	11400
2019	11400	11400
2025 Opening Year Trend		
2025	N/A	11200
2035 Mid-Year Trend		
2035	N/A	10900
2045 Design Year Trend		
2045	N/A	10600
TRANPLAN Forecasts/Trends		

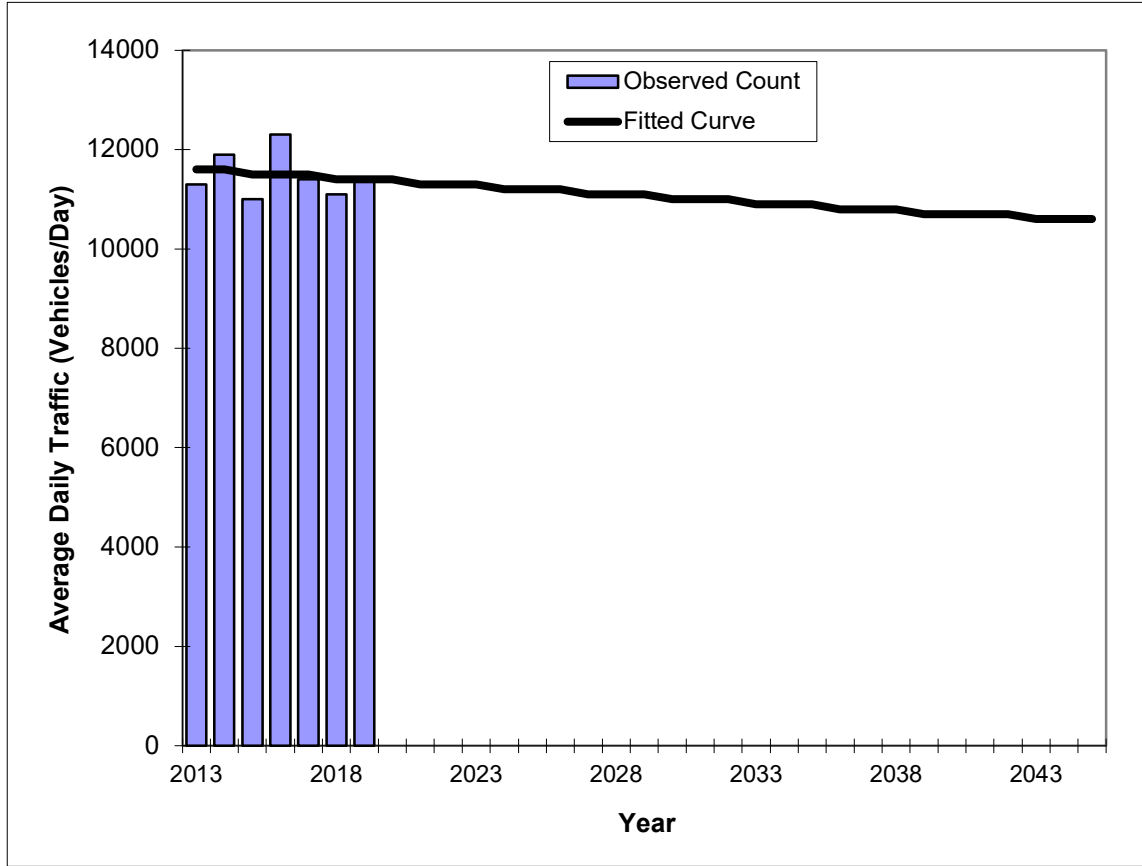
Trend R-squared:	2.27%
Compounded Annual Historic Growth Rate:	-0.29%
Compounded Growth Rate (2019 to Design Year):	-0.28%
Printed:	4-Jun-20
Exponential Growth Option	

*Axle-Adjusted

Traffic Trends - V3.0 MALABAR RD. -- W OF JUPITER BLVD

FIN#	1234
Location	1

County:	Brevard (70)
Station #:	589
Highway:	MALABAR RD.



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2013	11300	11600
2014	11900	11600
2015	11000	11500
2016	12300	11500
2017	11400	11500
2018	11100	11400
2019	11400	11400
2025 Opening Year Trend		
2025	N/A	11200
2035 Mid-Year Trend		
2035	N/A	10900
2045 Design Year Trend		
2045	N/A	10600
TRANPLAN Forecasts/Trends		

** Annual Trend Increase:	-32
Trend R-squared:	2.28%
Trend Annual Historic Growth Rate:	-0.29%
Trend Growth Rate (2019 to Design Year):	-0.27%
Printed:	4-Jun-20
Straight Line Growth Option	

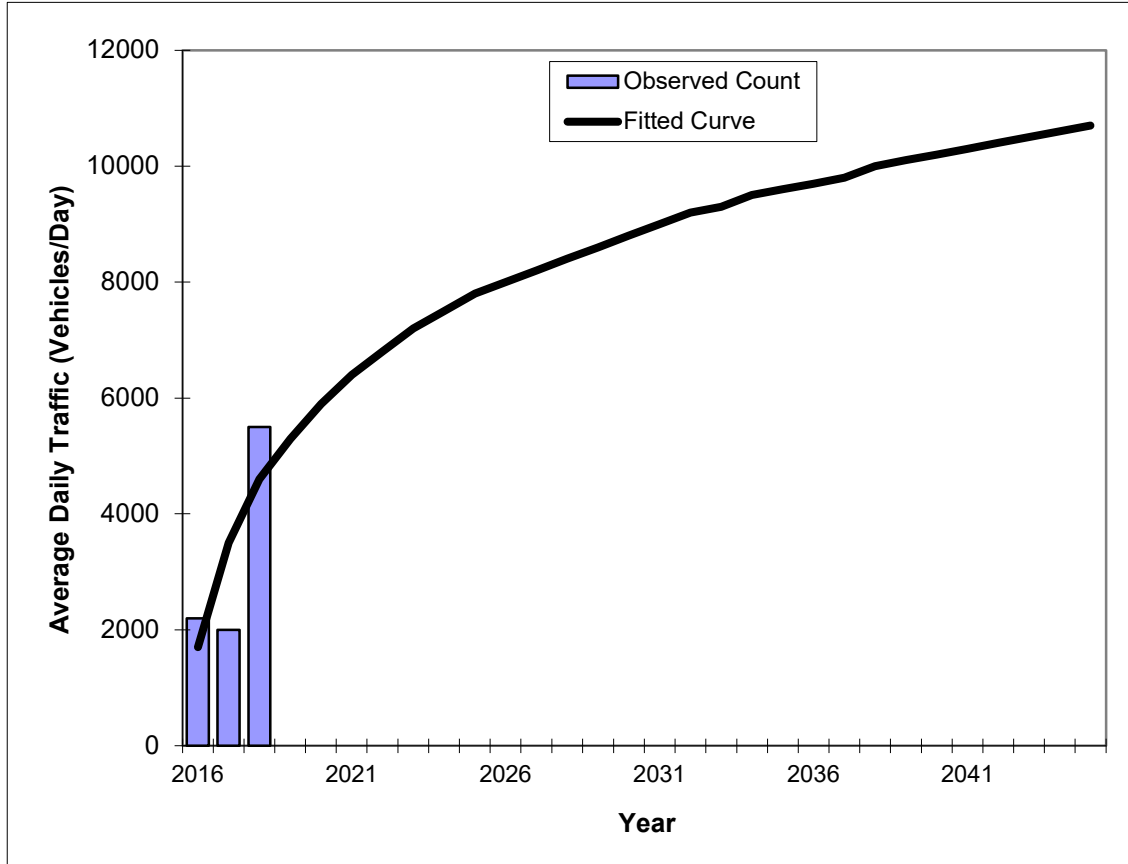
*Axle-Adjusted

Traffic Trends - V3.0

ST. JOHNS HERITAGE PKWY. -- N. OF MALABAR RD.

FIN#	1234
Location	1

County:	Brevard (70)
Station #:	609
Highway:	ST. JOHNS HERITAGE PKWY.



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2016	2200	1700
2017	2000	3500
2018	5500	4600
2025 Opening Year Trend		
2025	N/A	7800
2035 Mid-Year Trend		
2035	N/A	9600
2045 Design Year Trend		
2045	N/A	10700
TRANPLAN Forecasts/Trends		

Trend R-squared:	56.07%
Compounded Annual Historic Growth Rate:	64.50%
Compounded Growth Rate (2018 to Design Year):	3.18%
Printed:	4-Jun-20
Decaying Exponential Growth Option	

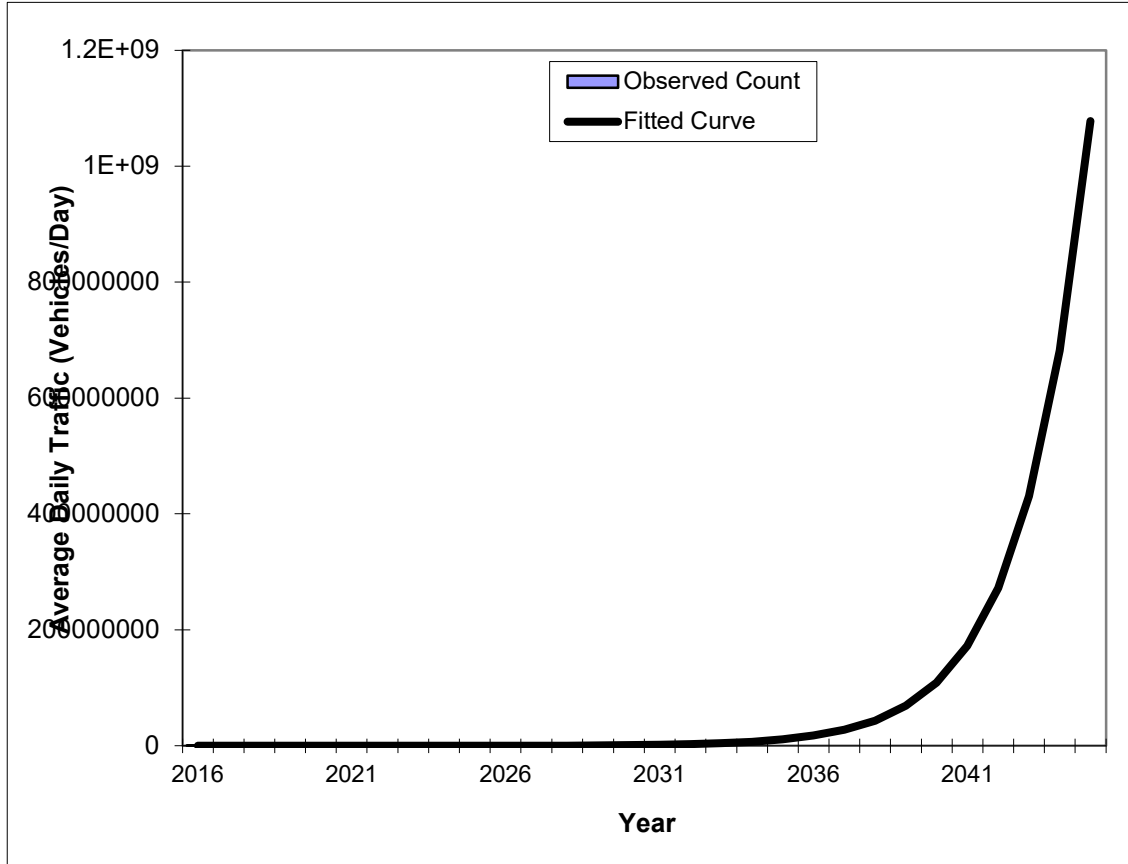
*Axle-Adjusted

Traffic Trends - V3.0

ST. JOHNS HERITAGE PKWY. -- N. OF MALABAR RD.

FIN#	1234
Location	1

County:	Brevard (70)
Station #:	609
Highway:	ST. JOHNS HERITAGE PKWY.



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2016	2200	1800
2017	2000	2900
2018	5500	4600
2025 Opening Year Trend		
2025	N/A	113000
2035 Mid-Year Trend		
2035	N/A	11034000
2045 Design Year Trend		
2045	N/A	1.08E+09
TRANPLAN Forecasts/Trends		

Trend R-squared:	67.27%
Compounded Annual Historic Growth Rate:	59.86%
Compounded Growth Rate (2018 to Design Year):	58.08%
Printed:	4-Jun-20
Exponential Growth Option	

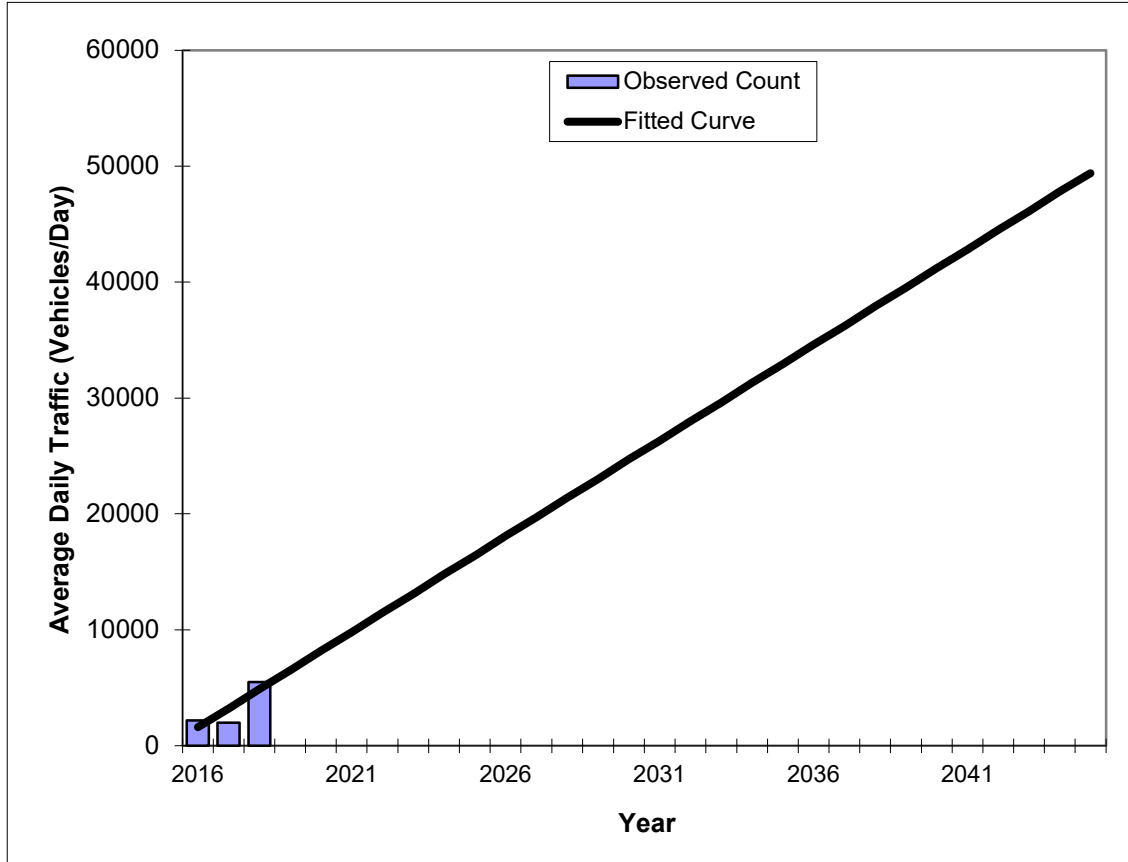
*Axle-Adjusted

Traffic Trends - V3.0

ST. JOHNS HERITAGE PKWY. -- N. OF MALABAR RD.

FIN#	1234
Location	1

County:	Brevard (70)
Station #:	609
Highway:	ST. JOHNS HERITAGE PKWY.



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2016	2200	1600
2017	2000	3200
2018	5500	4900
2025 Opening Year Trend		
2025	N/A	16400
2035 Mid-Year Trend		
2035	N/A	32900
2045 Design Year Trend		
2045	N/A	49400
TRANPLAN Forecasts/Trends		

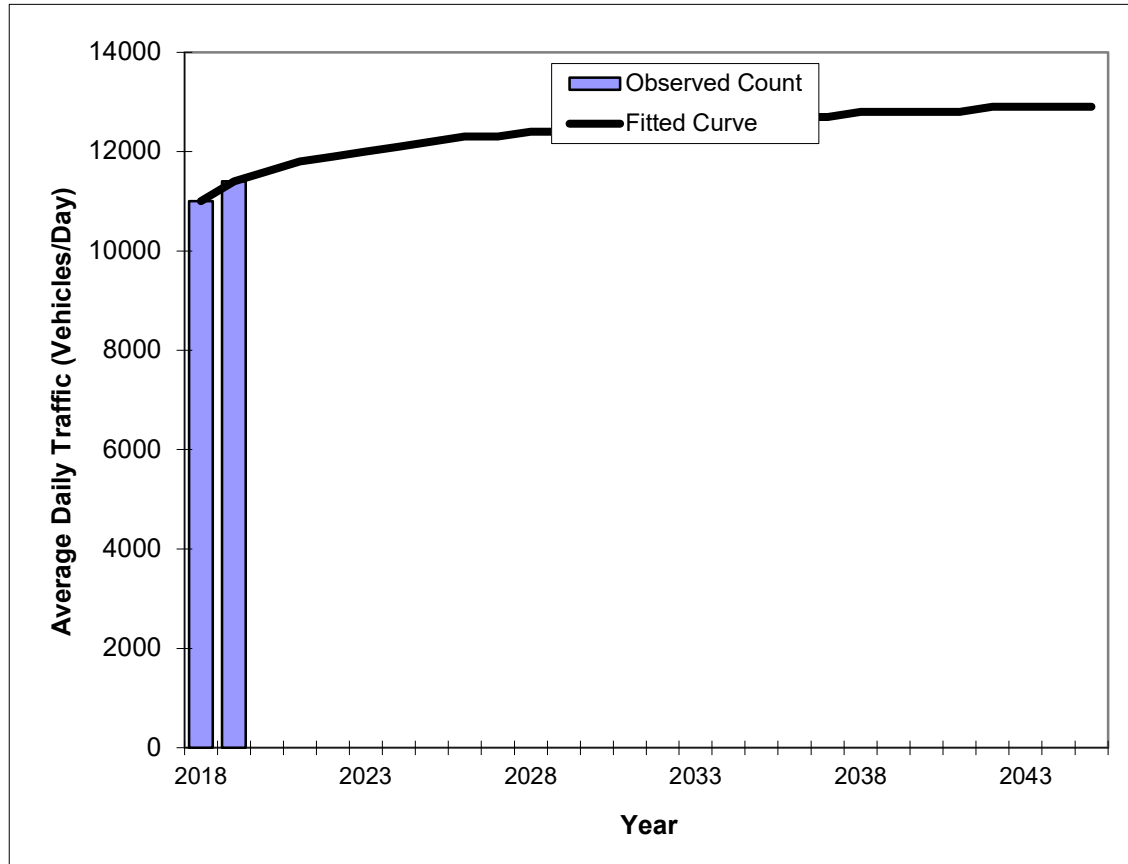
** Annual Trend Increase:	1,650
Trend R-squared:	70.47%
Trend Annual Historic Growth Rate:	103.13%
Trend Growth Rate (2018 to Design Year):	33.64%
Printed:	4-Jun-20
Straight Line Growth Option	

*Axle-Adjusted

Traffic Trends - V3.0 JUPITER BLVD -- N OF MALABAR RD

FIN#	1234
Location	1

County:	Brevard (70)
Station #:	620
Highway:	JUPITER BLVD



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2018	11000	11000
2019	11400	11400
2025 Opening Year Trend		
2025	N/A	12200
2035 Mid-Year Trend		
2035	N/A	12700
2045 Design Year Trend		
2045	N/A	12900
TRANPLAN Forecasts/Trends		

Trend R-squared:	100.00%
Compounded Annual Historic Growth Rate:	3.64%
Compounded Growth Rate (2019 to Design Year):	0.48%
Printed:	4-Jun-20
Decaying Exponential Growth Option	

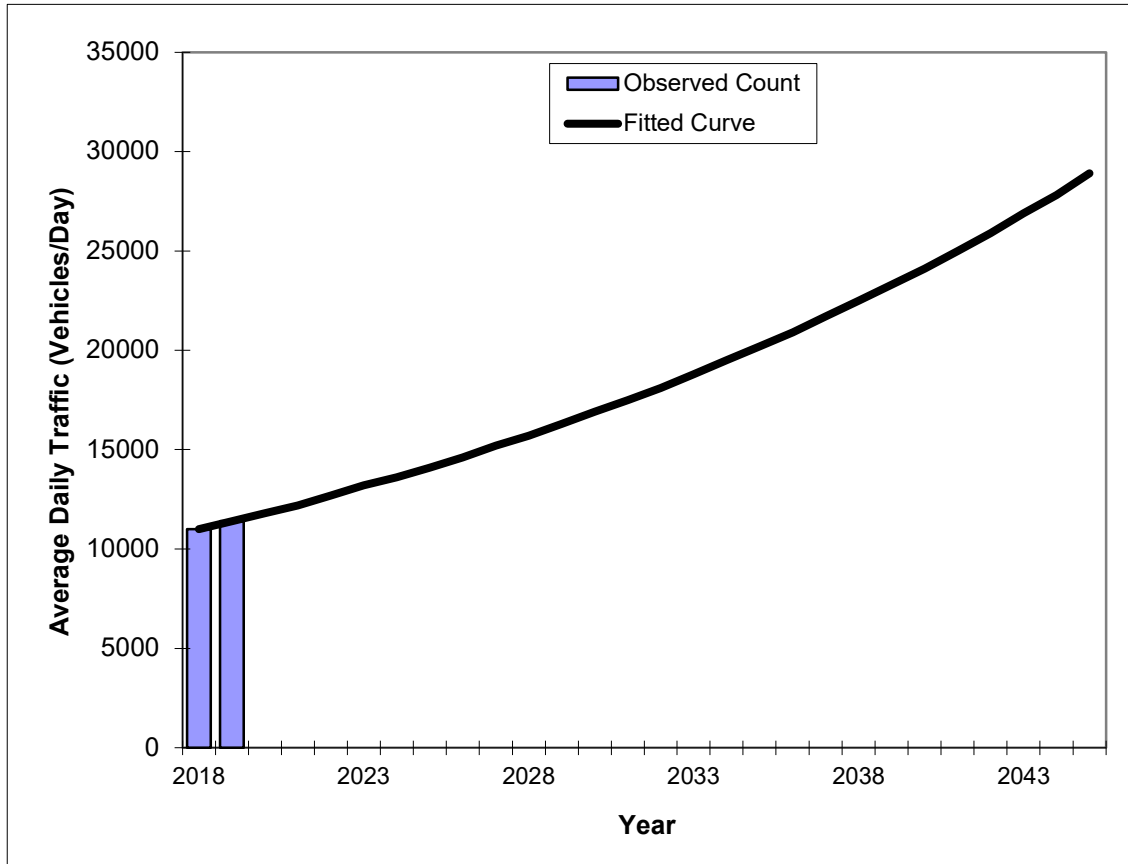
*Axle-Adjusted

Traffic Trends - V3.0

JUPITER BLVD -- N OF MALABAR RD

FIN#	1234
Location	1

County:	Brevard (70)
Station #:	620
Highway:	JUPITER BLVD



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2018	11000	11000
2019	11400	11400
2025 Opening Year Trend		
2025	N/A	14100
2035 Mid-Year Trend		
2035	N/A	20200
2045 Design Year Trend		
2045	N/A	28900
TRANPLAN Forecasts/Trends		

Trend R-squared:	100.00%
Compounded Annual Historic Growth Rate:	3.64%
Compounded Growth Rate (2019 to Design Year):	3.64%
Printed:	4-Jun-20
Exponential Growth Option	

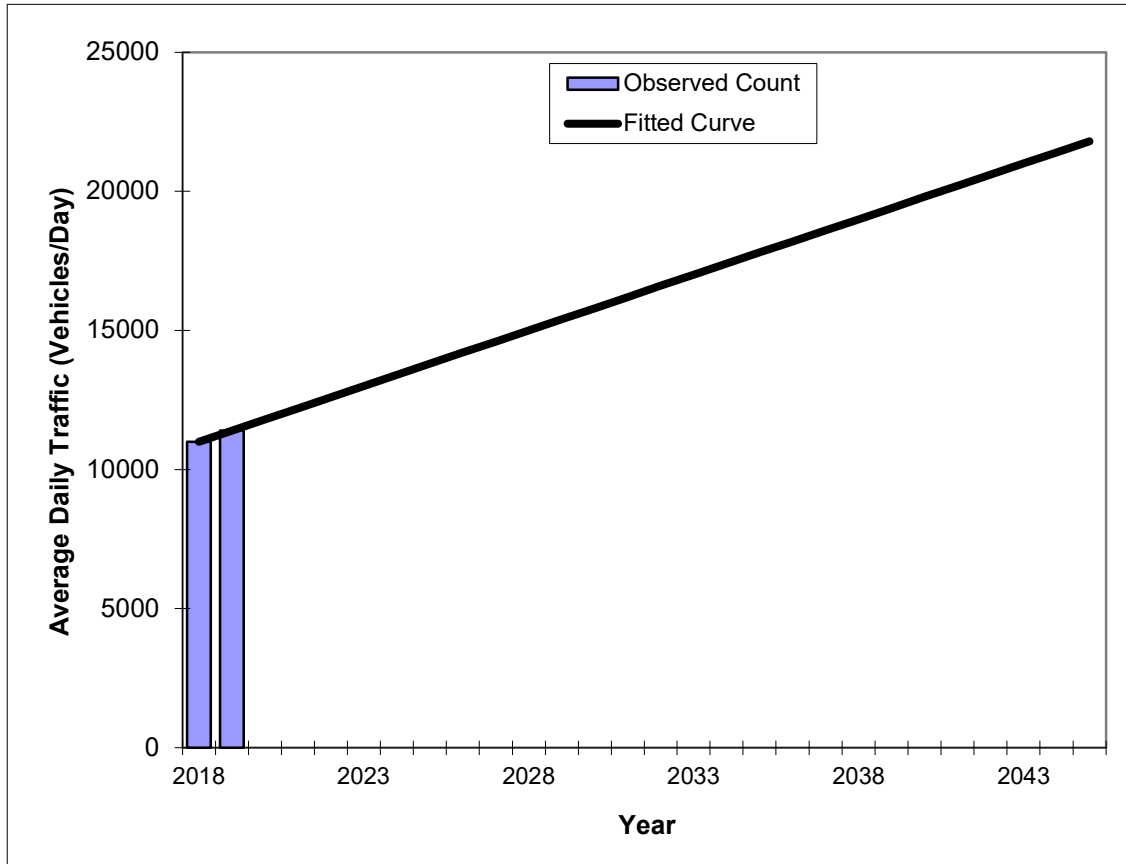
*Axle-Adjusted

Traffic Trends - V3.0

JUPITER BLVD -- N OF MALABAR RD

FIN#	1234
Location	1

County:	Brevard (70)
Station #:	620
Highway:	JUPITER BLVD



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2018	11000	11000
2019	11400	11400
2025 Opening Year Trend		
2025	N/A	13800
2035 Mid-Year Trend		
2035	N/A	17800
2045 Design Year Trend		
2045	N/A	21800
TRANPLAN Forecasts/Trends		

** Annual Trend Increase:	400
Trend R-squared:	100.00%
Trend Annual Historic Growth Rate:	3.64%
Trend Growth Rate (2019 to Design Year):	3.51%
Printed:	4-Jun-20
Straight Line Growth Option	

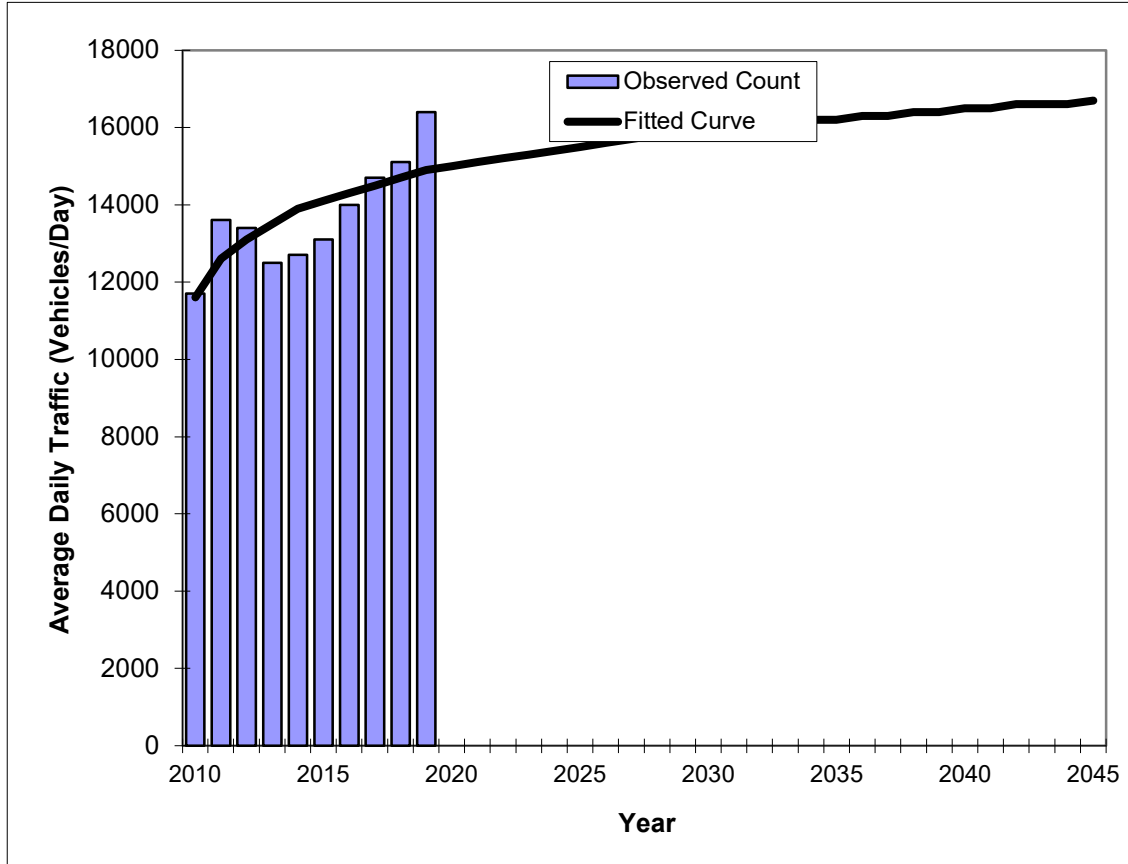
*Axle-Adjusted

Traffic Trends - V3.0

MINTON RD. -- JUPITER BLVD. TO MALABAR RD.

FIN#	1234
Location	1

County:	Brevard (70)
Station #:	7016
Highway:	MINTON RD.



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2010	11700	11600
2011	13600	12600
2012	13400	13100
2013	12500	13500
2014	12700	13900
2015	13100	14100
2016	14000	14300
2017	14700	14500
2018	15100	14700
2019	16400	14900
2025 Opening Year Trend		
2025	N/A	15500
2035 Mid-Year Trend		
2035	N/A	16200
2045 Design Year Trend		
2045	N/A	16700
TRANPLAN Forecasts/Trends		

Trend R-squared:	57.24%
Compounded Annual Historic Growth Rate:	2.82%
Compounded Growth Rate (2019 to Design Year):	0.44%
Printed:	19-Jun-20
Decaying Exponential Growth Option	

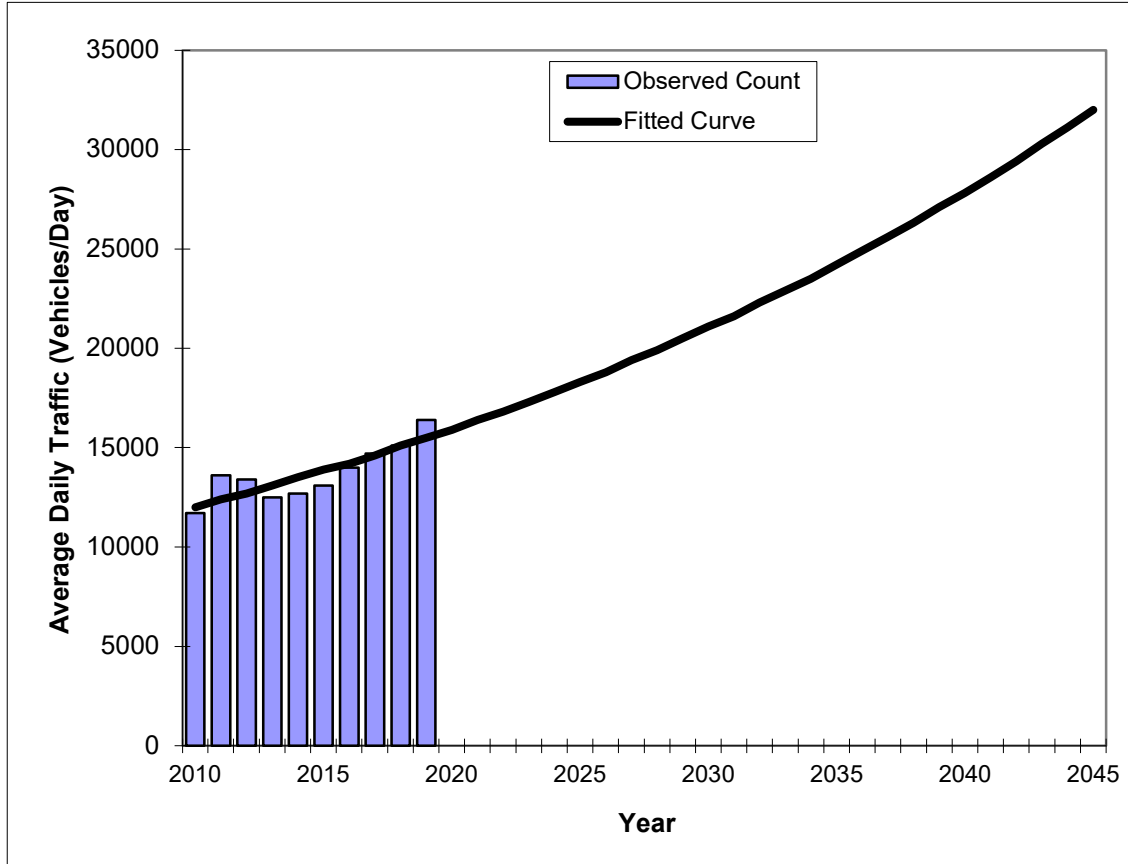
*Axle-Adjusted

Traffic Trends - V3.0

MINTON RD. -- JUPITER BLVD. TO MALABAR RD.

FIN#	1234
Location	1

County:	Brevard (70)
Station #:	7016
Highway:	MINTON RD.



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2010	11700	12000
2011	13600	12400
2012	13400	12700
2013	12500	13100
2014	12700	13500
2015	13100	13900
2016	14000	14200
2017	14700	14600
2018	15100	15100
2019	16400	15500
2025 Opening Year Trend		
2025	N/A	18300
2035 Mid-Year Trend		
2035	N/A	24200
2045 Design Year Trend		
2045	N/A	32000
TRANPLAN Forecasts/Trends		

Trend R-squared:	72.41%
Compounded Annual Historic Growth Rate:	2.88%
Compounded Growth Rate (2019 to Design Year):	2.83%
Printed:	19-Jun-20
Exponential Growth Option	

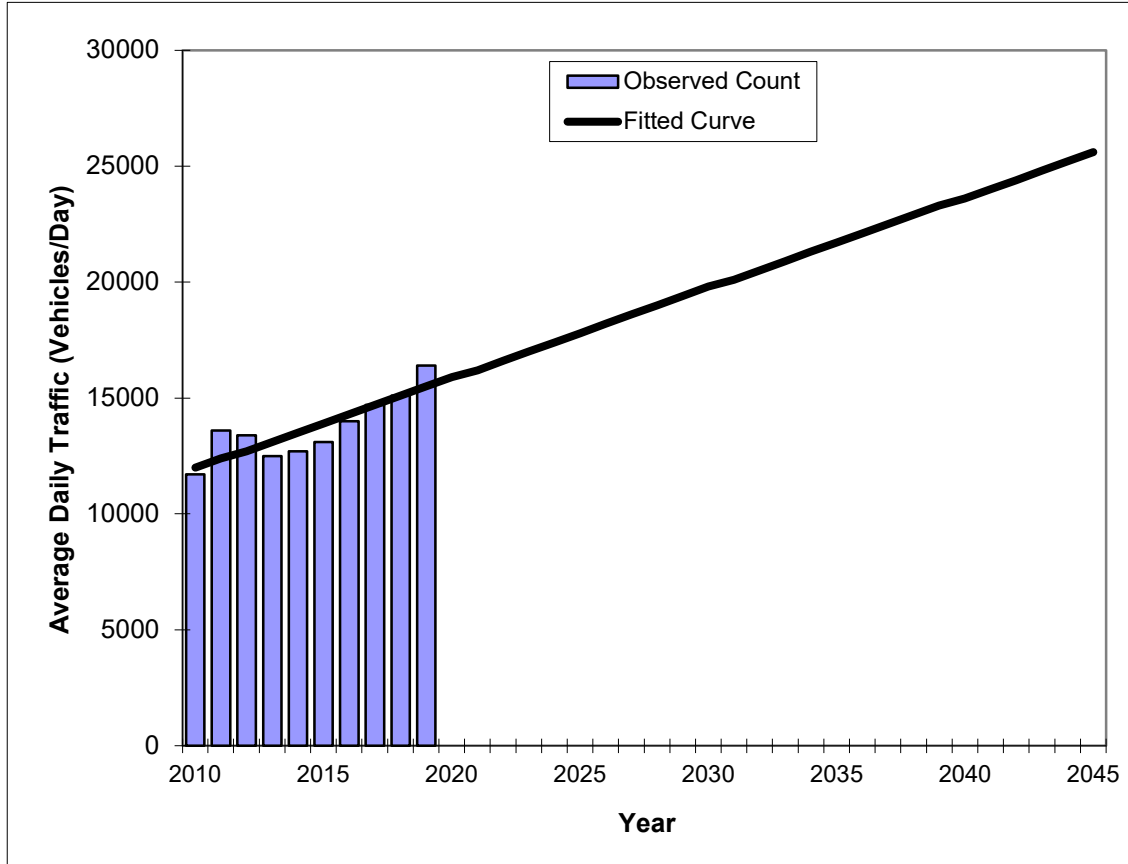
*Axle-Adjusted

Traffic Trends - V3.0

MINTON RD. -- JUPITER BLVD. TO MALABAR RD.

FIN#	1234
Location	1

County:	Brevard (70)
Station #:	7016
Highway:	MINTON RD.



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2010	11700	12000
2011	13600	12400
2012	13400	12700
2013	12500	13100
2014	12700	13500
2015	13100	13900
2016	14000	14300
2017	14700	14700
2018	15100	15100
2019	16400	15500
2025 Opening Year Trend		
2025	N/A	17800
2035 Mid-Year Trend		
2035	N/A	21700
2045 Design Year Trend		
2045	N/A	25600
TRANPLAN Forecasts/Trends		

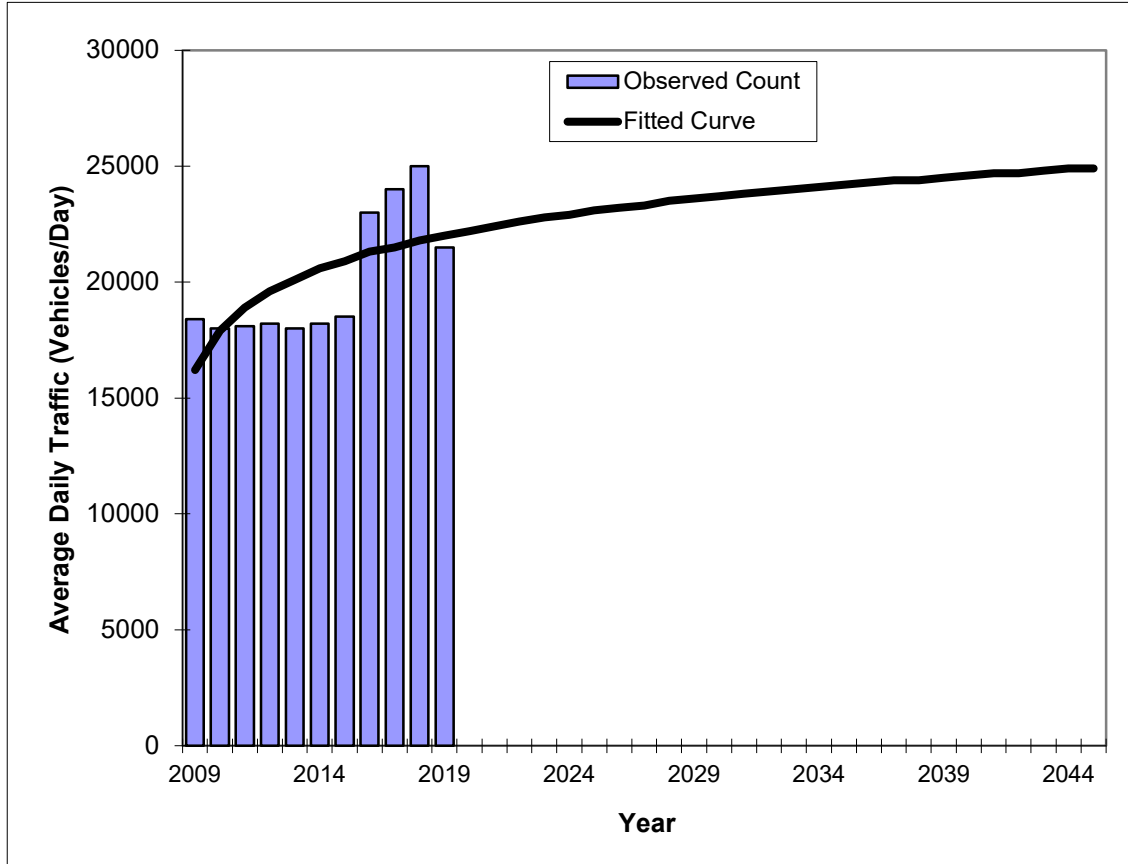
** Annual Trend Increase:	389
Trend R-squared:	72.46%
Trend Annual Historic Growth Rate:	3.24%
Trend Growth Rate (2019 to Design Year):	2.51%
Printed:	19-Jun-20
Straight Line Growth Option	

*Axle-Adjusted

Traffic Trends - V3.0
MINTON RD. -- N. OF MALABAR RD.

FIN#	1234
Location	1

County:	Brevard (70)
Station #:	7084
Highway:	MINTON RD.



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2009	18400	16200
2010	18000	17900
2011	18100	18900
2012	18200	19600
2013	18000	20100
2014	18200	20600
2015	18500	20900
2016	23000	21300
2017	24000	21500
2018	25000	21800
2019	21500	22000
2025 Opening Year Trend		
2025	N/A	23100
2035 Mid-Year Trend		
2035	N/A	24200
2045 Design Year Trend		
2045	N/A	24900
TRANPLAN Forecasts/Trends		

Trend R-squared:	42.91%
Compounded Annual Historic Growth Rate:	3.11%
Compounded Growth Rate (2019 to Design Year):	0.48%
Printed:	4-Jun-20
Decaying Exponential Growth Option	

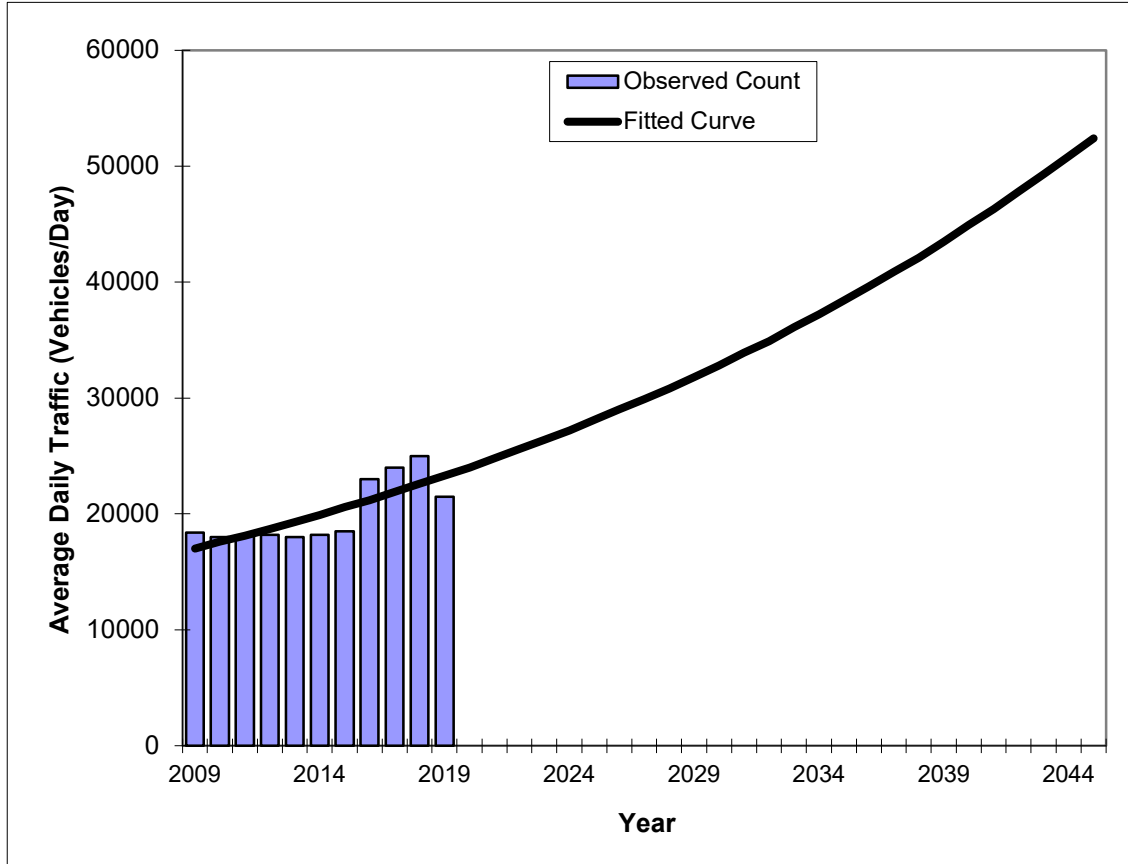
*Axle-Adjusted

Traffic Trends - V3.0

MINTON RD. -- N. OF MALABAR RD.

FIN#	1234
Location	1

County:	Brevard (70)
Station #:	7084
Highway:	MINTON RD.



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2009	18400	17000
2010	18000	17600
2011	18100	18100
2012	18200	18700
2013	18000	19300
2014	18200	19900
2015	18500	20600
2016	23000	21200
2017	24000	21900
2018	25000	22600
2019	21500	23300
2025 Opening Year Trend		
2025	N/A	28100
2035 Mid-Year Trend		
2035	N/A	38400
2045 Design Year Trend		
2045	N/A	52400
TRANPLAN Forecasts/Trends		

Trend R-squared:	62.85%
Compounded Annual Historic Growth Rate:	3.20%
Compounded Growth Rate (2019 to Design Year):	3.17%
Printed:	4-Jun-20
Exponential Growth Option	

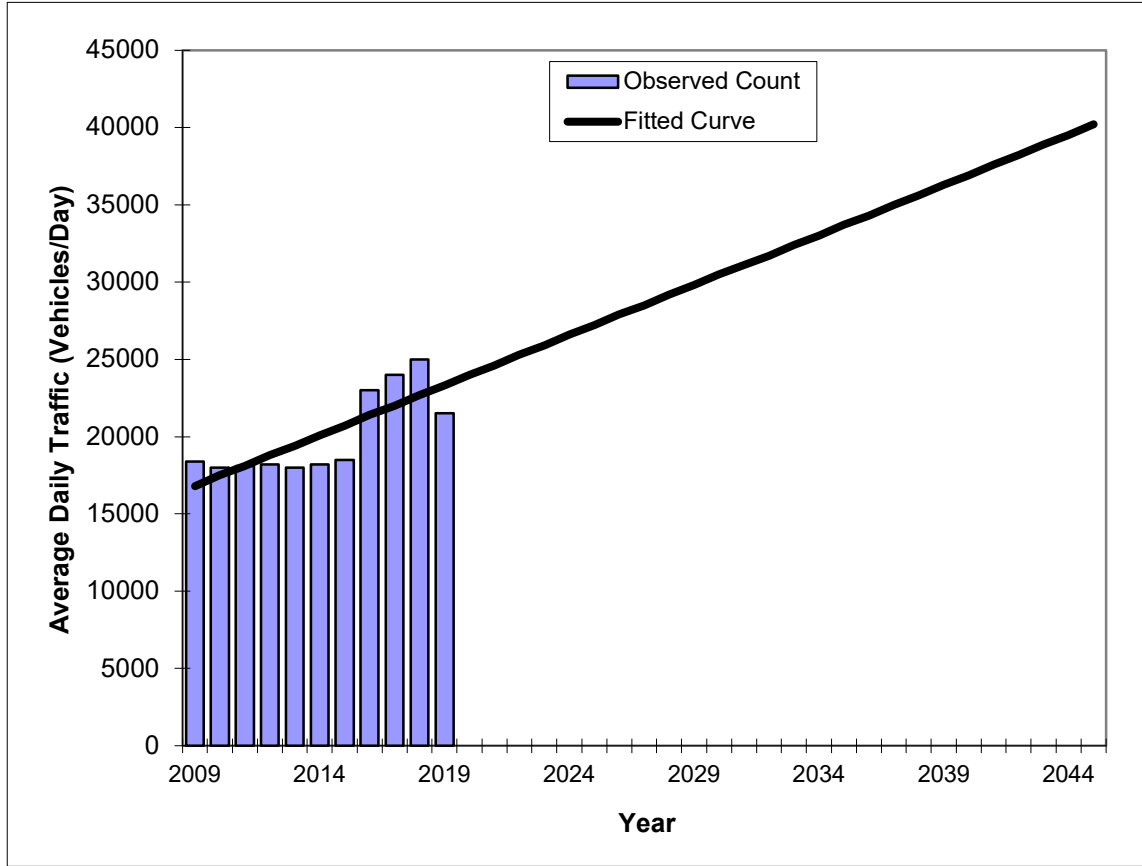
*Axle-Adjusted

Traffic Trends - V3.0

MINTON RD. -- N. OF MALABAR RD.

FIN#	1234
Location	1

County:	Brevard (70)
Station #:	7084
Highway:	MINTON RD.



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2009	18400	16800
2010	18000	17500
2011	18100	18100
2012	18200	18800
2013	18000	19400
2014	18200	20100
2015	18500	20700
2016	23000	21400
2017	24000	22000
2018	25000	22700
2019	21500	23300
2025 Opening Year Trend		
2025	N/A	27200
2035 Mid-Year Trend		
2035	N/A	33700
2045 Design Year Trend		
2045	N/A	40200
TRANPLAN Forecasts/Trends		

** Annual Trend Increase:	648
Trend R-squared:	61.56%
Trend Annual Historic Growth Rate:	3.87%
Trend Growth Rate (2019 to Design Year):	2.79%
Printed:	4-Jun-20
Straight Line Growth Option	

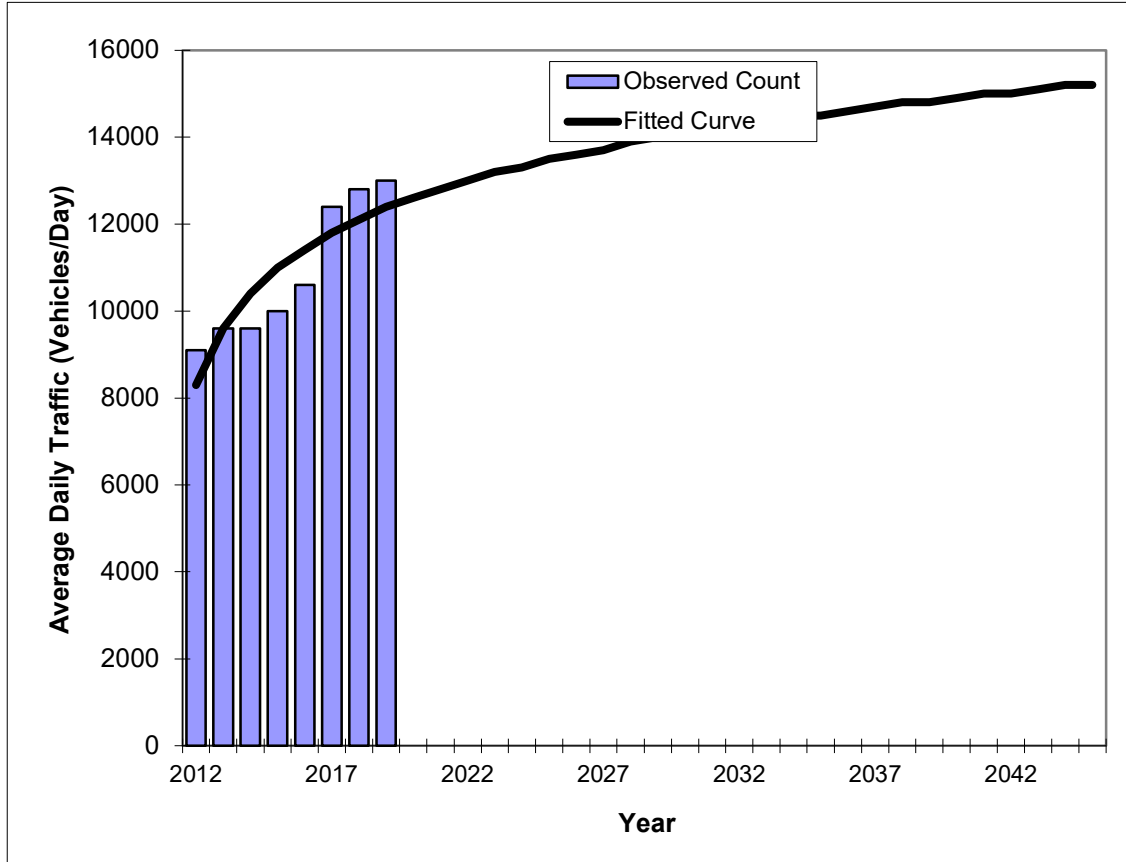
*Axle-Adjusted

Traffic Trends - V3.0

MALABAR RD. -- E OF HURLEY BLVD

FIN#	1234
Location	1

County:	Brevard (70)
Station #:	8142
Highway:	MALABAR RD.



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2012	9100	8300
2013	9600	9600
2014	9600	10400
2015	10000	11000
2016	10600	11400
2017	12400	11800
2018	12800	12100
2019	13000	12400
2025 Opening Year Trend		
2025	N/A	13500
2035 Mid-Year Trend		
2035	N/A	14500
2045 Design Year Trend		
2045	N/A	15200
TRANPLAN Forecasts/Trends		

Trend R-squared:	75.60%
Compounded Annual Historic Growth Rate:	6.48%
Compounded Growth Rate (2018 to Design Year):	0.85%
Printed:	4-Jun-20
Decaying Exponential Growth Option	

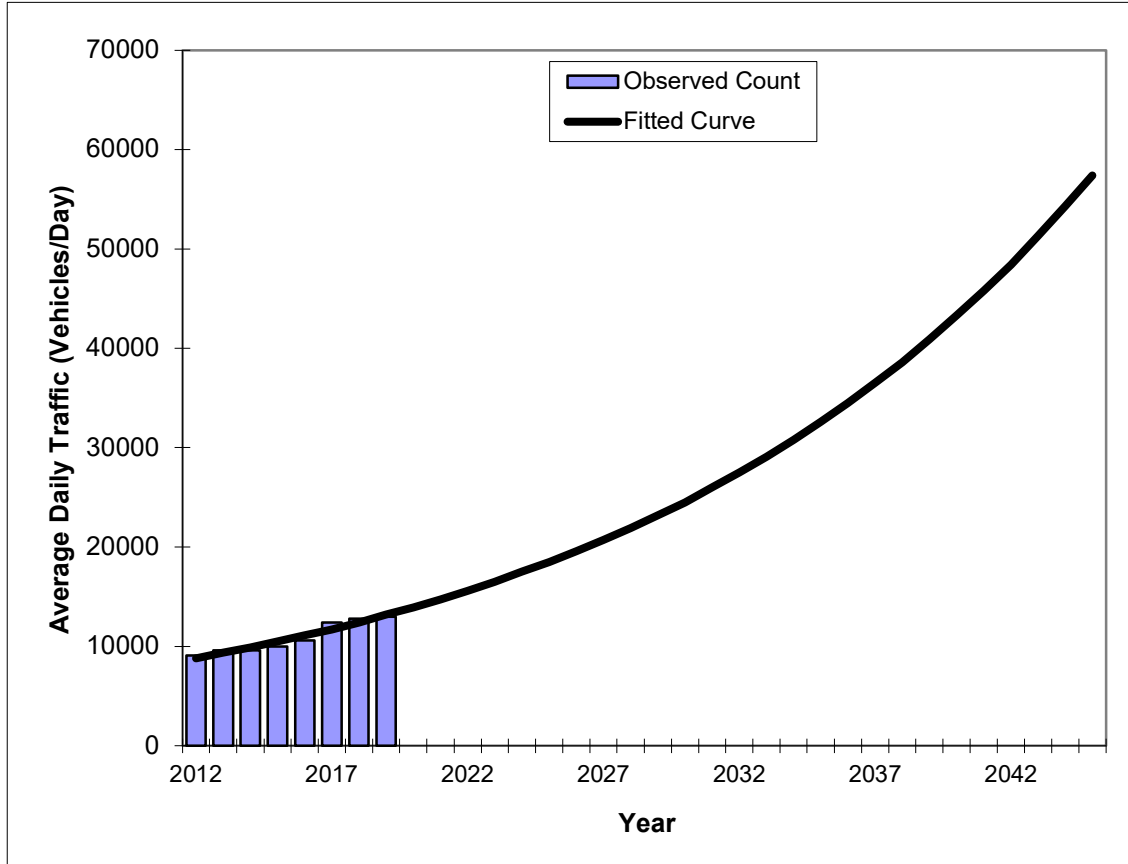
*Axle-Adjusted

Traffic Trends - V3.0

MALABAR RD. -- E OF HURLEY BLVD

FIN#	1234
Location	1

County:	Brevard (70)
Station #:	8142
Highway:	MALABAR RD.



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2012	9100	8800
2013	9600	9400
2014	9600	9900
2015	10000	10500
2016	10600	11100
2017	12400	11700
2018	12800	12400
2019	13000	13200
2025 Opening Year Trend		
2025	N/A	18500
2035 Mid-Year Trend		
2035	N/A	32600
2045 Design Year Trend		
2045	N/A	57400
TRANPLAN Forecasts/Trends		

Trend R-squared:	92.63%
Compounded Annual Historic Growth Rate:	5.88%
Compounded Growth Rate (2018 to Design Year):	5.84%
Printed:	4-Jun-20
Exponential Growth Option	

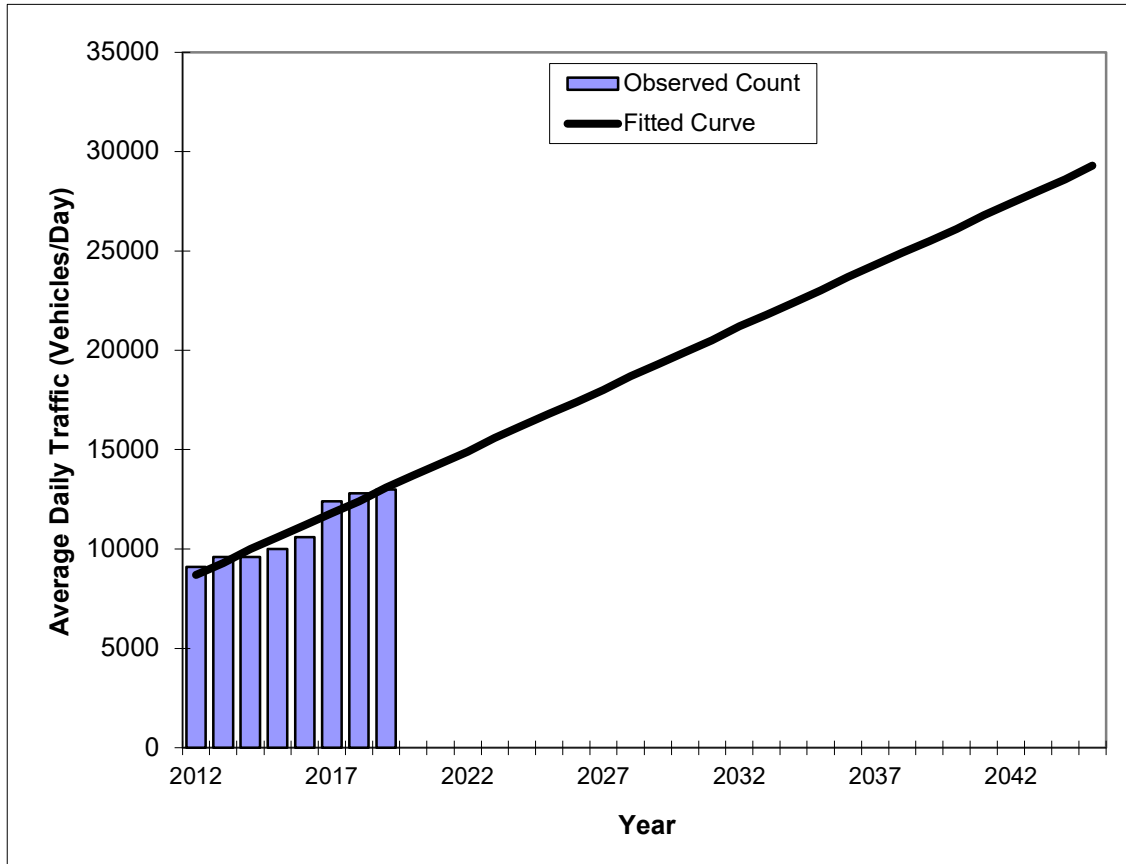
*Axle-Adjusted

Traffic Trends - V3.0

MALABAR RD. -- E OF HURLEY BLVD

FIN#	1234
Location	1

County:	Brevard (70)
Station #:	8142
Highway:	MALABAR RD.



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2012	9100	8700
2013	9600	9300
2014	9600	10000
2015	10000	10600
2016	10600	11200
2017	12400	11800
2018	12800	12400
2019	13000	13100
2025 Opening Year Trend		
2025	N/A	16800
2035 Mid-Year Trend		
2035	N/A	23000
2045 Design Year Trend		
2045	N/A	29300
TRANPLAN Forecasts/Trends		

** Annual Trend Increase:	623
Trend R-squared:	91.53%
Trend Annual Historic Growth Rate:	7.09%
Trend Growth Rate (2018 to Design Year):	5.05%
Printed:	4-Jun-20
Straight Line Growth Option	

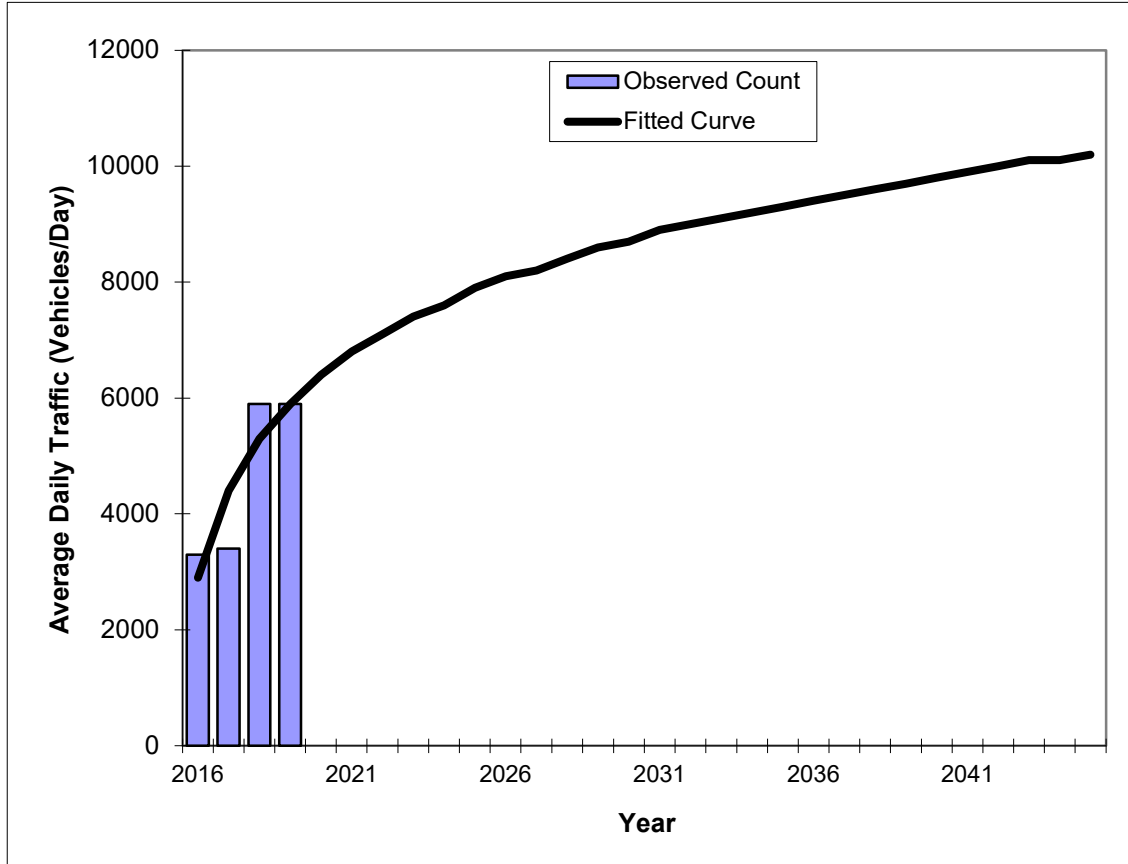
*Axle-Adjusted

Traffic Trends - V3.0

ST. JOHNS HERITAGE PKWY. -- N. OF MALABAR RD.

FIN#	1234
Location	1

County:	Brevard (70)
Station #:	8156
Highway:	ST. JOHNS HERITAGE PKWY.



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2016	3300	2900
2017	3400	4400
2018	5900	5300
2019	5900	5900
2025 Opening Year Trend		
2025	N/A	7900
2035 Mid-Year Trend		
2035	N/A	9300
2045 Design Year Trend		
2045	N/A	10200
TRANPLAN Forecasts/Trends		

Trend R-squared:	76.23%
Compounded Annual Historic Growth Rate:	26.71%
Compounded Growth Rate (2019 to Design Year):	2.13%
Printed:	4-Jun-20
Decaying Exponential Growth Option	

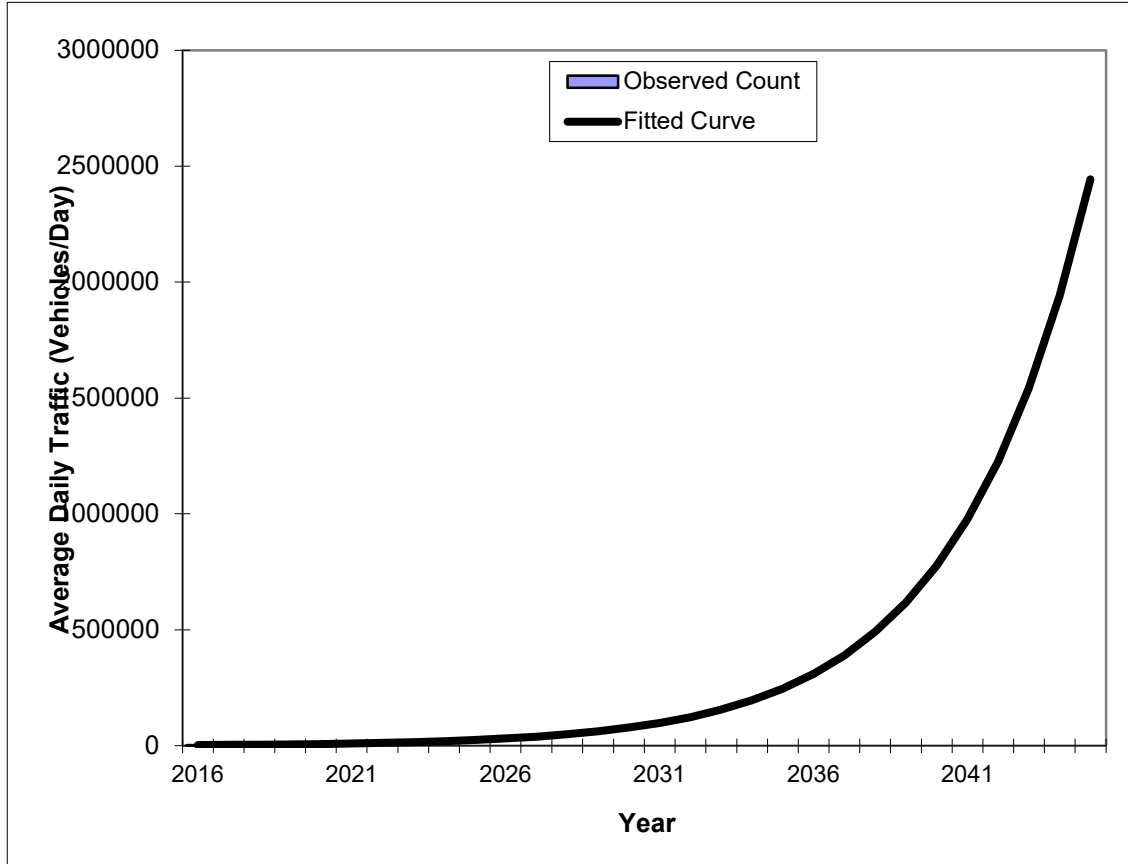
*Axle-Adjusted

Traffic Trends - V3.0

ST. JOHNS HERITAGE PKWY. -- N. OF MALABAR RD.

FIN#	1234
Location	1

County:	Brevard (70)
Station #:	8156
Highway:	ST. JOHNS HERITAGE PKWY.



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2016	3300	3200
2017	3400	4000
2018	5900	5000
2019	5900	6300
2025 Opening Year Trend		
2025	N/A	24800
2035 Mid-Year Trend		
2035	N/A	246400
2045 Design Year Trend		
2045	N/A	2443400
TRANPLAN Forecasts/Trends		

Trend R-squared:	82.01%
Compounded Annual Historic Growth Rate:	25.33%
Compounded Growth Rate (2019 to Design Year):	25.77%
Printed:	4-Jun-20
Exponential Growth Option	

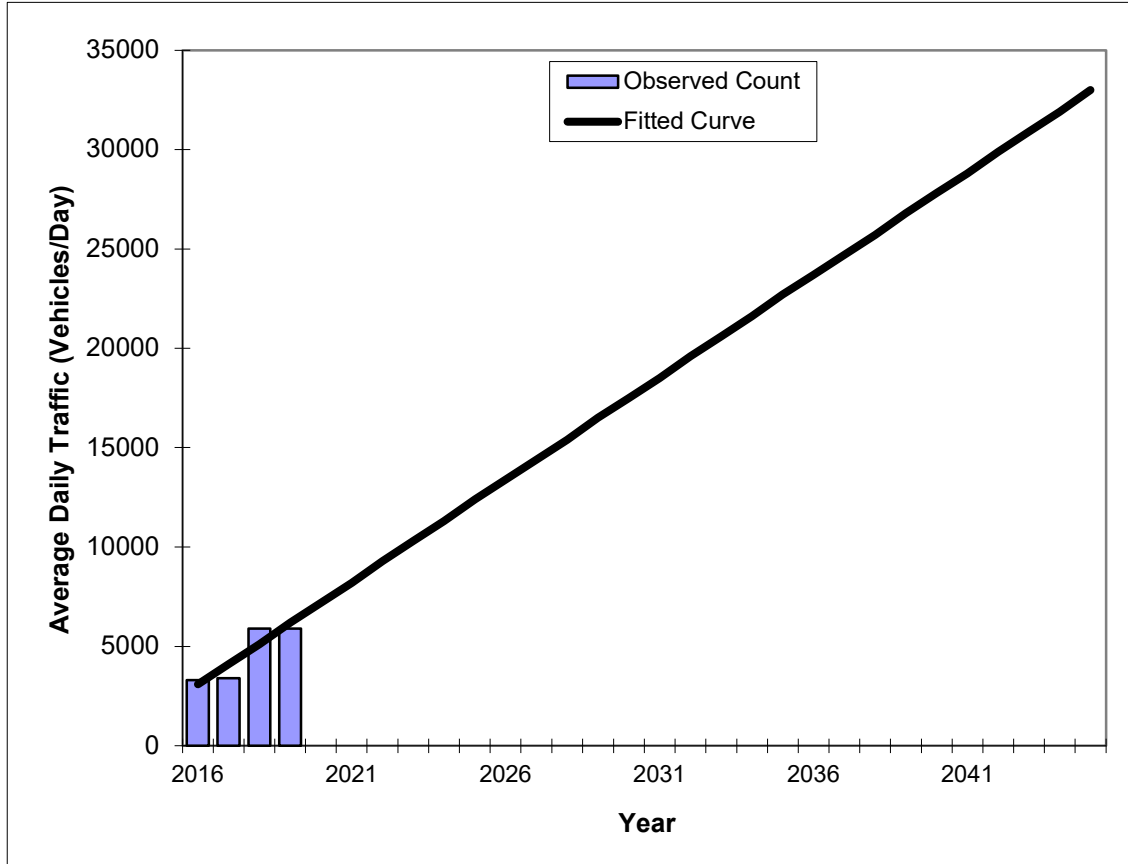
*Axle-Adjusted

Traffic Trends - V3.0

ST. JOHNS HERITAGE PKWY. -- N. OF MALABAR RD.

FIN#	1234
Location	1

County:	Brevard (70)
Station #:	8156
Highway:	ST. JOHNS HERITAGE PKWY.



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2016	3300	3100
2017	3400	4100
2018	5900	5100
2019	5900	6200
2025 Opening Year Trend		
2025	N/A	12400
2035 Mid-Year Trend		
2035	N/A	22700
2045 Design Year Trend		
2045	N/A	33000
TRANPLAN Forecasts/Trends		

** Annual Trend Increase:	1,030
Trend R-squared:	81.51%
Trend Annual Historic Growth Rate:	33.33%
Trend Growth Rate (2019 to Design Year):	16.63%
Printed:	4-Jun-20
Straight Line Growth Option	

*Axle-Adjusted

APPENDIX E – DEVELOPMENT PLANS

Contained in this Appendix –

- Chaparral Development Information
- Brentwood Lakes Development Information

CHAPARRAL DEVELOPMENT PLANS

Via Email: (homayoon.barekat@palmbayflorida.org)

Ref: 4247.01

December 12, 2016

Homayoon Barekat, PE
The City of Palm Bay
1050 Malabar Road SW
Palm Bay, FL 32907

RE: Chaparral Residential Development - Traffic Impact Study (TIS)
Melbourne, Florida

Dear Mr. Barekat:

Lassiter Transportation Group, Inc. (LTG) has been retained by Construction Engineering Group to prepare a Traffic Impact Study for the proposed Chaparral Subdivision Development. The subdivision will consist of 239 lots (128 single-family units and 111 townhouses) in Phase 1 and 509 lots (275 single-family units, 75 apartments and 159 townhouses) in Phase 2. The proposed development is located in the southeast quadrant of Malabar Road and Flying U lane in the City of Palm Bay, Florida. Figure 1 shows the location of the project relative to the surrounding road network. Access to the project will be provided via a stop controlled intersection at Malabar Road and Wisteria Avenue. The anticipated build-out years for Phase 1 and Phase 2 of the project are 2018 and 2021, respectively. A preliminary site plan showing the layout of the site is attached as Appendix A.

Study Area

The study area selected consists of the following intersections and road segments:

Intersections:

- Malabar Road at Hurley Boulevard
- Malabar Road at Jupiter Boulevard
- Malabar Road at Garvey Road
- Jupiter Boulevard at Americana Boulevard
- Jupiter Boulevard at Garvey Road
- Garvey Road at Harper Boulevard

Roadway Segments:

- Malabar Road from Jupiter Boulevard to Emerson Drive
- Minton Road from Malabar Road to Emerson Drive

Analysis Period

Roadway segments will be analyzed based on p.m. peak-hour traffic and intersections will be analyzed for the a.m. and p.m. peak-hours. The analysis will be conducted under 2016 existing conditions and both 2018 and 2021 build-out conditions.



**SITE
LOCATION**

**Chaparral
Residential**



Site Location Map

Lassiter Transportation Group, Inc.
Engineering and Planning

Project No.: 4247.01

Figure: 1

1103 W. Hibiscus Blvd, Suite 310- Melbourne, Florida 32901
Telephone: 321.499.4679 Fax: 321.499.4680 EB# 0009227

Traffic Concurrency Spreadsheet

The analysis will be based on the latest concurrency information as obtained from the Florida Department of Transportation (FDOT), the Space Coast Transportation Planning Organization (SCTPO), the City of Palm Bay, and Brevard County Planning Department.

Traffic Count Procedures

Manual turning movement counts will be conducted on a Tuesday, Wednesday or Thursday during a.m. and p.m. peak hours at each study intersection. Turning movement counts will not be older than one year.

Trip Distribution

The Central Florida Regional Planning Model will be used to obtain Trip Distribution and manually modified where appropriate.

Trip Assignment

Traffic will be assigned to the study area roadways using the peak-hour trip generation and the project trip distribution pattern.

Trip Generation

The daily, a.m. and p.m. peak-hour trip generation for the build-out of the development was determined using the Institute of Transportation Engineers (ITE) 9th edition of the *Trip Generation Manual*. The trip generation for Phase 1 and Phase 2 are summarized in Tables 1 and 2, respectively.

**Table 1
 Phase I Trip Generation
 Chaparral Residential Development**

Time Period	Land Use	ITE Land Use Code	Trip Rate Equation	Units (x) Dus	Total Trips	Percent Entering	Percent Exiting	Trips Entering	Trips Exiting
Daily	Single-Family	210	$\ln(T) = 0.92 \ln(X) + 2.72$	128	1,318	50%	50%	659	659
	Townhomes	230	$\ln(T) = 0.87 \ln(X) + 2.46$	111	704	50%	50%	352	352
Total:					2,022			1,011	1,011
A.M. Peak-hour	Single-Family	210	$T = 0.70 (X) + 9.74$	128	99	25%	75%	25	74
	Townhomes	230	$\ln(T) = 0.80 \ln(X) + 0.26$	111	56	17%	83%	10	46
Total:					155			35	120
P.M. Peak-hour	Single-Family	210	$\ln(T) = 0.90 \ln(X) + 0.51$	128	131	63%	37%	82	49
	Townhomes	230	$\ln(T) = 0.82 \ln(X) + 0.32$	111	65	67%	33%	43	22
Total:					196			125	71

Source: ITE, Trip Generation 9th Edition

**Table 2
 Phase II Trip Generation
 Chaparral Residential Development**

Time Period	Land Use	ITE Land Use Code	Trip Rate Equation	Units (x) Dus	Total Trips	Percent Entering	Percent Exiting	Trips Entering	Trips Exiting
Daily	Single-Family	210	$\text{Ln}(T) = 0.92 \text{Ln}(X) + 2.72$	275	2,664	50%	50%	1,332	1,332
	Apartment	220	$T = 6.06 (X) + 123.56$	75	578	50%	50%	289	289
	Townhouse	230	$\text{Ln}(T) = 0.87 \text{Ln}(X) + 2.46$	159	963	50%	50%	482	481
Total:					4,205			2,103	2,102
A.M. Peak-hour	Single-Family	210	$T = 0.70 (X) + 9.74$	275	202	25%	75%	51	152
	Apartment	220	$T = 0.49 (X) + 3.73$	75	40	20%	80%	8	32
	Townhouse	230	$\text{Ln}(T) = 0.80 \text{Ln}(X) + 0.26$	159	75	17%	83%	13	62
Total:					317			72	245
P.M. Peak-hour	Single-Family	210	$\text{Ln}(T) = 0.90 \text{Ln}(X) + 0.51$	275	261	63%	37%	164	97
	Apartment	220	$T = 0.55 (X) + 17.65$	75	59	65%	35%	38	21
	Townhouse	230	$\text{Ln}(T) = 0.82 \text{Ln}(X) + 0.32$	159	88	67%	33%	59	29
Total:					408			261	147

Source: ITE, Trip Generation 9th Edition

Build-Out Traffic

The build-out traffic will be developed by the sum of the background traffic derived from growth rates plus the estimated project traffic. Growth rates for each study area roadway segment will be determined by historic growth trends calculated based upon five years of historic count data. Minimum annual growth rate of two percent shall be used unless otherwise documented. In no case shall a negative growth rate be used. All improvements funded for construction within the first three years of the five-year work program will be considered in the analysis.

Segment Analysis – Existing and Build-Out Conditions

If the future projected volume is expected to exceed the maximum service volume of a roadway segment, an additional transportation analysis may be conducted (requires client authorization) to determine the service volume specific to that segment. The procedures documented in the latest version of the FDOT *Quality/Level of Service Handbook* will be used to determine specific capacity, if default capacities are exceeded and if detailed, site-specific capacity analysis has the potential to yield a higher capacity calculation.

Intersection Analysis – A.M. and P.M. Peak-Hour (Existing and Build-Out Conditions)

The operating conditions for both the existing and future conditions at the unsignalized intersections will be analyzed using the *Highway Capacity Software (HCS)*. HCS utilizes the procedures outlined in Chapter 17 of the 2010 *Highway Capacity Manual*, titled “Two-Way Stop Control Intersections”.

The operating conditions for both the existing and future conditions at the signalized intersections will be evaluated using the *Highway Capacity Software (HCS)*. This software utilizes the methodology outlined in Chapter 18 of the 2010 *Highway Capacity Manual*, titled “Signalized Intersections”.

Improvements

If warranted, appropriate roadway and intersection improvements will be identified. Conditions for each analysis phase will be analyzed for improvements that are required for mitigation. Site access needs will be addressed. The need for auxiliary lanes will be assessed using the methodology provided by NCHRP Report 457, HCS, and

Mr. Homayoon Barekat, PE
December 12, 2016
Page 5

the latest version of the FDOT Design Standards.

Please review and advise if the City of Palm Bay is in agreement with this proposed methodology or provide comments relating to preferred revisions. If you have any questions, please contact me at 321.499.4679.

Sincerely,




LASSITER TRANSPORTATION GROUP, INC.

Shanghong Ding, EI
Senior Engineer Intern

c: Gil A. Ramirez, PE

Appendix A

Preliminary Site Plan

-  Proposed 40' lots
-  Proposed 50' lots
-  Proposed multi-family

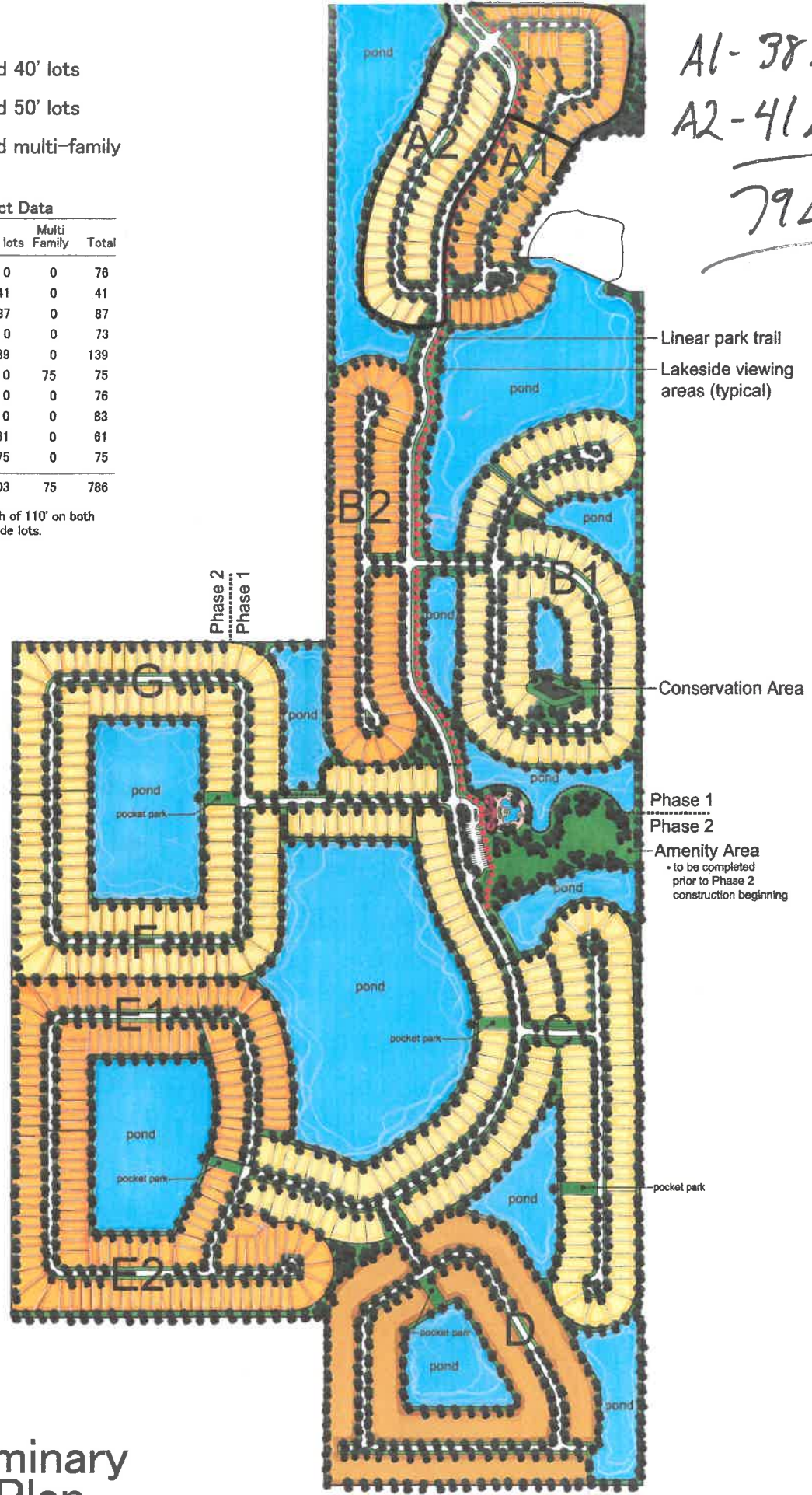
Residential Product Data

Residential Pod	40' lots	50' lots	Multi Family	Total
A1	76	0	0	76
A2	0	41	0	41
B1	0	87	0	87
B2	73	0	0	73
C	0	139	0	139
D	0	0	75	75
E1	76	0	0	76
E2	83	0	0	83
F	0	61	0	61
G	0	75	0	75
Total	308	403	75	786

Note: Minimum lot depth of 110' on both the 40' and 50' wide lots.

A1 - 38 Lots
 A2 - 41 Lots

 79 Lots




Preliminary Site Plan

Chaparral, Phase I
City of Palm Bay, Florida

Traffic Impact Study

Prepared for Lennar Homes, Inc.
By Lassiter Transportation Group, Inc.
February 2007


Lassiter Transportation Group, Inc.
Engineering and Planning

PROFESSIONAL ENGINEERING CERTIFICATION

I hereby certify that I am a Professional Engineer properly registered in the State of Florida practicing with Lassiter Transportation Group, Inc., a corporation authorized to operate as an engineering business, EB 0009227, by the State of Florida Department of Professional Regulation, Board of Professional Engineers, and that I have prepared or approved the evaluations, findings, opinions, conclusions, or technical advice attached hereto for:

PROJECT: Chaparral, Phase I
LOCATION: Palm Bay, Florida
CLIENT: Lennar Homes, Inc.
JOB #: 3498.01

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

NAME: R. Sans Lassiter, P.E.
P.E. No.: Florida P.E. No. 34868
DATE: February 27, 2007

SIGNATURE: _____

A handwritten signature in black ink, appearing to read "R. Sans Lassiter", is written over a horizontal line. The signature is stylized and cursive.

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1

INTRODUCTION

Lassiter Transportation Group, Inc. (LTG) was retained by Lennar Homes, Inc. (the Developer) to prepare a traffic impact study (TIS) for the proposed Chaparral, Phase I development (the Project) located in the City of Palm Bay. The development, which will be located on Malabar Road west of Hurley Boulevard, consists of 173 single-family dwelling units and 98 townhomes. The project is expected to be fully built and occupied by the end of 2009.

Access to the site is proposed via Malabar Road. A preliminary site plan is attached as Appendix A and Figure 1 shows the general location of the project.

Study Area

The study area selected consists of the following intersections and road segments:

Intersections:

- Malabar Road at Hurley Boulevard
- Malabar Road at Jupiter Boulevard
- Malabar Road at Garvey Road
- Jupiter Boulevard at Americana Boulevard
- Jupiter Boulevard at Garvey Road
- Garvey Road at Harper Boulevard

Roadway Segments:

- Malabar Road from Jupiter Boulevard to Emerson Drive
- Minton Road from Malabar Road to Emerson Drive

Study Procedures

Standard engineering and planning procedures were used to determine the impacts of this project. Reference data was obtained from the Brevard County Metropolitan Planning Organization (MPO), the City of Palm Bay Planning Department, the Brevard County Planning Department, the Institute of Transportation Engineers (ITE), and the Florida Department of Transportation (FDOT).

Planned Roadway Improvements

Brevard County, the City of Palm Bay, and FDOT were contacted to determine if there are any programmed roadway improvements in the study area. There are no currently planned improvements in the study area.

2

EXISTING ROADWAY ANALYSIS

A weekday, p.m. peak-period (4:00 p.m. to 6:00 p.m.) turning movement count was conducted at each of the study intersections. The turning movement counts are provided in Appendix B with the existing p.m. peak-hour traffic volumes depicted in Figure 2.

Unsignalized Intersection Analysis

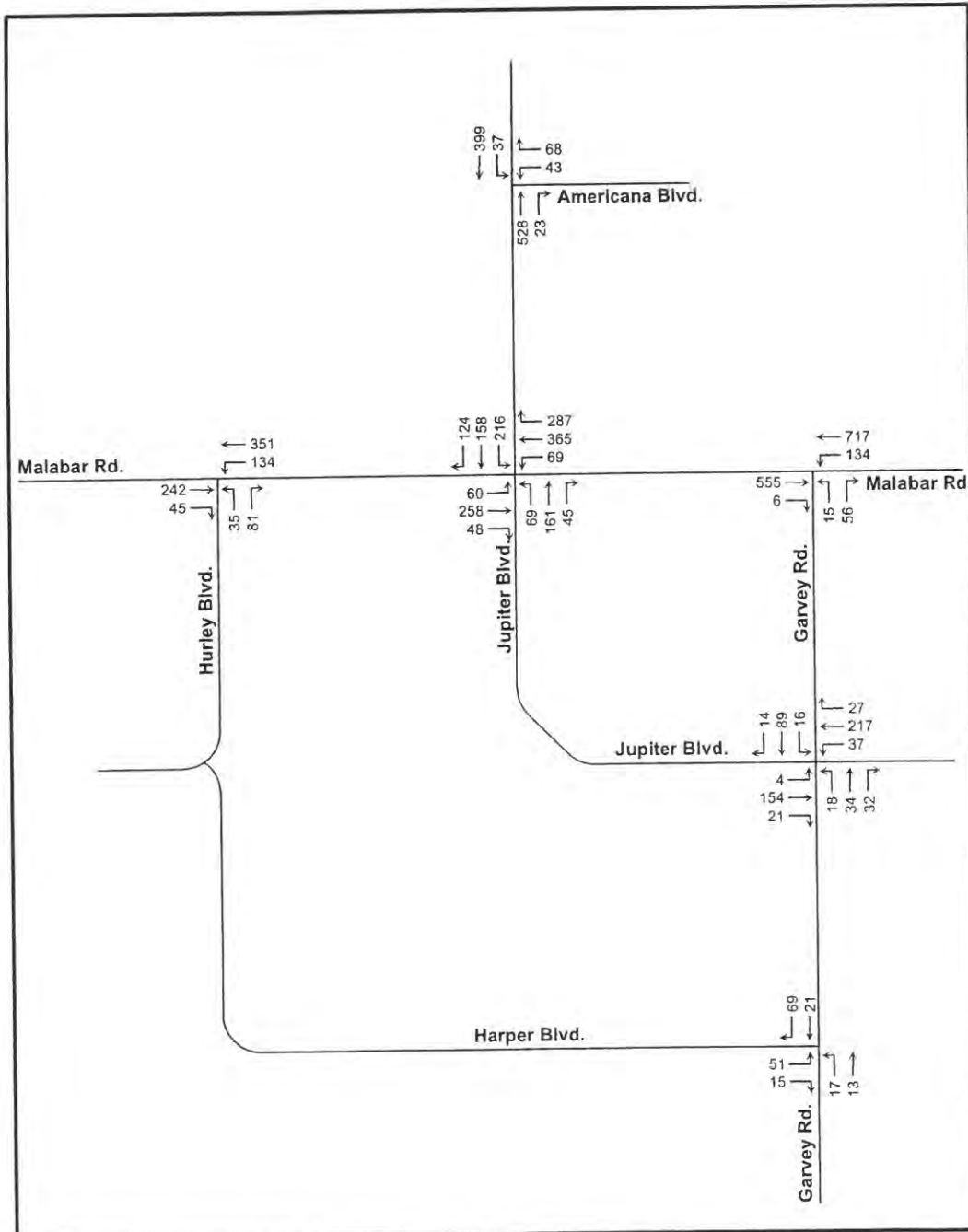
The level of service (LOS) at an unsignalized intersection is based on the average stop delay per vehicle for the various movements within the intersection. The operating condition at each unsignalized intersection was analyzed using the Highway Capacity Software, Version 5.2 (HCS). HCS utilizes the procedures outlined in Chapter 17 of the *Highway Capacity Manual*, titled "Unsignalized Intersections." Table 1 shows the existing p.m. peak-hour levels of service.



It should be noted that the adopted LOS for all City roads is "C". However, County roads are maintained at adopted level of service "E", as per Brevard County standards. Therefore, Table 1 has been broken down to show the intersection level of service on the City roads and separately for as Malabar Road (county road), where applicable.

As indicated in Table 1, the Malabar Road/Garvey Road intersection does not operate within the adopted service levels according to City of Palm Bay concurrency standards. However, Malabar Road operates within the adopted service level standard at this location, side street volumes are low, and delay at this intersection is not excessive and will not meet traffic signal warrant thresholds. Therefore, this intersection does operate acceptably under STOP control. The HCS printouts are included in Appendix C.

**Table 1
Existing P.M Peak-Hour Level of Service - Unsignalized Intersections
Chaparral, Phase I**

Intersection	Malabar Road (County Road)				City Road			
	Adopted LOS	Critical Approach	Delay (sec)	LOS	Adopted LOS	Critical Approach	Delay (sec)	LOS
Garvey Road at Harper Road	E	N/A			C	EB	9.4	A
Malabar Road at Hurley Boulevard	E	WB	8.3	A	C	NB	16.5	C
Malabar Road at Garvey Road	E	WB	9.4	A	C	NB	27.3	D
Jupiter Boulevard at Americana Boulevard	E	N/A			C	WB	21.2	C
Jupiter Boulevard at Garvey Road	E	N/A			C	All	10.74	B



Chaparral Phase 1	 NTS	2007 Existing Traffic P.M. Peak-Hour		 Lassiter Transportation Group, Inc. <i>Engineering and Planning</i>
		Project No.: 3498.01	Figure: 2	

Signalized Intersection Analysis

The level of service at a signalized intersection is based on the average control delay per vehicle for the various movements within the intersection. The operating conditions at the signalized intersection were evaluated using the Highway Capacity Software, Version 5.2 (HCS). This software utilizes the methodology outlined in Chapter 16 of the Highway Capacity Manual, titled "Signalized Intersections". Table 2 shows the existing p.m. peak-hour level of service. As indicated in Table 2, the signalized intersection currently operates within the allowable LOS. The HCS printout is located in Appendix D.

Table 2
Existing P.M Peak-Hour Level of Service - Signalized Intersection
Chaparral, Phase I

Intersection	Adopted LOS	P.M Peak-Hour	
		Delay (sec)	LOS
Malabar Road at Jupiter Boulevard	E	33.9	C

Road Segment Analysis

Roadway level of service describes the operating condition determined from the number of vehicles passing over a given section of roadway during a specified time period. It is a qualitative measure of several factors which include: speed, travel time, traffic interruptions, freedom to maneuver, driver comfort, convenience, safety and vehicle operating costs. Six levels of service have been established as standards by which to gauge roadway performance, designated by the letters A through F. The level of service categories are defined as follows:

- Level of Service A:* Free flow, individual users virtually unaffected by the presence of others
- Level of Service B:* Stable flow with a high degree of freedom to select operating conditions
- Level of Service C:* Flow remains stable, but with significant interactions with others
- Level of Service D:* High-density stable flow in which the freedom to maneuver is severely restricted
- Level of Service E:* This condition represents the capacity level of the road
- Level of Service F:* Forced flow in which the traffic exceeds the amount that can be served

Annual average daily traffic (AADT) volumes were obtained from the Brevard County Planning Department, where available. The existing daily level of service for the study area roadways is shown in Table 3. As indicated in Table 3, the segment of Malabar Road from Garvey Road to Minton Road does not currently operate within the adopted service levels.

Table 3
Existing Daily Level of Service- Roadway Links
Chaparral, Phase I

Roadway	Segment		Lanes	Adopted LOS	Max Cap. at Adopted LOS	2006 AADT	LOS
	From	To					
Malabar Road	Garvey Road	Minton Road	2	E	16,300	*17,964	F
	Minton Road	Emerson Drive	4	E	35,700	24,980	B
Minton Road	Malabar Road	Americana Boulevard	4	E	35,700	25,670	B
	Americana Boulevard	Emerson Drive	4	E	35,700	25,210	B

*2005 volume

3

FUTURE TRAFFIC CONDITIONS

Traffic on roadways will continue to grow due to local development approvals. The following documents the procedures by which the future traffic was determined.

Background Traffic Growth

Traffic growth projections from historic Average Annual Daily Traffic counts (2002 through 2006), as provided by the Brevard County MPO, were used to determine the growth rate for all study roadway segments except the segment of Malabar Road from Garvey Road to Minton Road. Using FDOT's *Traffic Trends* software, the average annual growth rate for each roadway segment was determined. The resulting annual growth rates are presented in Table 4. It should be noted that the historical growth rate of the adjacent segment was used for Malabar Road from Garvey Road to Minton Road, due to insufficient historical data. The *Traffic Trends* analysis worksheets are contained in Appendix E.

Table 4
Average Historical Growth
Chaparral, Phase I

Roadway	Segment		Growth Rate
	From	To	
Malabar Road	Garvey Road	Minton Road	8.71%
	Minton Road	Emerson Drive	8.71%
Minton Road	Malabar Road	Americana Boulevard	4.28%
	Americana Boulevard	Emerson Drive	5.19%
AVERAGE			6.06%

Historical growth rate of adjacent segment used due to insufficient historical data.

The historical annual growth was applied to the existing traffic volumes to obtain 2009 background traffic volumes.

Trip Generation

The trip generation for this development was determined using the trip generation rates published by the Institute of Transportation Engineers (ITE) in the document *Trip Generation*, 7th Edition. Total daily and p.m. peak-hour trip generation calculations are shown in Table 5.

Table 5
Total Daily and P.M. Peak-Hour Trip Generation
Chaparral, Phase I

Time Period	Land Use	Quantity	Units	ITE Land Use Code	Trip Rate Equation	Total Trips	Percent Entering	Percent Exiting	Trips Entering	Trips Exiting
Daily	Single-Family	173	DUs	210	$\ln(T) = 0.92 \ln(X) + 2.71$	1,722	50%	50%	861	861
	Townhomes	98	DUs	220	$T = 6.01 (X) + 150.35$	740	50%	50%	370	370
Totals:						2,462			1,231	1,231
P.M. Peak-hour	Single-Family	173	DUs	210	$\ln(T) = 0.90 \ln(X) + .53$	176	63%	37%	111	65
	Townhomes	98	DUs	220	$T = 0.55 (X) + 17.65$	72	65%	35%	47	25
Totals:						248			158	90

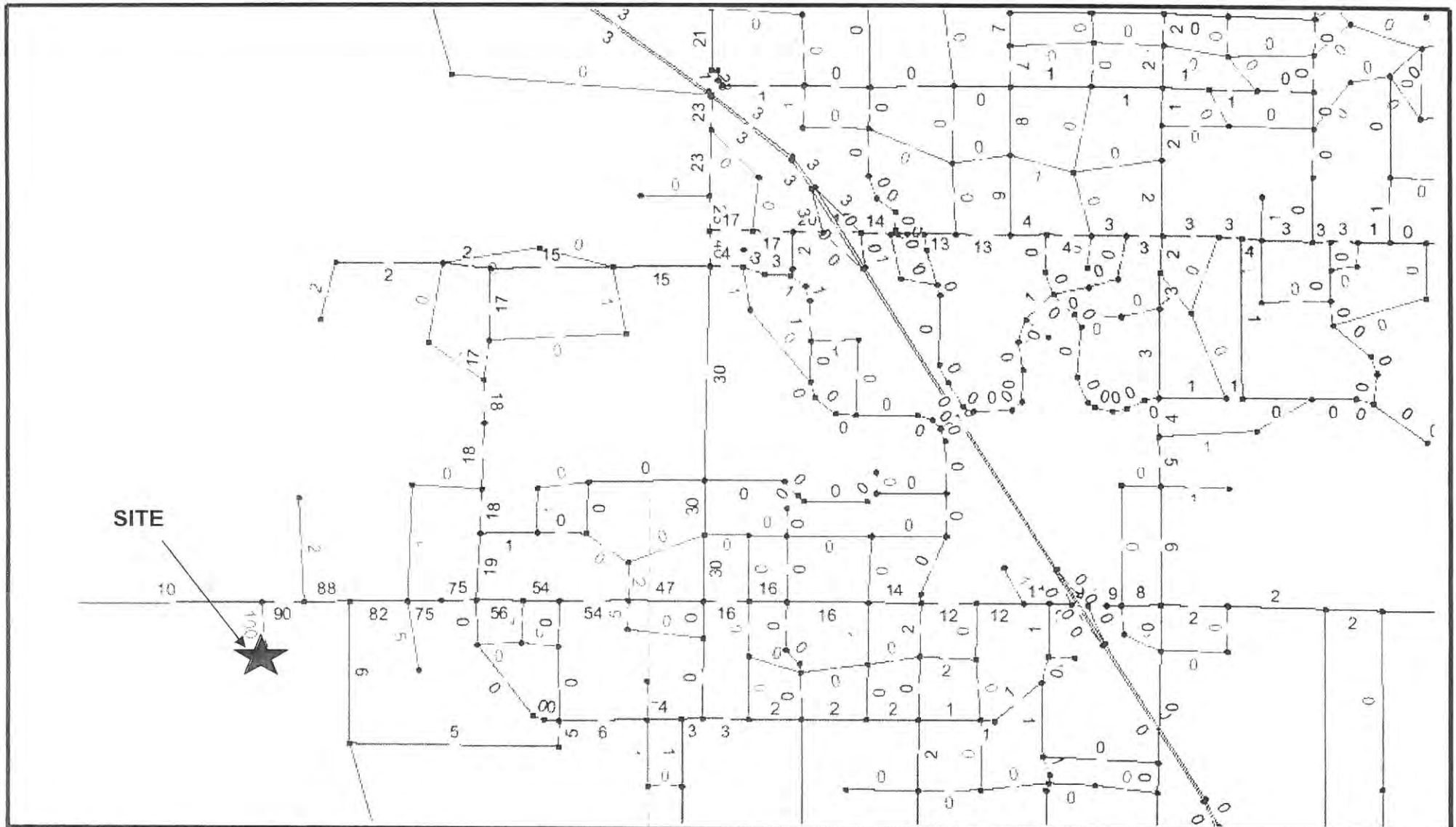
Source: ITE, *Trip Generation 7th Edition*

Project Distribution

The process of determining the directional flow of traffic associated with a new development is called trip distribution. The Central Florida Regional Planning Model (CFRPM) Version IV was used to obtain the trip distribution for the development. Figure 3 graphically illustrates the project trip distribution in the vicinity of the site.

Trip Assignment

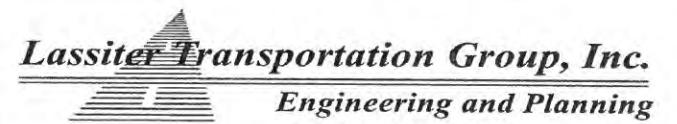
The final step in the analysis is to assign the project traffic to the road network. Figure 4 graphically depicts the p.m. peak-hour traffic assignments for the proposed development.



Chaparral Phase 1



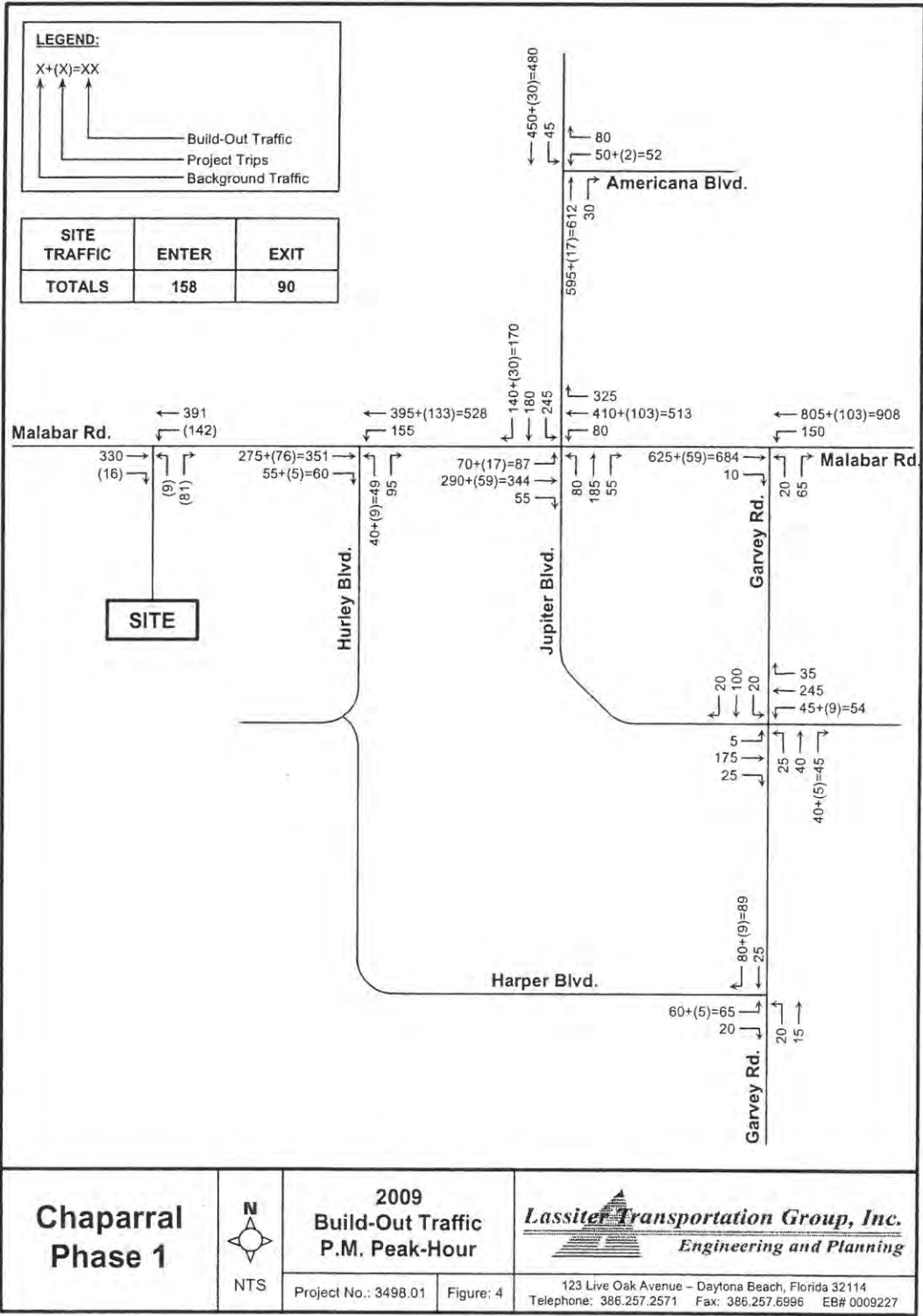
Project Distribution



Project
Number: 3498.01

Figure 3

123 Live Oak Avenue – Daytona Beach, Florida 32114
 Telephone: 386.257.2571 Fax: 386.257.6996 EB# 0009227
 J-207



4

FUTURE ROADWAY ANALYSIS

The critical intersections and road segments were analyzed based on the existing roadway geometry to determine potential impacts and to investigate mitigation requirements.

The 2009 build-out traffic volumes, which consist of future background traffic plus Chaparral, Phase I project traffic, were assigned to the road network. Traffic generated by the Chaparral, Phase I development was distributed on area roadways based on the trip distribution model. Figure 4 shows the 2009 build-out traffic volumes at the study area intersections.

Unsignalized Intersection Analysis

The unsignalized intersections were analyzed to determine the operational level of service at the time of build-out. Table 6 shows the projected levels of service, and the HCS printouts are included in Appendix F.

As indicated in Table 6, the intersections of Malabar Road at Hurley Boulevard, Malabar Road at Garvey Road, and Jupiter Boulevard at Americana Boulevard do not operate within City of Palm Bay adopted level of service standards for City roads. The failure of an unsignalized intersection does not mean that volumes will automatically meet warrants for traffic signal control, as is the case with these intersections where side street volumes are low and delay is not excessive. None of these side streets generate sufficient traffic volumes to warrant traffic signal control.

**Table 6
2009 Build-Out P.M. Peak-Hour Level of Service - Unsignalized Intersections
Chaparral, Phase I**

Intersection	Malabar Road (County Road)				City Road			
	Adopted LOS	Critical Approach	Delay (sec)	LOS	Adopted LOS	Critical Approach	Delay (sec)	LOS
Malabar Road at Site Drive	E	WB	8.5	A	C	NB	13.1	B
Garvey Road at Harper Road	E		N/A		C	NB	9.7	A
Malabar Road at Hurley Boulevard	E	WB	8.8	A	C	NB	38.8	E
Malabar Road at Garvey Road	E	WB	10.0	B	C	NB	53.1	F
Jupiter Boulevard at Americana Boulevard	E		N/A		C	WB	32.5	D
Jupiter Boulevard at Garvey Road	E		N/A		C	All	12.72	B

Signalized Intersection Analysis

The signalized intersection was analyzed to determine the operational level of service at the time of build-out. Table 7 shows the projected level of service. As indicated in Table 7, the signalized intersection will operate within the adopted levels of service under 2009 build-out conditions. The HCS printout is included in Appendix G.

Table 7
2009 Build-Out P.M. Peak-Hour Level of Service - Signalized Intersections
Chaparral, Phase I

Intersection	Adopted LOS	P.M Peak-Hour	
		Delay (sec)	LOS
Malabar Road at Jupiter Boulevard	E	51.4	D

Road Segment Analysis

The traffic analysis for the road segments involves the comparison of the future daily volumes to available capacity. Table 8 shows the daily project traffic assignments and presents the results of the daily road segment capacity analysis for the 2009 build-out condition.

As indicated in Table 8, the segment of Malabar Road from Garvey Road to Minton Road is projected to be deficient under 2009 background conditions alone, according to default daily capacity analysis techniques. However, the projection of 2009 background traffic on this segment was obtained using the historical growth rate of the adjacent roadway segment and 2002 AADT data since there was not adequate historical AADT data available (no daily count was performed after 2002). Additionally, this segment of Malabar Road is shown to operate within the adopted service level through more critical p.m. peak-hour intersection analyses. Therefore, this segment of Malabar Road does operate acceptably.

Table 8
 2009 Build-Out Daily Level of Service – Roadway Links
 Chaparral, Phase I

Roadway	Segment		Lanes	Adopted LOS	Max Cap. at Adopted LOS	2006 AADT	Growth Factor	2009 Back-Ground Traffic	Project Trips	2009 Build-Out Traffic	LOS
	From	To									
Malabar Road	Garvey Road	Minton Road	2	E	16,300	17,964	1.348	24,223	1,329	25,552	F
	Minton Road	Emerson Drive	4	E	35,700	24,980	1.261	31,508	394	31,902	C
Minton Road	Malabar Road	Americana Boulevard	4	E	35,700	25,670	1.128	28,965	739	29,704	C
	Americana Boulevard	Emerson Drive	4	E	35,700	25,210	1.156	29,135	739	29,874	C

2005 volume

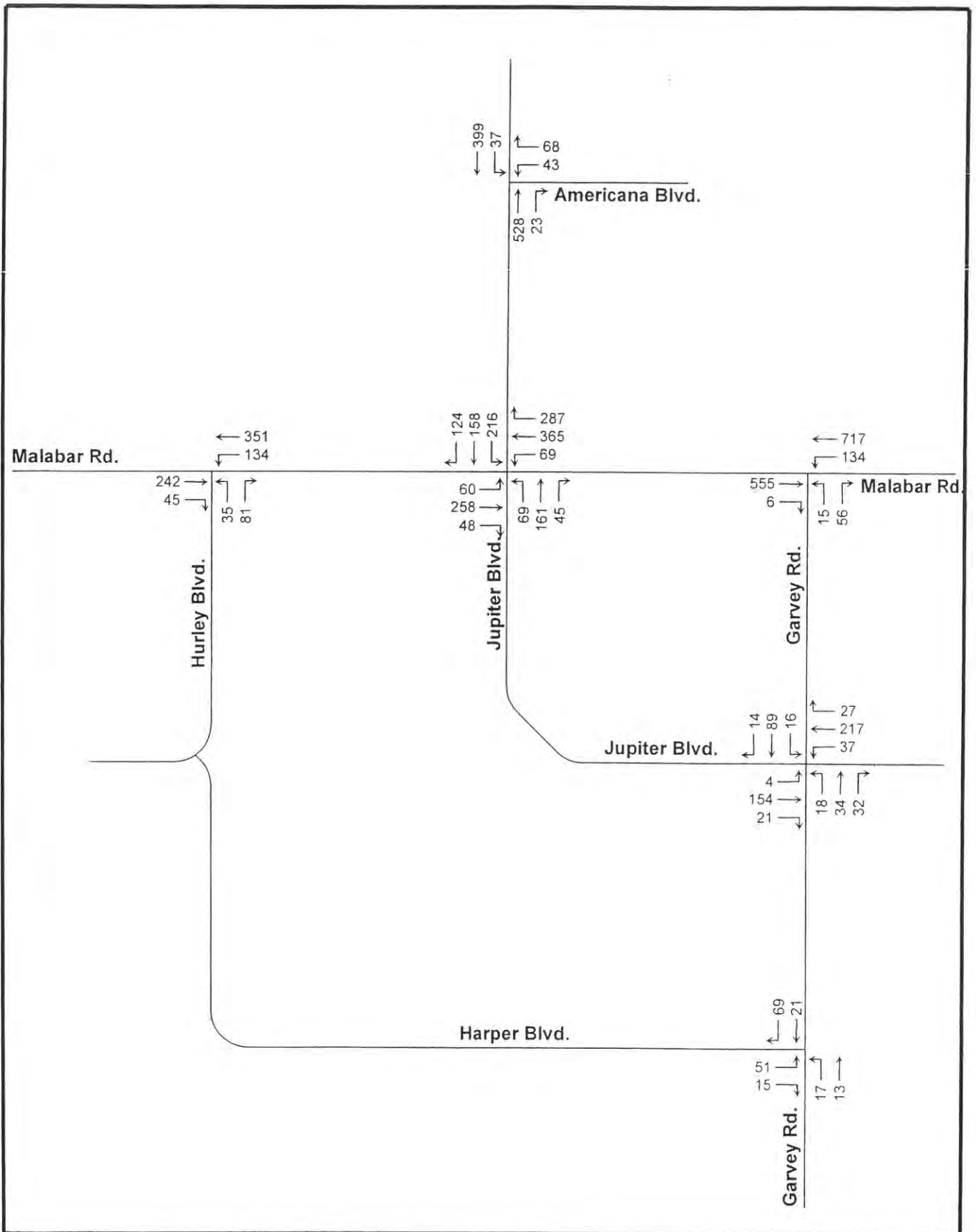
5

CONCLUSION

This study was conducted to evaluate the impact the proposed Chaparral, Phase I residential development would have on area roadways in the City of Palm Bay. The results of the study are summarized below:

- The proposed development will generate a total of 2,462 daily trips with 248 trips occurring during the p.m. peak-hour.
- Under 2009 build-out conditions, Malabar Road at Hurley Boulevard, Malabar Road at Garvey Road, and Jupiter Boulevard at Americana Boulevard do not operate within City of Palm Bay adopted level of service standards for City roads. However, volumes at these intersections would not meet traffic signal warrant thresholds and delay at these locations is not excessive.
- The signalized intersection will operate within the adopted levels of service under 2009 build-out conditions.
- The study roadway segment of Malabar Road from Jupiter Boulevard to Minton Road is projected to be deficient under 2009 build-out conditions alone, according to default daily capacity analysis techniques. However, the more critical p.m. peak-hour analyses of intersections along this segment indicate acceptable operations.

The proposed Chaparral, Phase I development has no adverse impact on area roadways. Accordingly, this development is recommended for approval.



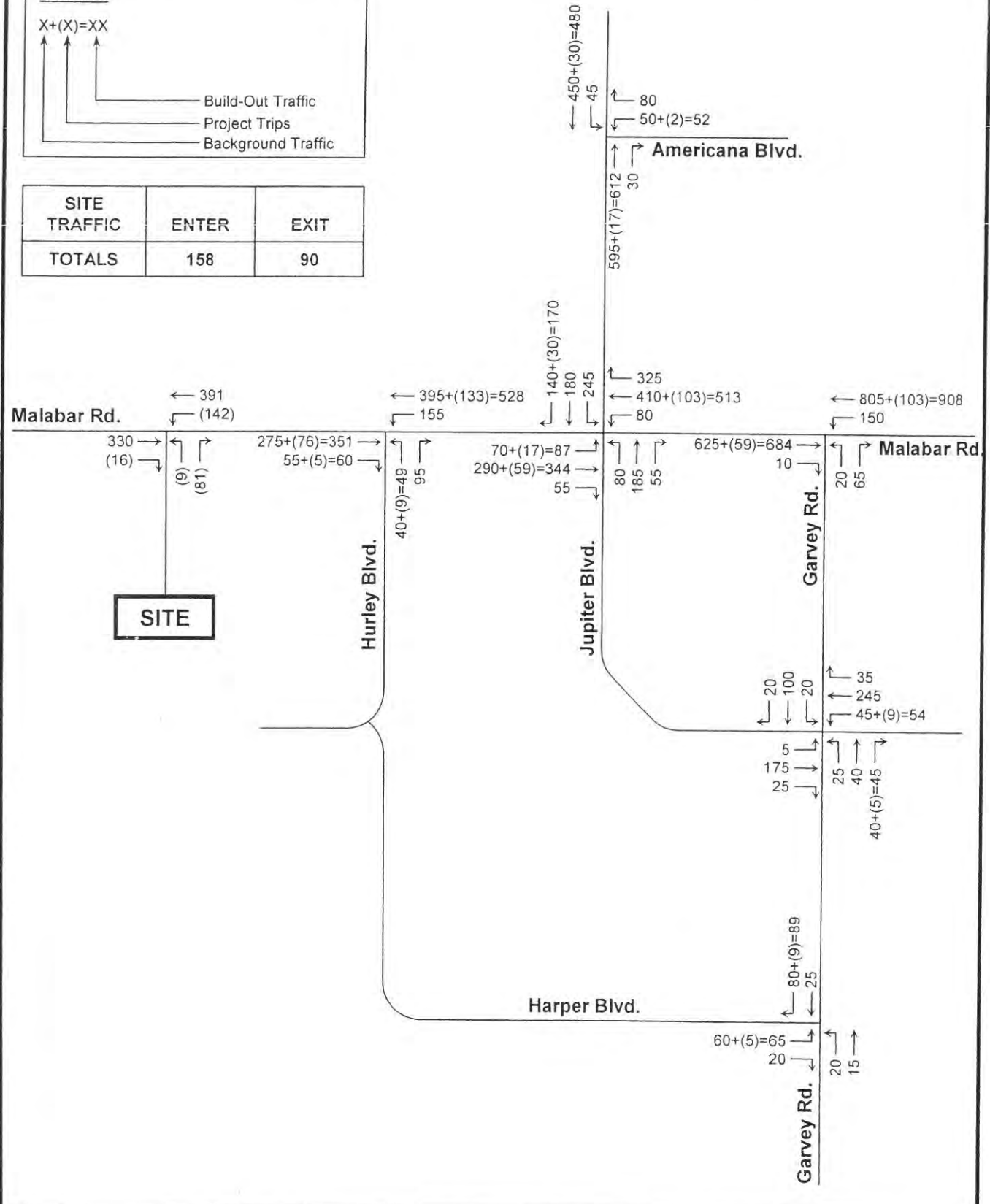
<h2 style="margin: 0;">Chaparral Phase 1</h2>	 NTS	2007 Existing Traffic P.M. Peak-Hour		 Lassiter Transportation Group, Inc. <i>Engineering and Planning</i>
		Project No.: 3498.01	Figure: 2	

LEGEND:

X+(X)=XX

↑ Build-Out Traffic
 ↑ Project Trips
 ↑ Background Traffic

SITE TRAFFIC	ENTER	EXIT
TOTALS	158	90



**Chaparral
Phase 1**



**2009
Build-Out Traffic
P.M. Peak-Hour**

Project No.: 3498.01 Figure: 4






Lassiter Transportation Group, Inc.
Engineering and Planning

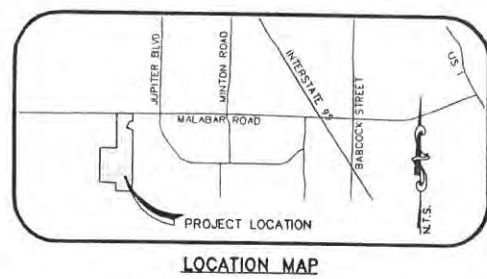
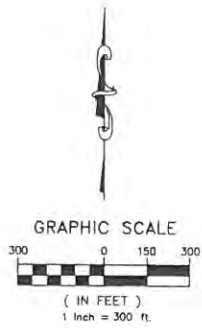
123 Live Oak Avenue - Daytona Beach, Florida 32114
 Telephone: 386.257.2571 Fax: 386.257.6996 EB# 0009227

APPENDICES

APPENDIX A

CHAPARRAL P.U.D. TOTAL AREA = ±246.42 ACRES

-  = 40' SINGLE FAMILY HOME SITES
-  = 50' SINGLE FAMILY HOME SITES
-  = MULTIFAMILY VILLAS
-  = FISHING DOCK/COVERED OPEN PLATFORM
-  = TRAIL



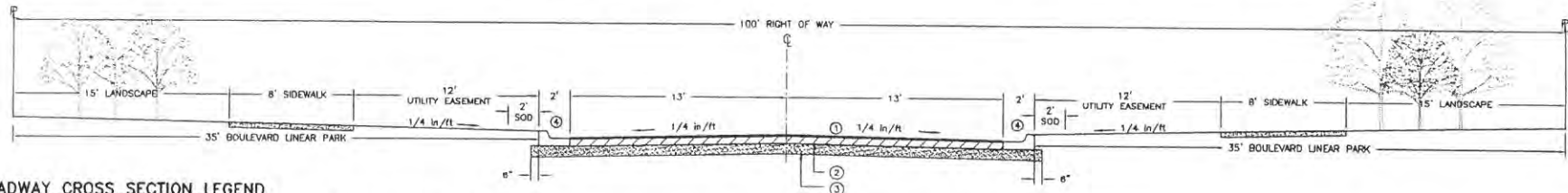
SITE DATA:

ALLOWABLE PERMITTED RESIDENTIAL UNITS:
 SINGLE FAMILY: 3 UNITS/ACRE x 228.97 ACRES = 687 UNITS + 252 MULTIFAMILY UNITS = 939 UNITS

SINGLE FAMILY UNITS PROVIDED = 598 UNITS
 MULTIFAMILY UNITS PROVIDED = 252 UNITS
 TOTAL UNITS PROVIDED = 850 UNITS

SHOWN ON PLAN

POD A LOTS (50') = ±79 UNITS
 POD B (EAST) LOTS (40') = ±94 UNITS
 POD B (WEST) LOTS (MULTIFAMILY) = ±98 UNITS



ROADWAY CROSS SECTION LEGEND

- ① 1.5" TYPE III MOD. ASPHALTIC CONCRETE, MARSHALL STABILITY 1000 P.S.I. MIN.
- ② 8" BASE
- ③ LIMEROCK, L.B.R. 100 MIN. SOIL CEMENT, 300 P.S.I. MIN. CEMENTED COQUINA SHELL, F.D.O.T. APPROVED
- ④ 10" STABILIZED SUB-GRADE, L.B.R. 40 MIN.
- ⑤ TYPE "T" CURB & GUTTER

ROADWAY SECTION 100' RIGHT-OF-WAY
N.T.S.

CHAPARRAL

PDP PLAN

DRAWING NO.
10801271
SHEET
1 of 1
PROJECT NO.
10801

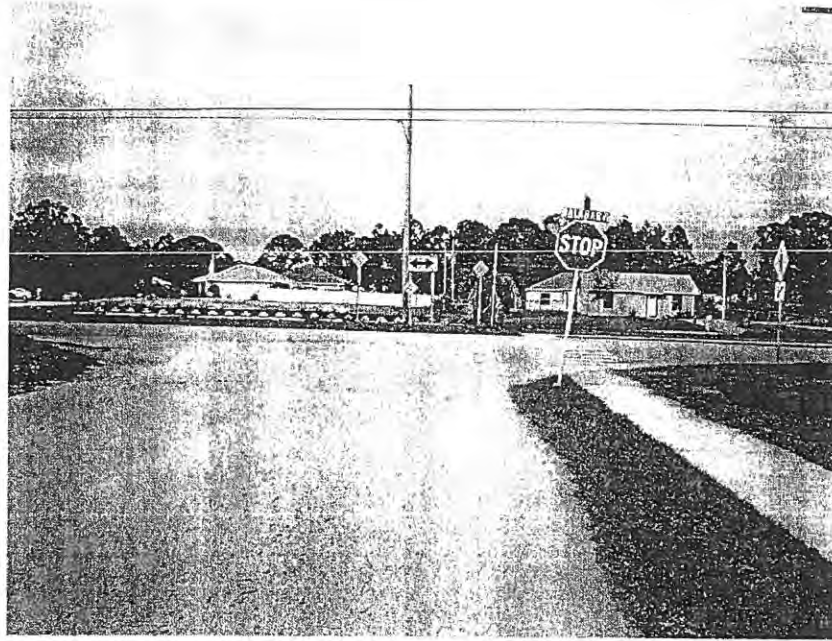


B.S.E. CONSULTANTS, INC.
 CONSULTING - ENGINEERING - LAND SURVEYING
 312 SOUTH HARBOR CITY BOULEVARD, SUITE 4
 MELBOURNE, FLORIDA 32901 PHONE: (321) 725-3674 FAX: (321) 723-1159
 CERTIFICATE OF PROFESSIONAL ENGINEERS BUSINESS AUTHORIZATION: 4805
 CERTIFICATE OF LAND SURVEYING BUSINESS AUTHORIZATION: LB0004905



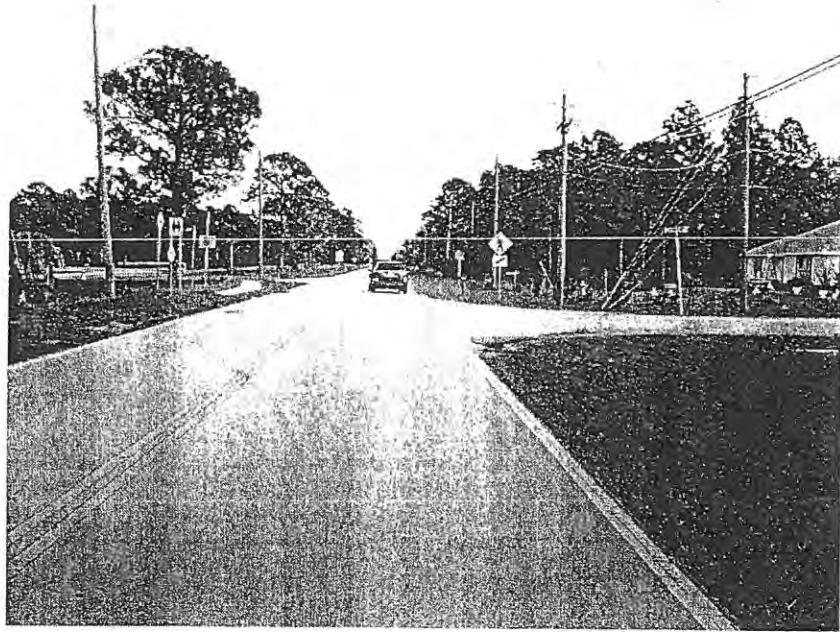
REVISIONS		
△		
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DESIGN	SMG	DATE 12-20-06
DRAWN	JK	DATE 12-20-06
CHECKED		DATE

APPENDIX B



Hurley Blvd NB Approach to Malabar Rd

<i>Hurley Blvd @ Malabar Rd</i> Brevard County	Approaches		DE Traffic
	Project Number: L2004-116		www.de-traffic.com
	Page Number: 1		<small>1619 W. Akron Dr. Deltona, FL 32725 Telephone (386) 214-1025 Fax (386) 789-1490</small>

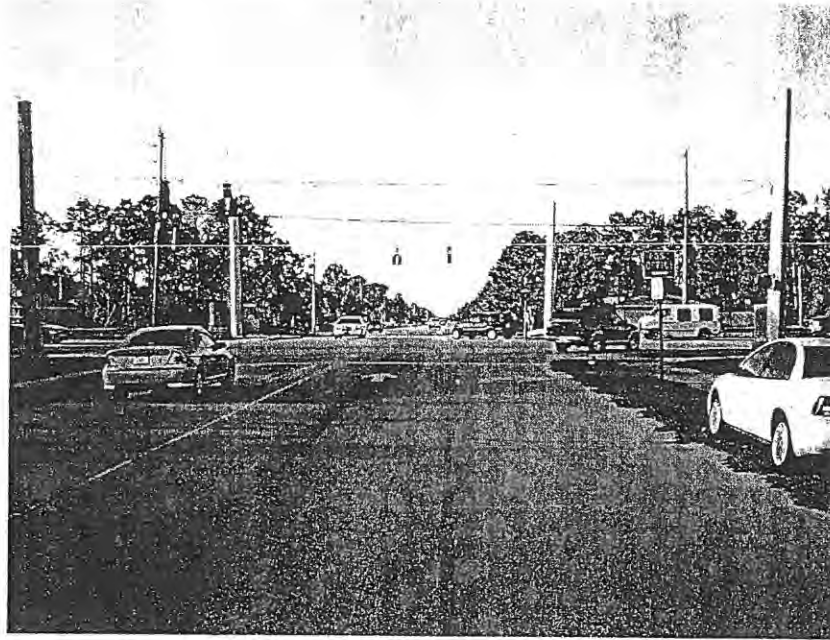


Malabar Rd EB Approach to Hurley Blvd

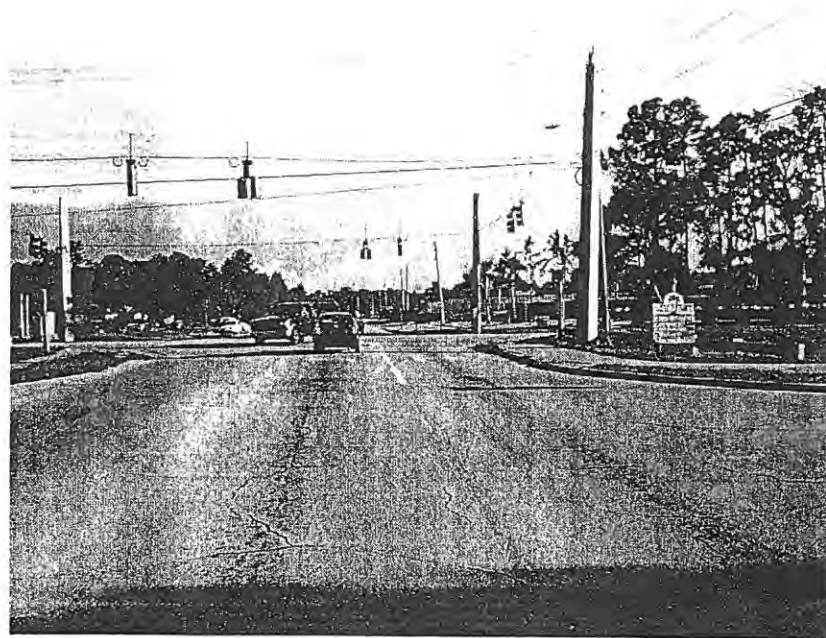


Malabar Rd WB Approach to Hurley Blvd

<i>Hurley Blvd @ Malabar Rd</i> Brevard County	Approaches		DE Traffic
			www.de-traffic.com
	Project Number: L2004-116	Page Number: 2	<small>1619 W. Akron Dr. Deltona, FL 32725 Telephone: (386) 214-1023 Fax: (386) 789-3980</small>



Jupiter Blvd NB Approach to Malabar Rd



Jupiter Blvd SB Approach to Malabar Rd

<p><i>Jupiter Blvd @ Malabar Rd</i></p> <p>Brevard County</p>	<p>Approaches</p>		<p>DE Traffic</p>
	<p>Project Number: L2004-116</p>	<p>Page Number: 3</p>	<p>www.de-traffic.com</p>
	<p><small>1619 W. Akron Dr. Deltona, FL 32725 Telephone (386) 214-1022 Fax (386) 789-3980</small></p>		

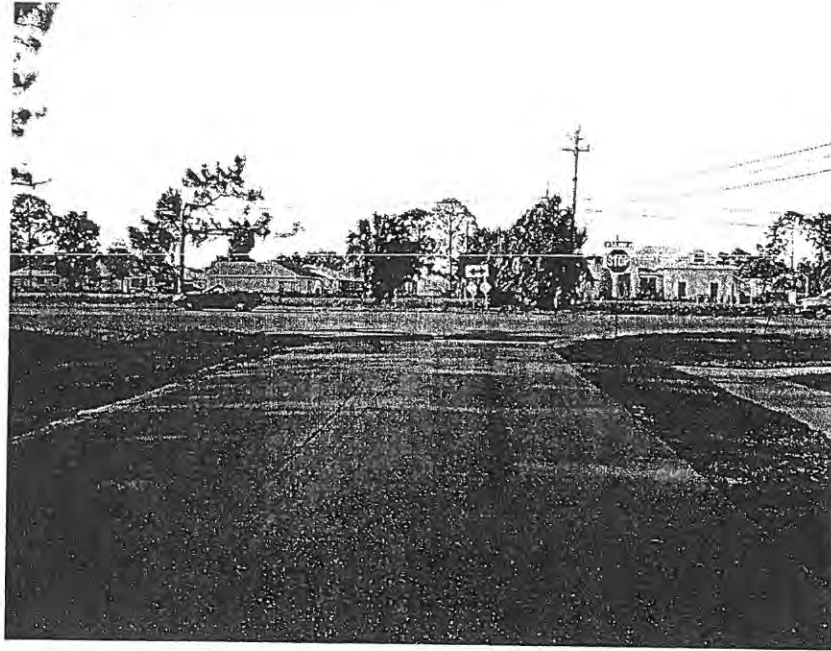


Malabar Rd EB Approach to Jupiter Blvd



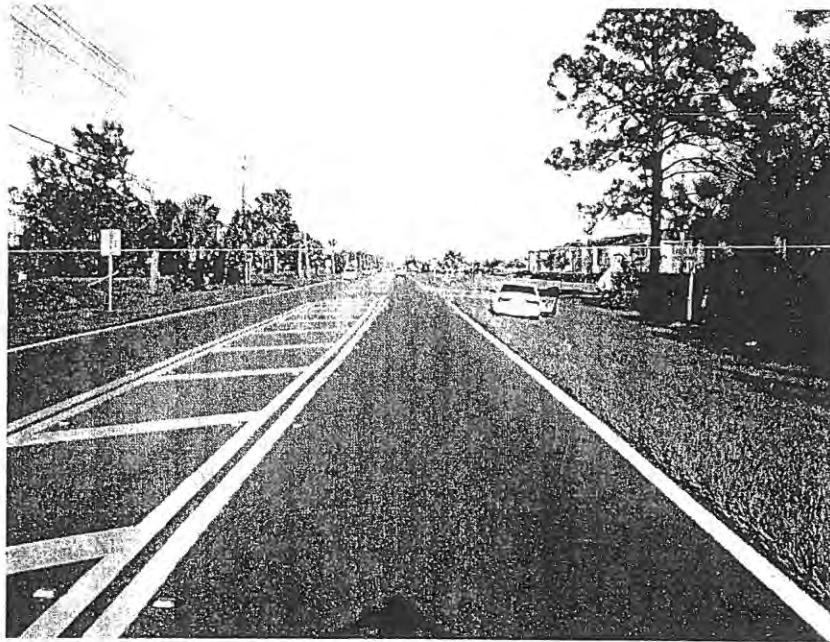
Malabar Rd WB Approach to Jupiter Blvd

<i>Jupiter Blvd @ Malabar Rd</i> Brevard County	Approaches		DE Traffic
	Project Number: L2004-116	Page Number: 4	www.de-traffic.com
	1619 W. Akron Dr. Deltona, FL 32725 Telephone: (386) 213-1025 Fax: (386) 789-3980		



Garvey Rd NB Approach to Malabar Rd

<p><i>Garvey Rd @ Malabar Rd</i></p> <p>Brevard County</p>	<p>Approaches</p>		<p>DE Traffic</p>
	<p>Project Number: L2004-116</p>	<p>Page Number: 5</p>	<p>www.de-traffic.com</p>
			<p><small>1619 W. Akron Dr. Deltona, FL 32725 Telephone (386) 214-1023 Fax: (386) 789-3980</small></p>



Malabar Rd EB Approach to Garvey Rd



Malabar Rd WB Approach to Garvey Rd

<i>Garvey Rd @ Malabar Rd</i> Brevard County	Approaches		DE Traffic
			www.de-traffic.com
	Project Number: L2004-116	Page Number: 6	<small>1619 W. Akron Dr. Deltona, FL 32725 Telephone: (386) 214-1023 Fax: (386) 789-3980</small>



Jupiter Blvd NB Approach to Americana Blvd



Jupiter Blvd SB Approach to Americana Blvd

<p><i>Jupiter Blvd</i> @ <i>Americana Blvd</i> Brevard County</p>	<p>Approaches</p>		<p>DE Traffic</p>
	<p>Project Number: L2004-116</p>	<p>Page Number: 7</p>	<p>www.de-traffic.com</p>
			<p>1614 W. Akron Dr. Deltona, FL 32725 Telephone (386) 214-1027 Fax (386) 789-3980</p>



Americana Blvd WB Approach to Jupiter Blvd

<p><i>Jupiter Blvd</i> @ <i>Americana Blvd</i> Brevard County</p>	<p>Approaches</p>		<p>DE Traffic</p>
	<p>Project Number: L2004-116</p>	<p>Page Number: 8</p>	<p>www.de-traffic.com</p>
			<p><small>1619 W. Akron Dr. Deltona, FL 32725 Telephone: (386) 219-1023 Fax: (386) 780-7980</small></p>



Garvey Rd NB Approach to Jupiter Blvd



Garvey Rd SB Approach to Jupiter Blvd

<p><i>Garvey Rd @ Jupiter Blvd</i></p> <p>Brevard County</p>	<p>Approaches</p>		<p>DE Traffic</p>
	<p>Project Number: L2004-116</p>	<p>Page Number: 9</p>	<p>www.de-traffic.com</p>
	<p><small>1619 W. Akron Dr. Deltona, FL 32725 Telephone (386) 214-1023 Fax (386) 789-3980</small></p>		

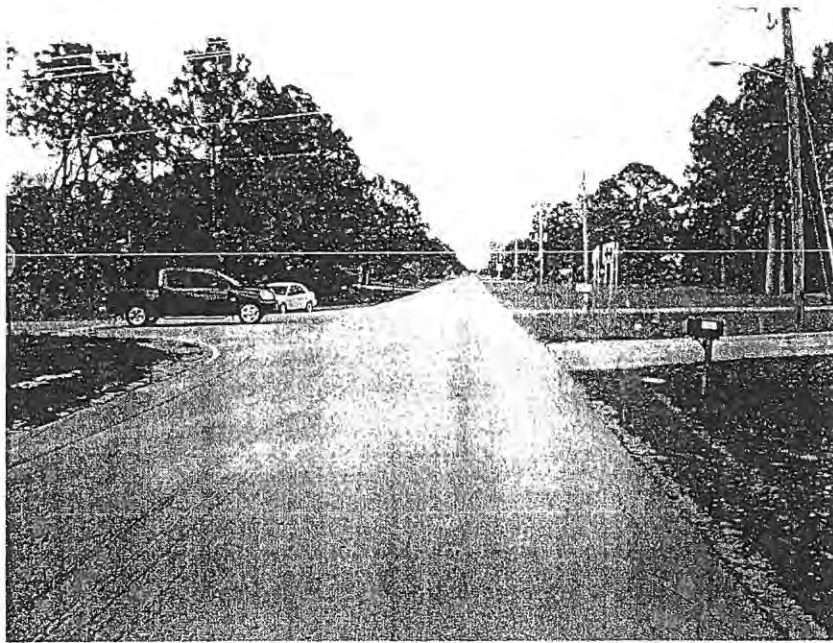


Jupiter Blvd EB Approach to Garvey Rd



Jupiter Blvd WB Approach to Garvey Rd

<i>Garvey Rd</i> <i>@ Jupiter Blvd</i> Brevard County	Approaches		DE Traffic
			www.de-traffic.com
	Project Number: L2004-116	Page Number: 10	<small>1619 W. Akron Dr. Deltona, FL 32725 Telephone (386) 214-1022 Fax (386) 789-1980</small>



Garvey Rd NB Approach to Harper Blvd



Garvey Rd SB Approach to Harper Blvd

<p><i>Garvey Rd @ Harper Blvd</i></p> <p>Brevard County</p>	<p>Approaches</p>		<p>DE Traffic</p>
			<p>www.de-traffic.com</p>
	<p>Project Number: L2004-116</p>	<p>Page Number: 11</p>	<p><small>1619 W. Akron Dr. Deltona, FL 32725 Telephone: (386) 214-1023 Fax: (386) 909-3986</small></p>



Harper Blvd EB Approach to Garvey Rd

<i>Garvey Rd @ Harper Blvd</i> Brevard County	Approaches		DE Traffic
	Project Number: L2004-116	Page Number: 12	www.de-traffic.com
	<small>1619 W. Alton Dr. Deltona FL 32725 Telephone (386) 214-1023 Fax (386) 789-3980</small>		

DE-TRAFFIC
TURNING MOVEMENT COUNT
GARVEY RD @ HARPER BLVD
BREVARD COUNTY, FLORIDA

Counter:D-4012
Counted By:JR
Weather:Clear
Other:Tuesday

File Name : Garvey @ Harper
Site Code : 34980006
Start Date : 1/23/2007
Page No : 1

Groups Printed- Automobiles - Commercial

Start Time	Garvey Rd Southbound				N/A Westbound				Garvey Rd Northbound				Harper Blvd Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Factor	1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		
04:00 PM	0	5	20	25	0	0	0	0	5	7	0	12	12	0	0	12	49
04:15 PM	0	8	17	25	0	0	0	0	6	2	0	8	10	0	2	12	45
04:30 PM	0	2	13	15	0	0	0	0	4	5	0	9	7	0	0	7	31
04:45 PM	0	4	17	21	0	0	0	0	2	2	0	4	11	0	3	14	39
Total	0	19	67	86	0	0	0	0	17	16	0	33	40	0	5	45	164
05:00 PM	0	5	22	27	0	0	0	0	6	4	0	10	12	0	4	16	53
05:15 PM	0	7	13	20	0	0	0	0	4	4	0	8	17	0	3	20	48
05:30 PM	0	5	17	22	0	0	0	0	5	3	0	8	11	0	5	16	46
05:45 PM	0	6	11	17	0	0	0	0	2	2	0	4	10	0	6	16	37
Total	0	23	63	86	0	0	0	0	17	13	0	30	50	0	18	68	184
Grand Total	0	42	130	172	0	0	0	0	34	29	0	63	90	0	23	113	348
Apprch %	0.0	24.4	75.6		0.0	0.0	0.0		54.0	46.0	0.0		79.6	0.0	20.4		
Total %	0.0	12.1	37.4	49.4	0.0	0.0	0.0	0.0	9.8	8.3	0.0	18.1	25.9	0.0	6.6	32.5	

Start Time	Garvey Rd Southbound				N/A Westbound				Garvey Rd Northbound				Harper Blvd Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour From 04:00 PM to 06:00 PM - Peak 1 of 1																	
Intersection 04:45 PM																	
Volume	0	21	69	90	0	0	0	0	17	13	0	30	51	0	15	66	186
Percent	0.0	23.3	76.7		0.0	0.0	0.0		56.7	43.3	0.0		77.3	0.0	22.7		
05:00 Volume	0	5	22	27	0	0	0	0	6	4	0	10	12	0	4	16	53
Peak Factor	0.877																
High Int.	05:00 PM																
Volume	0	5	22	27	0	0	0	0	6	4	0	10	17	0	3	20	
Peak Factor	0.825																

Counter:D-4012
 Counted By:JR
 Weather:Clear
 Other:Tuesday

DE-TRAFFIC
 TURNING MOVEMENT COUNT
 GARVEY RD @ HARPER BLVD
 BREVARD COUNTY, FLORIDA

File Name : Garvey @ Harper
 Site Code : 34980006
 Start Date : 1/23/2007
 Page No : 2

Groups Printed- Commercial

Start Time	Garvey Rd Southbound				N/A Westbound				Garvey Rd Northbound				Harper Blvd Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Factor	1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		
04:00 PM	0	0	3	3	0	0	0	0	1	1	0	2	0	0	0	0	5
04:15 PM	0	0	2	2	0	0	0	0	1	0	0	1	2	0	0	2	5
04:30 PM	0	1	2	3	0	0	0	0	0	2	0	2	0	0	0	0	5
04:45 PM	0	0	1	1	0	0	0	0	0	0	0	0	1	0	0	1	2
Total	0	1	8	9	0	0	0	0	2	3	0	5	3	0	0	3	17
05:00 PM	0	0	1	1	0	0	0	0	2	0	0	2	0	0	0	0	3
05:15 PM	0	0	1	1	0	0	0	0	0	0	0	0	1	0	0	1	2
05:30 PM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
Total	0	0	3	3	0	0	0	0	2	0	0	2	2	0	0	2	7
Grand Total	0	1	11	12	0	0	0	0	4	3	0	7	5	0	0	5	24
Apprch %	0.0	8.3	91.7		0.0	0.0	0.0		57.1	42.9	0.0		100.0	0.0	0.0		
Total %	0.0	4.2	45.8	50.0	0.0	0.0	0.0	0.0	16.7	12.5	0.0	29.2	20.8	0.0	0.0	20.8	

DE-TRAFFIC
TURNING MOVEMENT COUNT
GARVEY RD @ MALABAR RD
BREVARD COUNTY, FLORIDA

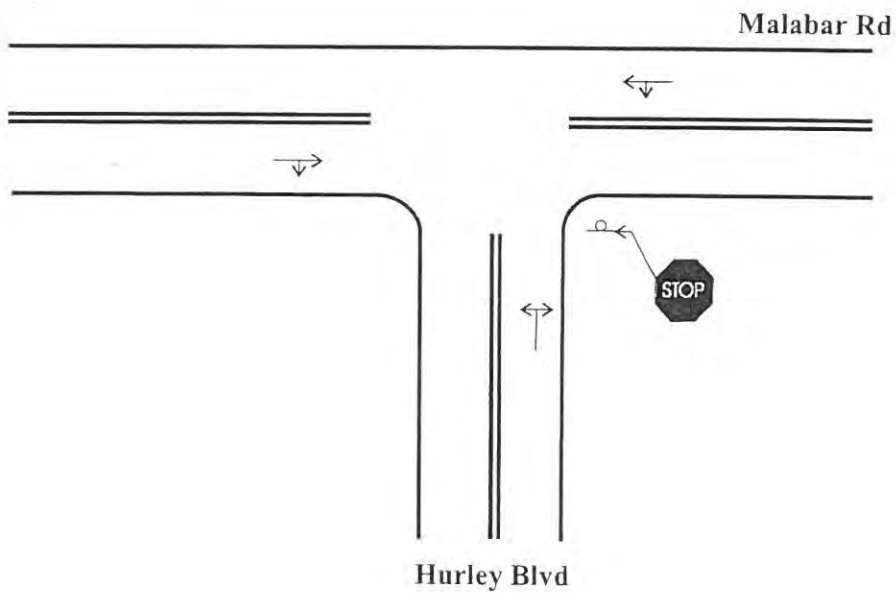
Counter:5
Counted By:AC
Weather:Clear
Other:Tuesday

File Name : Garvey @ Malabar
Site Code : 34980003
Start Date : 1/23/2007
Page No : 3

Start Time	N/A Southbound					Malabar Rd Westbound					Garvey Rd Northbound					Malabar Rd Eastbound					Int. Total	
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total		
04:30 PM	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	1
05:00 PM	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	1
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	1
Total	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1	1	0	2
Grand Total	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	1	1	0	3
Apprch %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	66.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	33.3	0.0	
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	66.7	66.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	33.3	33.3	0.0	

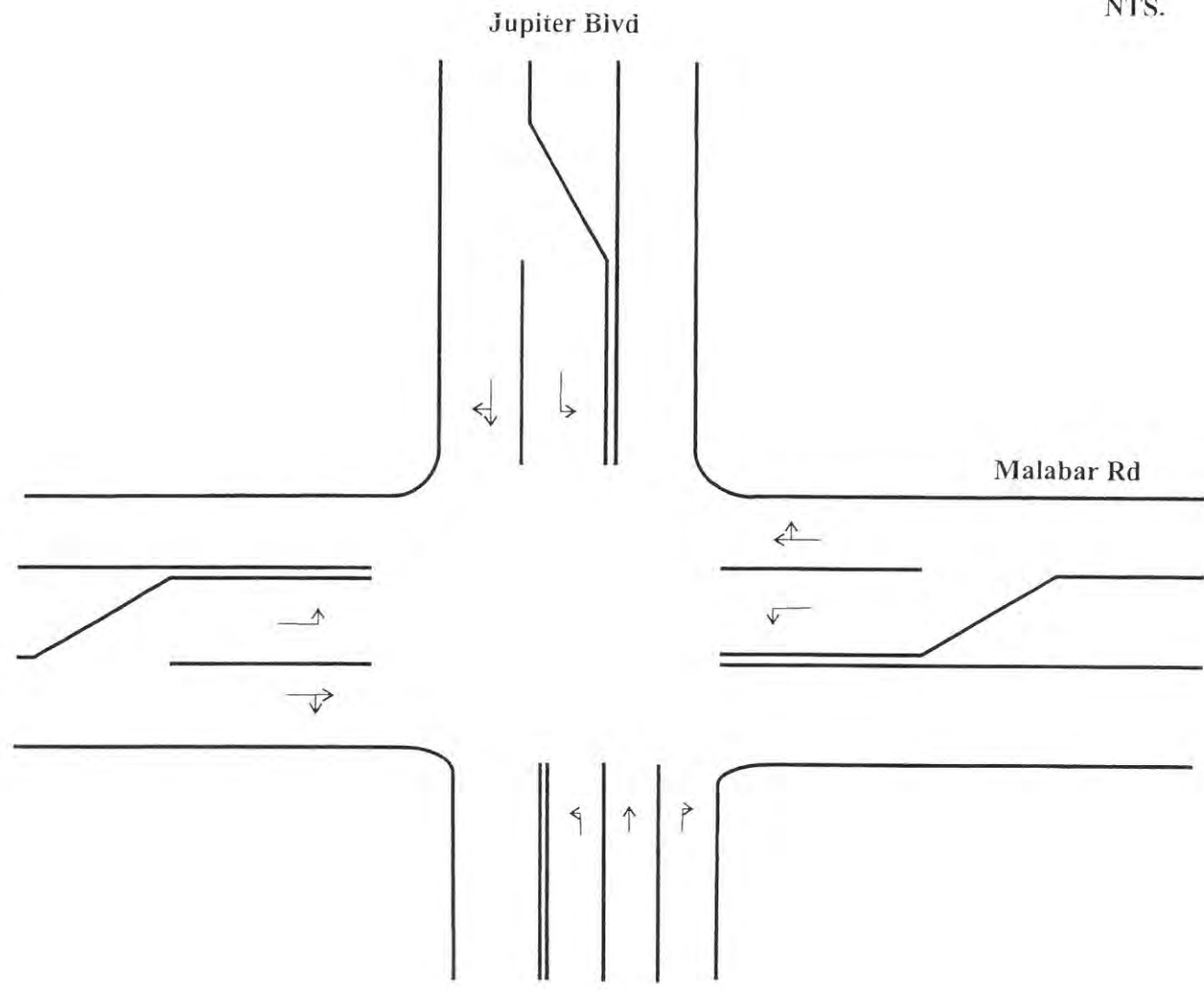


Unsignalized
Intersection



<i>Hurley Blvd @ Malabar Rd</i> Brevard County	Intersection Geometry		DE TRAFFIC
	Project Number: L2004-116	Page Number: 1	www.de-traffic.com
	1619 W. Akron Dr. Deltona, FL 32725 Telephone: (386) 341-4186 Fax: (386) 789-3980		

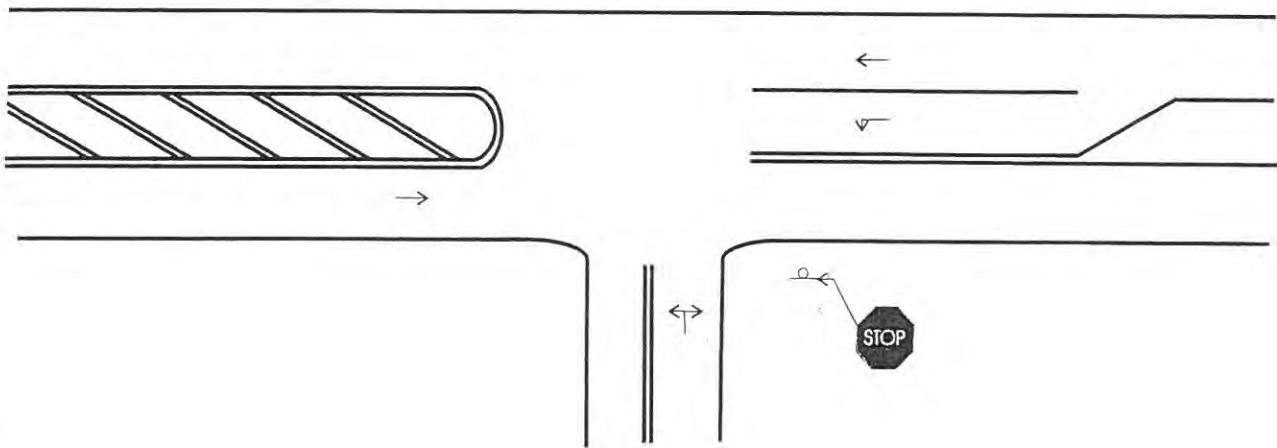

 Signalized
 Intersection



<i>Jupiter Blvd @ Malabar Rd</i> Brevard County	Intersection Geometry		DE TRAFFIC
	Project Number: L2004-116	Page Number: 2	www.de-traffic.com
	1619 W. Akron Dr. Deltona, FL 32725 Telephone: (386) 341-4186 Fax: (386) 789-3980		



Unsignalized
Intersection



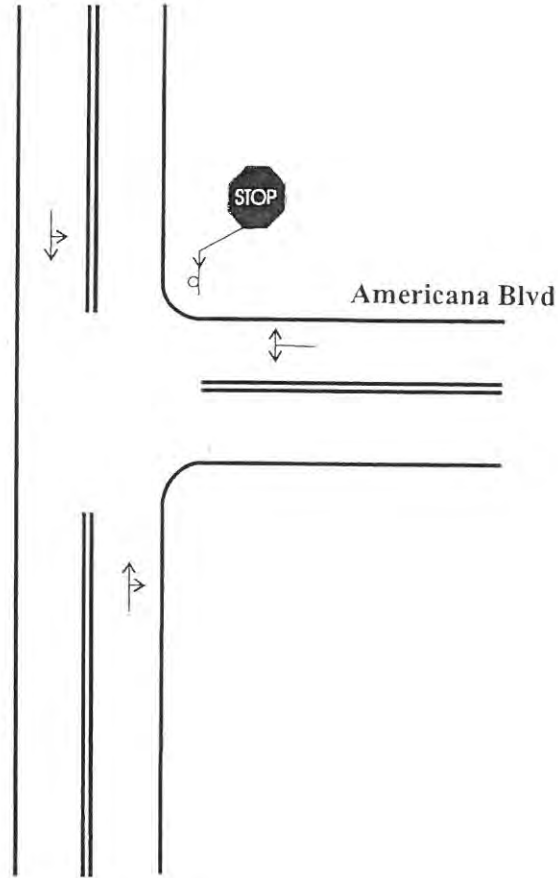
<i>Garvey Rd @ Malabar Rd</i> Brevard County	Intersection Geometry		DE TRAFFIC
	Project Number: L2004-116	Page Number: 3	www.de-traffic.com
			1619 W. Akron Dr. Deltona, FL 32725 Telephone (386) 341-4186 Fax: (386) 789-3980



Unsignalized Intersection



Jupiter Blvd



*Jupiter Blvd
@ Americana Blvd*
Brevard County

Intersection Geometry

DE TRAFFIC

www.de-traffic.com

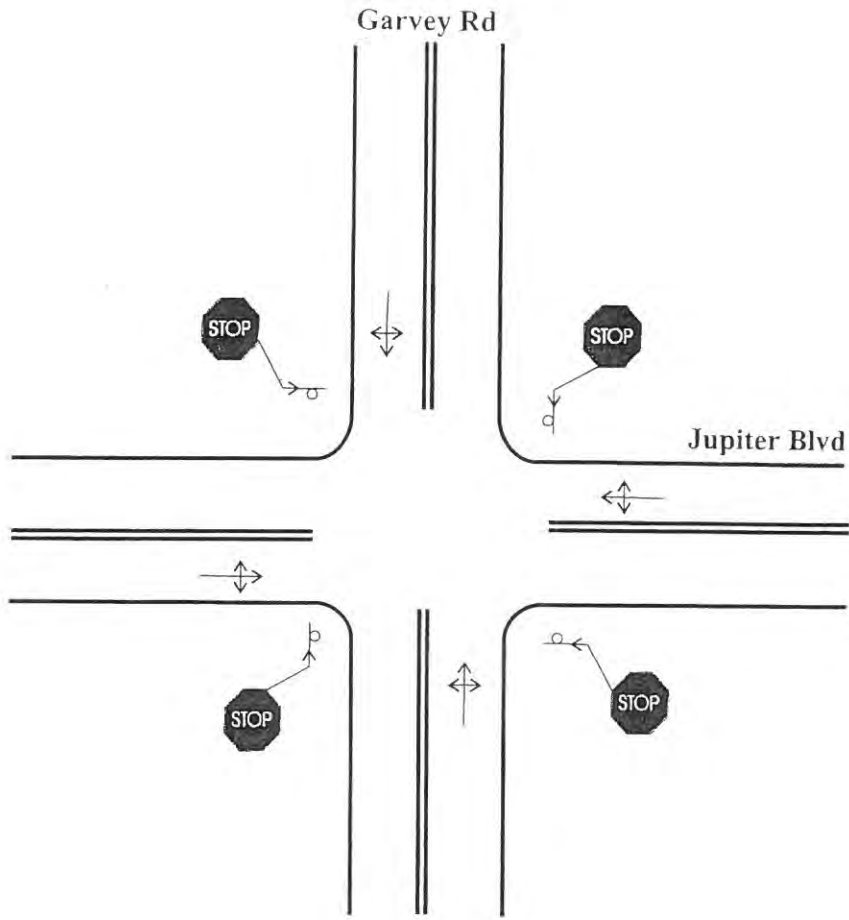
Project
Number: L2004-116

Page
Number: 4

1619 W. Akron Dr. Deltona, FL 32725
Telephone: (386) 341-4186 Fax: (386) 789-2980



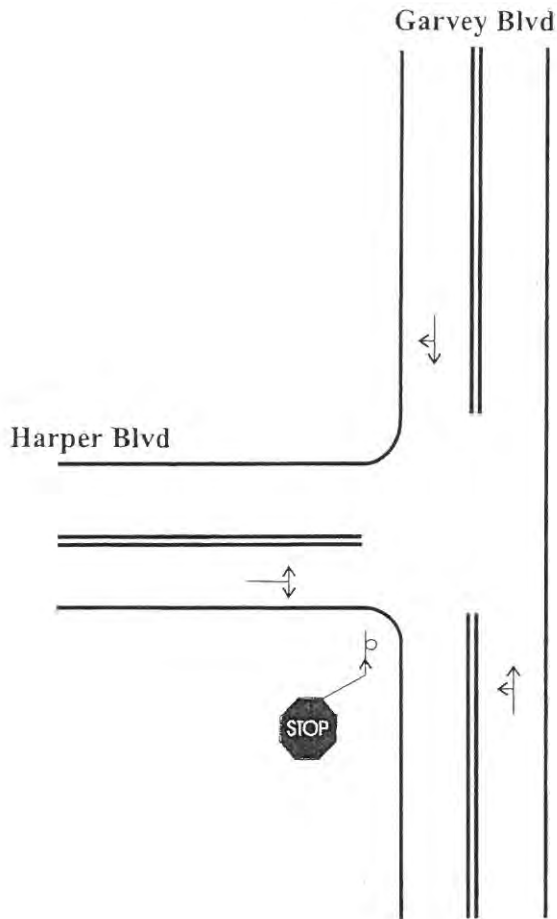
Unsignalized Intersection



<p><i>Garvey Rd</i> <i>@ Jupiter Blvd</i> Brevard County</p>	<p>Intersection Geometry</p>		<p>DE TRAFFIC</p>
	<p>Project Number: L2004-116</p>	<p>Page Number: 5</p>	<p>www.de-traffic.com</p>
			<p>1619 W. Akron Dr. Deltona, FL 32725 Telephone: (386) 341-4186 Fax: (386) 789-3980</p>



Unsignalized Intersection



<p><i>Garvey Rd @ Harper Blvd</i></p> <p>Brevard County</p>	<p>Intersection Geometry</p>		<p>DE TRAFFIC</p>
	<p>Project Number: L2004-116</p>	<p>Page Number: 6</p>	<p>www.de-traffic.com</p>
			<p>1619 W. Akron Dr. Deltona, FL 32725 Telephone: (386) 341-4186 Fax: (386) 789-3980</p>

DE-TRAFFIC
TURNING MOVEMENT COUNT
HURLEY BLVD @ MALABAR RD
BREVARD COUNTY, FLORIDA

Counter:D-3100
Counted By:DM
Weather:Clear
Other:Tuesday

File Name : Hurley @ Malabar
Site Code : 34980001
Start Date : 1/23/2007
Page No : 1

Groups Printed- Automobiles - Commercial

Start Time	N/A Southbound				Malabar Rd Westbound				Hurley Blvd Northbound				Malabar Rd Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Factor	1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		
04:00 PM	0	0	0	0	18	69	0	87	2	0	11	13	0	61	5	66	166
04:15 PM	0	0	0	0	34	66	0	100	3	0	10	13	0	53	5	58	171
04:30 PM	0	0	0	0	21	45	0	66	7	0	16	23	0	61	5	66	155
04:45 PM	0	0	0	0	17	65	0	82	4	0	15	19	0	39	4	43	144
Total	0	0	0	0	90	245	0	335	16	0	52	68	0	214	19	233	636
05:00 PM	0	0	0	0	23	77	0	100	6	0	14	20	0	64	7	71	191
05:15 PM	0	0	0	0	37	83	0	120	5	0	17	22	0	66	11	77	219
05:30 PM	0	0	0	0	34	95	0	129	12	0	21	33	0	59	12	71	233
05:45 PM	0	0	0	0	40	96	0	136	12	0	29	41	0	53	15	68	245
Total	0	0	0	0	134	351	0	485	35	0	81	116	0	242	45	287	888
Grand Total	0	0	0	0	224	596	0	820	51	0	133	184	0	456	64	520	1524
Approch %	0.0	0.0	0.0		27.3	72.7	0.0		27.7	0.0	72.3		0.0	87.7	12.3		
Total %	0.0	0.0	0.0	0.0	14.7	39.1	0.0	53.8	3.3	0.0	8.7	12.1	0.0	29.9	4.2	34.1	

Start Time	N/A Southbound				Malabar Rd Westbound				Hurley Blvd Northbound				Malabar Rd Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour From 04:00 PM to 06:00 PM - Peak 1 of 1																	
Intersection	05:00 PM																
Volume	0	0	0	0	134	351	0	485	35	0	81	116	0	242	45	287	888
Percent	0.0	0.0	0.0		27.6	72.4	0.0		30.2	0.0	69.8		0.0	84.3	15.7		
05:45 Volume	0	0	0	0	40	96	0	136	12	0	29	41	0	53	15	68	245
Peak Factor																	0.906
High Int.	3:45:00 PM																
Volume	0	0	0	0	40	96	0	136	12	0	29	41	0	66	11	77	245
Peak Factor								0.892				0.707		0		0.932	

DE-TRAFFIC
TURNING MOVEMENT COUNT
HURLEY BLVD @ MALABAR RD
BREVARD COUNTY, FLORIDA

Counter:D-3100
Counted By:DM
Weather:Clear
Other:Tuesday

File Name : Hurley @ Malabar
Site Code : 34980001
Start Date : 1/23/2007
Page No : 2

Groups Printed- Commercial

Start Time	N/A Southbound				Malabar Rd Westbound				Hurley Blvd Northbound				Malabar Rd Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Factor	1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		
04:00 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	2	0	2	4
04:15 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
04:30 PM	0	0	0	0	1	0	0	1	0	0	0	0	0	2	0	2	3
04:45 PM	0	0	0	0	0	1	0	1	0	0	1	1	0	1	0	1	3
Total	0	0	0	0	1	4	0	5	0	0	1	1	0	5	0	5	11
05:00 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2
05:15 PM	0	0	0	0	0	5	0	5	0	0	0	0	0	2	0	2	7
05:30 PM	0	0	0	0	1	1	0	2	0	0	0	0	0	2	0	2	4
05:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
Total	0	0	0	0	1	9	0	10	0	0	0	0	0	5	0	5	15
Grand Total	0	0	0	0	2	13	0	15	0	0	1	1	0	10	0	10	26
Apprch %	0.0	0.0	0.0		13.3	86.7	0.0		0.0	0.0	100.0		0.0	100.0	0.0		
Total %	0.0	0.0	0.0	0.0	7.7	50.0	0.0	57.7	0.0	0.0	3.8	3.8	0.0	38.5	0.0	38.5	

DE-TRAFFIC
TURNING MOVEMENT COUNT
HURLEY BLVD @ MALABAR RD
BREVARD COUNTY, FLORIDA

Counter:D-3100
Counted By:DM
Weather:Clear
Other:Tuesday

File Name : Hurley @ Malabar
Site Code : 34980001
Start Date : 1/23/2007
Page No : 3

Start Time	N/A Southbound					Groups Printed- Peds					Hurley Blvd Northbound					Malabar Rd Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0
04:30 PM	0	0	0	1	1	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0
Total	0	0	0	1	1	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0
05:15 PM	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	2	2	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0
Apprch %	0.0	0.0	0.0	100.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0	100.0		0.0	0.0	0.0	0.0	0.0	
Total %	0.0	0.0	0.0	50.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0

DE-TRAFFIC
TURNING MOVEMENT COUNT
JUPITER BLVD @ AMERICANA BLVD
BREVARD COUNTY, FLORIDA

Counter:D-4010
Counted By:DR
Weather:Clear
Other:Tuesday

File Name : Jupiter @ Americana
Site Code : 34980004
Start Date : 1/23/2007
Page No : 1

Groups Printed- Automobiles - Commercial

Start Time	Jupiter Blvd Southbound				Americana Blvd Westbound				Garvey Rd Northbound				N/A Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Factor	1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		
04:00 PM	8	79	0	87	8	0	17	25	0	130	3	133	0	0	0	0	245
04:15 PM	14	108	0	122	14	0	16	30	0	136	6	142	0	0	0	0	294
04:30 PM	9	92	0	101	11	0	16	27	0	140	6	146	0	0	0	0	274
04:45 PM	8	92	0	100	10	0	13	23	0	140	4	144	0	0	0	0	267
Total	39	371	0	410	43	0	62	105	0	546	19	565	0	0	0	0	1080
05:00 PM	6	107	0	113	8	0	23	31	0	112	7	119	0	0	0	0	263
05:15 PM	15	104	0	119	8	0	21	29	0	124	4	128	0	0	0	0	276
05:30 PM	7	112	0	119	15	0	26	41	0	114	7	121	0	0	0	0	281
05:45 PM	4	97	0	101	13	0	20	33	0	120	10	130	0	0	0	0	264
Total	32	420	0	452	44	0	90	134	0	470	28	498	0	0	0	0	1084
Grand Total	71	791	0	862	87	0	152	239	0	1016	47	1063	0	0	0	0	2164
Apprch %	8.2	91.8	0.0		36.4	0.0	63.6		0.0	95.6	4.4		0.0	0.0	0.0		
Total %	3.3	36.6	0.0	39.8	4.0	0.0	7.0	11.0	0.0	47.0	2.2	49.1	0.0	0.0	0.0	0.0	

Start Time	Jupiter Blvd Southbound				Americana Blvd Westbound				Garvey Rd Northbound				N/A Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour From 04:00 PM to 06:00 PM - Peak 1 of 1																	
Intersection 04:15 PM																	
Volume	37	399	0	436	43	0	68	111	0	528	23	551	0	0	0	0	1098
Percent	8.5	91.5	0.0		38.7	0.0	61.3		0.0	95.8	4.2		0.0	0.0	0.0		
04:15 Volume	14	108	0	122	14	0	16	30	0	136	6	142	0	0	0	0	294
Peak Factor																	
High Int. 04:15 PM					05:00 PM				04:30 PM				3:45:00 PM				0.934
Volume	14	108	0	122	8	0	23	31	0	140	6	146					
Peak Factor				0.893				0.895				0.943					

Counter:D-4010
 Counted By:DR
 Weather:Clear
 Other:Tuesday

DE-TRAFFIC
 TURNING MOVEMENT COUNT
 JUPITER BLVD @ AMERICANA BLVD
 BREVARD COUNTY, FLORIDA

File Name : Jupiter @ Americana
 Site Code : 34980004
 Start Date : 1/23/2007
 Page No : 2

Groups Printed- Commercial

Start Time	Left	Jupiter Blvd Southbound			Left	Americana Blvd Westbound			Left	Garvey Rd Northbound			Left	N/A Eastbound			Int. Total
		Thru	Right	App. Total		Thru	Right	App. Total		Thru	Right	App. Total		Thru	Right	App. Total	
Factor	1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		
04:00 PM	0	1	0	1	0	0	2	2	0	0	0	0	0	0	0	0	3
04:15 PM	0	1	0	1	1	0	0	1	0	2	0	2	0	0	0	0	4
04:30 PM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
04:45 PM	0	0	0	0	0	0	1	1	0	1	0	1	0	0	0	0	2
Total	0	3	0	3	1	0	3	4	0	4	0	4	0	0	0	0	11
05:00 PM	0	2	0	2	0	0	0	0	0	1	0	1	0	0	0	0	3
05:15 PM	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
05:30 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
05:45 PM	0	3	0	3	0	0	0	0	0	1	0	1	0	0	0	0	4
Total	0	8	0	8	0	0	0	0	0	2	0	2	0	0	0	0	10
Grand Total	0	11	0	11	1	0	3	4	0	6	0	6	0	0	0	0	21
Apprch %	0.0	100.0	0.0		25.0	0.0	75.0		0.0	100.0	0.0		0.0	0.0	0.0		
Total %	0.0	52.4	0.0	52.4	4.8	0.0	14.3	19.0	0.0	28.6	0.0	28.6	0.0	0.0	0.0	0.0	

Counter:D-4010
 Counted By:DR
 Weather:Clear
 Other:Tuesday

DE-TRAFFIC
 TURNING MOVEMENT COUNT
 JUPITER BLVD @ AMERICANA BLVD
 BREVARD COUNTY, FLORIDA

File Name : Jupiter @ Americana
 Site Code : 34980004
 Start Date : 1/23/2007
 Page No : 3

Groups Printed- Peds

Start Time	Jupiter Blvd Southbound					App. Total	Americana Blvd Westbound					App. Total	Garvey Rd Northbound					App. Total	N/A Eastbound					App. Total	Int. Total	
	Left	Thru	Right	Peds	Left		Thru	Right	Peds	Left	Thru		Right	Peds	Left	Thru	Right		Peds	Left	Thru	Right	Peds			
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0				
04:00 PM	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
04:15 PM	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
04:45 PM	0	0	0	1	1	0	0	0	2	2	0	0	0	0	0	0	0	0	2	2	0	0	2	2	5	
Total	0	0	0	1	1	0	0	0	4	4	0	0	0	0	0	0	0	0	2	2	0	0	2	2	7	
05:00 PM	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	2	2	0	0	2	2	3	
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	1	1	1	
05:30 PM	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
05:45 PM	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
Total	0	0	0	0	0	0	0	0	4	4	0	0	0	0	0	0	0	0	3	3	0	0	3	3	7	
Grand Total	0	0	0	1	1	0	0	0	8	8	0	0	0	0	0	0	0	0	5	5	0	0	5	5	14	
Apprch %	0.0	0.0	0.0	100.0		0.0	0.0	0.0	100.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0	100.0							
Total %	0.0	0.0	0.0	7.1	7.1	0.0	0.0	0.0	57.1	57.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	35.7	35.7	0.0	0.0	35.7	35.7		

DE-TRAFFIC
TURNING MOVEMENT COUNT
JUPITER BLVD @ MALABAR RD
BREVARD COUNTY, FLORIDA

Counter:D-3456
Counted By:AE
Weather:Clear
Other:Tuesday

File Name : Jupiter @ Malabar
Site Code : 34980002
Start Date : 1/23/2007
Page No : 1

Groups Printed- Automobiles - Commercial

Start Time	Jupiter Blvd Southbound				Malabar Rd Westbound				Jupiter Blvd Northbound				Malabar Rd Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Factor	1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		
04:00 PM	42	23	17	82	18	68	68	154	15	39	9	63	9	60	7	76	375
04:15 PM	36	35	24	95	17	76	95	188	15	48	7	70	12	77	9	98	451
04:30 PM	52	30	26	108	17	80	65	162	22	43	13	78	14	64	10	88	436
04:45 PM	46	36	26	108	24	81	77	182	25	37	9	71	16	60	11	87	448
Total	176	124	93	393	76	305	305	686	77	167	38	282	51	261	37	349	1710
05:00 PM	54	41	34	129	14	84	81	179	12	37	9	58	16	61	18	95	461
05:15 PM	53	42	29	124	15	98	70	183	19	49	13	81	12	82	10	104	492
05:30 PM	63	39	35	137	16	102	59	177	13	38	14	65	16	55	9	80	459
05:45 PM	58	45	16	119	10	88	57	155	14	26	14	54	16	52	6	74	402
Total	228	167	114	509	55	372	267	694	58	150	50	258	60	250	43	353	1814
Grand Total	404	291	207	902	131	677	572	1380	135	317	88	540	111	511	80	702	3524
Apprch %	44.8	32.3	22.9		9.5	49.1	41.4		25.0	58.7	16.3		15.8	72.8	11.4		
Total %	11.5	8.3	5.9	25.6	3.7	19.2	16.2	39.2	3.8	9.0	2.5	15.3	3.1	14.5	2.3	19.9	

Start Time	Jupiter Blvd Southbound				Malabar Rd Westbound				Jupiter Blvd Northbound				Malabar Rd Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour From 04:00 PM to 06:00 PM - Peak 1 of 1																	
Intersection	04:45 PM																
Volume	216	158	124	498	69	365	287	721	69	161	45	275	60	258	48	366	1860
Percent	43.4	31.7	24.9		9.6	50.6	39.8		25.1	58.5	16.4		16.4	70.5	13.1		
05:15 Volume	53	42	29	124	15	98	70	183	19	49	13	81	12	82	10	104	492
Peak Factor																	0.945
High Int.	05:30 PM				05:15 PM				05:15 PM				05:15 PM				
Volume	63	39	35	137	15	98	70	183	19	49	13	81	12	82	10	104	
Peak Factor	0.909				0.985				0.849				0.880				

DE-TRAFFIC
TURNING MOVEMENT COUNT
JUPITER BLVD @ MALABAR RD
BREVARD COUNTY, FLORIDA

Counter:D-3456
Counted By:AE
Weather:Clear
Other:Tuesday

File Name : Jupiter @ Malabar
Site Code : 34980002
Start Date : 1/23/2007
Page No : 2

Groups Printed- Commercial

Start Time	Jupiter Blvd Southbound				Malabar Rd Westbound				Jupiter Blvd Northbound				Malabar Rd Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Factor	1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		
04:00 PM	1	1	1	3	1	1	1	3	2	2	1	5	0	3	0	3	14
04:15 PM	1	0	0	1	1	0	1	2	0	3	0	3	1	1	0	2	8
04:30 PM	1	2	1	4	1	1	1	3	1	2	0	3	0	2	1	3	13
04:45 PM	0	4	1	5	0	0	2	2	0	2	1	3	0	1	0	1	11
Total	3	7	3	13	3	2	5	10	3	9	2	14	1	7	1	9	46
05:00 PM	1	2	0	3	1	1	0	2	0	2	0	2	1	5	0	6	13
05:15 PM	2	5	0	7	0	1	3	4	0	0	2	2	0	1	1	2	15
05:30 PM	0	4	1	5	0	1	2	3	0	1	0	1	1	4	0	5	14
05:45 PM	1	2	0	3	1	1	1	3	1	0	1	2	0	2	0	2	10
Total	4	13	1	18	2	4	6	12	1	3	3	7	2	12	1	15	52
Grand Total	7	20	4	31	5	6	11	22	4	12	5	21	3	19	2	24	98
Approch %	22.6	64.5	12.9		22.7	27.3	50.0		19.0	57.1	23.8		12.5	79.2	8.3		
Total %	7.1	20.4	4.1	31.6	5.1	6.1	11.2	22.4	4.1	12.2	5.1	21.4	3.1	19.4	2.0	24.5	

DE-TRAFFIC
TURNING MOVEMENT COUNT
JUPITER BLVD @ MALABAR RD
BREVARD COUNTY, FLORIDA

Counter:D-3456
Counted By:AE
Weather:Clear
Other:Tuesday

File Name : Jupiter @ Malabar
Site Code : 34980002
Start Date : 1/23/2007
Page No : 3

Groups Printed- Peds

Start Time	Jupiter Blvd Southbound					App. Total	Malabar Rd Westbound					App. Total	Jupiter Blvd Northbound					App. Total	Malabar Rd Eastbound					Int. Total									
	Left	Thru	Right	Peds	Left		Thru	Right	Peds	Left	Thru		Right	Peds	Left	Thru	Right		Peds	App. Total	Left	Thru	Right		Peds	App. Total							
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0				
04:45 PM	0	0	0	1		1	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		0	1
Total	0	0	0	1		1	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		0	1
05:00 PM	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	1		1	0	0	0		1	1	
05:15 PM	0	0	0	1		1	0	0	0	1		1	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		0	2
Total	0	0	0	1		1	0	0	0	1		1	0	0	0		0	0	0	0		0	0	0	1		1	0	0	0		1	3
Grand Total	0	0	0	2		2	0	0	0	1		1	0	0	0		0	0	0	0		0	0	0	1		1	0	0	0		1	4
Apprch %	0.0	0.0	0.0	100.0		50.0	0.0	0.0	0.0	100.0		25.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0	100.0		25.0	0	0	0		25.0	
Total %	0.0	0.0	0.0	50.0		50.0	0.0	0.0	0.0	25.0		25.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0	25.0		25.0	0	0	0		25.0	

APPENDIX C

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	CAM	Intersection	Malabar Rd. @ Hurley Blvd.
Agency/Co.	LTG	Jurisdiction	City of Palm Bay
Date Performed	1/27/2007	Analysis Year	2007 Existing
Analysis Time Period	P.M. Peak-Hour		

Project Description <i>Chaparral</i>	
East/West Street: <i>Malabar Rd.</i>	North/South Street: <i>Hurley Blvd.</i>
Intersection Orientation: <i>East-West</i>	Study Period (hrs): <i>0.25</i>

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound			
	Movement	1	2	3	4	5	6
		L	T	R	L	T	R
Volume (veh/h)			242	45	134	351	
Peak-Hour Factor, PHF	1.00		0.93	0.93	0.89	0.89	1.00
Hourly Flow Rate, HFR (veh/h)	0		260	48	150	394	0
Percent Heavy Vehicles	0		--	--	2	--	--
Median Type	<i>Undivided</i>						
RT Channelized			0				0
Lanes	0		1	0	0	1	0
Configuration			TR	LT			
Upstream Signal			0			0	

Minor Street	Northbound			Southbound			
	Movement	7	8	9	10	11	12
		L	T	R	L	T	R
Volume (veh/h)	35			81			
Peak-Hour Factor, PHF	0.75		1.00	0.75	1.00	1.00	1.00
Hourly Flow Rate, HFR (veh/h)	46		0	108	0	0	0
Percent Heavy Vehicles	2		0	2	0	0	0
Percent Grade (%)			0			0	
Flared Approach			N			N	
Storage			0			0	
RT Channelized				0			0
Lanes	0		0	0	0	0	0
Configuration			LR				

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
			7	8	9	10	11	12
Movement	1	4						
Lane Configuration		LT		LR				
v (veh/h)		150		154				
C (m) (veh/h)		1253		466				
v/c		0.12		0.33				
95% queue length		0.41		1.43				
Control Delay (s/veh)		8.3		16.5				
LOS		A		C				
Approach Delay (s/veh)	--	--		16.5				
Approach LOS	--	--		C				

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information						
Analyst	CAM	Intersection	Garvey Rd. @ Malabar Rd.					
Agency/Co.	LTG	Jurisdiction	City of Palm Bay					
Date Performed	1/27/2007	Analysis Year	2007 Existing					
Analysis Time Period	P.M. Peak-Hour							
Project Description <i>Chaparral</i>								
East/West Street: <i>Malabar Rd.</i>			North/South Street: <i>Garvey Rd.</i>					
Intersection Orientation: <i>East-West</i>			Study Period (hrs): <i>0.25</i>					
Vehicle Volumes and Adjustments								
Major Street	Eastbound			Westbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume (veh/h)		555	6	134	717			
Peak-Hour Factor, PHF	1.00	0.92	0.92	0.93	0.93	1.00		
Hourly Flow Rate, HFR (veh/h)	0	603	6	144	770	0		
Percent Heavy Vehicles	4	--	--	2	--	--		
Median Type	<i>Undivided</i>							
RT Channelized			0			0		
Lanes	0	1	0	1	1	0		
Configuration			TR	L	T			
Upstream Signal		0			0			
Minor Street	Northbound			Southbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume (veh/h)	15		56					
Peak-Hour Factor, PHF	0.77	0.75	0.77	1.00	0.83	0.83		
Hourly Flow Rate, HFR (veh/h)	19	0	72	0	0	0		
Percent Heavy Vehicles	7	2	9	0	2	27		
Percent Grade (%)		0			0			
Flared Approach		N			N			
Storage		0			0			
RT Channelized			0			0		
Lanes	0	0	0	0	0	0		
Configuration		LR						
Delay, Queue Length, and Level of Service								
Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		L		LR				
v (veh/h)		144		91				
C (m) (veh/h)		970		251				
v/c		0.15		0.36				
95% queue length		0.52		1.58				
Control Delay (s/veh)		9.4		27.3				
LOS		A		D				
Approach Delay (s/veh)	--	--		27.3				
Approach LOS	--	--		D				

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information						
Analyst	CAM	Intersection	Jupiter Blvd @ Americana Blvd.					
Agency/Co.	LTG	Jurisdiction	City of Palm Bay					
Date Performed	1/27/2007	Analysis Year	2007 Existing					
Analysis Time Period	P.M. Peak-Hour							
Project Description <i>Chaparral</i>								
East/West Street: <i>Americana Blvd.</i>			North/South Street: <i>Jupiter Blvd</i>					
Intersection Orientation: <i>North-South</i>			Study Period (hrs): <i>0.25</i>					
Vehicle Volumes and Adjustments								
Major Street	Northbound			Southbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume (veh/h)		528	23	37	399			
Peak-Hour Factor, PHF	0.75	0.94	0.94	0.89	0.89	1.00		
Hourly Flow Rate, HFR (veh/h)	0	0	0	48	0	68		
Percent Heavy Vehicles	2	--	--	2	--	--		
Median Type	<i>Undivided</i>							
RT Channelized			0			0		
Lanes	0	1	0	0	1	0		
Configuration			TR	LT				
Upstream Signal		0			0			
Minor Street	Eastbound			Westbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume (veh/h)				43		68		
Peak-Hour Factor, PHF	1.00	0.93	0.93	0.89	0.89	1.00		
Hourly Flow Rate, HFR (veh/h)	41	448	0	0	561	24		
Percent Heavy Vehicles	0	0	0	2	0	0		
Percent Grade (%)		0			0			
Flared Approach		N			N			
Storage		0			0			
RT Channelized			0			0		
Lanes	0	0	0	0	0	0		
Configuration					LR			
Delay, Queue Length, and Level of Service								
Approach	Northbound	Southbound	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		LT		LR				
v (veh/h)		41		116				
C (m) (veh/h)		990		337				
v/c		0.04		0.34				
95% queue length		0.13		1.49				
Control Delay (s/veh)		8.8		21.2				
LOS		A		C				
Approach Delay (s/veh)	--	--		21.2				
Approach LOS	--	--		C				

ALL-WAY STOP CONTROL ANALYSIS

General Information		Site Information	
Analyst	CAM	Intersection	Jupiter Blvd. @ Garvey Rd.
Agency/Co.	LTG	Jurisdiction	City of Palm Bay
Date Performed	1/27/2007	Analysis Year	2007 Existing
Analysis Time Period	P.M. Peak-Hour		

Project ID	
East/West Street: Jupiter Blvd	North/South Street: Garvey Rd

Volume Adjustments and Site Characteristics						
Approach	Eastbound			Westbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	4	154	21	37	217	27
%Thrus Left Lane						
Approach	Northbound			Southbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	18	34	32	16	89	14
%Thrus Left Lane						

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Configuration	LTR		LTR		LTR		LTR	
PHF	0.86		0.87		0.75		0.90	
Flow Rate (veh/h)	207		322		111		130	
% Heavy Vehicles	2		5		22		6	
No. Lanes	1		1		1		1	
Geometry Group	1		1		1		1	
Duration, T	0.25							

Saturation Headway Adjustment Worksheet								
Prop. Left-Turns	0.0		0.1		0.2		0.1	
Prop. Right-Turns	0.1		0.1		0.4		0.1	
Prop. Heavy Vehicle	0.0		0.0		0.2		0.1	
hLT-adj	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
hRT-adj	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6
hHV-adj	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
hadj, computed	-0.0		0.1		0.2		0.1	

Departure Headway and Service Time								
hd, initial value (s)	3.20		3.20		3.20		3.20	
x, initial	0.18		0.29		0.10		0.12	
hd, final value (s)	5.02		4.95		5.68		5.52	
x, final value	0.29		0.44		0.18		0.20	
Move-up time, m (s)	2.0		2.0		2.0		2.0	
Service Time, ts (s)	3.0		3.0		3.7		3.5	

Capacity and Level of Service								
	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Capacity (veh/h)	457		572		361		380	
Delay (s/veh)	10.05		11.83		9.88		9.88	
LOS	B		B		A		A	
Approach: Delay (s/veh)	10.05		11.83		9.88		9.88	
LOS	B		B		A		A	
Intersection Delay (s/veh)	10.74							
Intersection LOS	B							

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	CAM	Intersection	Garvey Rd. @ Harper Rd.
Agency/Co.	LTG	Jurisdiction	City of Palm Bay
Date Performed	1/27/2007	Analysis Year	2007 Existing
Analysis Time Period	P.M. Peak-Hour		

Project Description: Chaparral	
East/West Street: Harper Rd.	North/South Street: Garvey Rd.
Intersection Orientation: North-South	Study Period (hrs): 0.25

Vehicle Volumes and Adjustments						
Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	17	13			21	69
Peak-Hour Factor, PHF	0.75	0.75	0.75	1.00	0.83	0.83
Hourly Flow Rate, HFR (veh/h)	51	0	16	0	0	0
Percent Heavy Vehicles	12	--	--	0	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	1	0	0	1	0
Configuration	LT					TR
Upstream Signal		0			0	

Minor Street	Eastbound			Westbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	51		15			
Peak-Hour Factor, PHF	1.00	0.93	0.93	0.89	0.89	1.00
Hourly Flow Rate, HFR (veh/h)	0	25	83	22	17	0
Percent Heavy Vehicles	4	0	0	2	0	0
Percent Grade (%)	0			0		
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	0	0	0	0	0
Configuration		LR				

Delay, Queue Length, and Level of Service								
Approach	Northbound	Southbound	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LT						LR	
v (veh/h)	22						67	
C (m) (veh/h)	1422						882	
v/c	0.02						0.08	
95% queue length	0.05						0.25	
Control Delay (s/veh)	7.6						9.4	
LOS	A						A	
Approach Delay (s/veh)	--	--					9.4	
Approach LOS	--	--					A	

APPENDIX D

HCS+™ DETAILED REPORT

General Information				Site Information			
Analyst	CAM			Intersection	Malabar Rd./Jupiter Blvd.		
Agency or Co.	LTG			Area Type	All other areas		
Date Performed	1/27/2007			Jurisdiction	City of Palm Bay		
Time Period	P.M. Peak-Hour			Analysis Year	2007 Existing		
Project ID				Chaparral			

Volume and Timing Input												
	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes, N _i	1	1	0	1	1	0	1	1	1	1	1	0
Lane Group	L	TR		L	TR		L	T	R	L	TR	
Volume, V (vph)	60	258	48	69	365	287	69	161	45	216	158	124
% Heavy Vehicles, %HV	3	4	2	2	2	2	2	3	7	2	9	2
Peak-Hour Factor, PHF	0.88	0.88	0.88	0.99	0.99	0.99	0.85	0.85	0.85	0.91	0.91	0.91
Pretimed (P) or Actuated (A)	A	A	A	A	A	A	A	A	A	A	A	A
Start-up Lost Time, I _s	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Extension of Effective Green, e	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Arrival Type, AT	3	3		3	3		3	3	3	3	3	
Unit Extension, UE	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Filtering/Metering, I	1.000	1.000		1.000	1.000		1.000	1.000	1.000	1.000	1.000	
Initial Unmet Demand, Q _b	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Ped / Bike / RTOR Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0		12.0	12.0		12.0	12.0	12.0	12.0	12.0	
Parking / Grade / Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking Maneuvers, N _m												
Buses Stopping, N _b	0	0		0	0		0	0	0	0	0	
Min. Time for Pedestrians, G _p	3.2			3.2			3.2			3.2		
Phasing	Excl. Left	EW Perm	03	04	Excl. Left	NS Perm	07	08				
Timing	G = 6.0	G = 43.0	G = 0.0	G = 0.0	G = 6.0	G = 23.0	G = 0.0	G = 0.0				
	Y = 5	Y = 6	Y = 0	Y = 0	Y = 5	Y = 6	Y = 0	Y = 0				
Duration of Analysis, T = 0.25							Cycle Length, C = 100.0					

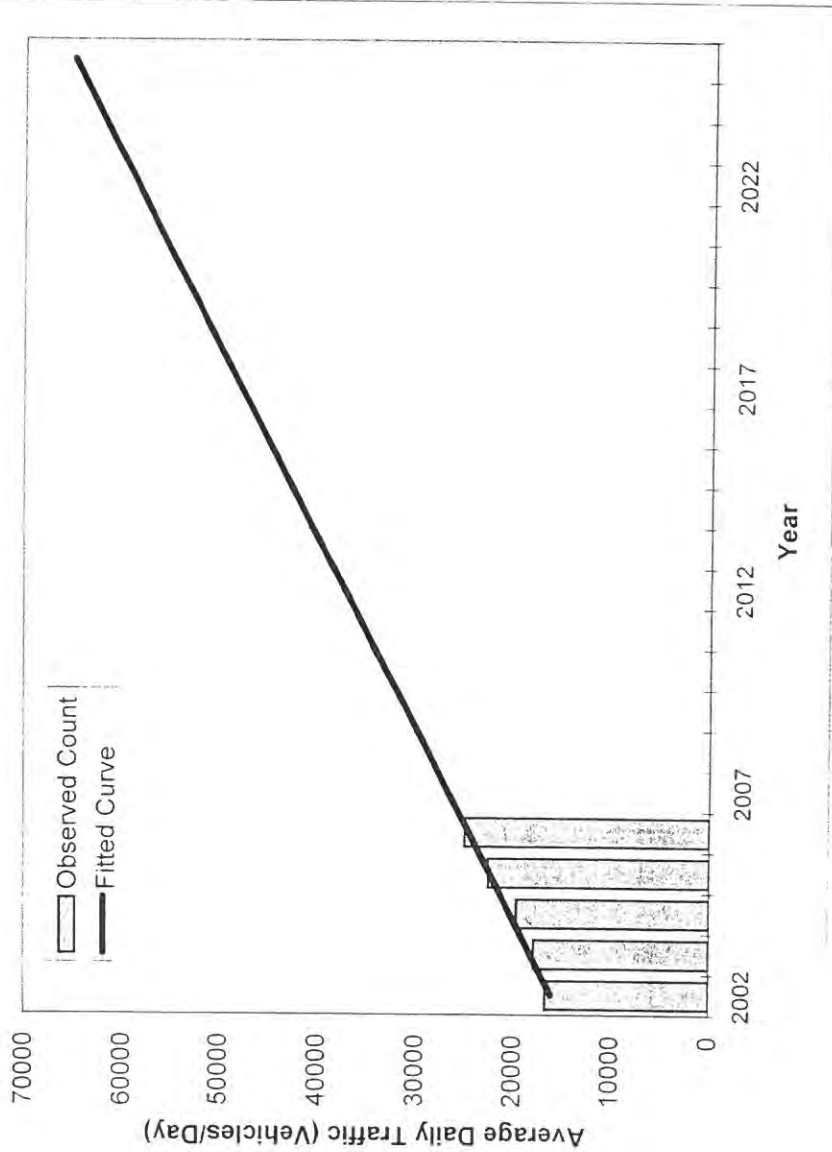
Lane Group Capacity, Control Delay, and LOS Determination												
	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Adjusted Flow Rate, v	68	348		70	659		81	189	53	237	310	
Lane Group Capacity, c	220	769		459	748		234	424	347	332	385	
v/c Ratio, X	0.31	0.45		0.15	0.88		0.35	0.45	0.15	0.71	0.81	
Total Green Ratio, g/C	0.54	0.43		0.54	0.43		0.34	0.23	0.23	0.34	0.23	
Uniform Delay, d ₁	17.0	20.2		12.0	26.2		24.2	33.0	30.7	31.3	36.4	
Progression Factor, PF	1.000	1.000		1.000	1.000		1.000	1.000	1.000	1.000	1.000	
Delay Calibration, k	0.11	0.11		0.11	0.41		0.11	0.11	0.11	0.28	0.35	
Incremental Delay, d ₂	0.8	0.4		0.2	11.9		0.9	0.7	0.2	7.1	11.9	
Initial Queue Delay, d ₃	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Control Delay	17.8	20.6		12.2	38.0		25.1	33.8	30.9	38.4	48.2	
Lane Group LOS	B	C		B	D		C	C	C	D	D	
Approach Delay	20.1			35.5			31.1			44.0		
Approach LOS	C			D			C			D		
Intersection Delay	33.9			X _c = 0.87			Intersection LOS			C		

APPENDIX E

TRAFFIC TRENDS

Malabar Road -- Minton Road to Emerson Drive

County:	Brevard
Station #:	0
Highway:	Malabar Road



** Annual Trend Increase:	2,130
Trend R-squared:	97.7%
Trend Annual Historic Growth Rate:	13.20%
Trend Growth Rate (2006 to Design Year):	8.71%
Printed:	27-Feb-07

Straight Line Growth Option

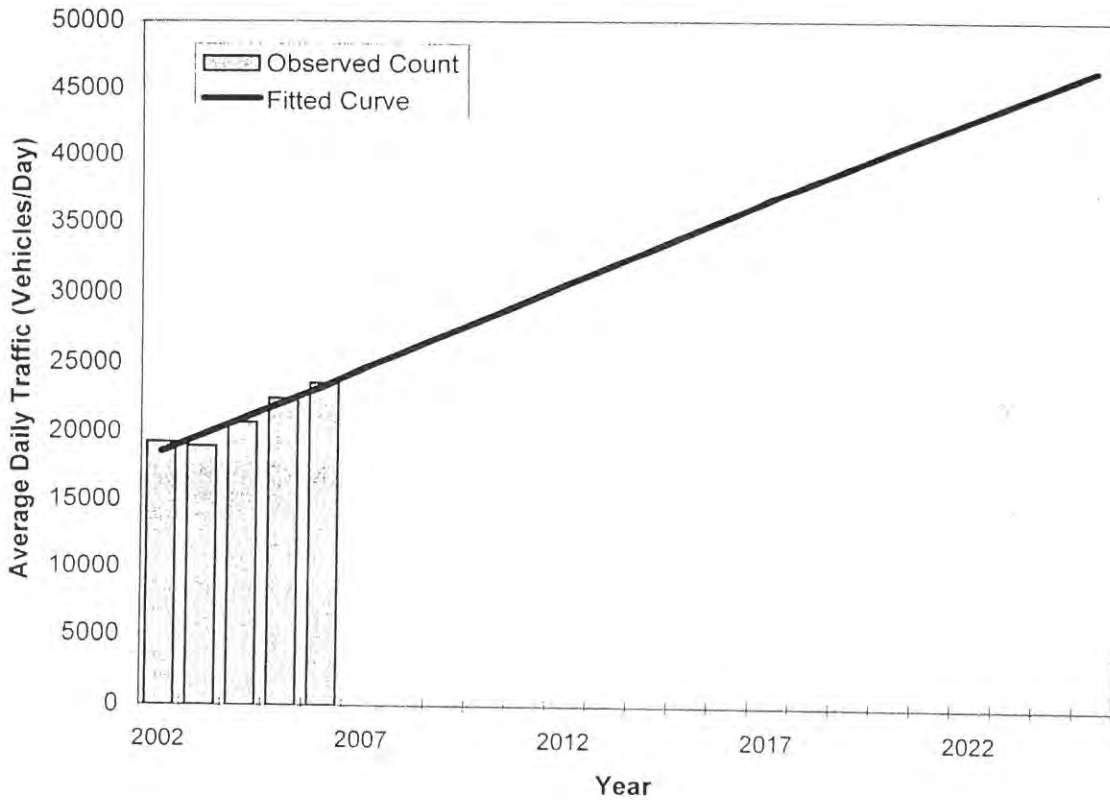
Year	Traffic (ADT/AADT)	
	Count*	Trend**
2002	16700	16100
2003	17900	18300
2004	19700	20400
2005	22600	22500
2006	25000	24600
2007 Opening Year Trend		
2007	N/A	26800
2010 Mid-Year Trend		
2010	N/A	33200
2013 Design Year Trend		
2013	N/A	39600
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

TRAFFIC TRENDS

Minton Road -- Americana Boulevard to Emerson Drive

County:	Brevard
Station #:	0
Highway:	Minton Road



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2002	19300	18600
2003	19000	19800
2004	20700	21000
2005	22500	22200
2006	23600	23400
2007 Opening Year Trend		
2007	N/A	24700
2010 Mid-Year Trend		
2010	N/A	28300
2013 Design Year Trend		
2013	N/A	31900
TRANPLAN Forecasts/Trends		

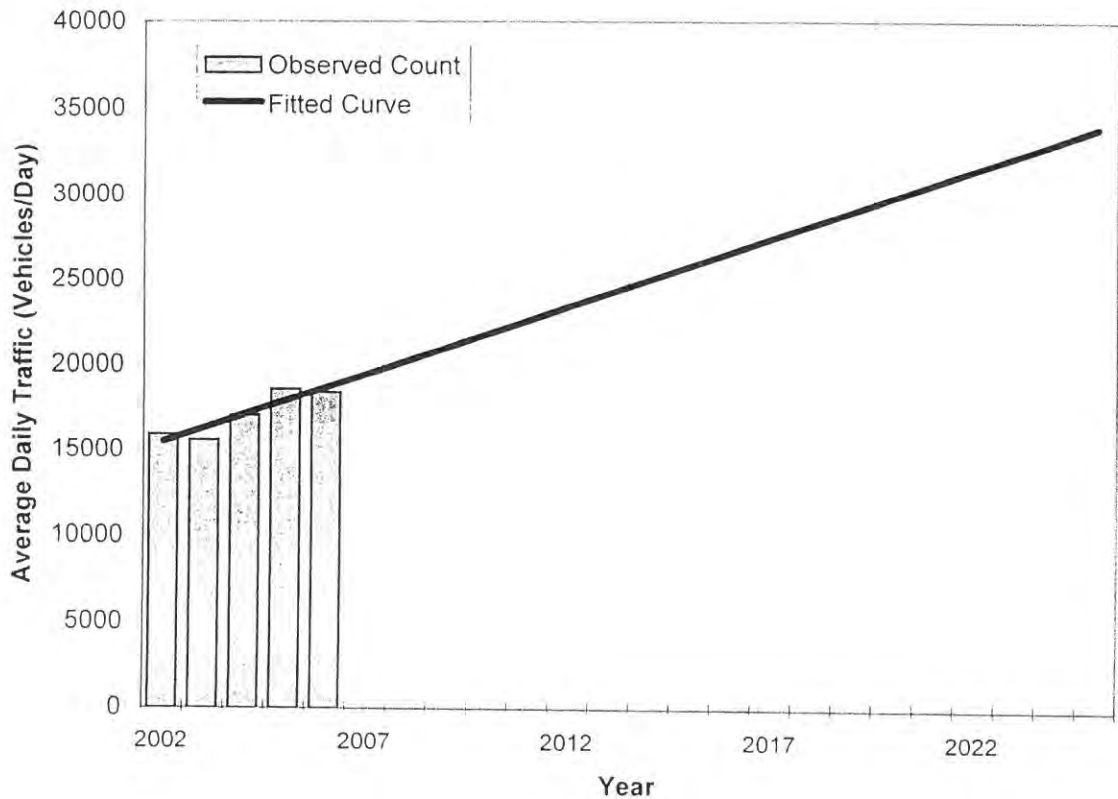
** Annual Trend Increase:	1,210
Trend R-squared:	91.6%
Trend Annual Historic Growth Rate:	6.45%
Trend Growth Rate (2006 to Design Year):	5.19%
Printed:	27-Feb-07
Straight Line Growth Option	

*Axle-Adjusted

TRAFFIC TRENDS

Minton Road -- Malabar Road to Americana Boulevard

County:	Brevard
Station #:	0
Highway:	Minton Road



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2002	15900	15500
2003	15600	16300
2004	17000	17100
2005	18600	17900
2006	18400	18700
2007 Opening Year Trend		
2007	N/A	19500
2010 Mid-Year Trend		
2010	N/A	21900
2013 Design Year Trend		
2013	N/A	24300
TRANPLAN Forecasts/Trends		

** Annual Trend Increase:	800
Trend R-squared:	83.8%
Trend Annual Historic Growth Rate:	5.16%
Trend Growth Rate (2006 to Design Year):	4.28%
Printed:	27-Feb-07
Straight Line Growth Option	

*Axle-Adjusted

APPENDIX F

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	CAM	Intersection	Malabar Rd. @ Site Dr.
Agency/Co.	LTG	Jurisdiction	City of Palm Bay
Date Performed	1/27/2007	Analysis Year	2009 Build-Out
Analysis Time Period	P.M. Peak-Hour		

Project Description: Chaparral		North/South Street: Site Dr.	
East/West Street: Malabar Rd.		Study Period (hrs): 0.25	
Intersection Orientation: East-West			

Vehicle Volumes and Adjustments						
Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)		330	16	142	391	
Peak-Hour Factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Hourly Flow Rate, HFR (veh/h)	0	366	17	157	434	0
Percent Heavy Vehicles	0	--	--	2	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	1	0	0	1	0
Configuration			TR	LT		
Upstream Signal		0			0	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	9		81			
Peak-Hour Factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Hourly Flow Rate, HFR (veh/h)	10	0	90	0	0	0
Percent Heavy Vehicles	2	0	2	0	0	0
Percent Grade (%)	0			0		
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	0	0	0	0	0
Configuration		LR				

Delay, Queue Length, and Level of Service								
Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		LT		LR				
v (veh/h)		157		100				
C (m) (veh/h)		1175		542				
v/c		0.13		0.18				
95% queue length		0.46		0.67				
Control Delay (s/veh)		8.5		13.1				
LOS		A		B				
Approach Delay (s/veh)	--	--		13.1				
Approach LOS	--	--		B				

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	CAM	Intersection	Malabar Rd. @ Hurley Blvd.
Agency/Co.	LTG	Jurisdiction	City of Palm Bay
Date Performed	1/27/2007	Analysis Year	2009 Build-Out
Analysis Time Period	P.M. Peak-Hour		

Project Description: Chaparral	
East/West Street: Malabar Rd.	North/South Street: Hurley Blvd.
Intersection Orientation: East-West	Study Period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound			
	Movement	1	2	3	4	5	6
		L	T	R	L	T	R
Volume (veh/h)		351	60	155	528		
Peak-Hour Factor, PHF	1.00	0.93	0.93	0.89	0.89	1.00	
Hourly Flow Rate, HFR (veh/h)	0	377	64	174	593	0	
Percent Heavy Vehicles	0	--	--	2	--	--	
Median Type	Undivided						
RT Channelized			0			0	
Lanes	0	1	0	0	1	0	
Configuration			TR	LT			
Upstream Signal		0			0		

Minor Street	Northbound			Southbound			
	Movement	7	8	9	10	11	12
		L	T	R	L	T	R
Volume (veh/h)	49		95				
Peak-Hour Factor, PHF	0.75	1.00	0.75	1.00	1.00	1.00	
Hourly Flow Rate, HFR (veh/h)	65	0	126	0	0	0	
Percent Heavy Vehicles	2	0	2	0	0	0	
Percent Grade (%)		0			0		
Flared Approach		N			N		
Storage		0			0		
RT Channelized			0			0	
Lanes	0	0	0	0	0	0	
Configuration		LR					

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
			7	8	9	10	11	12
Movement	1	4						
Lane Configuration		LT		LR				
v (veh/h)		174		191				
C (m) (veh/h)		1119		289				
v/c		0.16		0.66				
95% queue length		0.55		4.32				
Control Delay (s/veh)		8.8		38.8				
LOS		A		E				
Approach Delay (s/veh)	--	--		38.8				
Approach LOS	--	--		E				

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	CAM	Intersection	Garvey Rd. @ Malabar Rd.
Agency/Co.	LTG	Jurisdiction	City of Palm Bay
Date Performed	1/27/2007	Analysis Year	2009 Build-Out
Analysis Time Period	P.M. Peak-Hour		

Project Description <i>Chaparral</i>	
East/West Street: <i>Malabar Rd.</i>	North/South Street: <i>Garvey Rd.</i>
Intersection Orientation: <i>East-West</i>	Study Period (hrs): <i>0.25</i>

Vehicle Volumes and Adjustments						
Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)		684	10	150	908	
Peak-Hour Factor, PHF	1.00	0.95	0.95	0.95	0.95	1.00
Hourly Flow Rate, HFR (veh/h)	0	720	10	157	955	0
Percent Heavy Vehicles	4	--	--	2	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	1	0	1	1	0
Configuration			TR	L	T	
Upstream Signal		0			0	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	20		65			
Peak-Hour Factor, PHF	0.95	0.75	0.95	1.00	0.83	0.83
Hourly Flow Rate, HFR (veh/h)	21	0	68	0	0	0
Percent Heavy Vehicles	7	2	9	0	2	27
Percent Grade (%)	0			0		
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	0	0	0	0	0
Configuration		LR				

Delay, Queue Length, and Level of Service								
Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		L		LR				
v (veh/h)		157		89				
C (m) (veh/h)		874		159				
v/c		0.18		0.56				
95% queue length		0.65		2.87				
Control Delay (s/veh)		10.0		53.1				
LOS		B		F				
Approach Delay (s/veh)	--	--	53.1					
Approach LOS	--	--	F					

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	CAM	Intersection	Jupiter Blvd @ Americana Blvd.
Agency/Co.	LTG	Jurisdiction	City of Palm Bay
Date Performed	1/27/2007	Analysis Year	2009 Build-Out
Analysis Time Period	P.M. Peak-Hour		

Project Description: <i>Chaparral</i>	
East/West Street: <i>Americana Blvd.</i>	North/South Street: <i>Jupiter Blvd</i>
Intersection Orientation: <i>North-South</i>	Study Period (hrs): <i>0.25</i>

Vehicle Volumes and Adjustments						
Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)		612	30	45	480	
Peak-Hour Factor, PHF	0.75	0.94	0.94	0.89	0.89	1.00
Hourly Flow Rate, HFR (veh/h)	0	0	0	58	0	80
Percent Heavy Vehicles	2	--	--	2	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	1	0	0	1	0
Configuration			TR	LT		
Upstream Signal		0			0	

Minor Street	Eastbound			Westbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)				52		80
Peak-Hour Factor, PHF	1.00	0.93	0.93	0.89	0.89	1.00
Hourly Flow Rate, HFR (veh/h)	50	539	0	0	651	31
Percent Heavy Vehicles	0	0	0	2	0	0
Percent Grade (%)		0			0	
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	0	0	0	0	0
Configuration					LR	

Delay, Queue Length, and Level of Service								
Approach	Northbound	Southbound	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		LT		LR				
v (veh/h)		50		138				
C (m) (veh/h)		911		265				
v/c		0.05		0.52				
95% queue length		0.17		2.77				
Control Delay (s/veh)		9.2		32.5				
LOS		A		D				
Approach Delay (s/veh)	--	--	32.5					
Approach LOS	--	--	D					

ALL-WAY STOP CONTROL ANALYSIS

General Information		Site Information	
Analyst	CAM	Intersection	Jupiter Blvd. @ Garvey Rd.
Agency/Co.	LTG	Jurisdiction	City of Palm Bay
Date Performed	1/27/2007	Analysis Year	2009 Build-Out
Analysis Time Period	P.M. Peak-Hour		

Project ID	
East/West Street: <i>Jupiter Blvd.</i>	North/South Street: <i>Garvey Rd.</i>

Volume Adjustments and Site Characteristics								
Approach	Eastbound				Westbound			
Movement	L	T	R	L	T	R		
Volume (veh/h)	5	175	25	54	245	35		
%Thrus Left Lane								
Approach	Northbound				Southbound			
Movement	L	T	R	L	T	R		
Volume (veh/h)	25	40	45	20	100	20		
%Thrus Left Lane								
	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Configuration	LTR		LTR		LTR		LTR	
PHF	0.86		0.87		0.75		0.90	
Flow Rate (veh/h)	237		383		146		155	
% Heavy Vehicles	2		5		22		6	
No. Lanes	1		1		1		1	
Geometry Group	1		1		1		1	
Duration, T	0.25							

Saturation Headway Adjustment Worksheet								
Prop. Left-Turns	0.0		0.2		0.2		0.1	
Prop. Right-Turns	0.1		0.1		0.4		0.1	
Prop. Heavy Vehicle	0.0		0.0		0.2		0.1	
hLT-adj	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
hRT-adj	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6
hHV-adj	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
hadj, computed	-0.0		0.1		0.2		0.0	

Departure Headway and Service Time								
hd, initial value (s)	3.20		3.20		3.20		3.20	
x, initial	0.21		0.34		0.13		0.14	
hd, final value (s)	5.42		5.29		6.09		5.95	
x, final value	0.36		0.56		0.25		0.26	
Move-up time, m (s)	2.0		2.0		2.0		2.0	
Service Time, ts (s)	3.4		3.3		4.1		3.9	

Capacity and Level of Service								
	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Capacity (veh/h)	487		633		396		405	
Delay (s/veh)	11.40		14.85		11.08		10.98	
LOS	B		B		B		B	
Approach Delay (s/veh)	11.40		14.85		11.08		10.98	
LOS	B		B		B		B	
Intersection Delay (s/veh)	12.72							
Intersection LOS	B							

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	CAM	Intersection	Garvey Rd. @ Harper Rd.
Agency/Co.	LTG	Jurisdiction	City of Palm Bay
Date Performed	1/27/2007	Analysis Year	2009 Build-Out
Analysis Time Period	P.M. Peak-Hour		
Project Description <i>Chaparral</i>			
East/West Street: <i>Harper Rd.</i>		North/South Street: <i>Garvey Rd.</i>	
Intersection Orientation: <i>North-South</i>		Study Period (hrs): <i>0.25</i>	

Vehicle Volumes and Adjustments						
Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	20	15			25	89
Peak-Hour Factor, PHF	0.75	0.75	0.75	1.00	0.83	0.83
Hourly Flow Rate, HFR (veh/h)	65	0	21	0	0	0
Percent Heavy Vehicles	12	--	--	0	--	--
Median Type	<i>Undivided</i>					
RT Channelized			0			0
Lanes	0	1	0	0	1	0
Configuration	LT					TR
Upstream Signal		0			0	

Minor Street	Eastbound			Westbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	65		20			
Peak-Hour Factor, PHF	1.00	0.93	0.93	0.89	0.89	1.00
Hourly Flow Rate, HFR (veh/h)	0	30	107	26	20	0
Percent Heavy Vehicles	4	0	0	2	0	0
Percent Grade (%)	0			0		
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	0	0	0	0	0
Configuration		LR				

Delay, Queue Length, and Level of Service								
Approach	Northbound	Southbound	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LT						LR	
v (veh/h)	26						86	
C (m) (veh/h)	1388						850	
v/c	0.02						0.10	
95% queue length	0.06						0.34	
Control Delay (s/veh)	7.6						9.7	
LOS	A						A	
Approach Delay (s/veh)	--	--					9.7	
Approach LOS	--	--					A	

APPENDIX G

HCS+™ DETAILED REPORT

General Information				Site Information			
Analyst	CAM			Intersection	Malabar Rd./Jupiter Blvd.		
Agency or Co.	LTG			Area Type	All other areas		
Date Performed	1/27/2007			Jurisdiction	City of Palm Bay		
Time Period	P.M. Peak-Hour			Analysis Year	2009 Build-Out		
				Project ID	Chaparral		

Volume and Timing Input												
	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes, N _i	1	1	0	1	1	0	1	1	1	1	1	0
Lane Group	L	TR		L	TR		L	T	R	L	TR	
Volume, V (vph)	87	344	55	80	513	325	80	185	55	245	180	170
% Heavy Vehicles, %HV	3	4	2	2	2	2	2	3	7	2	9	2
Peak-Hour Factor, PHF	0.88	0.88	0.88	0.99	0.99	0.99	0.85	0.85	0.85	0.91	0.91	0.91
Pretimed (P) or Actuated (A)	A	A	A	A	A	A	A	A	A	A	A	A
Start-up Lost Time, I ₁	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Extension of Effective Green, e	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Arrival Type, AT	3	3		3	3		3	3	3	3	3	
Unit Extension, UE	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Filtering/Metering, I	1.000	1.000		1.000	1.000		1.000	1.000	1.000	1.000	1.000	
Initial Unmet Demand, Q _b	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Ped / Bike / RTOR Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0		12.0	12.0		12.0	12.0	12.0	12.0	12.0	
Parking / Grade / Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking Maneuvers, N _m												
Buses Stopping, N _b	0	0		0	0		0	0	0	0	0	
Min. Time for Pedestrians, G _p	3.2			3.2			3.2			3.2		
Phasing	Excl. Left	EW Perm	03	04	Excl. Left	NS Perm	07	08				
Timing	G = 6.0	G = 70.0	G = 0.0	G = 0.0	G = 6.0	G = 36.0	G = 0.0	G = 0.0				
	Y = 5	Y = 6	Y = 0	Y = 0	Y = 5	Y = 6	Y = 0	Y = 0				
Duration of Analysis, T = 0.25							Cycle Length, C = 140.0					

Lane Group Capacity, Control Delay, and LOS Determination												
	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Adjusted Flow Rate, v	99	454		81	846		94	218	65	269	385	
Lane Group Capacity, c	134	897		418	877		166	474	388	297	429	
v/c Ratio, X	0.74	0.51		0.19	0.96		0.57	0.46	0.17	0.91	0.90	
Total Green Ratio, g/C	0.58	0.50		0.58	0.50		0.34	0.26	0.26	0.34	0.26	
Uniform Delay, d ₁	29.4	23.4		15.2	33.8		35.8	43.8	40.4	49.9	50.2	
Progression Factor, PF	1.000	1.000		1.000	1.000		1.000	1.000	1.000	1.000	1.000	
Delay Calibration, k	0.30	0.11		0.11	0.47		0.16	0.11	0.11	0.43	0.42	
Incremental Delay, d ₂	19.3	0.5		0.2	22.1		4.5	0.7	0.2	29.4	21.1	
Initial Queue Delay, d ₃	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Control Delay	48.8	23.9		15.4	55.9		40.3	44.5	40.6	79.3	71.4	
Lane Group LOS	D	C		B	E		D	D	D	E	E	
Approach Delay	28.4			52.4			42.8			74.6		
Approach LOS	C			D			D			E		
Intersection Delay	51.4			X _c = 0.95			Intersection LOS			D		

CHAPARRAL SUBDIVISION-PHASE 1A

PALM BAY, FLORIDA

DATE:
APRIL 28, 2017

PREPARED FOR:
CHAPARRAL PROPERTIES LLC

REV#	DATE	REVISION
1	8/21/17	CITY AND BREVARD COUNTY COMMENTS
2	1/5/18	CITY COMMENTS
3	1/22/18	BREVARD COUNTY COMMENTS
4	5/31/18	SURVIMD COMMENTS
5	12/19/18	TRAFFIC UPDATE
6	4/24/19	CLIENT CHANGES

APPROVED FOR CONSTRUCTION

 City Engineer Date

SITE DATA:

1. GENERAL STATEMENT:

THIS PROPOSED COMMUNITY CONSISTS OF THE CONSTRUCTION OF PHASE 1A OF CHAPARRAL SUBDIVISION RESIDENTIAL COMMUNITY IN PALM BAY, FLORIDA. THIS PHASE INCLUDES 82 SINGLE FAMILY LOTS AT THE NORTH END OF THE PROJECT SITE ADJACENT TO THE ENTRANCE OFF MALABAR ROAD. A SINGLE, PREVIOUSLY CONSTRUCTED WET DETENTION POND WILL SERVE AS STORMWATER TREATMENT FOR THIS PHASE AND IS INTERCONNECTED TO ANOTHER EXISTING POND ON THE WEST SIDE OF THE SITE WITH AN OVERFLOW STRUCTURE THAT DISCHARGES TO MELBOURNE TILLMAN CANAL NO. 9. THE STORMWATER TREATMENT SYSTEM DESIGN FOR THIS PHASE IS CONSISTENT WITH PREVIOUSLY PERMITTED AND PARTIALLY CONSTRUCTED MASTER SYSTEM FOR OVERALL PROPERTY.

THE PROPOSED PUBLIC SEWER SYSTEM IS GRAVITY FED TO A LIFT STATION THAT DISCHARGES VIA FORCE MAIN THAT CONNECTS TO THE FORCE MAIN IN MALABAR ROAD RIGHT-OF-WAY. THE PUBLIC WATER MAIN SHALL BE LOOPED THROUGH PHASE 1A AND STUB TO THE SOUTH FOR FUTURE PHASES TO CONNECT. THE WATER MAIN WILL BE TAPPED OFF THE MAIN ON THE NORTH SIDE OF MALABAR ROAD AND FED ON-SITE VIA A DIRECTIONAL DRILL UNDER THE ROADWAY.

THE MALABAR ROAD INTERSECTION AT THE SITE ENTRANCE WILL BE EXPANDED AS PART OF THIS PHASE OF CONSTRUCTION TO INCLUDE DEDICATED TURN LANES TO THE DEVELOPMENT.

2. CONTACT INFORMATION:

OWNER:
METRO DEVELOPMENT GROUP
2502 N. ROCKY POINT DR, SUITE 1050
TAMPA, FL 33607
TEL: (813) 288-8078
E-MAIL: MLAWSON@MDGFLORIDA.COM

CIVIL ENGINEER:
CONSTRUCTION ENGINEERING GROUP, LLC
JAKE T. WISE, P.E.
2651 EAU GALLE BLVD, SUITE A
MELBOURNE, FL 32935
TEL: (321) 610-1760
FAX: (321) 253-3123
E-MAIL: JWIS@CEENGINEERING.COM

SURVEYOR:
AAL LAND SURVEYING SERVICES, INC.
3970 MINTON ROAD
WEST MELBOURNE, FL 32904
TEL: (321) 768-8110

ADDRESS:
TOWNSHIP: 29
RANGE: 36
SECTION: 04
TAX ACCOUNT NUMBER: 2903859

3. SITE CHARACTERISTICS:

TOTAL ACREAGE: 28.75
ZONING CLASSIFICATION: PUD
FUTURE LAND USE: SINGLE FAMILY RESIDENTIAL
DATUM: NVD 29

BUILDING SETBACKS:
FRONT SETBACK: 25'
SIDE INTERIOR: 5'
REAR SETBACK: 20'
SIDE CORNER: 25'

PROVIDED LOT COVERAGE:
MINIMUM LOT AREA: 4,600 SF
MINIMUM LOT WIDTH: 40 FT
MINIMUM LOT DEPTH: 115 FT

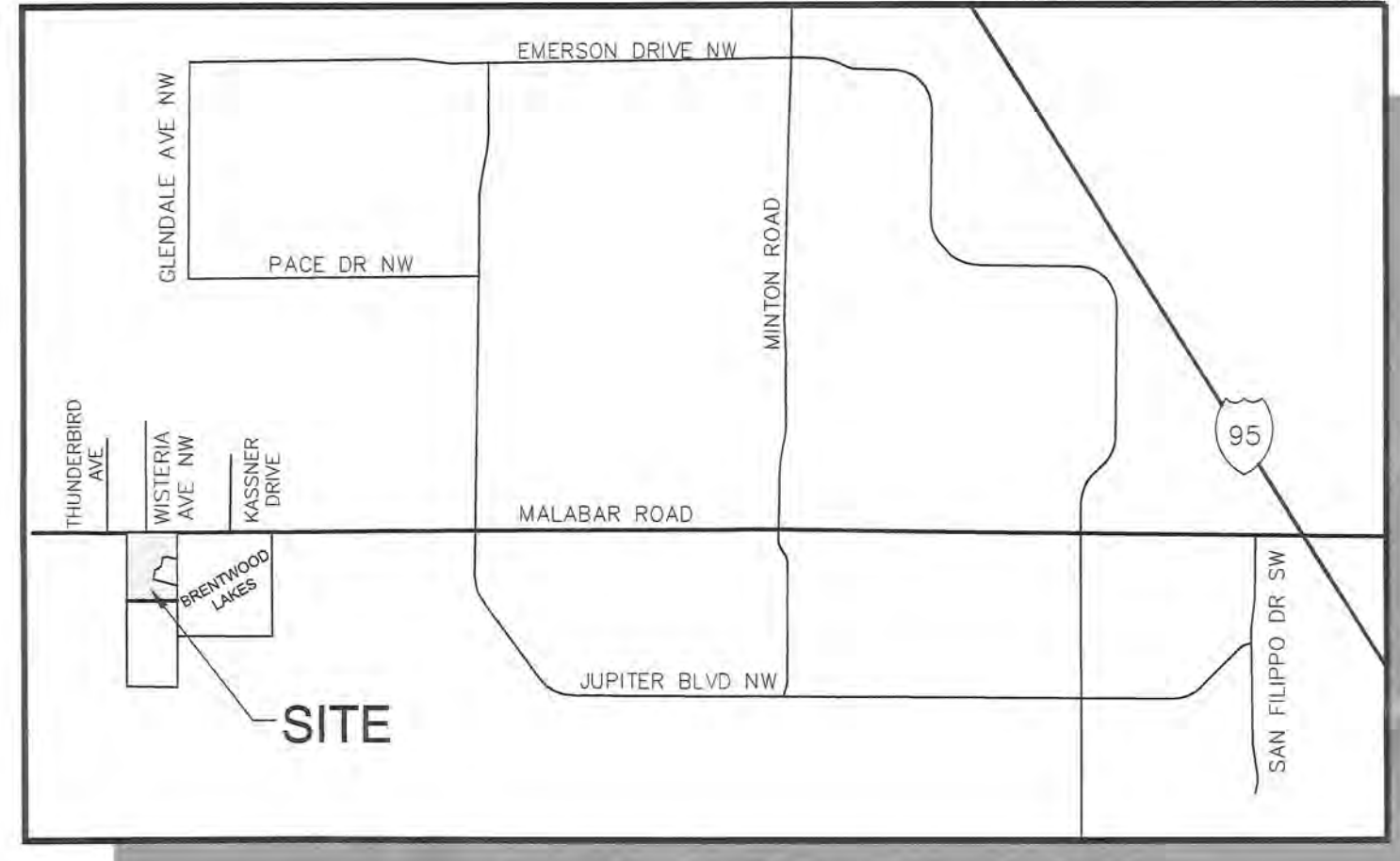
PROPOSED STORMWATER BASIN COVERAGES:	SF	ACRE	PERCENT
65% IMPERVIOUS (LOTS):	290,981	6.68	23%
IMPERVIOUS (ASPHALT/CONCRETE):	126,324	2.90	10%
TOTAL IMPERVIOUS:	417,305	9.58	33%
PONDS AT NWL:	281,398	6.46	23%
PERVIOUS:	553,648	12.71	44%
TOTAL GROSS AREA:	1,252,351	28.75	100%

I HEREBY CERTIFY THAT THE DESIGN OF THE STORMWATER MANAGEMENT SYSTEM FOR THE PROJECT KNOWN AS CHAPARRAL SUBDIVISION MEETS ALL OF THE REQUIREMENTS AND HAS BEEN DESIGNED SUBSTANTIALLY IN ACCORDANCE WITH THE REQUIREMENTS OF THE CITY OF PALM BAY'S ORDINANCE NO. 95-33 AND THE PUBLIC WORKS MANUAL.

4. REQUIRED PERMITS:

- BREVARD COUNTY ROW
- CITY OF PALM BAY
- FDEP NOI, WATER AND WASTE WATER
- SURVIMD ERP
- FLORIDA FISH AND WILDLIFE COMMISSION
- MELBOURNE TILLMAN WATER CONTROL DISTRICT

PREPARED BY:



LOCATION MAP
NTS

CIVIL INDEX OF DRAWINGS:

G-1	CIVIL COVER SHEET
G-2	STORMWATER POLLUTION PREVENTION PLAN (SWPPP)
G-3	OVERALL SUBDIVISION PLAN
C-1	EXISTING CONDITIONS AND DEMOLITION PLAN
C-2A THRU C-2C	SUBDIVISION PLAN
C-3A THRU C-3B	UTILITY PLAN
C-4A THRU C-4C	GRADING AND DRAINAGE PLAN
C-5 THRU C-9	PLAN AND PROFILE
C-10 THRU C-16	DETAILS
C-17 THRU C-18	SPECIFICATIONS
C-19	BREVARD COUNTY PUBLIC WORKS ENGINEERING STANDARD DEVELOPMENT NOTES SURVEY

LEGAL DESCRIPTION:

PARCEL 1:
LANDS IN SECTIONS 4 AND 9 OF TOWNSHIP 29 SOUTH, RANGE 36 EAST, BREVARD COUNTY, FLORIDA, AS FOLLOWS: THE FOLLOWING LAND IN SECTION 4, TOWNSHIP 29 SOUTH, RANGE 36 EAST, BREVARD COUNTY, FLORIDA: THE EAST 1/2 OF THE NORTHEAST 1/4, AND THE NORTHEAST 1/4 OF THE SOUTHWEST 1/4; AND THE SOUTH 1/2 OF THE SOUTHWEST 1/4; LESS AND EXCEPT THE FOLLOWING FIVE (5) TRACTS:
TRACT 1:
THE NORTH 33 FEET OF THE EAST 1/2 OF THE NORTHEAST 1/4; AND
TRACT 2:
THE EAST 65 FEET OF THE EAST 1/2 OF THE NORTHEAST 1/4; AND
TRACT 3:
THE EAST 65 FEET OF THE NORTHEAST 1/4 OF THE SOUTHWEST 1/4; AND
TRACT 4:
THE EAST 65 FEET AND WEST 64 FEET OF THE SOUTH 1/2 OF THE SOUTHWEST 1/4; AND
TRACT 5:
COMMENCE AT THE NORTHEAST CORNER OF SECTION 4, TOWNSHIP 29 SOUTH, RANGE 36 EAST, BREVARD COUNTY, FLORIDA AND RUN SOUTH 00 DEGREES 00 MINUTES 32 SECONDS EAST, ALONG THE EAST LINE OF SAID SECTION 4, A DISTANCE OF 673.07 FEET TO THE SOUTHWEST CORNER OF THE NORTHEAST QUARTER OF THE NORTHEAST QUARTER OF SAID SECTION 4; THENCE SOUTH 89 DEGREES 48 MINUTES 16 SECONDS WEST, ALONG THE SOUTH LINE OF SAID NORTHEAST QUARTER OF THE NORTHEAST QUARTER, A DISTANCE OF 65.00 FEET TO THE WEST RIGHT-OF-WAY LINE OF THE MELBOURNE-TILLMAN DRAINAGE DISTRICT C-9 CANAL AND THE POINT OF BEGINNING OF THE PARCEL OF LAND HEREIN DESCRIBED; THENCE SOUTH 00 DEGREES 00 MINUTES 32 SECONDS EAST, ALONG SAID RIGHT-OF-WAY LINE, A DISTANCE OF 628.82 FEET; THENCE SOUTH 89 DEGREES 59 MINUTES 28 SECONDS WEST A DISTANCE OF 66.65 FEET; THENCE NORTH 68 DEGREES 20 MINUTES 23 SECONDS WEST A DISTANCE OF 336.04 FEET; THENCE SOUTH 89 DEGREES 59 MINUTES 28 SECONDS WEST A DISTANCE OF 135.60 FEET; THENCE NORTH 00 DEGREES 00 MINUTES 31 SECONDS WEST A DISTANCE OF 23.81 FEET TO THE BEGINNING OF A CURVE TO THE RIGHT; THENCE ALONG THE ARC OF SAID CURVE, (SAID CURVE BEING CURVED CONCAVE TO THE EAST AND HAVING A RADIUS OF 170.00 FEET, A CENTRAL ANGLE OF 15 DEGREES 17 MINUTES 36 SECONDS EAST), A DISTANCE OF 104.72 FEET TO THE END OF SAID CURVE; THENCE NORTH 35 DEGREES 17 MINUTES 05 SECONDS EAST A DISTANCE OF 148.86 FEET TO THE BEGINNING OF A CURVE TO THE LEFT; THENCE ALONG THE ARC OF SAID CURVE, (SAID CURVE BEING CURVED CONCAVE TO THE WEST AND HAVING A RADIUS OF 1050.00 FEET, A CENTRAL ANGLE OF 16 DEGREES 02 MINUTES 13 SECONDS WEST), A DISTANCE OF 230.09 FEET TO AN INTERSECTION WITH A NON-TANGENT LINE; THENCE SOUTH 87 DEGREES 12 MINUTES 38 SECONDS EAST, ALONG SAID NON-TANGENT LINE, A DISTANCE OF 15.00 FEET TO THE BEGINNING OF A CURVE TO THE RIGHT; THENCE ALONG THE ARC OF SAID CURVE, (SAID CURVE BEING CURVED CONCAVE TO THE EAST AND HAVING A RADIUS OF 170.00 FEET, A CENTRAL ANGLE OF 35 DEGREES 17 MINUTES 36 SECONDS EAST), A CHORD LENGTH OF 103.07 FEET AND A CHORD BEARING OF NORTH 17 DEGREES 38 MINUTES 17 SECONDS WEST, A DISTANCE OF 146.88 FEET TO THE BEGINNING OF A CURVE TO THE LEFT; THENCE ALONG THE ARC OF SAID CURVE, (SAID CURVE BEING CURVED CONCAVE TO THE WEST AND HAVING A RADIUS OF 1050.00 FEET, A CENTRAL ANGLE OF 15 DEGREES 17 MINUTES 36 SECONDS EAST), A DISTANCE OF 104.72 FEET AND A CHORD BEARING OF NORTH 35 DEGREES 17 MINUTES 05 SECONDS EAST, A DISTANCE OF 148.86 FEET TO THE BEGINNING OF A CURVE TO THE RIGHT; THENCE ALONG THE ARC OF SAID CURVE, (SAID CURVE BEING CURVED CONCAVE TO THE EAST AND HAVING A RADIUS OF 170.00 FEET, A CENTRAL ANGLE OF 35 DEGREES 17 MINUTES 36 SECONDS EAST), A CHORD LENGTH OF 103.07 FEET AND A CHORD BEARING OF NORTH 17 DEGREES 38 MINUTES 17 SECONDS WEST, A DISTANCE OF 146.88 FEET TO THE BEGINNING OF A CURVE TO THE LEFT; THENCE ALONG THE ARC OF SAID CURVE, (SAID CURVE BEING CURVED CONCAVE TO THE WEST AND HAVING A RADIUS OF 1050.00 FEET, A CENTRAL ANGLE OF 15 DEGREES 17 MINUTES 36 SECONDS EAST), A DISTANCE OF 104.72 FEET AND A CHORD BEARING OF NORTH 35 DEGREES 17 MINUTES 05 SECONDS EAST, A DISTANCE OF 148.86 FEET TO THE BEGINNING OF A CURVE TO THE RIGHT; THENCE ALONG THE ARC OF SAID CURVE, (SAID CURVE BEING CURVED CONCAVE TO THE EAST AND HAVING A RADIUS OF 170.00 FEET, A CENTRAL ANGLE OF 35 DEGREES 17 MINUTES 36 SECONDS EAST), A CHORD LENGTH OF 103.07 FEET AND A CHORD BEARING OF NORTH 17 DEGREES 38 MINUTES 17 SECONDS WEST, A DISTANCE OF 146.88 FEET TO THE BEGINNING OF A CURVE TO THE LEFT; THENCE ALONG THE ARC OF SAID CURVE, (SAID CURVE BEING CURVED CONCAVE TO THE WEST AND HAVING A RADIUS OF 1050.00 FEET, A CENTRAL ANGLE OF 15 DEGREES 17 MINUTES 36 SECONDS EAST), A DISTANCE OF 104.72 FEET AND A CHORD BEARING OF NORTH 35 DEGREES 17 MINUTES 05 SECONDS EAST, A DISTANCE OF 148.86 FEET TO THE BEGINNING OF A CURVE TO THE RIGHT; THENCE ALONG THE ARC OF SAID CURVE, (SAID CURVE BEING CURVED CONCAVE TO THE EAST AND HAVING A RADIUS OF 170.00 FEET, A CENTRAL ANGLE OF 35 DEGREES 17 MINUTES 36 SECONDS EAST), A CHORD LENGTH OF 103.07 FEET AND A CHORD BEARING OF NORTH 17 DEGREES 38 MINUTES 17 SECONDS WEST, A DISTANCE OF 146.88 FEET TO THE BEGINNING OF A CURVE TO THE LEFT; THENCE ALONG THE ARC OF SAID CURVE, (SAID CURVE BEING CURVED CONCAVE TO THE WEST AND HAVING A RADIUS OF 1050.00 FEET, A CENTRAL ANGLE OF 15 DEGREES 17 MINUTES 36 SECONDS EAST), A DISTANCE OF 104.72 FEET AND A CHORD BEARING OF NORTH 35 DEGREES 17 MINUTES 05 SECONDS EAST, A DISTANCE OF 148.86 FEET TO THE BEGINNING OF A CURVE TO THE RIGHT; THENCE ALONG THE ARC OF SAID CURVE, (SAID CURVE BEING CURVED CONCAVE TO THE EAST AND HAVING A RADIUS OF 170.00 FEET, A CENTRAL ANGLE OF 35 DEGREES 17 MINUTES 36 SECONDS EAST), A CHORD LENGTH OF 103.07 FEET AND A CHORD BEARING OF NORTH 17 DEGREES 38 MINUTES 17 SECONDS WEST, A DISTANCE OF 146.88 FEET TO THE BEGINNING OF A CURVE TO THE LEFT; THENCE ALONG THE ARC OF SAID CURVE, (SAID CURVE BEING CURVED CONCAVE TO THE WEST AND HAVING A RADIUS OF 1050.00 FEET, A CENTRAL ANGLE OF 15 DEGREES 17 MINUTES 36 SECONDS EAST), A DISTANCE OF 104.72 FEET AND A CHORD BEARING OF NORTH 35 DEGREES 17 MINUTES 05 SECONDS EAST, A DISTANCE OF 148.86 FEET TO THE BEGINNING OF A CURVE TO THE RIGHT; THENCE ALONG THE ARC OF SAID CURVE, (SAID CURVE BEING CURVED CONCAVE TO THE EAST AND HAVING A RADIUS OF 170.00 FEET, A CENTRAL ANGLE OF 35 DEGREES 17 MINUTES 36 SECONDS EAST), A CHORD LENGTH OF 103.07 FEET AND A CHORD BEARING OF NORTH 17 DEGREES 38 MINUTES 17 SECONDS WEST, A DISTANCE OF 146.88 FEET TO THE POINT OF BEGINNING.

PARCEL 2:
THE FOLLOWING LAND IN SECTION 4, TOWNSHIP 29 SOUTH, RANGE 36 EAST, BREVARD COUNTY, FLORIDA: THE NORTH 1/2 OF THE NORTHEAST 1/4 OF THE NORTHEAST 1/4; LESS AND EXCEPT THE FOLLOWING ONE (1) TRACT:
TRACT 1:
THE WEST 64 FEET OF THE NORTH 1/2 OF THE NORTHEAST 1/4 OF THE SOUTHWEST 1/4;
TRACT 2:
THE FOLLOWING LAND IN SECTION 4, TOWNSHIP 29 SOUTH, RANGE 36 EAST, BREVARD COUNTY, FLORIDA: THE SOUTH 1/2 OF THE NORTHEAST 1/4 OF THE NORTHEAST 1/4; LESS AND EXCEPT THE FOLLOWING ONE (1) TRACT:
TRACT 1:
THE WEST 64 FEET OF THE SOUTH 1/2 OF THE NORTHEAST 1/4 OF THE SOUTHWEST 1/4;
TRACT 2:
THE FOLLOWING LAND IN SECTION 9, TOWNSHIP 29 SOUTH, RANGE 36 EAST, BREVARD COUNTY, FLORIDA: THE NORTHWEST 1/4 OF THE NORTHEAST 1/4 OF THE NORTHEAST 1/4;
TRACT 3:
TOGETHER WITH A CONVEYANCE AND STORMWATER EASEMENT DESCRIBED AS FOLLOWS:
COMMENCE AT THE NORTHEAST CORNER OF SECTION 4, TOWNSHIP 29 SOUTH, RANGE 36 EAST, BREVARD COUNTY, FLORIDA AND RUN SOUTH 00 DEGREES 00 MINUTES 32 SECONDS EAST, ALONG THE EAST LINE OF SAID SECTION 4, A DISTANCE OF 673.07 FEET TO THE SOUTHWEST CORNER OF THE NORTHEAST QUARTER OF THE NORTHEAST QUARTER OF SAID SECTION 4; THENCE SOUTH 89 DEGREES 48 MINUTES 16 SECONDS WEST, ALONG THE SOUTH LINE OF SAID NORTHEAST QUARTER OF THE NORTHEAST QUARTER, A DISTANCE OF 65.00 FEET TO THE WEST RIGHT-OF-WAY LINE OF THE MELBOURNE-TILLMAN DRAINAGE DISTRICT C-9 CANAL; THENCE SOUTH 00 DEGREES 00 MINUTES 32 SECONDS EAST, ALONG SAID RIGHT-OF-WAY LINE, A DISTANCE OF 628.82 FEET; THENCE SOUTH 89 DEGREES 59 MINUTES 28 SECONDS WEST, A DISTANCE OF 66.65 FEET; THENCE NORTH 68 DEGREES 20 MINUTES 23 SECONDS WEST A DISTANCE OF 336.04 FEET; THENCE SOUTH 89 DEGREES 59 MINUTES 28 SECONDS WEST A DISTANCE OF 135.60 FEET; THENCE NORTH 00 DEGREES 00 MINUTES 31 SECONDS WEST A DISTANCE OF 23.81 FEET TO THE BEGINNING OF A CURVE TO THE RIGHT; THENCE ALONG THE ARC OF SAID CURVE, (SAID CURVE BEING CURVED CONCAVE TO THE EAST AND HAVING A RADIUS OF 170.00 FEET, A CENTRAL ANGLE OF 15 DEGREES 17 MINUTES 36 SECONDS EAST), A DISTANCE OF 104.72 FEET TO THE END OF SAID CURVE; THENCE NORTH 35 DEGREES 17 MINUTES 05 SECONDS EAST A DISTANCE OF 148.86 FEET TO THE BEGINNING OF A CURVE TO THE LEFT; THENCE ALONG THE ARC OF SAID CURVE, (SAID CURVE BEING CURVED CONCAVE TO THE WEST AND HAVING A RADIUS OF 1050.00 FEET, A CENTRAL ANGLE OF 16 DEGREES 02 MINUTES 13 SECONDS WEST), A DISTANCE OF 230.09 FEET TO AN INTERSECTION WITH A NON-TANGENT LINE; THENCE SOUTH 87 DEGREES 12 MINUTES 38 SECONDS EAST, ALONG SAID NON-TANGENT LINE, A DISTANCE OF 15.00 FEET TO THE BEGINNING OF A CURVE TO THE RIGHT; THENCE ALONG THE ARC OF SAID CURVE, (SAID CURVE BEING CURVED CONCAVE TO THE EAST AND HAVING A RADIUS OF 170.00 FEET, A CENTRAL ANGLE OF 35 DEGREES 17 MINUTES 36 SECONDS EAST), A CHORD LENGTH OF 103.07 FEET AND A CHORD BEARING OF NORTH 17 DEGREES 38 MINUTES 17 SECONDS WEST, A DISTANCE OF 146.88 FEET TO THE BEGINNING OF A CURVE TO THE LEFT; THENCE ALONG THE ARC OF SAID CURVE, (SAID CURVE BEING CURVED CONCAVE TO THE WEST AND HAVING A RADIUS OF 1050.00 FEET, A CENTRAL ANGLE OF 15 DEGREES 17 MINUTES 36 SECONDS EAST), A DISTANCE OF 104.72 FEET AND A CHORD BEARING OF NORTH 35 DEGREES 17 MINUTES 05 SECONDS EAST, A DISTANCE OF 148.86 FEET TO THE BEGINNING OF A CURVE TO THE RIGHT; THENCE ALONG THE ARC OF SAID CURVE, (SAID CURVE BEING CURVED CONCAVE TO THE EAST AND HAVING A RADIUS OF 170.00 FEET, A CENTRAL ANGLE OF 35 DEGREES 17 MINUTES 36 SECONDS EAST), A CHORD LENGTH OF 103.07 FEET AND A CHORD BEARING OF NORTH 17 DEGREES 38 MINUTES 17 SECONDS WEST, A DISTANCE OF 146.88 FEET TO THE POINT OF BEGINNING.

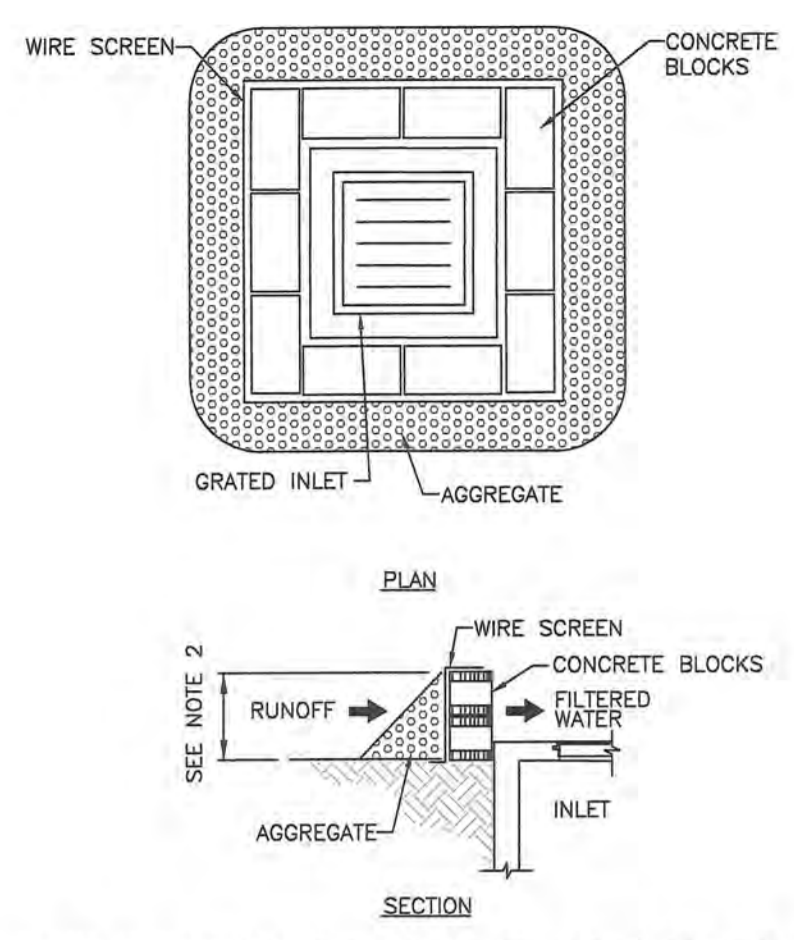
PARCEL 3:
TOGETHER ALSO WITH A 60 FOOT WIDE DRAINAGE EASEMENT DESCRIBED AS FOLLOWS:
COMMENCE AT THE NORTHEAST CORNER OF SECTION 4, TOWNSHIP 29 SOUTH, RANGE 36 EAST, BREVARD COUNTY, FLORIDA AND RUN SOUTH 00 DEGREES 00 MINUTES 32 SECONDS EAST, ALONG THE EAST LINE OF SAID SECTION 4, A DISTANCE OF 673.07 FEET TO THE SOUTHWEST CORNER OF THE NORTHEAST QUARTER OF THE NORTHEAST QUARTER OF SAID SECTION 4; THENCE SOUTH 89 DEGREES 48 MINUTES 16 SECONDS WEST, ALONG THE SOUTH LINE OF SAID NORTHEAST QUARTER OF THE NORTHEAST QUARTER, A DISTANCE OF 65.00 FEET TO THE WEST RIGHT-OF-WAY LINE OF THE MELBOURNE-TILLMAN DRAINAGE DISTRICT C-9 CANAL; THENCE SOUTH 00 DEGREES 00 MINUTES 32 SECONDS EAST, ALONG SAID RIGHT-OF-WAY LINE, A DISTANCE OF 628.82 FEET; THENCE SOUTH 89 DEGREES 59 MINUTES 28 SECONDS WEST, A DISTANCE OF 66.65 FEET; THENCE NORTH 68 DEGREES 20 MINUTES 23 SECONDS WEST A DISTANCE OF 336.04 FEET; THENCE SOUTH 89 DEGREES 59 MINUTES 28 SECONDS WEST A DISTANCE OF 135.60 FEET; THENCE NORTH 00 DEGREES 00 MINUTES 31 SECONDS WEST A DISTANCE OF 23.81 FEET TO THE BEGINNING OF A CURVE TO THE RIGHT; THENCE ALONG THE ARC OF SAID CURVE, (SAID CURVE BEING CURVED CONCAVE TO THE EAST AND HAVING A RADIUS OF 170.00 FEET, A CENTRAL ANGLE OF 15 DEGREES 17 MINUTES 36 SECONDS EAST), A DISTANCE OF 104.72 FEET TO THE END OF SAID CURVE; THENCE NORTH 35 DEGREES 17 MINUTES 05 SECONDS EAST A DISTANCE OF 148.86 FEET TO THE BEGINNING OF A CURVE TO THE LEFT; THENCE ALONG THE ARC OF SAID CURVE, (SAID CURVE BEING CURVED CONCAVE TO THE WEST AND HAVING A RADIUS OF 1050.00 FEET, A CENTRAL ANGLE OF 16 DEGREES 02 MINUTES 13 SECONDS WEST), A DISTANCE OF 230.09 FEET TO AN INTERSECTION WITH A NON-TANGENT LINE; THENCE SOUTH 87 DEGREES 12 MINUTES 38 SECONDS EAST, ALONG SAID NON-TANGENT LINE, A DISTANCE OF 15.00 FEET TO THE BEGINNING OF A CURVE TO THE RIGHT; THENCE ALONG THE ARC OF SAID CURVE, (SAID CURVE BEING CURVED CONCAVE TO THE EAST AND HAVING A RADIUS OF 170.00 FEET, A CENTRAL ANGLE OF 35 DEGREES 17 MINUTES 36 SECONDS EAST), A CHORD LENGTH OF 103.07 FEET AND A CHORD BEARING OF NORTH 17 DEGREES 38 MINUTES 17 SECONDS WEST, A DISTANCE OF 146.88 FEET TO THE BEGINNING OF A CURVE TO THE LEFT; THENCE ALONG THE ARC OF SAID CURVE, (SAID CURVE BEING CURVED CONCAVE TO THE WEST AND HAVING A RADIUS OF 1050.00 FEET, A CENTRAL ANGLE OF 15 DEGREES 17 MINUTES 36 SECONDS EAST), A DISTANCE OF 104.72 FEET AND A CHORD BEARING OF NORTH 35 DEGREES 17 MINUTES 05 SECONDS EAST, A DISTANCE OF 148.86 FEET TO THE BEGINNING OF A CURVE TO THE RIGHT; THENCE ALONG THE ARC OF SAID CURVE, (SAID CURVE BEING CURVED CONCAVE TO THE EAST AND HAVING A RADIUS OF 170.00 FEET, A CENTRAL ANGLE OF 35 DEGREES 17 MINUTES 36 SECONDS EAST), A CHORD LENGTH OF 103.07 FEET AND A CHORD BEARING OF NORTH 17 DEGREES 38 MINUTES 17 SECONDS WEST, A DISTANCE OF 146.88 FEET TO THE POINT OF BEGINNING.

PARCEL 4:
TOGETHER ALSO WITH A 30 FOOT WIDE DRAINAGE EASEMENT DESCRIBED AS FOLLOWS:
COMMENCE AT THE NORTHEAST CORNER OF SECTION 4, TOWNSHIP 29 SOUTH, RANGE 36 EAST, BREVARD COUNTY, FLORIDA AND RUN SOUTH 00 DEGREES 00 MINUTES 32 SECONDS EAST, ALONG THE EAST LINE OF SAID SECTION 4, A DISTANCE OF 673.07 FEET TO THE SOUTHWEST CORNER OF THE NORTHEAST QUARTER OF THE NORTHEAST QUARTER OF SAID SECTION 4; THENCE SOUTH 89 DEGREES 48 MINUTES 16 SECONDS WEST, ALONG THE SOUTH LINE OF SAID NORTHEAST QUARTER OF THE NORTHEAST QUARTER, A DISTANCE OF 65.00 FEET TO THE WEST RIGHT-OF-WAY LINE OF THE MELBOURNE-TILLMAN DRAINAGE DISTRICT C-9 CANAL; THENCE SOUTH 00 DEGREES 00 MINUTES 32 SECONDS EAST, ALONG SAID RIGHT-OF-WAY LINE, A DISTANCE OF 628.82 FEET; THENCE SOUTH 89 DEGREES 59 MINUTES 28 SECONDS WEST, A DISTANCE OF 66.65 FEET; THENCE NORTH 68 DEGREES 20 MINUTES 23 SECONDS WEST A DISTANCE OF 336.04 FEET; THENCE SOUTH 89 DEGREES 59 MINUTES 28 SECONDS WEST A DISTANCE OF 135.60 FEET; THENCE NORTH 00 DEGREES 00 MINUTES 31 SECONDS WEST A DISTANCE OF 23.81 FEET TO THE BEGINNING OF A CURVE TO THE RIGHT; THENCE ALONG THE ARC OF SAID CURVE, (SAID CURVE BEING CURVED CONCAVE TO THE EAST AND HAVING A RADIUS OF 170.00 FEET, A CENTRAL ANGLE OF 15 DEGREES 17 MINUTES 36 SECONDS EAST), A DISTANCE OF 104.72 FEET TO THE END OF SAID CURVE; THENCE NORTH 35 DEGREES 17 MINUTES 05 SECONDS EAST A DISTANCE OF 148.86 FEET TO THE BEGINNING OF A CURVE TO THE LEFT; THENCE ALONG THE ARC OF SAID CURVE, (SAID CURVE BEING CURVED CONCAVE TO THE WEST AND HAVING A RADIUS OF 1050.00 FEET, A CENTRAL ANGLE OF 16 DEGREES 02 MINUTES 13 SECONDS WEST), A DISTANCE OF 230.09 FEET TO AN INTERSECTION WITH A NON-TANGENT LINE; THENCE SOUTH 87 DEGREES 12 MINUTES 38 SECONDS EAST, ALONG SAID NON-TANGENT LINE, A DISTANCE OF 15.00 FEET TO THE BEGINNING OF A CURVE TO THE RIGHT; THENCE ALONG THE ARC OF SAID CURVE, (SAID CURVE BEING CURVED CONCAVE TO THE EAST AND HAVING A RADIUS OF 170.00 FEET, A CENTRAL ANGLE OF 35 DEGREES 17 MINUTES 36 SECONDS EAST), A CHORD LENGTH OF 103.07 FEET AND A CHORD BEARING OF NORTH 17 DEGREES 38 MINUTES 17 SECONDS WEST, A DISTANCE OF 146.88 FEET TO THE BEGINNING OF A CURVE TO THE LEFT; THENCE ALONG THE ARC OF SAID CURVE, (SAID CURVE BEING CURVED CONCAVE TO THE WEST AND HAVING A RADIUS OF 1050.00 FEET, A CENTRAL ANGLE OF 15 DEGREES 17 MINUTES 36 SECONDS EAST), A DISTANCE OF 104.72 FEET AND A CHORD BEARING OF NORTH 35 DEGREES 17 MINUTES 05 SECONDS EAST, A DISTANCE OF 148.86 FEET TO THE BEGINNING OF A CURVE TO THE RIGHT; THENCE ALONG THE ARC OF SAID CURVE, (SAID CURVE BEING CURVED CONCAVE TO THE EAST AND HAVING A RADIUS OF 170.00 FEET, A CENTRAL ANGLE OF 35 DEGREES 17 MINUTES 36 SECONDS EAST), A CHORD LENGTH OF 103.07 FEET AND A CHORD BEARING OF NORTH 17 DEGREES 38 MINUTES 17 SECONDS WEST, A DISTANCE OF 146.88 FEET TO THE POINT OF BEGINNING.

CHAPARRAL SUBDIVISION-PHASE 1A
 CHAPARRAL PROPERTIES, LLC
 MALABAR ROAD AND WISTERIA AVENUE NW PALM BAY, FLORIDA
 DRAWING TITLE
 CIVIL COVER SHEET

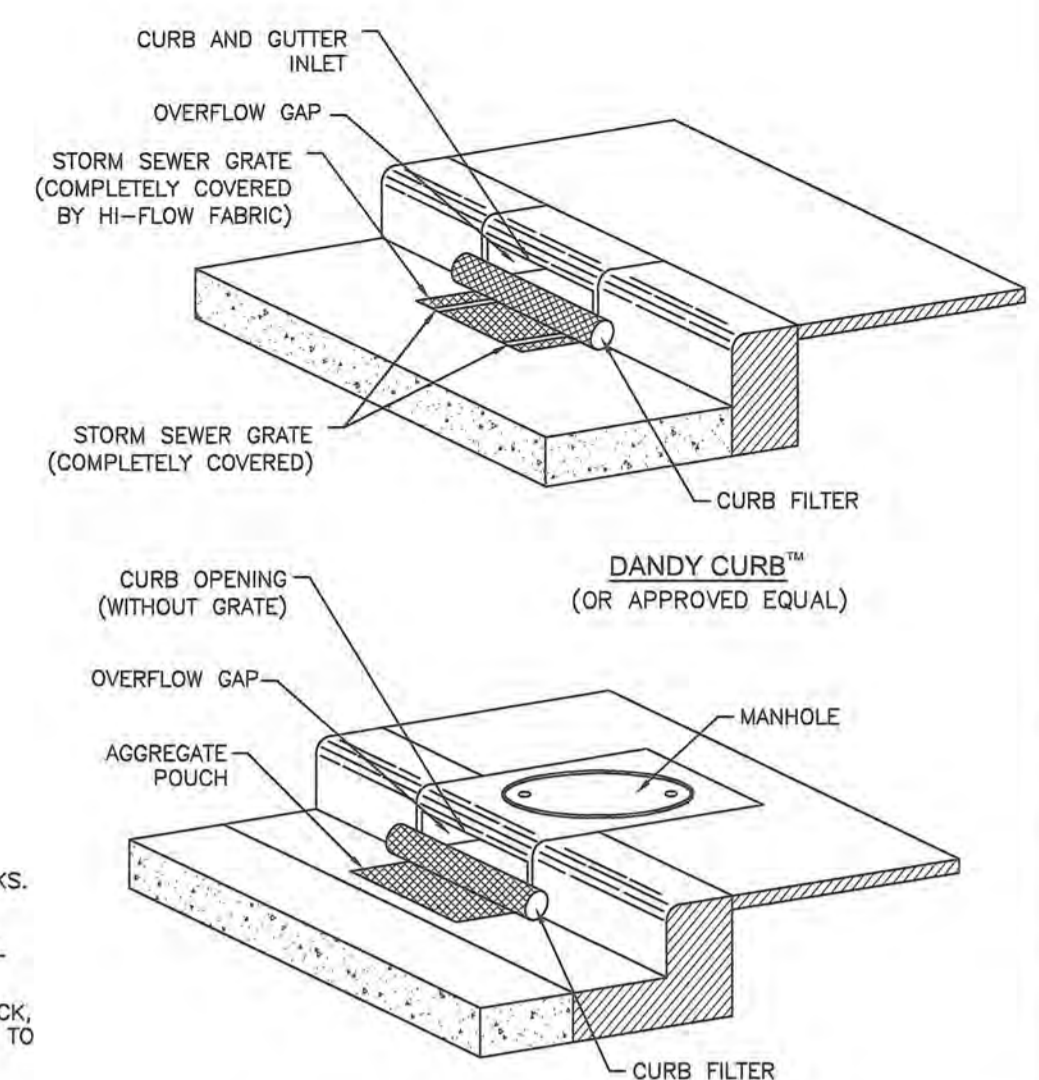


DATE	4-28-17
SCALE	N.T.S.
PROJ. NO.:	160455
DESIGNED BY:	JRT
DRAWN BY:	SMB
CHECKED BY:	JTW
DRAWING NO.	G-1



1. PLACE CONCRETE BLOCKS IN A SINGLE ROW AROUND PERIMETER OF INLET ON THEIR SIDES, WITH ENDS OF ADJACENT BLOCKS ABUTTING.
2. HEIGHT OF BARRIER VARIES. USE STACKS OF 4-INCH, 8-INCH, OR 12" BLOCKS. MIN. HEIGHT OF BARRIER 12" AND MAX. HEIGHT OF 24".
3. PLACE HARDWARE CLOTH/WIRE MESH 1/2" MAX. 1/2" OPENINGS OVER VERTICAL FACE OF CONCRETE BLOCKS.
4. THE AGGREGATE SHALL BE ANY NON-ERODIBLE MATERIAL SUCH AS LOOSE ROCK, BROKEN CONCRETE THAT WILL SLOW THE FLOW OF THE WATER AND ALLOW IT TO FILTER THROUGH AND OVER THE MATERIAL BEFORE ENTERING THE INLET.

BLOCK AND AGGREGATE INLET SEDIMENT DEVICE
NTS



CURB INLET SEDIMENT CONTROL
NTS

EROSION AND SEDIMENTATION CONTROL REQUIREMENTS

1. THE LAND-DISTURBING ACTIVITY SHALL CONFORM TO EXISTING TOPOGRAPHY AND SOIL TYPE SO AS TO CREATE THE LOWEST PRACTICAL EROSION POTENTIAL.
2. LAND-DISTURBING ACTIVITIES SHALL BE CONDUCTED IN A MANNER MINIMIZING EROSION.
3. THE DISTURBED AREA AND THE DURATION OF EXPOSURE TO EROSION ELEMENTS SHALL BE KEPT TO A PRACTICABLE MINIMUM.
4. EROSION CONTROL MUST BE STRICTLY MAINTAINED DURING CUT AND FILL OPERATIONS.
5. DISTURBED SOIL SHALL BE STABILIZED AS QUICKLY AS PRACTICABLE.
6. WHENEVER FEASIBLE, NATURAL VEGETATION SHALL BE RETAINED, PROTECTED AND SUPPLEMENTED.
7. TEMPORARY VEGETATION OR MULCHING SHALL BE EMPLOYED TO PROTECT EXPOSED CRITICAL AREAS DURING DEVELOPMENT.
8. PERMANENT VEGETATION AND STRUCTURAL EROSION CONTROL MEASURES SHALL BE INSTALLED AS SOON AS PRACTICABLE.
9. PLANTINGS ACROSS THE SITE WILL FINISH OUT THE PROJECT.
10. ESTIMATE OF THE TOTAL AREA OF THE SITE AND THE TOTAL AREA EXPECTED TO BE DISTURBED BY EXCAVATION, GRADING, OR OTHER ACTIVITIES.
11. THE ENTIRE 28.76 ACRES ARE EXPECTED TO BE DISTURBED BY GRADING, WITH THE EXCEPTION OF THE PREVIOUSLY CONSTRUCTED POND.
12. AN ESTIMATE OF RUNOFF COEFFICIENT OF THE SITE BEFORE, DURING, AND AFTER CONSTRUCTION USING "C" FROM THE RATIONAL METHOD.
13. "C" CAN BE APPROXIMATED AS 0.15 (BEFORE) AND 0.60(AFTER), FROM TABLE 2.1 "TYPICAL "C" VALUES" OF THE EPA "STORM WATER MANAGEMENT FOR CONSTRUCTION ACTIVITIES."
14. THE EXISTING DATA DESCRIBING EXISTING CONDITIONS OF SOIL OR THE QUALITY OF ANY DISCHARGE FROM THE SITE.

DEWATERING PLAN:

(ALL PONDS)
EXCAVATE AND GRADE FIRST HALF OF POND TO NWL. DEWATER TO EXISTING ON-SITE SOUTH PONDS.
EXCAVATE AND GRADE THE OTHER HALF OF POND TO FINAL GRADE. DEWATER INTO FIRST HALF OF POND.
EXCAVATE AND GRADE THE FIRST HALF OF POND TO FINAL GRADE. DEWATER INTO OTHER HALF OF POND.
FINAL GRADE AND SOD ENTIRE BANKS OF PONDS PER SECTION CUTS IMMEDIATELY. STAKE SOD IN AREAS WHERE WASHOUTS MAY OCCUR. WATER SOD AS NEEDED TO MAINTAIN HEALTH OF SOD. INSTALL SILT FENCE AROUND PONDS AFTER SODDING.
CONSTRUCT OVERFLOW STRUCTURES AND ALL PIPING BETWEEN DETENTION PONDS UPON FINAL GRADING OR SOONER TO UTILIZE FOR DEWATERING. INSTALL SKIMMERS AND UTILIZE TURBIDITY BARRIERS AROUND PIPE ENDS TO PREVENT SILTATION OF PIPING/STRUCTURE. ALL OF THIS WORK TO BE COMPLETED PER SURVIM AND CITY OF PALM BAY PERMIT CONDITIONS.
INSPECT AND REPAIR ANY HAY BALES, SILT FENCES AND TURBIDITY BARRIERS AFTER EACH RAIN EVENT DURING CONSTRUCTION.

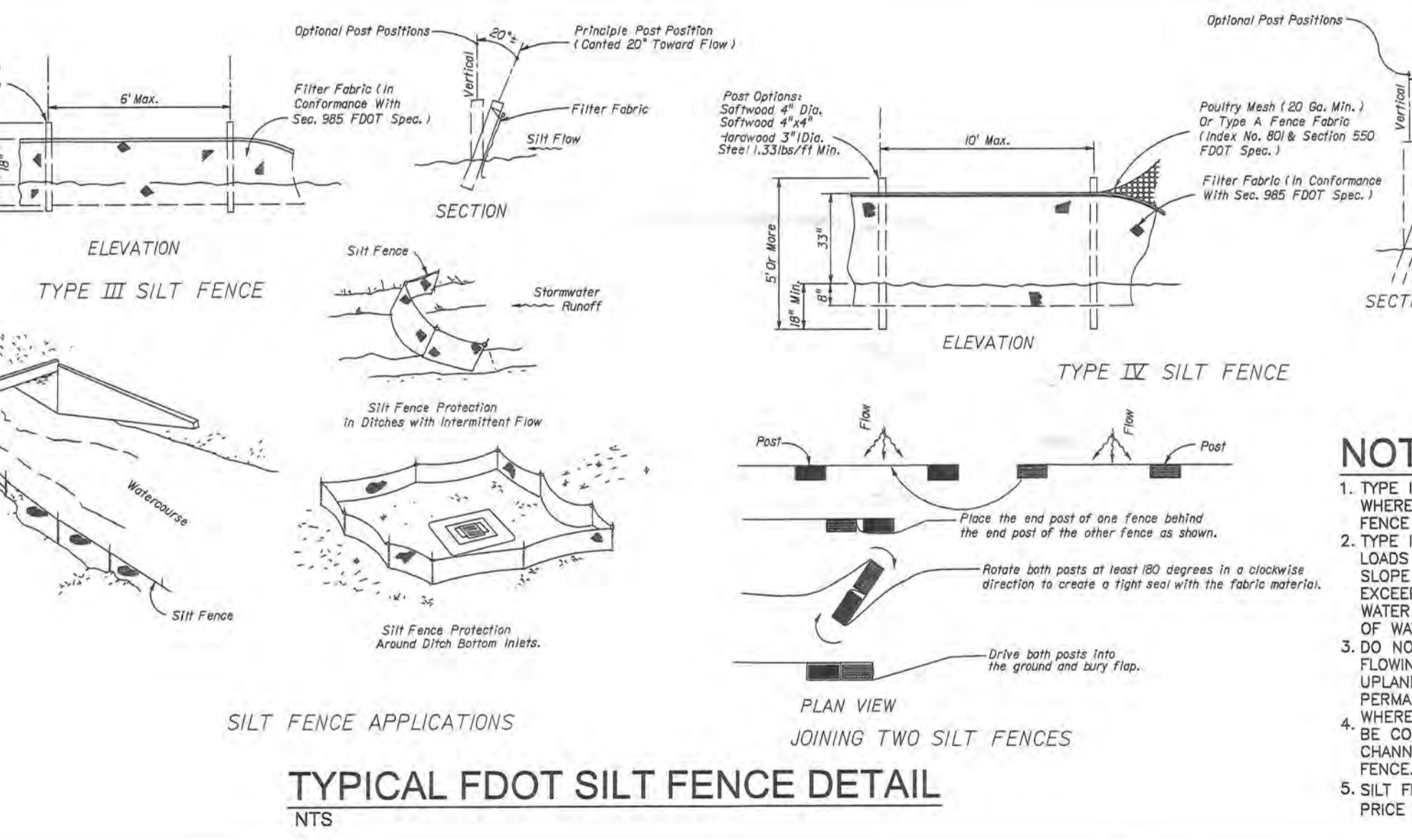
CONTRACTOR RESPONSIBILITIES FOR NPDES (SWPPP)

1. GENERAL NOTES
 - A. CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS HEREIN AND ALL WATER MANAGEMENT DISTRICT, FDEP, EPA, CORPS OF ENGINEERS, AND MUNICIPALITY/COUNTY WITH JURISDICTION REQUIREMENTS.
 - B. CONTRACTOR SHALL MAINTAIN A RECORD OF CONSTRUCTION WORK AND PROVIDE INSPECTION REPORTS WITH THE FOLLOWING DATA:
 - 1) LAND-DISTURBING SITE WORK BEGINS, EROSION CONTROL MEASURES ARE INSTALLED, GRADING WORK BEGINS, STORMWATER FACILITIES ARE CONSTRUCTED, AND FINAL STABILIZATION IS COMPLETE.
 - 2) REPORT INSPECTOR'S NAME, QUALIFICATIONS, DAILY RAINFALL, ANY CHANGES NECESSARY TO SWPPP, AND DATES OF INSPECTIONS.
 - 3) PICTURES OF ANY PROBLEM AREAS THAT OCCUR INCLUDING DATE AND TIME, AND PICTURES OF SAME AREA REPAIRED INCLUDING DATE AND TIME.
 - 4) PRIOR TO FINAL PAYMENT, CONTRACTOR SHALL PROVIDE A COPY OF THE REPORT TO THE OWNER AND CIVIL ENGINEER CERTIFYING THE PROJECT. CONTRACTOR SHALL EXCEDE NPDES CERTIFICATION FORM AND PROVIDE COPIES TO OWNER AND ENGINEER.
2. SITE DESCRIPTION
 - A. DESCRIPTION OF THE INTENDED SEQUENCE OF MAJOR ACTIVITIES WHICH DISTURB SOILS FOR MAJOR PORTIONS OF THE SITE.
 - B. FIRST, GRADE THE SITE INCLUDING THE STORMWATER TREATMENT SYSTEM. ALL EROSION CONTROL MEASURES INSTALLED AT THIS TIME (SOD ALL AREAS FINAL GRADING IMMEDIATELY). FINAL GRADING, PAVING, AND PLANTINGS ACROSS THE SITE WILL FINISH OUT THE PROJECT.
 - C. ESTIMATE OF THE TOTAL AREA OF THE SITE AND THE TOTAL AREA EXPECTED TO BE DISTURBED BY EXCAVATION, GRADING, OR OTHER ACTIVITIES.
 - D. AN ESTIMATE OF RUNOFF COEFFICIENT OF THE SITE BEFORE, DURING, AND AFTER CONSTRUCTION USING "C" FROM THE RATIONAL METHOD.
 - E. "C" CAN BE APPROXIMATED AS 0.15 (BEFORE) AND 0.60(AFTER), FROM TABLE 2.1 "TYPICAL "C" VALUES" OF THE EPA "STORM WATER MANAGEMENT FOR CONSTRUCTION ACTIVITIES."
 - F. THE EXISTING DATA DESCRIBING EXISTING CONDITIONS OF SOIL OR THE QUALITY OF ANY DISCHARGE FROM THE SITE.
3. CONTROLS
 - A. THIS SECTION PROVIDES A DESCRIPTION OF APPROPRIATE CONTROLS AND MEASURES THAT WILL BE IMPLEMENTED AT THE CONSTRUCTION SITE.
 - 1) STABILIZATION PRACTICES: EXCAVATED MATERIALS WILL BE STOCKPILED FOR USE AS A BACKFILL AND STABILIZING MATERIAL. UNSUITABLE MATERIALS WILL BE PROMPTLY REMOVED FROM THE SITE AND LEGALLY DISPOSED OF.
 - 2) STRUCTURAL PRACTICES: THE CONTRACTOR SHALL INSTALL AND MAINTAIN WATER QUALITY CONTROL DEVICES AT ALL NEARBY STORMWATER MANAGEMENT PONDS, DITCHES, AND SWALES. INCLUDED IN THE PLANS AND SPECIFICATIONS SHALL BE THE ELEVATIONS INDICATED ON THE CONSTRUCTION PLANS AND APPROPRIATE CONTAINERS AND TURBIDITY BARRIERS. CONTRACTOR SHALL INSTALL ADDITIONAL WATER QUALITY CONTROL MEASURES AS APPROPRIATE TO ASSURE ADEQUATE PROTECTION OF RECEIVING WATER BODIES.
 - 3) STORMWATER MANAGEMENT: THE ENTIRE PROJECT IS DESIGNED TO IMPROVE STORMWATER MANAGEMENT. THE CONTRACTOR SHALL GRADIENT THE SITE TO THE ELEVATIONS INDICATED ON THE CONSTRUCTION PLANS AND GRADING AND INSTALLING EROSION CONTROL MEASURES.
 - 4) OTHER CONTROLS: ALL GUIDELINES AND REGULATIONS SET FORTH IN THE ST. JOHNS RIVER WATER MANAGEMENT DISTRICT AND FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION.
 - THE CONTRACTOR SHALL PROVIDE ROUTINE MAINTENANCE OF VEGETATION, PERMANENT AND TEMPORARY EROSION AND SEDIMENT CONTROL FEATURES FOR THE DURATION OF THE PROJECT.
 - THE CONTRACTOR SHALL MAINTAIN THE SITE TO THE ELEVATIONS INDICATED ON THE CONSTRUCTION PLANS AND SHALL RE-GRASS WAREHOUSES WHERE THEY OCCUR AFTER EVERY RAINFALL UNTIL NEW LANDSCAPING IS ESTABLISHED.
 - ALL DRAINAGE STRUCTURES SHALL BE DE-SILTED AS REQUIRED DURING CONSTRUCTION AND AT THE END OF CONSTRUCTION TO PROVIDE POSITIVE DRAINAGE FLOWS AND MINIMIZE TRANSPORT OF SILT TO THE MASTER DRAINAGE SYSTEM AND RECEIVING WATER BODY.
 - ALL ACCUMULATIONS OF SILT GREATER THAN SIX INCHES SHALL BE REMOVED BY THE CONTRACTOR AND PROPERLY DISPOSED.
 - ALL TEMPORARY AND PERMANENT EROSION CONTROL DEVICES WILL BE INSPECTED BY THE CONTRACTOR ON A WEEKLY BASIS (MINIMUM). IN AREAS OF ONGOING CONSTRUCTION ACTIVITY, TURBIDITY AND EROSION CONTROL MEASURES WILL BE INSPECTED ON A DAILY BASIS. ADDITIONAL INSPECTIONS WILL BE CONDUCTED AFTER SEVERE WEATHER. WHEN ANY DEFICIENCIES IN EROSION CONTROL ARE DISCOVERED, CORRECTIVE ACTIONS SHALL BE TAKEN IMMEDIATELY BY THE CONTRACTOR.
4. MAINTENANCE
 - THE CONTRACTOR SHALL PROVIDE ROUTINE MAINTENANCE OF VEGETATION, PERMANENT AND TEMPORARY EROSION AND SEDIMENT CONTROL FEATURES FOR THE DURATION OF THE PROJECT.
 - THE CONTRACTOR SHALL MAINTAIN THE SITE TO THE ELEVATIONS INDICATED ON THE CONSTRUCTION PLANS AND SHALL RE-GRASS WAREHOUSES WHERE THEY OCCUR AFTER EVERY RAINFALL UNTIL NEW LANDSCAPING IS ESTABLISHED.
 - ALL DRAINAGE STRUCTURES SHALL BE DE-SILTED AS REQUIRED DURING CONSTRUCTION AND AT THE END OF CONSTRUCTION TO PROVIDE POSITIVE DRAINAGE FLOWS AND MINIMIZE TRANSPORT OF SILT TO THE MASTER DRAINAGE SYSTEM AND RECEIVING WATER BODY.
 - ALL ACCUMULATIONS OF SILT GREATER THAN SIX INCHES SHALL BE REMOVED BY THE CONTRACTOR AND PROPERLY DISPOSED.
 - ALL TEMPORARY AND PERMANENT EROSION CONTROL DEVICES WILL BE INSPECTED BY THE CONTRACTOR ON A WEEKLY BASIS (MINIMUM). IN AREAS OF ONGOING CONSTRUCTION ACTIVITY, TURBIDITY AND EROSION CONTROL MEASURES WILL BE INSPECTED ON A DAILY BASIS. ADDITIONAL INSPECTIONS WILL BE CONDUCTED AFTER SEVERE WEATHER. WHEN ANY DEFICIENCIES IN EROSION CONTROL ARE DISCOVERED, CORRECTIVE ACTIONS SHALL BE TAKEN IMMEDIATELY BY THE CONTRACTOR.
5. INSPECTIONS
 - A. INSPECTIONS WILL BE PERFORMED BY THE CONTRACTOR ON A WEEKLY BASIS (MINIMUM) AND WITHIN 24 HOURS OF THE END OF A STORM THAT IS 0.50 INCHES OR GREATER.
 - B. INSPECTIONS SHALL INCLUDE, BUT ARE NOT LIMITED TO:
 - ALL DISTURBED AREAS OF THE CONSTRUCTION SITE THAT HAVE NOT RECEIVED FINAL STABILIZATION.
 - AREAS USED FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION.
 - EXAMINATION OF THE SITE FOR EVIDENCE OF, OR THE POTENTIAL FOR POLLUTANTS ENTERING THE RECEIVING WATER.
 - STORMWATER MANAGEMENT SYSTEM AND EROSION AND SEDIMENT CONTROL MEASURES IDENTIFIED IN THE PLAN TO PROVIDE REASONABLE ASSURANCE THAT THEY ARE OPERATING AS DESIGNED.
 - LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE FOR EVIDENCE OF OFF-SITE SEDIMENT TRACKING.
 - ALL POINTS OF DISCHARGE INTO THE MASTER STORMWATER MANAGEMENT SYSTEM TO DETERMINE WHETHER EROSION CONTROL AND STORMWATER MANAGEMENT MEASURES ARE EFFECTIVELY PREVENTING WATER QUALITY DEGRADATION IN THE RECEIVING WATER BODY.
 - C. WHEN REMEDIAL ACTION IS REQUIRED FOR COMPLIANCE, THE PLAN WILL BE REVISED AS NECESSARY AND ADDITIONAL STRUCTURAL MEASURES INSTALLED IMMEDIATELY AS WARRANTED.
 - 1) PRODUCT SPECIFIC PRACTICES:
 - A) CONCRETE TRUCKS: CONCRETE TRUCKS WILL NOT BE ALLOWED TO WASH OUT OR DISCHARGE SURPLUS CONCRETE OR DRUM WASH WATER ON THE SITE.
 - B) FERTILIZERS: FERTILIZERS USED WILL BE APPLIED ONLY IN THE MINIMUM AMOUNTS RECOMMENDED BY THE MANUFACTURER. ONCE APPLIED, FERTILIZER WILL BE WORKED INTO THE SOIL TO LIMIT EXPOSURE TO STORMWATER. THE CONTENTS OF ANY PARTIALLY USED BAGS OF FERTILIZER WILL BE TRANSFERRED TO A SEALABLE PLASTIC BIN TO AVOID SPILLS.
 - C) PETROLEUM PRODUCTS: ALL ON-SITE VEHICLES WILL BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTIVE MAINTENANCE TO REDUCE THE CHANCE OF LEAKAGE. PETROLEUM PRODUCTS WILL BE STORED IN TIGHTLY SEALED CONTAINERS, WHICH ARE CLEARLY LABELED.
 - 2) SPILL CONTROL PRACTICES:
 - THESE ADDITIONAL PRACTICES WILL BE FOLLOWED FOR SPILL PREVENTION/CLEANUP:
 - MANUFACTURERS' RECOMMENDED METHODS FOR SPILL CLEANUP WILL BE CLEARLY POSTED AND SITE PERSONNEL WILL BE MADE AWARE OF THE PROCEDURES AND THE LOCATION OF THE INFORMATION AND CLEANUP SUPPLIES.
 - MATERIALS AND EQUIPMENT NECESSARY FOR SPILL CLEANUP WILL BE KEPT ON-SITE.
 - ALL SPILLS WILL BE CLEANED UP IMMEDIATELY AFTER DISCOVERY AND REPORTED TO THE APPROPRIATE STATE OR LOCAL GOVERNMENT AGENCY IF NECESSARY, AND
 - THE SPILL PREVENTION PLAN WILL BE MODIFIED TO INCLUDE MEASURES TO PREVENT A REOCCURRENCE, HOW TO CLEAN UP IF ANOTHER OCCURS, AND A DESCRIPTION OF WHAT SPILLED, WHAT CAUSED IT, AND WHAT THE CLEANUP MEASURES ARE.
 6. NON-STORMWATER DISCHARGES ARE ANTICIPATED WITH THE POSSIBLE EXCEPTION OF DEWATERING. THE CONTRACTOR SHALL OBTAIN A DEWATERING PERMIT IF NECESSARY AND FOLLOW ALL STATE REQUIREMENTS ENFORCED BY THE WATER MANAGEMENT DISTRICT WITH AUTHORITY.
 7. INVENTORY FOR POLLUTION PREVENTION PLAN
 - A. THE MATERIALS OR SUBSTANCES LISTED BELOW ARE EXPECTED TO BE PRESENT ON-SITE DURING CONSTRUCTION:
 - CONCRETE;
 - FERTILIZERS; AND
 - PETROLEUM BASED PRODUCTS.
 - B. SPILL PREVENTION AND CLEANUP PRACTICES.
 - THE MATERIAL MANAGEMENT PRACTICES WILL BE USED TO REDUCE THE RISK OF SPILLS OR OTHER ACCIDENTAL EXPOSURE OF MATERIALS AND SUBSTANCES TO STORMWATER RUNOFF.
 - THE FOLLOWING PRACTICES WILL BE FOLLOWED ON-SITE DURING THE CONSTRUCTION PROJECT.
 - AN EFFORT WILL BE MADE TO STORE ONLY ENOUGH PRODUCT REQUIRED TO DO THE JOB;
 - ALL MATERIALS STORED ON-SITE WILL BE STORED IN A NEAT, ORDERLY MANNER IN THEIR APPROPRIATE CONTAINERS AND, IF POSSIBLE, UNDER A ROOF;
 - PRODUCTS WILL BE KEPT IN THEIR ORIGINAL CONTAINERS WITH THE ORIGINAL MANUFACTURERS' LABEL;
 - SUBSTANCES WILL NOT BE MIXED UNLESS RECOMMENDED BY THE MANUFACTURER;
 - MANUFACTURERS' RECOMMENDATIONS FOR PROPER USE AND DISPOSAL WILL BE FOLLOWED;
 - WHENEVER POSSIBLE, ALL OF A PRODUCT WILL BE USED UP BEFORE DISPOSING OF THE CONTAINER.
 - IF SURPLUS PRODUCT MUST BE DISPOSED OF, MANUFACTURERS' OR LOCAL AND STATE RECOMMENDED METHODS FOR PROPER DISPOSAL WILL BE FOLLOWED.

REVISION DATE

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CONSTRUCTION ENGINEERING GROUP
consulting engineers



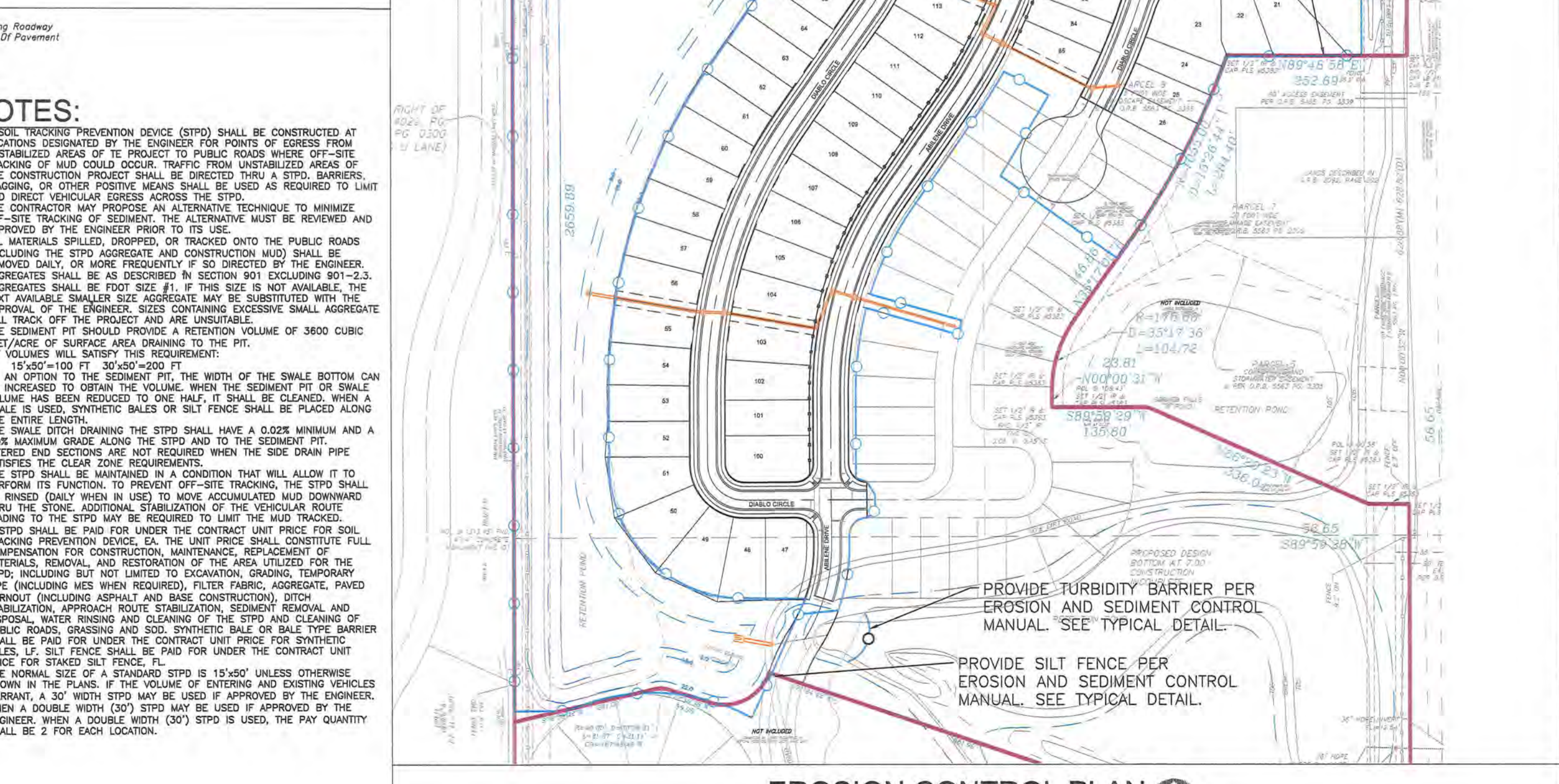
TYPICAL FDOT SILT FENCE DETAIL
NTS

DEWATERING SPECIFICATIONS:

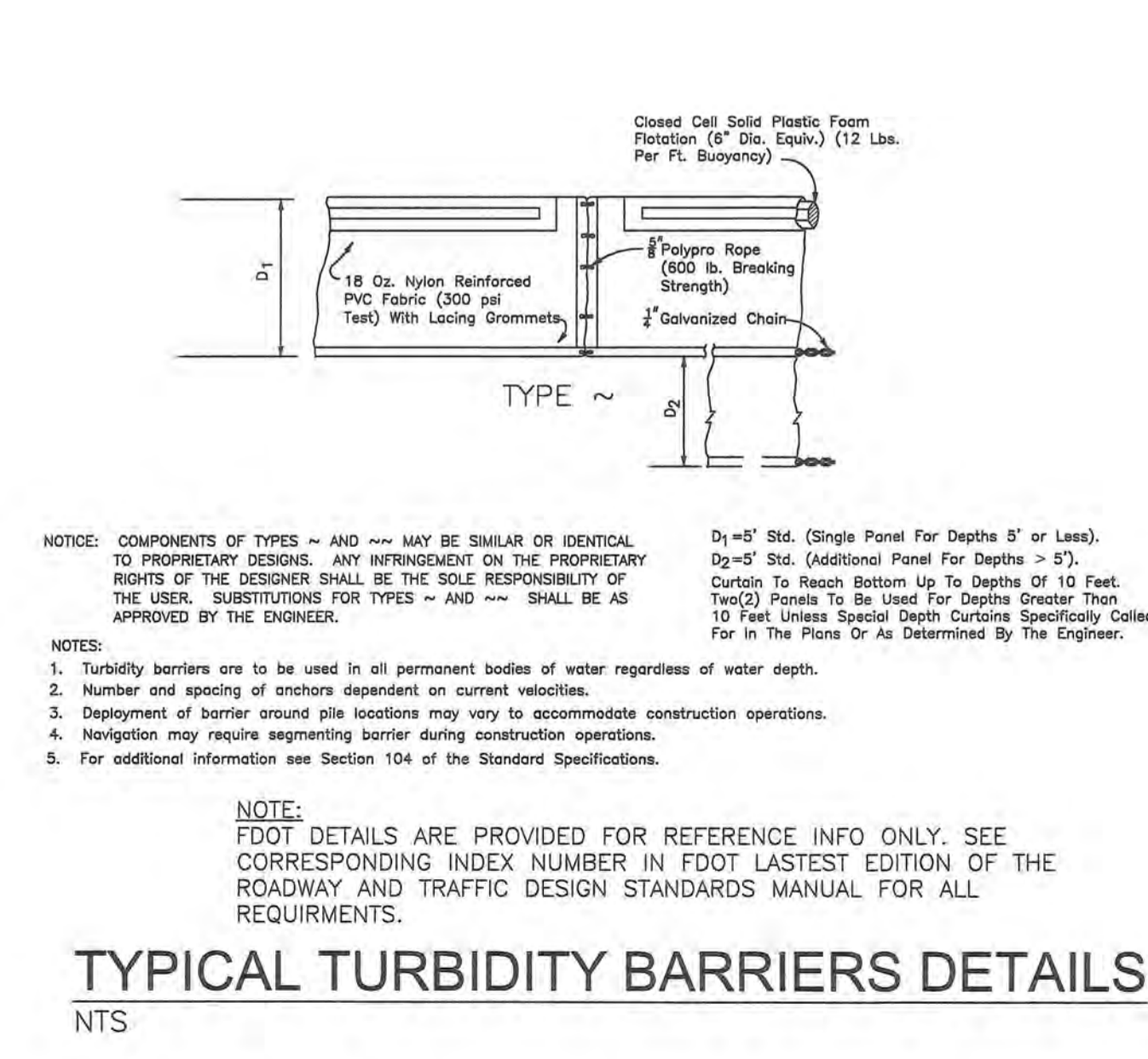
1. MAINTAIN ADEQUATE SUPERVISION AND CONTROL TO ENSURE THAT STABILITY OF EXCAVATED AND CONSTRUCTED SLOPES ARE NOT ADVERSELY AFFECTED BY WATER. EROSION IS CONTROLLED, AND FLOODING OF EXCAVATION OR DAMAGE TO STRUCTURES DOES NOT OCCUR.
2. THE DEWATERING PLAN SHALL COMPLY WITH THE REQUIREMENTS OF THE ST. JOHNS WATER MANAGEMENT DISTRICT FOR CONSUMPTIVE USE OF GROUNDWATER. PERMITTING, IF REQUIRED, SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
3. PROVIDE AN ADEQUATE SYSTEM TO LOWER AND CONTROL GROUNDWATER IN ORDER TO PERMIT EXCAVATION, CONSTRUCTION OF STRUCTURES, AND PLACEMENT OF FILL MATERIALS UNDER DRY CONDITIONS. INSTALL SUFFICIENT DEWATERING EQUIPMENT TO DRAIN WATER-BEARING STRATA ABOVE AND BELOW BOTTOM OF STRUCTURE FOUNDATIONS, DRAINS, SEWERS, AND OTHER EXCAVATIONS.
4. REDUCE HYDROSTATIC HEAD IN WATER-BEARING STRATA BELOW STRUCTURE FOUNDATIONS, DRAINS, SEWERS AND OTHER EXCAVATIONS TO EXTENT THAT WATER LEVEL AND PIEZOMETRIC WATER LEVELS IN CONSTRUCTION ARE BELOW PREVAILING EXCAVATION SURFACE.
5. PRIOR TO EXCAVATION BELOW GROUNDWATER LEVEL, PLACE SYSTEM INTO OPERATION TO LOWER WATER LEVELS AS REQUIRED AND OPERATE CONTINUOUSLY 24 HOURS A DAY, 7 DAYS A WEEK UNTIL DRAINS, SEWERS AND STRUCTURES HAVE BEEN CONSTRUCTED, INCLUDING PLACEMENT OF FILL MATERIALS, AND UNTIL DEWATERING IS NO LONGER REQUIRED.
6. DISPOSE OF WATER REMOVED FROM EXCAVATIONS IN A MANNER TO AVOID ENDANGERING PUBLIC HEALTH, PROPERTY, AND PORTIONS OF WORK UNDER CONSTRUCTION OR COMPLETED. DISPOSE OF WATER IN A MANNER TO AVOID INCONVENIENCE TO OTHERS, PROVIDE SUMPS, SEDIMENTATION TANKS, AND OTHER FLOW CONTROL DEVICES AS REQUIRED BY GOVERNING AUTHORITIES.
7. PROVIDE STANDBY EQUIPMENT ON SITE, INSTALLED AND AVAILABLE FOR IMMEDIATE OPERATION IF REQUIRED TO MAINTAIN DEWATERING ON A CONTINUOUS BASIS IN EVENT ANY PART OF SYSTEM BECOMES INADEQUATE OR FAILS. IF DEWATERING REQUIREMENTS ARE NOT SATISFIED DUE TO INADEQUACY OR FAILURE OF DEWATERING SYSTEM, PERFORM SUCH WORK AS MAY BE REQUIRED TO RESTORE DAMAGED STRUCTURES AND FOUNDATION SOILS AT NO ADDITIONAL EXPENSE.

NOTES FOR SILT FENCES

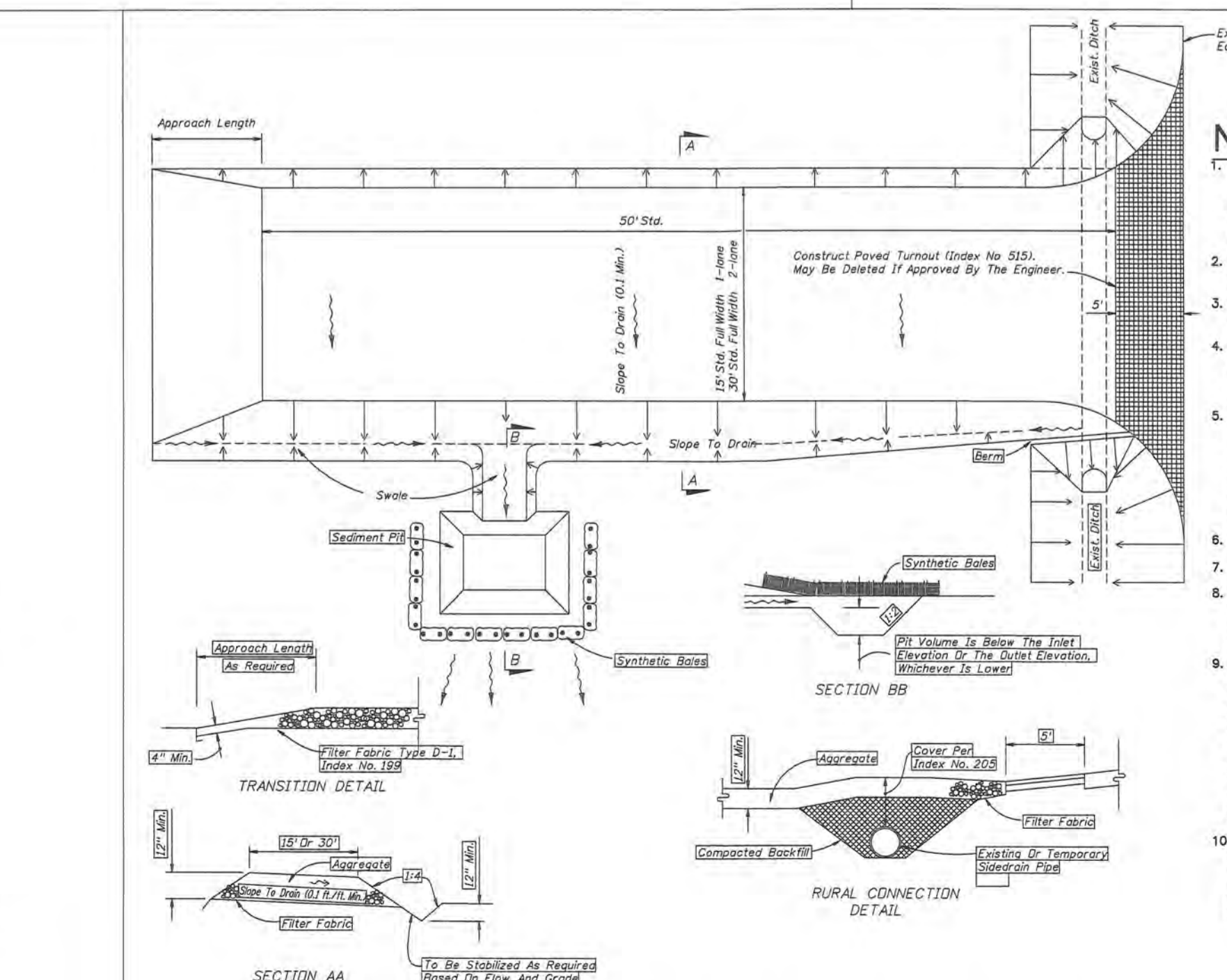
1. TYPE III SILT FENCE TO BE USED AT MOST LOCATIONS, WHERE USED IN DITCHES, THE SPACING FOR TYPE III SILT FENCE SHALL BE IN ACCORDANCE WITH CHART 1, SHEET 1.
2. TYPE IV SILT FENCE TO BE USED WHERE LARGE SEDIMENT LOADS ARE ANTICIPATED. SUGGESTED USE IS WHERE FILL SLOPE IS 1:2 OR STEEPER AND LENGTH OF SLOPE EXCEEDS 25 FEET. AVOID USE WHERE THE DETAINED WATER MAY BACK INTO TRAVEL LANES OR OFF THE RIGHT OF WAY.
3. DO NOT CONSTRUCT SILT FENCES ACROSS PERMANENT FLOWING WATERCOURSES. SILT FENCES ARE TO BE AT UPLAND LOCATIONS AND TURBIDITY BARRIERS USED AT PERMANENT BODIES OF WATER.
4. WHERE USED AS SLOPE PROTECTION, SILT FENCE IS TO BE CONSTRUCTED ON 0% LONGITUDINAL GRADE TO AVOID CHANNELIZING RUNOFF ALONG THE LENGTH OF THE FENCE.
5. SILT FENCE TO BE PAID FOR UNDER THE CONTRACT UNIT PRICE FOR STAKED SILT FENCE, (LF).



EROSION CONTROL PLAN
1"=150'



TYPICAL TURBIDITY BARRIERS DETAILS
NTS

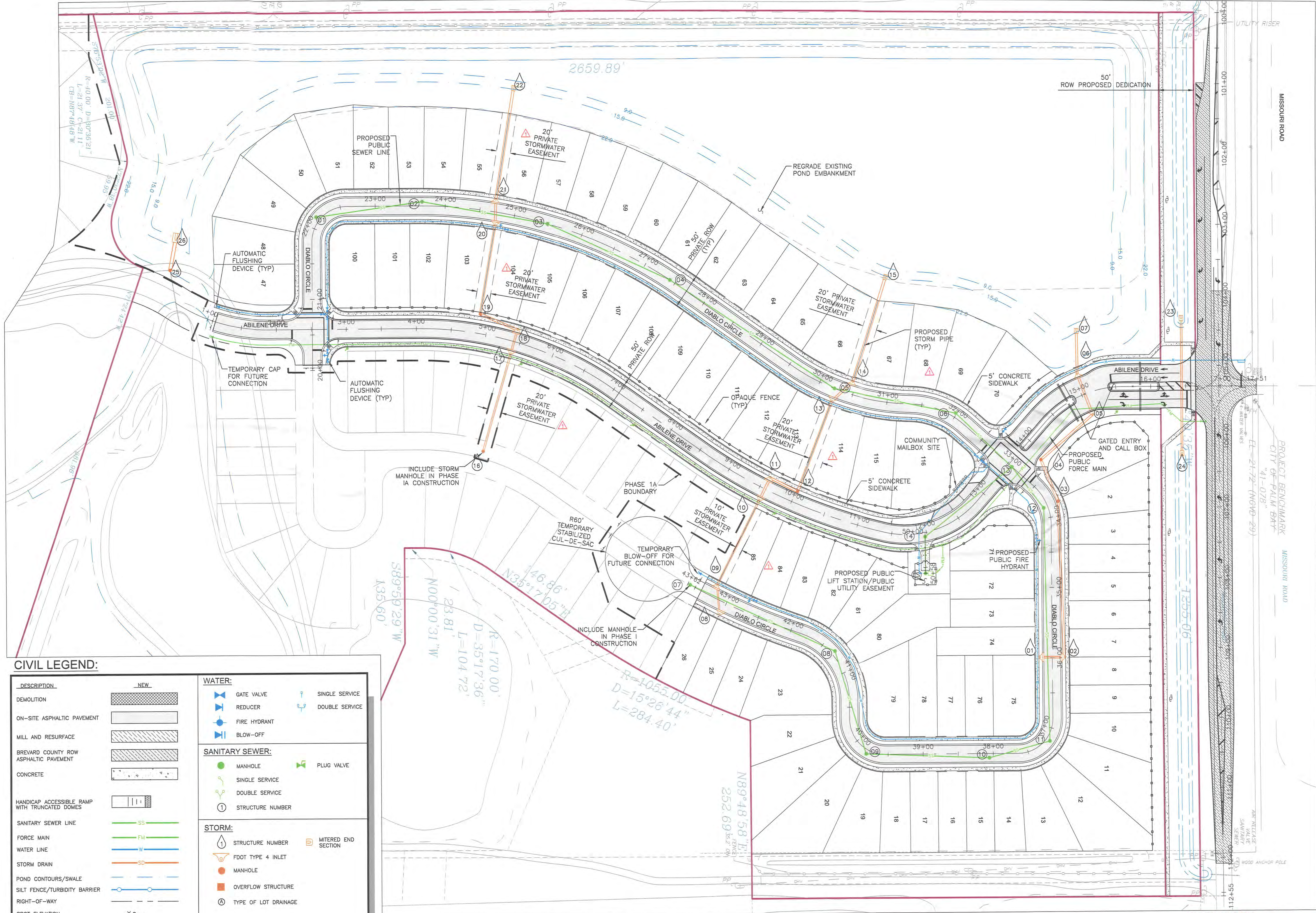


SOIL TRACKING PREVENTION DEVICE
NTS

CHAPARRAL SUBDIVISION-PHASE 1A
CHAPARRAL PROPERTIES, LLC
MALABAR ROAD AND WISTERIA AVENUE NW PALM BAY, FLORIDA
DRAWING TITLE
STORMWATER POLLUTION PREVENTION PLAN (SWPPP)

DATE: 4-28-17
SCALE: 1"=150'
PROJ. NO.: 160455
DESIGNED BY: JRT
DRAWN BY: SMB
CHECKED BY: JTW
DRAWING NO. G-2

JAKE T. WISE
LICENSE No. 55405
STATE OF FLORIDA
PROFESSIONAL ENGINEER
7-22-19



CIVIL LEGEND:

DESCRIPTION	NEW	WATER:	SANITARY SEWER:	STORM:
DEMOLITION		GATE VALVE	MANHOLE	STRUCTURE NUMBER
ON-SITE ASPHALTIC PAVEMENT		REDUCER	SINGLE SERVICE	FDOT TYPE 4 INLET
MILL AND RESURFACE		FIRE HYDRANT	DOUBLE SERVICE	MANHOLE
BREVARD COUNTY ROW ASPHALTIC PAVEMENT		BLOW-OFF	PLUG VALVE	OVERFLOW STRUCTURE
CONCRETE			STRUCTURE NUMBER	TYPE OF LOT DRAINAGE
HANDICAP ACCESSIBLE RAMP WITH TRUNCATED DOMES				
SANITARY SEWER LINE				
FORCE MAIN				
WATER LINE				
STORM DRAIN				
POND CONTOURS/SWALE				
SILT FENCE/TURBIDITY BARRIER				
RIGHT-OF-WAY				
SPOT ELEVATION				
SWALE OR FLOW DIRECTION				
OPAQUE FENCE WITH DOUBLE GATES				

OVERALL PHASE 1A SUBDIVISION PLAN

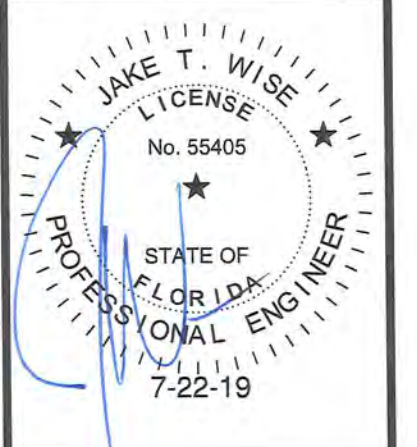


REV#	DATE	REVISION
1	8/21/17	CITY AND BRAVARD COUNTY COMMENTS
2	1/5/18	CITY COMMENTS
6	4/24/19	CLIENT CHANGES

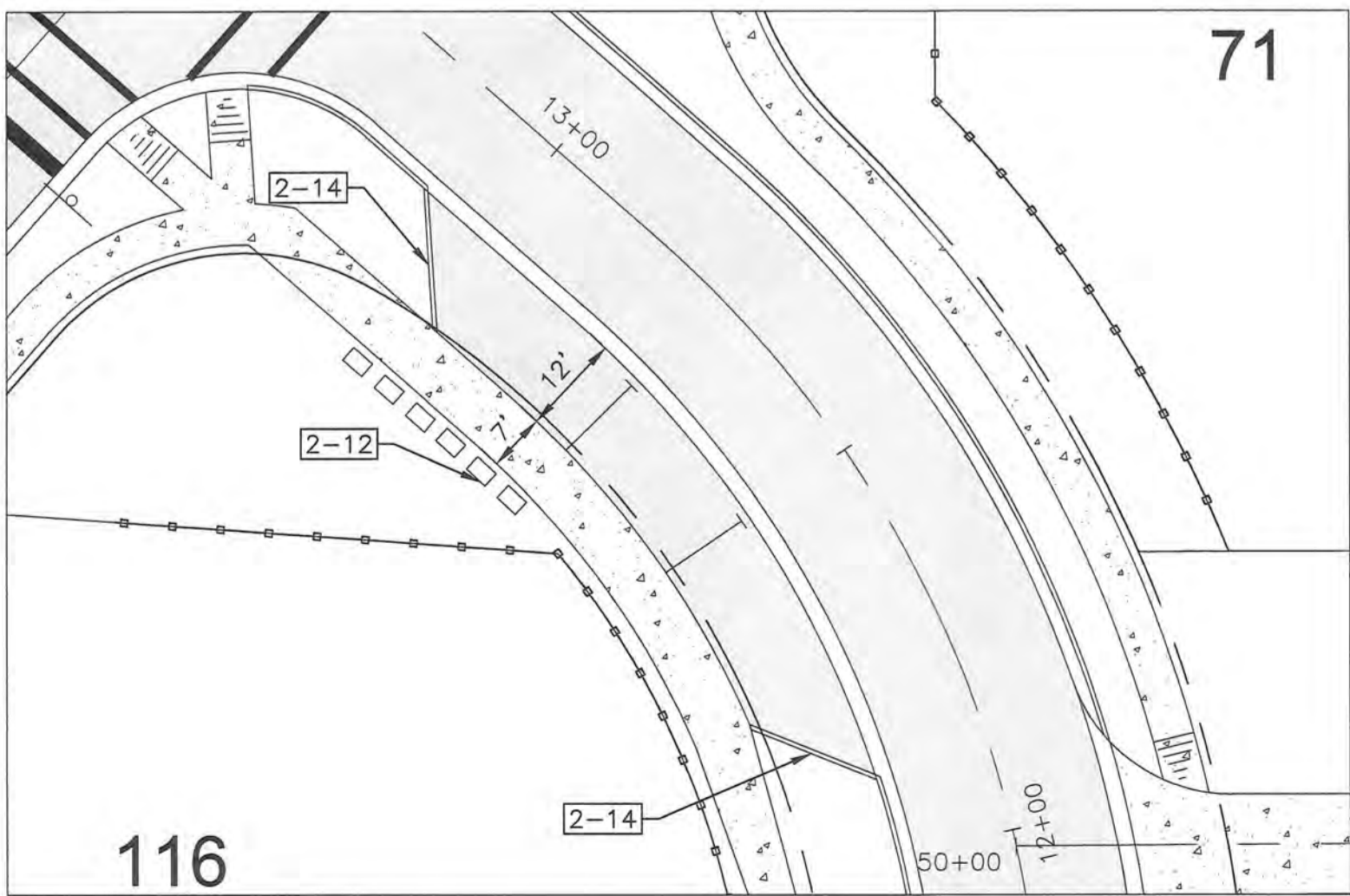
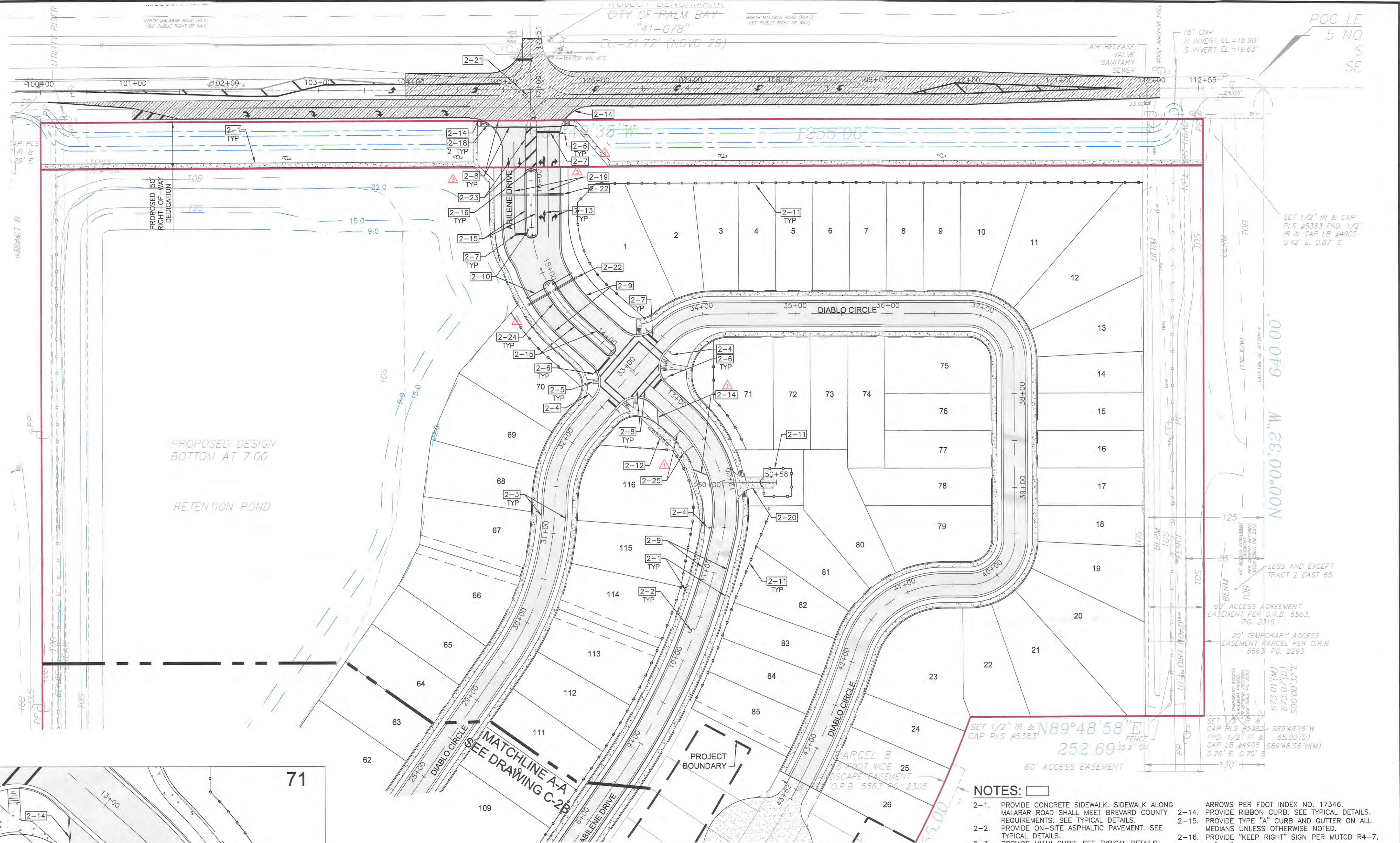
2651 sou palm blvd, suite 101
melbourne, fl 32955
tel: 321.253.1221
fax: 321.253.3123
www.constructionengr.com
license #000897

CONSTRUCTION ENGINEERING GROUP
consulting engineers

CHAPARRAL SUBDIVISION-PHASE 1A
CHAPARRAL PROPERTIES, LLC
MALABAR ROAD AND WISTERIA AVENUE NW PALM BAY, FLORIDA
DRAWING TITLE
OVERALL PHASE 1A SUBDIVISION PLAN



DATE	4-28-17
SCALE	1"=60'
PROJ. NO.:	160455
DESIGNED BY:	JRT
DRAWN BY:	SMB
CHECKED BY:	JTW
DRAWING NO.	G-3

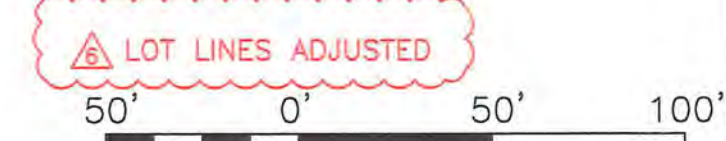


116
COMMUNITY MAILBOX SITE PLAN
1"=20'

SUBDIVISION PLAN
1"=50'

Approved For Construction
SEP 16 2019
City of Palm Bay

- NOTES:**
- 2-1. PROVIDE CONCRETE SIDEWALK. SIDEWALK ALONG MALABAR ROAD SHALL MEET BREVARD COUNTY REQUIREMENTS. SEE TYPICAL DETAILS.
 - 2-2. PROVIDE ON-SITE ASPHALTIC PAVEMENT. SEE TYPICAL DETAILS.
 - 2-3. PROVIDE MIAMI CURB. SEE TYPICAL DETAILS.
 - 2-4. PROVIDE "25 MPH" SPEED LIMIT SIGN PER MUTCD R2-1 24"x30".
 - 2-5. PROVIDE HANDICAP ACCESSIBLE RAMP. SEE TYPICAL DETAILS.
 - 2-6. PROVIDE "STOP" SIGN PER MUTCD R1-1, 30"x30" WITH STREET NAME SIGN.
 - 2-7. PROVIDE 24" WHITE THERMOPLASTIC STOP BAR PER FDOT INDEX NO. 17346.
 - 2-8. PROVIDE WHITE THERMOPLASTIC PARALLEL CROSSWALK STRIPING PER FDOT INDEX NO. 17346.
 - 2-9. PROVIDE FDOT TYPE "F" CURB AND GUTTER.
 - 2-10. DEVELOPER SHALL PROVIDE GATED ENTRANCE, PEDESTRIAN GATES AND UTILITY SERVICES AS REQUIRED. VISITOR CALL BOX AND SIREN ACTIVATOR PROVIDED BY DEVELOPER. CONTRACTOR SHALL DETERMINE INFRASTRUCTURE REQUIREMENTS INCLUDING CONDUITS, POWER, COMMUNICATION, ETC. WITH DEVELOPER.
 - 2-11. PROVIDE 6' HIGH OPAQUE FENCE PER OWNER'S SPECIFICATIONS WITH DOUBLE LOCKABLE GATES AS SHOWN ON PLAN.
 - 2-12. PROVIDE COMMUNITY MAILBOX PER USPS AND DEVELOPER'S SPECIFICATIONS WITH HANDICAP ACCESSIBILITY.
 - 2-13. PROVIDE WHITE THERMOPLASTIC DIRECTIONAL ARROWS PER FDOT INDEX NO. 17346.
 - 2-14. PROVIDE RIBBON CURB. SEE TYPICAL DETAILS.
 - 2-15. PROVIDE TYPE "A" CURB AND GUTTER ON ALL MEDIANS UNLESS OTHERWISE NOTED.
 - 2-16. PROVIDE "KEEP RIGHT" SIGN PER MUTCD R4-7, 24"x30" AT ENDS OF MEDIAN ISLANDS.
 - 2-17. PROVIDE "NO OUTLET" SIGN PER MUTCD W14-2A BELOW STOP SIGN.
 - 2-18. PROVIDE HANDICAP ACCESSIBLE RAMP WITH BRICK RED TRUNCATED DOMES PER BREVARD COUNTY AND FDOT REQUIREMENTS. SEE TYPICAL DETAILS.
 - 2-19. PROVIDE 6" WHITE THERMOPLASTIC LANE LINE PER FDOT INDEX NO. 17346.
 - 2-20. PROVIDE CONCRETE DRIVE TO LIFT STATION. SEE TYPICAL DETAILS.
 - 2-21. SEE DRAWING C-2C FOR MALABAR ROAD RIGHT-OF-WAY IMPROVEMENTS.
 - 2-22. PROVIDE (3) 6" DIAMETER PVC CONDUIT AND MARK FOR FUTURE LOCATION.
 - 2-23. PROVIDE 18" WIDE YELLOW THERMOPLASTIC STRIPES SPACED 10' O.C. WITH 6" DOUBLE YELLOW LANE LINE.
 - 2-24. PROVIDE 6" YELLOW THERMOPLASTIC LANE LINE AROUND ALL MEDIANS PER FDOT INDEX NO. 17346.
 - 2-25. PROVIDE 4" WIDE WHITE PAINTED STRIPE.

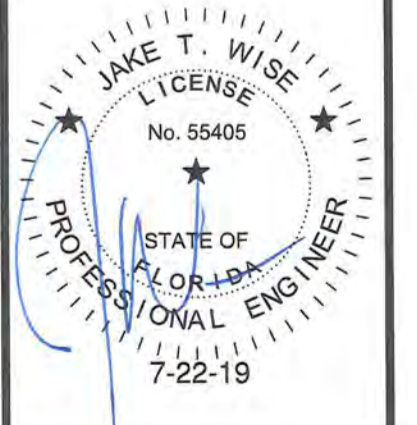


REV#	DATE	REVISION
1	8/21/17	CITY AND BREVARD COUNTY COMMENTS
3	5/31/18	BREVARD COUNTY COMMENTS
6	4/24/19	CLIENT CHANGES

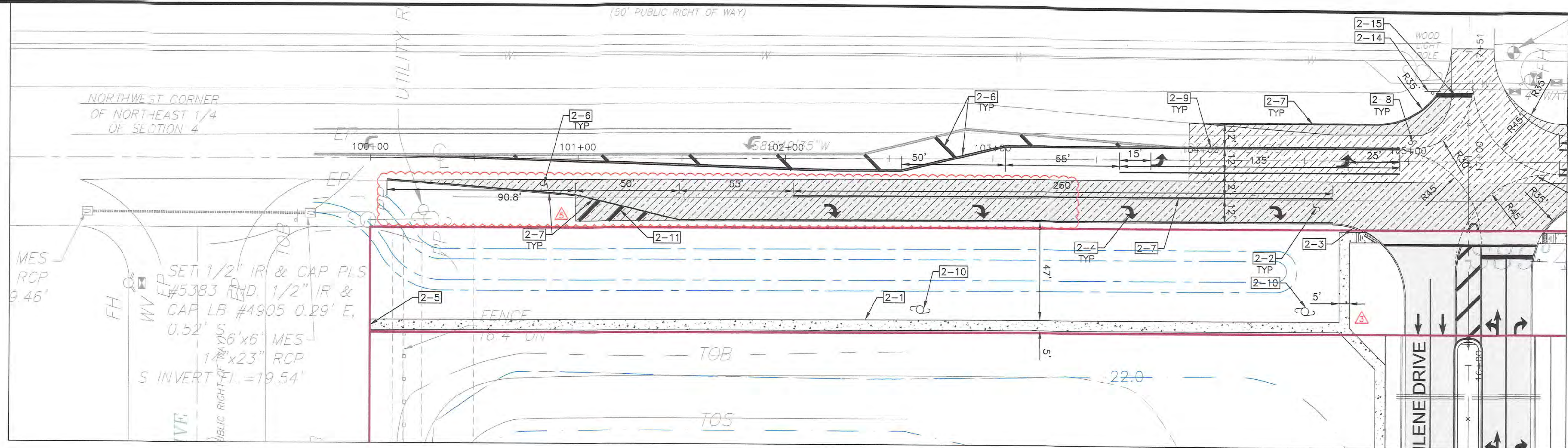
261 southe Blvd, Suite 200
Melbourne, FL 32935
Tel: 321.253.1221
Fax: 321.253.1212
www.ccgengineering.com
License #000697

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consulting engineers

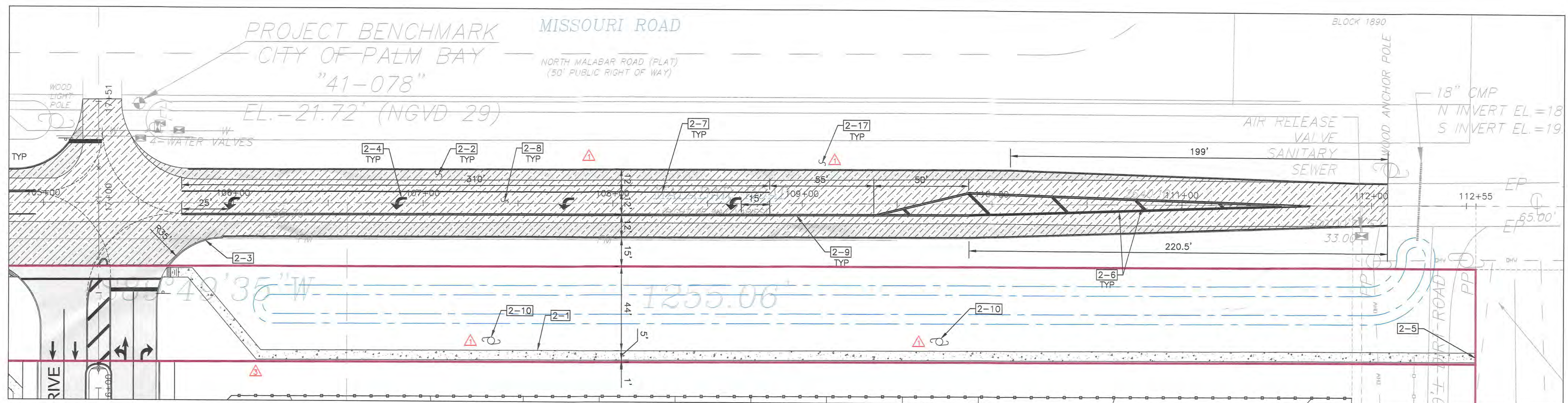
CHAPARRAL SUBDIVISION-PHASE 1A
CHAPARRAL PROPERTIES, LLC
MALABAR ROAD AND WISTERIA AVENUE NW PALM BAY, FLORIDA
DRAWING TITLE
SUBDIVISION PLAN



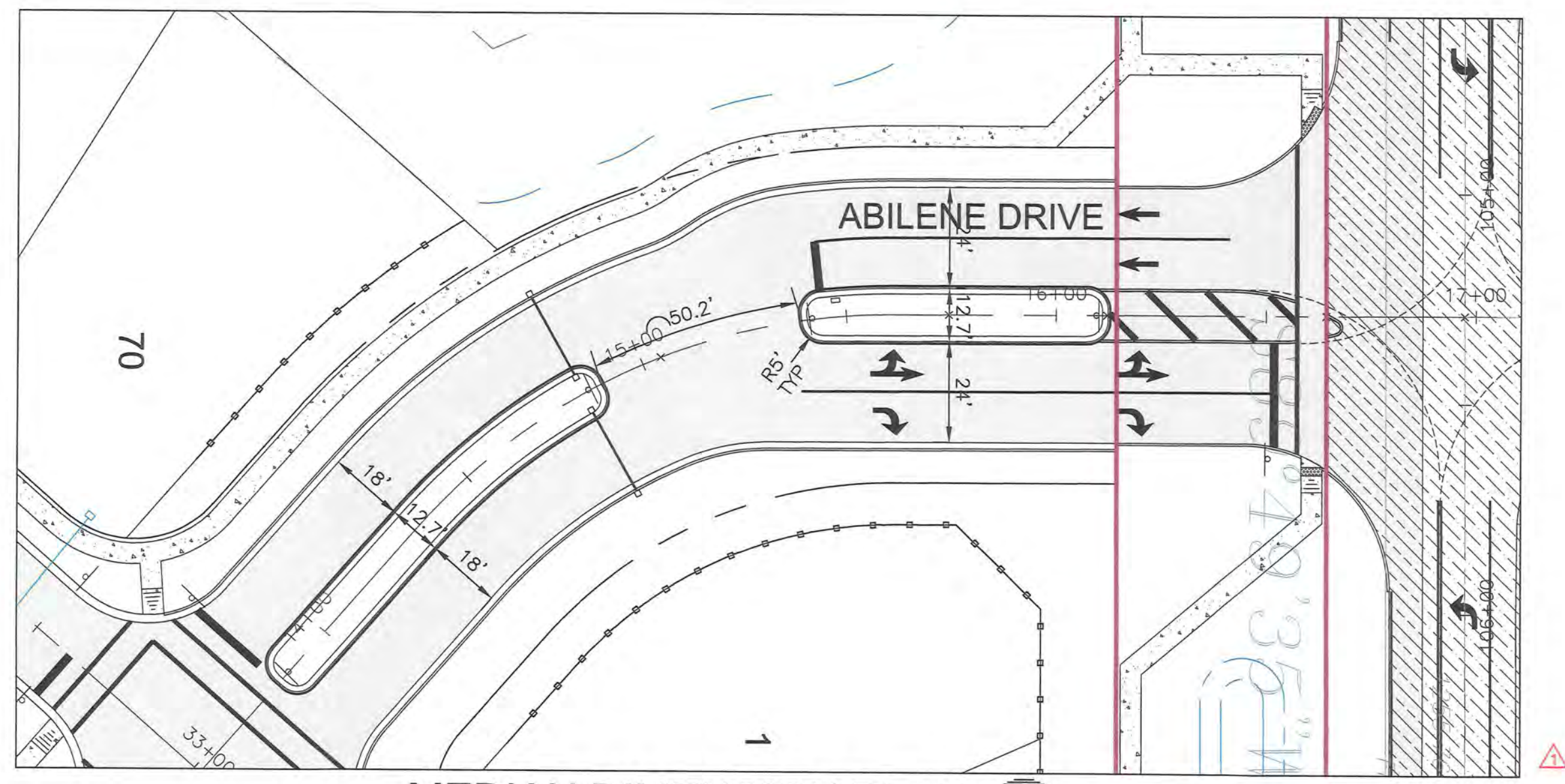
DATE	4-28-17
SCALE	1"=50'
PROJ. NO.:	160455
DESIGNED BY:	JRT
DRAWN BY:	SMB
CHECKED BY:	JTW
DRAWING NO.	C-2A



MALABAR ROAD RIGHT-OF-WAY SITE PLAN
1"=30'



MALABAR ROAD RIGHT-OF-WAY SITE PLAN
1"=30'



MEDIAN DIMENSION PLAN
1"=30'

- NOTES:**
- 2-1. PROVIDE RIGHT-OF-WAY CONCRETE SIDEWALK. SEE TYPICAL BREVARD COUNTY DETAILS.
 - 2-2. PROVIDE RIGHT-OF-WAY ASPHALTIC PAVEMENT. SEE TYPICAL BREVARD COUNTY DETAILS.
 - 2-3. PROVIDE FLUSH RIBBON CURB. SEE TYPICAL DETAILS.
 - 2-4. PROVIDE WHITE THERMOPLASTIC DIRECTIONAL ARROWS PER FDOT INDEX NO. 17346.
 - 2-5. PROVIDE RED 9-BUTTON SIGN AT END OF SIDEWALK PER MUTCD 0M4-1.
 - 2-6. PROVIDE YELLOW THERMOPLASTIC 18" WIDE STRIPES AT 45' SPACED 30' O.C. WITH 6" DOUBLE YELLOW PERIMETER STRIPE PER FDOT INDEX NO. 17346 AND REFLECTIVE PAVEMENT MARKERS PER FDOT INDEX NO. 17352.
 - 2-7. PROVIDE WHITE THERMOPLASTIC 6" LANE EDGE STRIPE PER FDOT INDEX NO. 17346.
 - 2-8. PROVIDE 3/4" FC-5 FRICTION COURSE. SEE TYPICAL DETAIL.
 - 2-9. PROVIDE DOUBLE YELLOW THERMOPLASTIC 6" LANE STRIPE PER FDOT INDEX NO. 17346 WITH REFLECTIVE PAVEMENT MARKERS PER FDOT INDEX NO. 17352.
 - 2-10. PROPOSED LOCATION OF RELOCATED POWER POLES 5' OFF OF PROPOSED SIDEWALK. CONTRACTOR REQUIRED TO COORDINATE FINAL LOCATION WITH FPL AND BREVARD COUNTY REPRESENTATIVE.
 - 2-11. PROVIDE WHITE THERMOPLASTIC 18" WIDE STRIPES AT 45' SPACED 10' O.C. PER FDOT INDEX NO. 17346 WITH RAISED REFLECTIVE PAVEMENT MARKERS PER FDOT INDEX NO. 17352.
 - 2-12. NOT USED
 - 2-13. NOT USED
 - 2-14. RELOCATED EXISTING STOP SIGN.
 - 2-15. PROVIDE 24" WIDE WHITE THERMOPLASTIC STOP BAR PER FDOT INDEX NO. 17346.
 - 2-16. NOT USED
 - 2-17. PROVIDE STABILIZED SHOULDER PER BREVARD COUNTY LAND DEVELOPMENT DETAIL EX-3. CONTRACTOR SHALL FIELD VERIFY SHOULDER BASE IS FULL DEPTH. IF NOT, THE EXISTING BASE AND PAVEMENT SHALL BE REMOVED AND REPLACED AT PAVEMENT CONNECTION TO MATCH EXISTING ROADWAY.

Approved For Construction
SEP 16 2016
City of Palm Bay

ALL SIGNS AND HARDWARE IN MALABAR ROAD RIGHT-OF-WAY SHALL COMPLY WITH BREVARD COUNTY LAND DEVELOPMENT DETAIL EX-26.

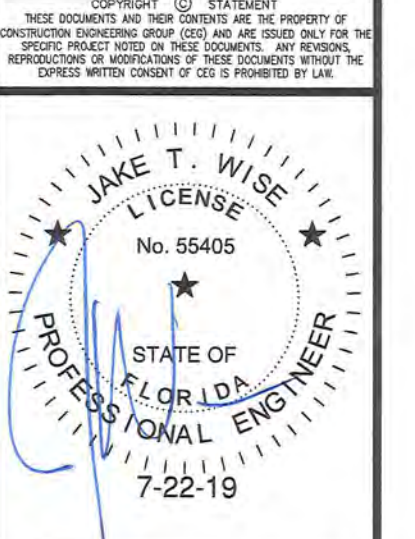


REV#	DATE	REVISION
1	8/21/17	CITY AND BREVARD COUNTY COMMENTS
3	1/22/18	BREVARD COUNTY COMMENTS
5	12/19/18	TRAFFIC UPDATE

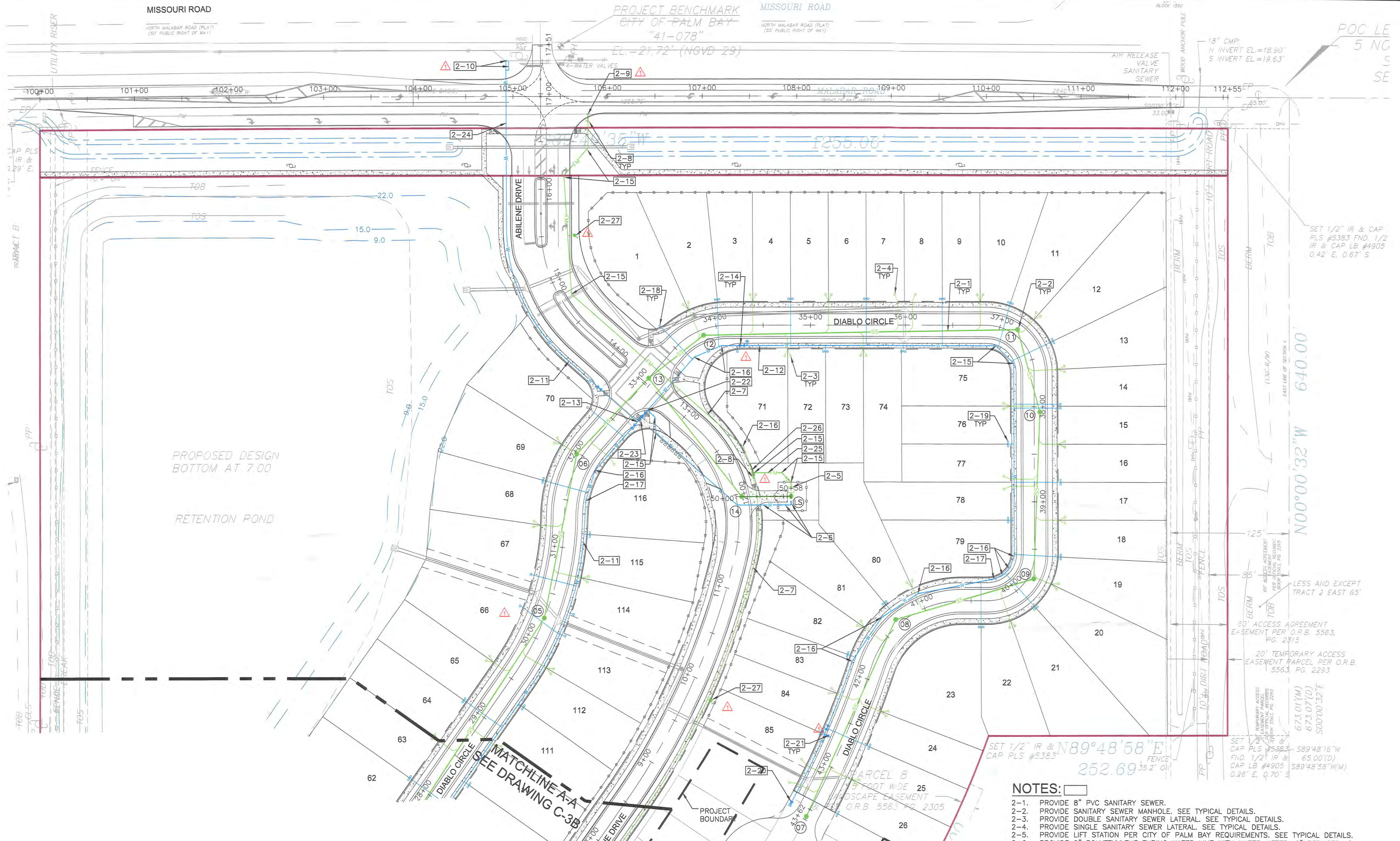
2651 rougale Blvd, Suite 6
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Tel: 321.253.1221
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www.constructionengineeringgroup.com
License # 000897

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consulting engineers

CHAPARRAL SUBDIVISION-PHASE 1A
CHAPARRAL PROPERTIES, LLC
MALABAR ROAD AND WISTERIA AVENUE NW PALM BAY, FLORIDA
DRAWING TITLE
SUBDIVISION PLAN



DATE	4-28-17
SCALE	1"=30'
PROJ. NO.:	160455
DESIGNED BY:	JRT
DRAWN BY:	SMB
CHECKED BY:	JTW
DRAWING NO.	C-2C



MISSOURI ROAD
NORTH MALABAR ROAD (PLAT)
(50' PUBLIC RIGHT OF WAY)

PROJECT BENCHMARK
CITY OF PALM BAY
"41-078"
EL. -21.72' (NGVD 29)

MISSOURI ROAD
NORTH MALABAR ROAD (PLAT)
(50' PUBLIC RIGHT OF WAY)

POC LE
5' NG
SE

PROPOSED DESIGN
BOTTOM AT 7.00

RETENTION POND

UTILITY PLAN
1"=50'

Approved For Construction

SEP 16 2016

City of Palm Bay

NOTES:

- 2-1. PROVIDE 8" PVC SANITARY SEWER.
- 2-2. PROVIDE SANITARY SEWER MANHOLE. SEE TYPICAL DETAILS.
- 2-3. PROVIDE DOUBLE SANITARY SEWER LATERAL. SEE TYPICAL DETAILS.
- 2-4. PROVIDE SINGLE SANITARY SEWER LATERAL. SEE TYPICAL DETAILS.
- 2-5. PROVIDE LIFT STATION PER CITY OF PALM BAY REQUIREMENTS. SEE TYPICAL DETAILS.
- 2-6. PROVIDE 2" POLYETHYLENE TUBING WATER LINE WITH WATER METER, 2" REDUCED PRESSURE BACKFLOW PREVENTER, 3/4" HOSE BIBB AND 2" BALL VALVE WITH 2 1/2" FIRE HOSE CONNECTION.
- 2-7. PROVIDE 8" PVC FORCE MAIN.
- 2-8. PROVIDE PLUG VALVE.
- 2-9. PROVIDE 16"x8" TAPPING SLEEVE. SEE TYPICAL DETAILS.
- 2-10. PROVIDE 20"x12" TAPPING SLEEVE AND TEMPORARY JUMPER. SEE TYPICAL DETAILS.
- 2-11. PROVIDE 12" PVC WATER MAIN.
- 2-12. PROVIDE 8" PVC WATER MAIN.
- 2-13. PROVIDE 12" TEE. SEE TYPICAL DETAILS.
- 2-14. PROVIDE GATE VALVE. SEE TYPICAL DETAILS.
- 2-15. PROVIDE 45° BEND.
- 2-16. PROVIDE 22.5° BEND.
- 2-17. PROVIDE 11.25° BEND.
- 2-18. PROVIDE SINGLE POTABLE WATER SERVICE. SEE TYPICAL DETAILS.
- 2-19. PROVIDE DOUBLE POTABLE WATER SERVICES. SEE TYPICAL DETAILS.
- 2-20. PROVIDE 2" AUTOMATIC FLUSHING DEVICE. SEE TYPICAL DETAILS.
- 2-21. PROVIDE FIRE HYDRANT ASSEMBLY. SEE TYPICAL DETAILS.
- 2-22. PROVIDE 8"x2" TAPPING SADDLE.
- 2-23. PROVIDE 12"x8" REDUCER.
- 2-24. DIRECTIONAL DRILL WATERLINE UNDER MALABAR ROAD. SEE TYPICAL DETAILS.
- 2-25. PROVIDE 4" PVC FORCE MAIN.
- 2-26. PROVIDE 8"x4" WYE.
- 2-27. PROVIDE TEE AND AIR RELEASE VALVE. SEE TYPICAL DETAILS.

LOT LINES ADJUSTED



REV#	DATE	REVISION
1	8/21/17	CITY AND BREVARD COUNTY COMMENTS
6	4/24/19	CLIENT CHANGES

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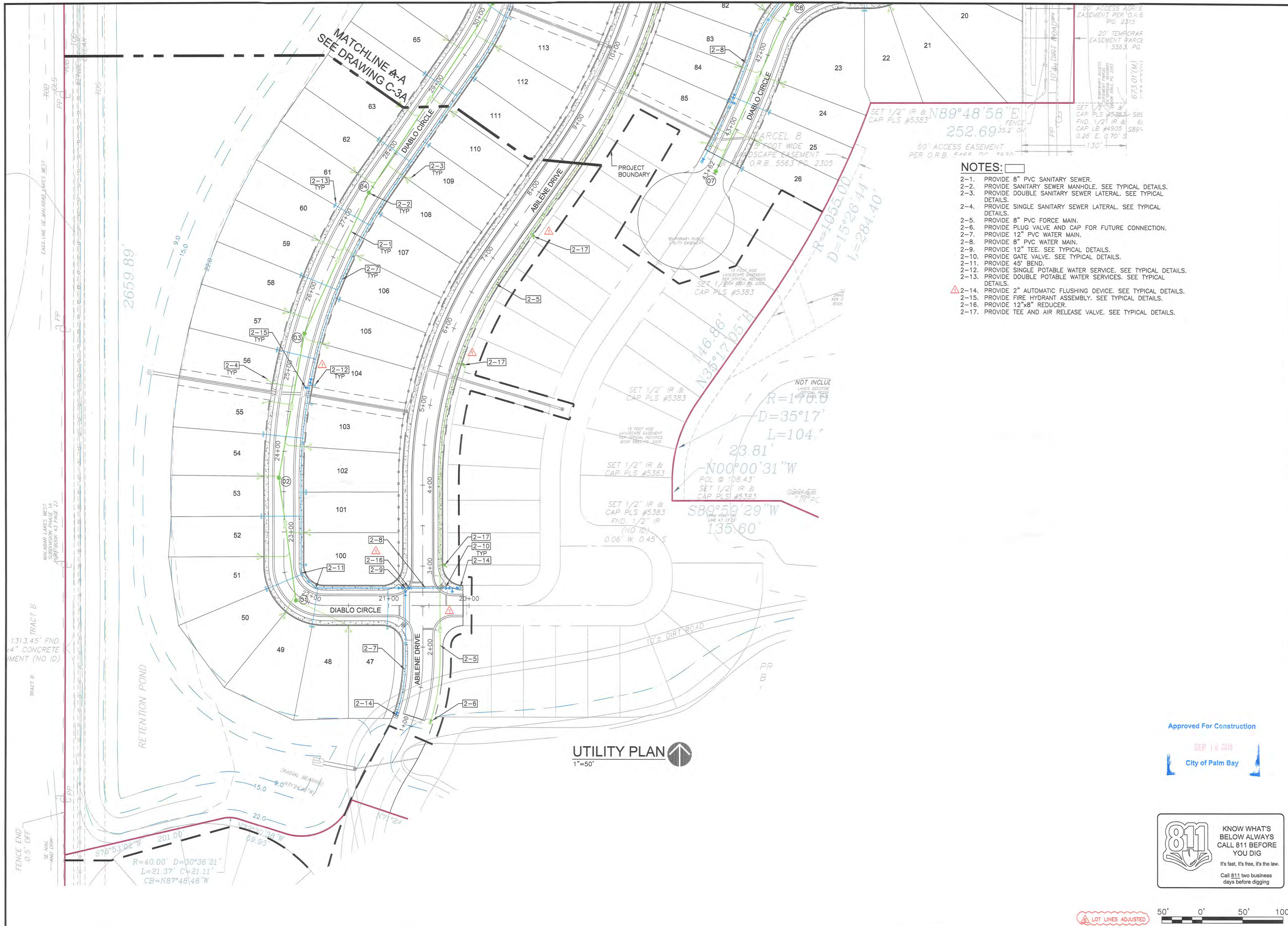
2051 east galle Blvd, suite 0
melbourne, fl 32935
tel: 321.253.1231
fax: 321.253.1232
www.cogengineering.com
license #008977

CHAPARRAL SUBDIVISION-PHASE 1A
CHAPARRAL PROPERTIES, LLC
MALABAR ROAD AND WISTERIA AVENUE NW PALM BAY, FLORIDA
DRAWING TITLE
UTILITY PLAN

STATE OF FLORIDA
PROFESSIONAL ENGINEER
JAKE T. WISE
LICENSE No. 55405
7-22-19

DATE	4-28-17
SCALE	1"=50'
PROJ. NO.:	160455
DESIGNED BY:	JRT
DRAWN BY:	SMB
CHECKED BY:	JTW
DRAWING NO.	C-3A

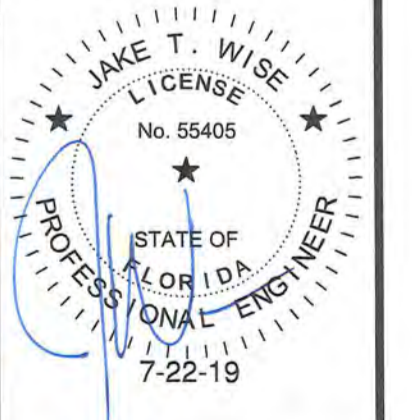
811
KNOW WHAT'S
BELOW ALWAYS
CALL 811 BEFORE
YOU DIG
It's fast, it's free, it's the law.
Call 811 two business
days before digging



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consulting engineers

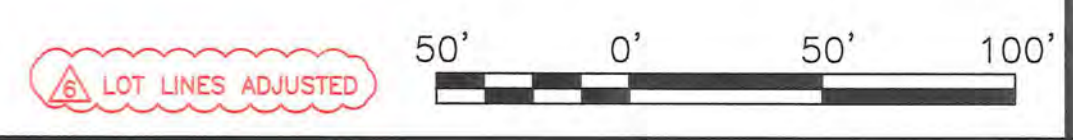
2651 eou globe bld. suite 200
melbourne, fl 32905
tel: 321.253.1221
fax: 321.253.1223
www.cogengineering.com
license #0000997

CHAPARRAL SUBDIVISION-PHASE 1A
CHAPARRAL PROPERTIES, LLC
MALABAR ROAD AND WISTERIA AVENUE NW PALM BAY, FLORIDA
DRAWING TITLE
UTILITY PLAN

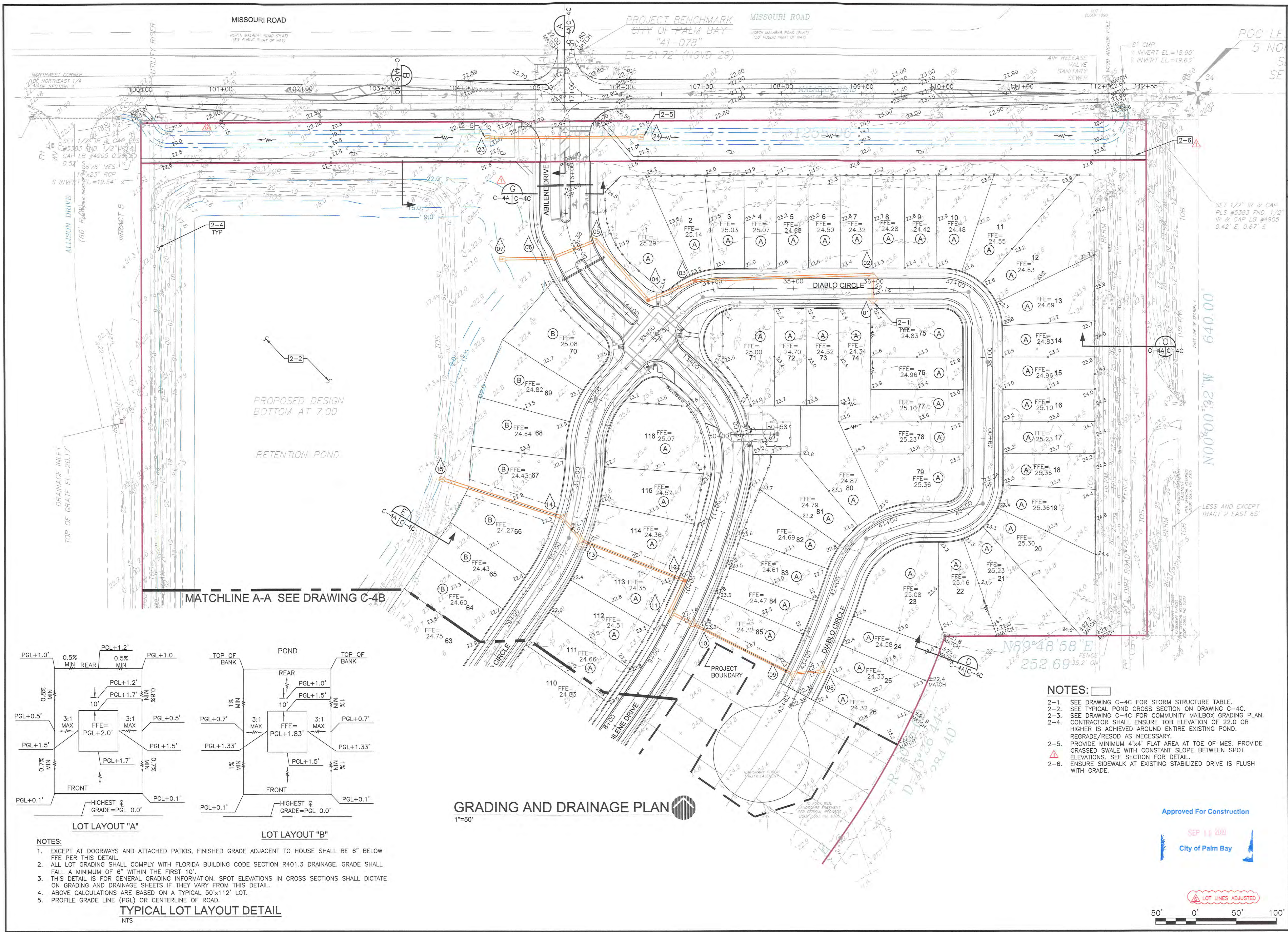


Approved For Construction
SEP 18 2019
City of Palm Bay

811 KNOW WHAT'S BELOW ALWAYS CALL 811 BEFORE YOU DIG
It's fast. It's free. It's the law.
Call 811 two business days before digging



DATE	4-28-17
SCALE	1"=50'
PROJ. NO.:	160455
DESIGNED BY:	JRT
DRAWN BY:	SMB
CHECKED BY:	JTW
DRAWING NO.	C-3B



MISSOURI ROAD
NORTH MALABAR ROAD (PLAT)
(50' PUBLIC RIGHT OF WAY)

PROJECT BENCHMARK
CITY OF PALM BAY
"41-078"
EL. -21.72' (NGVD 29)

MISSOURI ROAD
NORTH MALABAR ROAD (PLAT)
(50' PUBLIC RIGHT OF WAY)

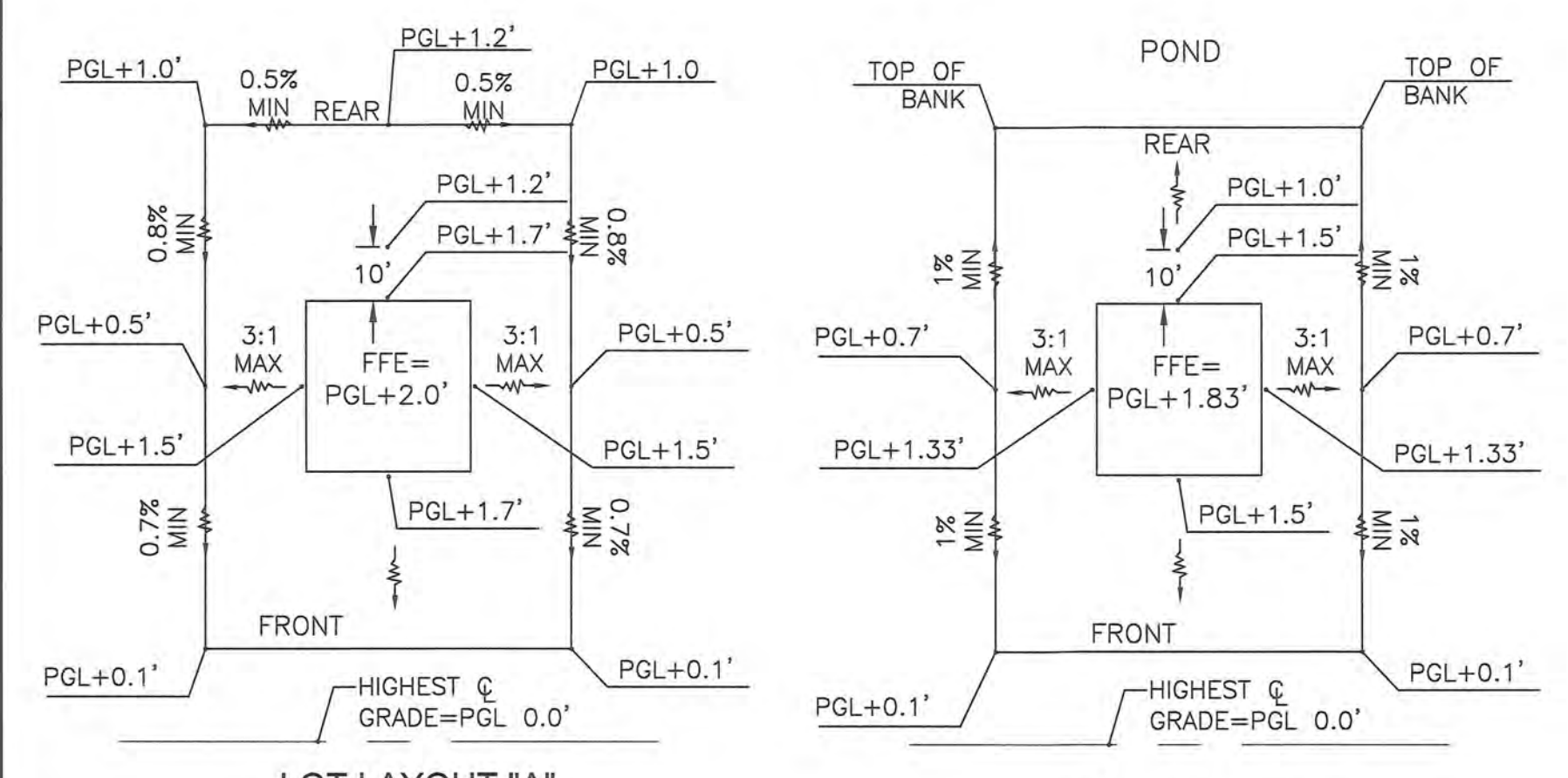
POC LE
5 NO
S
SE

PROPOSED DESIGN
BOTTOM AT 7.00

RETENTION POND

MATCHLINE A-A SEE DRAWING C-4B

GRADING AND DRAINAGE PLAN
1"=50'



LOT LAYOUT "A"

LOT LAYOUT "B"

- NOTES:**
- EXCEPT AT DOORWAYS AND ATTACHED PATIOS, FINISHED GRADE ADJACENT TO HOUSE SHALL BE 6" BELOW FFE PER THIS DETAIL.
 - ALL LOT GRADING SHALL COMPLY WITH FLORIDA BUILDING CODE SECTION R401.3 DRAINAGE. GRADE SHALL FALL A MINIMUM OF 6" WITHIN THE FIRST 10'.
 - THIS DETAIL IS FOR GENERAL GRADING INFORMATION. SPOT ELEVATIONS IN CROSS SECTIONS SHALL DICTATE ON GRADING AND DRAINAGE SHEETS IF THEY VARY FROM THIS DETAIL.
 - ABOVE CALCULATIONS ARE BASED ON A TYPICAL 50'x112' LOT.
 - PROFILE GRADE LINE (PGL) OR CENTERLINE OF ROAD.

TYPICAL LOT LAYOUT DETAIL
NTS

- NOTES:**
- SEE DRAWING C-4C FOR STORM STRUCTURE TABLE.
 - SEE TYPICAL POND CROSS SECTION ON DRAWING C-4C.
 - SEE DRAWING C-4C FOR COMMUNITY MAILBOX GRADING PLAN.
 - CONTRACTOR SHALL ENSURE TOB ELEVATION OF 22.0 OR HIGHER IS ACHIEVED AROUND ENTIRE EXISTING POND. REGRADE/RESOD AS NECESSARY.
 - PROVIDE MINIMUM 4'x4' FLAT AREA AT TOE OF MES. PROVIDE GRASSED SWALE WITH CONSTANT SLOPE BETWEEN SPOT ELEVATIONS. SEE SECTION FOR DETAIL.
 - ENSURE SIDEWALK AT EXISTING STABILIZED DRIVE IS FLUSH WITH GRADE.

Approved For Construction

SEP 16 2016
City of Palm Bay



REVISION	DATE	DESCRIPTION
1	8/21/17	CITY AND BREVARD COUNTY COMMENTS
5	12/19/18	TRAFFIC UPDATE
6	4/24/19	CLIENT CHANGES

2651 you grade ltd. suite a
maitland, fl 32753
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license #000897

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consulting engineers

CHAPARRAL SUBDIVISION-PHASE 1A
CHAPARRAL PROPERTIES, LLC
MALABAR ROAD AND WISTERIA AVENUE NW PALM BAY, FLORIDA

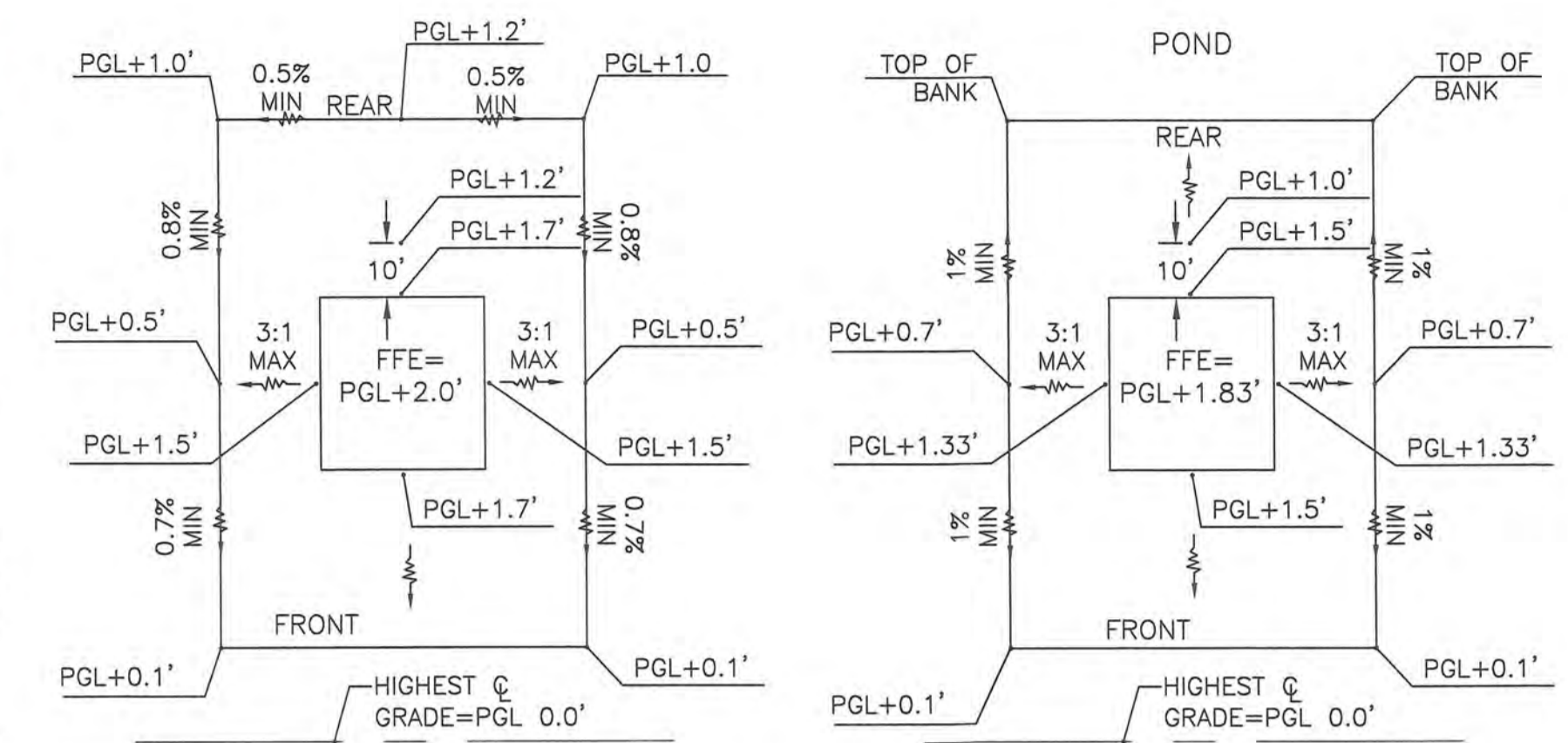
DRAWING TITLE
GRADING AND DRAINAGE PLAN

DATE: 4-28-17
SCALE: 1"=50'
PROJ. NO.: 160455
DESIGNED BY: JRT
DRAWN BY: SMB
CHECKED BY: JTW
DRAWING NO.: C-4A

MATCHLINE A-A SEE DRAWING C-4A

NOTES:

- 2-1. SEE DRAWING C-4C FOR STORM STRUCTURE TABLE.
- 2-2. SEE TYPICAL POND CROSS SECTION ON DRAWING C-4C.
- 2-3. CONTRACTOR TO VERIFY PIPE AND INLET INVERTS AND CONDITION. REPAIR AND REPLACE AS NEEDED.
- 2-4. PROVIDE STABILIZED SWALE WITH MAXIMUM 4:1 SIDE SLOPES. DIRECT RUNOFF TO ON-SITE STORM POND.
- 2-5. MODIFY EXISTING OUTFALL STRUCTURE TO MATCH OVERFLOW WEIR DETAIL. SEE TYPICAL DETAILS.



LOT LAYOUT "A"

LOT LAYOUT "B"

NOTES:

- 1. EXCEPT AT DOORWAYS AND ATTACHED PATIOS, FINISHED GRADE ADJACENT TO HOUSE SHALL BE 6" BELOW FFE PER THIS DETAIL.
- 2. ALL LOT GRADING SHALL COMPLY WITH FLORIDA BUILDING CODE SECTION R401.3 DRAINAGE. GRADE SHALL FALL A MINIMUM OF 6" WITHIN THE FIRST 10'.
- 3. THIS DETAIL IS FOR GENERAL GRADING INFORMATION. SPOT ELEVATIONS IN CROSS SECTIONS SHALL DICTATE ON GRADING AND DRAINAGE SHEETS IF THEY VARY FROM THIS DETAIL.
- 4. ABOVE CALCULATIONS ARE BASED ON A TYPICAL 50'x125' LOT.
- 5. PROFILE GRADE LINE (PGL) OR CENTERLINE OF ROAD.

TYPICAL LOT LAYOUT DETAIL
NTS

GRADING AND DRAINAGE PLAN

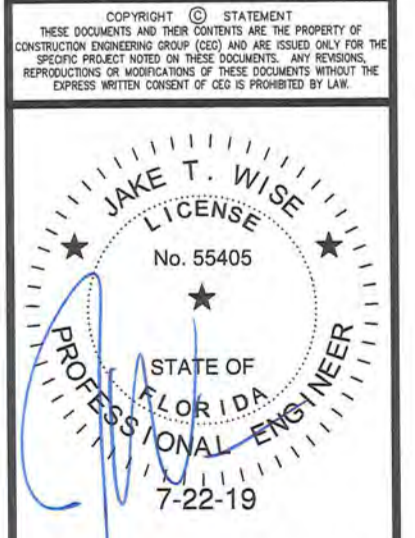
1"=50'

REV#	DATE	REVISION
6	4/24/19	CLIENT CHANGES

2651 Cox public Blvd. Suite 10
Melbourne, FL 32935
Tel: 321.253.1221
Fax: 321.253.1223
www.cegroupinc.com
license #000897

CONSTRUCTION ENGINEERING GROUP
consulting engineers

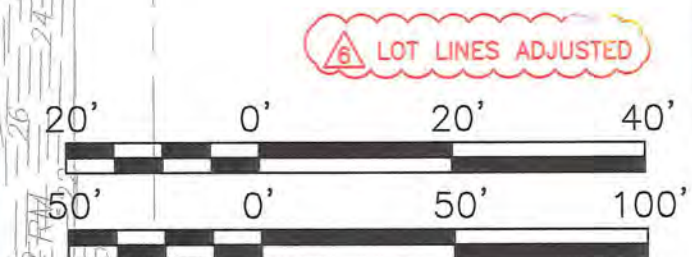
CHAPARRAL SUBDIVISION-PHASE 1A
CHAPARRAL PROPERTIES, LLC
MALABAR ROAD AND WISTERIA AVENUE NW PALM BAY, FLORIDA
DRAWING TITLE
GRADING AND DRAINAGE PLAN

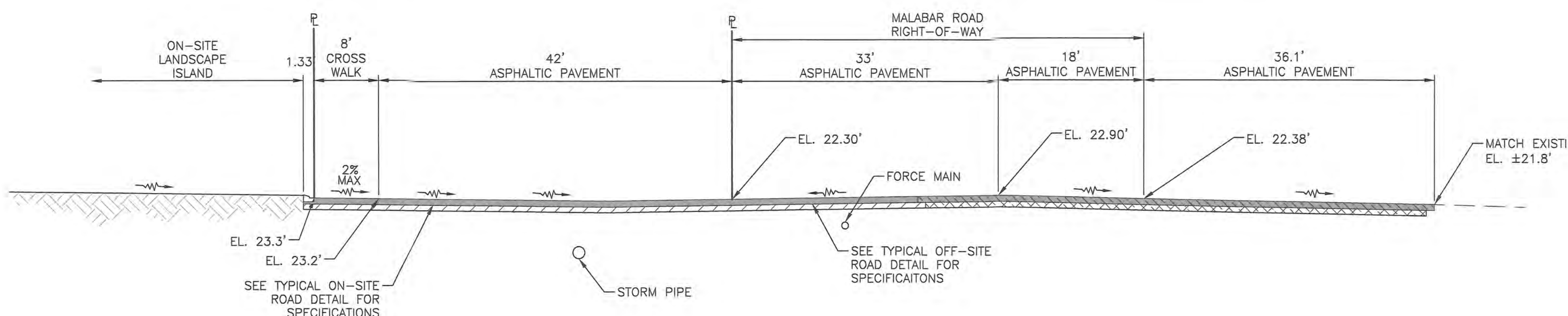


Approved For Construction

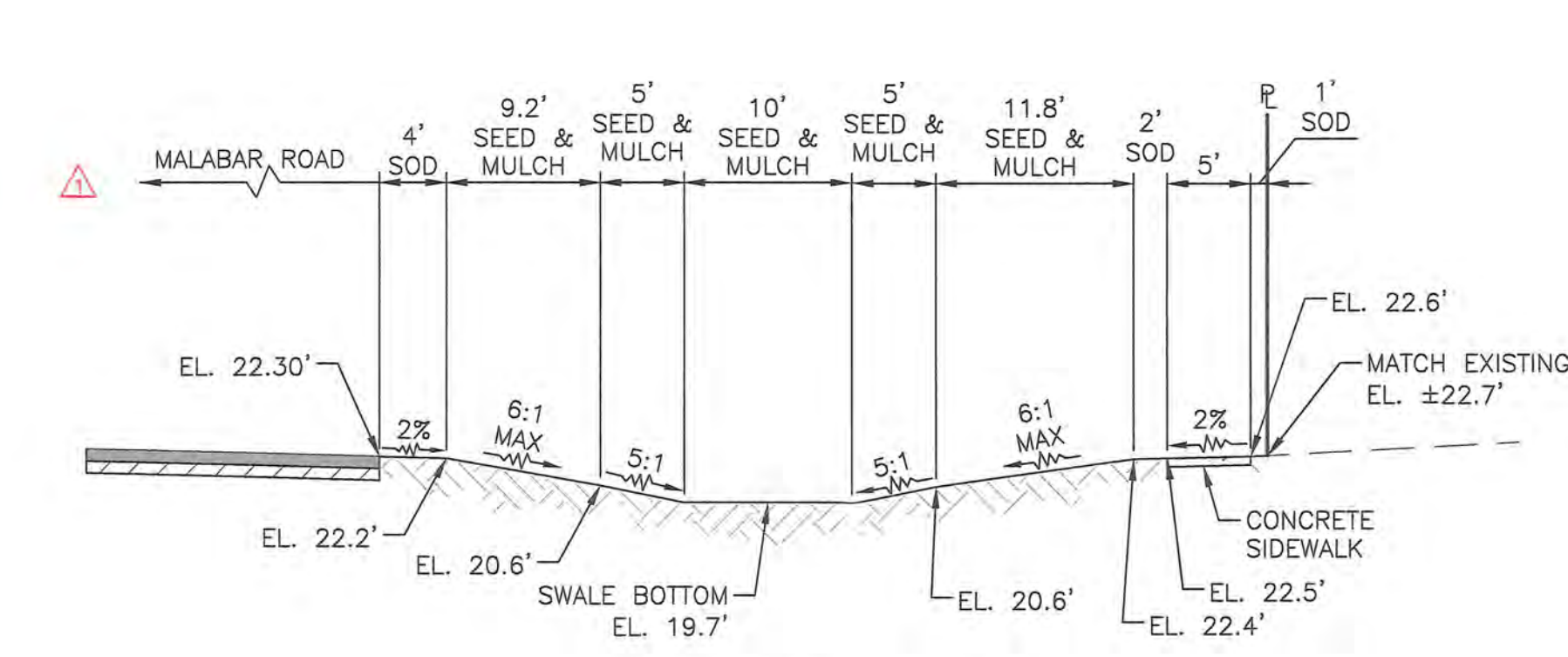
SEP 16 AM
City of Palm Bay

DATE	4-28-17
SCALE	PER PLAN
PROJ. NO.:	160455
DESIGNED BY:	JRT
DRAWN BY:	SMB
CHECKED BY:	JTW
DRAWING NO.	C-4B

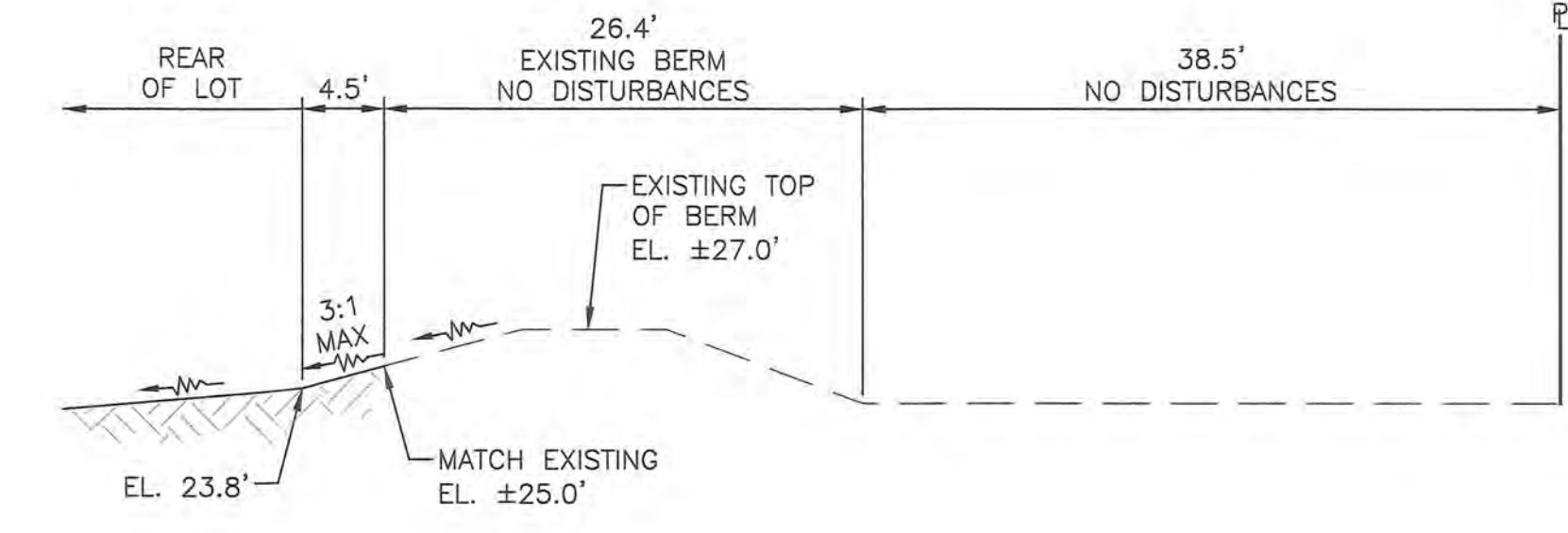




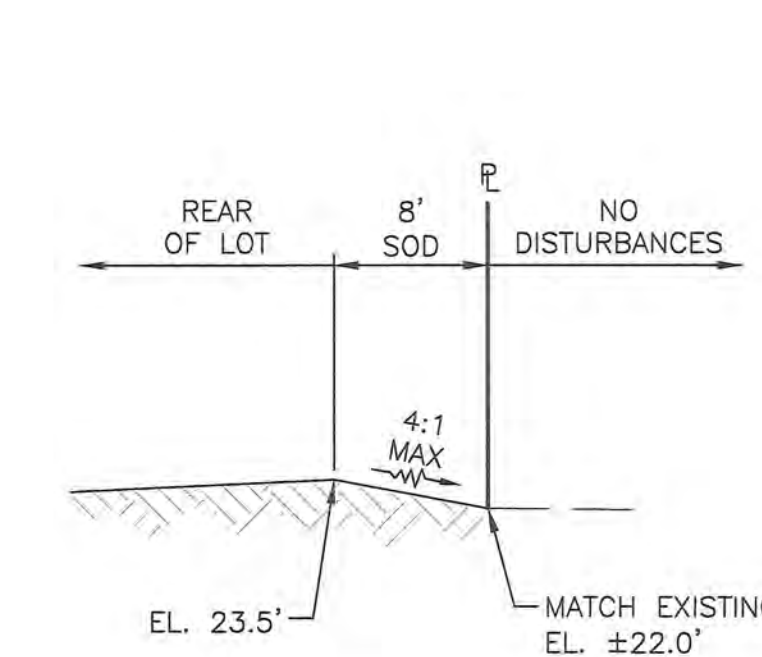
SECTION A
NTS C-4A|C-4C



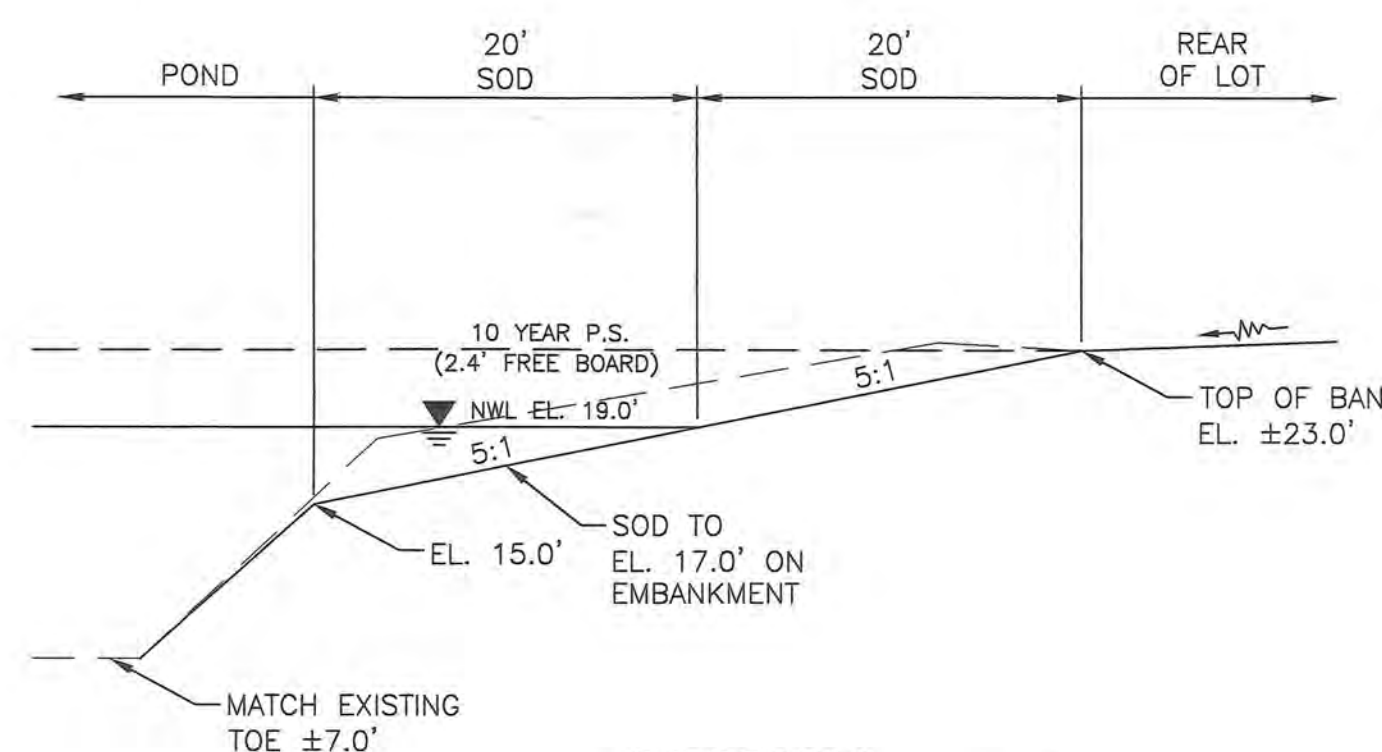
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NTS C-4A|C-4C



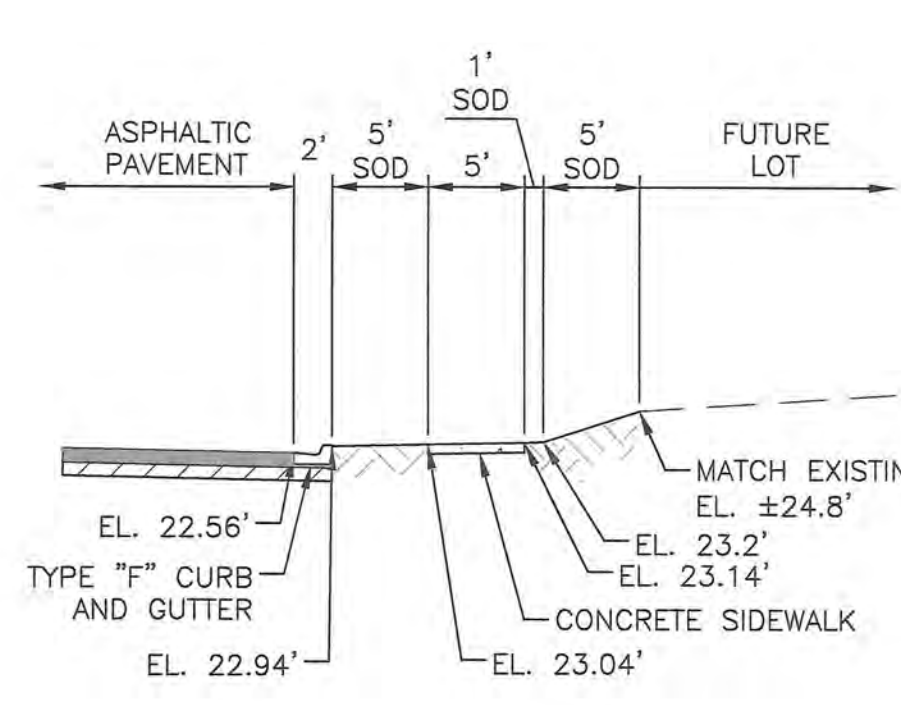
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NTS C-4A|C-4C



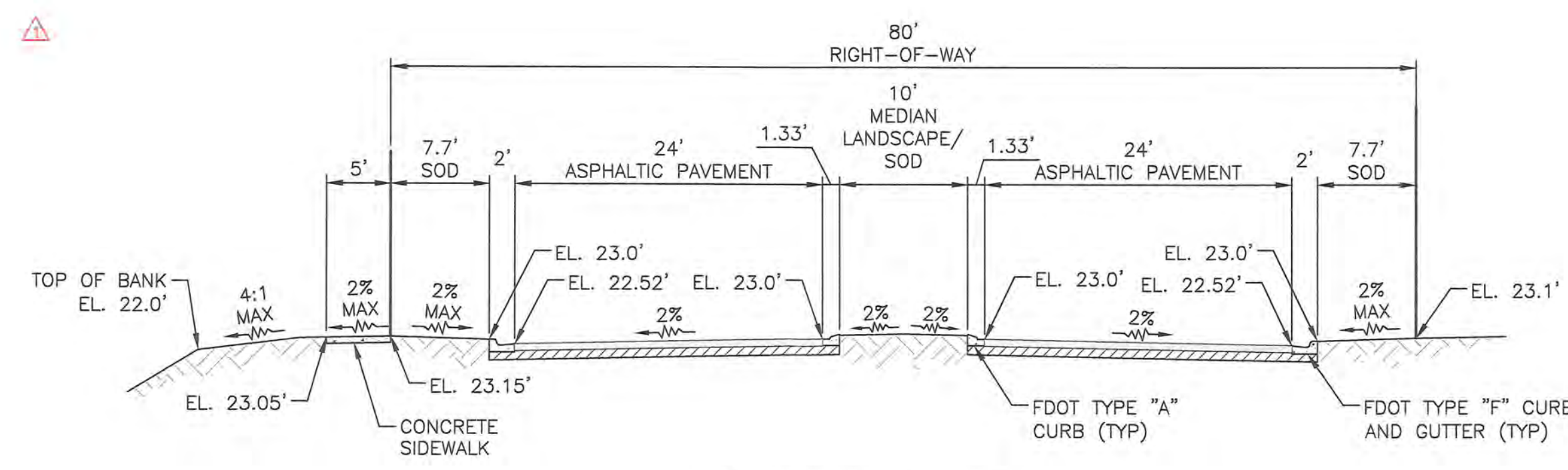
SECTION D
NTS C-4A|C-4C



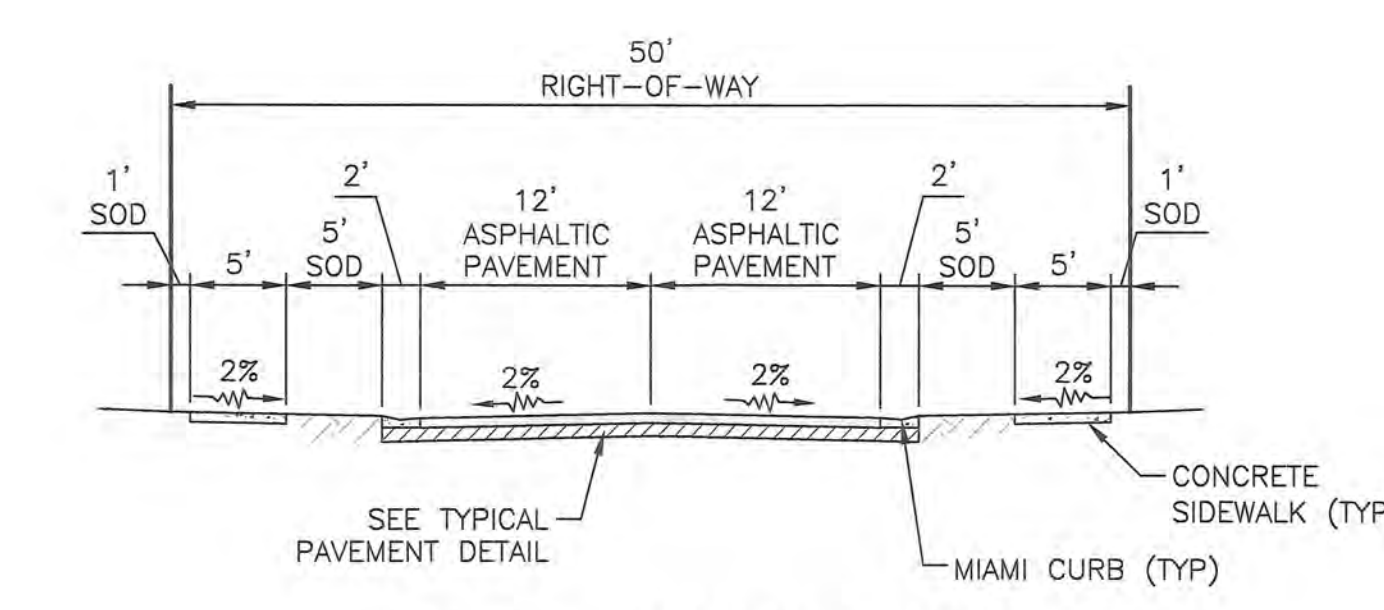
SECTION E
NTS C-4A|C-4C



SECTION F
NTS C-4B|C-4C



SECTION G
NTS C-4A|C-4C

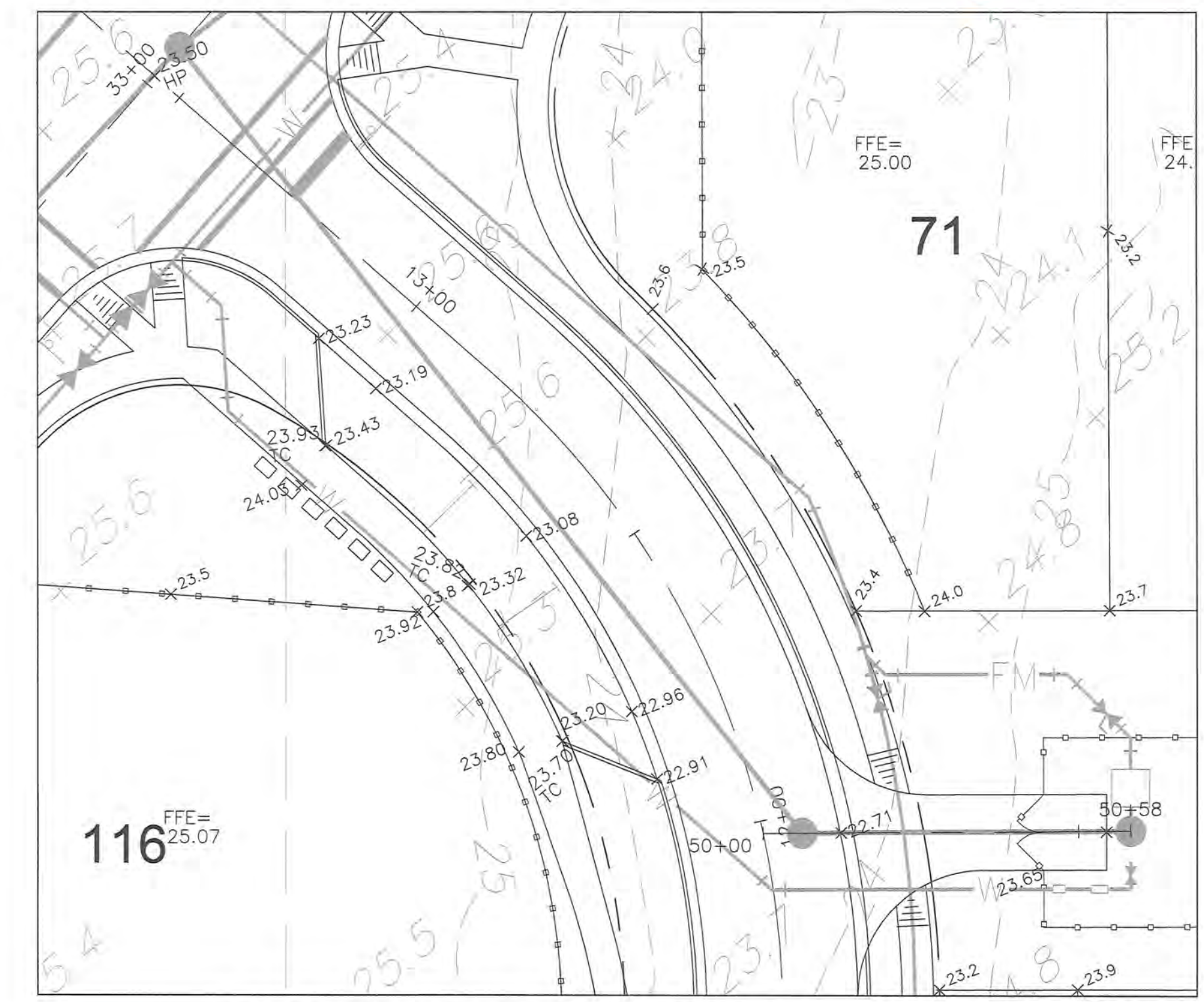


TYPICAL ROAD SECTION
NTS

DRAINAGE STRUCTURE TABLE							
STRUCTURE NO.	DESCRIPTION - FDOT INDEX NO.	TOP ELEVATION	INVERTS	SIZE (INCHES)	PIPE LENGTH (FEET)	DOWNSTREAM STRUCTURE NO.	COMMENT
01	4-210	21.90	N=18.30	24"	24 LF	02	-
02	4-210	21.90	S=18.20 W=18.20	30"	222 LF	03	-
03	J-8-200/201	23.01	E=17.30 W=17.30	30"	64 LF	04	-
04	J-8-200/201	23.28	E=17.00 NW=17.00	30"	101 LF	05	-
05	4-210	21.90	SE=16.75 W=16.30	30"	49 LF	06	-
06	4-210	21.90	E=16.00 W=16.00	30"	63 LF	07	-
07	MES-272	-	E=15.00	-	-	-	-
08	4-210	21.90	W=18.50	18"	41 LF	09	-
09	4-210	21.90	E=18.20 NW=18.00	24"	141 LF	10	-
10	4-210	21.90	SE=16.90 NW=16.90	30"	29 LF	11	-
11	4-210	21.90	SE=16.80 NE=16.80	30"	43 LF	12	-
12	J-8-200/201	22.50	SW=16.40 W=16.40	30"	137 LF	13	-
13	4-210	21.90	E=15.80 NW=12.00	30"	40 LF	14	-
14	4-210	21.90	SE=11.75 W=11.75	36"	152 LF	15	-
15	MES-272	-	E=11.00	-	-	-	-
16	J-8-200/201	25.00	W=18.30	24"	149 LF	17	-
17	4-210	21.90	E=17.30 W=17.30	24"	24 LF	18	-
18	4-210	21.90	E=17.10 SW=17.10	30"	58 LF	19	-
19	J-8-200/201	23.00	NE=16.80 W=16.80	30"	128 LF	20	-
20	4-210	21.90	E=16.00 W=14.00	30"	30 LF	21	-
21	4-210	21.90	E=13.80 W=13.80	36"	161 LF	22	-
22	MES-272	-	E=13.00	-	-	-	-
23	MES-272	-	E=19.80	14"x23"	184 LF	24	CLASS V RCP
24	MES-272	-	W=19.80	-	-	-	-
25	J-8-200/201	22.50	W=10.00	48"	40 LF	26	-
26	MES-272	-	E=10.00	-	-	-	-

- STORM DRAIN STRUCTURE NOTES:**
1. ALL STRUCTURES SHALL BE MINIMUM 6" DEEPER THAN LOWEST PIPE INVERT.
 2. ALL GRATES SHALL BE GALVANIZED STEEL WITH H-20 LOADING.
 3. TOP ELEVATION OF TYPE 4 INLET IS MIAMI CURB GUTTER ELEVATION.
 4. PROVIDE ADEQUATE BOX SIZE AT BASE OF TYPE 4 INLETS AND TYPE J-8 MANHOLES FOR PIPE SIZES PER THIS PLAN.
 5. ALL PIPING SHALL BE RCP. ADS N-12 PIPING IS AN ACCEPTABLE ALTERNATIVE ON-SITE WITH WATERTIGHT JOINTS IF MINIMUM 2' OF COVER IS PROVIDED UNLESS COMMENTS SPECIFY RCP.
 6. ALL PROPOSED ELEVATIONS ARE REFERENCED IN NGVD. LOWER ELEVATIONS BY 1.4 FOR CONVERSION TO NAVD.

Approved For Construction
City of Palm Bay



COMMUNITY MAILBOX GRADING PLAN
1"=20'

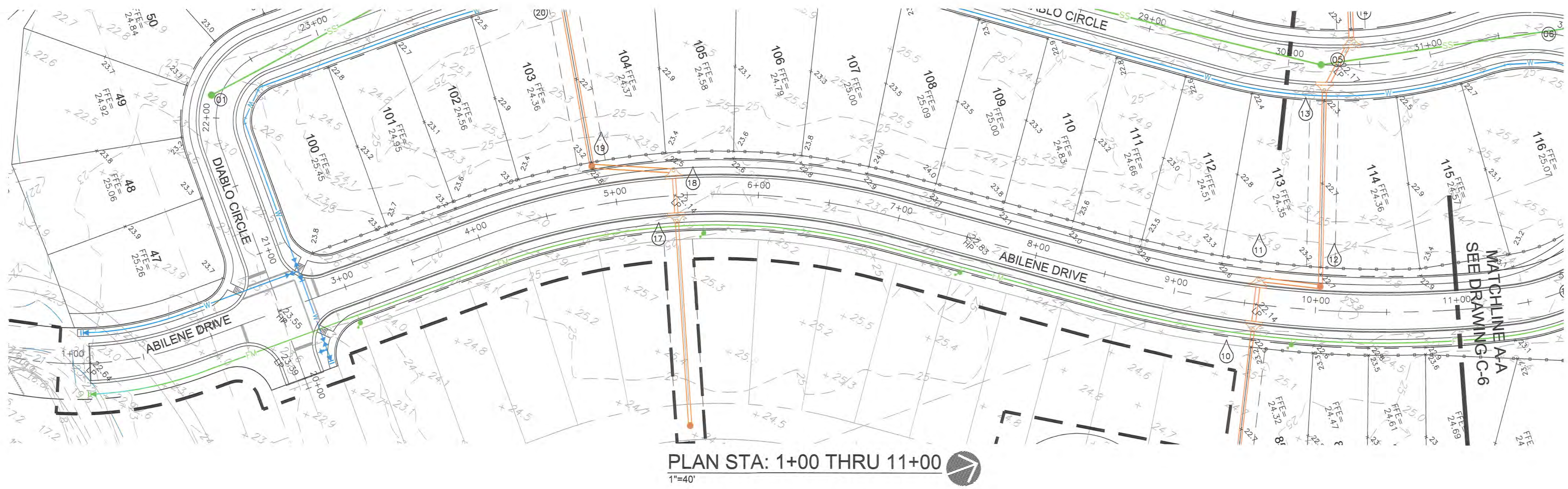
REV#	DATE	DESCRIPTION
1	8/21/17	CITY AND BREVARD COUNTY COMMENTS
4	5/31/18	SURVIMD COMMENTS
6	4/24/19	CLIENT CHANGES

CHAPARRAL SUBDIVISION-PHASE 1A
CHAPARRAL PROPERTIES, LLC
MALABAR ROAD AND WISTERIA AVENUE NW PALM BAY, FLORIDA
DRAWING TITLE
GRADING AND DRAINAGE DETAILS

Professional Engineer Seal: MAKE T. WISE LICENSE No. 55405 STATE OF FLORIDA PROFESSIONAL ENGINEER 7-22-19

DATE: 4-28-17
SCALE: PER PLAN
PROJ. NO.: 160455
DESIGNED BY: JRT
DRAWN BY: SMB
CHECKED BY: JTW
DRAWING NO.: C-4C

LOT LINES ADJUSTED

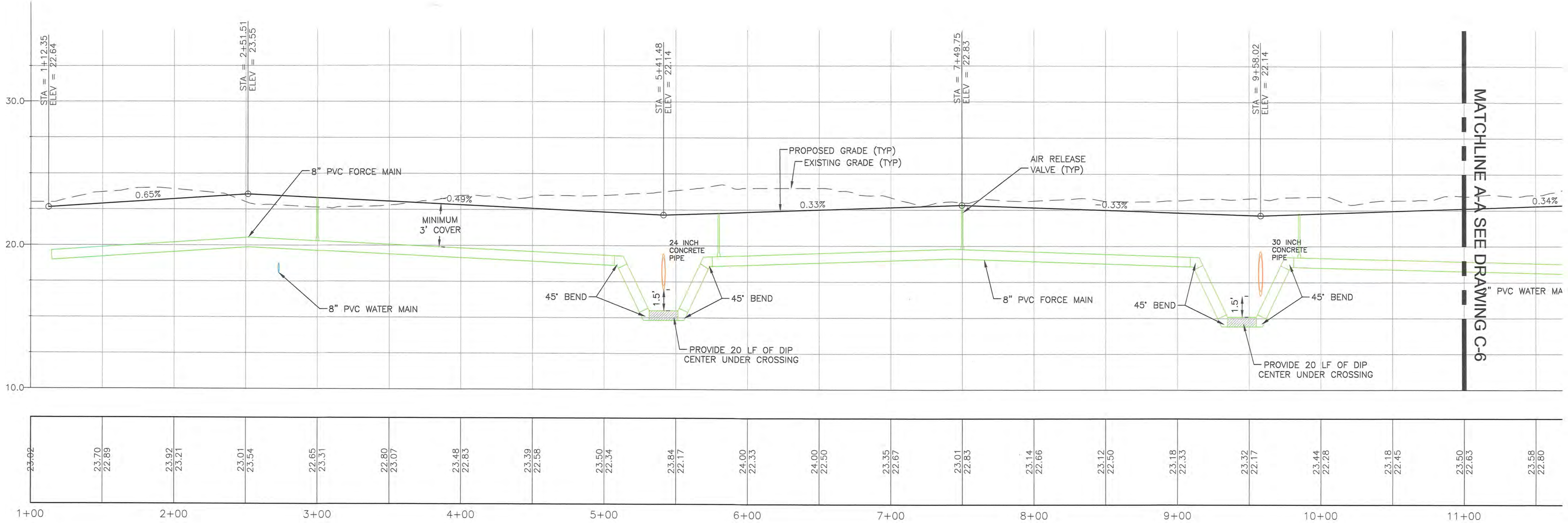


PLAN STA: 1+00 THRU 11+00
1"=40'

811
 KNOW WHAT'S BELOW ALWAYS CALL 811 BEFORE YOU DIG
 It's fast, it's free, it's the law.
 Call 811 two business days before digging

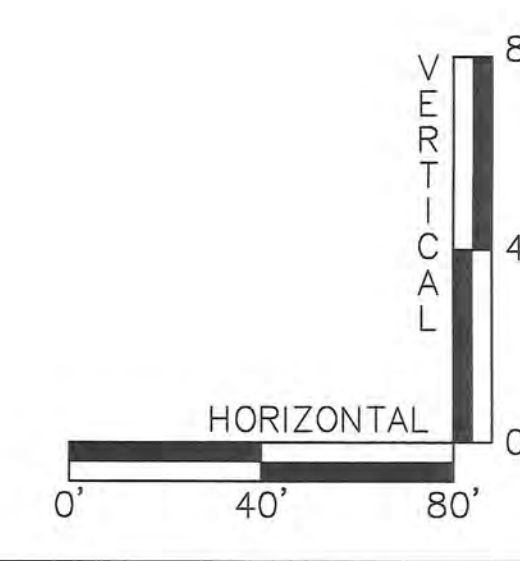
CONSTRUCTION ENGINEERING GROUP
 consulting engineers
 2351 east gable Blvd, suite 100
 mebourne, FL 32055
 Tel: 321.253.1211
 Fax: 321.253.1212
 www.congengr.com
 License #000997

CHAPARRAL SUBDIVISION-PHASE 1A
 CHAPARRAL PROPERTIES, LLC
 MALABAR ROAD AND WISTERIA AVENUE NW PALM BAY, FLORIDA
 DRAWING TITLE
PLAN AND PROFILE STA: 1+00 THRU 11+00

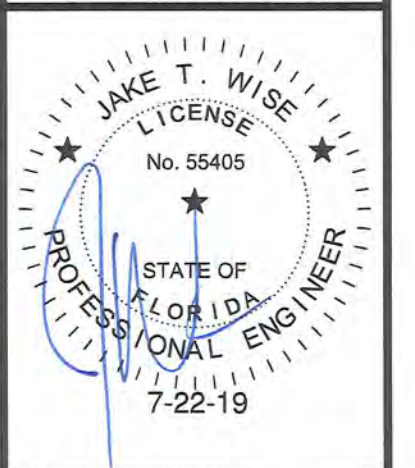


PROFILE STA: 1+00 THRU 11+00
H: 1"=40' V: 1"=4'

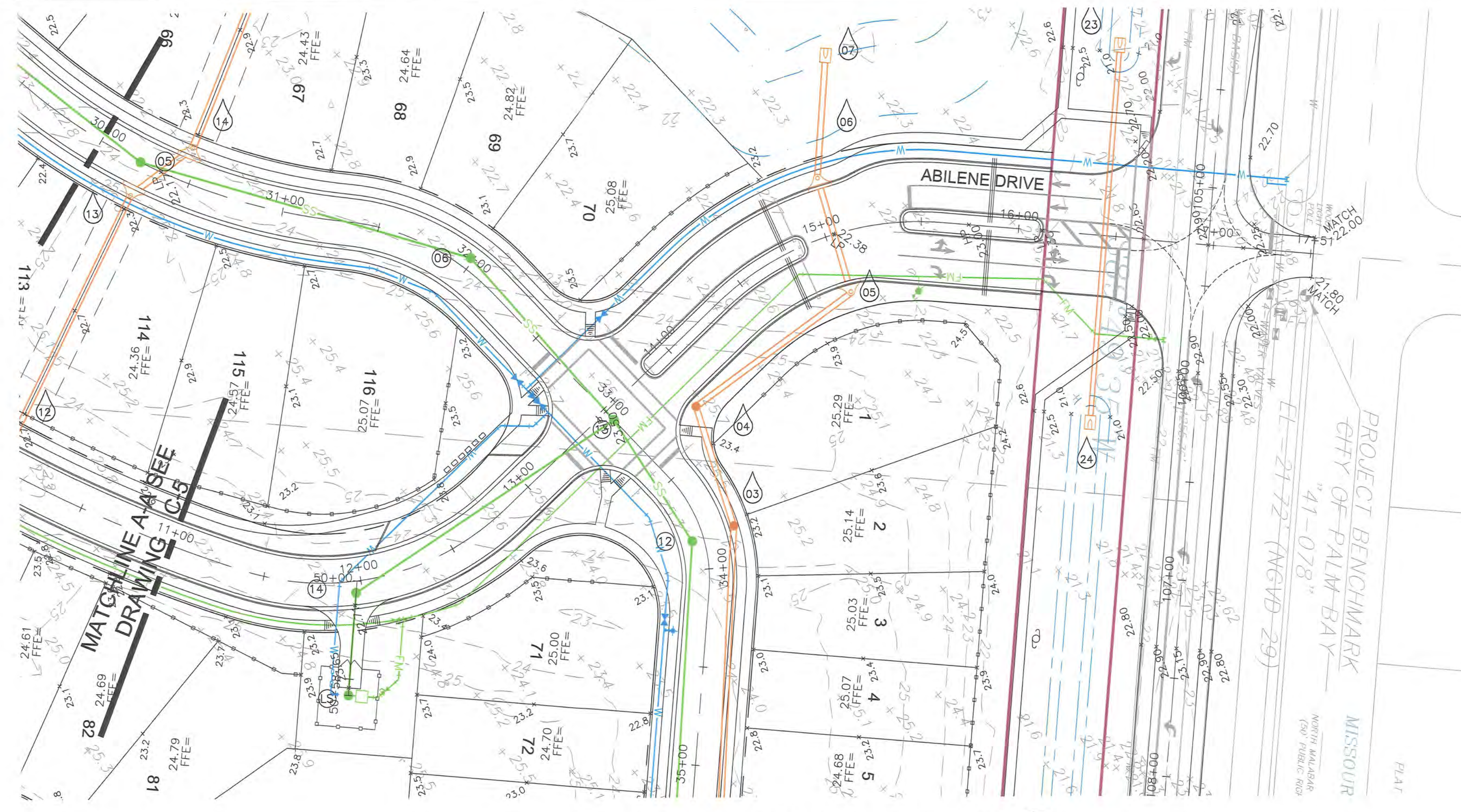
Approved For Construction
 SEP 18 2017
 City of Palm Bay



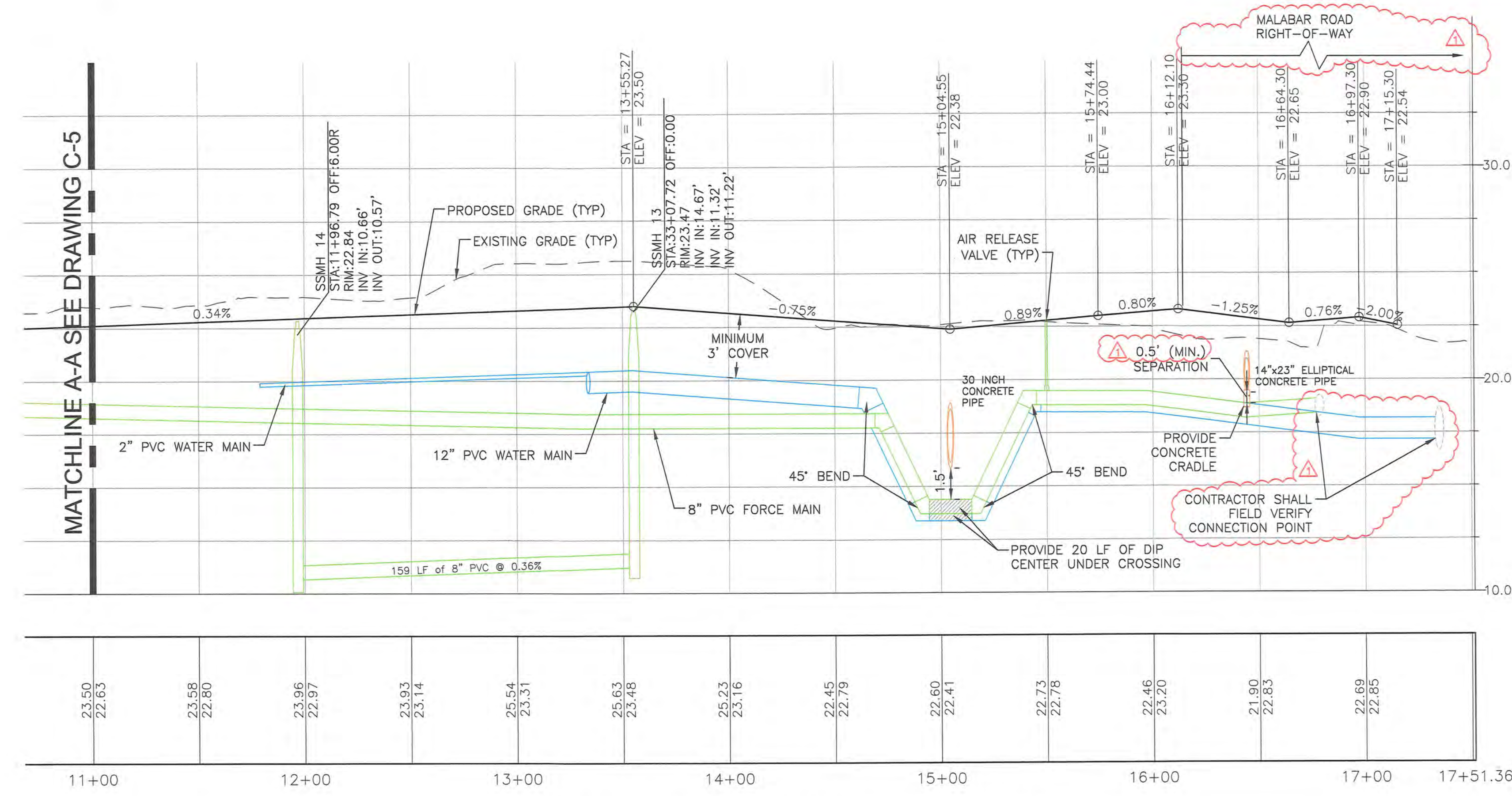
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PROJ. NO.:	160455
DESIGNED BY:	JRT
DRAWN BY:	SMB
CHECKED BY:	JTW
DRAWING NO.	C-5



PLAN STA: 11+00 THRU 17+51.30
1"=40'



PROFILE STA: 11+00 THRU 17+51.30
H: 1"=40' V: 1"=4'

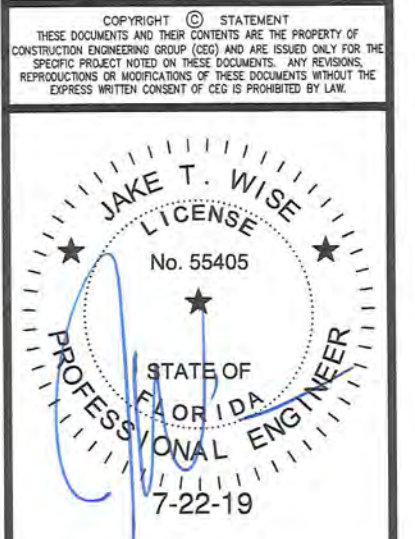
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REV#	DATE	REVISION
1	8/21/17	CITY COMMENTS

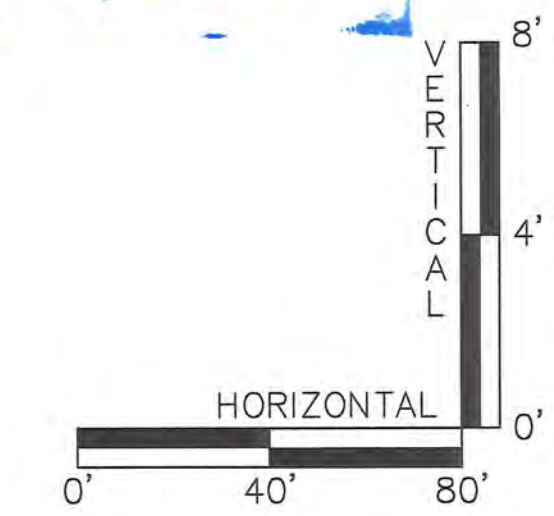
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Melbourne, FL 32935
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consulting engineers

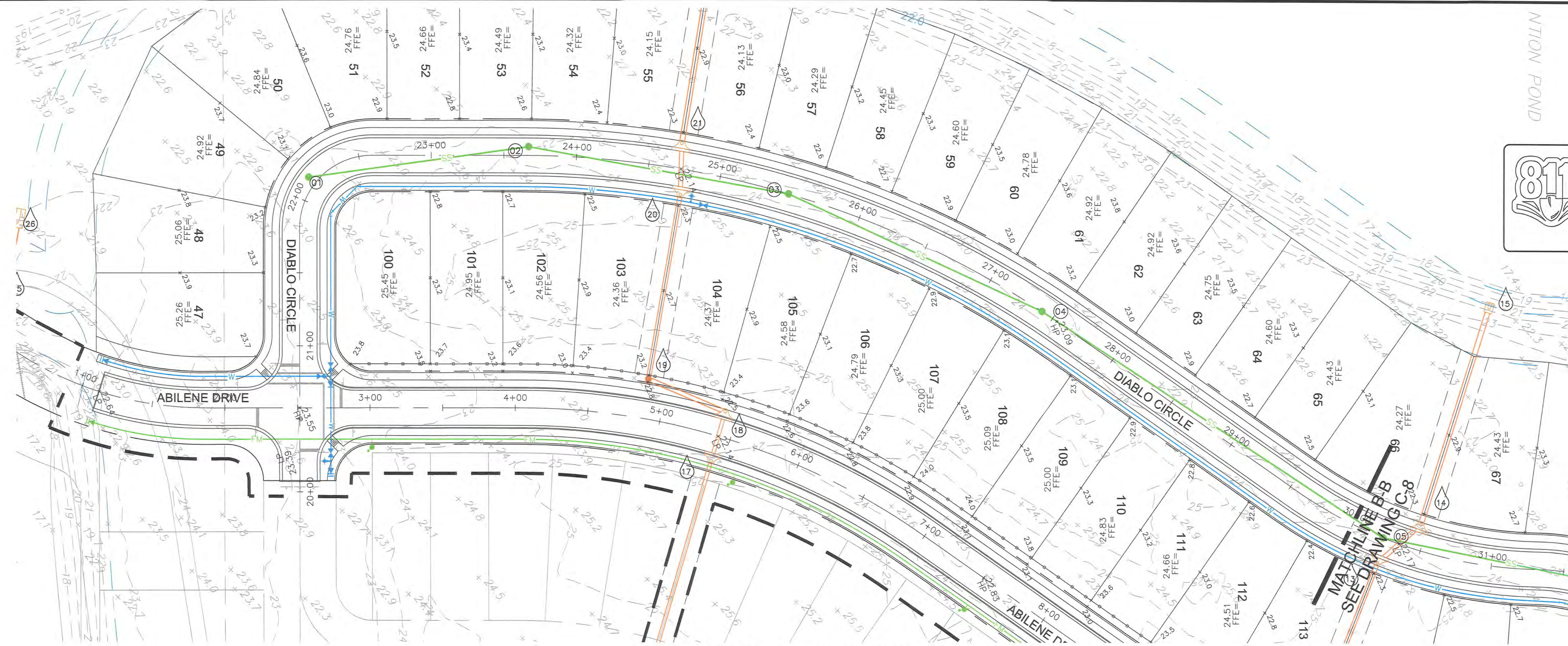
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CHAPARRAL PROPERTIES, LLC
MALABAR ROAD AND WISTERIA AVENUE NW PALM BAY, FLORIDA
DRAWING TITLE
PLAN AND PROFILE STA: 11+00 THRU 17+51.30



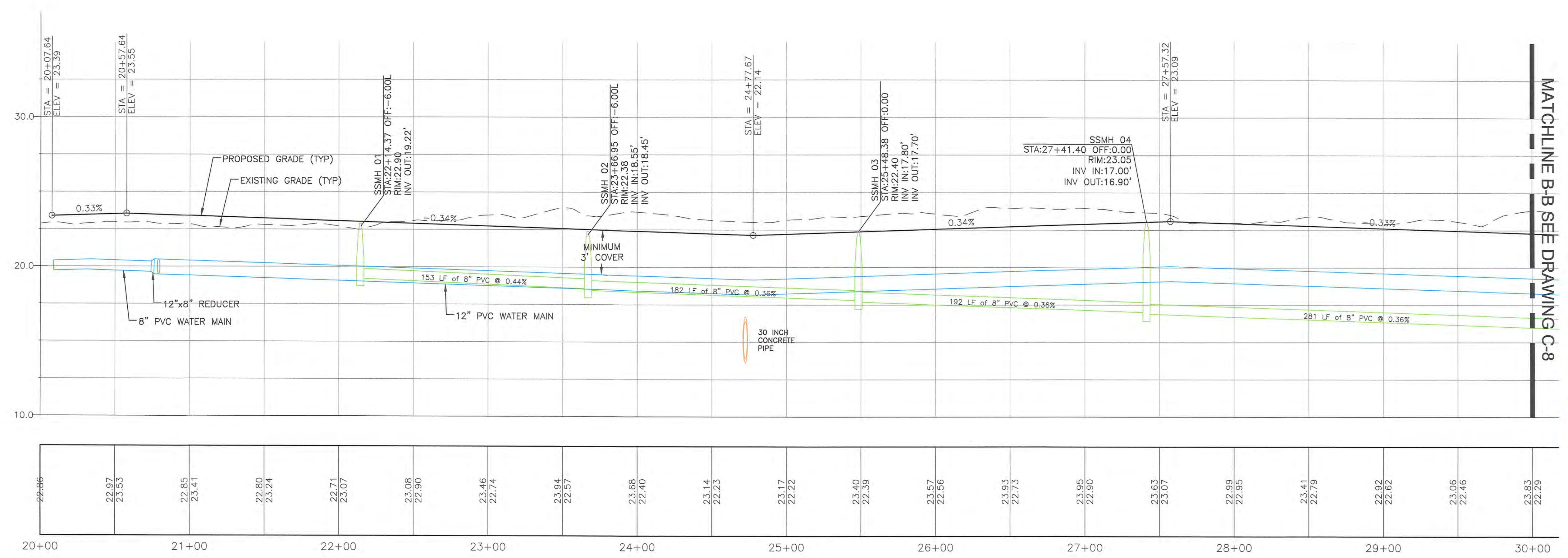
Approved For Construction
SEP 16 2017
City of Palm Bay



DATE	4-28-17
SCALE	H: 1"=40' V: 1"=4'
PROJ. NO.:	160455
DESIGNED BY:	JRT
DRAWN BY:	SMB
CHECKED BY:	JTW
DRAWING NO.	C-6



PLAN STA: 20+00 THRU 30+00
1"=40'



PROFILE STA: 20+00 THRU 30+00
H: 1"=40' V: 1"=4'

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REVISION
DATE
REV#

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license: 10008077

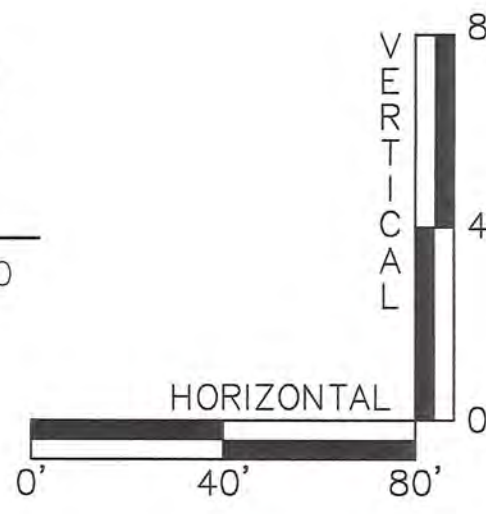
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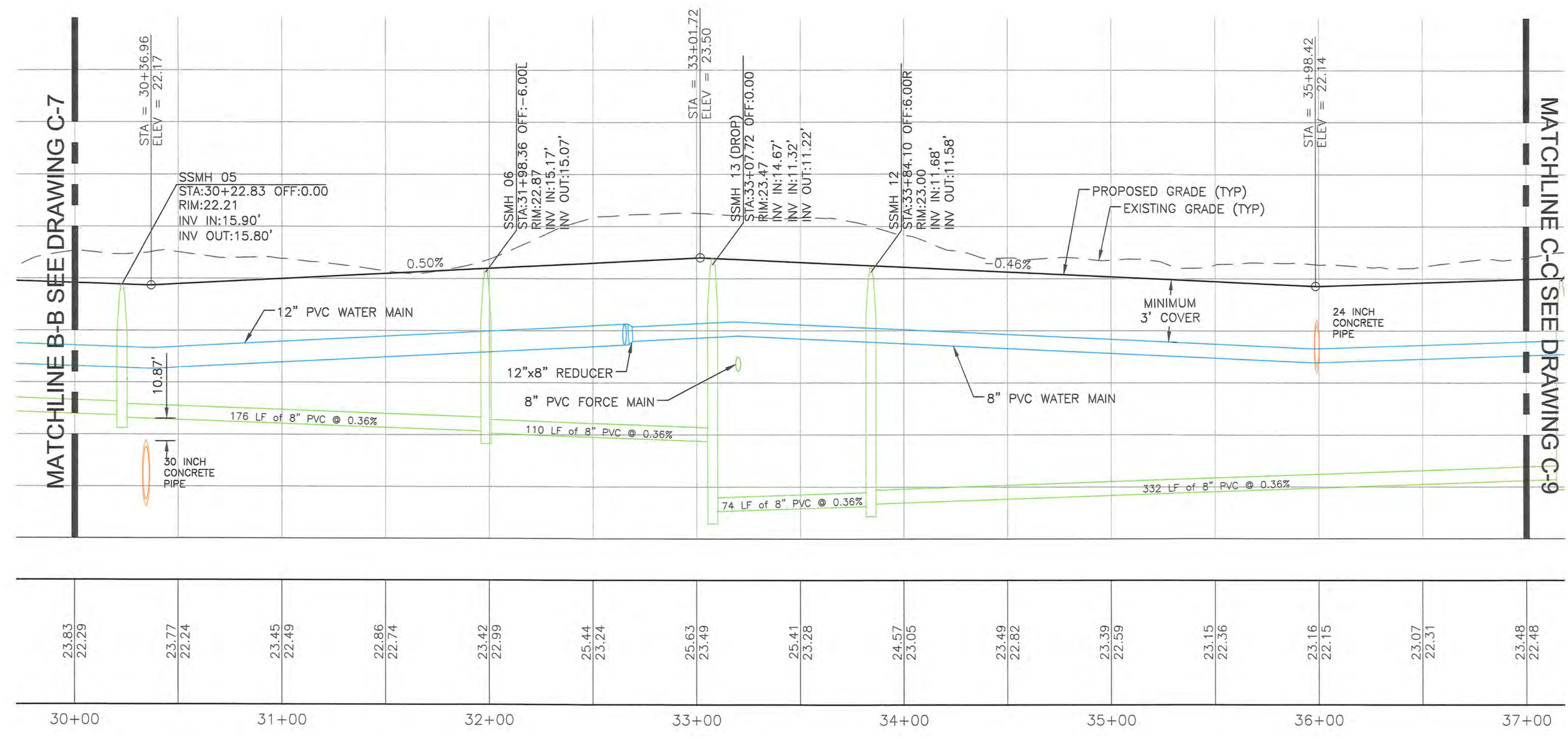
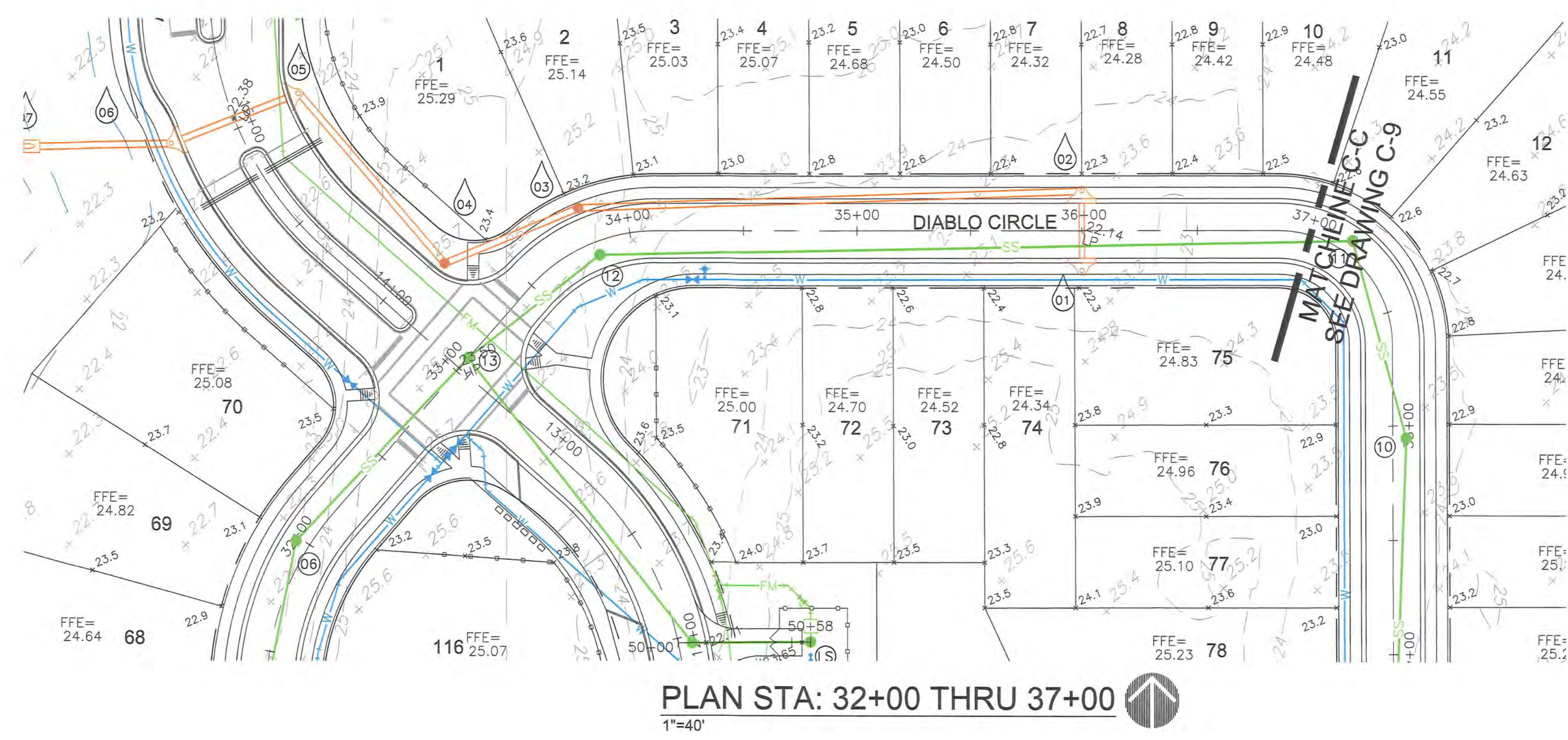
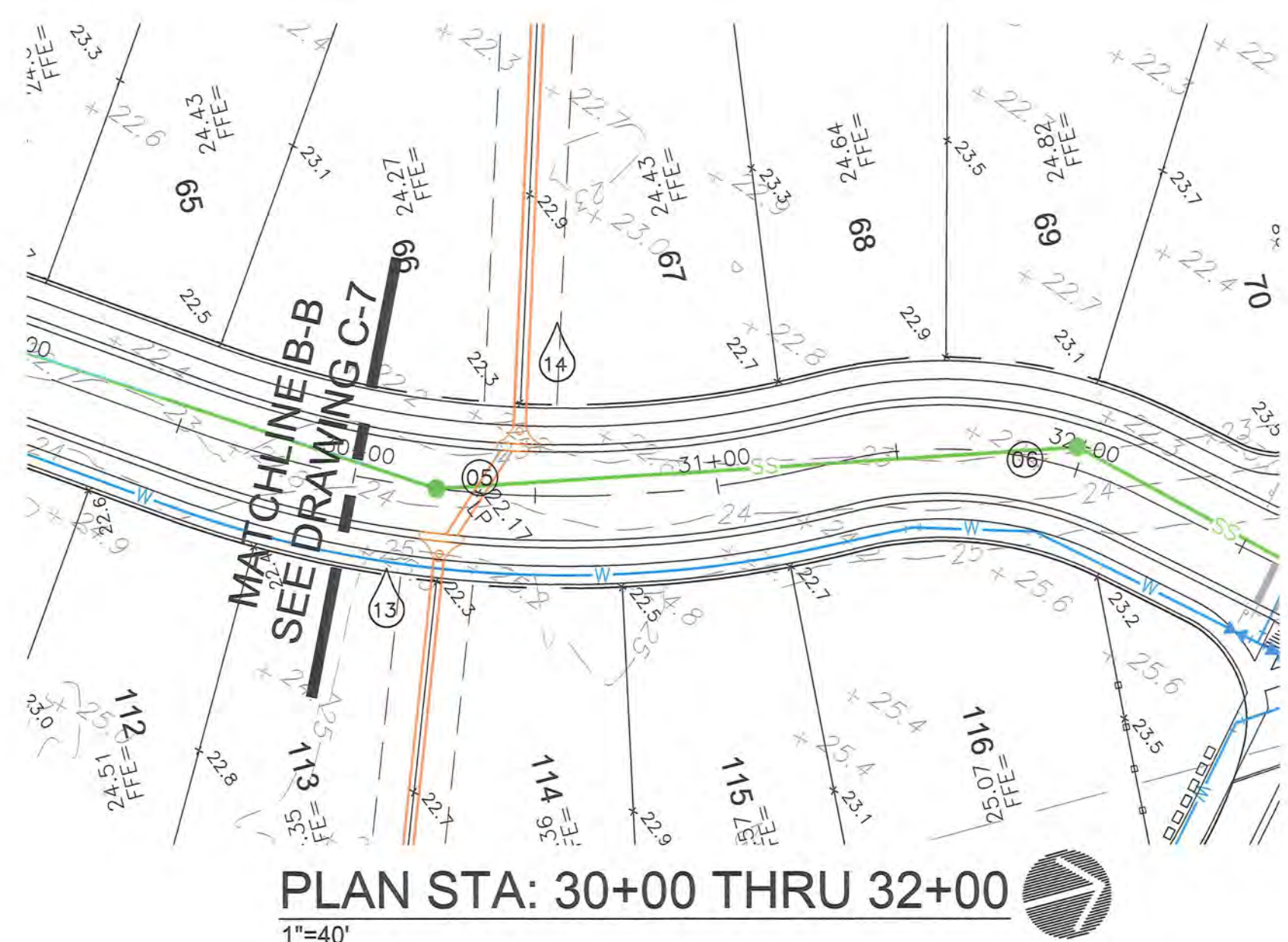
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CHAPARRAL PROPERTIES, LLC
MALABAR ROAD AND WISTERIA AVENUE NW PALM BAY, FLORIDA
DRAWING TITLE
PLAN AND PROFILE STA: 20+00 THRU 30+00

STATE OF FLORIDA
LICENSED PROFESSIONAL ENGINEER
No. 55405
JAKE T. WISE
7-22-19

Approved For Construction
SEP 16 2017
City of Palm Bay

DATE: 4-28-17
SCALE: H: 1"=40' V: 1"=4'
PROJ. NO.: 160455
DESIGNED BY: JRT
DRAWN BY: SMB
CHECKED BY: JTW
DRAWING NO.: C-7





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SEP 16 2016
City of Palm Bay
VERTICAL
8'
4'
0'
HORIZONTAL
0' 40' 80'

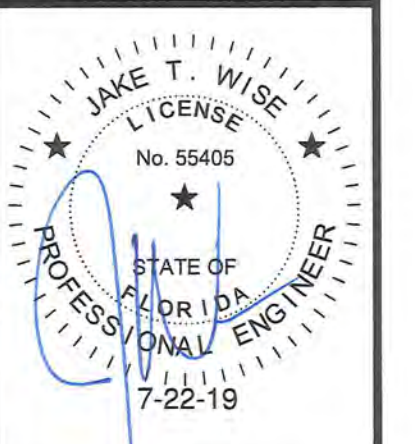
REV#	DATE	REVISION

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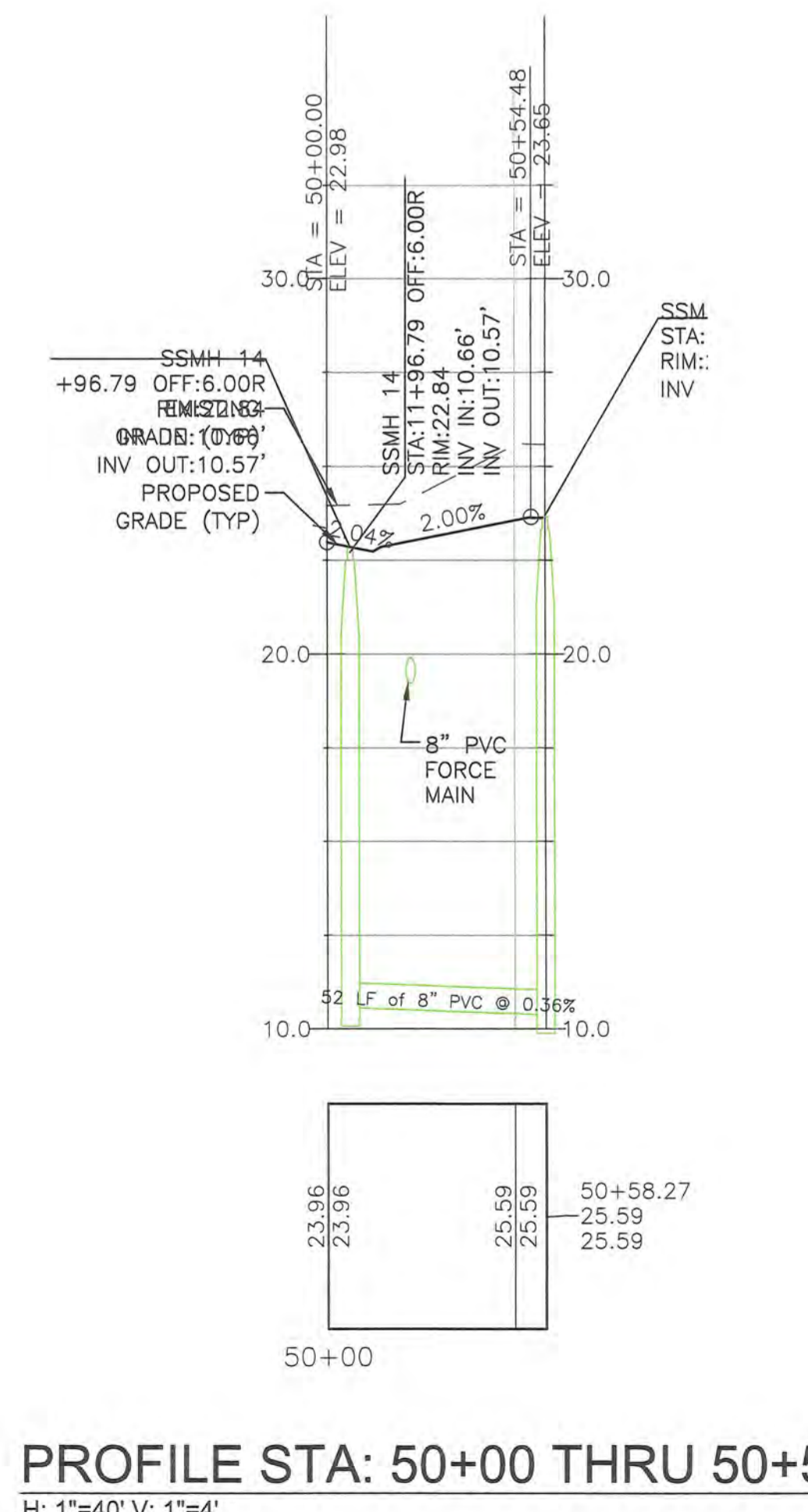
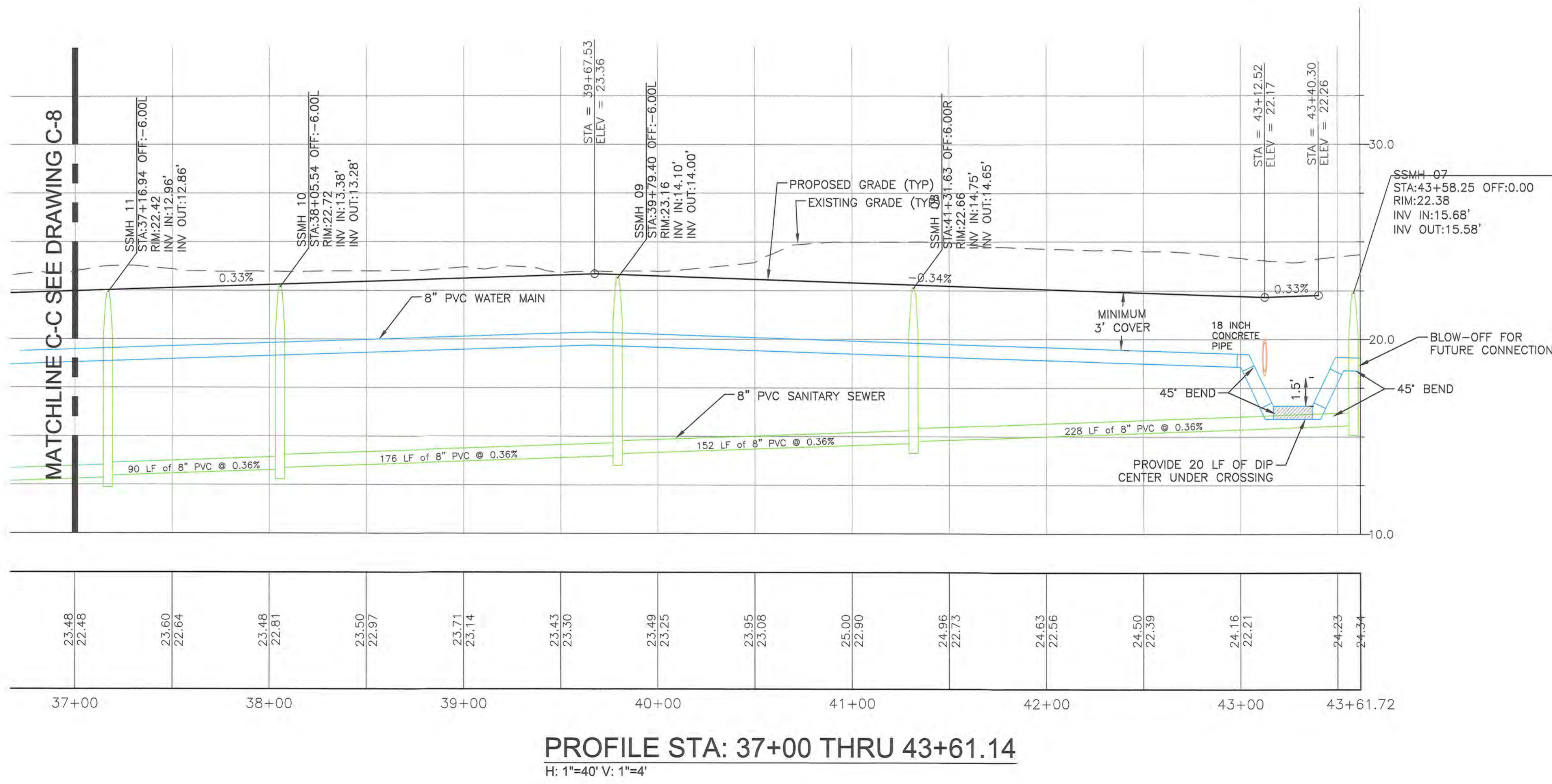
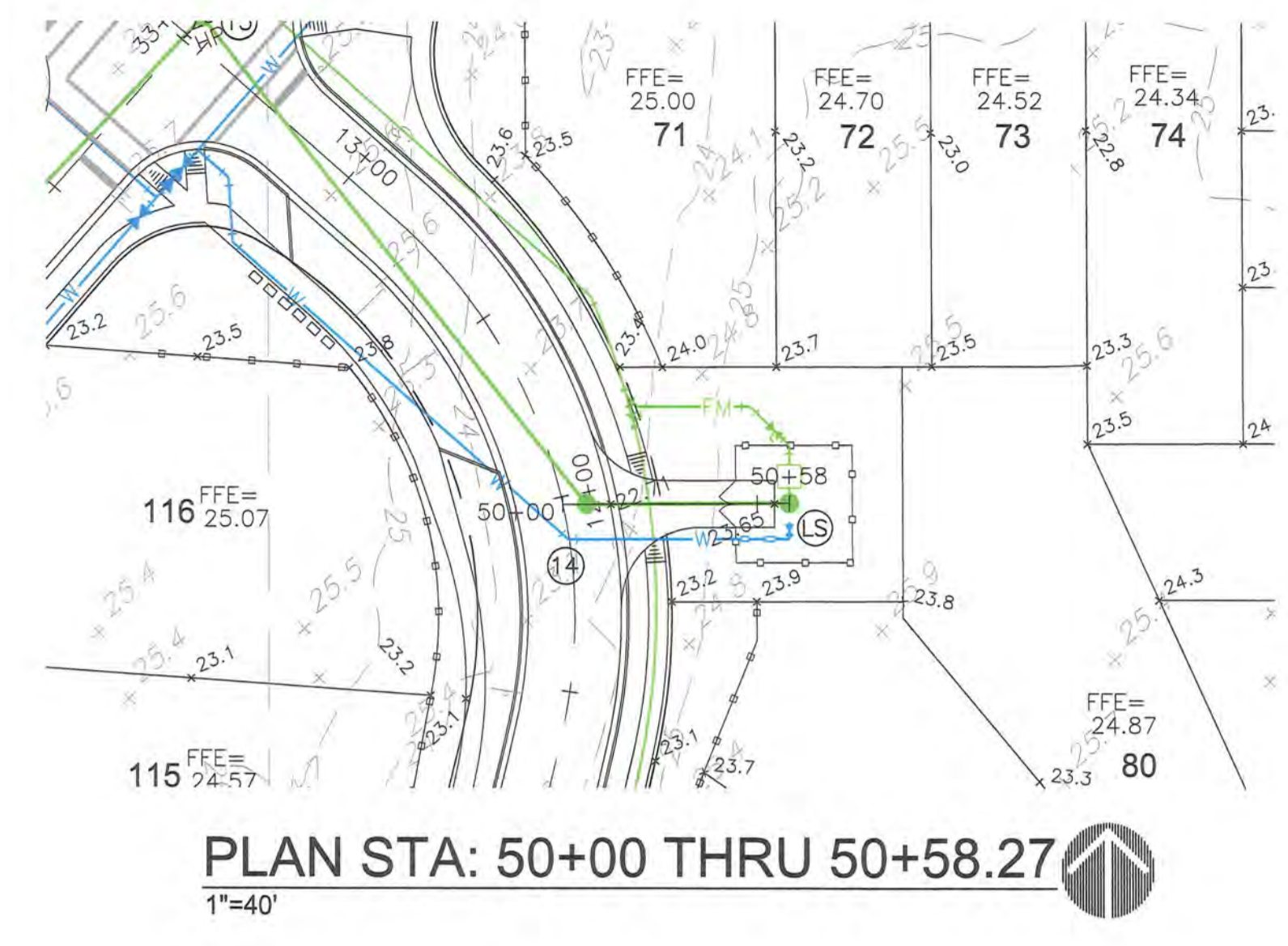
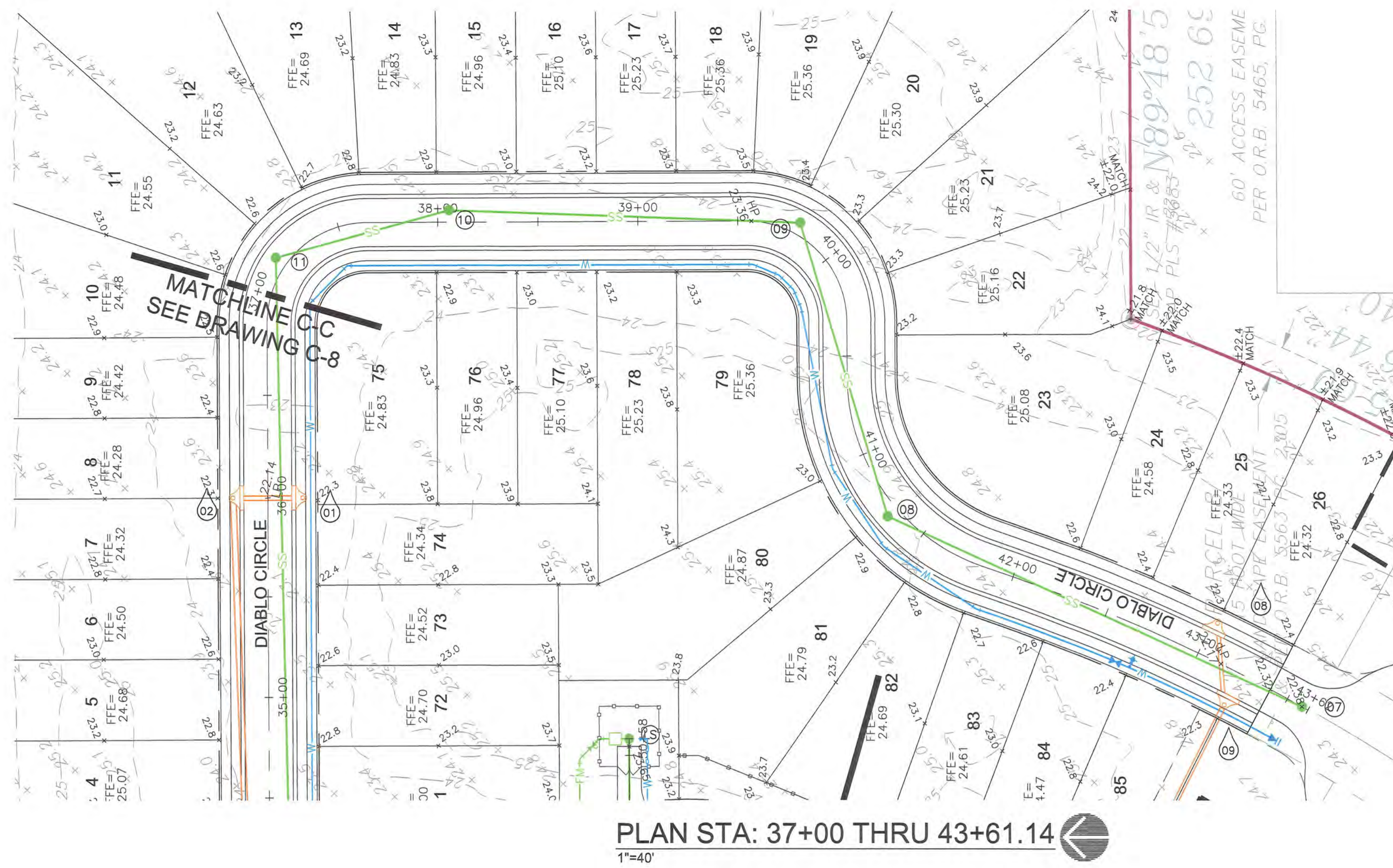
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City of Palm Bay
SEP 18 2018
VERTICAL
HORIZONTAL
0' 40' 80'

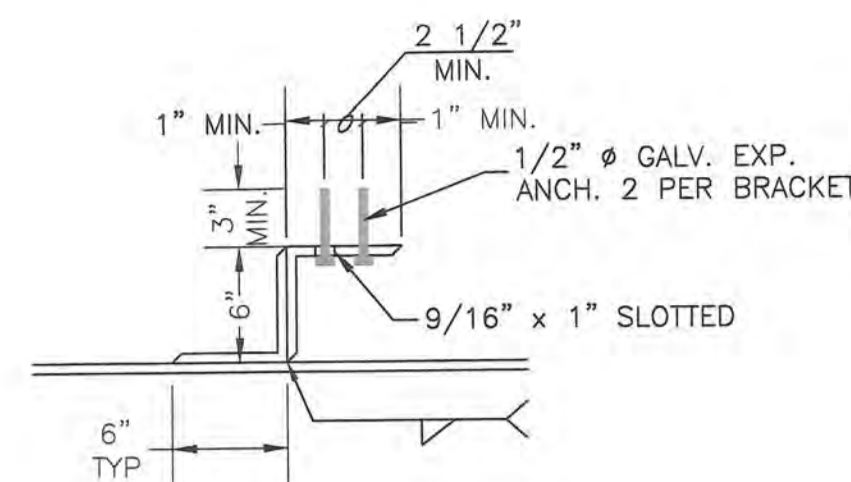
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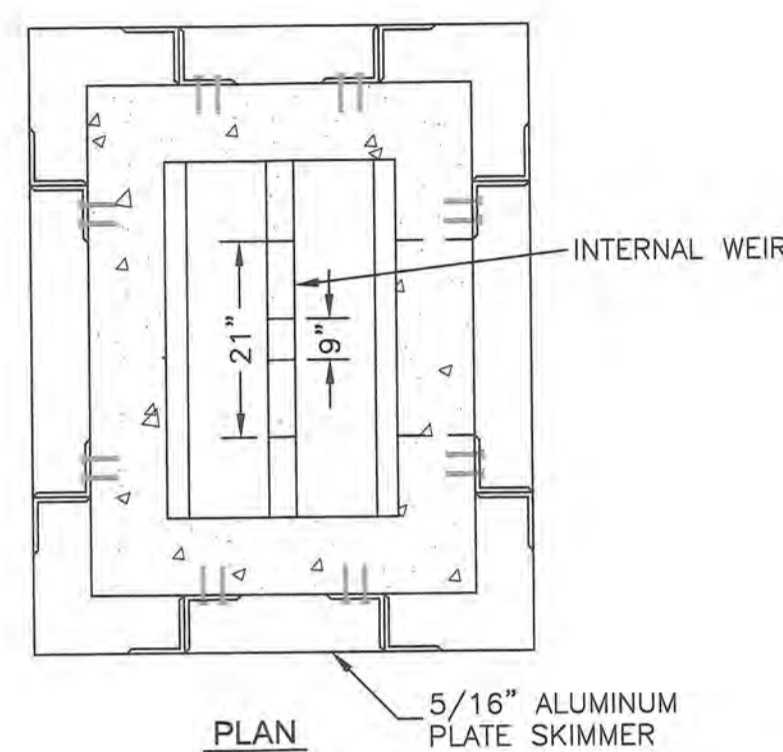
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DRAWING TITLE
PLAN AND PROFILE STA: 37+00 THRU 43+61.14
PLAN AND PROFILE STA: 50+00 THRU 50+58.27

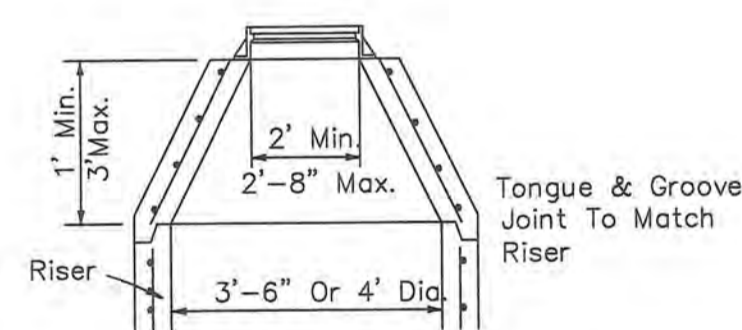
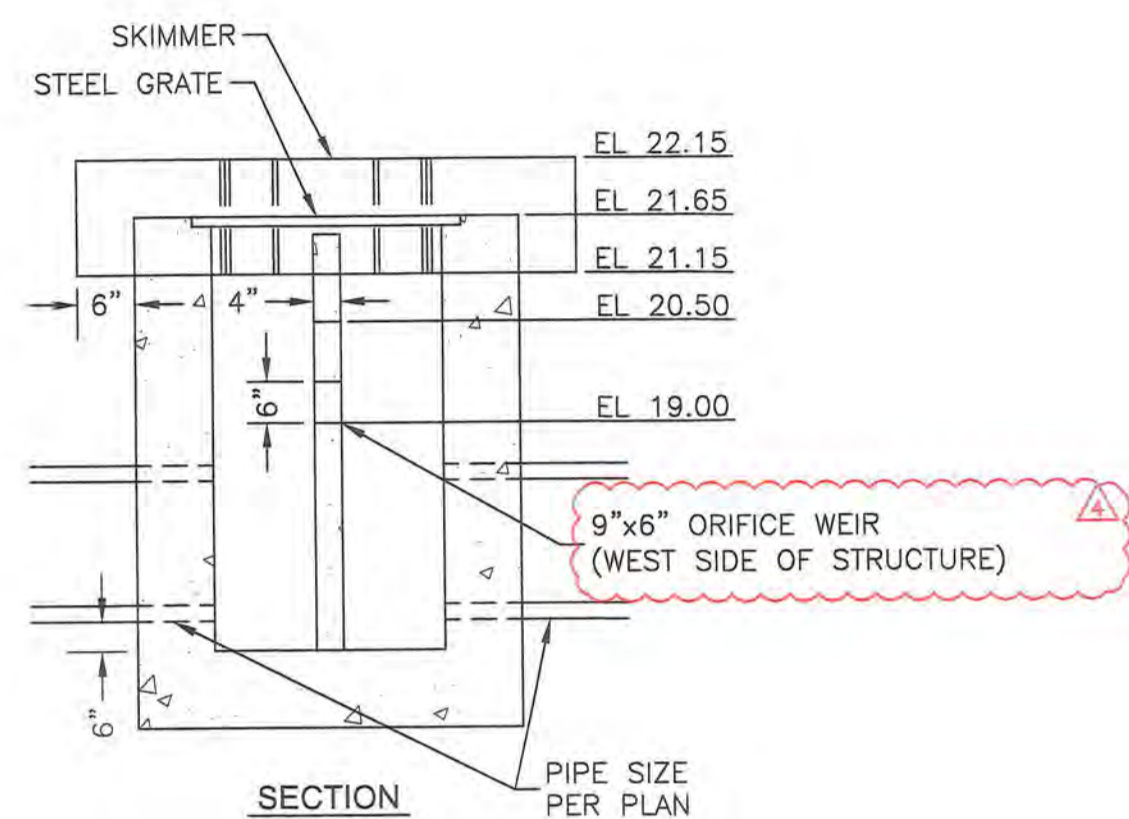
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SCALE: H: 1"=40' V: 1"=4'
PROJ. NO.: 160455
DESIGNED BY: JRT
DRAWN BY: SMB
CHECKED BY: JTJW
DRAWING NO.: **C-9**



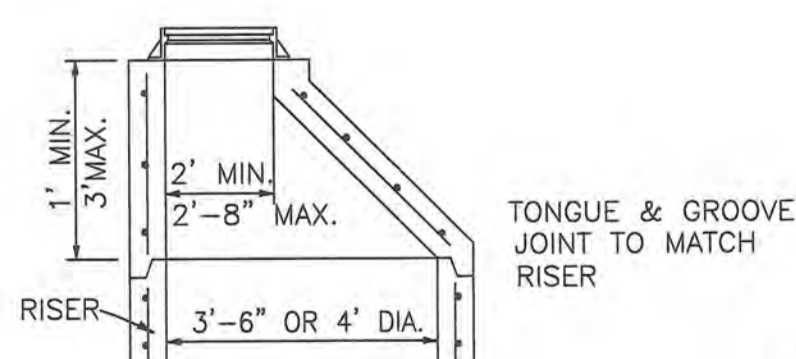
SKIMMER DETAIL



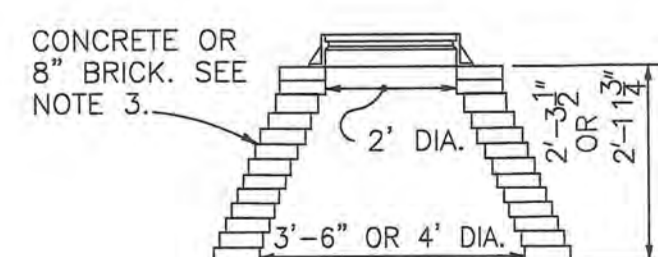
MODIFIED OUTFALL STRUCTURE DETAIL
NTS



PRECAST CONCENTRIC CONE



PRECAST ECCENTRIC CONE

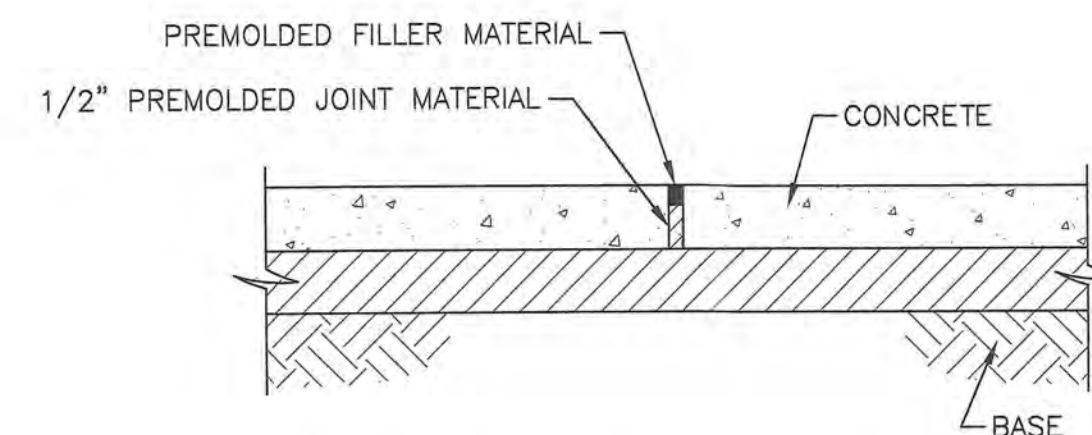


TYPE 8
MANHOLES

TYPICAL J-8 MANHOLE DETAIL
NTS

NOTES (TOPS)

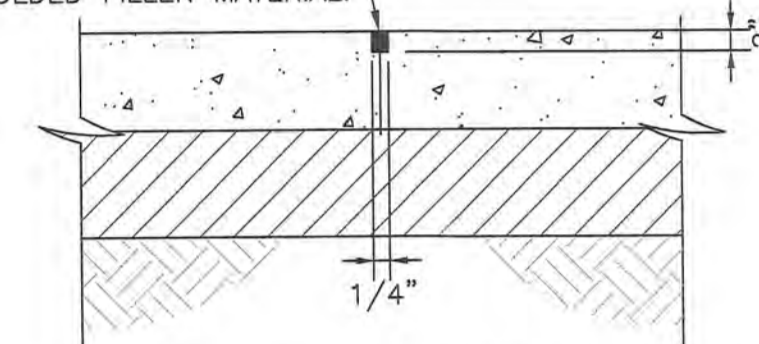
1. MANHOLE TOP TYPE 7 SLABS SHALL BE OF CLASS ~ CONCRETE. CONCRETE AS SPECIFIED IN ASTM C-478 MAY BE USED FOR PRECAST UNITS; SEE GENERAL NOTE NO. 3.
2. MANHOLE TOP TYPE 7 SLABS MAY BE OF CAST-IN-PLACE OR PRECAST CONSTRUCTION. THE OPTIONAL KEY IS FOR PRECAST TOPS AND IN LIEU OF DOWELS. FRAME AND SLAB OPENINGS ARE TO BE OMITTED WHEN TOP IS USED OVER A JUNCTION BOX. FRAMES CAN BE ADJUSTED WITH FROM ONE TO SIX COURSES OF BRICK.
3. MANHOLE TOP TYPE 8 MAY BE OF CAST-IN-PLACE OR PRECAST CONCRETE CONSTRUCTION OR BRICK CONSTRUCTION. FOR CONCRETE CONSTRUCTION, THE CONCRETE AND STEEL REINFORCEMENT SHALL BE THE SAME AS THE SUPPORTING WALL UNIT. AN ECCENTRIC CONE MAY BE USED.
4. MANHOLE TOPS SHALL BE SECURED TO STRUCTURES BY OPTIONAL CONSTRUCTION JOINTS AS SHOWN ON SHEET 3 OF 6.



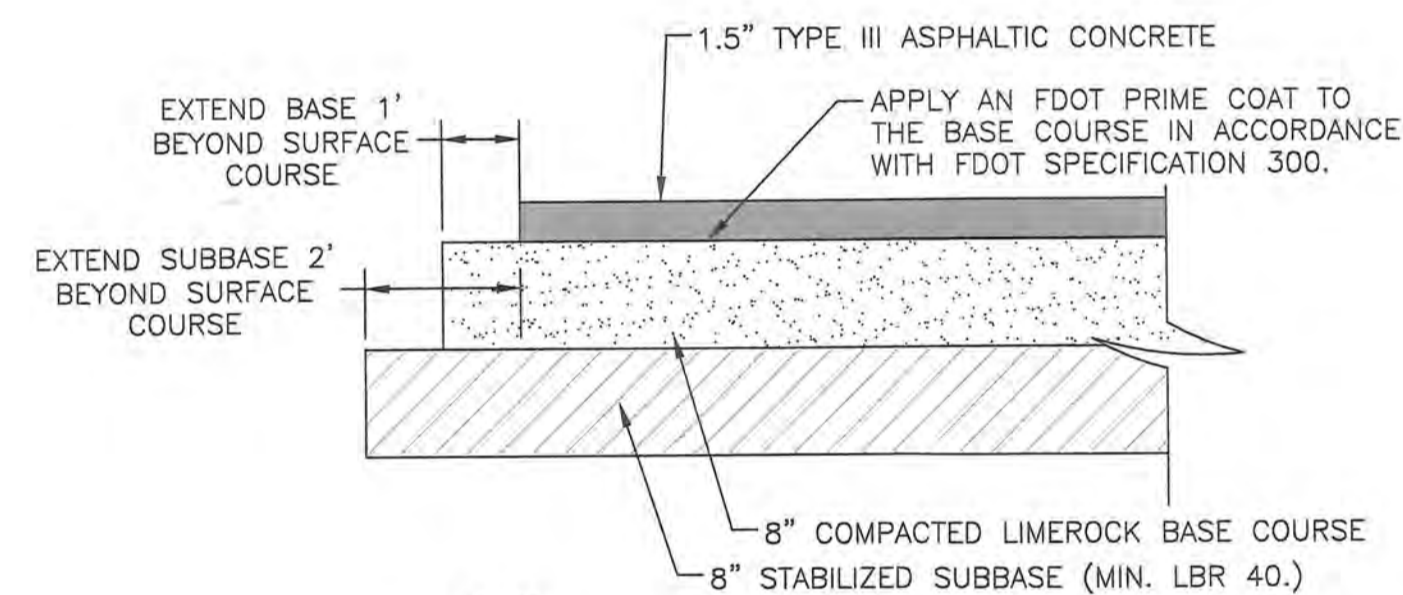
NOTE: CONTRACTOR SHALL PROVIDE A JOINT PLAN FOR APPROVAL ONE WEEK PRIOR TO POURING.

TYPICAL EXPANSION
JOINT (EJ) DETAIL
NTS

SAW CUT & SEAL CONTRACTION JOINT BETWEEN 4 & 18 HOURS AFTER CONCRETE HAS BEEN PLACED. AS AN OPTION, JOINT MAY BE 1/4\"/>

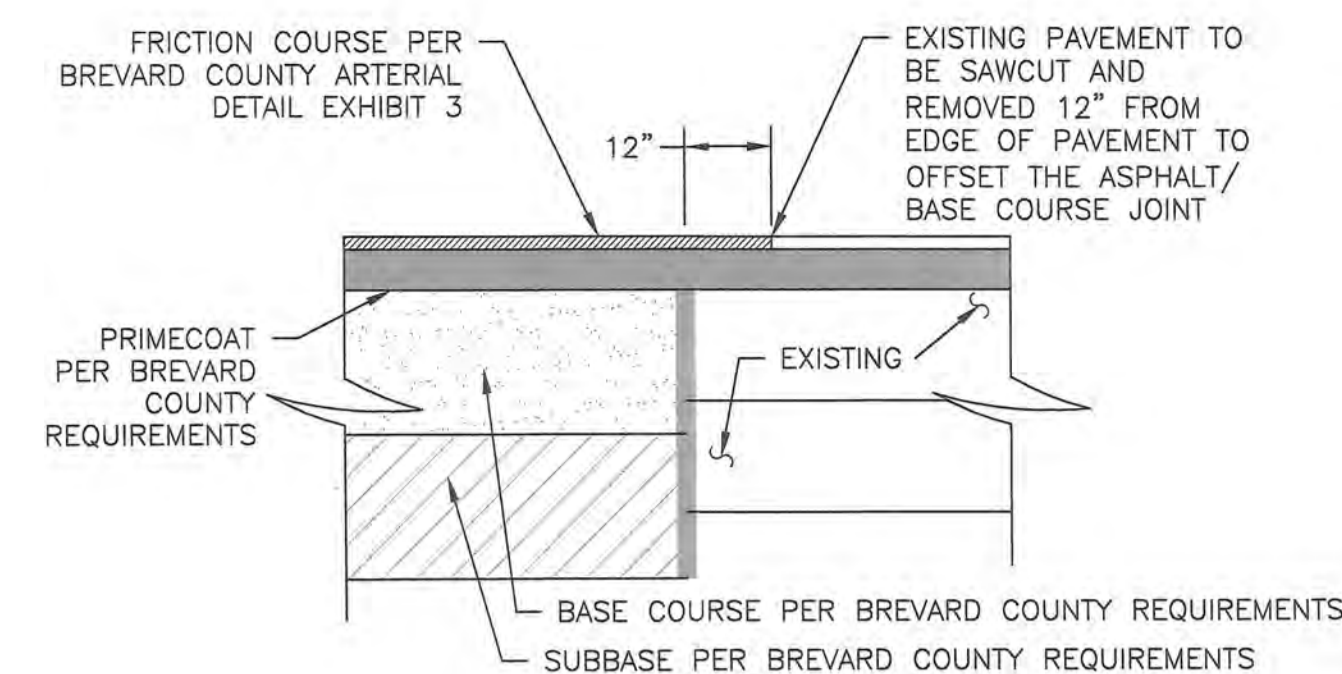


TYPICAL CONTRACTION JOINT
(CJ) DETAIL
NTS

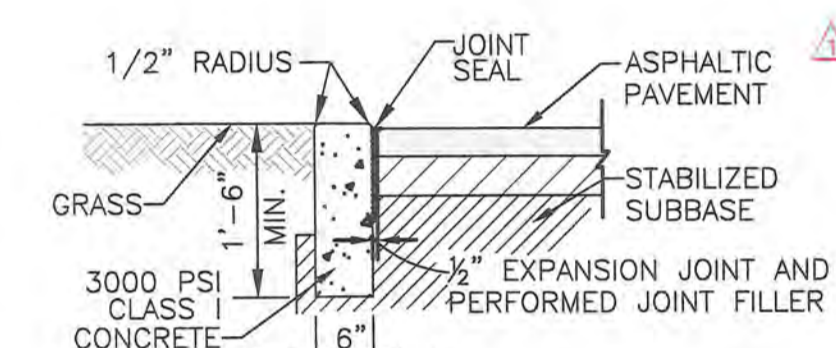


- NOTES:
1. BASECOURSE MINIMUM LBR SHALL NOT BE LESS THAN 100. COMPACT TO 98% MAX DENSITY PER AASHTO T-180, MODIFIED PROCTOR.
 2. SUBGRADE SHALL BE STABILIZED TO LBR 40 PER FDOT STANDARD SPECIFICATIONS 160-2. COMPACTION SHALL BE SAME AS BASE COURSE.

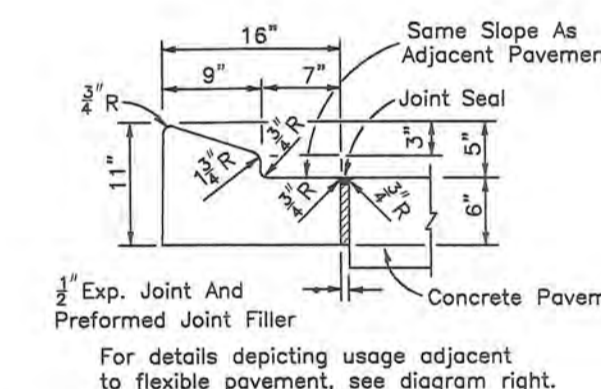
TYPICAL ROADWAY PAVEMENT SECTION
NTS



TYPICAL EDGE OF PAVEMENT WITHIN
COUNTY RIGHT-OF-WAY DETAIL
NTS



TYPICAL RIBBON CURB DETAIL
NTS



NOTE: For use adjacent to concrete or flexible pavement, concrete shown. Expansion joint, preformed joint filler and joint seal are required between curbs and concrete pavement only, see diagram right.

TYPICAL FDOT TYPE 'A'
CURB DETAIL
NTS

Approved For Construction

City of Palm Bay

NOTE:
FDOT DETAILS ARE PROVIDED FOR REFERENCE INFORMATION ONLY. SEE CORRESPONDING INDEX NUMBER IN FDOT LATEST EDITION OF THE ROADWAY AND TRAFFIC DESIGN STANDARDS MANUAL FOR ALL REQUIREMENTS.

REVISION	DATE	CITY AND BREVARD COUNTY COMMENTS
1	8/21/17	
4	5/31/18	

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Melbourne, FL 32935
Tel. 321.253.1721
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www.cegroupinc.com
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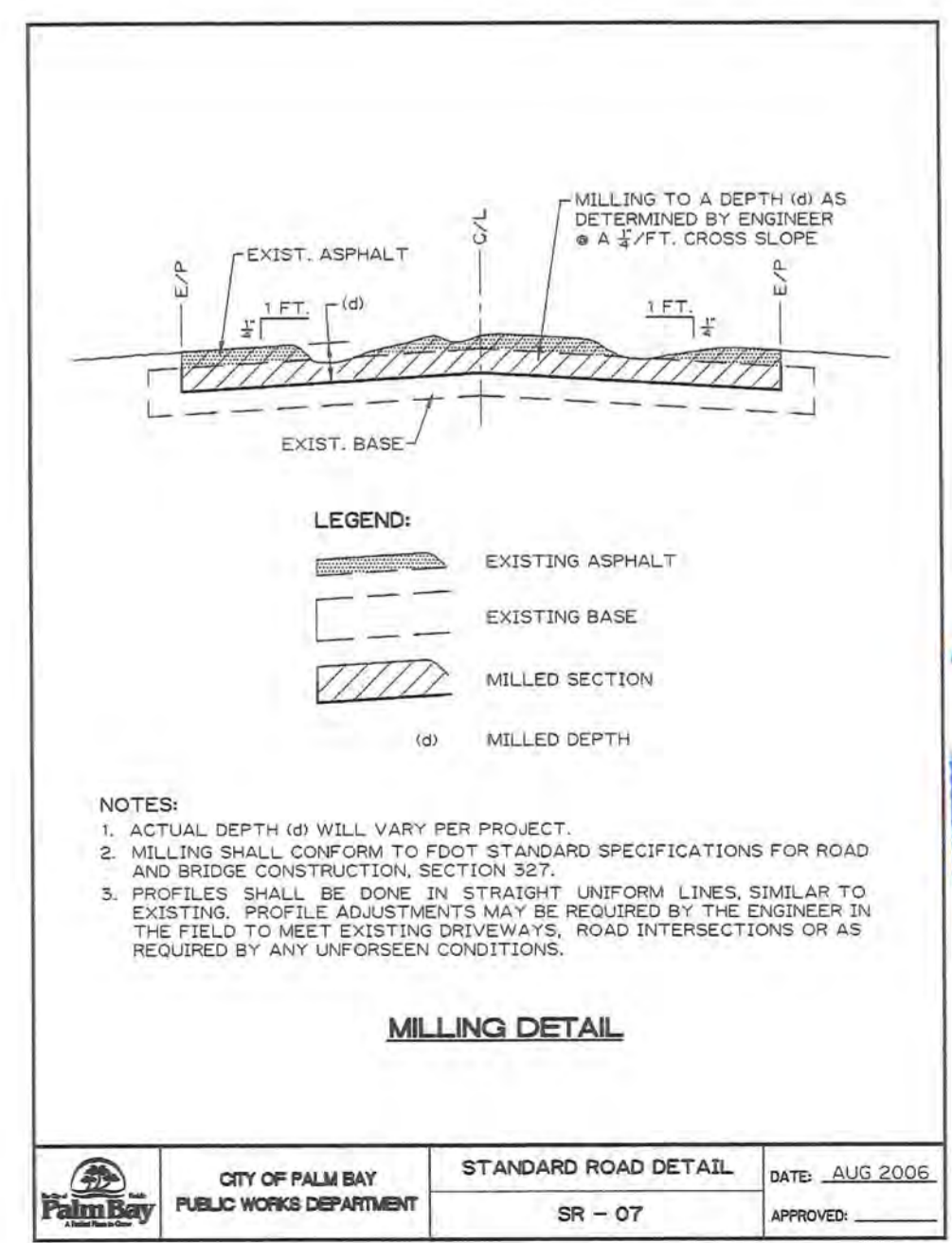
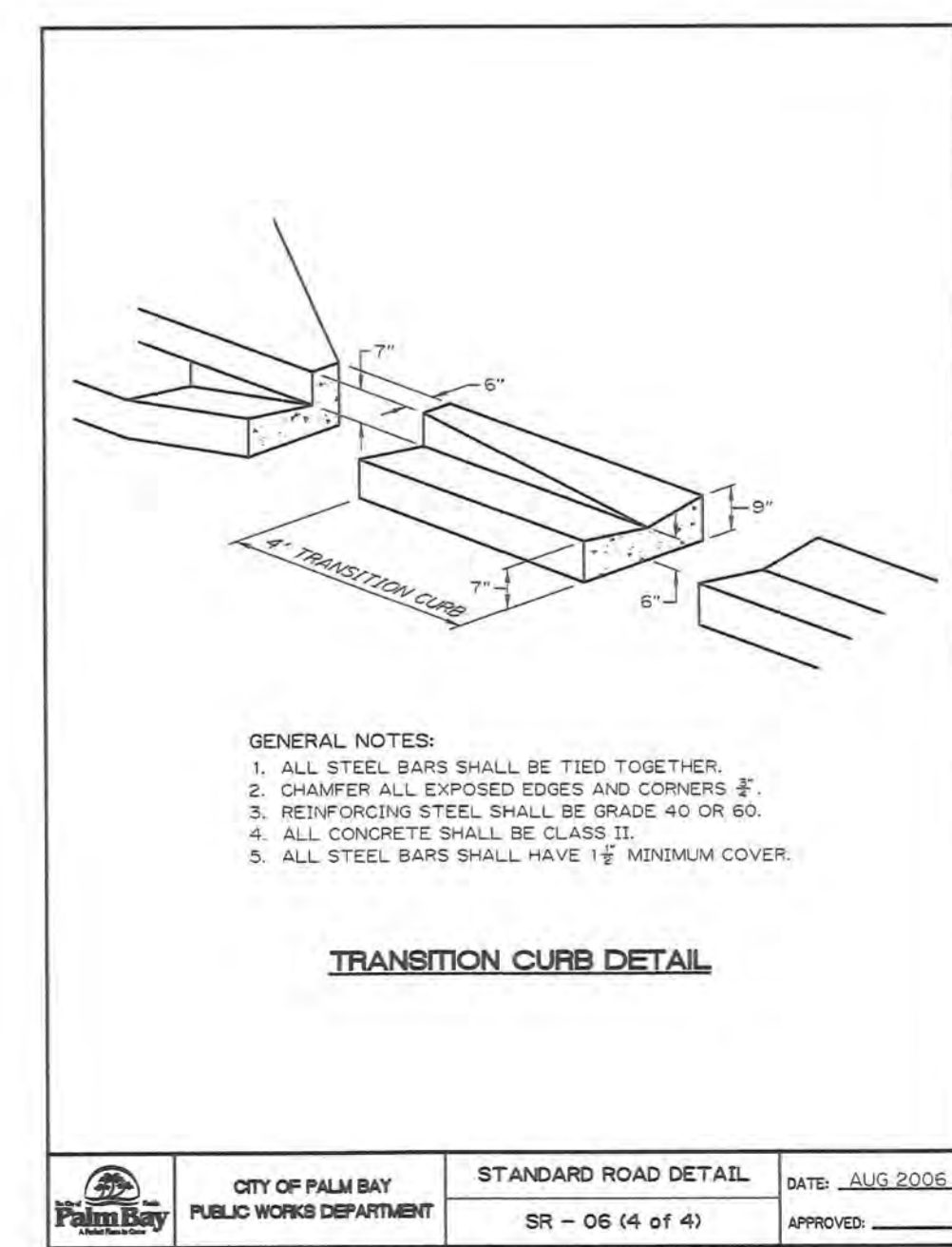
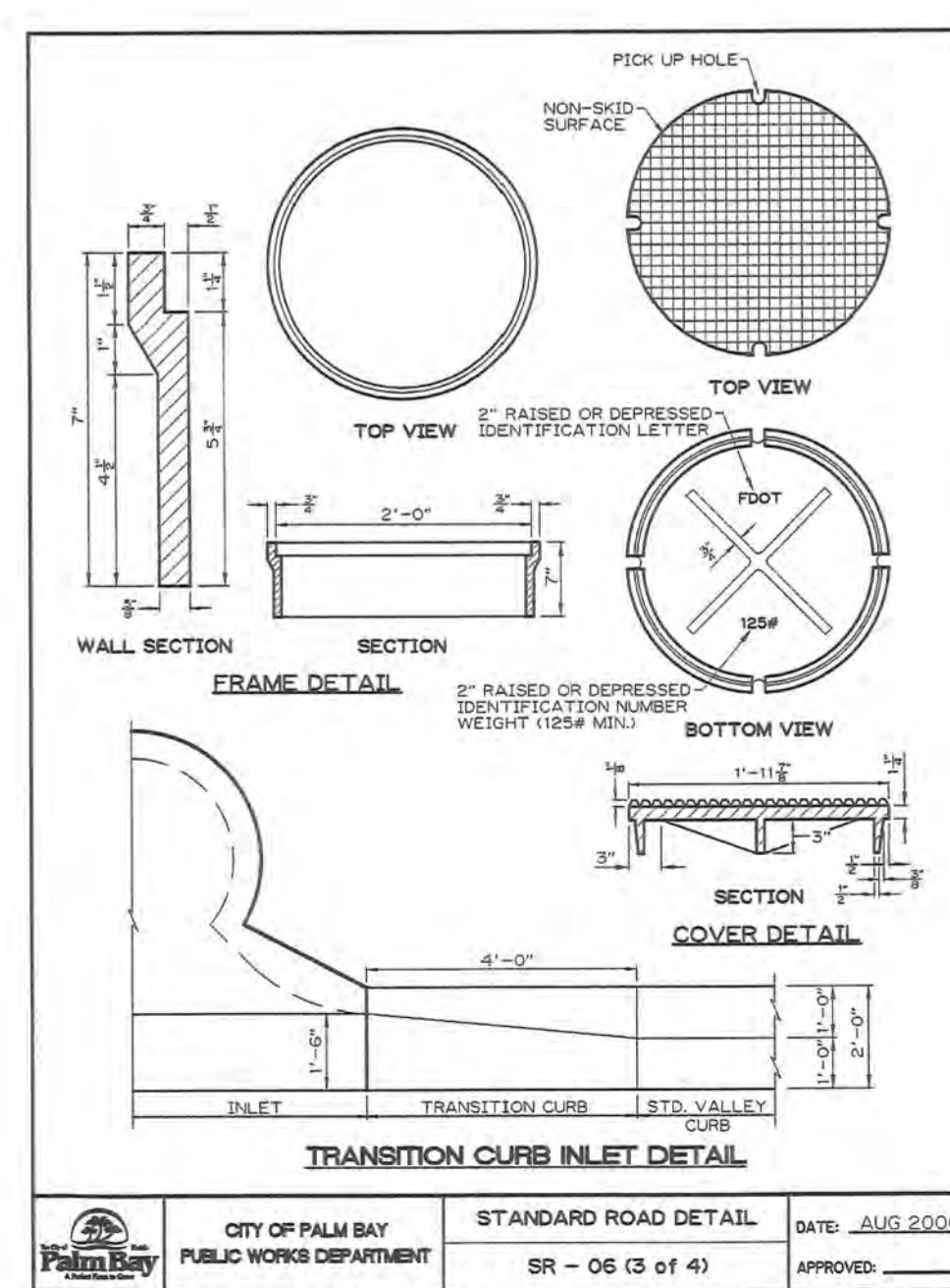
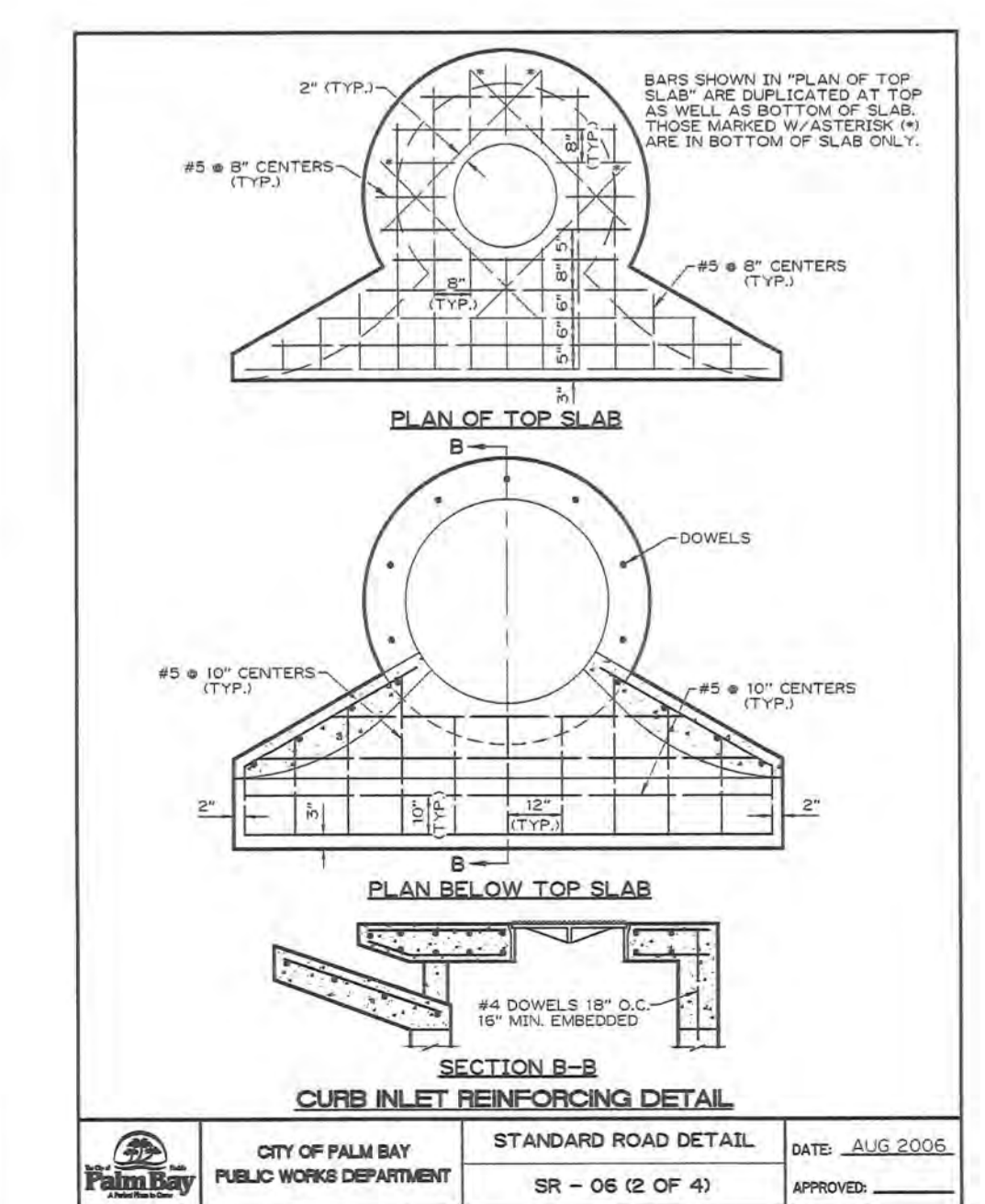
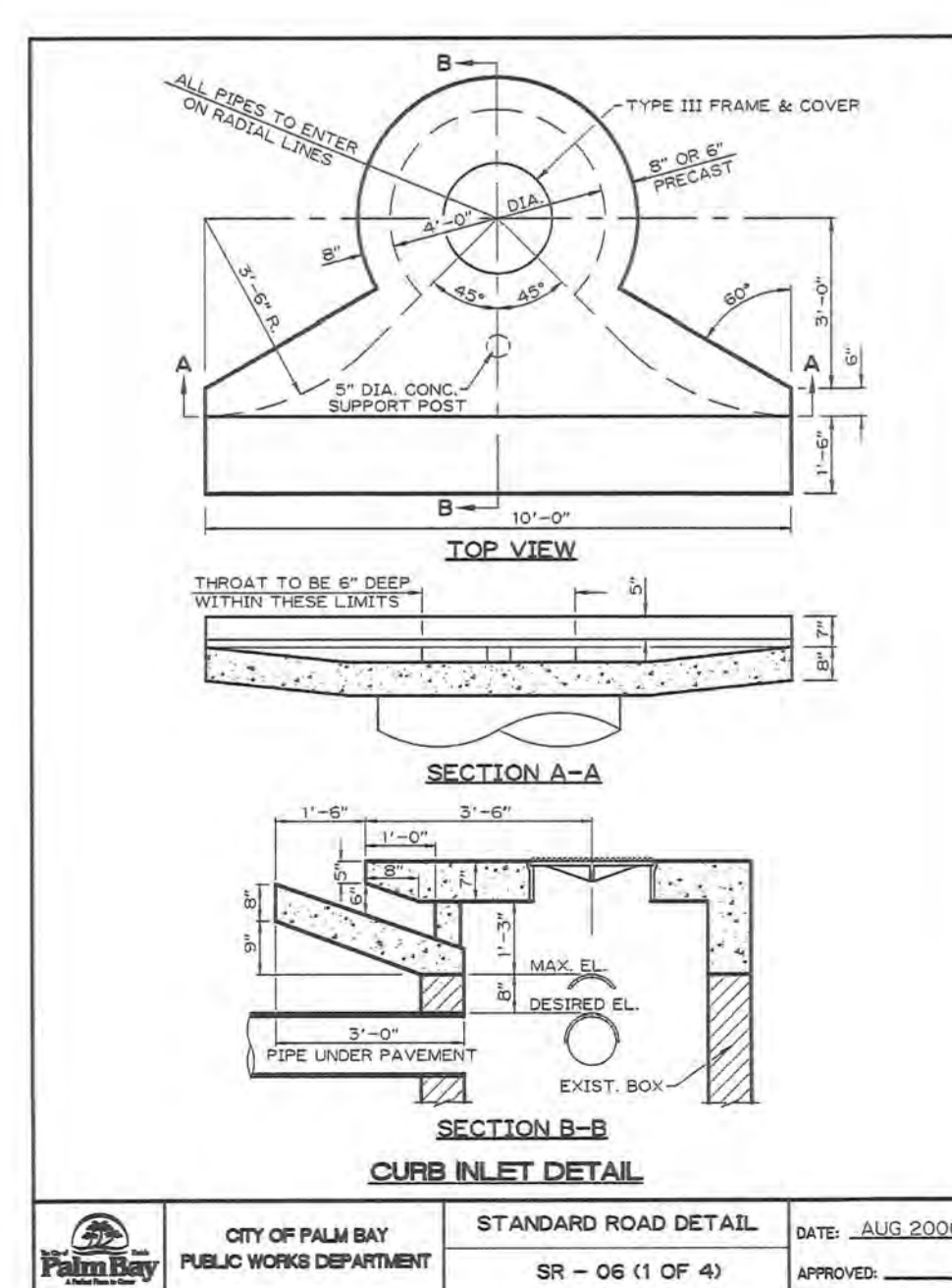
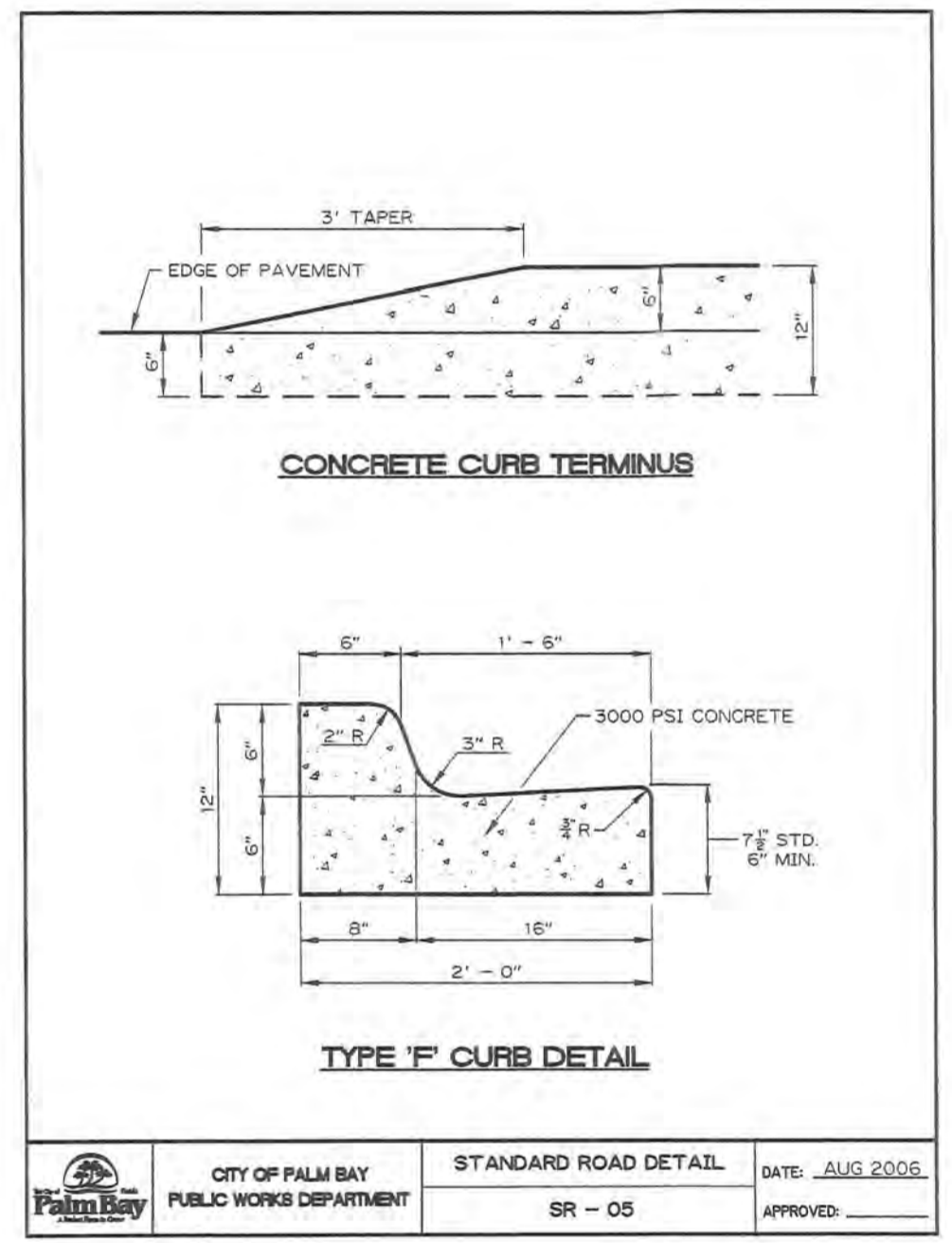
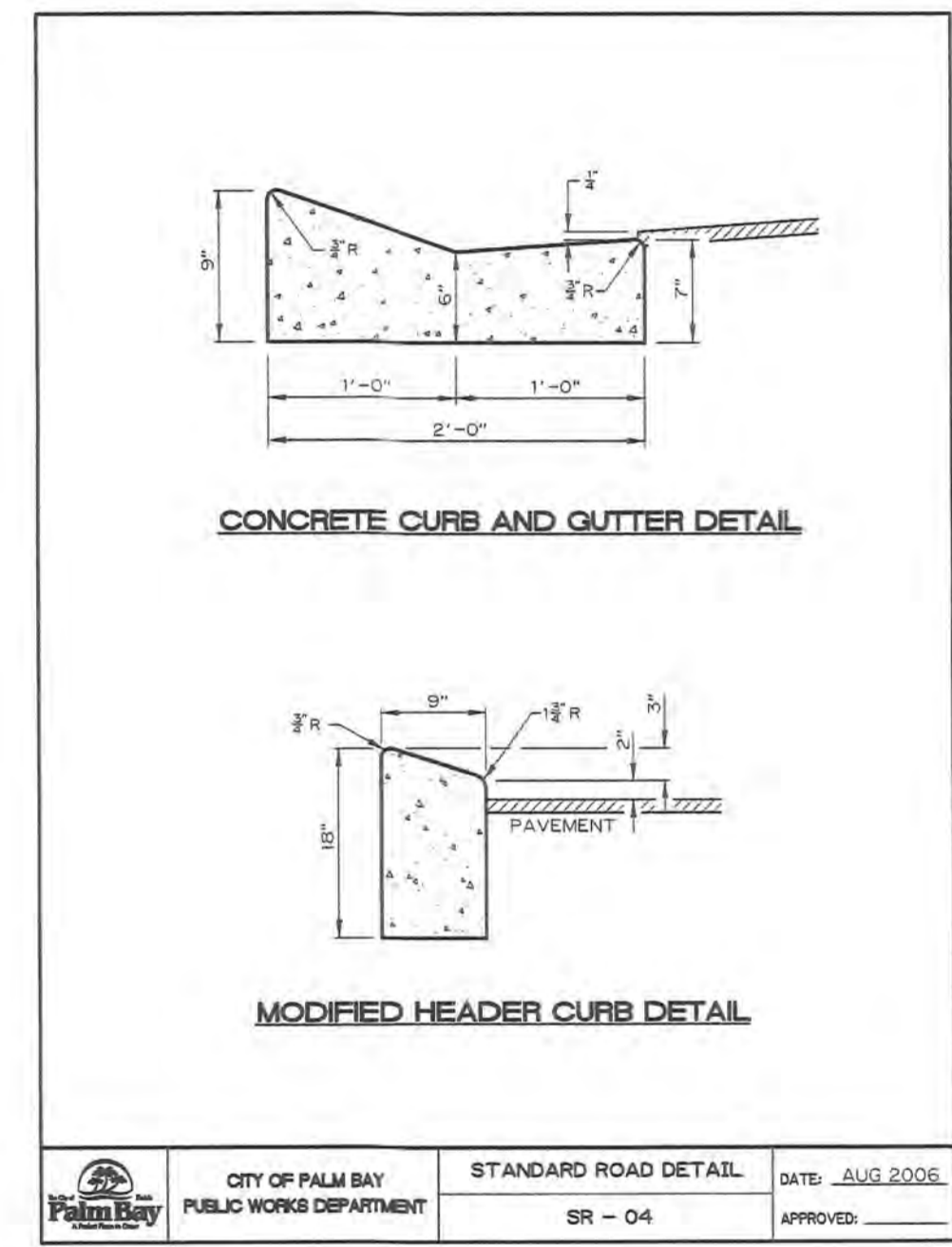
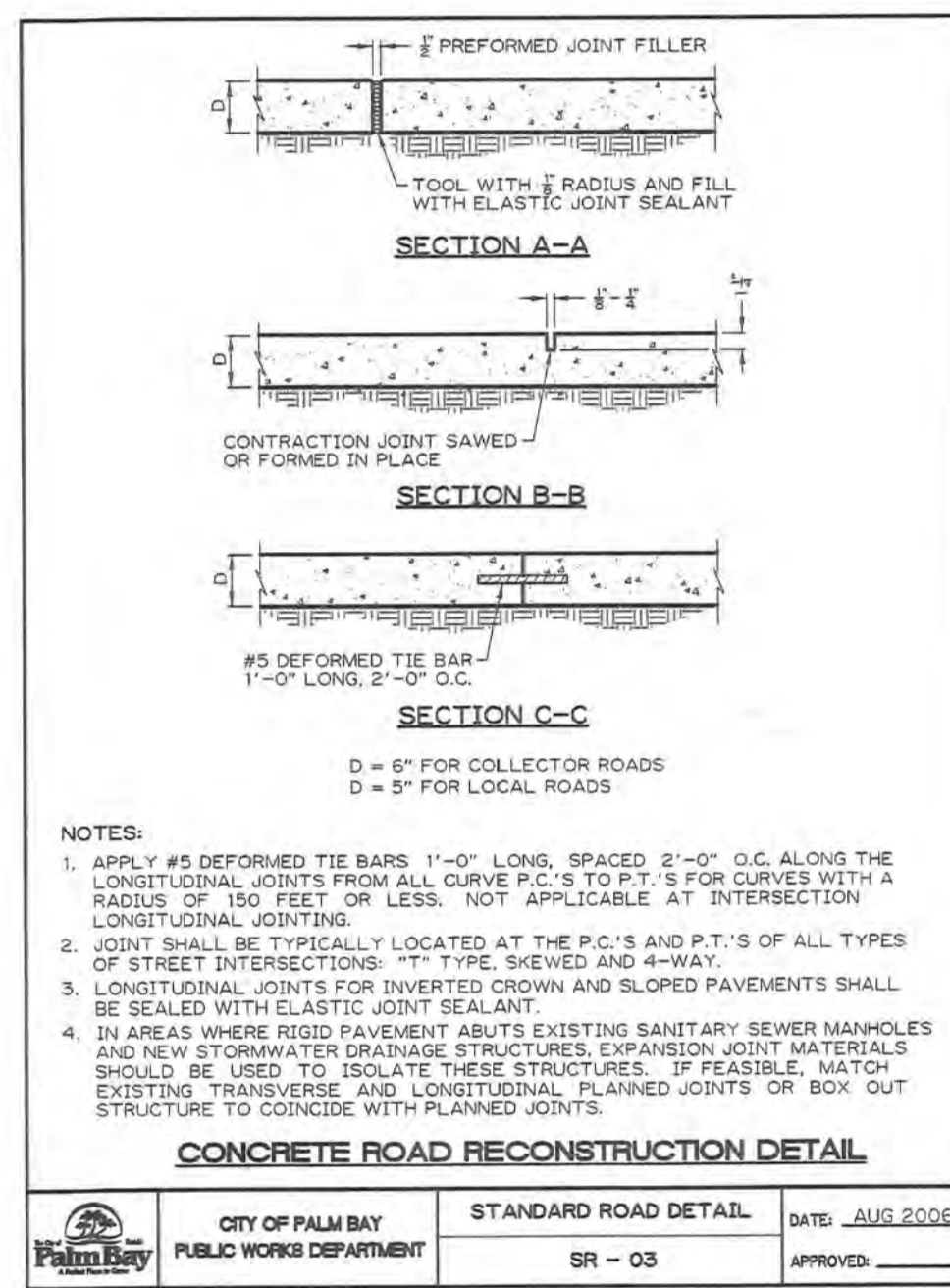
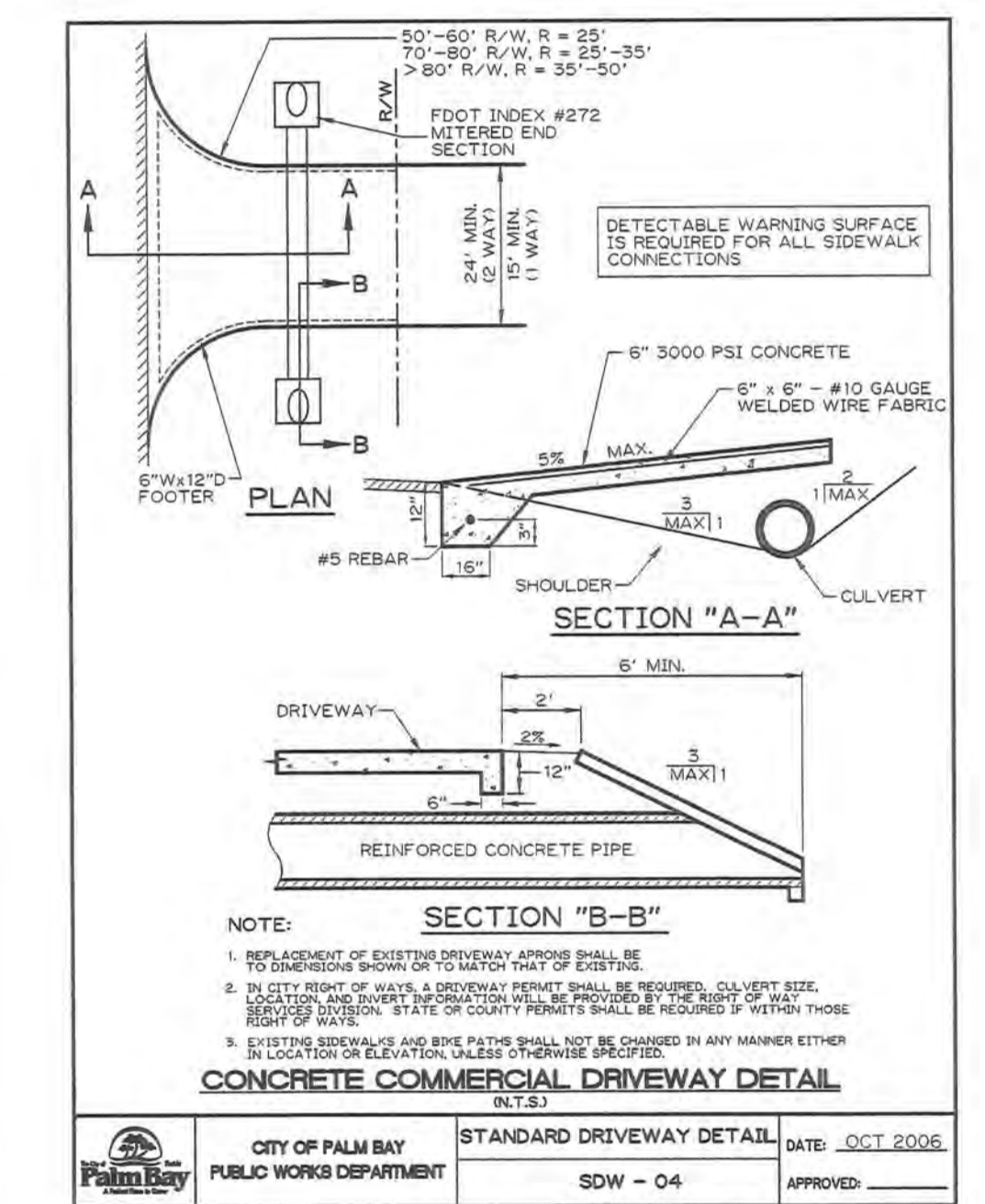
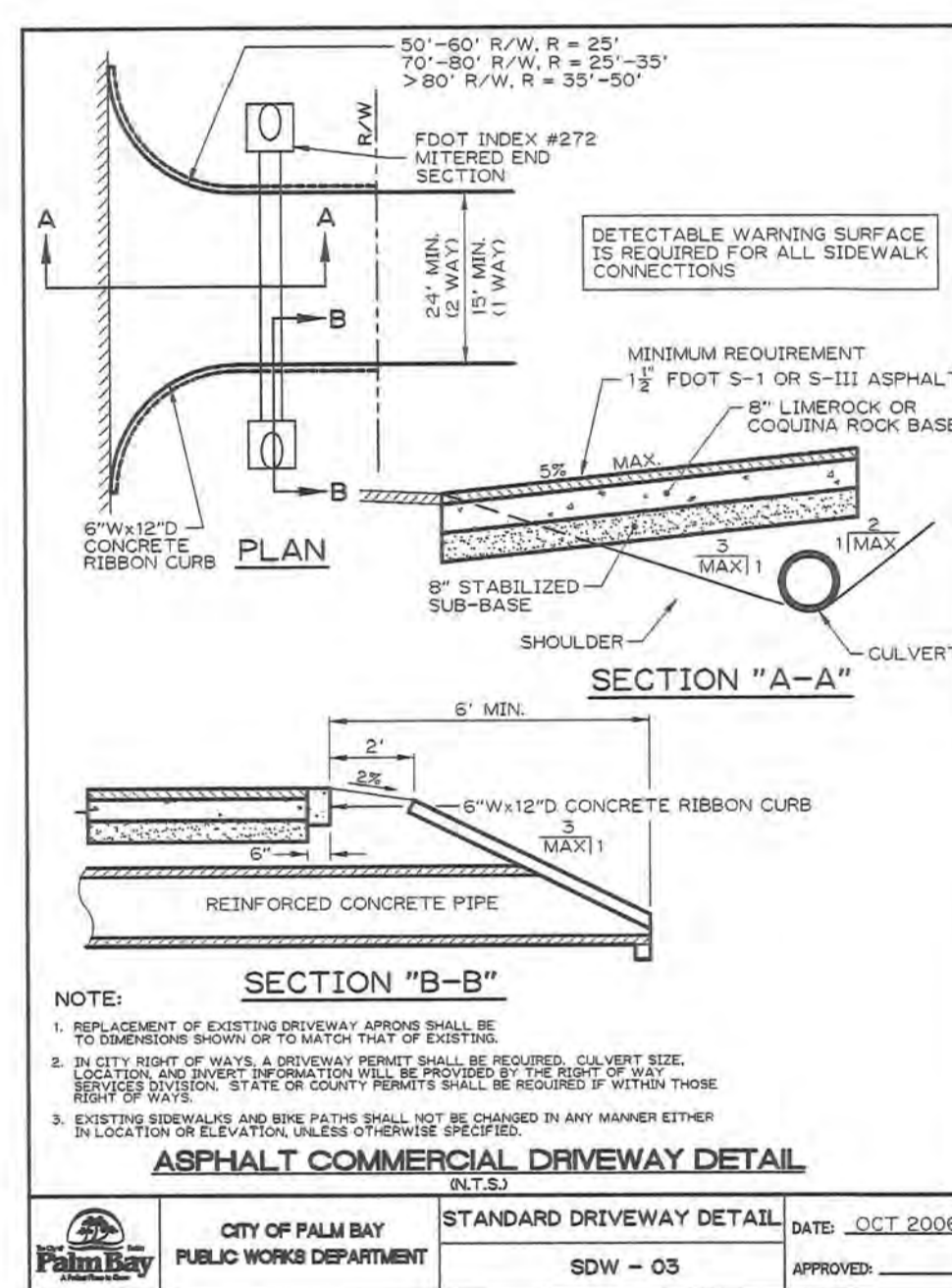
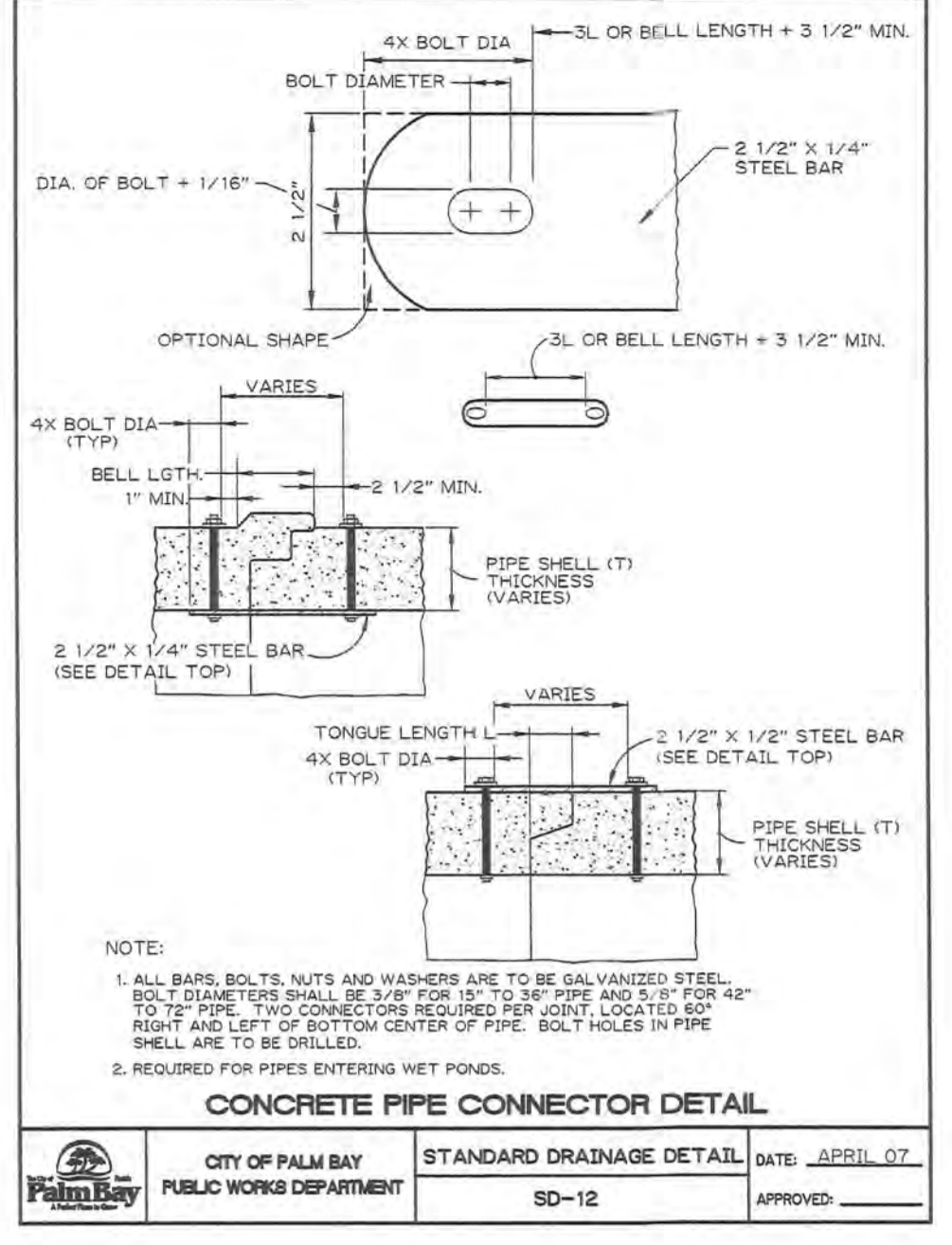
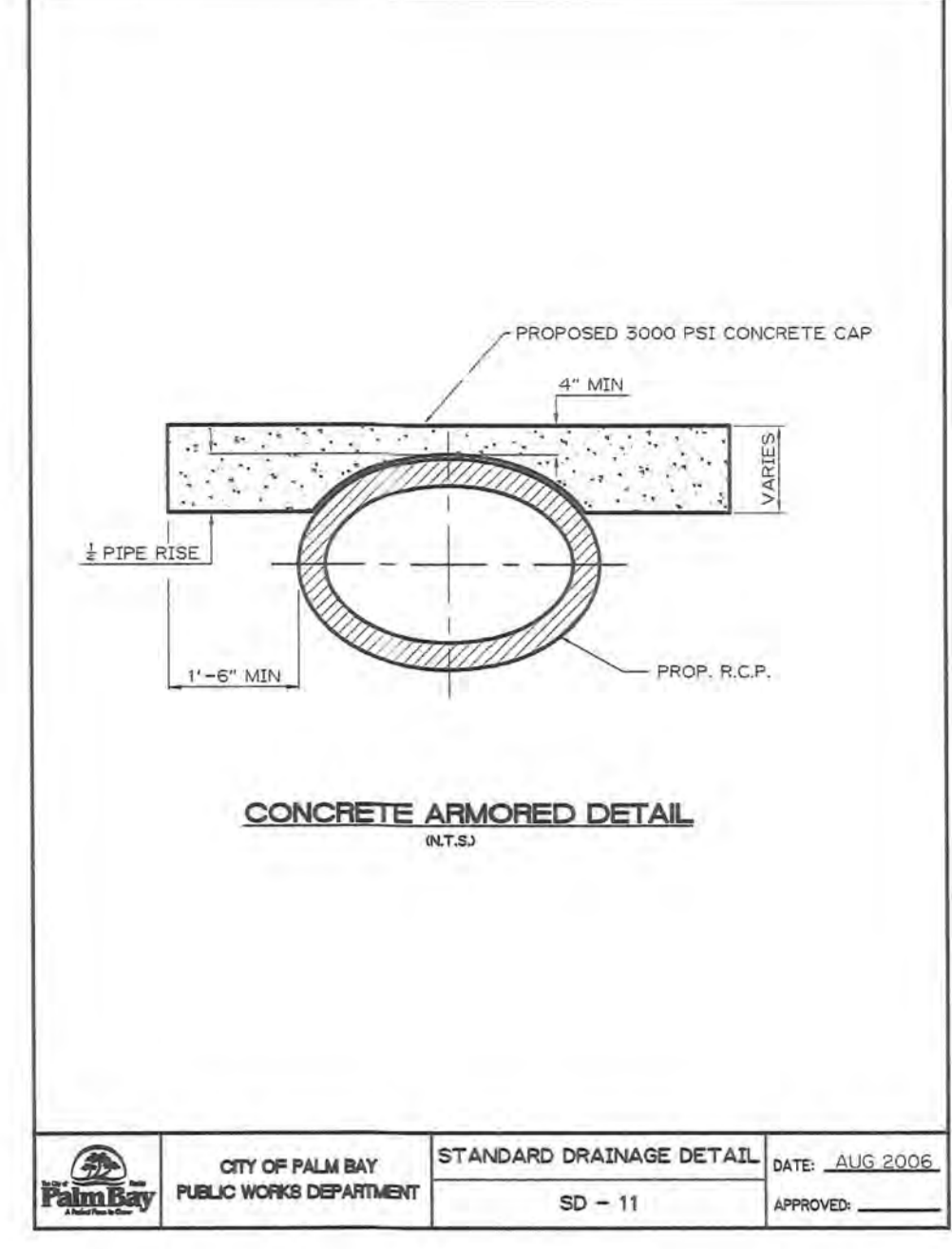
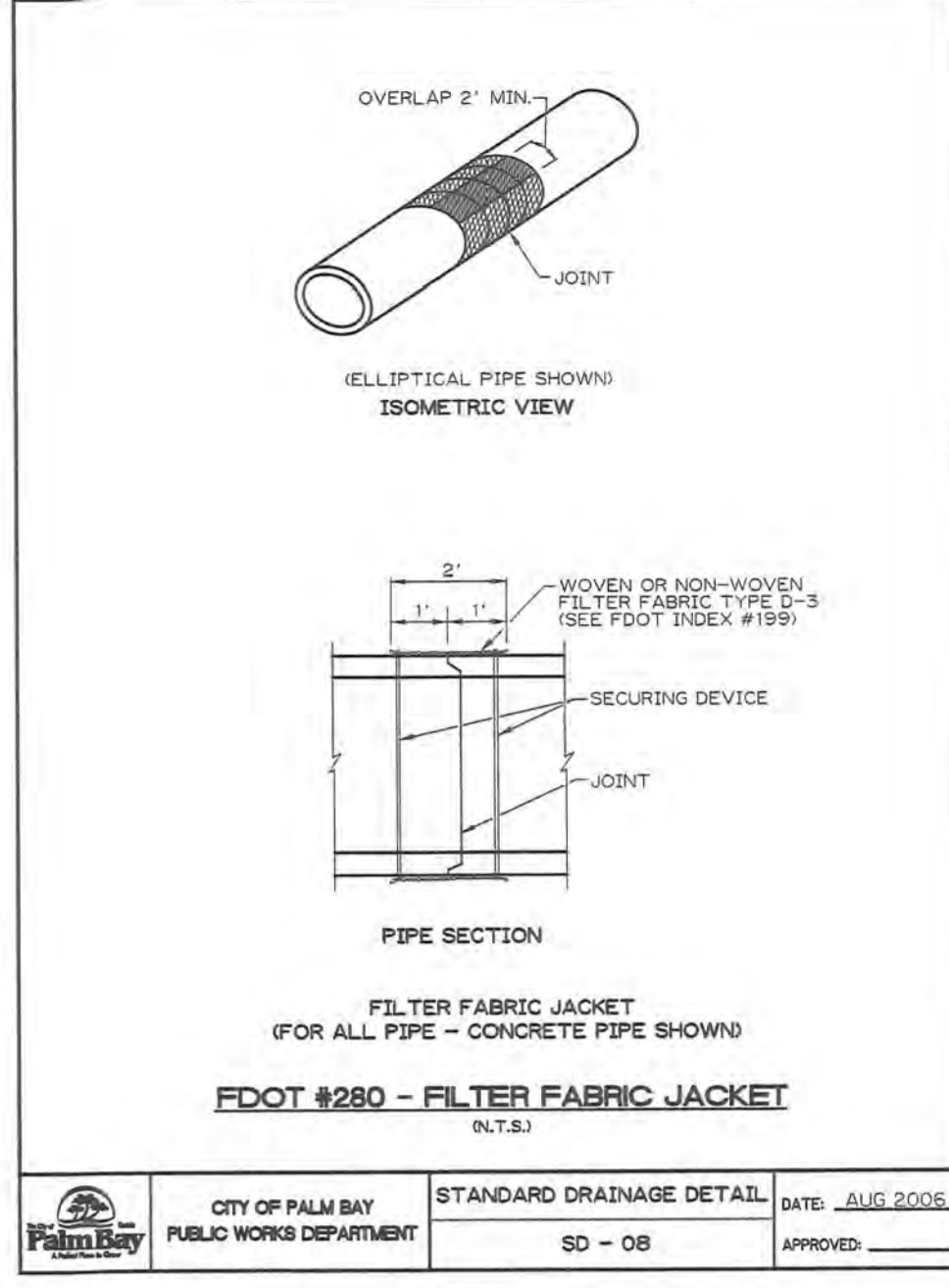
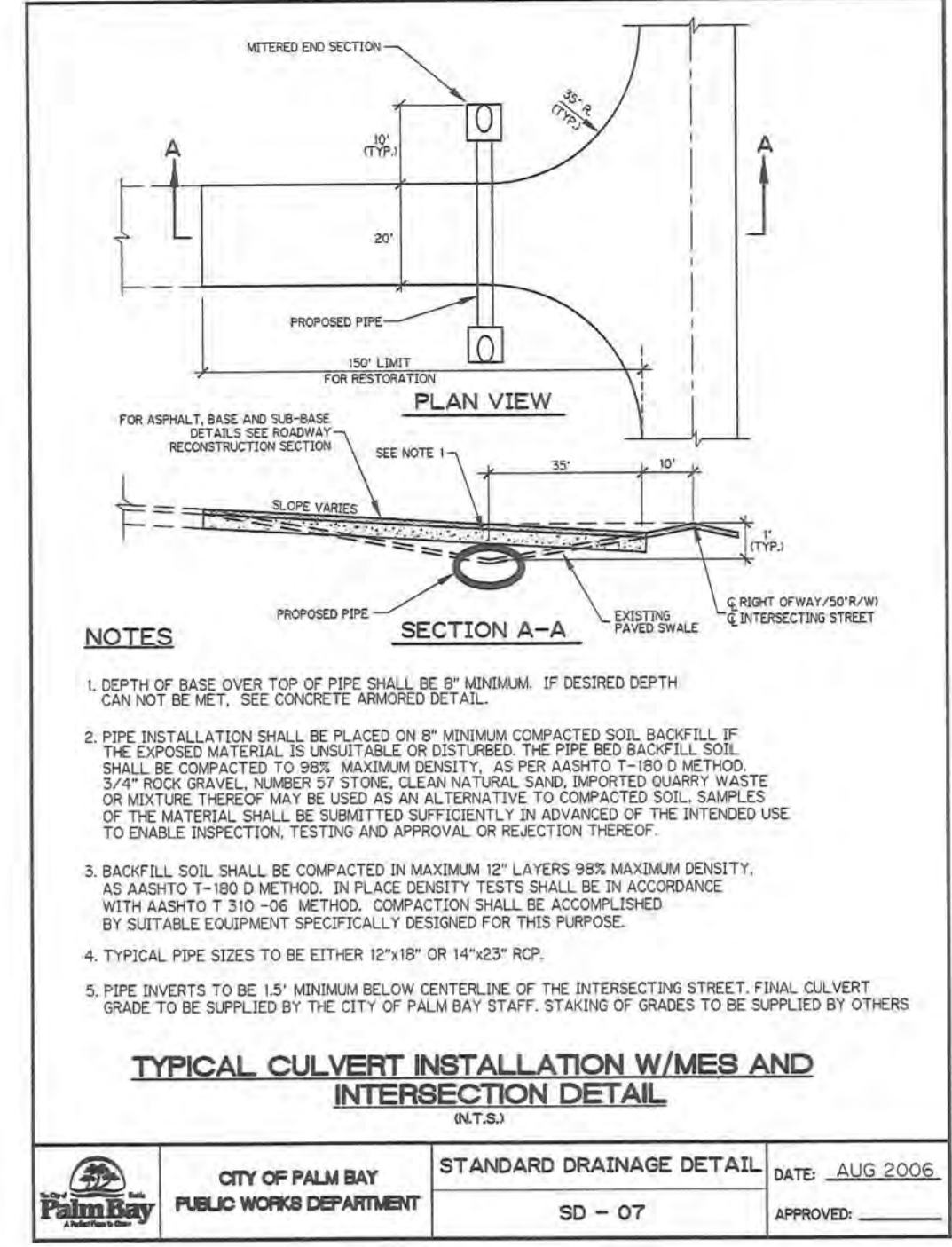
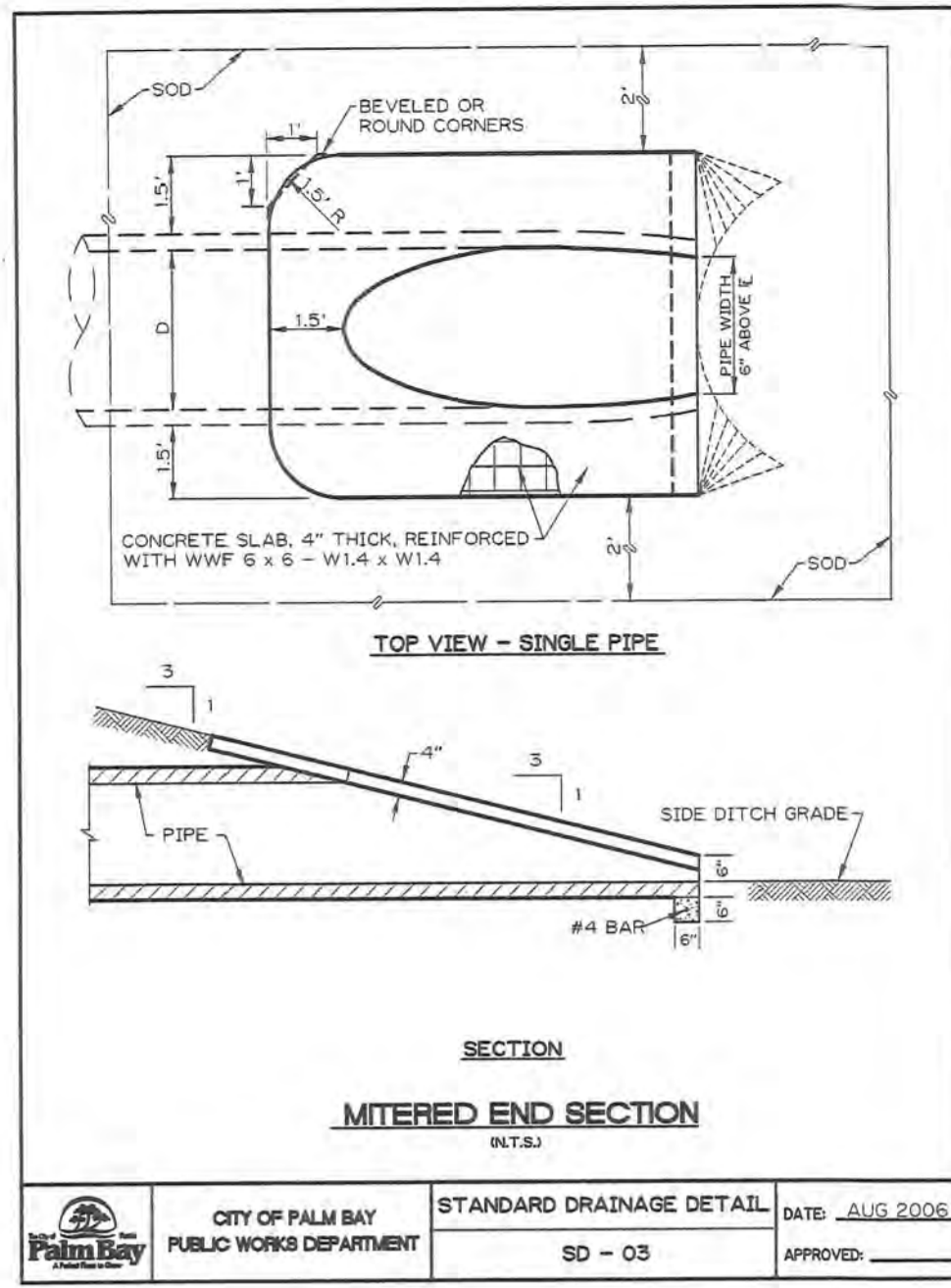
CONSTRUCTION ENGINEERING GROUP
consulting engineers

CHAPARRAL SUBDIVISION-PHASE 1A
CHAPARRAL PROPERTIES, LLC
MALABAR ROAD AND WISTERIA AVENUE NW PALM BAY, FLORIDA
DRAWING TITLE
DETAILS

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JAKE T. WISE
LICENSE
No. 55405
STATE OF FLORIDA
PROFESSIONAL ENGINEER
7-22-19

DATE	4-28-17
SCALE	NTS
PROJ. NO.:	160455
DESIGNED BY:	JRT
DRAWN BY:	SMB
CHECKED BY:	JTW
DRAWING NO.	C-10



REVISION	DATE	REV#

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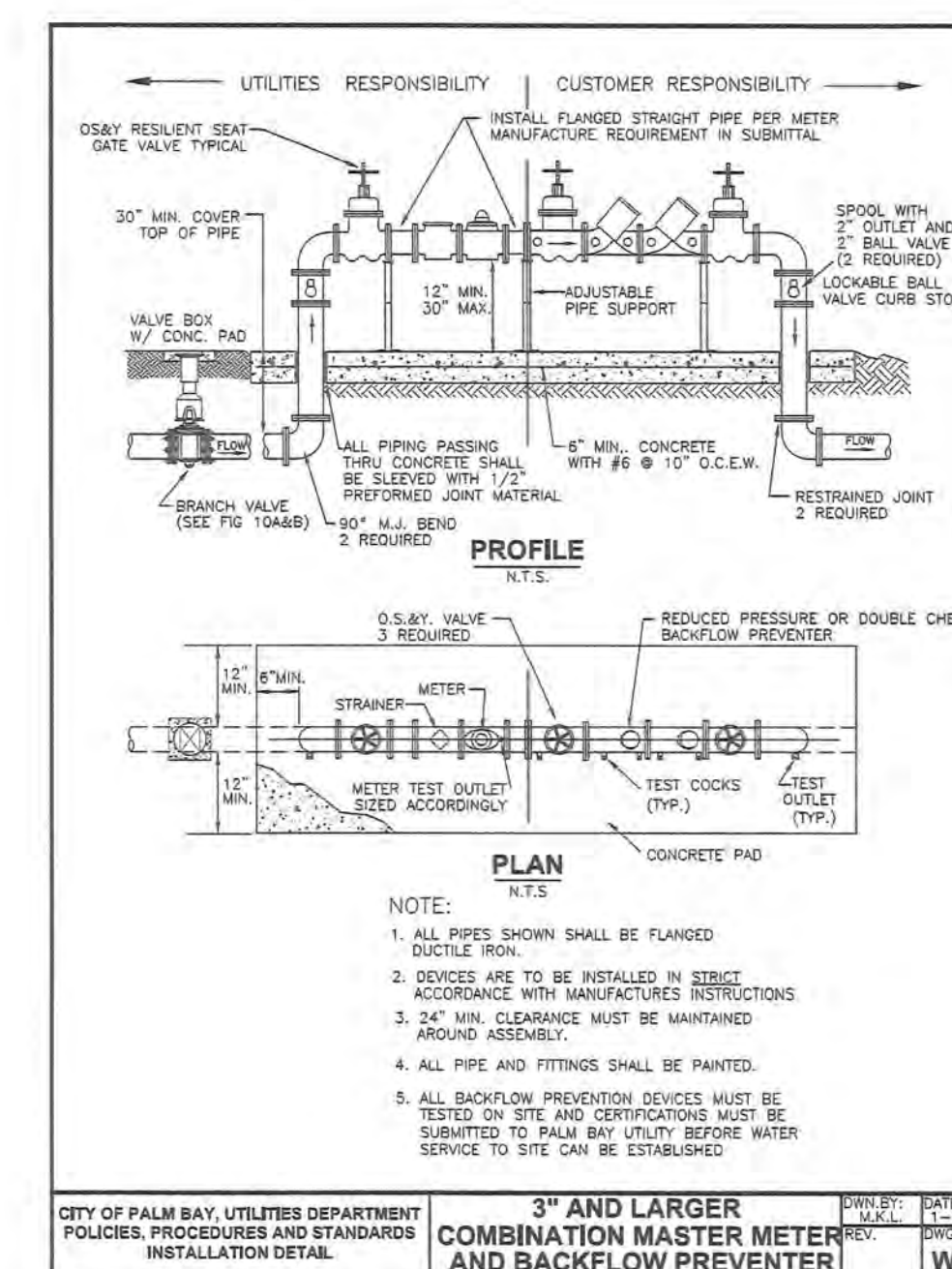
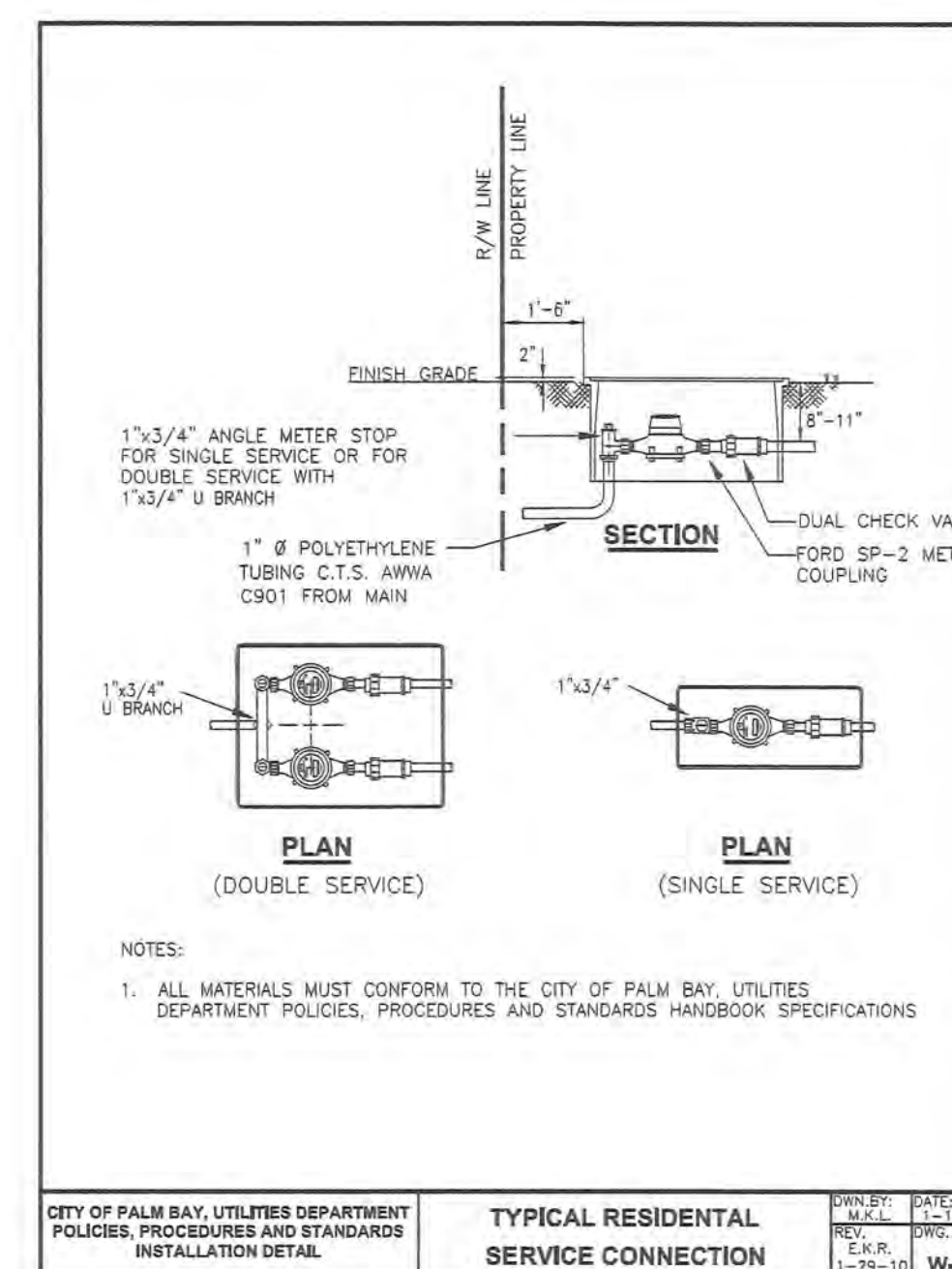
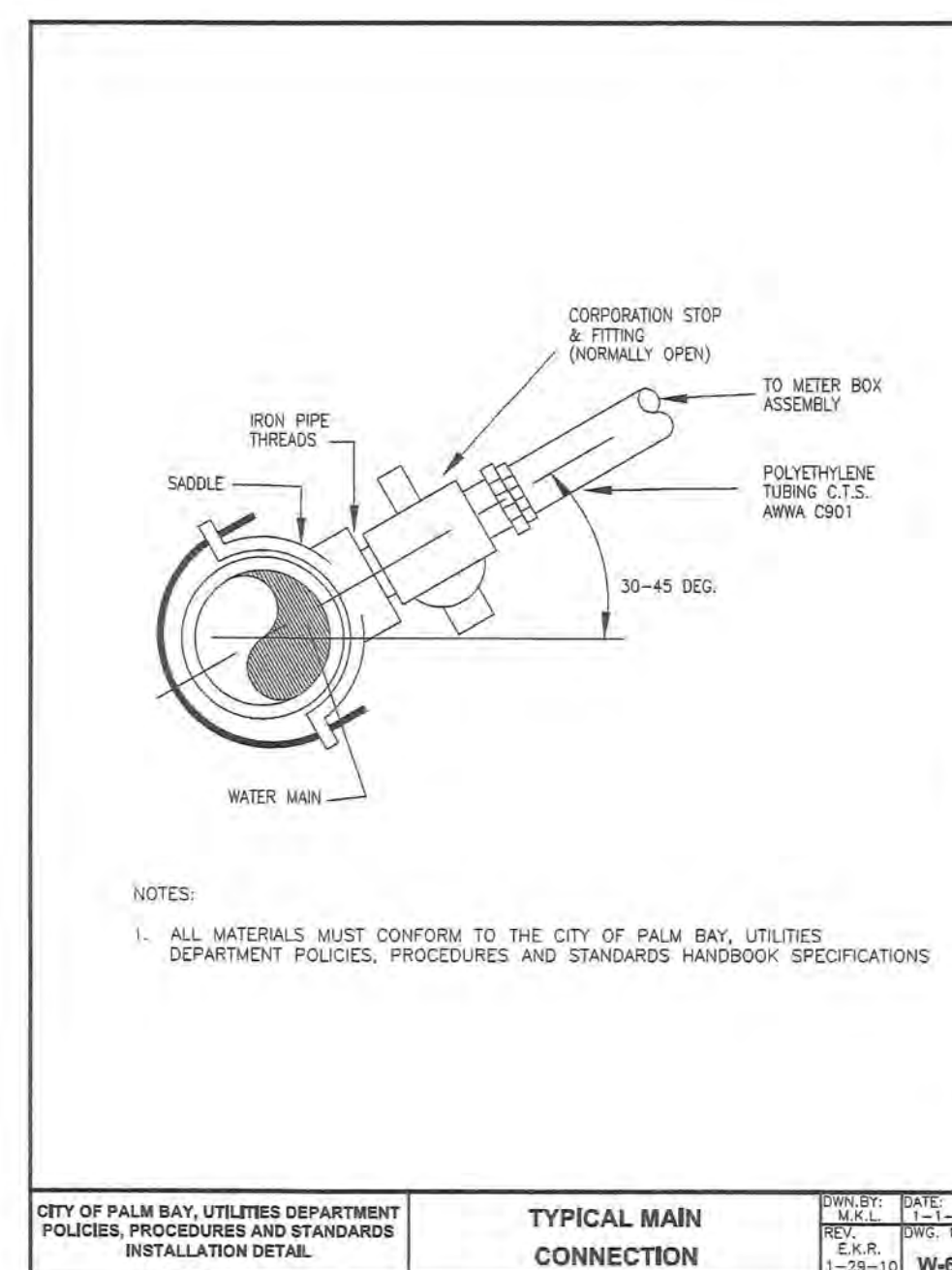
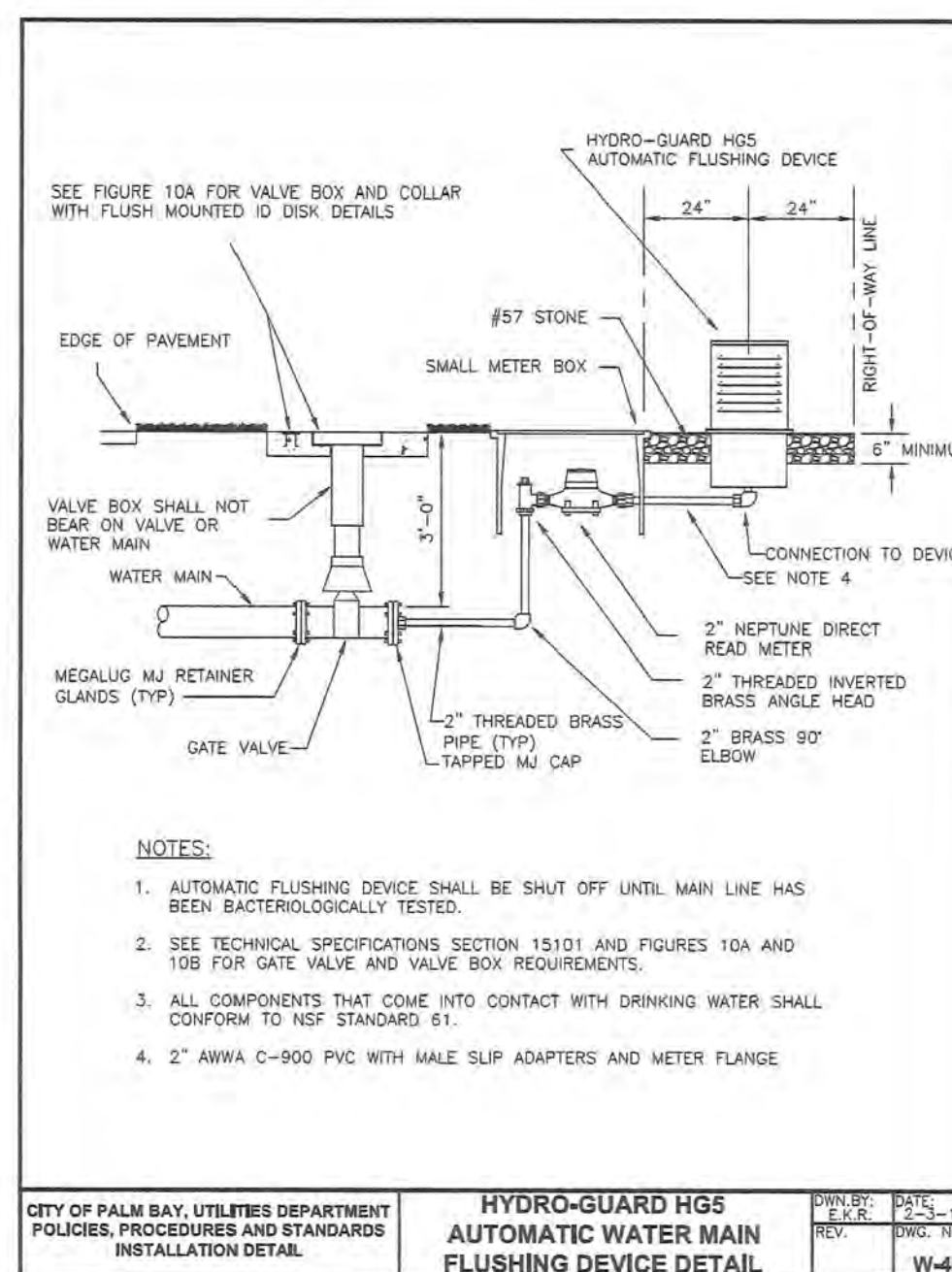
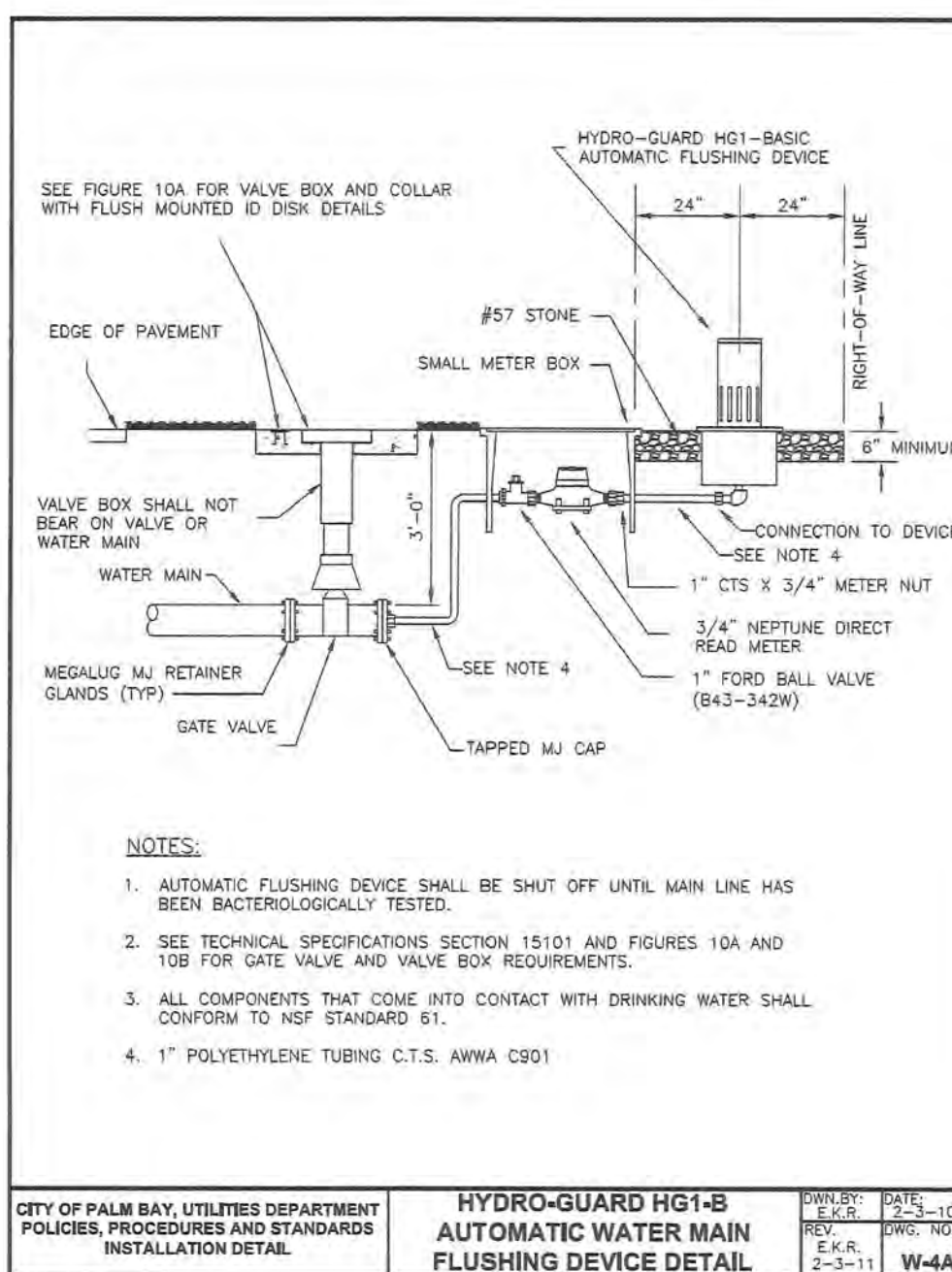
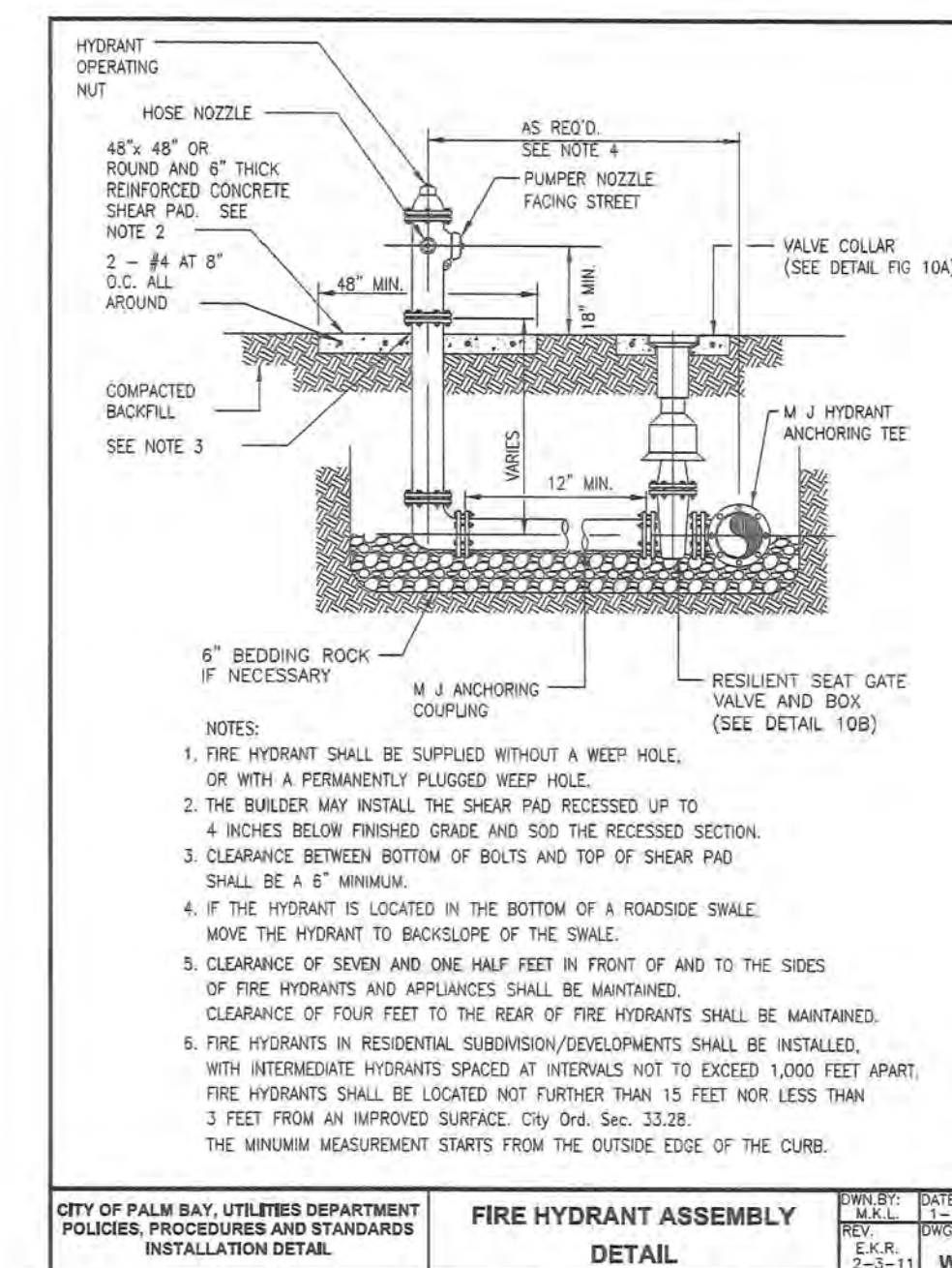
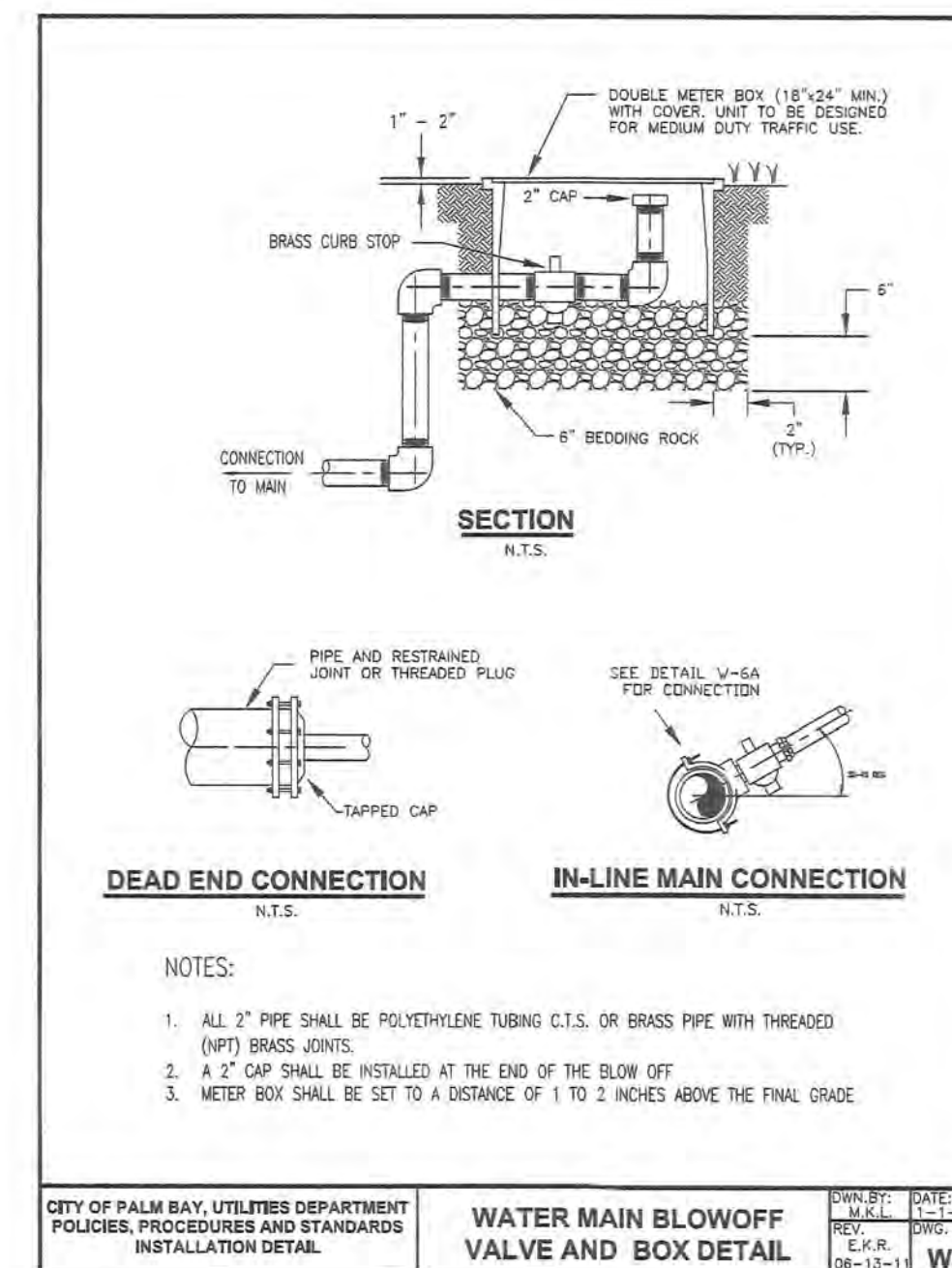
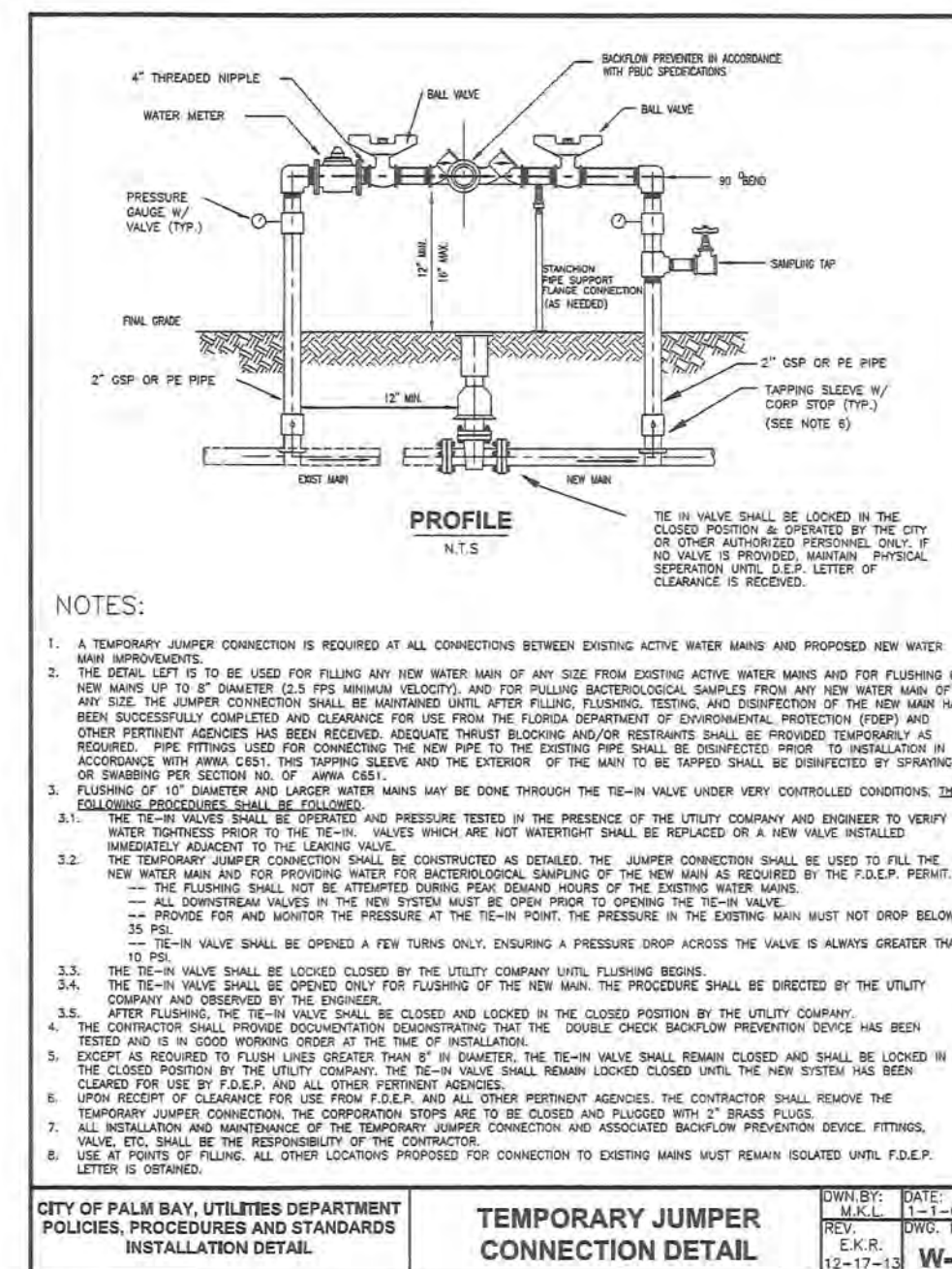
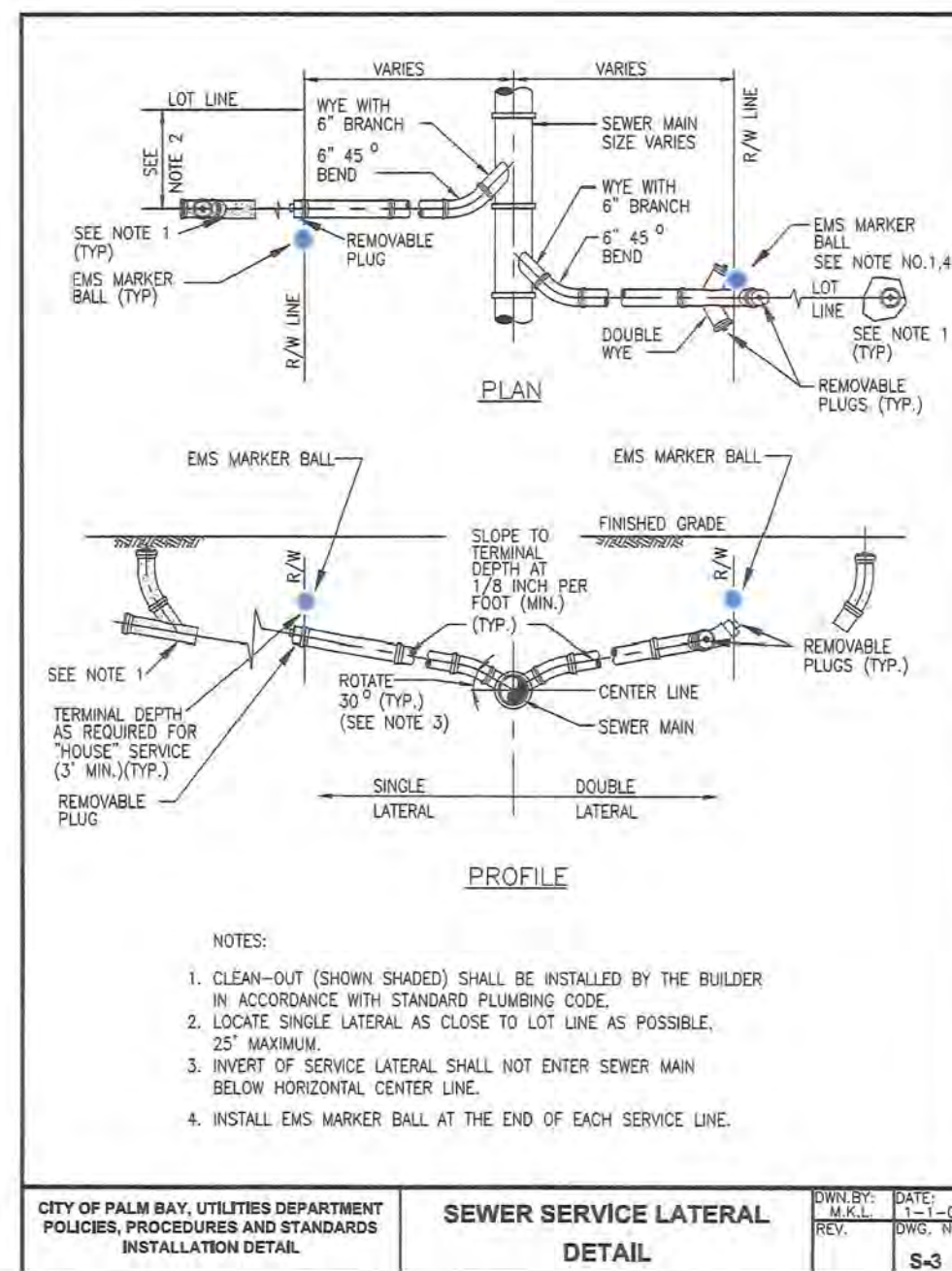
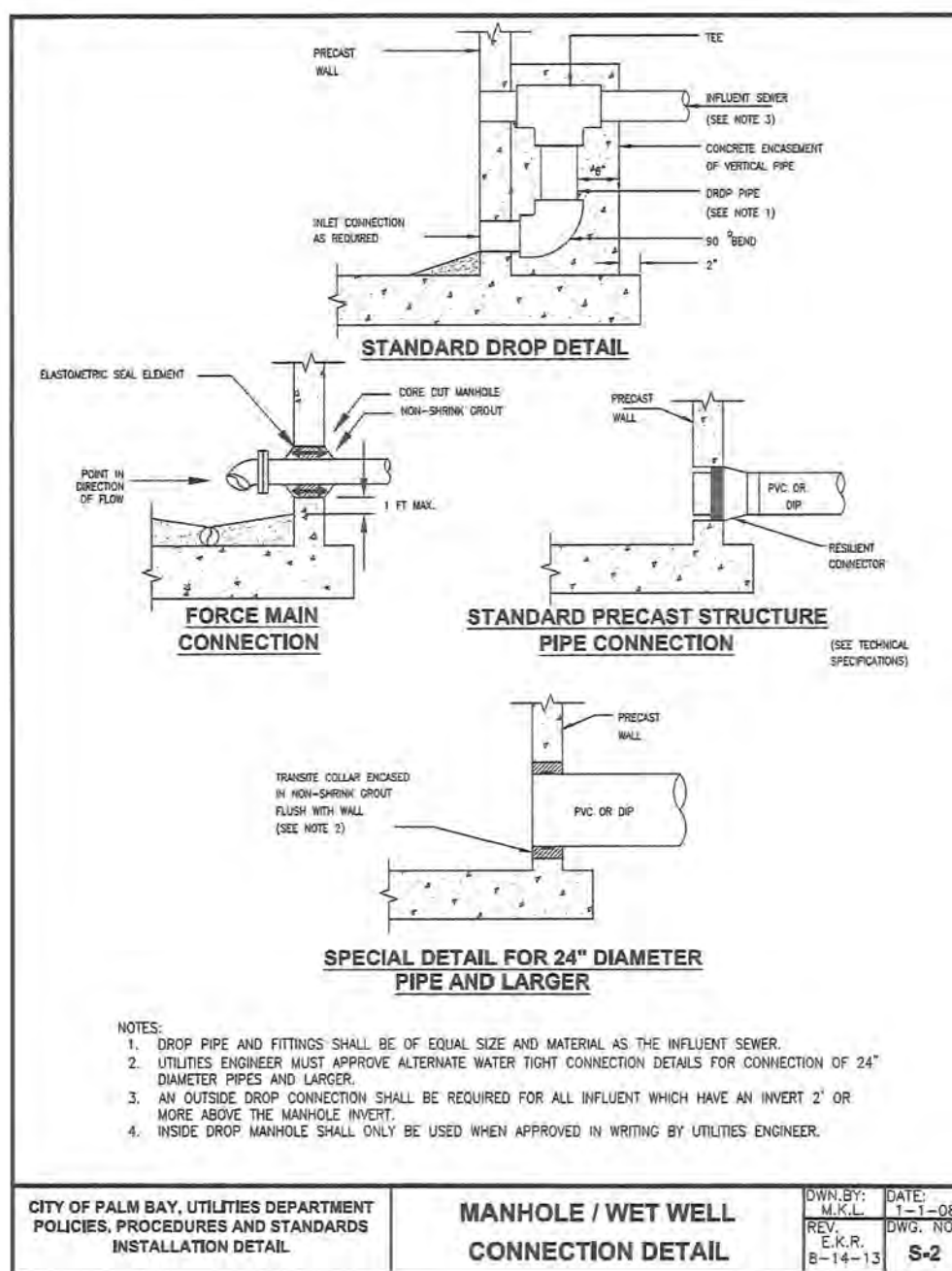
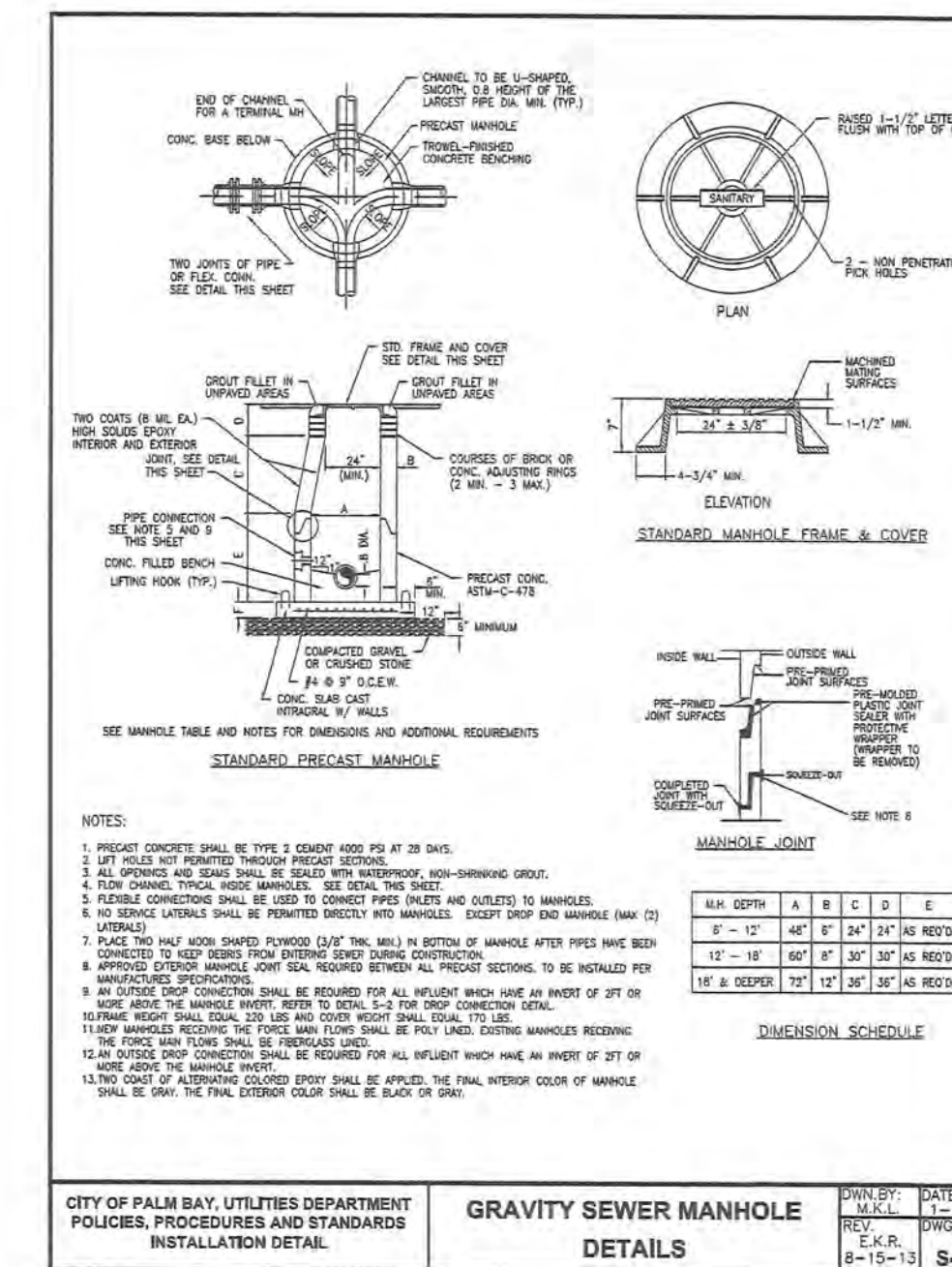
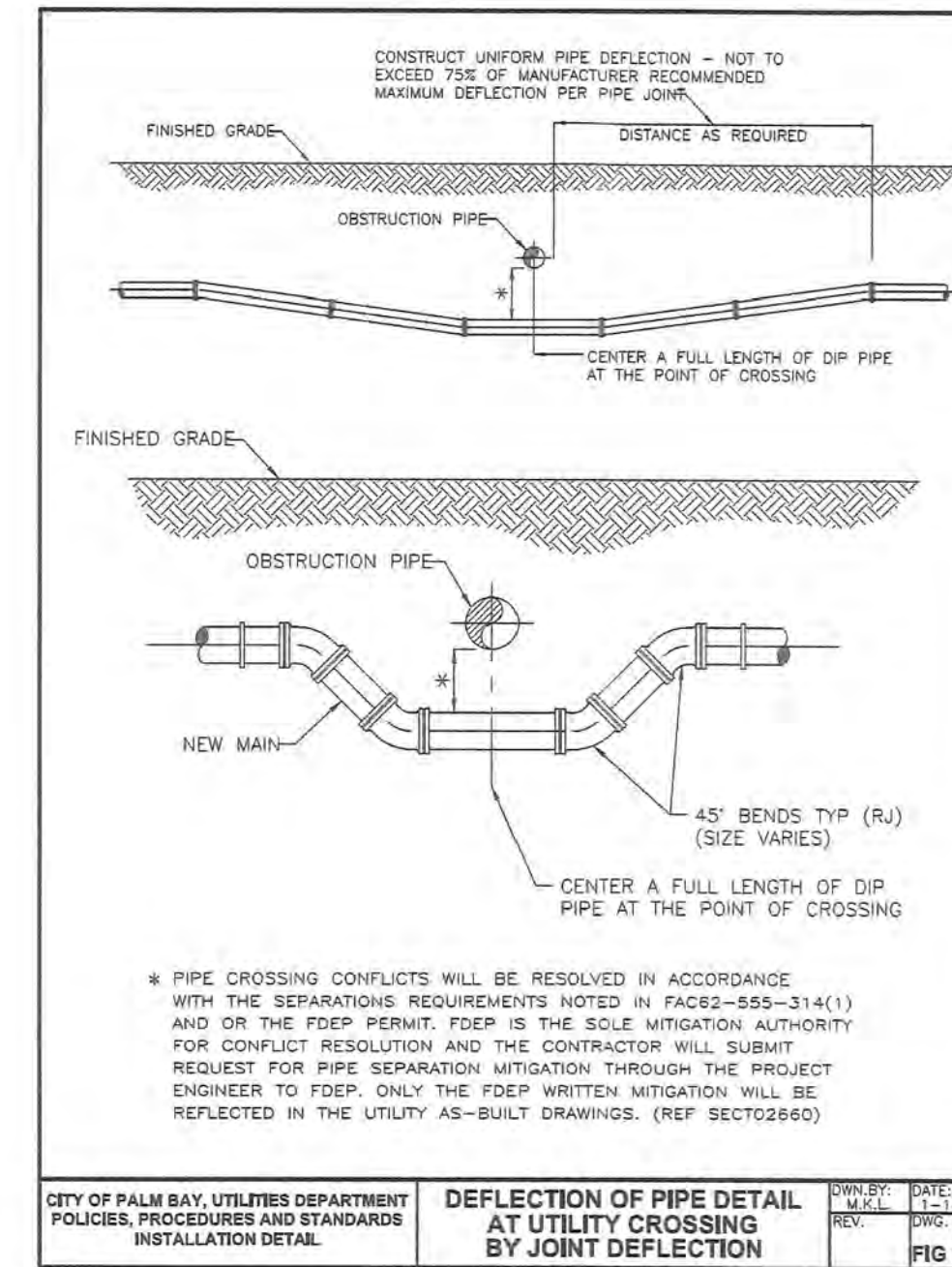
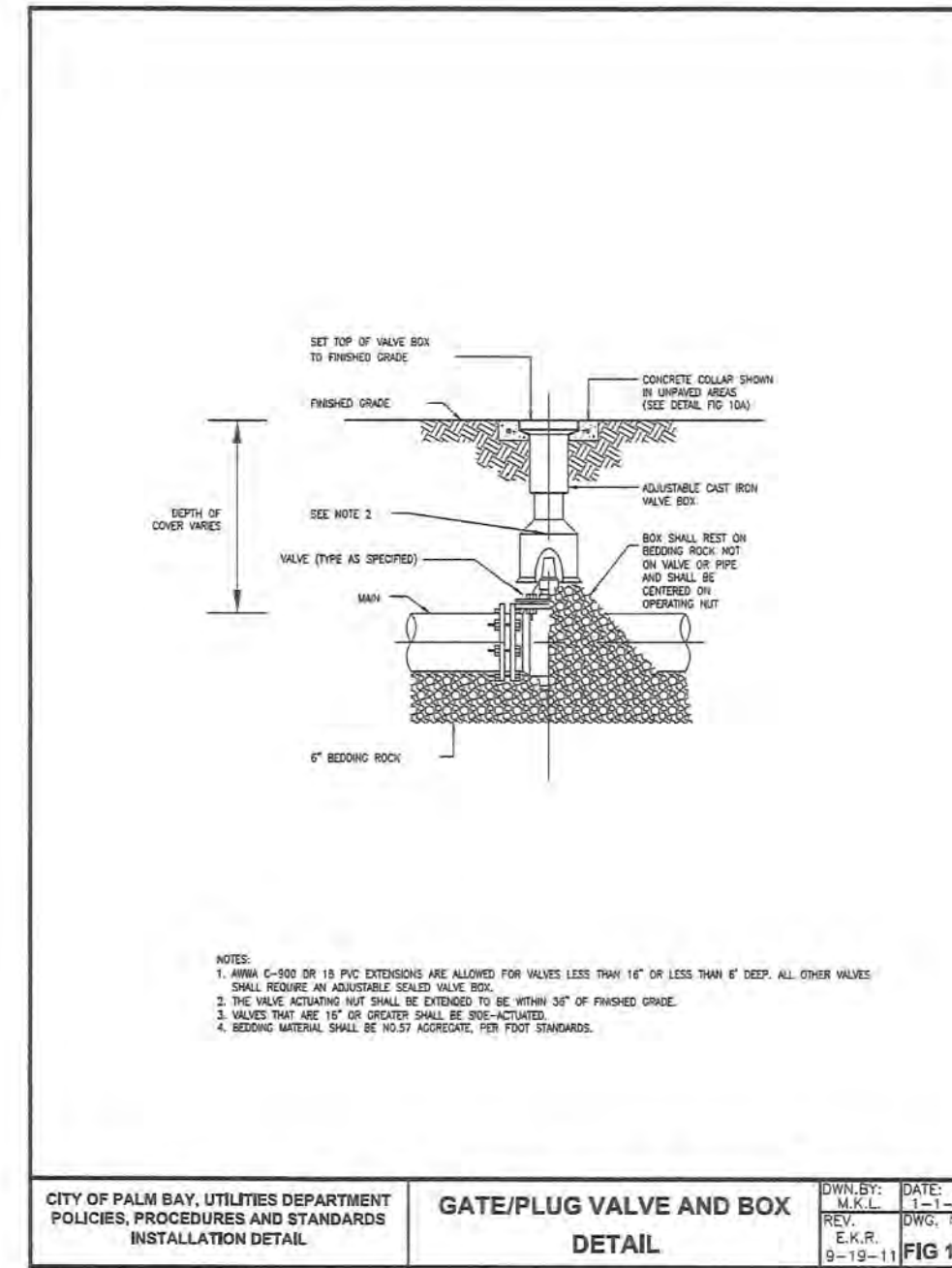
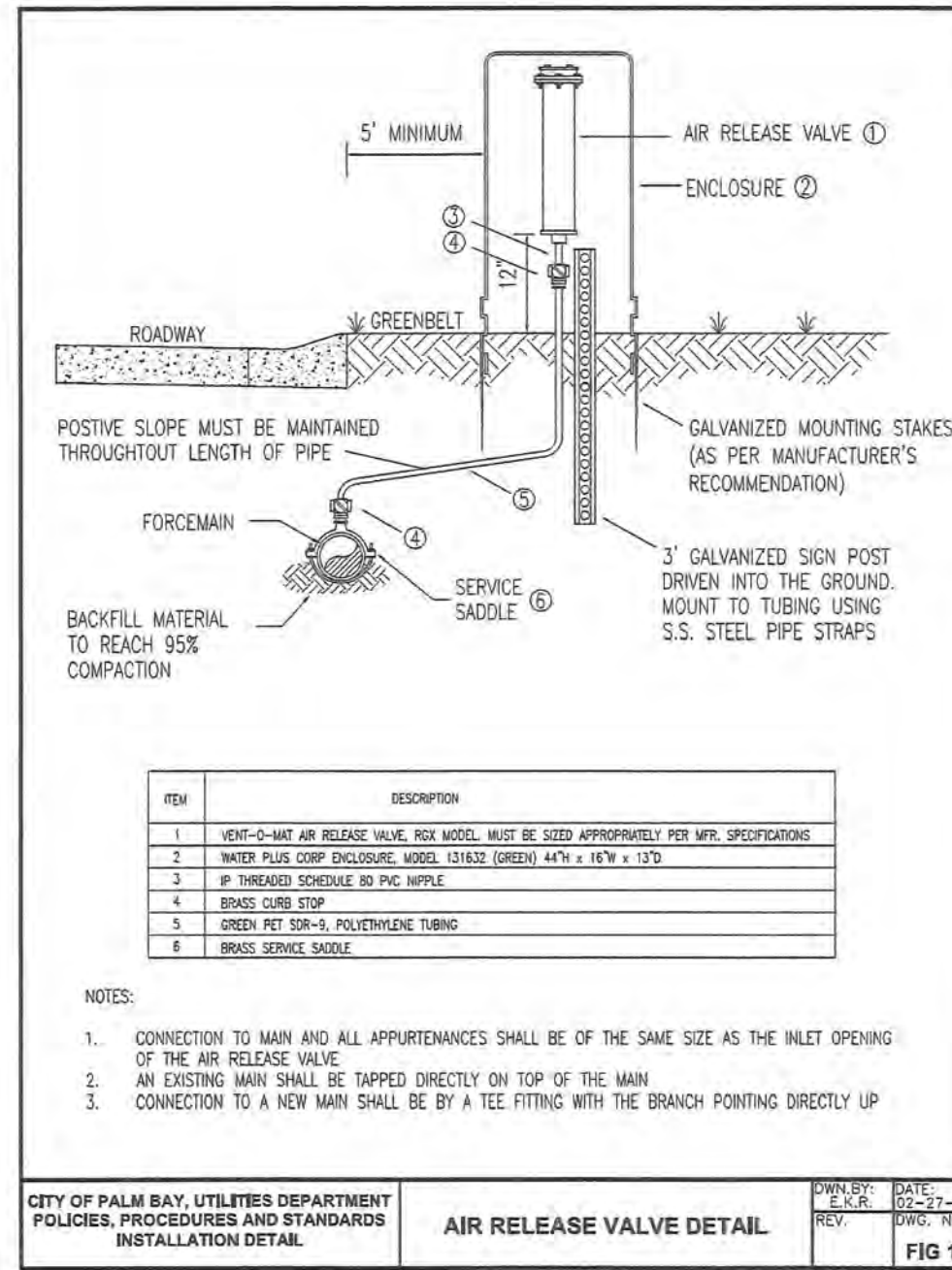
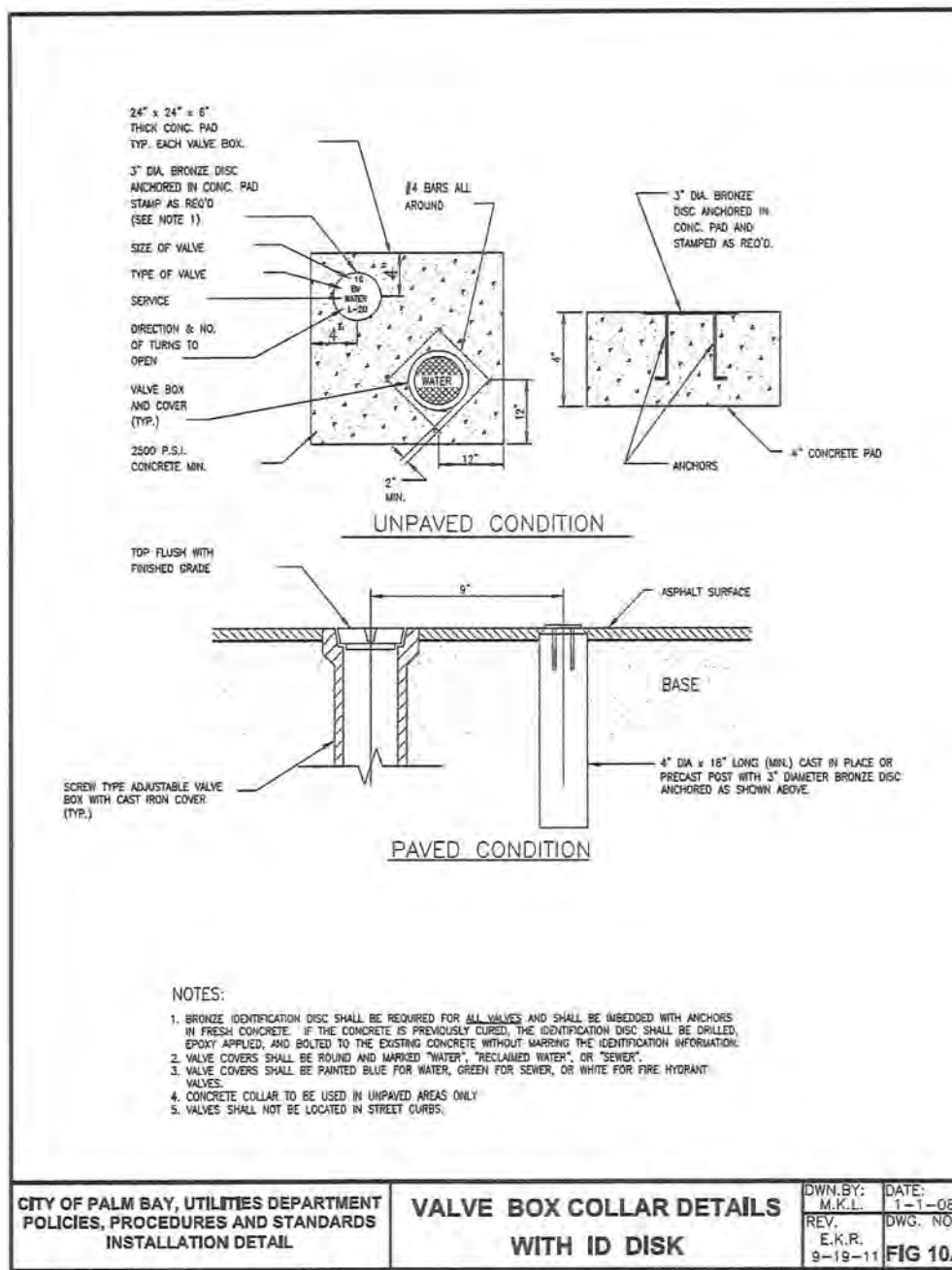
CONSTRUCTION ENGINEERING GROUP
consulting engineers

CHAPARRAL SUBDIVISION-PHASE 1A
CHAPARRAL PROPERTIES, LLC
MALABAR ROAD AND WISTERIA AVENUE NW PALM BAY, FLORIDA
DRAWING TITLE
DETAILS

STATE OF FLORIDA
PROFESSIONAL ENGINEER
JAKE T. WISE
No. 55405
7-22-19

Approved For Construction
City of Palm Bay

DATE: 4-28-17
SCALE: NTS
PROJ. NO.: 160455
DESIGNED BY: JRT
DRAWN BY: SMB
CHECKED BY: JTW
DRAWING NO. C-11



REVISION

DATE

REVIEW

DATE

CONSTRUCTION ENGINEERING GROUP
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CHAPARRAL SUBDIVISION-PHASE 1A
CHAPARRAL PROPERTIES, LLC
MALABAR ROAD AND WISTERIA AVENUE NW PALM BAY, FLORIDA
DRAWING TITLE
DETAILS

DATE: 4-28-17

SCALE: NTS

PROJ. NO.: 160455

DESIGNED BY: JRT

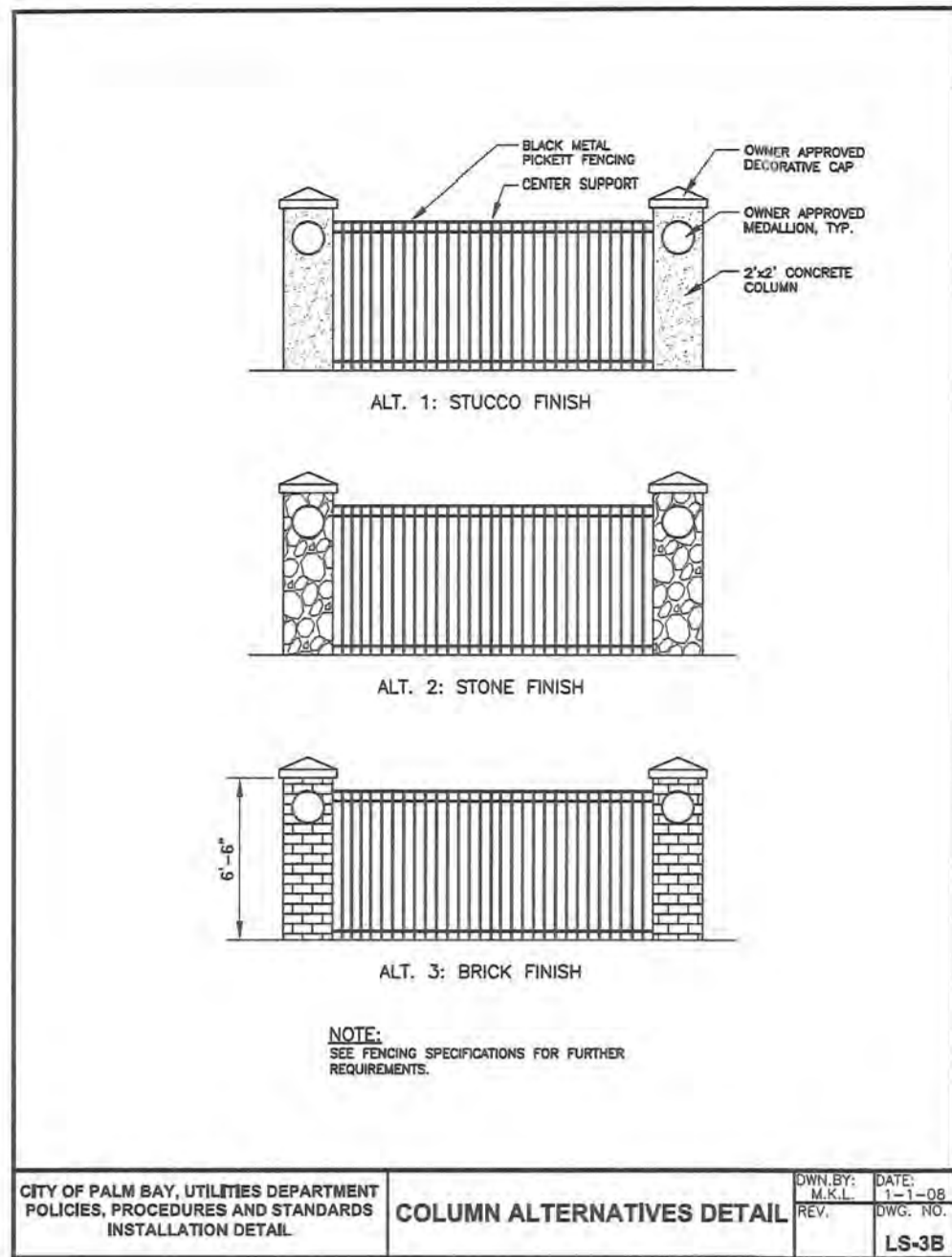
DRAWN BY: SMB

CHECKED BY: JTW

DRAWING NO. C-13

APPROVED FOR CONSTRUCTION
City of Palm Bay

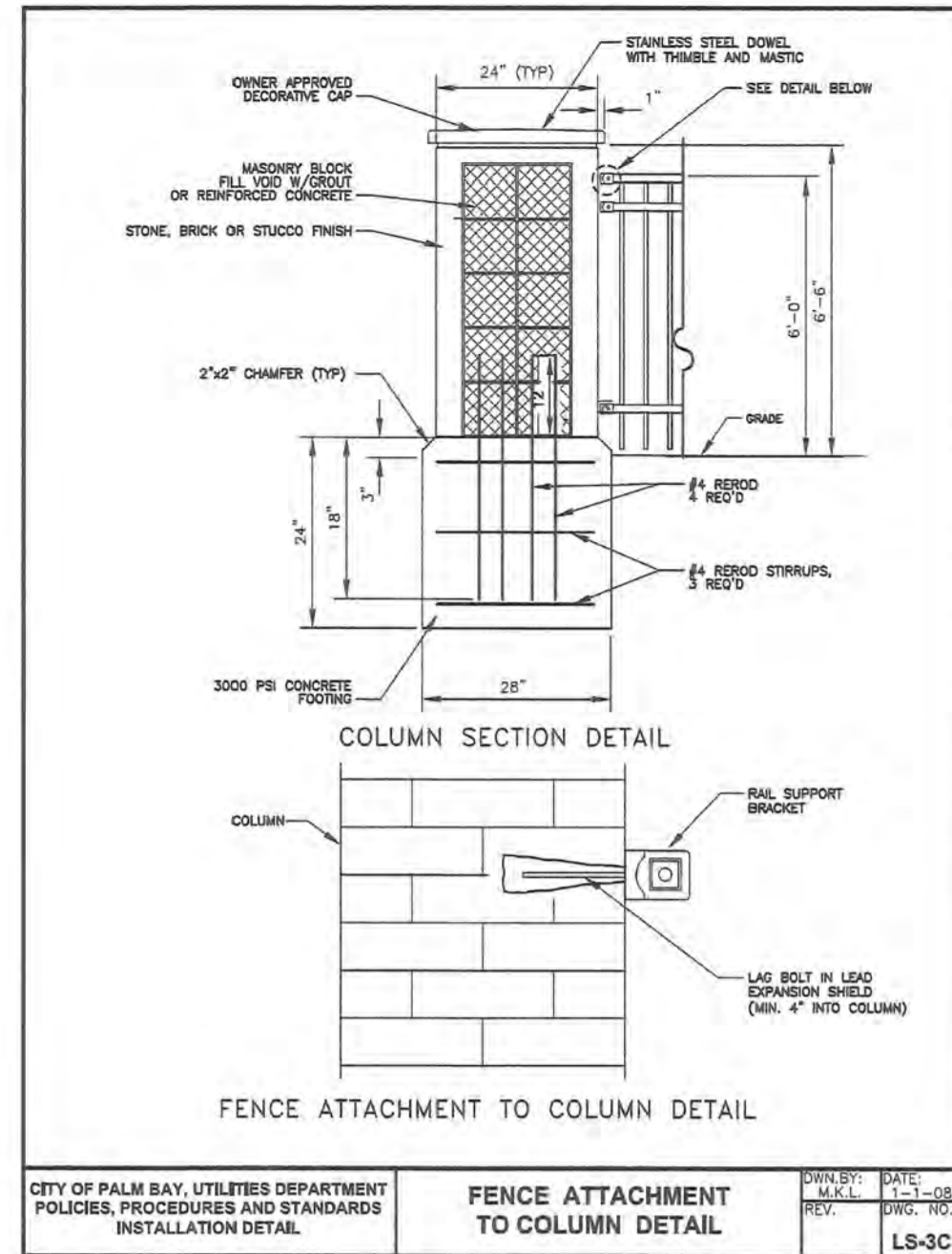
JAKE T. WISE
LICENSE No. 55405
STATE OF FLORIDA
PROFESSIONAL ENGINEER
7-22-19



CITY OF PALM BAY, UTILITIES DEPARTMENT
POLICIES, PROCEDURES AND STANDARDS
INSTALLATION DETAIL

COLUMN ALTERNATIVES DETAIL

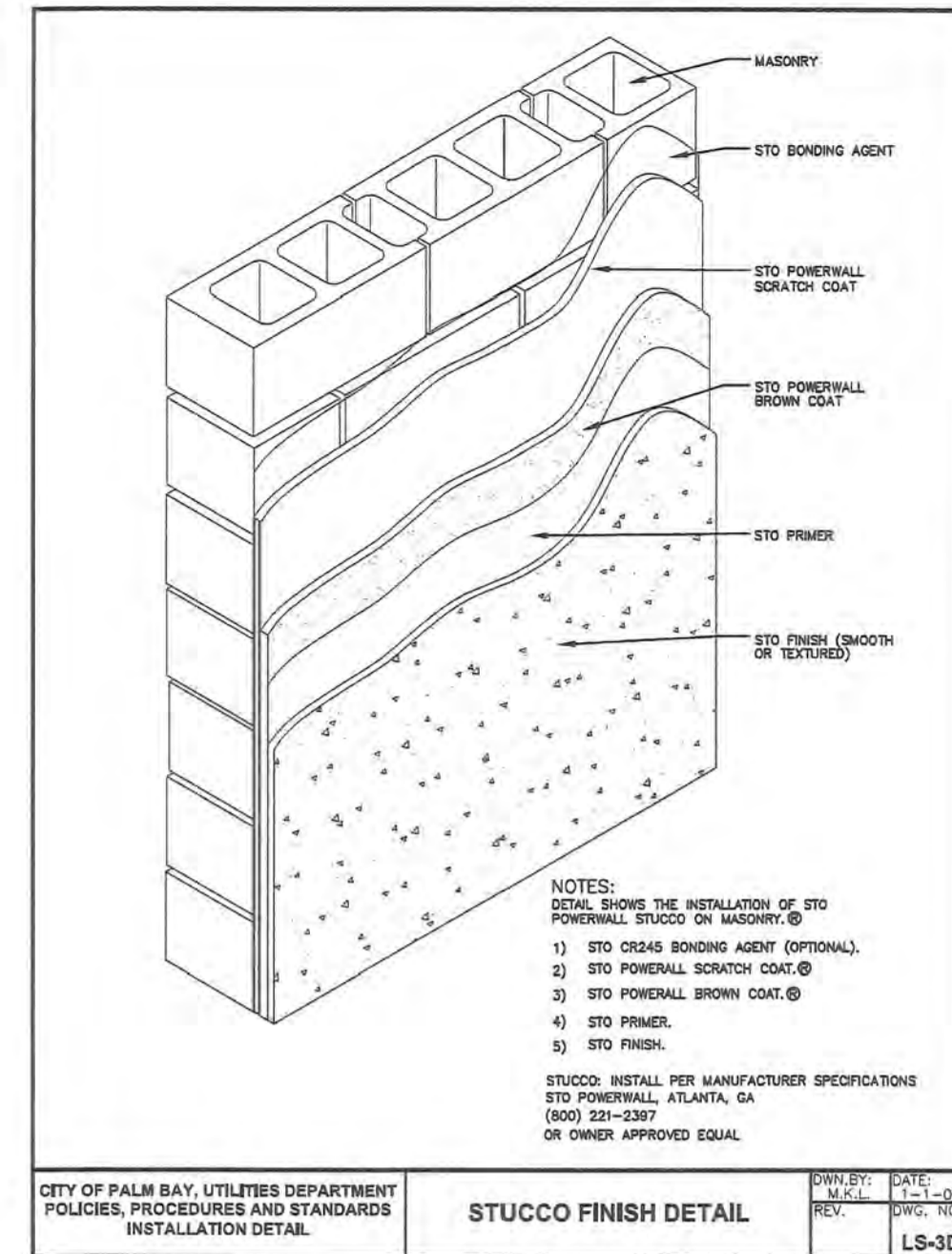
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REV. 1: 11-10-12
E.A.R. M.W.L. D.C.P. NO. 15-3B



CITY OF PALM BAY, UTILITIES DEPARTMENT
POLICIES, PROCEDURES AND STANDARDS
INSTALLATION DETAIL

FENCE ATTACHMENT TO COLUMN DETAIL

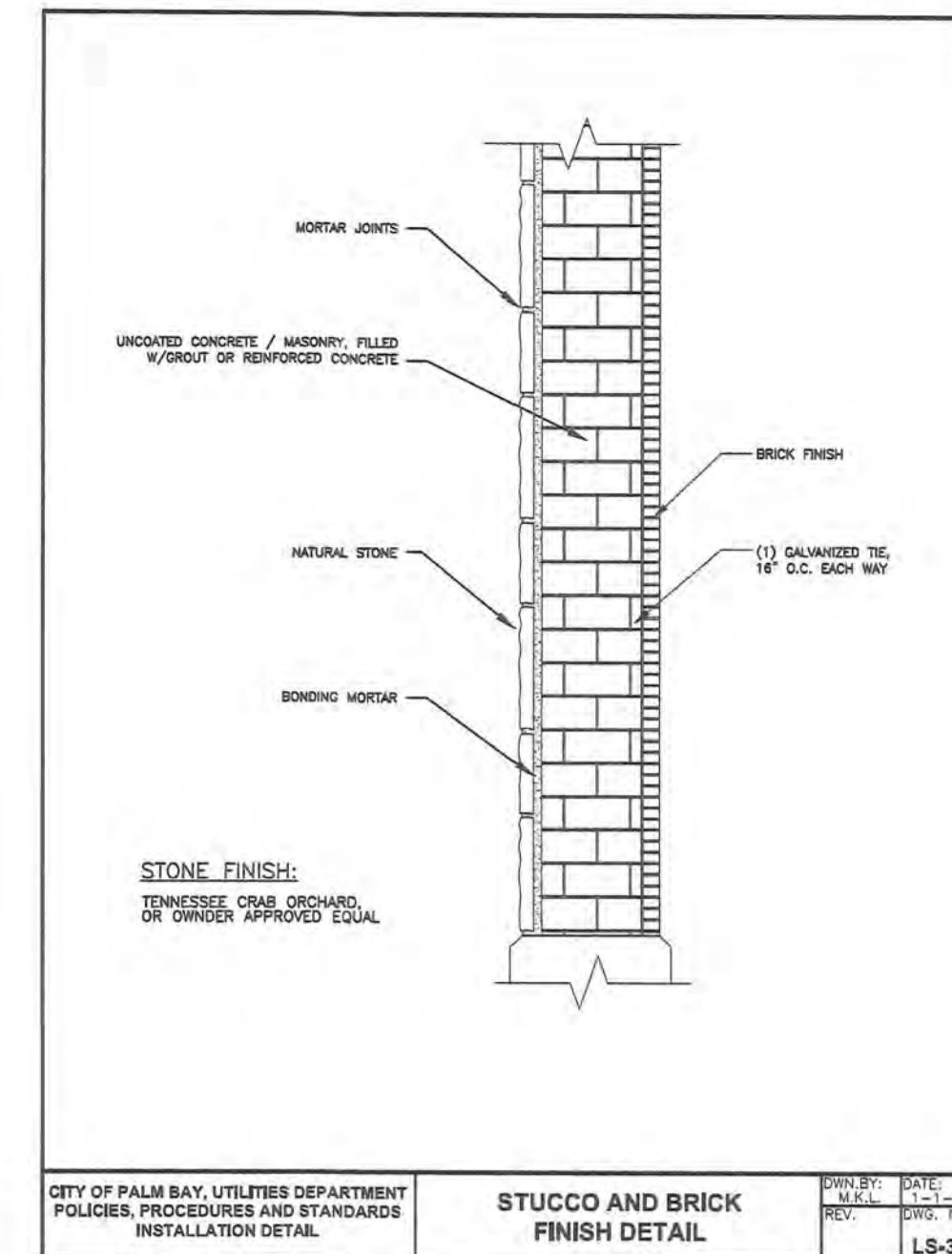
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E.A.R. M.W.L. D.C.P. NO. 15-3C



CITY OF PALM BAY, UTILITIES DEPARTMENT
POLICIES, PROCEDURES AND STANDARDS
INSTALLATION DETAIL

STUCCO FINISH DETAIL

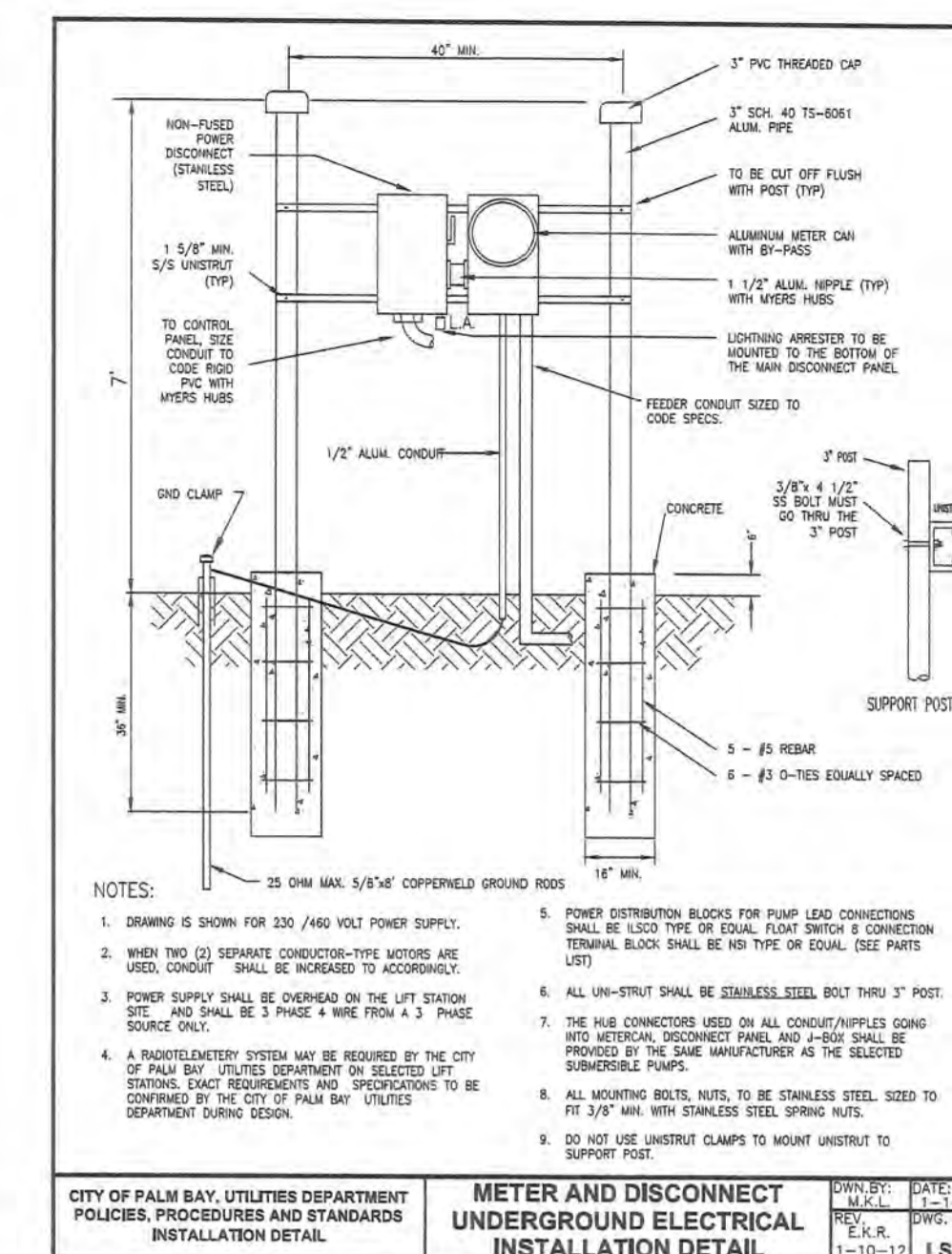
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CITY OF PALM BAY, UTILITIES DEPARTMENT
POLICIES, PROCEDURES AND STANDARDS
INSTALLATION DETAIL

STUCCO AND BRICK FINISH DETAIL

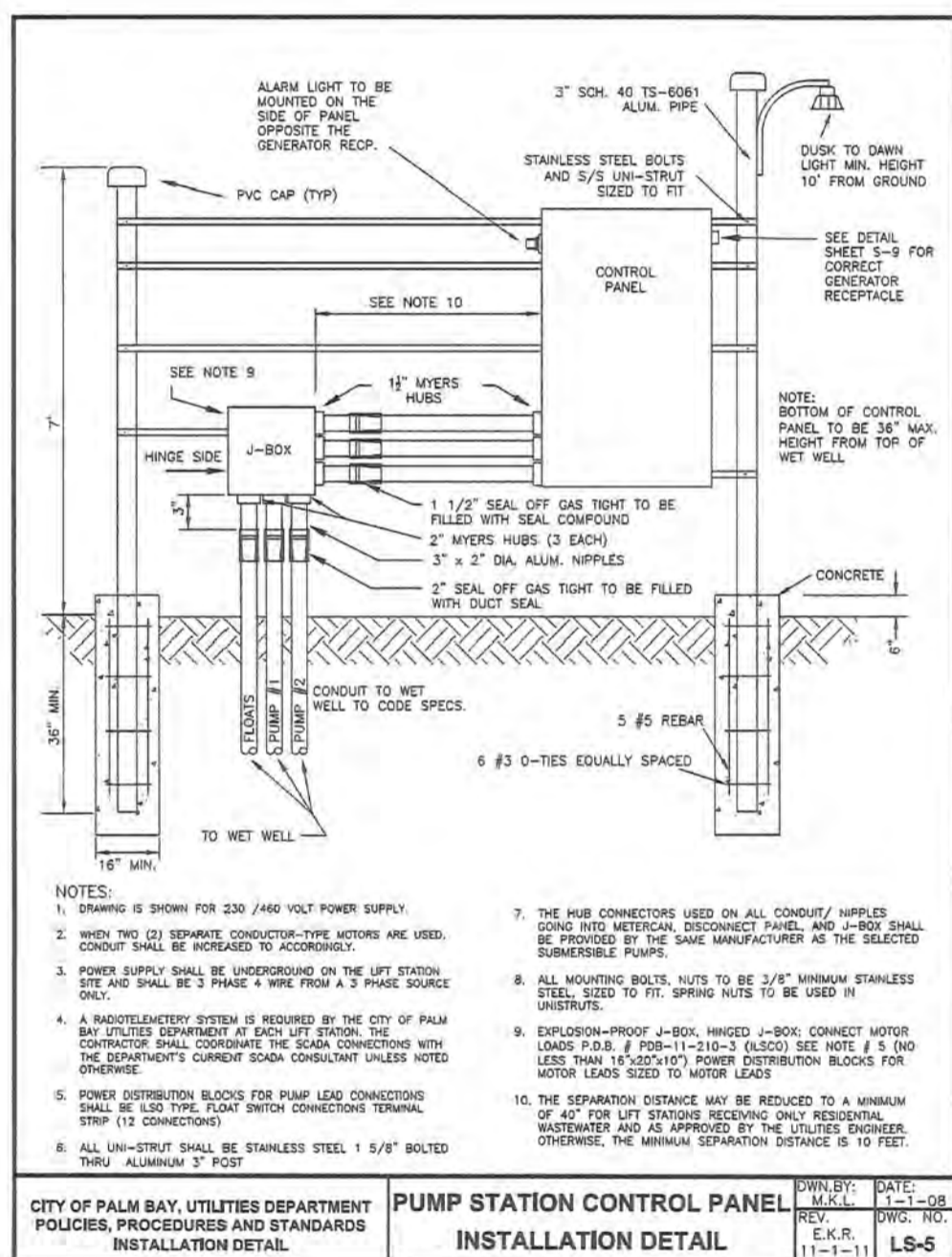
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CITY OF PALM BAY, UTILITIES DEPARTMENT
POLICIES, PROCEDURES AND STANDARDS
INSTALLATION DETAIL

METER AND DISCONNECT UNDERGROUND ELECTRICAL INSTALLATION DETAIL

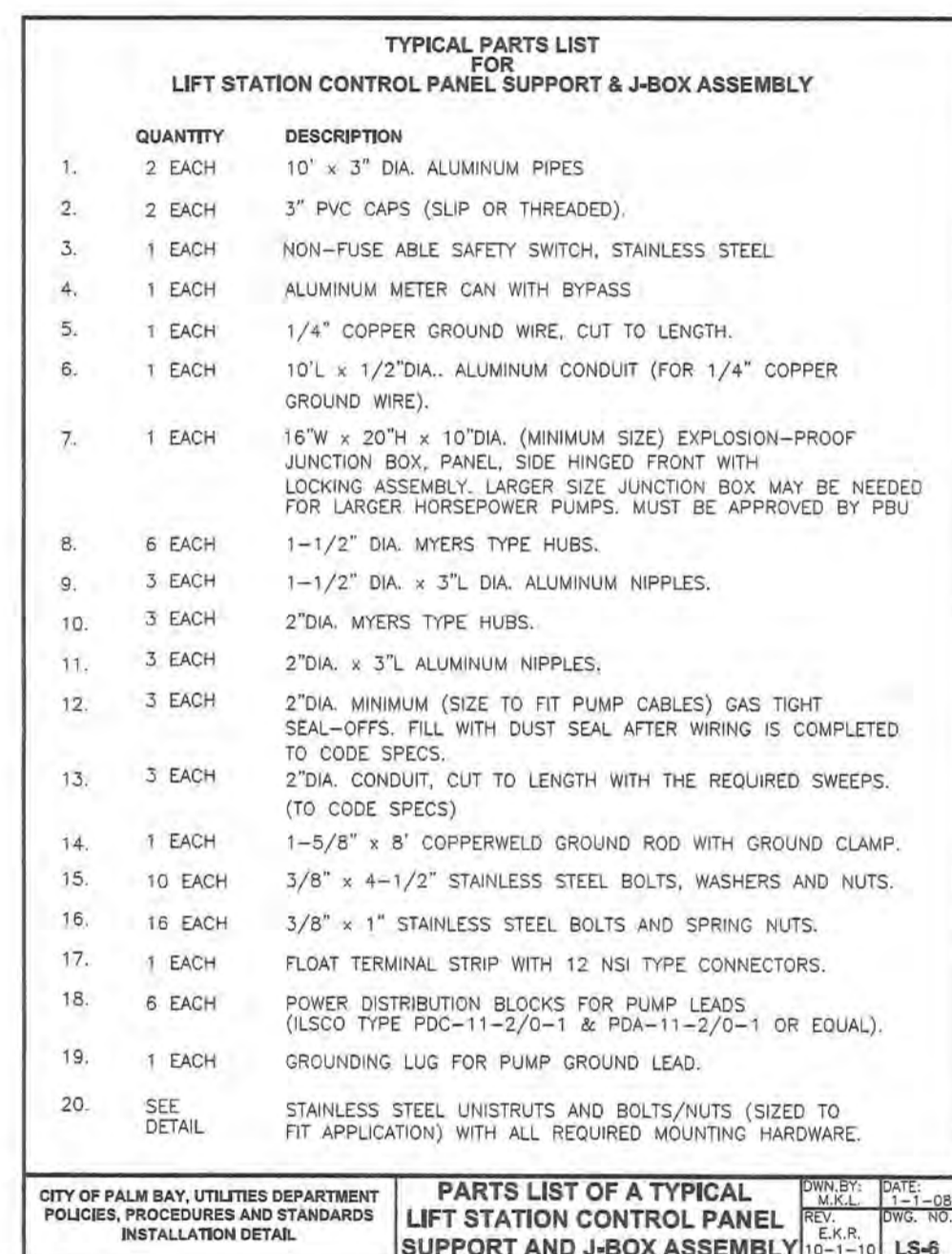
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CITY OF PALM BAY, UTILITIES DEPARTMENT
POLICIES, PROCEDURES AND STANDARDS
INSTALLATION DETAIL

PUMP STATION CONTROL PANEL INSTALLATION DETAIL

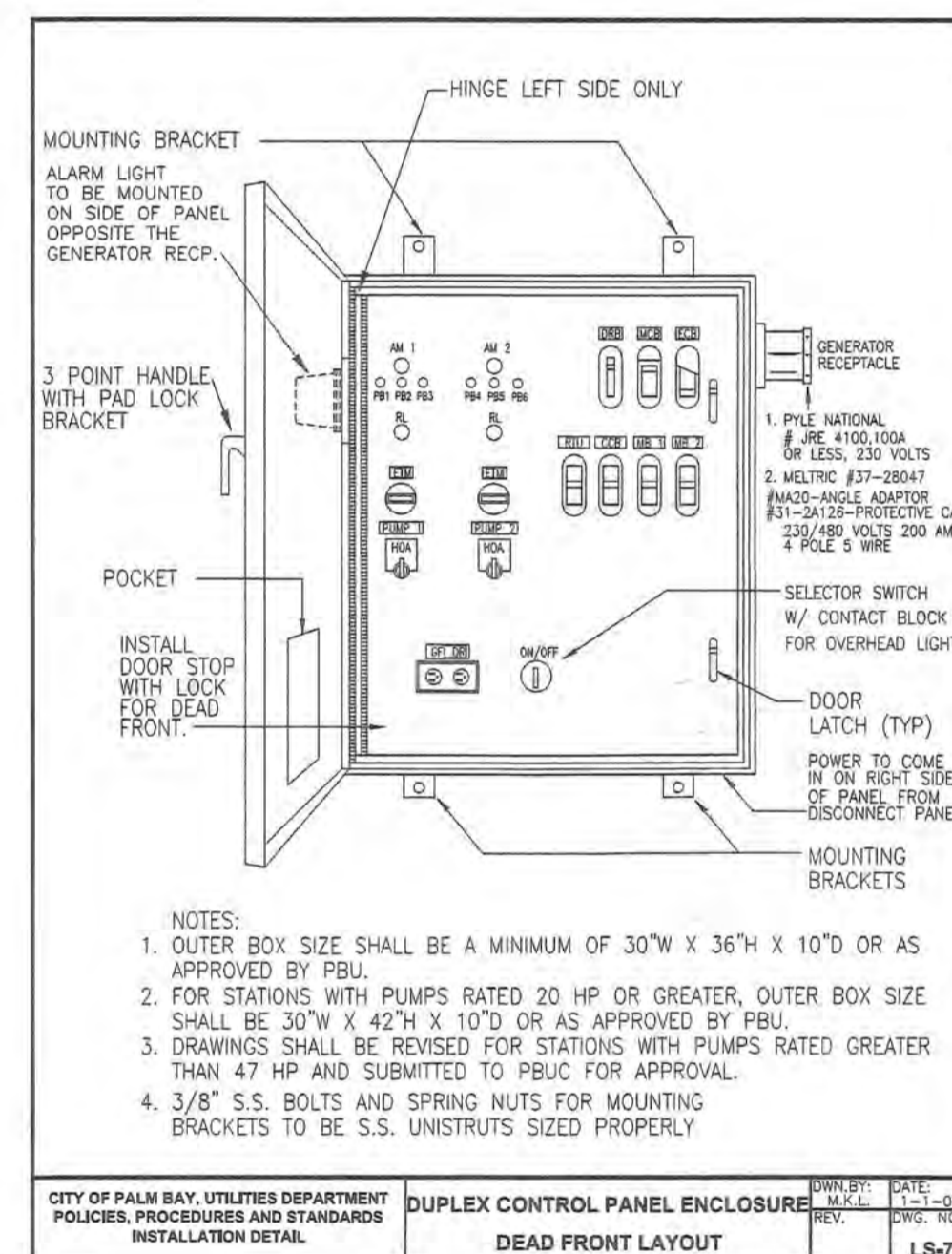
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CITY OF PALM BAY, UTILITIES DEPARTMENT
POLICIES, PROCEDURES AND STANDARDS
INSTALLATION DETAIL

TYPICAL PARTS LIST LIFT STATION CONTROL PANEL SUPPORT AND J-BOX ASSEMBLY

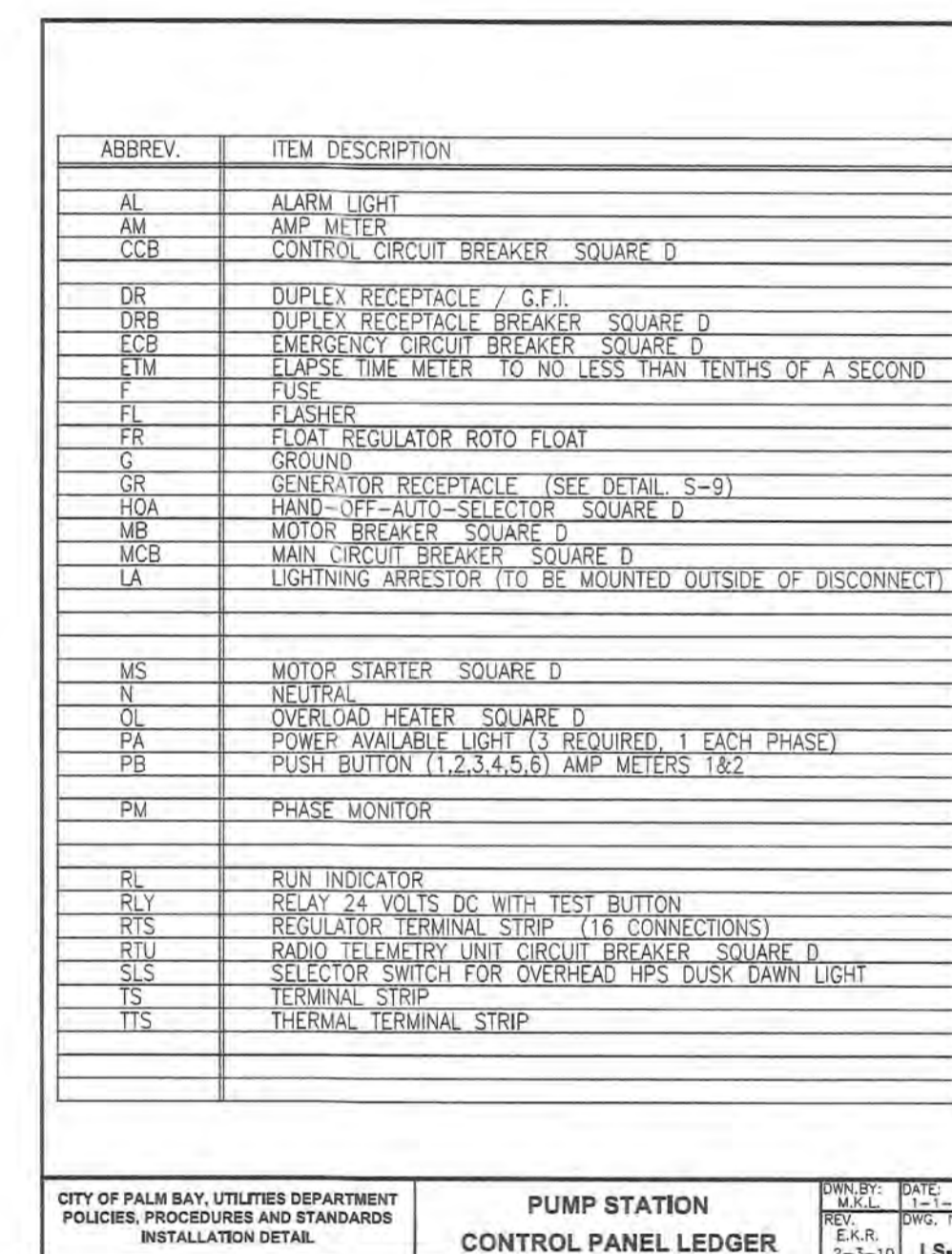
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E.A.R. M.W.L. D.C.P. NO. 15-6



CITY OF PALM BAY, UTILITIES DEPARTMENT
POLICIES, PROCEDURES AND STANDARDS
INSTALLATION DETAIL

DUPLEX CONTROL PANEL ENCLOSURE DEAD FRONT LAYOUT

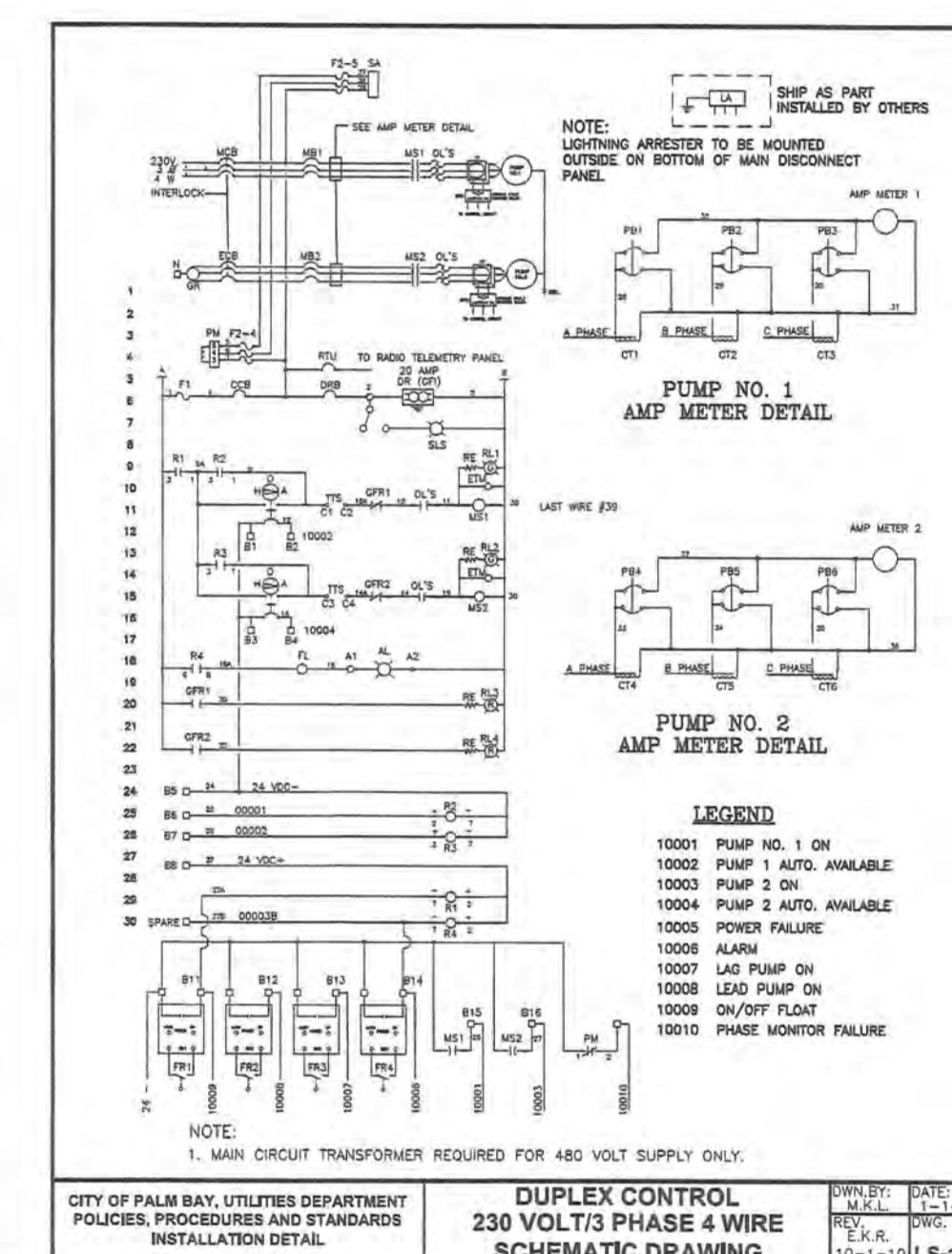
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E.A.R. M.W.L. D.C.P. NO. 15-7



CITY OF PALM BAY, UTILITIES DEPARTMENT
POLICIES, PROCEDURES AND STANDARDS
INSTALLATION DETAIL

PUMP STATION CONTROL PANEL LEDGER

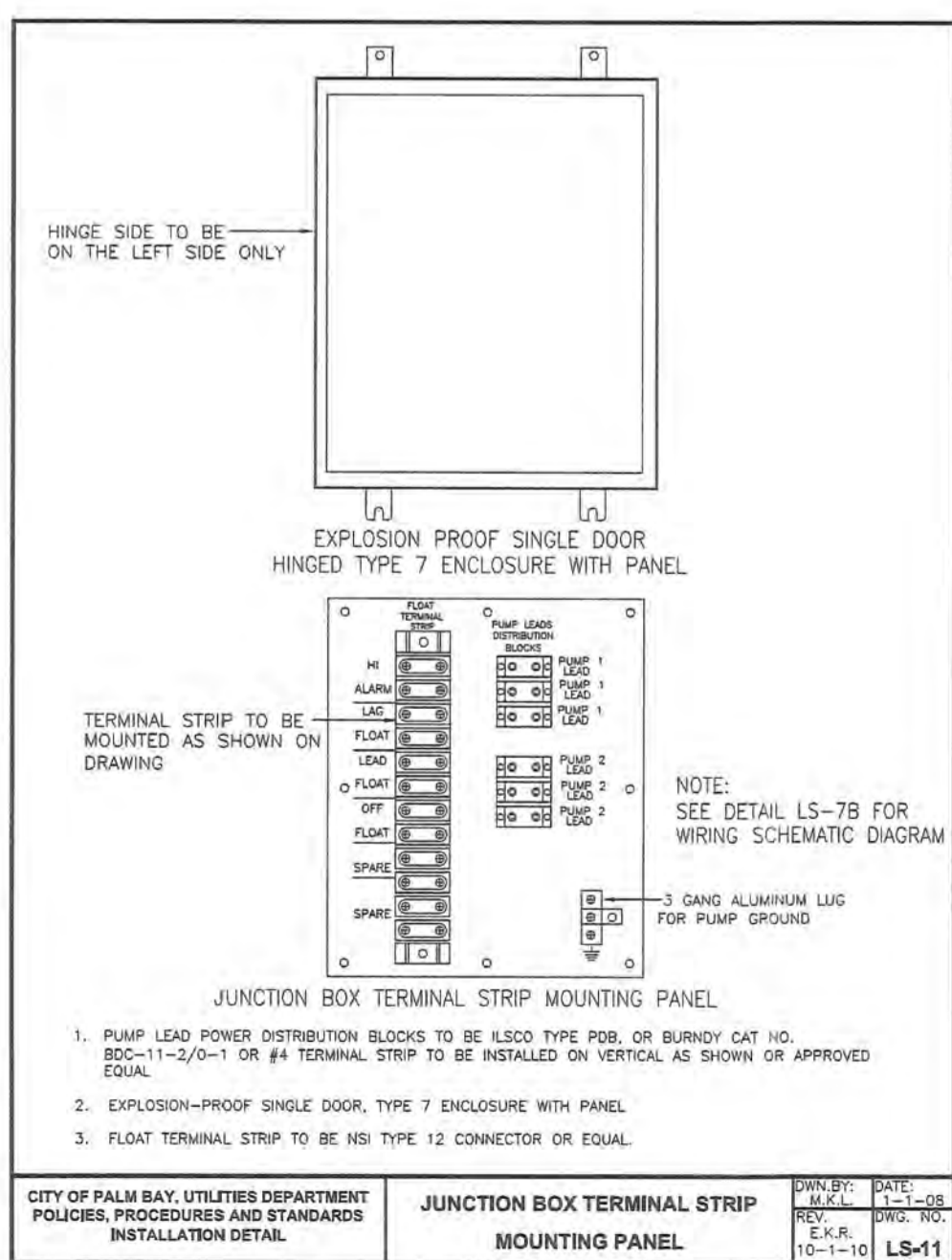
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E.A.R. M.W.L. D.C.P. NO. 15-8



CITY OF PALM BAY, UTILITIES DEPARTMENT
POLICIES, PROCEDURES AND STANDARDS
INSTALLATION DETAIL

DUPLEX CONTROL 230 VOLT/3 PHASE 4 WIRE SCHEMATIC DRAWING

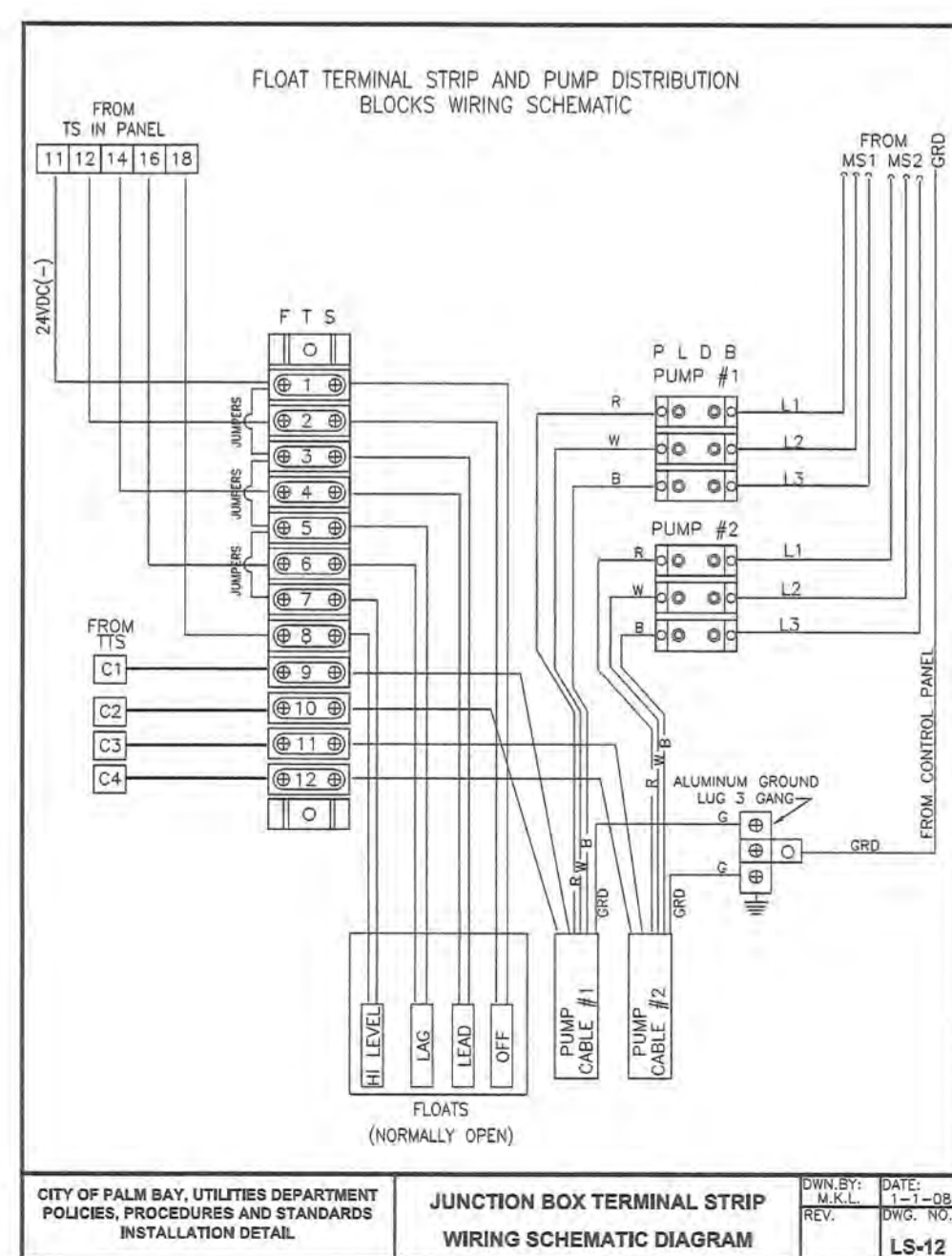
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E.A.R. M.W.L. D.C.P. NO. 15-10A



CITY OF PALM BAY, UTILITIES DEPARTMENT
POLICIES, PROCEDURES AND STANDARDS
INSTALLATION DETAIL

JUNCTION BOX TERMINAL STRIP MOUNTING PANEL

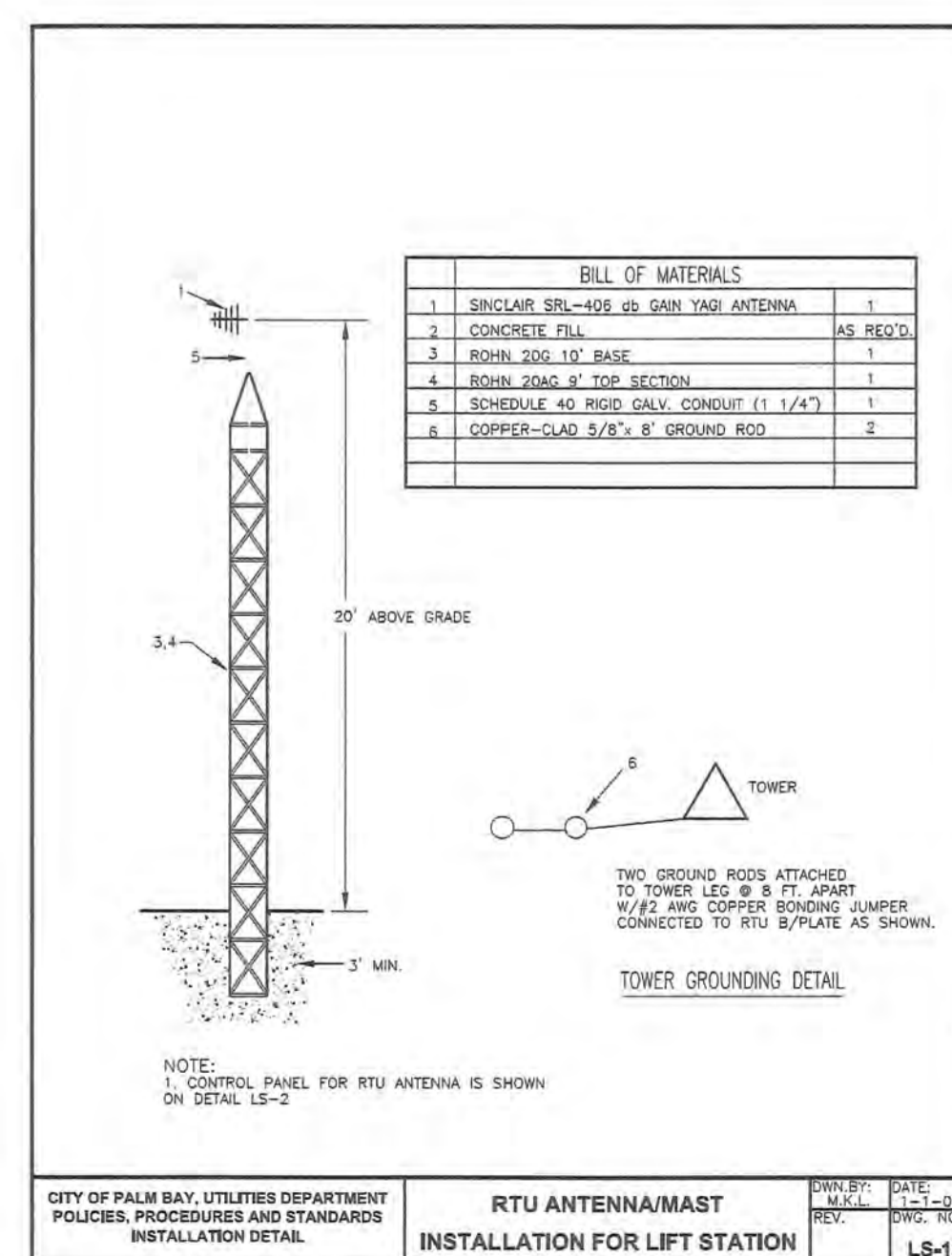
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E.A.R. M.W.L. D.C.P. NO. 15-11



CITY OF PALM BAY, UTILITIES DEPARTMENT
POLICIES, PROCEDURES AND STANDARDS
INSTALLATION DETAIL

JUNCTION BOX TERMINAL STRIP WIRING SCHEMATIC DIAGRAM

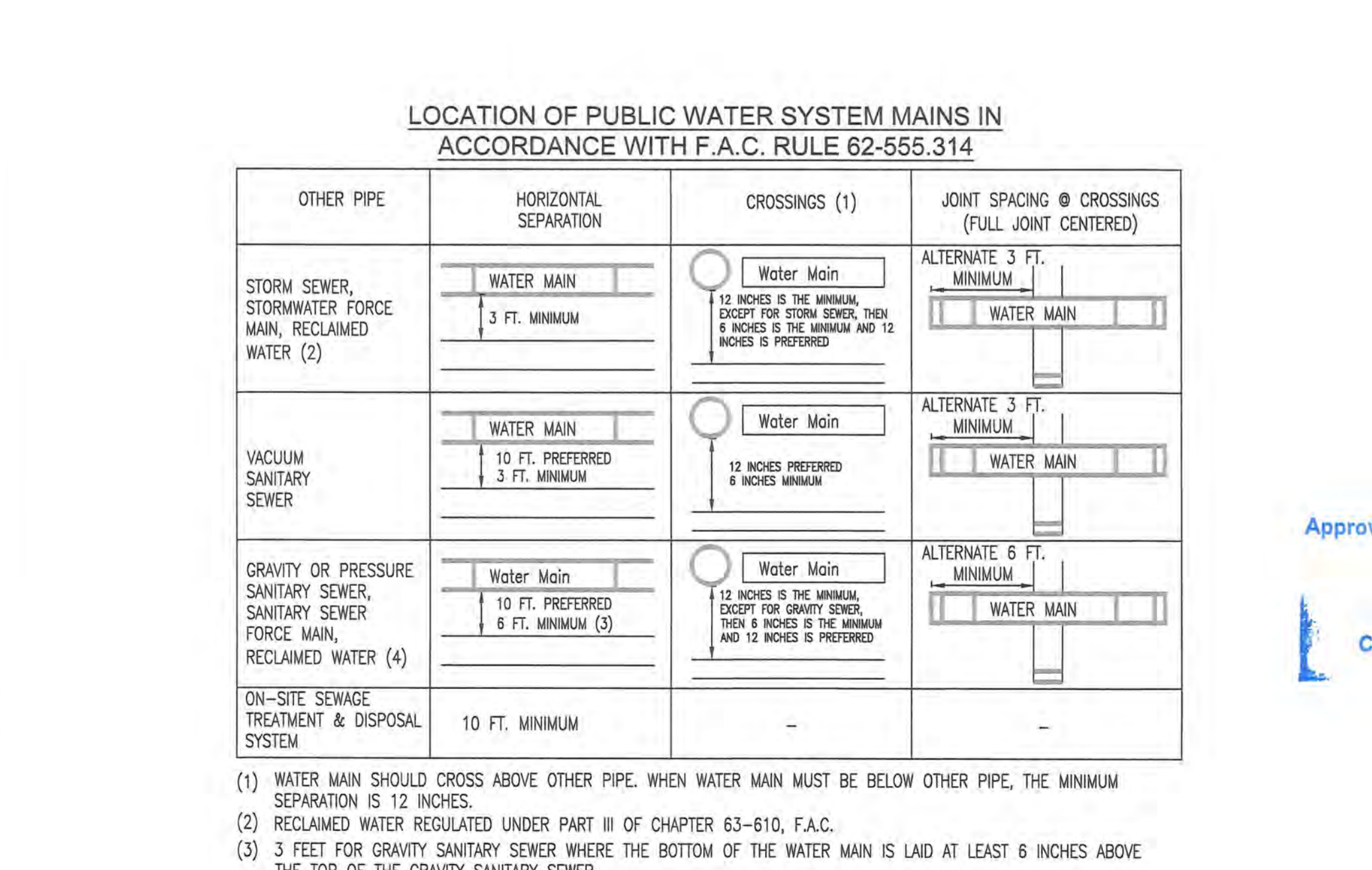
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E.A.R. M.W.L. D.C.P. NO. 15-12



CITY OF PALM BAY, UTILITIES DEPARTMENT
POLICIES, PROCEDURES AND STANDARDS
INSTALLATION DETAIL

RTU ANTENNA/MAST INSTALLATION FOR LIFT STATION

DATE: 11-10-12
REV. 1: 11-10-12
E.A.R. M.W.L. D.C.P. NO. 15-13



CITY OF PALM BAY, UTILITIES DEPARTMENT
POLICIES, PROCEDURES AND STANDARDS
INSTALLATION DETAIL

LOCATION OF PUBLIC WATER SYSTEM MAINS IN ACCORDANCE WITH F.A.C. RULE 62-555.314

DATE: 11-10-12
REV. 1: 11-10-12
E.A.R. M.W.L. D.C.P. NO. 15-14

REVISION

DATE

REV#

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CHAPARRAL SUBDIVISION-PHASE 1A

CHAPARRAL PROPERTIES, LLC
MALABAR ROAD AND WISTERIA AVENUE NW PALM BAY, FLORIDA

DRAWING TITLE
DETAILS

DATE: 4-28-17

SCALE: NTS

PROJ. NO.: 160455

DESIGNED BY: JRT

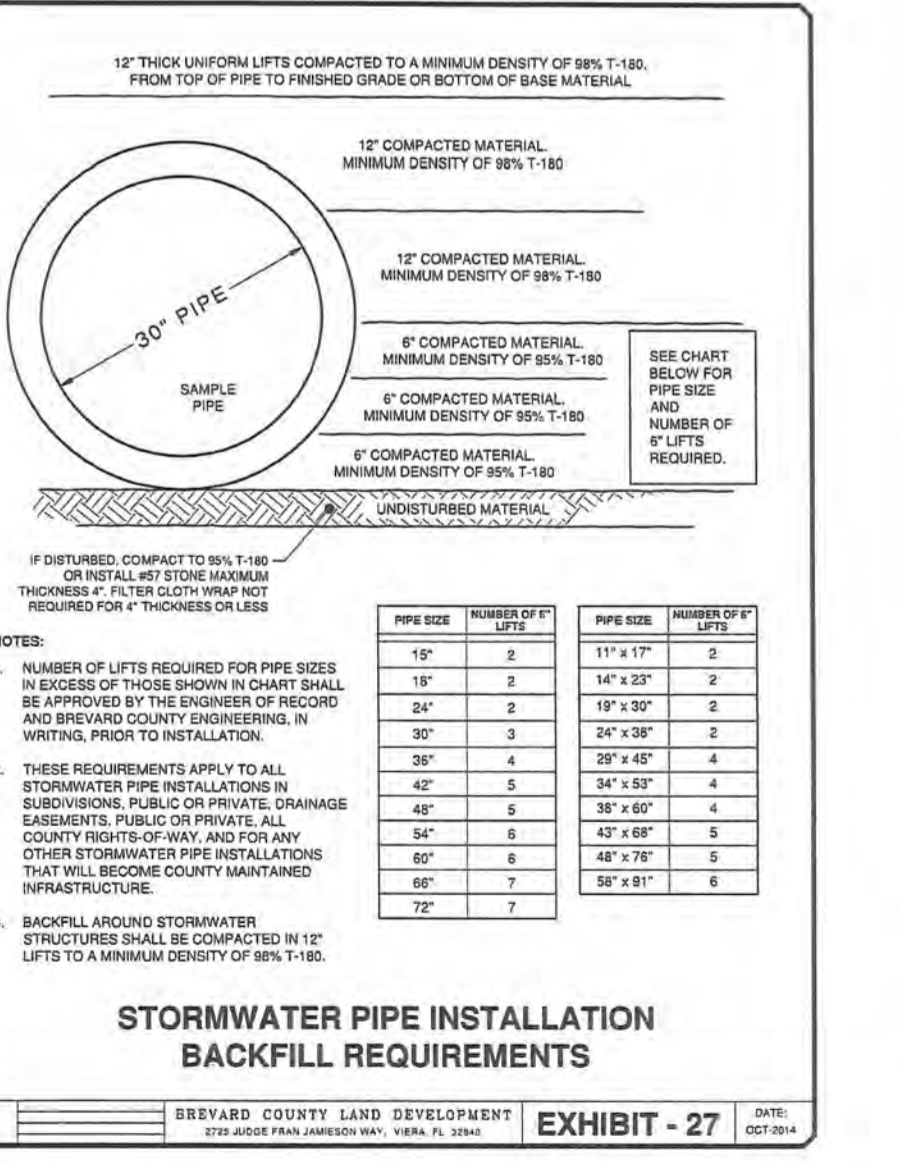
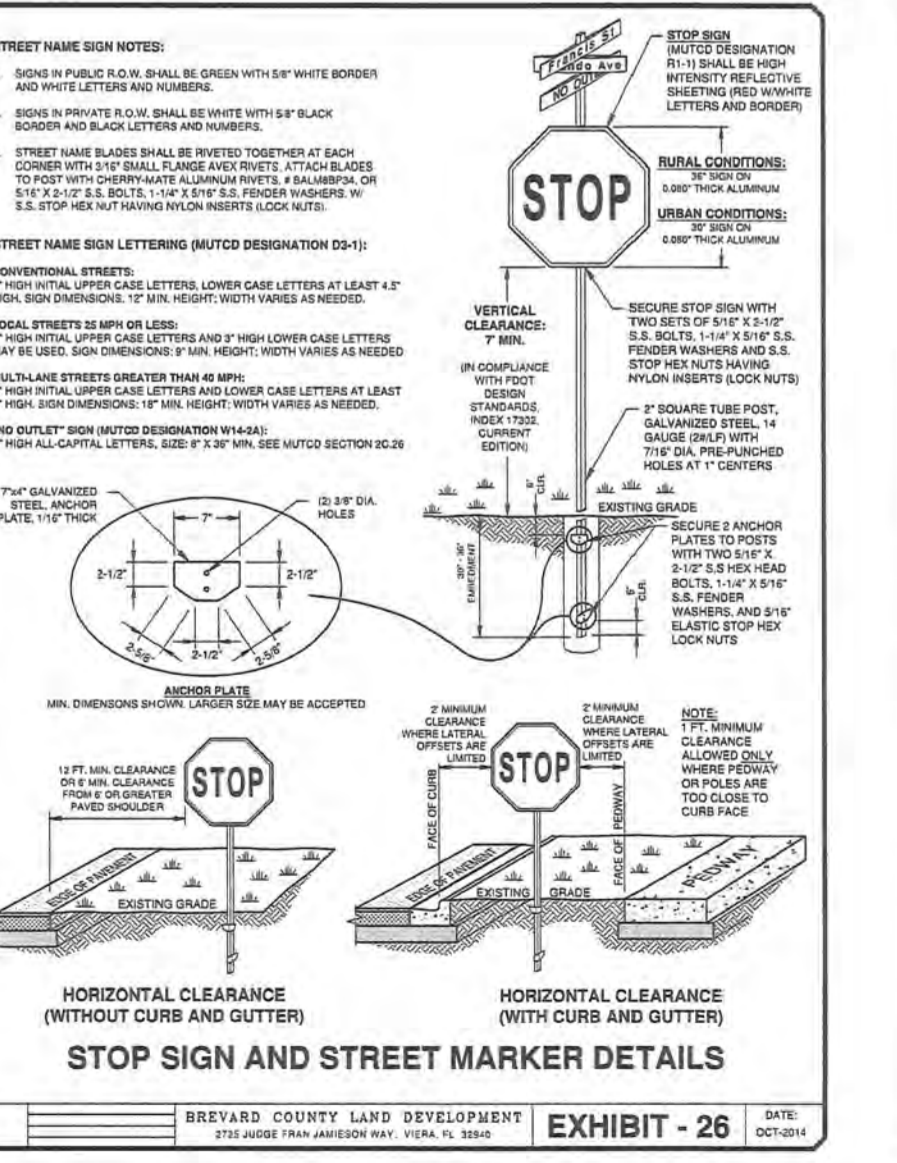
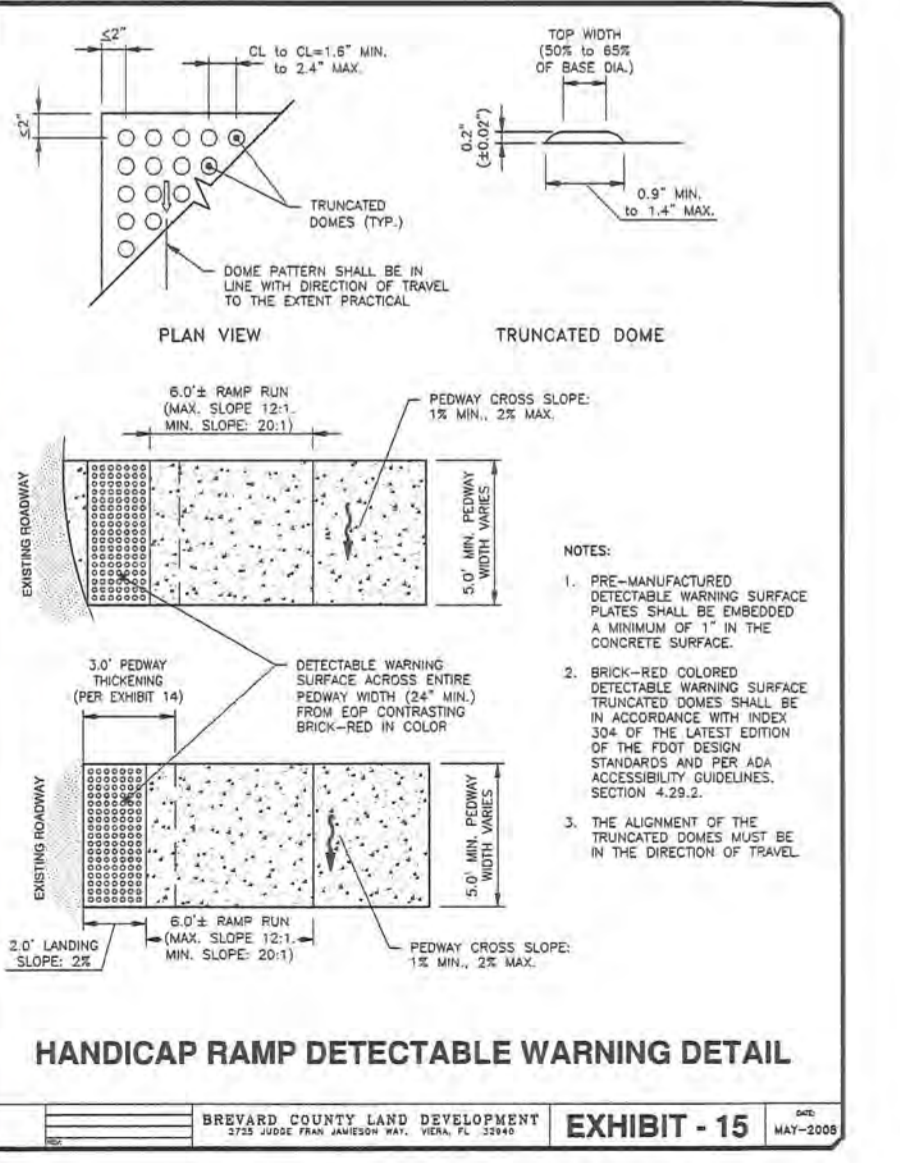
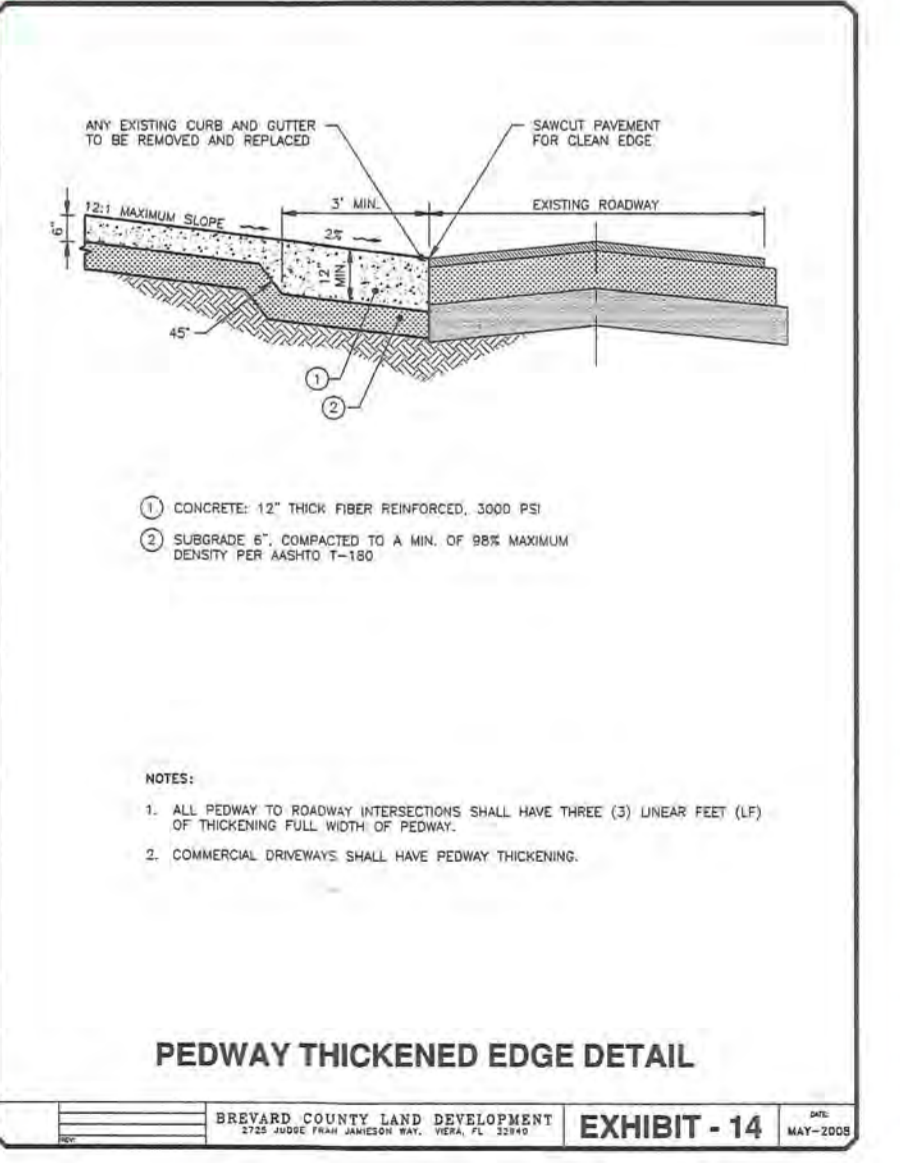
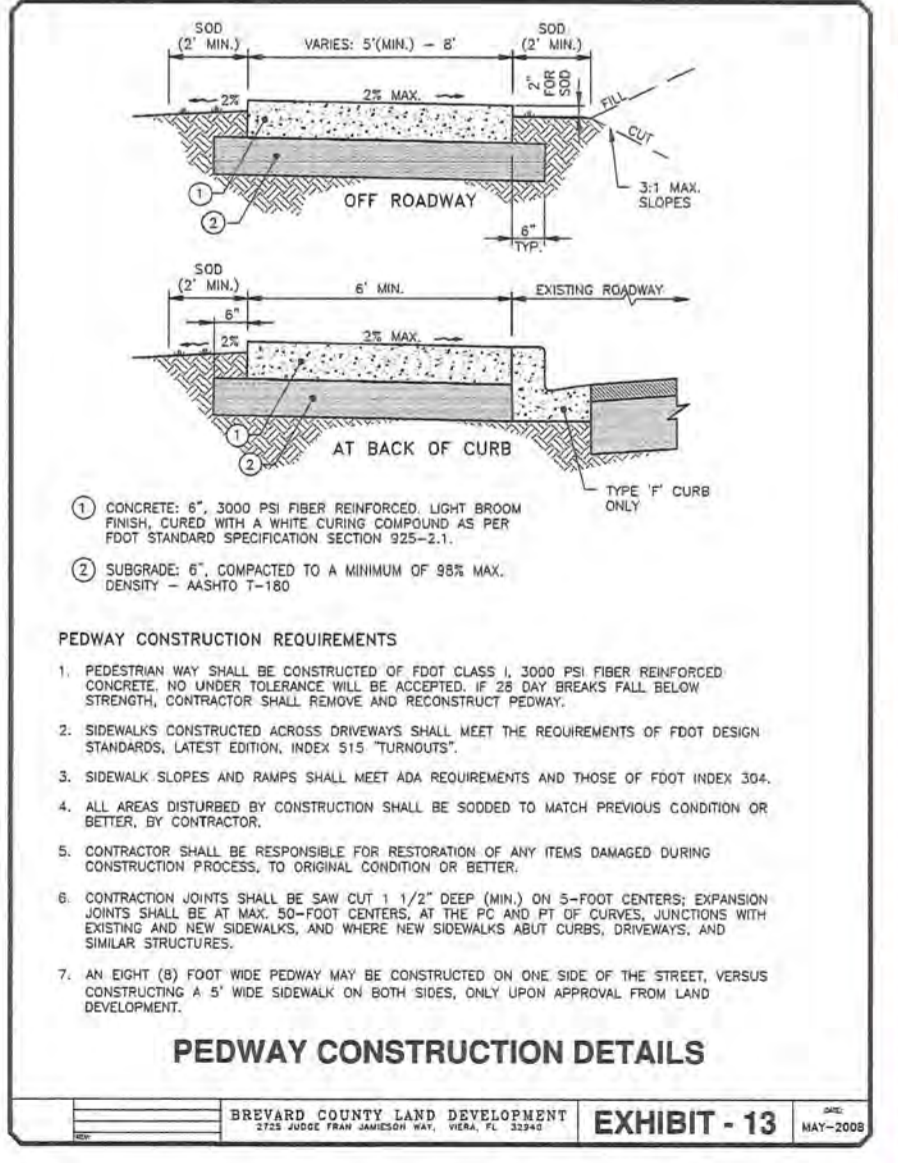
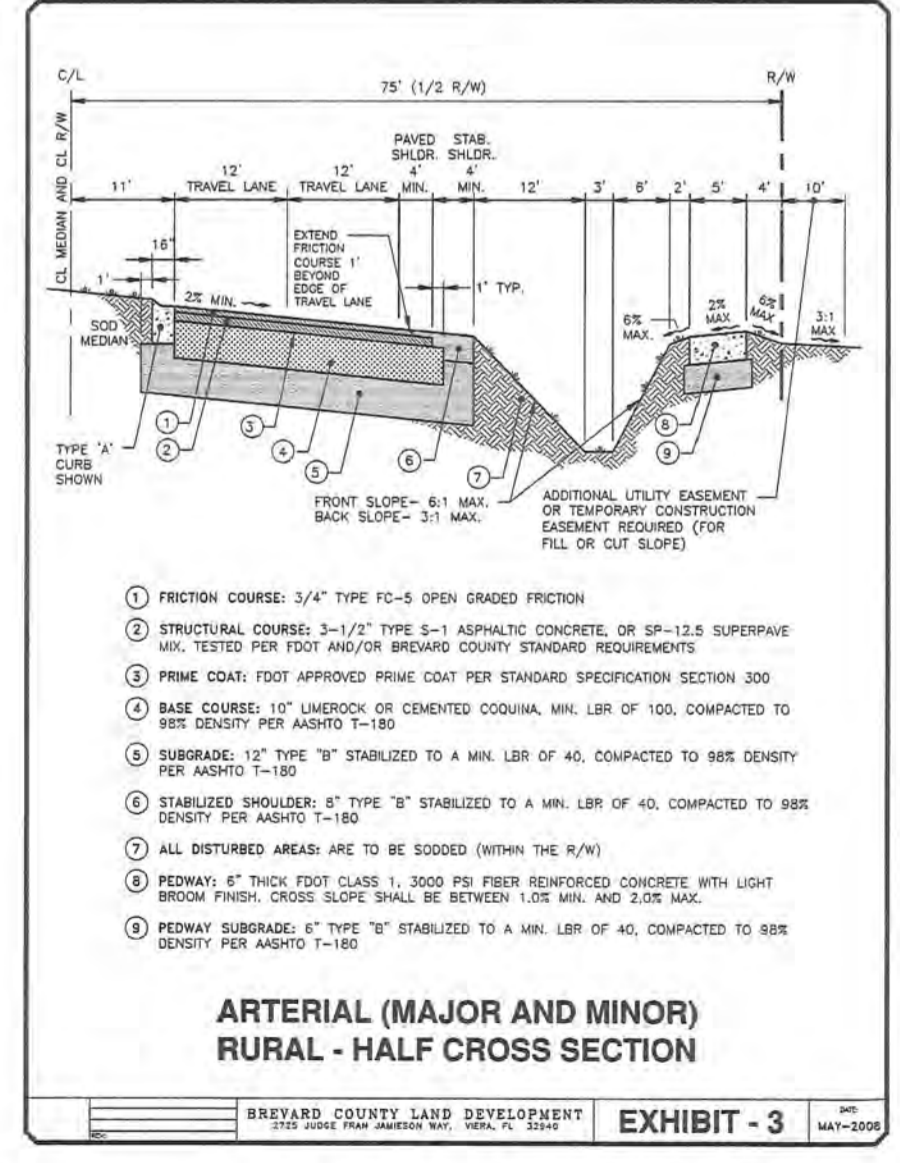
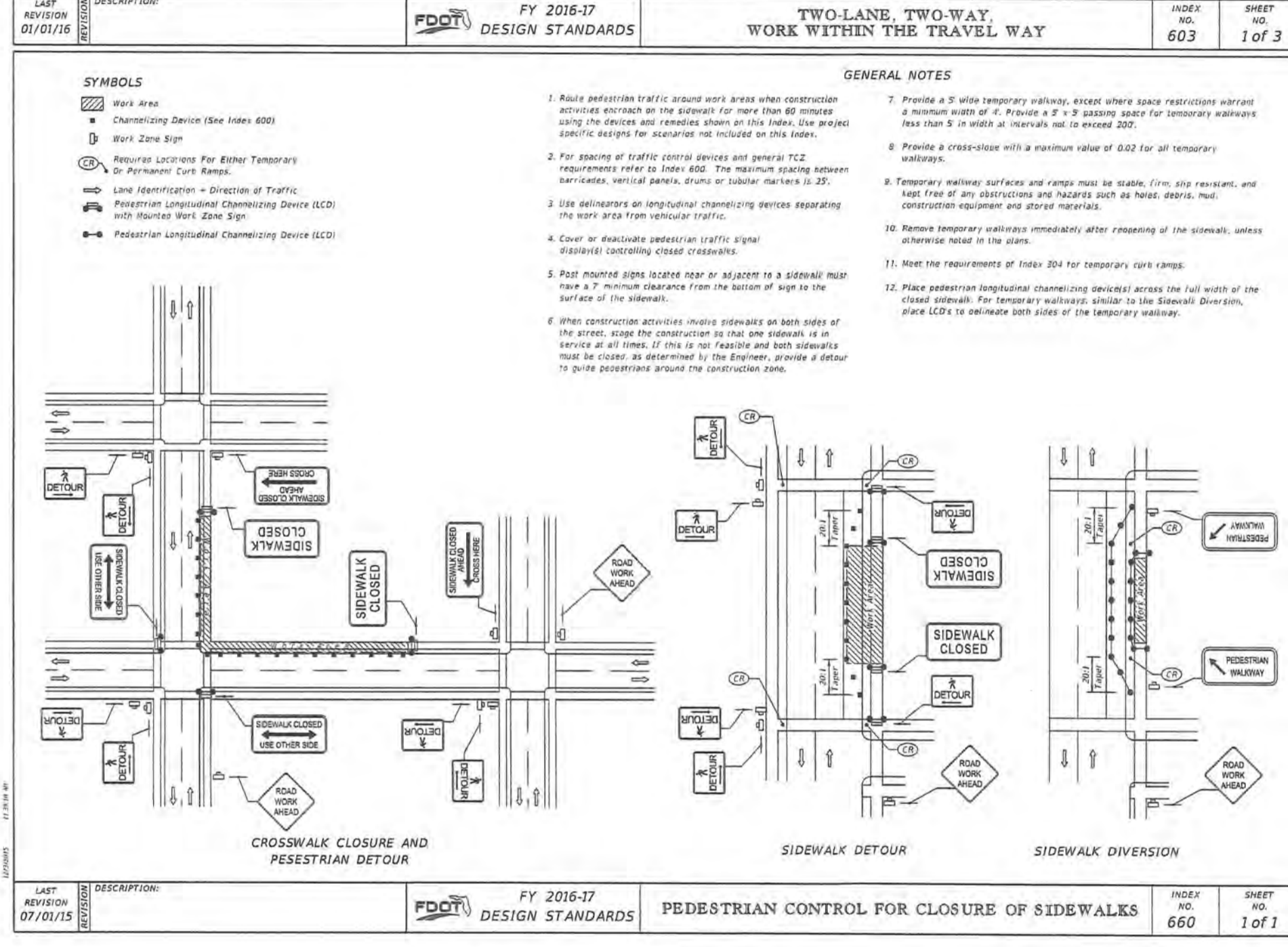
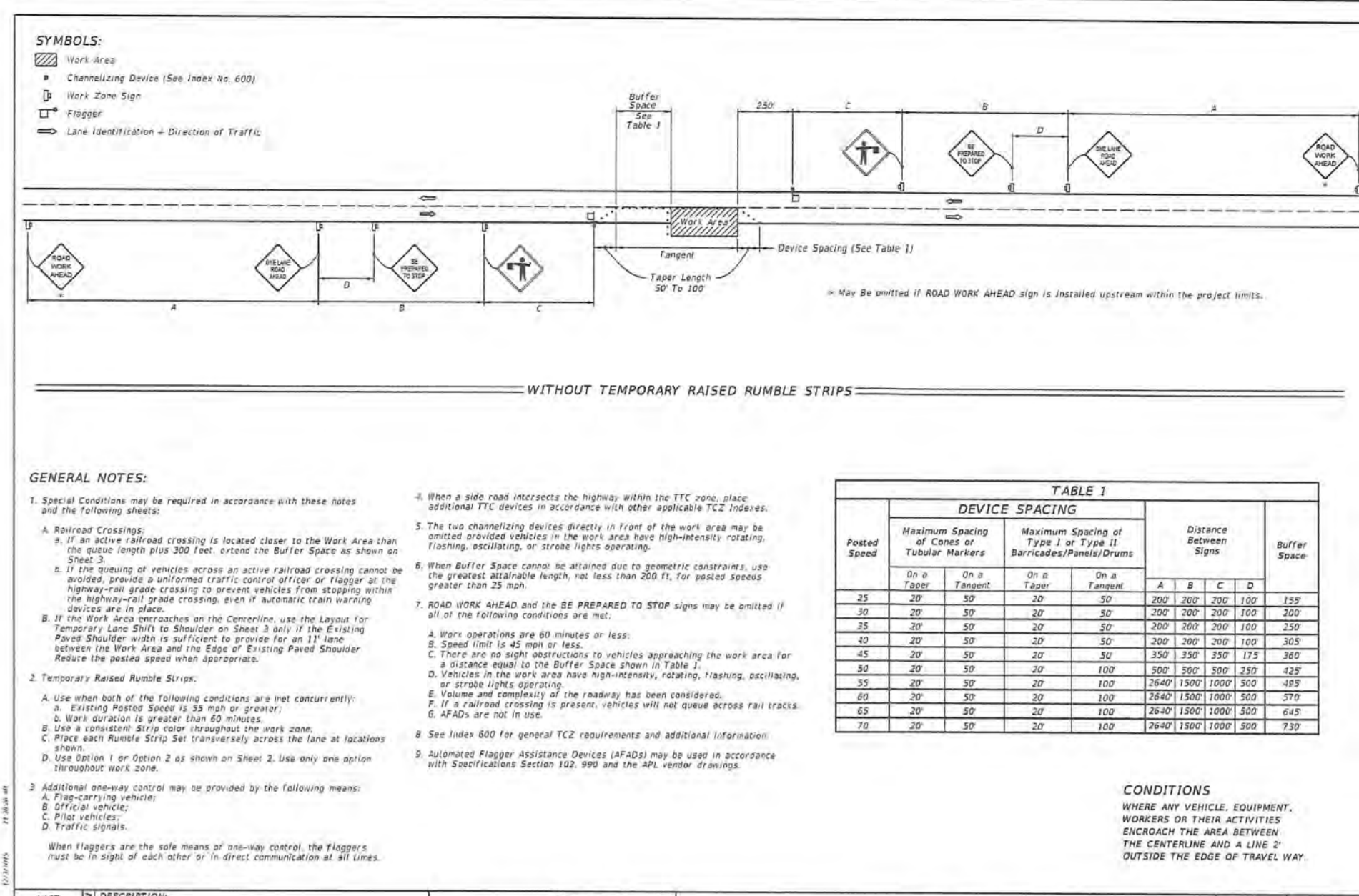
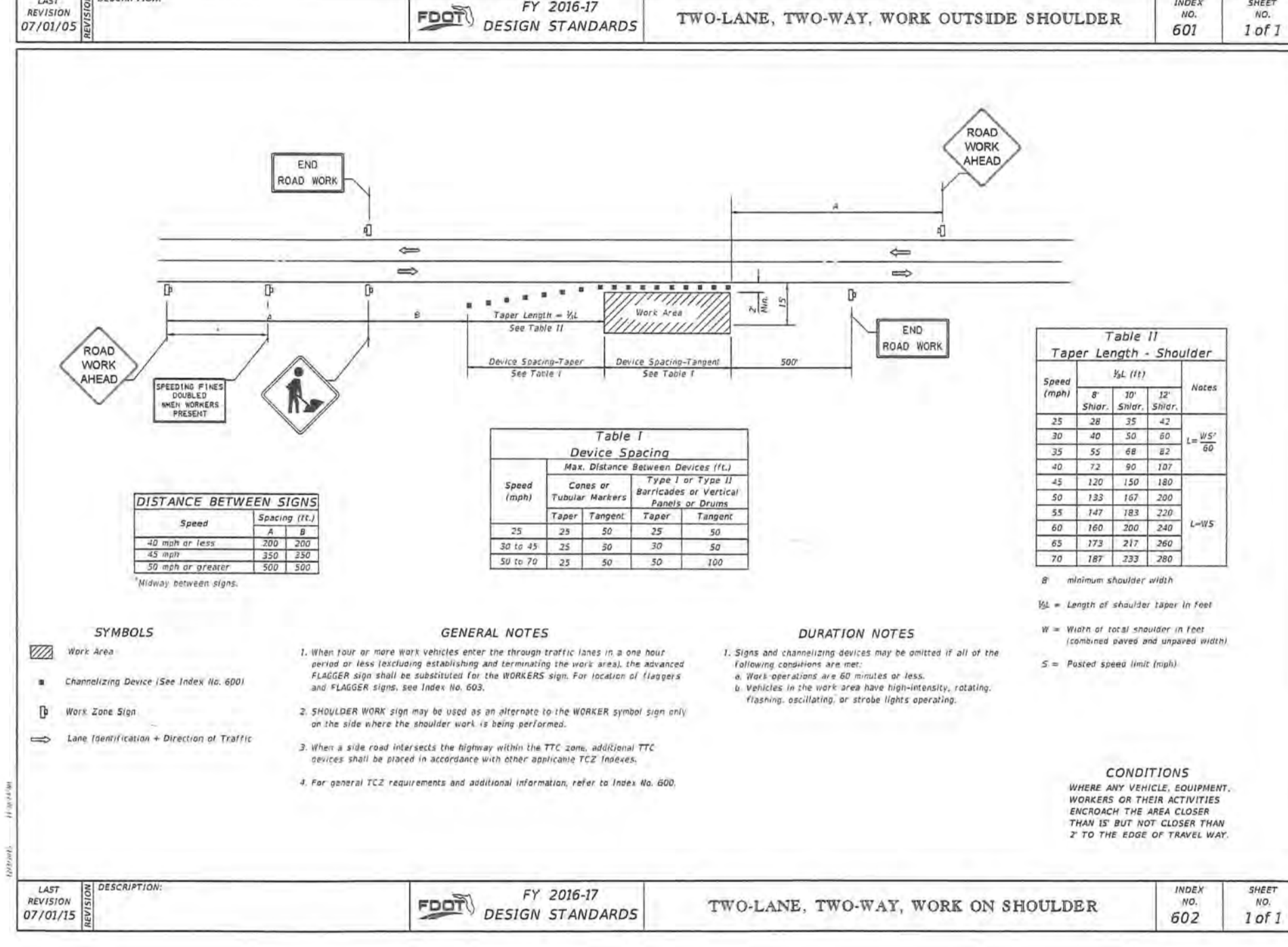
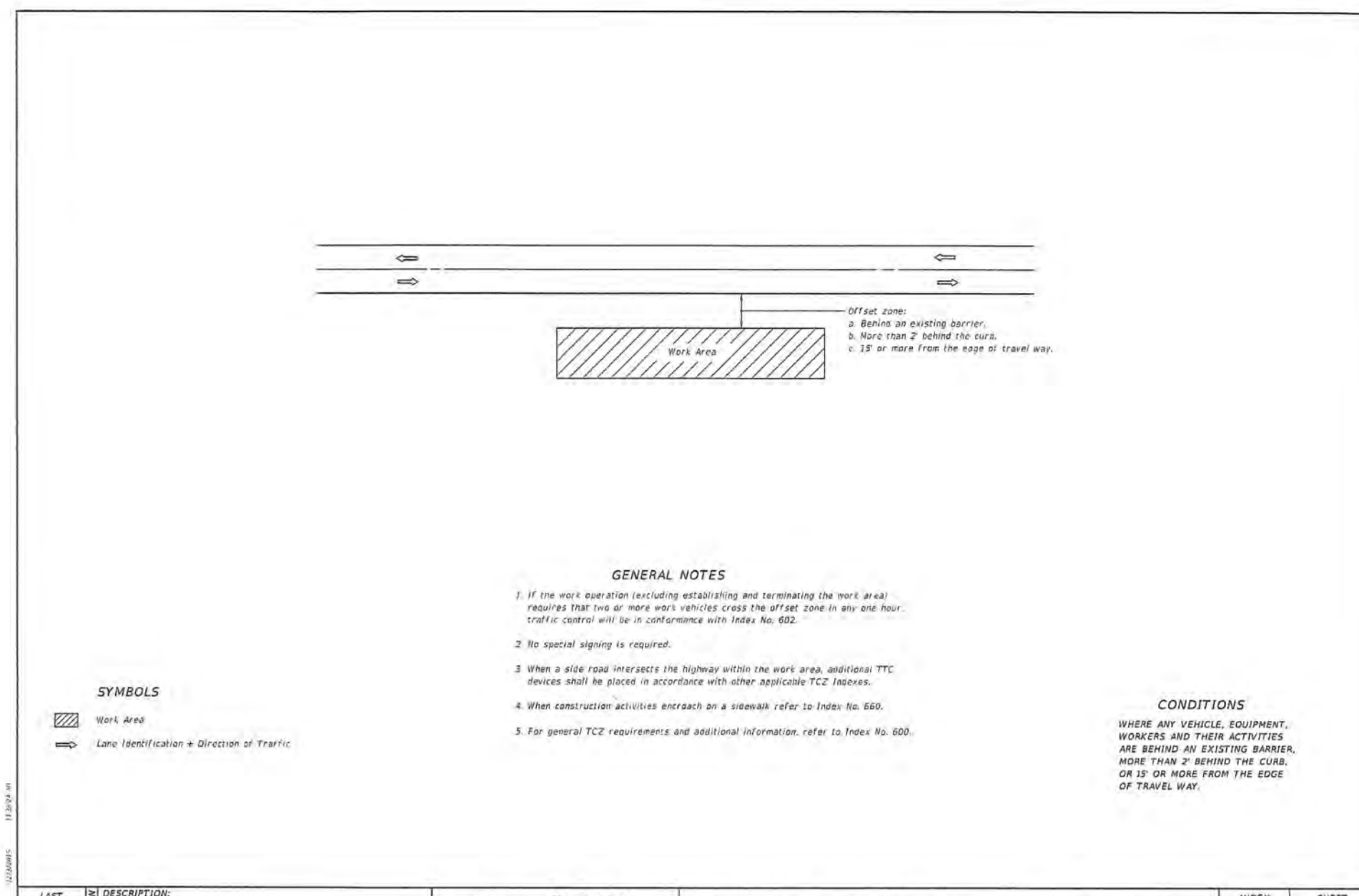
DRAWN BY: SMB

CHECKED BY: JTW

DRAWING NO.: C-15

JAKE T. WISE
LICENSE No. 55405
STATE OF FLORIDA
PROFESSIONAL ENGINEER
7-22-19

Approved For Construction
City of Palm Bay



REVISION

DATE

8/21/17

CITY AND BREVARD COUNTY COMMENTS

CONSTRUCTION ENGINEERING GROUP

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CHAPARRAL SUBDIVISION-PHASE 1A

CHAPARRAL PROPERTIES, LLC
MALABAR ROAD AND WISTERIA AVENUE NW PALM BAY, FLORIDA

DRAWING TITLE

MALABAR ROAD RIGHT-OF-WAY DETAILS

DATE

4-28-17

SCALE

NTS

PROJ. NO.

160455

DESIGNED BY:

JRT

DRAWN BY:

SMB

CHECKED BY:

JTW

DRAWING NO.

C-16

NOTE: FDOT DETAILS ARE PROVIDED FOR REFERENCE INFORMATION ONLY. SEE CORRESPONDING INDEX NUMBER IN FDOT LATEST EDITION OF THE ROADWAY AND TRAFFIC DESIGN STANDARDS MANUAL FOR ALL REQUIREMENTS.



FDEP SEPARATION NOTES: (ALL DRAWINGS)

1. HORIZONTAL SEPARATION BETWEEN UNDERGROUND WATER MAINS AND SANITARY OR STORM SEWERS, WASTEWATER OR STORMWATER FORCE MAINS, RECLAIMED WATER PIPELINES, AND ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEMS.
 - a. NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST THREE FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED STORM SEWER, STORMWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.
 - b. NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST THREE FEET, AND PREFERABLY TEN FEET, BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED VACUUM-TYPE SANITARY SEWER.
 - c. NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST SIX FEET, AND PREFERABLY TEN FEET, BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED GRAVITY- OR PRESSURE-TYPE SANITARY SEWER, WASTEWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C. THE MINIMUM HORIZONTAL SEPARATION DISTANCE BETWEEN WATER MAINS AND GRAVITY-TYPE SANITARY SEWERS SHALL BE REDUCED TO THREE FEET WHERE THE BOTTOM OF THE WATER MAIN IS LAID AT LEAST SIX INCHES ABOVE THE TOP OF THE SEWER.
 - d. NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST TEN FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND ALL PARTS OF ANY EXISTING OR PROPOSED "ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEM" AS DEFINED IN SECTION 381.0065(2), F.S., AND RULE 64E-6.002, F.A.C.(2)
2. VERTICAL SEPARATION BETWEEN UNDERGROUND WATER MAINS AND SANITARY OR STORM SEWERS, WASTEWATER OR STORMWATER FORCE MAINS, AND RECLAIMED WATER PIPELINES.
 - a. NEW OR RELOCATED, UNDERGROUND WATER MAINS CROSSING ANY EXISTING OR PROPOSED GRAVITY- OR VACUUM-TYPE SANITARY SEWER OR STORM SEWER SHALL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST SIX INCHES ABOVE AND PREFERABLY 12 INCHES ABOVE THE OTHER PIPELINE. HOWEVER, IT IS PREFERABLE TO LAY THE WATER MAIN ABOVE THE OTHER PIPELINE.
 - b. NEW OR RELOCATED, UNDERGROUND WATER MAINS CROSSING ANY EXISTING OR PROPOSED PRESSURE-TYPE SANITARY SEWER, WASTEWATER OR STORMWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER SHALL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST 12 INCHES ABOVE OR BELOW THE OUTSIDE OF THE OTHER PIPELINE. HOWEVER, IT IS PREFERABLE TO LAY THE WATER MAIN ABOVE THE OTHER PIPELINE.
 - c. AT THE UTILITY CROSSINGS DESCRIBED IN PARAGRAPHS (A) AND (B) ABOVE, ONE FULL LENGTH OF WATER MAIN PIPE SHALL BE CENTERED ABOVE OR BELOW THE OTHER PIPELINE SO THE WATER MAIN JOINTS WILL BE AS FAR AS POSSIBLE FROM THE OTHER PIPELINE. ALTERNATIVELY, AT SUCH CROSSINGS, THE PIPES SHALL BE ARRANGED SO THAT ALL WATER MAIN JOINTS ARE AT LEAST THREE FEET FROM ALL JOINTS IN VACUUM-TYPE SANITARY SEWERS, STORM SEWERS, STORMWATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C., AND AT LEAST SIX FEET FROM ALL JOINTS IN GRAVITY- OR PRESSURE-TYPE SANITARY SEWERS, WASTEWATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.(3)
3. SEPARATION BETWEEN WATER MAINS AND SANITARY OR STORM SEWER MANHOLES
 - a. NO WATER MAIN SHALL PASS THROUGH, OR COME INTO CONTACT WITH, ANY PART OF A SANITARY SEWER MANHOLE.
 - b. EFFECTIVE AUGUST 28, 2003, WATER MAINS SHALL NOT BE CONSTRUCTED OR ALTERED TO PASS THROUGH, OR COME INTO CONTACT WITH, ANY PART OF A STORM SEWER MANHOLE OR INLET STRUCTURE. WHERE IT IS NOT TECHNICALLY FEASIBLE OR ECONOMICALLY SENSIBLE TO COMPLY WITH THIS REQUIREMENT (I.E., WHERE THERE IS A CONFLICT IN THE ROUTING OF A WATER MAIN AND A STORM SEWER AND WHERE ALTERNATIVE ROUTING OF THE WATER MAIN OR THE STORM SEWER IS NOT TECHNICALLY FEASIBLE OR IS NOT ECONOMICALLY SENSIBLE), THE DEPARTMENT SHALL ALLOW EXCEPTIONS TO THIS REQUIREMENT (I.E., THE DEPARTMENT SHALL ALLOW CONSTRUCTION OF CONFLICT MANHOLES), BUT SUPPLIERS OF WATER OR PERSONS PROPOSING TO CONSTRUCT CONFLICT MANHOLES MUST FIRST OBTAIN A SPECIFIC PERMIT FROM THE DEPARTMENT IN ACCORDANCE WITH PART V OF THIS CHAPTER AND MUST PROVIDE IN THE PRELIMINARY DESIGN REPORT OR DRAWINGS, SPECIFICATIONS, AND DESIGN DATA ACCOMPANYING THEIR PERMIT APPLICATION THE FOLLOWING INFORMATION:
 1. TECHNICAL OR ECONOMIC JUSTIFICATION FOR EACH CONFLICT MANHOLE.
 2. A STATEMENT IDENTIFYING THE PARTY RESPONSIBLE FOR MAINTAINING EACH CONFLICT MANHOLE.
 3. ASSURANCE OF COMPLIANCE WITH THE DESIGN AND CONSTRUCTION REQUIREMENTS IN SUB-SUBPARAGRAPHS a. THROUGH d. BELOW.
 - a. EACH WATER MAIN PASSING THROUGH A CONFLICT MANHOLE SHALL HAVE A FLEXIBLE, WATERTIGHT JOINT ON EACH SIDE OF THE MANHOLE TO ACCOMMODATE DIFFERENTIAL SETTLING BETWEEN THE MAIN AND THE MANHOLE.
 - b. WITHIN EACH CONFLICT MANHOLE, THE WATER MAIN PASSING THROUGH THE MANHOLE SHALL BE INSTALLED IN A WATERTIGHT CASING PIPE HAVING HIGH IMPACT STRENGTH (I.E., HAVING AN IMPACT STRENGTH AT LEAST EQUAL TO THAT OF 0.25-INCH-THICK DUCTILE IRON PIPE).
 - c. EACH CONFLICT MANHOLE SHALL HAVE AN ACCESS OPENING, AND SHALL BE SIZED, TO ALLOW FOR EASY CLEANING OF THE MANHOLE.
 - d. GRATINGS SHALL BE INSTALLED AT ALL STORM SEWER INLETS UPSTREAM OF EACH CONFLICT MANHOLE TO PREVENT LARGE OBJECTS FROM ENTERING THE MANHOLE.

4. SEPARATION BETWEEN FIRE HYDRANT DRAINS AND SANITARY OR STORM SEWERS, WASTEWATER OR STORMWATER FORCE MAINS, RECLAIMED WATER PIPELINES, AND ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEMS. NEW OR RELOCATED FIRE HYDRANTS WITH UNDERGROUND DRAINS SHALL BE LOCATED SO THAT THE DRAINS ARE AT LEAST THREE FEET FROM ANY EXISTING OR PROPOSED STORM SEWER, STORMWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.; AT LEAST THREE FEET, AND PREFERABLY TEN FEET, FROM ANY EXISTING OR PROPOSED VACUUM-TYPE SANITARY SEWER; AT LEAST SIX FEET, AND PREFERABLY TEN FEET, FROM ANY EXISTING OR PROPOSED GRAVITY- OR PRESSURE-TYPE SANITARY SEWER, WASTEWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.; AND AT LEAST TEN FEET FROM ANY EXISTING OR PROPOSED "ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEM" AS DEFINED IN SECTION 381.0065(2), F.S., AND RULE 64E-6.002, F.A.C. HORIZONTAL SEPARATION BETWEEN UNDERGROUND WATER MAINS AND SANITARY OR STORM SEWERS, WASTEWATER OR STORMWATER FORCE MAINS, RECLAIMED WATER PIPELINES, AND ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEMS.
 - a. NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST THREE FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED STORM SEWER, STORMWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.
 - b. NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST THREE FEET, AND PREFERABLY TEN FEET, BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED VACUUM-TYPE SANITARY SEWER.
 - c. NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST SIX FEET, AND PREFERABLY TEN FEET, BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED GRAVITY- OR PRESSURE-TYPE SANITARY SEWER, WASTEWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C. THE MINIMUM HORIZONTAL SEPARATION DISTANCE BETWEEN WATER MAINS AND GRAVITY-TYPE SANITARY SEWERS SHALL BE REDUCED TO THREE FEET WHERE THE BOTTOM OF THE WATER MAIN IS LAID AT LEAST SIX INCHES ABOVE THE TOP OF THE SEWER.
 - d. NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST TEN FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND ALL PARTS OF ANY EXISTING OR PROPOSED "ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEM" AS DEFINED IN SECTION 381.0065(2), F.S., AND RULE 64E-6.002, F.A.C.(2)
5. THE CONTRACTOR IS TO CONTACT THE ENGINEER TO RESOLVE ALL SEPARATION PROBLEMS ENCOUNTERED IN THE FIELD. NOTE: MOST STRINGENT LOCAL, STATE AND FEDERAL RULES TO APPLY.

GENERAL NOTES: (ALL DRAWINGS)

1. SEE TYPICAL DETAILS ON FOLLOWING SHEETS FOR ADDITIONAL CONSTRUCTION DETAIL INFORMATION.
2. CONTRACTOR SHALL BECOME FAMILIAR AND COMPLY WITH ALL PERMITS AND PERMIT CONDITIONS.
3. CONTRACTOR SHALL OBTAIN PERMISSION FROM CEG OR ALL PERMIT AGENCIES IDENTIFIED IN SPECIFICATIONS PRIOR TO COMMENCING SITE WORK.
4. ALL AREAS DISTURBED OFF-SITE SHALL BE RESTORED TO EQUAL OR BETTER CONDITION THAN PRE-CONSTRUCTION WITH SAME TYPE OF SOD AS EXISTING.
5. CONTRACTOR SHALL COMPLY WITH ALL RECOMMENDATIONS OF GEOTECHNICAL EXPERT REPORT FOR THIS SITE. CONTRACTOR SHALL OBTAIN FROM CEG OR THE GEOTECHNICAL COMPANY.
6. PROVIDE CONSTANT SLOPE BETWEEN ALL SPOT ELEVATIONS.
7. UTILITY LENGTHS ARE APPROXIMATE BASED ON FIELD OBSERVATIONS AND AS-BUILT DRAWINGS. CONTRACTOR SHALL VERIFY EXACT LOCATION, SIZE, DEPTH, AND MATERIAL OF EXISTING UTILITIES. PROVIDE ADDITIONAL PIPING AND FITTINGS AS NECESSARY. NOTIFY ENGINEER OF SIGNIFICANT INCREASES.
8. NOTIFY ENGINEER MINIMUM 72 HOURS (WEEKDAYS) PRIOR TO MAKING UTILITY CONNECTIONS OR BACK FILLING UTILITY TRENCHES FOR INSPECTION. IF NOT NOTIFIED, CONTRACTOR SHALL EXPOSE LINES PER ENGINEER'S REQUEST FOR INSPECTIONS.
9. ALL TRAFFIC SIGNS SHALL BE INSTALLED PER STANDARD FDOT INDEX NOS. 11860 AND 17302.
10. PROVIDE 36" LONG TRANSITION WITH CONSTANT SLOPE FROM TOP OF CURB TO GRADE AT TERMINATION POINT OF CURBS.
11. ALL DIMENSIONS ARE TO FACE OF CURB.
12. CONTRACTOR SHALL CLEAR AND GRUB ALL VEGETATION ON-SITE EXCEPT TREES SHOWN TO REMAIN ON DRAWING C-1 OR LANDSCAPE PLANS.
13. REMOVE SILT FENCE ALONG ENTIRE PERIMETER OF PROJECT AREA EXCLUDING ENTRANCE DRIVEWAYS OR AS SHOWN ON DRAWING G-2.
14. ALL WASTE SHALL BE DISPOSED OF OFF-SITE IN A SAFE AND LEGAL MANNER UNLESS OWNER SPECIFICALLY REQUESTS OTHERWISE.
15. FOR DEMOLITION OF ALL ASPHALT AND CONCRETE MATERIALS, SAWCUT EDGES FOR SMOOTH STRAIGHT EDGE. ALSO SAWCUT ALL EXISTING PAVEMENT EDGES FOR SMOOTH STRAIGHT EDGE AT ALL TIE-IN POINTS WITH NEW PAVEMENT OR CONCRETE.
16. CONTRACTOR SHALL VERIFY ON-SITE PRIOR TO BIDDING WORK THE FULL EXTENT OF DEMOLITION REQUIRED BASED ON SITE PLAN CONSTRUCTION DRAWINGS. ALL ITEMS SHALL BE INCLUDED IN BASE BID.
17. REMOVE ALL ABOVE GROUND IMPROVEMENTS IN AREAS SHOWN FOR DEMOLITION UNLESS SPECIFICALLY IDENTIFIED OTHERWISE.
18. ALL SLOPES 4H:1V OR STEEPER SHALL BE SODDED. ALL SLOPES STEEPER THEN 3H:1V SHALL BE SODDED AND STAKED.
19. ADD BARS SPACED 6" O.C. TO ALL MES PER FDOT INDEX NO. 273 UNLESS FENCING PROHIBITS PUBLIC ACCESS.
20. CONTRACTOR SHALL PROVIDE ALL FITTINGS REQUIRED TO INSTALL UTILITIES PER PLAN.
21. CONTACT UNDERGROUND UTILITIES LOCATE BEFORE COMMENCING ANY DIGGING A MINIMUM OF 48 HOURS IN ADVANCE AT 811.
22. SUBMIT PROPOSED JOINT PLAN TO ENGINEER A MINIMUM OF ONE WEEK PRIOR TO POURING CONCRETE PAVEMENT FOR APPROVAL OR MODIFICATIONS.
23. VERIFY THAT THE LANDSCAPE WORK IS COORDINATED WITH ALL UTILITIES AND STORMWATER SYSTEMS. A MINIMUM OF FIVE (5) FOOT HORIZONTAL SEPARATION BETWEEN TREES AND BURIED, AERIAL, OR GRADE-MOUNTED UTILITY SYSTEMS IS REQUIRED.
24. JACK-AND-BORE OR DIRECTIONAL DRILL LENGTHS ARE APPROXIMATE BASED ON FIELD OBSERVATIONS AND AS-BUILT SURVEY DATA. CONTRACTOR SHALL VERIFY EXACT LENGTH REQUIRED PER UTILITY DESIGN. PROVIDE ADDITIONAL PIPING AND/OR DRILLING IF NECESSARY. NOTIFY ENGINEER OF ANY SIGNIFICANT DISTANCE INCREASES.
25. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO PUBLIC ROADWAYS, EASEMENTS, CURBS, SIDEWALKS, DRAINAGE SYSTEM, BENCHMARKS, OR UTILITIES AS A DIRECT RESULT OF CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR HAVING ALL BOUNDARY CORNERS AND BENCHMARKS DISTURBED OR DESTROYED DURING CONSTRUCTION REPLACED BY A FLORIDA LICENSED LAND SURVEYOR.
26. ALL EXCAVATIONS OF GREATER DEPTH THAN 5' SHALL COMPLY WITH THE CURRENT OSHA TRENCH SAFETY STANDARDS 29 C.F.R. s. 1926.650 SUBPART P. ANY EXCAVATION WITHIN THE CLEARZONE SHALL ALSO COMPLY WITH ALL WARNING AND/OR BARRIER REQUIREMENTS OF FDOT INDEX NO. 600.
27. CONSTRUCTION ENGINEERING GROUP DOES NOT WARRANT THE ACCURACY OF THE RECORD SURVEY.
28. GRADING ADJACENT TO BUILDINGS SHALL BE 6" BELOW FINISHED FLOOR UNLESS IDENTIFIED OTHERWISE BY ARCHITECT OR ON GRADING PLANS.
29. ALL PROPOSED ELEVATIONS ARE REFERENCED IN NGVD 29.
30. THE FIRE LINE SHOWN DOWNSTREAM OF THE DOUBLE DETECTOR CHECK VALVE ASSEMBLY IS FOR AN APPROXIMATE LOCATION ONLY. THE FINAL DESIGN SHALL BE FROM THE FIRE PROTECTION ENGINEER.

BREVARD COUNTY RIGHT-OF-WAY

1. ALL DISTURBED AREAS WITHIN THE COUNTY RIGHT-OF-WAY SHALL BE SODDED TO MATCH EXISTING SOD TYPE. SEED AND MULCH IS NOT ACCEPTABLE.
2. ALL DIRECTIONAL BORES MUST EXTEND A MINIMUM 8 (EIGHT) FEET PAST THE EDGE OF PAVEMENT OF ANY ROADWAY OR COMMERCIAL DRIVEWAY. FOR PRIVATE RESIDENTIAL DRIVEWAYS THE BORE MUST EXTEND 3 (THREE) FEET PAST THE EDGE OF THE DRIVEWAY.
3. ALL DIRECTIONAL BORES SHALL BE IN ACCORDANCE WITH FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION SECTION 555, DIRECTIONAL BORES AND THE FDOT UTILITIES ACCOMMODATION MANUAL.
4. ANY DAMAGE TO THE EXISTING INFRASTRUCTURE, INCLUDING SIDEWALKS, BY THE CONTRACTOR MUST BE REPLACED PRIOR TO FINAL INSPECTION. SIDEWALK PATCHING IS NOT ACCEPTABLE.
5. A VISUAL OR MECHANICAL INTERIOR INSPECTION OF THE EXISTING CULVERT(S) WILL BE REQUIRED PRIOR TO FINAL INSPECTION.
6. A MINIMUM OF 18 (EIGHTEEN) INCHES OF SEPARATION WILL BE MAINTAINED WITH EXISTING UTILITIES.
7. EXISTING DRAINAGE SWALES AND/OR CULVERTS WILL BE MAINTAINED DURING PROPOSED TRENCH/BORE AND WILL BE RESTORED TO ORIGINAL CONDITION.

PALM BAY

1. PROVIDE AS-BUILT INFORMATION WHEN REQUESTING A CERTIFICATE OF OCCUPANCY AND ALLOW FIVE (5) DAYS FOR PROCESSING.
2. ALL DISTURBED AREAS SHALL HAVE GRASS/VEGETATION ESTABLISHED (80% GERMINATION) PRIOR TO THE FINAL INSPECTION FOR A CERTIFICATE OF OCCUPANCY.
3. TESTING OF PAVED AREAS IS REQUIRED AND SHALL BE SPECIFIED ON THE PLANS WITH A DESCRIPTION OF TEST IMPROVEMENTS AND THE TESTING METHODS TO BE USED.
4. PROVIDE FILTER FABRIC JACKET AT JOINTS OF STORM DRAIN PIPING PER FDOT INDEX NO. 280. SEE TYPICAL DETAILS ON THESE PLANS.
5. ALL WORK IN PALM BAY RIGHT-OF-WAY SHALL CONFORM TO LATEST EDITION OF CITY OF PALM BAY GENERAL RIGHT-OF-WAY USE SPECIFICATIONS, CONDITIONS, AND DETAILS.
6. PROVIDE NOTIFICATION TO ENGINEERING INSPECTOR GROWTH MANAGEMENT LAND DEVELOPMENT DIVISION FAX 321-674-1852 AND THE UTILITY INSPECTOR PHONE AT 321-952-3410 72 HOURS PRIOR TO CONSTRUCTION START WITH CORRECT INFORMATION (NAME AND PHONE NUMBER TO CONTACT CONTRACTOR, SUB-CONTRACTOR), SEQUENCE OF WORK ARE REQUIRED.
7. FIRE HYDRANTS AND FIRE PROTECTION APPLIANCES SHALL BE KEPT ACCESSIBLE TO THE FIRE DEPARTMENT AT ALL TIMES. CLEARANCE OF 7.5 FEET IN FRONT OF AND TO THE SIDES OF FIRE HYDRANTS AND APPLIANCES SHALL BE MAINTAINED. CLEARANCE OF FOUR FEET TO THE REAR OF FIRE HYDRANTS SHALL BE MAINTAINED. NFPA 1, 3-6.6.2., 3-5.6.2.1, 3-5.6.2.2.
8. WATER TUBING SERVICE SHALL BE POLYETHYLENE (PE) 3408 TUBING WITH STIFFENERS BY ORANGEBURG INDUSTRIES OR AN EQUAL.
9. PROVIDE A BRASS CORPORATION STOP AND CURB STOP MANUFACTURED BY FORD FOR PE 3408 PLASTIC TUBING.
10. NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEMS CONSTRUCTION PERMIT IS REQUIRED FOR PROJECTS OVER 1 ACRE IN SIZE. THE CONTRACTOR SHALL PREPARE THE NECESSARY NOTICE OF INTENT (N.O.I.) AND STORMWATER POLLUTION PREVENTION PLAN (S.W.P.P.P.) PERMIT SHALL BE REQUIRED TO BE POSTED AT THE PROJECT SITE AT ALL TIMES.
11. THE N.O.I. WILL BE FILED TO THE APPROPRIATE SECTION OF F.D.E.P. COPIES OF THE N.O.I. AND S.W.P.P.P. WILL BE SUBMITTED TO THE LAND DEVELOPMENT DIVISION BEFORE ANY WORK CAN START ON SITE.
12. PROVIDE NOTIFICATION SCHEDULE OF WORK IN 30 DAY PERIODS WITH DATE OF WORK DESCRIPTION OF WORK, NAMES, PHONE NUMBERS AND FAX NUMBERS OF CONTRACTORS AND SUB-CONTRACTORS.
13. SILT FENCE SPECIFICATION SHALL BE PER F.D.O.T. EROSION AND SEDIMENT CONTROL DESIGNER AND REVIEWER MANUAL.
14. AFTER INSTALLATION OF EROSION CONTROL MEASURES AND PRIOR TO CLEARING, AN INSPECTION IS REQUIRED.
15. SILT FENCE IS REQUIRED AROUND PROPERTY. CHANGES REQUIRE INSPECTOR APPROVAL.
16. FOR TREES ALONG THE PERIMETER OF PROPERTY PRIOR TO REMOVAL CONTRACTOR SHALL OBTAIN ABUTTING PROPERTY OWNER AUTHORIZATION.
17. A 72 HOURS NOTIFICATION IS REQUIRED FOR ROAD WORK PROPOSED IN PUBLIC RIGHT OF WAY.
18. CONTRACTOR SHALL PROVIDE F.D.O.T. MAINTENANCE OF TRAFFIC PLAN, INDEX TO BE USED, INCLUDE TAPER LENGTH, TRAFFIC OPERATION AND DESCRIPTION OF WORK.
19. DRIVEWAYS, ROADS, RIGHT OF WAY, DRAINAGE PIPES...ETC. "CITY PROPERTY" AROUND PROJECT SHALL BE KEPT IN GOOD CONDITION AND CLEAN.
20. NOTIFY THE CITY OF PALM BAY RIGHT-OF-WAY USE SERVICES DIVISION AT (321) 953-8965 48 HOURS PRIOR TO THE START OF CONSTRUCTION ACTIVITIES IN A ROAD RIGHT-OF-WAY, SUCH AS PAVING, PLACING A PIPE, ETC. THESE ACTIVITIES SHALL BE PERFORMED ONLY IN THE PRESENCE OF A PALM BAY PUBLIC WORKS DEPARTMENT INSPECTOR.
21. THE CONTRACTOR WILL NOTIFY RIGHT-OF-WAY USE SERVICES 72 HOURS PRIOR TO ANY OFFSITE CONSTRUCTION ACTIVITIES INCLUDING EXCAVATION WORK. THE CONTRACTOR WILL PROVIDE RIGHT-OF-WAY USE SERVICES WITH A COPY OF ALL TEST RESULTS FROM PROPOSED IMPROVEMENTS, ALL CONCRETE TESTS AND ALL DENSITY AND COMPACTION RESULTS FORM THE PROJECT THAT ARE LOCATED IN THE PUBLIC ROAD ROW. ALL COORDINATION FOR RIGHT-OF-WAY USE SERVICES CAN BE ACCOMPLISHED USING THE FOLLOWING CONTACT INFORMATION: PUBLIC WORKS DEPARTMENT, RIGHT-OF-WAY USE SERVICES, 321-952-3403 OR FAX: 321-768-6401 OR EMAIL: PWPERMITTING@PALMBAYFLORIDA.ORG OR MAIL: PUBLIC WORKS DEPARTMENT/RIGHT-OF-WAY USE SERVICES, 1050 MALABAR ROAD SW, PALM BAY, FL 32907.
22. NOTIFY BRUCE MOJA TO SET UP A PRE-SITE WORK MEETING. NOTIFY THE PALM BAY UTILITIES DEPARTMENT AT 321-952-3410, AND HECTOR FRANCO OF THE PUBLIC WORKS DEPARTMENT AT 952-3403, 72 HOURS PRIOR TO CONSTRUCTION START WITH THE CORRECT INFORMATION (NAMES AND PHONE NUMBERS OF CONTRACTOR, SUB-CONTRACTORS), A SEQUENCE OF WORK AND COORDINATION WITH CITY STAFF IS REQUIRED PRIOR TO THE START OF CONSTRUCTION.
23. FIRE HYDRANT SHALL BE INSTALLED AND OPERATIONAL PRIOR TO CONSTRUCTION WORK. NFPA 241, 6-7.2.2.
24. THE REQUIRED WIDTH OF ACCESS ROADWAYS SHALL NOT BE OBSTRUCTED IN ANY MANNER, INCLUDING OBSTRUCTION BY PARKED VEHICLES. NFPA 241, 7.5.5.3
25. ALL UTILITY CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST REVISION OF THE PALM BAY UTILITY DEPARTMENT'S "POLICIES, PROCEDURES, AND STANDARDS" HANDBOOK AND THE STANDARD DETAIL DRAWINGS.
26. THE OWNER OR AUTHORIZED AGENT TO CALL THE DRIVEWAY PERMIT SECTION (321-952-3403) FOR A DRIVEWAY PRE-POUR INSPECTION. CITY INSPECTORS WILL VERIFY THE INVERT ELEVATION AND CONSTRUCTION REQUIREMENTS PRIOR TO THE PLACEMENT OF THE DRIVEWAYS. FAILURE TO COMPLY WITH THE SPECIFIED INVERT ELEVATIONS WILL RESULT IN CORRECTIVE MEASURES AT THE EXPENSE OF THE PERMITTEE. THE INSPECTOR WILL LEAVE A PASS OR FAIL NOTICE ON-SITE.
27. THE OWNER OR AUTHORIZED AGENT TO CALL THE RIGHT-OF-WAY USE SECTION (321-952-8985) FOR THE PRE-POUR INSPECTION OF THE PROPOSED SIDEWALK WITHIN THE RIGHT-OF-WAY. CITY INSPECTORS WILL VERIFY THE CONSTRUCTION REQUIREMENTS PRIOR TO THE PLACEMENT OF THE SIDEWALK.
28. NOTIFY THE INSPECTOR IN LAND DEVELOPMENT DIVISION BY E-MAIL TO ROBERT.LORING@PALMBAYFLORIDA.ORG 72 HOURS PRIOR TO START OF CONSTRUCTION TO SCHEDULE A PRE-SITE CONSTRUCTION MEETING. CORRECT INFORMATION (NAMES AND PHONE NUMBER TO CONTACT CONTRACTORS, SUB CONTRACTORS) AND SEQUENCE OF WORK IS REQUIRED. FOR ADDITIONAL INFORMATION OR ANY CHANGES CALL (321) 733-3042 EXT. 5372.
29. DRIVEWAY SIGNS AND PAVEMENT MARKINGS IN DRIVE SHALL BE THE PERPETUAL MAINTENANCE RESPONSIBILITY OF THE SITE OWNERS.
30. WORK CLOSER THAN FIVE FEET FROM THE EDGE OF PAVEMENT SHALL REQUIRE SHORING OF THE IMPROVEMENT ADJACENT TO THE WORK.
31. NO WORK SHALL BE PERMITTED IN THE RIGHT OF WAY INVOLVING LANE CLOSURES DURING THE AM AND PM PEAK TRAFFIC HOURS.
32. PROVIDE LANE CLOSURE NOTIFICATION WITH APPROPRIATE MAINTENANCE OF THE TRAFFIC PLAN WITH 72 HOURS PRIOR TO WORK STARTING. THE MOT MUST BE APPROVED PRIOR TO THE WORK BEING SCHEDULED AND LANE CLOSURE BEING APPROVED.
33. DIRECTIONAL BORING LOGS SHALL BE REQUIRED AS PART OF UTILITY WORK WITHIN THE RIGHT OF WAY. THE BORING LOGS SHALL BE PROVIDED AT COMPLETION. THE CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS PRIOR TO PERFORMING THIS WORK AND WILL BE RESPONSIBLE FOR ANY DAMAGE TO OTHER UTILITIES.
34. THE CONTRACTOR WILL NOTIFY THE PUBLIC WORKS DEPARTMENT TO SCHEDULE A PRE-SITE CONSTRUCTION MEETING 72 HOURS PRIOR TO CONSTRUCTION START. THE CONTRACTOR WILL NOTIFY RIGHT-OF-WAY SERVICES 48 HOURS PRIOR TO ANY OFFSITE CONSTRUCTION ACTIVITIES TO INCLUDE EXCAVATION. THE CONTRACTOR WILL PROVIDE RIGHT-OF-WAY SERVICES WITH A COPY OF ALL TEST RESULTS FROM PROPOSED IMPROVEMENTS, ALL CONCRETE TESTS AND ALL DENSITY AND COMPACTION RESULTS FROM THE PROJECT. THE CONTRACTOR WILL PROVIDE RIGHT-OF-WAY SERVICES WITH THE CORRECT INFORMATION (NAME AND PHONE NUMBERS OF CONTRACTOR AND SUB-CONTRACTOR), A SEQUENCE OF WORK IS REQUIRED. FOR ADDITIONAL INFORMATION OR CHANGES CONTACT STUART HUGHES BY EITHER EMAIL: PWPERMITTING@PALMBAYFLORIDA.ORG OR PHONE: (321) 953-8966 OR FAX: (321) 952-3472.
35. THE ENGINEER OF RECORD WILL REVIEW AND APPROVE SHOP DRAWINGS AND FURNISH APPROVALS TO THE APPROPRIATE CITY DEPARTMENT. TESTING LOGS FROM THE TESTING COMPANY WILL BE FURNISHED TO THE APPROPRIATE DEPARTMENT.
36. PER THE CITY PUBLIC WORKS MANUAL SECTION 2.1.4.5: THE CONTRACTOR SHALL PROVIDE FOR SATISFACTORY DISPOSAL OF SURPLUS WATER AND SHALL SUBMIT A PLAN TO THE ENGINEER FOR HIS/HER REVIEW PRIOR TO INITIATION AND IMPLEMENTATION OF THE PLAN.
37. THE ENGINEER SHALL BE NOTIFIED:
 - A. PRIOR TO ANY MAJOR DEVIATION FROM THE APPROVED PLANS.
 - B. PRIOR TO BACKFILLING ANY PIPE TRENCHES.
 - C. UPON COMPLETION OF SUBGRADE GRADING AND COMPACTION.
 - D. UPON BEGINNING OF SPREADING OF ROCK BASE MATERIAL.
 - E. UPON COMPLETION OF GRADING AND COMPACTION OF THE BASE MATERIAL AND PRIOR TO PRIMING.
 - F. IMMEDIATELY PRIOR TO AND UPON APPLICATION OF A.C.S.C.
 - G. UPON COMPLETION OF CONSTRUCTION.

Approved For Construction



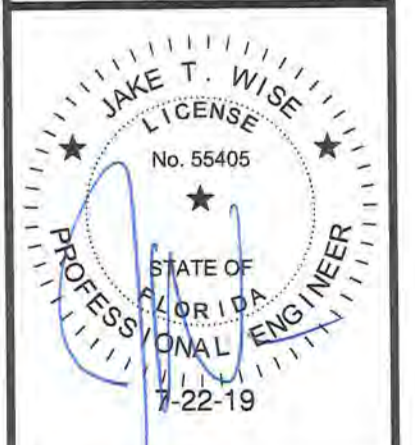
REV#	DATE	CITY COMMENTS
1	8/21/17	

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CONSTRUCTION ENGINEERING GROUP
consulting engineers

CHAPARRAL SUBDIVISION-PHASE 1A
CHAPARRAL PROPERTIES, LLC
MALABAR ROAD AND WISTERIA AVENUE NW PALM BAY, FLORIDA
DRAWING TITLE
SPECIFICATIONS AND GENERAL NOTES

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DATE	4-28-17
SCALE	NTS
PROJ. NO.:	160455
DESIGNED BY:	JRT
DRAWN BY:	SMB
CHECKED BY:	JTW
DRAWING NO.	C-18

BRENTWOOD LAKES DEVELOPMENT PLANS

BRENTWOOD LAKES

CITY OF PALM BAY, FLORIDA

PREPARED FOR:

D.R. HORTON, INC.

MAY 9, 2016

REV#	DATE	REVISION
1	6/14/16	PALM BAY AND SJRWMD COMMENTS
2	7/07/16	SURMWD COMMENTS
3	7/25/16	CITY OF PALM BAY COMMENTS
4	8/10/16	CITY OF PALM BAY COMMENTS

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CONSTRUCTION ENGINEERING GROUP
consulting engineers

BRENTWOOD LAKES SOUTH
D.R. HORTON
MALABAR ROAD PALM BAY, FLORIDA
DRAWING TITLE

DATE: 4-26-16
SCALE: NTS
PROJ. NO.: 160163
DESIGNED BY: JRT
DRAWN BY: SMB
CHECKED BY: JTW
DRAWING NO.: G-1

SITE DATA:

1. GENERAL STATEMENT:

CONSTRUCTION PLANS FOR THIS DEVELOPMENT WERE PREVIOUSLY APPROVED AND CLOSELY PARALLEL THE DESIGN IN THESE DRAWINGS. ONLY A FEW GRADING CHANGES THAT IMPROVE THE FUNCTION OF THE STORMWATER TREATMENT SYSTEMS AND PROVIDE ADDED SAFETY ARE PROPOSED WITH THESE REVISED DRAWINGS TO ADDRESS CODE CHANGES AND RECENT GEOTECHNICAL DATA. THE PREVIOUSLY CONSTRUCTED LARGE CENTRAL PONDS (POND A & POND B) EXPERIENCE PERIODIC LEVELS LOWER THAN THE DESIGN ELEVATION SO WE ARE PROPOSING TO FENCE THESE PONDS AND THE SMALL POND BY THE ENTRANCE (POND G) IS PROPOSED TO BE LINED AND KEPT AS AN AESTHETIC POND ONLY (NOT FOR STORMWATER TREATMENT)

THE PROPOSED STORMWATER TREATMENT SYSTEM FOR THESE PHASES SHALL BE TWO INTERCONNECTED WET DETENTION PONDS THAT TIE INTO THE EXISTING SYSTEM FOR THE CONSTRUCTED PHASES. THE STORMWATER TREATMENT SYSTEM, COLLECTION SYSTEM AND ROADS SHALL BE PRIVATELY MAINTAINED BUT HAVE BEEN DESIGNED TO MEET PUBLIC INFRASTRUCTURE REQUIREMENTS.

THE WATER AND SEWER SYSTEM SHALL BE PUBLIC. SITE ACCESS SHALL BE FROM THE PREVIOUSLY CONSTRUCTED GATED ENTRANCES OF THE EXISTING COMMUNITIES, WITH AN ACCESS POINT OF MALABAR ROAD.

2. CONTRACT INFORMATION:

DEVELOPER:
D.R. HORTON, INC.
1430 CULVER DRIVE, NE
PALM BAY, FL 32907
TEL: (321) 953-3105

SURVEYOR:
AAL LAND SURVEYING SERVICES, INC.
3970 MINTON ROAD
WEST MELBOURNE, FL 32904
TEL: (321) 768-8110

ENGINEER:
CONSTRUCTION ENGINEERING GROUP
JAKE T. WISE, P.E.
2651 W. EAU GALLIE BLVD., SUITE A
MELBOURNE, FLORIDA 32935
TEL: (321) 253-1221, EXT 1760
FAX: 253-3123
E-MAIL: JWISE@CEENGINEERING.COM

GEOTECHNICAL ENGINEERS:
KSM ENGINEERING
P.O. BOX 78-1377
SEBASTIAN, FL 32978
TEL: (772) 589-0712
FAX: (772) 589-6469

3. SITE CHARACTERISTICS:

TOTAL OVERALL ACREAGE: 143.47
TOTAL PROJECT ACREAGE: 73.34
ZONING CLASSIFICATION: PUD
FUTURE LAND USE: SFR
DATUM: NAVD 88 (+1.4' FROM NGVD 29) SEE SURVEY SHEET 1

BUILDING SETBACKS

FRONT: 25 FT
SIDE: 7.5 FT
REAR: 25 FT
SIDE CORNER: 25 FT

PREVIOUSLY CONSTRUCTED PHASES:

	SE	ACRE	PERCENT
IMPERVIOUS (LOTS):	1,278,486	29.35	36%
IMPERVIOUS (ASPHALT / CONCRETE):	136,778	3.14	4%
TOTAL IMPERVIOUS:	1,415,264	32.49	40%
PONDS AT NWL:	486,130	11.16	14%
PERVIOUS:	1,625,659	37.32	46%
TOTAL GROSS AREA:	3,527,053	80.97	100%

PROPOSED PHASES:

	SE	ACRE	PERCENT
IMPERVIOUS (LOTS):	1,235,797	28.37	45%
IMPERVIOUS (ASPHALT / CONCRETE):	167,706	3.85	6%
TOTAL IMPERVIOUS:	1,403,503	32.22	51%
PONDS AT NWL:	294,901	6.77	11%
PERVIOUS:	1,067,656	24.51	38%
TOTAL GROSS AREA:	2,766,060	63.50	100%

TOTAL OVERALL PROJECT AREA: 6,249,553 143.47

I HEREBY CERTIFY THAT THE DESIGN OF THE STORMWATER MANAGEMENT SYSTEM FOR THE PROJECT KNOWN AS BRENTWOOD LAKES SOUTH MEETS ALL OF THE REQUIREMENTS AND HAS BEEN DESIGNED SUBSTANTIALLY IN ACCORDANCE WITH THE REQUIREMENTS OF THE CITY OF PALM BAY'S ORDINANCE NO. 95-33 AND THE PUBLIC WORKS MANUAL.

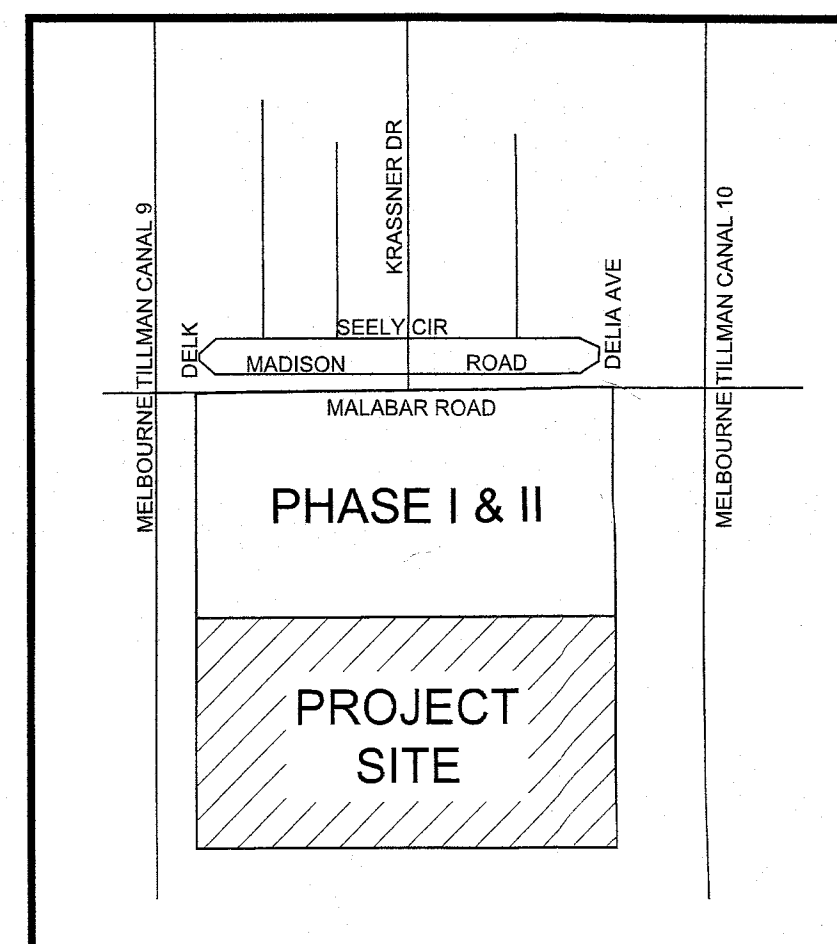
4. REQUIRED PERMITS

- CITY OF PALM BAY
- BREVARD COUNTY SCHOOL CONCURRENCE
- FDEP NOI, WATER AND WASTE WATER
- SJRWMD PERMIT #5-009-96853
- FLORIDA FISH AND WILDLIFE COMMISSION
- MELBOURNE TILLMAN WATER CONTROL DISTRICT

PREPARED BY:

CONSTRUCTION ENGINEERING GROUP
consulting engineers

2651 Eau Gallie Blvd., Suite C
Melbourne, FL 32935
Tel: 321.253.1221
Fax: 321.253.3123
www.ceengineering.com
license #0008097



LOCATION MAP
NTS

LEGAL DESCRIPTION:

DESCRIPTION:
A PARCEL OF LAND LYING IN A PORTION OF THE NORTHWEST 1/4 OF SECTION 3, TOWNSHIP 29 SOUTH, RANGE 36 EAST, BREVARD COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGIN AT THE SOUTHWEST CORNER OF BRENTWOOD LAKES PHASE II, ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 54, PAGE 54, OF THE PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA FOR THE FOLLOWING DESCRIBED PARCEL AND RUN ALONG THE SOUTH LINE OF SAID BRENTWOOD LAKES PHASE II, AND THE SOUTH LINE OF BRENTWOOD LAKES PHASE I, ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 54, PAGE 53, OF THE PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA FOR THE FOLLOWING FOUR (4) CALLS, SOUTH 90°00'00"E, A DISTANCE OF 1733.20 FEET; THENCE SOUTH 83°17'20" EAST, A DISTANCE OF 50.17 FEET; THENCE SOUTH 90°00'00" EAST, A DISTANCE OF 568.91 FEET; THENCE SOUTH 00°04'54" EAST ALONG THE WEST RIGHT OF WAY LINE OF A 110.00 FOOT WIDE FLORIDA POWER AND LIGHT RIGHT OF WAY AS RECORDED IN OFFICIAL RECORDS BOOK 675, PAGE 18, OF THE PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA, A DISTANCE OF 1348.22 FEET; THENCE SOUTH 89°39'56" WEST ALONG THE SOUTH LINE OF THE NORTHWEST 1/4 OF SAID SECTION 3 AND THE NORTH RIGHT OF WAY LINE OF MELBOURNE TILLMAN DRAINAGE DISTRICT CANAL NO. 9R, A DISTANCE OF 2352.10 FEET; THENCE NORTH 00°04'59" WEST ALONG THE EAST RIGHT OF WAY LINE OF MELBOURNE TILLMAN DRAINAGE DISTRICT CANAL NO. 9, A DISTANCE OF 1366.07 FEET TO THE POINT OF BEGINNING.
CONTAINING 73.34 ACRES MORE OR LESS.

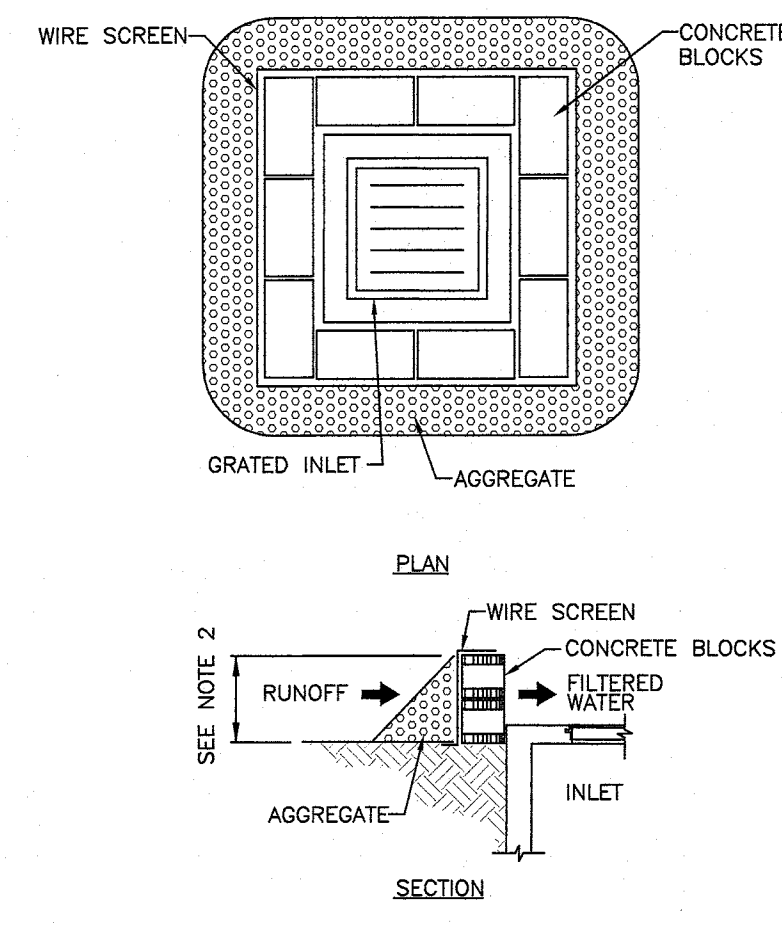
CIVIL INDEX OF DRAWINGS:

G-1	COVER SHEET
G-2	STORMWATER POLLUTION PREVENTION PLAN
G-3	NORTH SUBDIVISION AND RIGHT-OF-WAY PLAN
C-1	EXISTING CONDITIONS AND DEMOLITION PLAN
C-2A THRU C-2B	SITE PLAN
C-4A THRU C-4B	PAVING AND GRADING PLAN
C-4C	CROSS SECTIONS
C-4D	PAVING AND GRADING DETAILS
C-15 THRU C-16	DETAILS

CIVIL LEGEND:

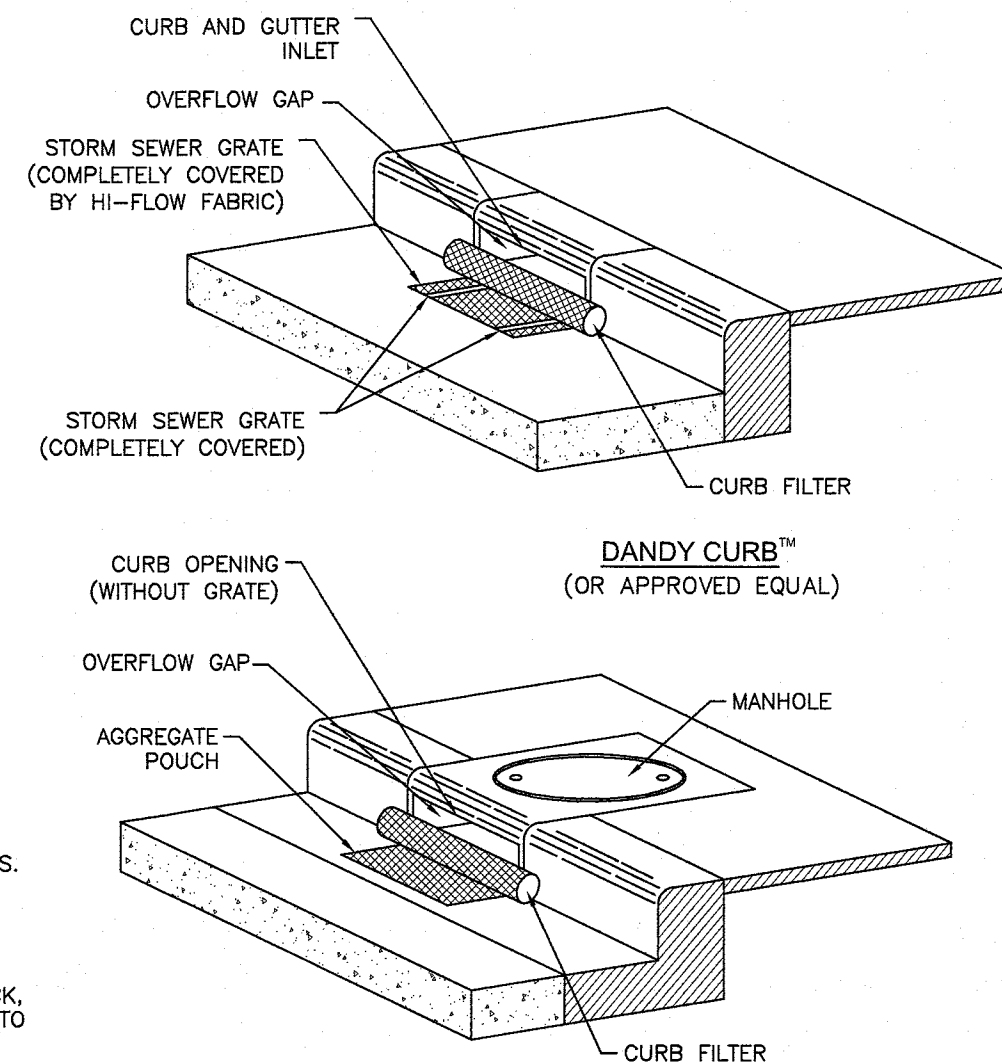
DESCRIPTION	NEW	WATER:
DEMOLITION		GATE VALVE
HANDICAP ACCESSIBLE RAMP WITH TRUNCATED DOMES		REDUCER
SANITARY SEWER LINE		FIRE HYDRANT
WATERLINE		BLOW-OFF
STORM DRAIN		MANHOLE
POND		SINGLE SERVICE
SILT FENCE/TURBIDITY BARRIER		DOUBLE SERVICE
RIGHT-OF-WAY		MANHOLE
SPOT ELEVATION		PLUG VALVE
SWALE OR FLOW DIRECTION		AIR RELEASE VALVE
CHAIN LINK FENCE WITH DOUBLE GATES		DOUBLE SERVICE
		STRUCTURE NUMBER
		FOOT TYPE 4 INLET
		MANHOLE
		INLET/OVERFLOW STRUCTURE
		TYPE OF LOT DRAINAGE

APPROVED FOR CONSTRUCTION
City Engineer Date 8/28/16



1. PLACE CONCRETE BLOCKS IN A SINGLE ROW AROUND PERIMETER OF INLET ON THEIR SIDES, WITH ENDS OF ADJACENT BLOCKS ADJUTING.
2. HEIGHT OF BARRIER VARIES. USE STACKS OF 4-INCH, 8-INCH, OR 12" BLOCKS. MIN. HEIGHT OF BARRIER 12" AND MAX. HEIGHT OF 24"
3. PLACE HARDWARE CLOTH/WIRE MESH W/ MAX. 1/2" OPENINGS OVER VERTICAL FACE OF CONCRETE BLOCKS.
4. THE AGGREGATE SHALL BE ANY NON-ERODIBLE MATERIAL SUCH AS LOOSE ROCK, BROKEN CONCRETE THAT WILL SLOW THE FLOW OF THE WATER AND ALLOW IT TO FILTER THROUGH AND OVER THE MATERIAL BEFORE ENTERING THE INLET.

BLOCK AND AGGREGATE INLET SEDIMENT DEVICE
NTS



CURB INLET SEDIMENT CONTROL
NTS

EROSION AND SEDIMENTATION CONTROL REQUIREMENTS

1. THE LAND-DISTURBING ACTIVITY SHALL CONFORM TO EXISTING TOPOGRAPHY AND SOIL TYPE SO AS TO CREATE THE LOWEST PRACTICAL EROSION POTENTIAL.
2. LAND-DISTURBING ACTIVITIES SHALL BE CONDUCTED IN A MANNER MINIMIZING EROSION.
3. THE DISTURBED AREA AND THE DURATION OF EXPOSURE TO EROSION ELEMENTS SHALL BE KEPT TO A PRACTICABLE MINIMUM.
4. EROSION CONTROL MUST BE STRICTLY MAINTAINED DURING CUT AND FILL OPERATIONS.
5. DISTURBED SOIL SHALL BE STABILIZED AS QUICKLY AS PRACTICABLE.
6. WHENEVER FEASIBLE, NATURAL VEGETATION SHALL BE RETAINED, PROTECTED AND SUPPLEMENTED.
7. TEMPORARY VEGETATION OR MULCHING SHALL BE EMPLOYED TO PROTECT EXPOSED CRITICAL AREAS DURING DEVELOPMENT.
8. PERMANENT VEGETATION AND STRUCTURAL EROSION CONTROL MEASURES SHALL BE INSTALLED AS SOON AS PRACTICABLE.
9. ADEQUATE PROVISIONS MUST BE PROVIDED TO MINIMIZE DAMAGE FROM SURFACE WATER TO THE CUT FACE OF EXCAVATIONS OR THE SLOPING SURFACE OF FILLS.
10. TO THE EXTENT NECESSARY, SEDIMENT IN RUNOFF WATER MUST BE TRAPPED BY THE USE OF DEBRIS BASINS, SEDIMENT BASINS, SILT TRAPS OR SIMILAR MEASURES UNTIL THE DISTURBED AREA IS STABILIZED.
11. AN ESTIMATE OF RUNOFF COEFFICIENT OF THE SITE BEFORE, DURING, AND AFTER CONSTRUCTION USING "C" FROM THE RATIONAL METHOD.
12. "C" CAN BE APPROXIMATED AS 0.15 (BEFORE) AND 0.60(AFTER), FROM TABLE 2.1 "TYPICAL 'C' VALUES" OF THE EPA STORM WATER MANAGEMENT FOR CONSTRUCTION ACTIVITIES."
13. THE EXISTING DATA DESCRIBING EXISTING CONDITIONS OF SOIL OR THE QUALITY OF ANY DISCHARGE FROM THE SITE.
14. POMELO SAND, IMMOKALEE SAND AS CLASSIFIED BY THE SOIL CONSERVATION SERVICE HANDBOOK.

DEWATERING PLAN:

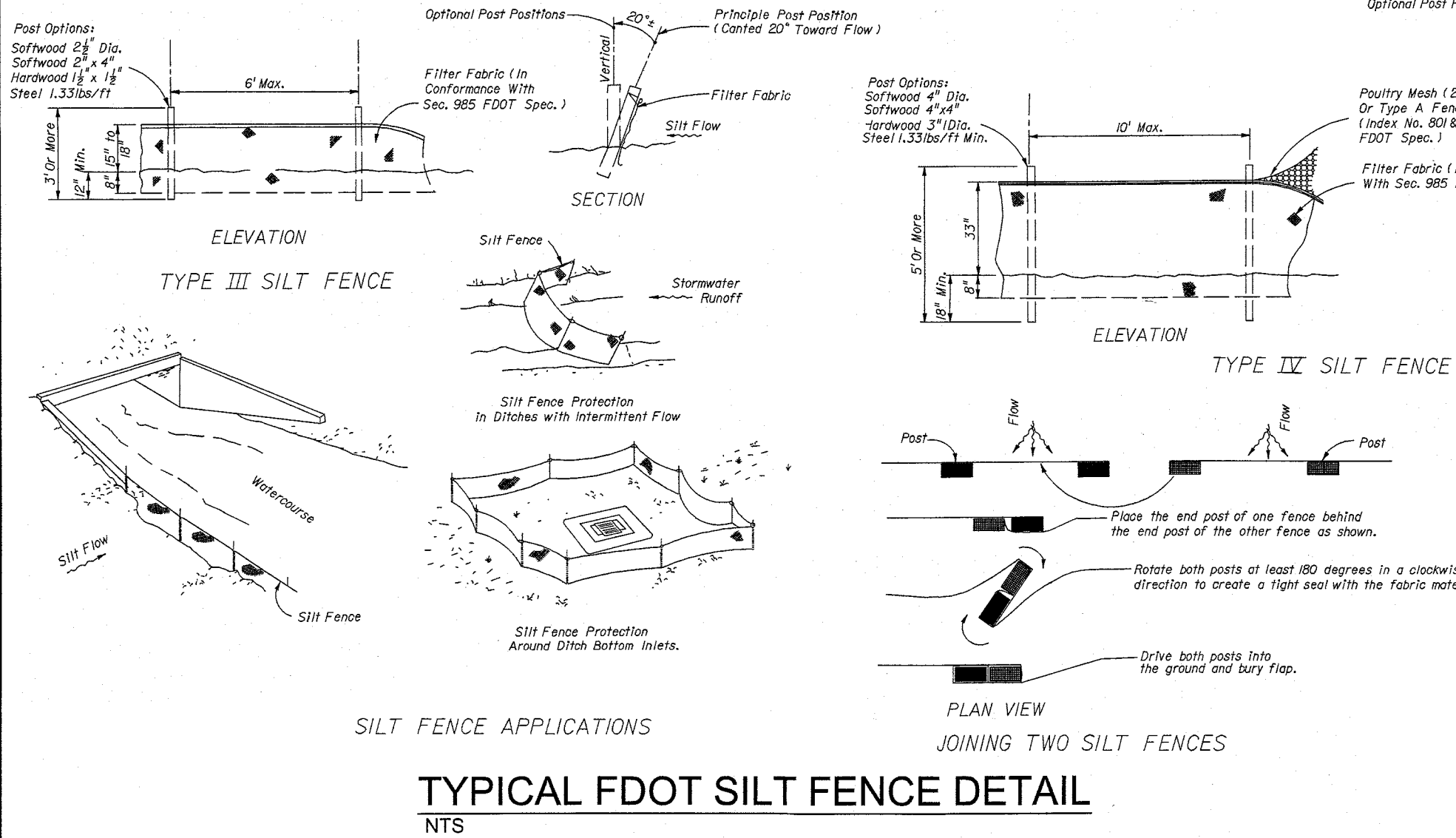
- (ALL PONDS)
1. EXCAVATE AND GRADE FIRST HALF OF POND TO NWL. DEWATER TO EXISTING ON-SITE SOUTH POND.
 2. EXCAVATE AND GRADE THE OTHER HALF OF POND TO FINAL GRADE. DEWATER INTO FIRST HALF OF POND.
 3. EXCAVATE AND GRADE THE FIRST HALF OF POND TO FINAL GRADE. DEWATER INTO OTHER HALF OF POND.
- FINAL GRADE AND SOD ENTIRE BANKS OF PONDS PER SECTION CUTS IMMEDIATELY. STAKE SOD IN AREAS WHERE WASHWAYS MAY OCCUR AS NEEDED TO MAINTAIN HEALTH OF SOD. INSTALL SILT FENCE AROUND PONDS AFTER SODDING. CONSTRUCT OVERFLOW STRUCTURES AND ALL PIPING BETWEEN DETENTION PONDS UPON FINAL GRADING OR SOONER TO UTILIZE FOR DEWATERING. INSTALL SKIMMERS AND UTILIZE TURBIDITY BARRIERS AROUND PIPE ENDS TO PREVENT SILTATION OF PIPING/STRUCTURE. ALL OF THIS WORK TO BE COMPLETED PER SJRWMD AND CITY OF PALM BAY PERMIT CONDITIONS.
- INSPECT AND REPAIR ANY HAY BALES, SILT FENCES AND TURBIDITY BARRIERS AFTER EACH RAIN EVENT DURING CONSTRUCTION.

DEWATERING SPECIFICATIONS:

1. MAINTAIN ADEQUATE SUPERVISION AND CONTROL TO ENSURE THAT STABILITY OF EXCAVATED AND CONSTRUCTED SLOPES ARE NOT ADVERSELY AFFECTED BY WATER. EROSION IS CONTROLLED AND FLOODING OF EXCAVATION OR DAMAGE TO STRUCTURES DOES NOT OCCUR.
2. THE DEWATERING PLAN SHALL COMPLY WITH THE REQUIREMENTS OF THE ST. JOHNS WATER MANAGEMENT DISTRICT FOR CONSUMING USE OF GROUNDWATER. PERMITTING, IF REQUIRED, SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
3. PROVIDE AN ADEQUATE SYSTEM TO LOWER AND CONTROL GROUNDWATER IN ORDER TO PERMIT EXCAVATION CONSTRUCTION AND PLACEMENT OF STRUCTURES AND OTHER MATERIALS UNDER DRY CONDITIONS. INSTALL SUFFICIENT DEWATERING EQUIPMENT TO DRAIN WATER-BEARING STRATA ABOVE AND BELOW BOTTOM OF STRUCTURE FOUNDATIONS, DRAINS, SEWERS AND OTHER EXCAVATIONS TO EXTENT THAT WATER LEVEL AND PIEZOMETRIC WATER LEVELS IN CONSTRUCTION AREAS ARE BELOW PREVAILING EXCAVATION SURFACE.
4. PRIOR TO EXCAVATION BELOW GROUNDWATER LEVEL, PLACE SYSTEM INTO OPERATION TO LOWER WATER LEVELS AS REQUIRED AND THEN OPERATE CONTINUOUSLY 24 HOURS A DAY, 7 DAYS A WEEK UNTIL DRAINS, SEWERS AND STRUCTURES HAVE BEEN CONSTRUCTED, INCLUDING PLACEMENT OF FILL MATERIALS, AND UNTIL DEWATERING IS NO LONGER REQUIRED.
5. DISPOSE OF WATER REMOVED FROM EXCAVATIONS IN A MANNER TO AVOID ENDANGERING PUBLIC HEALTH, PROPERTY, AND PORTIONS OF WORK UNDER CONSTRUCTION OR COMPLETED. DISPOSE OF WATER IN A MANNER TO AVOID INCONVENIENCE TO OTHERS. PROVIDE SUMPS, SEDIMENTATION TANKS, AND OTHER FLOW CONTROL DEVICES AS REQUIRED BY GOVERNING AUTHORITIES.
6. PROVIDE STANDBY EQUIPMENT ON SITE, INSTALLED AND AVAILABLE, FOR IMMEDIATE OPERATION IF REQUIRED TO MAINTAIN DEWATERING ON A CONTINUOUS BASIS ANY PART OF SYSTEM BECOMES INADEQUATE OR FAILS. IF DEWATERING REQUIREMENTS ARE NOT SATISFIED DUE TO INADEQUACY OR FAILURE OF DEWATERING SYSTEM, PERFORM SUCH WORK AS MAY BE REQUIRED TO RESTORE PROTECTED DAMAGED STRUCTURES AND FOUNDATION SOILS AT NO ADDITIONAL EXPENSE.

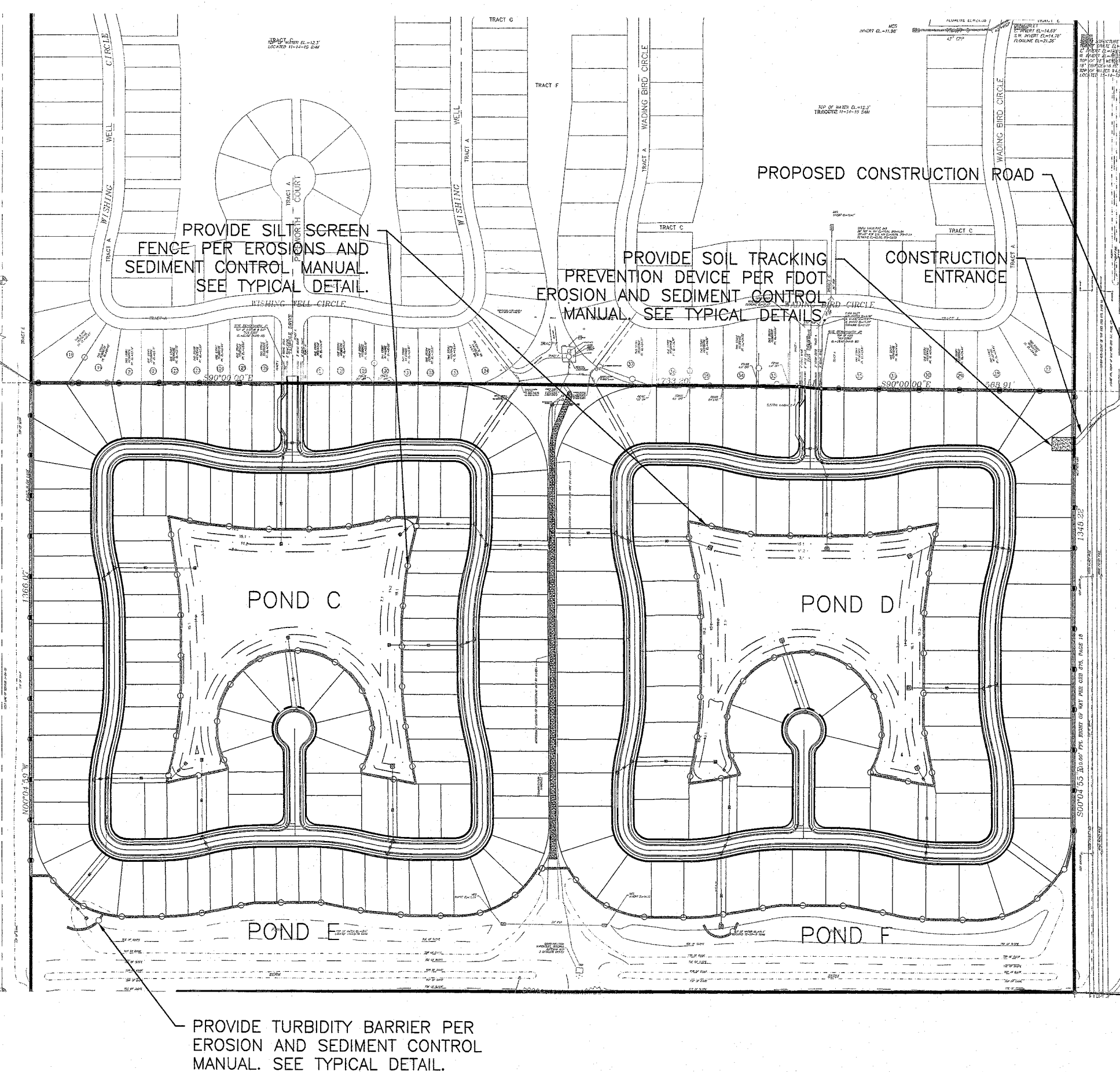
NOTES FOR SILT FENCES

1. TYPE III SILT FENCE TO BE USED AT MOST LOCATIONS. WHERE USED IN DITCHES, THE SPACING FOR TYPE III SILT FENCE SHALL BE IN ACCORDANCE WITH CHART 1, SHEET 1.
2. TYPE IV SILT FENCE TO BE USED WHERE LARGE SEDIMENT LOADS ARE ANTICIPATED. SUGGESTED USE IS WHERE FILL SLOPE IS 1:2 OR STEEPER AND LENGTH OF SLOPE EXCEEDS 25 FEET. AVOID USE WHERE THE DETAINED WATER MAY BACK INTO TRAIL LANE OR OFF THE RIGHT OF WAY.
3. DO NOT CONSTRUCT SILT FENCES ACROSS PERMANENT FLOWING WATERWAYS. SILT FENCES ARE TO BE AT UPLAND LOCATIONS AND TURBIDITY BARRIERS USED AT PERMANENT BODIES OF WATER.
4. WHERE USED AS SLOPE PROTECTION, SILT FENCE IS TO BE CONSTRUCTED ON OR LONGITUDINAL GRADE TO AVOID CHANNELIZING RUNOFF ALONG THE LENGTH OF THE FENCE.
5. SILT FENCE TO BE PAID FOR UNDER THE CONTRACT UNIT PRICE FOR STAKED SILT FENCE, (LF).



NOTES:

1. A SOIL TRACKING PREVENTION DEVICE (STPD) SHALL BE CONSTRUCTED AT LOCATIONS DESIGNATED BY THE ENGINEER FOR PORTS OF ACCESS FROM UNSTABILIZED AREAS OF THE PROJECT TO PUBLIC ROADS WHERE OFF-SITE TRACKING OF MUD COULD OCCUR. TRAFFIC FROM UNSTABILIZED AREAS OF THE CONSTRUCTION PROJECT SHALL BE DIRECTED THRU A STPD. BARRIERS, FLAGGING, OR OTHER POSITIVE MEANS SHALL BE USED AS REQUIRED TO LIMIT AND DIRECT VEHICULAR EGRESS ACROSS THE STPD.
2. THE CONTRACTOR MAY PROPOSE AN ALTERNATIVE TECHNIQUE TO MINIMIZE OFF-SITE TRACKING OF SEDIMENT. THE ALTERNATIVE MUST BE REVIEWED AND APPROVED BY THE ENGINEER PRIOR TO ITS USE.
3. ALL MATERIALS SPILLED, DROPPED, OR TRACKED ONTO THE PUBLIC ROADS (INCLUDING THE STPD AGGREGATE AND CONSTRUCTION MUD) SHALL BE REMOVED DAILY, OR MORE FREQUENTLY AS DIRECTED BY THE ENGINEER.
4. AGGREGATES SHALL BE AS DESCRIBED IN SECTION 901 EXCLUDING 901-2.3. AGGREGATES SHALL BE 3/4" IN SIZE. IF THIS SIZE IS NOT AVAILABLE, THE NEXT AVAILABLE SMALLER SIZE AGGREGATE MAY BE SUBSTITUTED WITH APPROVED AND INSURABLE SYNTHETIC BALES OR SILT FENCE SHALL BE PLACED ALONG WITH TRACK OFF THE PROJECT AND ARE UNSUITABLE.
5. THE SEDIMENT RETENTION VOLUME OF 3800 CUBIC FEET/ACRE OF SURFACE AREA DRAINING TO THE PIT. PIT VOLUMES WILL SATISFY THIS REQUIREMENT: 12'-0" x 10'.
6. AS AN OPTION TO THE SEDIMENT PIT, THE WIDTH OF THE SWALE BOTTOM CAN BE INCREASED TO OBTAIN THE VOLUME. WHEN THE SEDIMENT PIT OR SWALE VOLUME HAS BEEN REDUCED TO ONE HALF, IT SHALL BE CLEANED. WHEN A SWALE IS USED, SYNTHETIC BALES OR SILT FENCE SHALL BE PLACED ALONG THE ENTIRE LENGTH.
7. MIXED DIO SECTIONS ARE NOT REQUIRED WHEN THE SIDE DRAIN PIPE SATISFIES THE CLEAR ZONE REQUIREMENTS.
8. THE STPD SHALL BE MAINTAINED IN A CONDITION THAT WILL ALLOW IT TO PERFORM ITS FUNCTION TO PREVENT OFF-SITE TRACKING. THE STPD SHALL BE RINSED (ONLY WHEN IN USE) TO MOVE ACCUMULATED MUD DOWNWARD THRU THE STONE. ADDITIONAL STABILIZATION OF THE VEHICULAR ROUTE LEADING TO THE STPD MAY BE REQUIRED TO LIMIT THE MUD TRACKED.
9. A STPD SHALL BE PAID FOR UNDER THE CONTRACT UNIT PRICE FOR SOIL TRACKING PREVENTION DEVICE, EA. THE UNIT PRICE SHALL CONSTITUTE FULL COMPENSATION FOR CONSTRUCTION, MAINTENANCE, REPAIR, AGGREGATE, PAVED TURNOUT (INCLUDING ASPHALT AND BASE CONSTRUCTION), SITCH STABILIZATION, APPROACH ROUTE STABILIZATION, SEDIMENTATION, PAVED AND DISPOSAL, WATER RINSING AND CLEANING OF THE STPD AND CLEANING OF PUBLIC ROADS, GRASSING AND SOD. SYNTHETIC BALE OR BALE TYPE BARRIER SHALL BE PAID FOR UNDER THE CONTRACT UNIT PRICE FOR SYNTHETIC BALES. SILT FENCE SHALL BE PAID FOR UNDER THE CONTRACT UNIT PRICE FOR STAKED SILT FENCE, FL.
10. THE NORMAL SIZE OF A STANDARD STPD IS 15'x40' UNLESS OTHERWISE SHOWN IN THE PLANS. IF THE VOLUME OF ENTERING AND EXISTING VEHICLES WARRANT, A 30' WIDE STPD MAY BE USED IF APPROVED BY THE ENGINEER. WHEN A DOUBLE WIDTH (30') STPD MAY BE USED APPROVED BY THE ENGINEER, WHEN A DOUBLE WIDTH (30') STPD IS USED, THE PAY QUANTITY SHALL BE 2 FOR EACH LOCATION.



EROSION CONTROL PLAN
1"=250'

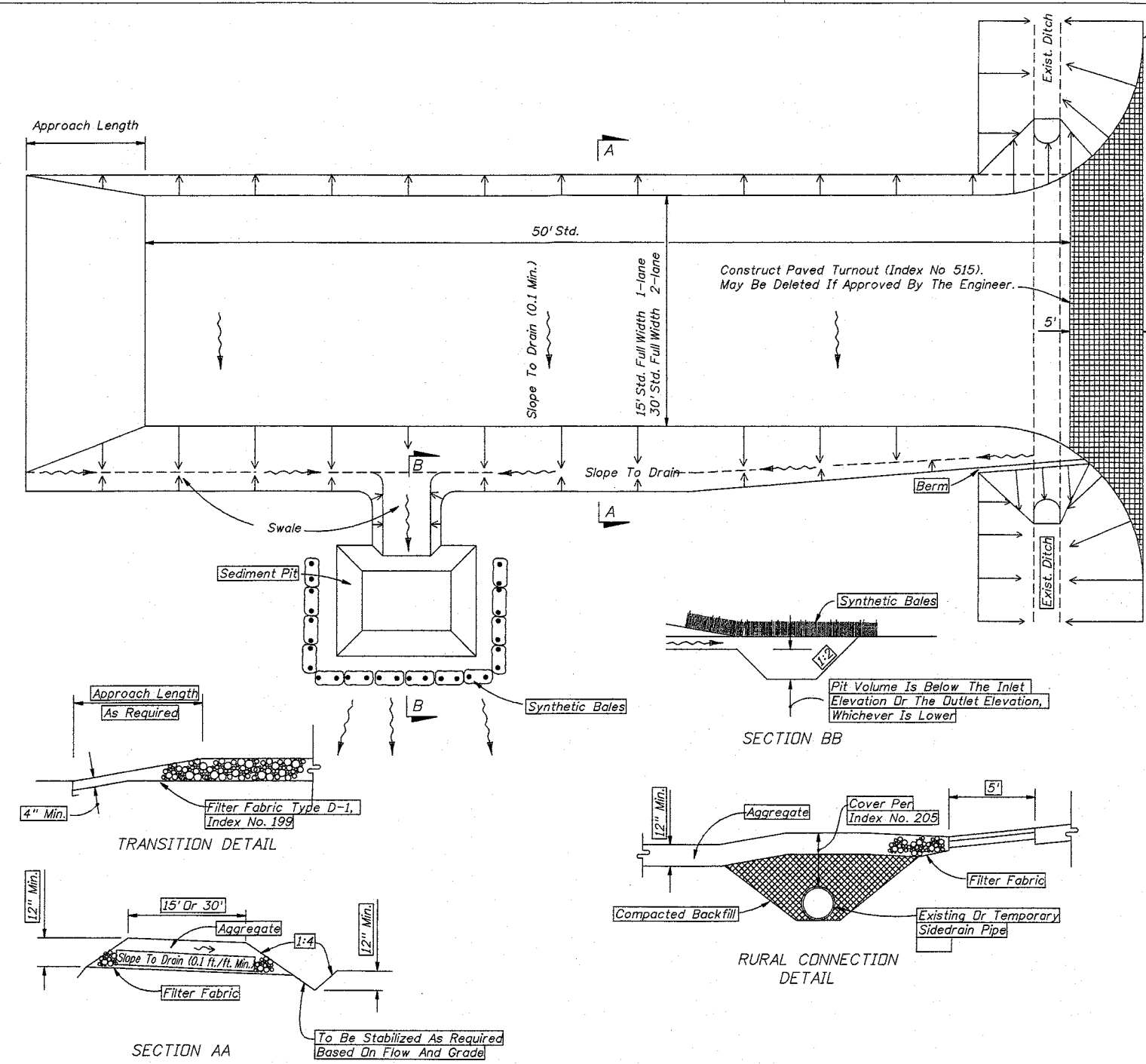
Approved For Construction
AUG 26 2016
City of Palm Bay

CONTRACTOR SIGN-OFF / ACKNOWLEDGEMENT:

TO THE BEST OF MY KNOWLEDGE, I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHER AND EVALUATE THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSON OR PERSONS MANAGE THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION SUBMITTED IS TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINES AND IMPRISONMENT FOR KNOWING VIOLATIONS.

OWNER: _____ TITLE: _____ DATE: _____
NAME: _____ SIGNATURE: _____

CONTRACTOR'S CERTIFICATION		
I CERTIFY UNDER PENALTY OF LAW THAT I UNDERSTAND THE TERMS AND CONDITIONS OF THE GENERAL NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT THAT AUTHORIZES THE STORM WATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY FROM THE SITE IDENTIFIED AS PART OF THIS CERTIFICATION.		
SIGNATURE:	COMPANY NAME AND ADDRESS:	RESPONSIBLE FOR:
NAME:	ADDRESS:	GENERAL CONTRACTOR
DATE:	PHONE:	
SIGNATURE:	COMPANY:	TEMPORARY AND PERMANENT STABILIZATION
NAME:	ADDRESS:	
DATE:	PHONE:	
SIGNATURE:	COMPANY:	STABILIZED CONSTRUCTION ENTRANCE, EARTH DIKES, SEDIMENT BASIN
NAME:	ADDRESS:	
DATE:	PHONE:	



SOIL TRACKING PREVENTION DEVICE
NTS

CONTRACTOR RESPONSIBILITIES FOR NPDES (SWPPP)

1. GENERAL NOTES
 - A. CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS HEREIN AND ALL WATER MANAGEMENT DISTRICT, FDEP, EPA, CORPS OF ENGINEERS, AND MUNICIPALITY/COUNTY WITH JURISDICTION REQUIREMENTS.
 - B. CONTRACTOR SHALL MAINTAIN A RECORD OF CONSTRUCTION WORK AND PROVIDE INSPECTION REPORTS WITH THE FOLLOWING DATES OF INSPECTIONS:
 - 1) DATES WHEN SITE WORK BEGINS, EROSION CONTROL MEASURES ARE INSTALLED, GRADING WORK BEGINS, STORMWATER FACILITIES ARE CONSTRUCTED, AND FINAL STABILIZATION IS COMPLETE.
 - 2) REPORT INSPECTOR'S NAME, QUALIFICATIONS, DAILY RAINFALL, ANY CHANGES NECESSARY TO SWPPP, AND DATES OF INSPECTIONS.
 - 3) PICTURES OF ANY PROBLEM AREAS THAT OCCUR INCLUDING DATE AND TIME, AND PICTURES OF SAME AREA REPAIRED INCLUDING DATE AND TIME.
 - C. PRIOR TO FINAL PAYMENT, CONTRACTOR SHALL PROVIDE A COPY OF THE REPORT TO THE OWNER AND CIVIL ENGINEER CERTIFYING THE PROJECT. CONTRACTOR SHALL EXECUTE NPDES CERTIFICATION FORM AND PROVIDE COPIES TO OWNER AND ENGINEER.
2. SITE DESCRIPTION
 - A. DESCRIPTION OF THE INTENDED SEQUENCE OF MAJOR ACTIVITIES WHICH DISTURB SOILS FOR MAJOR PORTIONS OF THE SITE.
 - B. FIRST, GRADING OF THE SITE INCLUDING THE STORMWATER TREATMENT SYSTEM. ALL EROSION CONTROL MEASURES INSTALLED AT THIS TIME (SOD ALL AREAS FINAL GRADED IMMEDIATELY). FINAL GRADING, PAVING, AND PLANTINGS ACROSS THE SITE WILL FINISH OUT THE PROJECT.
 - B. ESTIMATE OF THE TOTAL AREA OF THE SITE AND THE TOTAL AREA EXPECTED TO BE DISTURBED BY EXCAVATION, GRADING, OR OTHER ACTIVITIES.
 - C. THE ENTIRE 6.75 ACRES ARE EXPECTED TO BE DISTURBED BY GRADING, WITH THE EXCEPTION OF TREE PRESERVATION AREAS AS IDENTIFIED ON THE EXISTING SITE PLAN.
 - D. AN ESTIMATE OF RUNOFF COEFFICIENT OF THE SITE BEFORE, DURING, AND AFTER CONSTRUCTION USING "C" FROM THE RATIONAL METHOD.
 - E. "C" CAN BE APPROXIMATED AS 0.15 (BEFORE) AND 0.60(AFTER), FROM TABLE 2.1 "TYPICAL 'C' VALUES" OF THE EPA STORM WATER MANAGEMENT FOR CONSTRUCTION ACTIVITIES."
 - F. THE EXISTING DATA DESCRIBING EXISTING CONDITIONS OF SOIL OR THE QUALITY OF ANY DISCHARGE FROM THE SITE.
 - G. POMELO SAND, IMMOKALEE SAND AS CLASSIFIED BY THE SOIL CONSERVATION SERVICE HANDBOOK.
3. CONTROLS
 - A. EROSION AND SEDIMENT CONTROLS.
 - 1) STABILIZATION PRACTICES: EXCAVATED MATERIALS WILL BE STOCKPILED FOR USE AS A BACKFILL AND STABILIZING MATERIAL. UNSUITABLE MATERIALS WILL BE PROMPTLY REMOVED FROM THE SITE AND LEGALLY DISPOSED OF.
 - 2) STRUCTURAL PRACTICES: THE CONTRACTOR SHALL INSTALL AND MAINTAIN WATER QUALITY CONTROL DEVICES AT ALL NEARBY STORMWATER MANAGEMENT PONDS, DITCHES, AND SWALES. INCLUDED IN THE PLANS ARE SILTATION FENCES AND TURBIDITY BARRIERS. CONTRACTOR SHALL INSTALL ADDITIONAL WATER QUALITY CONTROL MEASURES AS APPROPRIATE TO ASSURE PROTECTION OF RECEIVING WATER BODIES.
 3. STORMWATER MANAGEMENT: THE ENTIRE PROJECT IS DESIGNED TO IMPROVE STORMWATER MANAGEMENT. THE CONTRACTOR SHALL CONTROL TURBID RUNOFF FROM THE PROJECT SITE BY USING TEMPORARY GRADING AND EROSION CONTROL MEASURES.
 4. OTHER CONTROLS: ALL GOVERNMENT AND REGULATIONS SET FORTH IN THE ST. JOHNS RIVER WATER MANAGEMENT DISTRICT AND FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION.
 - B. MAINTENANCE
 1. THE CONTRACTOR SHALL PROVIDE ROUTINE MAINTENANCE OF VEGETATION, PERMANENT AND TEMPORARY EROSION AND SEDIMENT CONTROL FEATURES FOR THE DURATION OF THE PROJECT.
 2. THE CONTRACTOR SHALL GRADE THE SITE TO THE ELEVATIONS INDICATED ON THE CONSTRUCTION PLANS AND SHALL REGRADE WASHOUTS WHERE THEY OCCUR AFTER EVERY RAINFALL UNTIL NEW LANDSCAPING IS ESTABLISHED.
 3. ALL DRAINAGE STRUCTURES SHALL BE DE-SILTED AS REQUIRED DURING CONSTRUCTION AND AT THE END OF CONSTRUCTION TO PROVIDE POSITIVE DRAINAGE FLOWS AND MINIMIZE TRANSPORT OF SILT TO THE MASTER DRAINAGE SYSTEM AND RECEIVING WATER BODY.
 4. ALL ACCUMULATIONS OF SILT GREATER THAN SIX INCHES SHALL BE REMOVED BY THE CONTRACTOR AND PROPERLY DISPOSED.
 5. ALL TEMPORARY AND PERMANENT EROSION CONTROL DEVICES WILL BE INSPECTED BY THE CONTRACTOR ON A WEEKLY BASIS (MINIMUM). IN AREAS OF ONGOING CONSTRUCTION ACTIVITY, TURBIDITY AND EROSION CONTROL MEASURES WILL BE INSPECTED ON A DAILY BASIS. ADDITIONAL INSPECTIONS WILL BE CONDUCTED AFTER ALL SEVERE WEATHER. IF ANY DEFICIENCIES IN EROSION CONTROL ARE DISCOVERED, CORRECTIVE ACTIONS SHALL BE TAKEN IMMEDIATELY BY THE CONTRACTOR.
4. INSPECTIONS
 - A. INSPECTIONS WILL BE PERFORMED BY THE CONTRACTOR ON A WEEKLY BASIS (MINIMUM) AND WITHIN 24 HOURS OF THE END OF A STORM THAT IS 0.50 INCHES OR GREATER.
 - B. INSPECTIONS SHALL INCLUDE, BUT ARE NOT LIMITED TO:
 - 1) ALL DISTURBED AREAS OF THE CONSTRUCTION SITE THAT HAVE NOT RECEIVED FINAL STABILIZATION.
 - 2) AREAS USED FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION.
 - 3) EXAMINATION OF THE SITE FOR EVIDENCE OF, OR THE POTENTIAL FOR POLLUTANTS ENTERING THE RECEIVING WATERS.
 - 4) STORMWATER MANAGEMENT SYSTEM AND EROSION AND SEDIMENT CONTROL MEASURES IDENTIFIED IN THE PLAN TO PROVIDE REASONABLE ASSURANCE THAT THEY ARE OPERATING AS DESIGNED.
 - 5) LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE FOR EVIDENCE OF OFF-SITE SEDIMENT TRACKING.
 - 6) ALL POINTS OF DISCHARGE INTO THE MASTER STORMWATER MANAGEMENT SYSTEM TO DETERMINE WHETHER EROSION CONTROL AND STORMWATER MANAGEMENT MEASURES ARE EFFECTIVELY PREVENTING WATER QUALITY DEGRADATION IN THE RECEIVING WATER BODY.
 - C. WHEN REMEDIAL ACTION IS REQUIRED FOR COMPLIANCE, THE PLAN WILL BE REVISED AS NECESSARY AND ADDITIONAL STRUCTURAL MEASURES INSTALLED IMMEDIATELY AS WARRANTED.
 - D. ADDITIONAL PRODUCT SPECIFIC PRACTICES:
 - 1) CONCRETE TRUCKS: CONCRETE TRUCKS WILL NOT BE ALLOWED TO WASH OUT OR DISCHARGE SURPLUS CONCRETE OR DRUM WASH WATER ON THE SITE.
 - 2) FERTILIZERS: FERTILIZERS USED WILL BE APPLIED ONLY IN THE MINIMUM AMOUNTS RECOMMENDED BY THE MANUFACTURER. ONCE APPLIED, FERTILIZER WILL BE WORKED INTO THE SOIL TO LIMIT EXPOSURE TO STORMWATER. THE CONTENTS OF ANY PARTIALLY USED BAGS OF FERTILIZER WILL BE TRANSFERRED TO A SEALABLE PLASTIC BIN TO AVOID SPILLS.
 - 3) PETROLEUM PRODUCTS: ALL ON-SITE VEHICLES WILL BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTIVE MAINTENANCE TO REDUCE THE CHANCE OF LEAKAGE. PETROLEUM PRODUCTS WILL BE STORED IN TIGHTLY SEALED CONTAINERS, WHICH ARE CLEARLY LABELED.
 - E. SPILL PREVENTION PRACTICES:
 - 1) THESE ADDITIONAL PRACTICES WILL BE FOLLOWED FOR SPILL PREVENTION CLEANUP:
 - MATERIALS RECOMMENDED METHODS FOR SPILL CLEANUP WILL BE CLEARLY POSTED AND INFORMATION AND CLEANUP SUPPLIES;
 - SITE PERSONNEL WILL BE MADE AWARE OF THE PROCEDURES AND THE LOCATION OF THE INFORMATION AND CLEANUP SUPPLIES;
 - MATERIALS AND EQUIPMENT NECESSARY FOR SPILL CLEANUP WILL BE KEPT ON-SITE;
 - ALL SPILLS WILL BE CLEANED UP IMMEDIATELY AFTER DISCOVERY AND REPORTED TO THE APPROPRIATE STATE OR LOCAL GOVERNMENT AGENCY IF NECESSARY; AND
 - THE SPILL PREVENTION PLAN WILL BE MODIFIED TO INCLUDE MEASURES TO PREVENT A REOCCURRENCE, HOW TO CLEAN UP IF ANOTHER OCCURS, AND A DESCRIPTION OF WHAT SPILLED, WHAT CAUSED IT, AND WHAT THE CLEANUP MEASURES ARE.
 - 2) NON-STORMWATER DISCHARGES ARE ANTICIPATED WITH THE POSSIBLE EXCEPTION OF DEWATERING. THE CONTRACTOR SHALL OBTAIN A DEWATERING PERMIT IF NECESSARY AND FOLLOW ALL STATE REQUIREMENTS AS ENFORCED BY THE WATER MANAGEMENT DISTRICT WITH AUTHORITY.
 3. INVENTORY FOR POLLUTION PREVENTION PLAN
 - THE MATERIALS OR SUBSTANCES LISTED BELOW ARE EXPECTED TO BE PRESENT ON-SITE DURING CONSTRUCTION:
 - CONCRETE;
 - FERTILIZERS; AND
 - PETROLEUM BASED PRODUCTS.
 - 4. SPILL PREVENTION MATERIAL MANAGEMENT PRACTICES:
 - THE MATERIAL MANAGEMENT PRACTICES WILL BE USED TO REDUCE THE RISK OF SPILLS OR OTHER ACCIDENTAL EXPOSURE OF MATERIALS AND SUBSTANCES TO STORMWATER RUNOFF.
 - 5) GOOD HOUSEKEEPING.
 - THE FOLLOWING PRACTICES WILL BE FOLLOWED ON-SITE DURING THE CONSTRUCTION PROJECT.
 - AN EFFORT WILL BE MADE TO STORE ONLY EXCESS EQUIPMENT TO DO THE JOB;
 - ALL MATERIALS STORED ON-SITE WILL BE STORED IN A NEAT, ORDERLY MANNER IN THEIR APPROPRIATE CONTAINERS AND, IF POSSIBLE, UNDER A ROOF;
 - PRODUCTS WILL BE KEPT IN THEIR ORIGINAL CONTAINERS WITH THE ORIGINAL MANUFACTURERS' LABELS;
 - SUBSTANCES WILL NOT BE MIXED UNLESS RECOMMENDED BY THE MANUFACTURER;
 - MANUFACTURERS' RECOMMENDATIONS FOR PROPER USE AND DISPOSAL WILL BE FOLLOWED;
 - WHENEVER POSSIBLE, ALL OF A PRODUCT WILL BE USED UP BEFORE DISPOSING OF THE CONTAINER.
 - 6) HAZARDOUS PRODUCTS.
 - THESE PRACTICES ARE USED TO REDUCE THE RISKS ASSOCIATED WITH HAZARDOUS MATERIALS.
 - PRODUCTS WILL BE KEPT IN ORIGINAL CONTAINERS IF THEY ARE NOT RESEALABLE;
 - ORIGINAL LABELS AND MATERIAL SAFETY DATA WILL BE RETAINED; THEY CONTAIN IMPORTANT PRODUCT INFORMATION;
 - IF SURPLUS PRODUCT MUST BE DISPOSED OF, MANUFACTURERS' OR LOCAL AND STATE RECOMMENDED METHODS FOR PROPER DISPOSAL WILL BE FOLLOWED.

REVISION: 6/14/16
DATE: 6/14/16
REV# 1
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consulting engineers

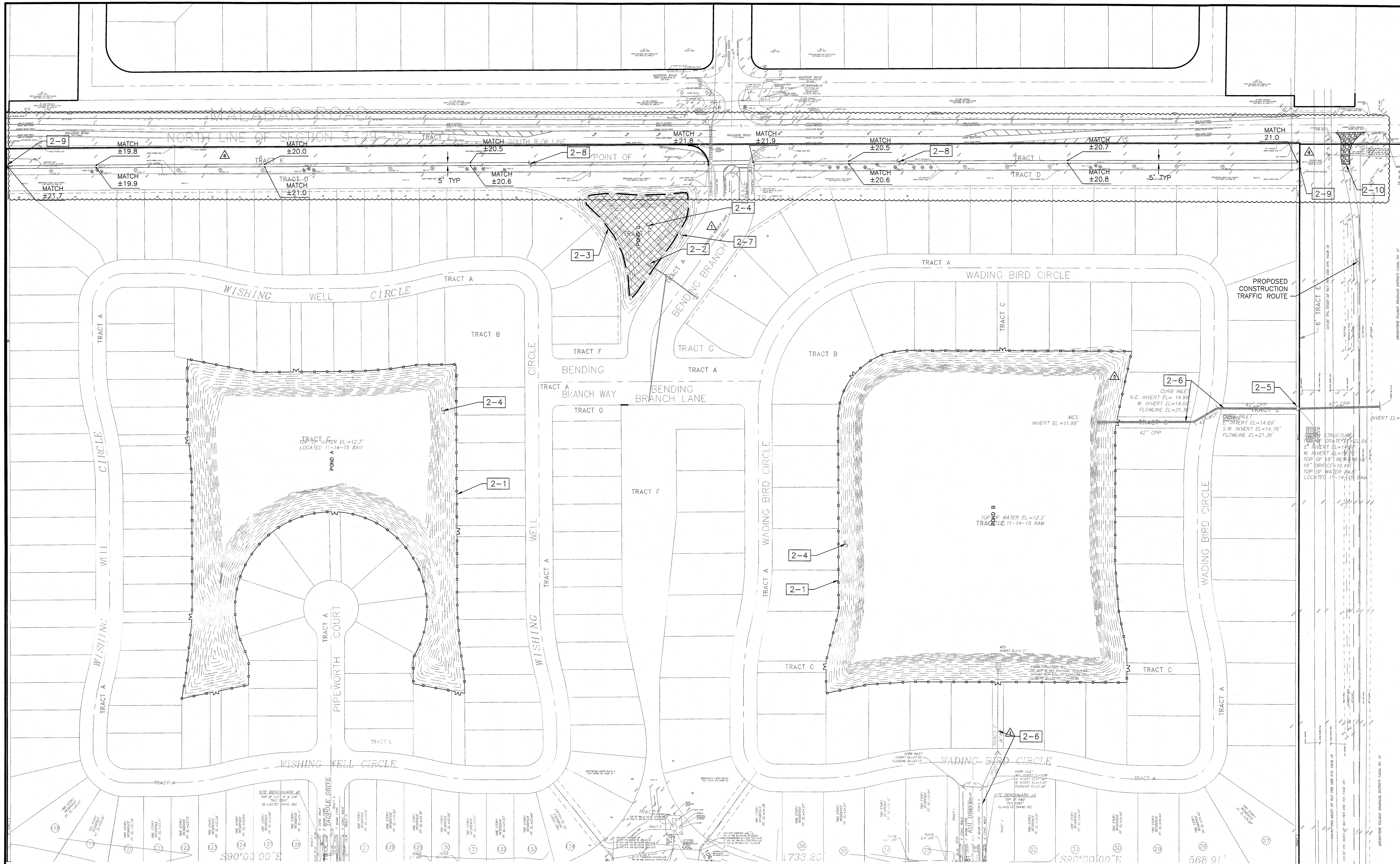
BRENTWOOD LAKES SOUTH
D.R. HORTON
MALBAR ROAD PALM BAY, FLORIDA

DRAWING TITLE: STORMWATER POLLUTION PREVENTION PLAN (SWPPP)

DATE: 4-26-16
SCALE: 1"=250'
PROJ. NO.: 160163
DESIGNED BY: JRT
DRAWN BY: SMB
CHECKED BY: JTW
DRAWING NO. G-2

STATE OF FLORIDA
LICENSE # 55405
AUG 24 2016

DATE: 4-26-16
SCALE: 1"=250'
PROJ. NO.: 160163
DESIGNED BY: JRT
DRAWN BY: SMB
CHECKED BY: JTW
DRAWING NO. G-2



NORTH SUBDIVISION AND RIGHT-OF-WAY PLAN
 1"=80'

- NOTES:**
- 2-1. PROVIDE 4' VINYL COATED CHAIN LINK FENCE WITH DOUBLE LOCKABLE GATES AS SHOWN ON PLAN. SEE TYPICAL DETAIL.
 - 2-2. REMOVE EXISTING MITERED END SECTION AND PROVIDE FDOT TYPE "C" INLET WITH GRATE ELEVATION 19.00. TIE INTO EXISTING 18" RCP WITH WATERTIGHT JOINT AT EL. 15.50.
 - 2-3. PROVIDE HDPE OR PVC POND LINER BENEATH ENTIRE POND UP TO ELEVATION 19.0'. PER MANUFACTURER'S SPECIFICATIONS. SOD ALL DISTURBED AREAS AT EXISTING PONDS.
 - 2-4. REGRADE ALL AREAS OF WASHOUTS. SOD ALL DISTURBED AREAS.
 - 2-5. MODIFY CONTROL STRUCTURE. SEE TYPICAL DETAIL.
 - 2-6. CONTRACTOR SHALL CLEAN OUT EXISTING STORM PIPES.
 - 2-7. PROVIDE 2" WELL AND FLOAT CONTROLS AT POND. INCLUDE POWER TO SYSTEM.

- 2-8. PROVIDE 6" THICK CONCRETE SIDEWALK IN RIGHT-OF-WAY. TIE INTO EXISTING SIDEWALK BY ENTRANCE. CONSTRUCT SIDEWALK AT MAXIMUM 2% CROSS SLOPE, 5% LONGITUDINAL. MATCH EXISTING GRADE. SEE TYPICAL DETAIL.
- 2-9. PROVIDE 9" BULLET OBJECT MARKER AT SIDEWALK TERMINATION PER MUTCD QM1-1.
- 2-10. PROVIDE SOIL TRACKING PREVENTION DEVICE. SEE TYPICAL DETAILS ON SHEET G-2.

Approved For Construction

AUG 26 2016
 City of Palm Bay
 80' 0' 80' 160'

REV#	DATE	REVISION
1	6/14/15	PALM BAY AND SURVIV COMMENTS
3	7/25/16	CITY OF PALM BAY COMMENTS
4	8/10/16	CITY OF PALM BAY COMMENTS

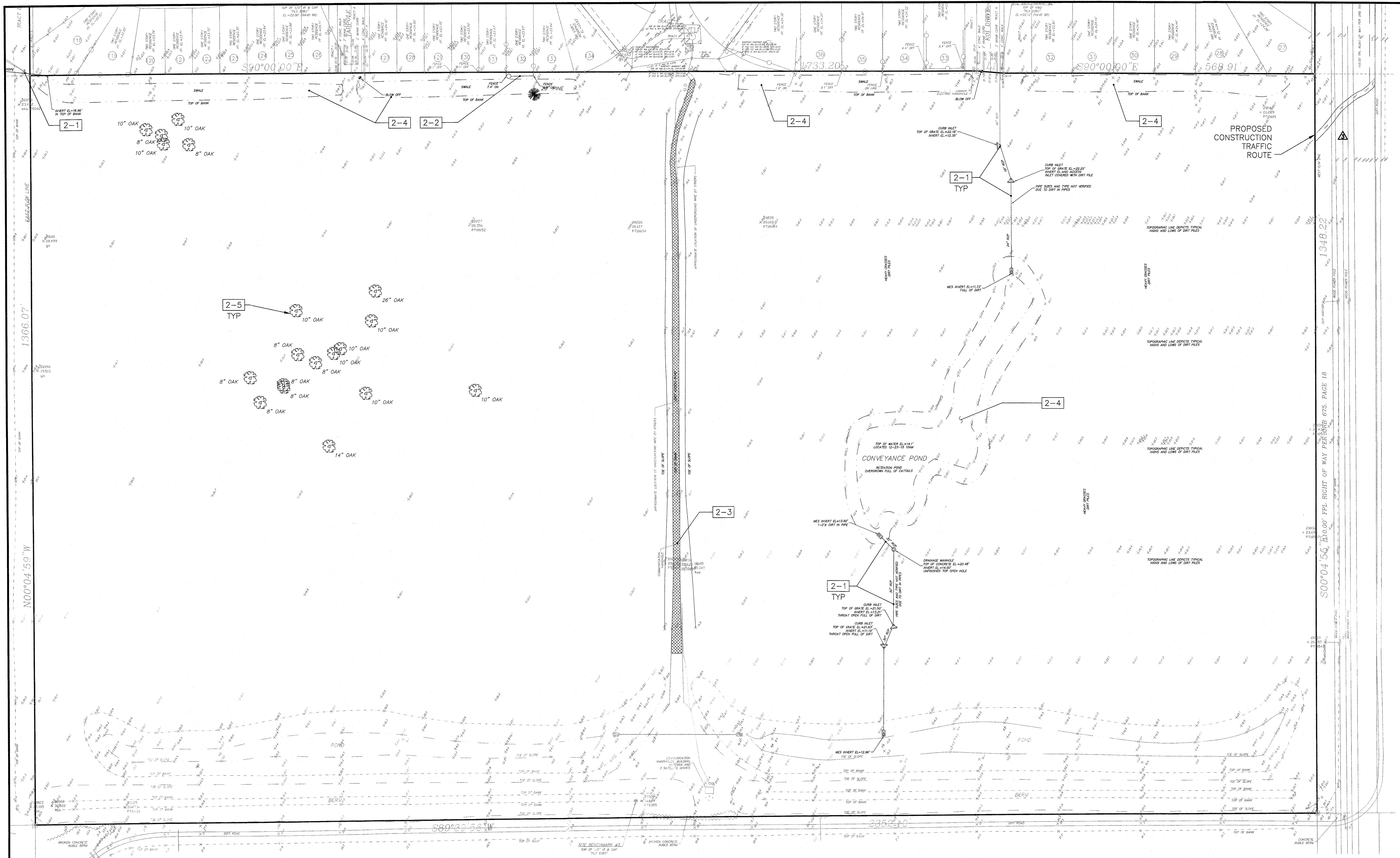
2651 eou galle Blvd., suite 10
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 License 1000897

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BRENTWOOD LAKES SOUTH
 D.R. HORTON
 MALABAR ROAD PALM BAY, FLORIDA
 DRAWING TITLE
 NORTH SUBDIVISION AND RIGHT-OF-WAY PLAN

STATE OF FLORIDA
 PROFESSIONAL ENGINEER
 LICENSE
 No. 55405
 AUG 24 2016

DATE	4-26-16
SCALE	1"=80'
PROJ. NO.:	160163
DESIGNED BY:	JRT
DRAWN BY:	SMB
CHECKED BY:	JTW
DRAWING NO.	G-3



BRENTWOOD LAKES PHASE 3&4
TREE REMOVAL TABLE

TYPE	SIZE (INCHES DBH)	QUANTITY	DBH. (OVER 18")
PINE	20	1	20
OAK	8	8	
OAK	10	9	
OAK	14	1	
OAK	26	1	26
TOTAL		20	46

EXISTING CONDITIONS AND DEMOLITION PLAN
1" = 120'

Approved For Construction

AUG 26 2016
City of Palm Bay

- NOTES:**
- 2-1. REMOVE EXISTING STORM PIPE AND INLETS.
 - 2-2. REMOVE EXISTING FENCE. COORDINATE WITH OWNER OF LOTS 132. SALVAGE FENCE PER OWNER'S DIRECTION.
 - 2-3. ADJUST COMMUNICATION MANHOLE TOP AS NEEDED FOR PROPOSED GRADE.
 - 2-4. REGRADE EXISTING PONDS/SWALES PER GRADING PLAN, SHEETS C4A-C4C.
 - 2-5. REMOVE EXISTING TREE AND ROOTS COMPLETELY.



REVISION	DATE	CITY OF PALM BAY COMMENTS
3	7/25/16	
4	8/10/16	

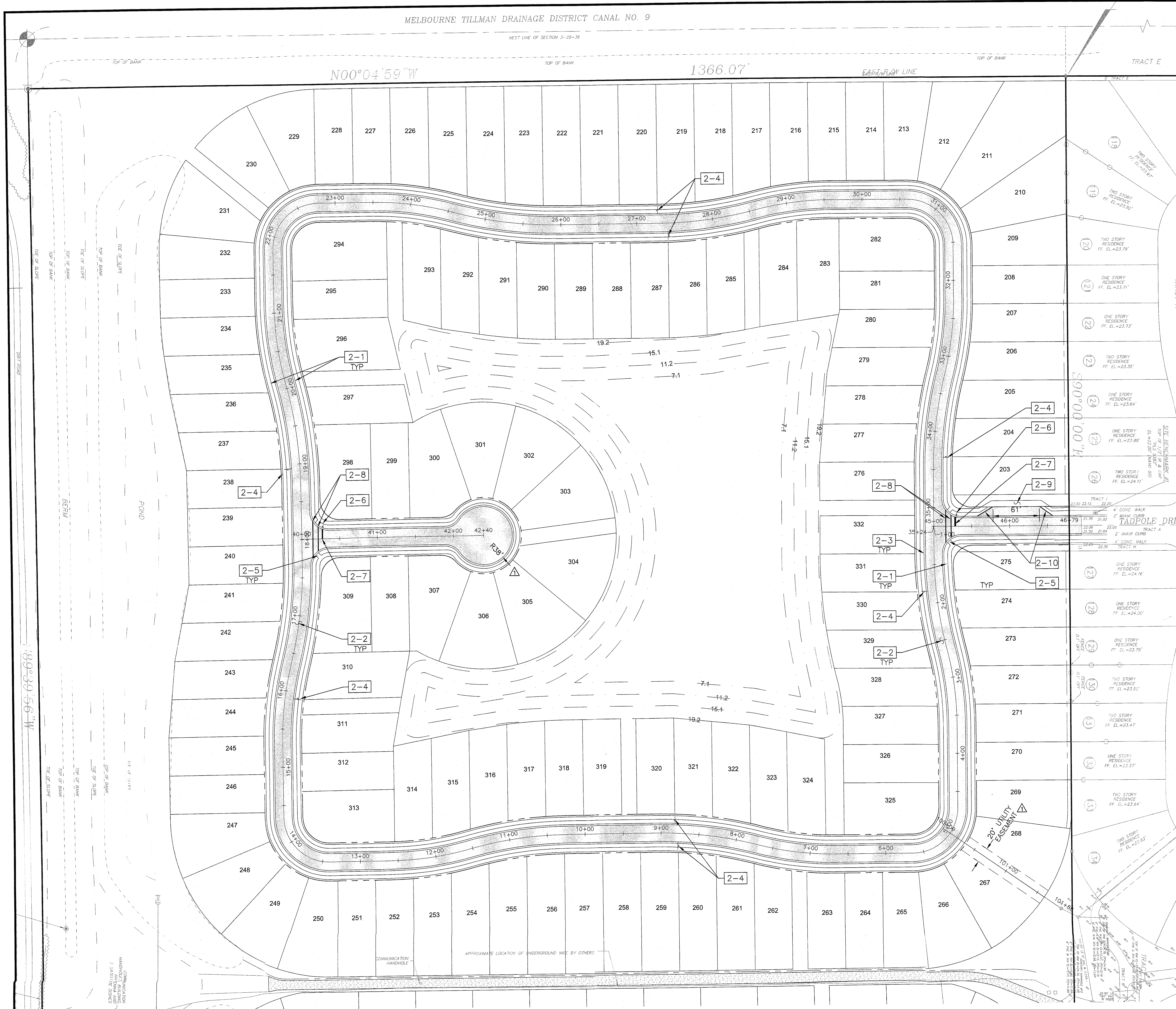
251 eou galle bld. suite 200
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BRENTWOOD LAKES SOUTH
D.R. HORTON
MALABAR ROAD PALM BAY, FLORIDA
DRAWING TITLE
EXISTING CONDITIONS AND DEMOLITION PLAN

JAKE T. WISE
LICENSE No. 55405
STATE OF FLORIDA
PROFESSIONAL ENGINEER
AUG 24 2016

DATE	4-26-16
SCALE	1"=80'
PROJ. NO.:	160163
DESIGNED BY:	JRT
DRAWN BY:	SMB
CHECKED BY:	JTW
DRAWING NO.	C-1



NOTES:

- 2-1. PROVIDE 5' WIDE CONCRETE SIDEWALK. SEE TYPICAL DETAIL. CONTRACTOR SHALL ONLY INSTALL COMMON AREA SIDEWALKS. THOSE IN FRONT OF LOTS SHALL BE CONSTRUCTED WITH VERTICAL WORK.
- 2-2. PROVIDE ASPHALTIC PAVEMENT. SEE TYPICAL DETAIL.
- 2-3. PROVIDE MIAMI CURB. SEE TYPICAL DETAIL.
- 2-4. PROVIDE "25 M.P.H. SPEED LIMIT" SIGN (MUTCD R2-1 24"X30").
- 2-5. PROVIDE HANDICAP ACCESSIBLE RAMP WITH TRUNCATED DOMES ON BOTH SIDES OF ROADWAY. SEE TYPICAL DETAIL.
- 2-6. PROVIDE "STOP" SIGN (MUTCD R1-1, 30"X30") WITH STREET NAME SIGN.
- 2-7. PROVIDE 24" WHITE THERMOPLASTIC STOP BAR PER FOOT INDEX NO. 17346.
- 2-8. PROVIDE WHITE THERMOPLASTIC PARALLEL CROSSWALK STRIPING PER FOOT INDEX NO. 17346.
- 2-9. PROVIDE 8' WIDE CONCRETE SIDEWALK IN FRONT OF CENTRAL MAIL PARKING. SEE TYPICAL DETAILS.
- 2-10. PROVIDE FDOT TYPE D' VERTICAL CURB. SEE TYPICAL DETAIL.

REV#	DATE	REVISION
1	6/14/16	PALM BAY AND SUBDIVISION COMMENTS

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BRENTWOOD LAKES SOUTH
D.R. HORTON
MALABAR ROAD PALM BAY, FLORIDA
DRAWING TITLE
SUBDIVISION PLAN - WEST

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JAKE T. WISE
LICENSE
No. 55405
STATE OF FLORIDA
PROFESSIONAL ENGINEER
AUG 24 2016

DATE	4-26-16
SCALE	1"=60'
PROJ. NO.:	160163
DESIGNED BY:	JRT
DRAWN BY:	SMB
CHECKED BY:	JTW
DRAWING NO.:	C-2A

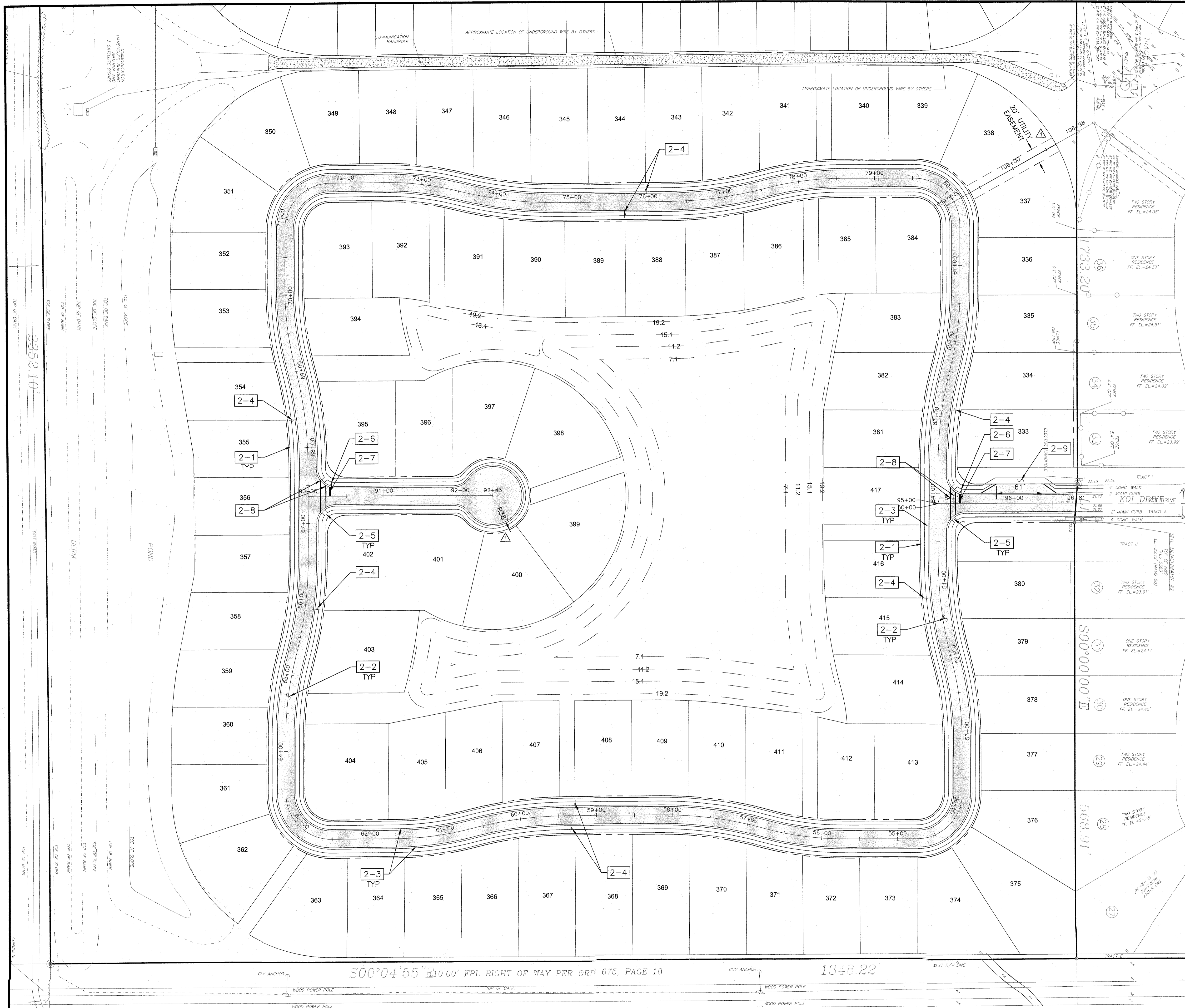
Approved For Construction

AUG 26 2016

City of Palm Bay

SUBDIVISION PLAN - WEST
1"=60'





NOTES:

- 2-1. PROVIDE 5' WIDE CONCRETE SIDEWALK. SEE TYPICAL DETAIL. CONTRACTOR SHALL ONLY INSTALL COMMON AREA SIDEWALKS. THOSE IN FRONT OF LOTS SHALL BE CONSTRUCTED WITH VERTICAL WORK.
- 2-2. PROVIDE ASPHALTIC PAVEMENT. SEE TYPICAL DETAIL.
- 2-3. PROVIDE MIAMI CURB. SEE TYPICAL DETAIL.
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- 2-10. PROVIDE FDOT TYPE D' VERTICAL CURB. SEE TYPICAL DETAILS.

REV#	DATE	REVISION
1	6/14/16	PALM BAY AND SURVIV COMMENTS

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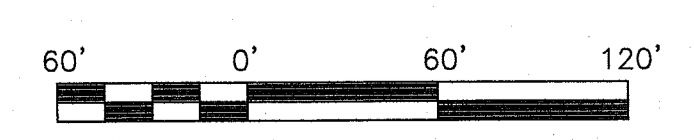
2651 e. palm bay blvd. suite 100
mims, fl 32956
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www.constructioneng.com
license #000807

BRENTWOOD LAKES SOUTH
D.R. HORTON
MALABAR ROAD PALM BAY, FLORIDA
DRAWING TITLE
SUBDIVISION PLAN - EAST

STATE OF FLORIDA
PROFESSIONAL ENGINEER
JAKE T. WISE
LICENSE No. 55405
AUG 24 2016

DATE	4-26-16
SCALE	1"=60'
PROJ. NO.:	160163
DESIGNED BY:	JRT
DRAWN BY:	SMB
CHECKED BY:	JTW
DRAWING NO.:	C-2B

Approved For Construction
AUG 26 2016
City of Palm Bay



SUBDIVISION PLAN - EAST
1"=60'



N00°04'59"W

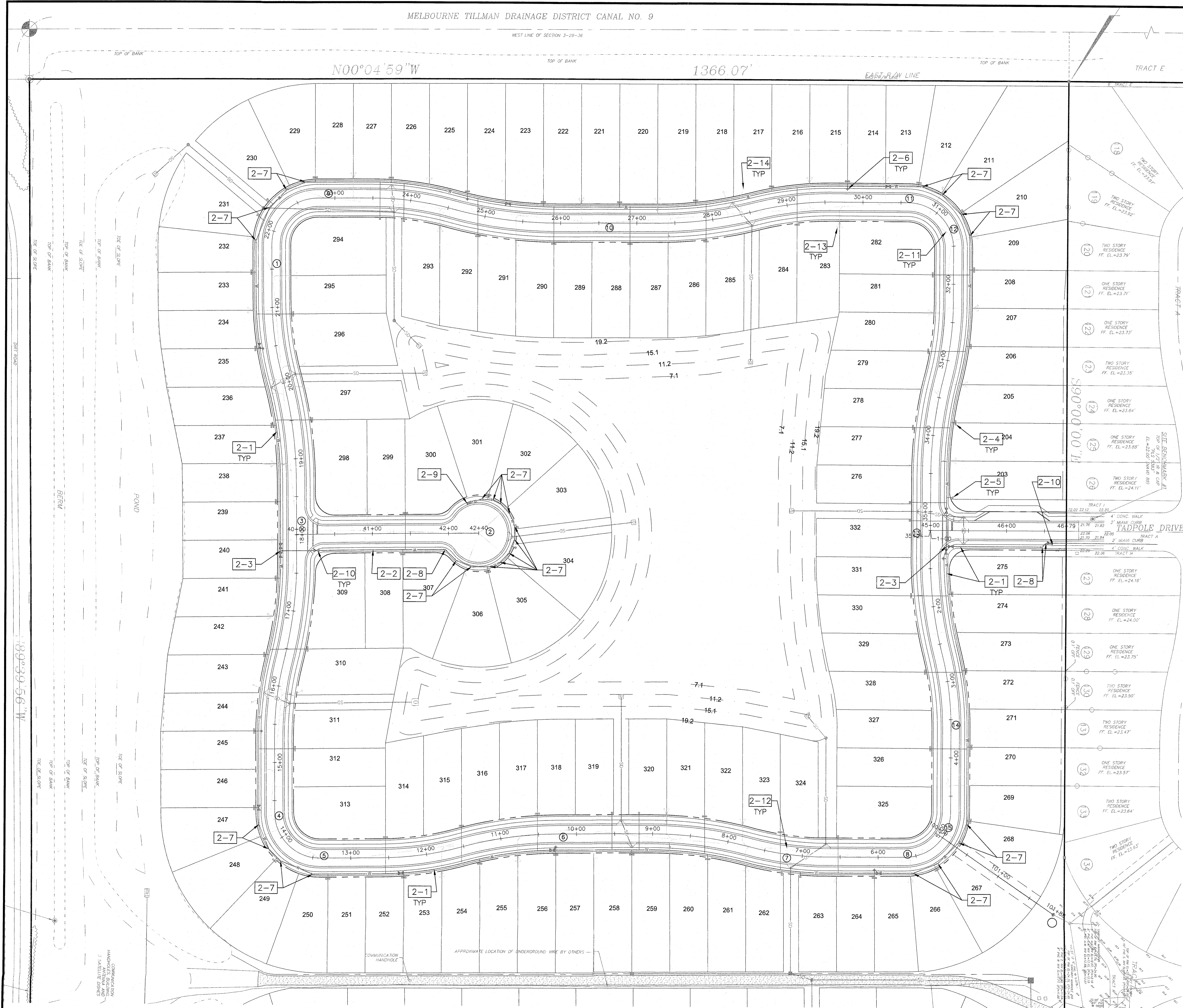
1366.07'

EAST/RUN LINE

TRACT E

NOTES:

- 2-1. PROVIDE 8" PVC WATER LINE.
- 2-2. PROVIDE 6" PVC WATER LINE.
- 2-3. PROVIDE TEE.
- 2-4. PROVIDE DOUBLE POTABLE WATER SERVICE. SEE TYPICAL DETAILS.
- 2-5. PROVIDE SINGLE POTABLE WATER SERVICE. SEE TYPICAL DETAILS.
- 2-6. PROVIDE FIRE HYDRANT ASSEMBLY TO INCLUDE FIRE HYDRANT, HYDRANT ELBOW, VALVE, 6" PVC WATER MAIN AND TEE PER CITY OF PALM BAY DETAILS.
- 2-7. PROVIDE 22.5" BEND.
- 2-8. PROVIDE 45° BEND.
- 2-9. PROVIDE PERMANENT AUTOMATIC BLOW-OFF. SEE TYPICAL DETAIL.
- 2-10. PROVIDE GATE VALVE. SEE TYPICAL DETAIL.
- 2-11. PROVIDE 8" PVC SANITARY SEWER. SEE PLAN AND PROFILES FOR ADDITION SLOPE INFORMATION.
- 2-12. PROVIDE SANITARY SEWER MANHOLE. SEE TYPICAL DETAILS.
- 2-13. PROVIDE DOUBLE SANITARY SEWER LATERAL. SEE TYPICAL DETAILS.
- 2-14. PROVIDE SINGLE SANITARY SEWER LATERAL. SEE TYPICAL DETAILS.



REVISION	DATE

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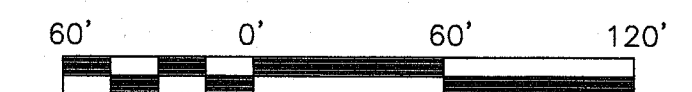
BRENTWOOD LAKES SOUTH
D.R. HORTON
MALABAR ROAD PALM BAY, FLORIDA
DRAWING TITLE
UTILITY PLAN - WEST

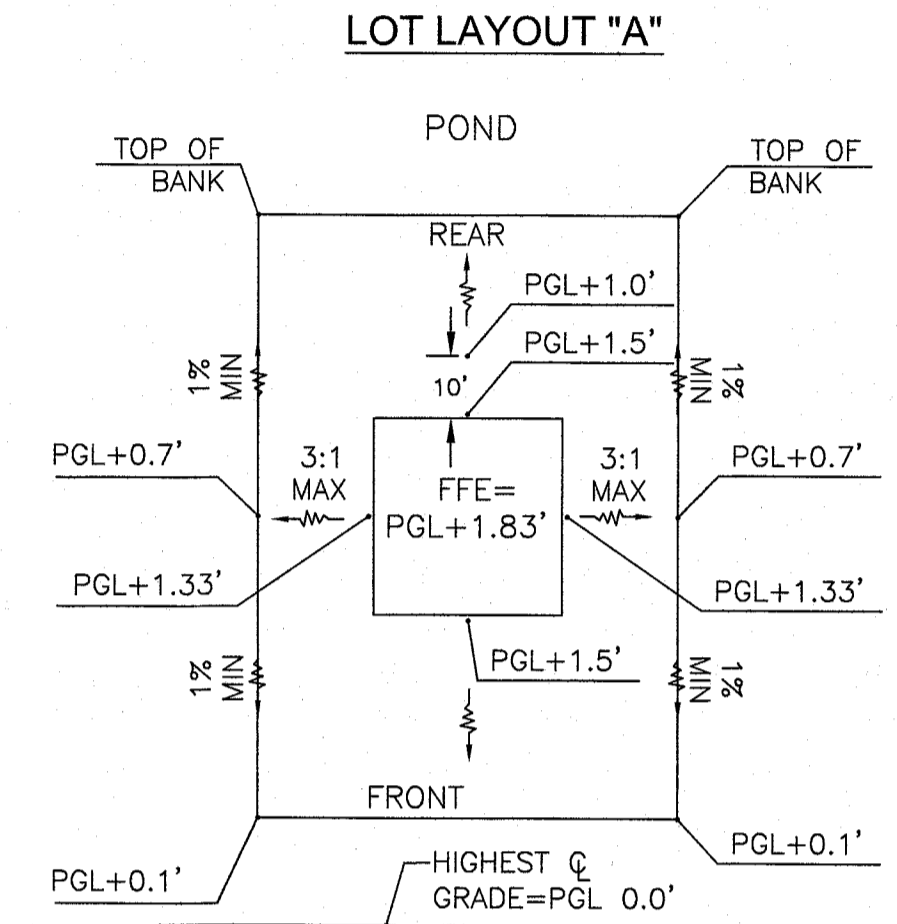
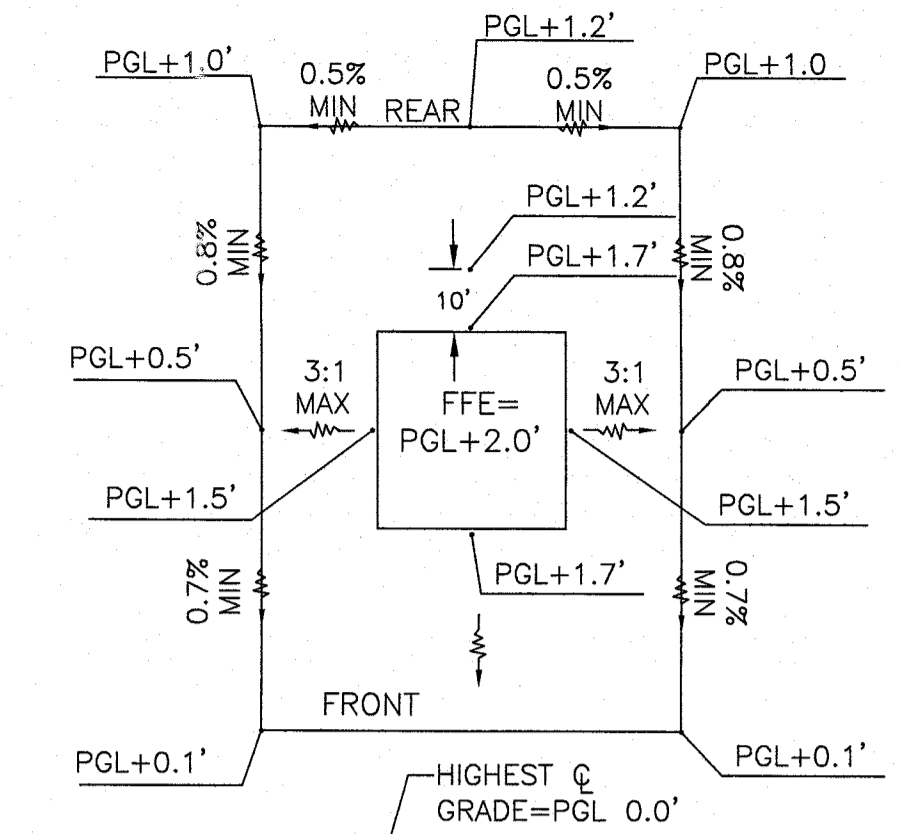
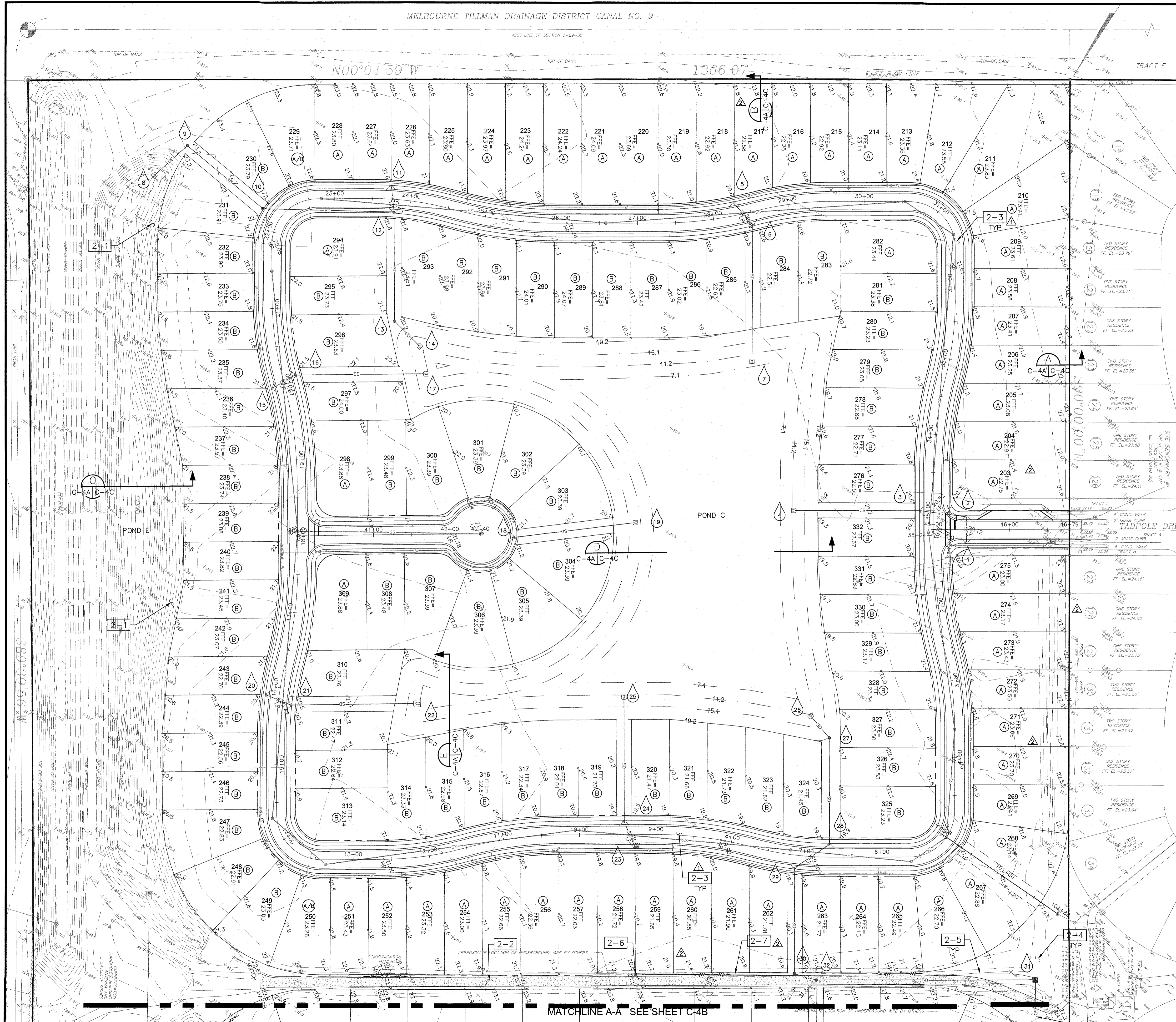
STATE OF FLORIDA
PROFESSIONAL ENGINEER
JAKE T. WISE
LICENSE No. 55405
AUG 24 2016

DATE	4-26-16
SCALE	1"=60'
PROJ. NO. :	160163
DESIGNED BY:	JRT
DRAWN BY:	SMB
CHECKED BY:	JTW
DRAWING NO.	C-3A

Approved For Construction
AUG 26 2016
City of Palm Bay

UTILITY PLAN - WEST
1"=60'





- NOTES:**
- EXCEPT AT DOORWAYS AND ATTACHED PATIOS, FINISHED GRADE ADJACENT TO HOUSE SHALL BE 6" BELOW FFE PER THIS DETAIL.
 - ALL LOT GRADING SHALL COMPLY WITH FLORIDA BUILDING CODE SECTION R401.3 DRAINAGE. GRADE SHALL FALL A MINIMUM OF 6" WITHIN THE FIRST 10'.
 - THIS DETAIL IS FOR GENERAL GRADING INFORMATION. SPOT ELEVATIONS IN CROSS SECTIONS SHALL DICTATE ON GRADING AND DRAINAGE SHEETS IF THEY VARY FROM THIS DETAIL.
 - ABOVE CALCULATIONS ARE BASED ON A TYPICAL 50'x125' LOT.
 - PROFILE GRADE LINE (PGL) OR CENTERLINE OF ROAD.

TYPICAL LOT LAYOUT DETAIL
NTS

- NOTES:**
- 2-1. REGRADE POND BANK AS NEEDED TO 4:1 MAX SLOPE TO ACHIEVE REAR LOT CORNER ELEVATIONS AS SHOWN ON PLAN.
 - 2-2. REGRADE STABILIZED DRIVE PER GRADES ON THIS SHEET. SEE TYPICAL SECTION ON C-4C.
 - 2-3. OVEREXCAVATE BENEATH ALL ROADS AND REMOVE HARDPAN AND UNSUITABLE MATERIAL.
 - 2-4. GRADE OPEN SPACE TO DRAIN TOWARD INLET/POND.
 - 2-5. PROVIDE GRASS SWALE WITH CONSTANT SLOPE BETWEEN SPOT ELEVATIONS.
 - 2-6. PROVIDE 15" INLINE NYLOPLAST YARD DRAIN. CONNECT TO ADS STORM DRAIN PIPE. TOP OF STRUCTURE AT 20.30', INVERT: 16.85'.
 - 2-7. PROVIDE ±209 LF OF 15" N-12 ADS WATERTIGHT JOINT STORM DRAIN PIPE AT 1% SLOPE.

Approved For Construction
AUG 26 2016
City of Palm Bay

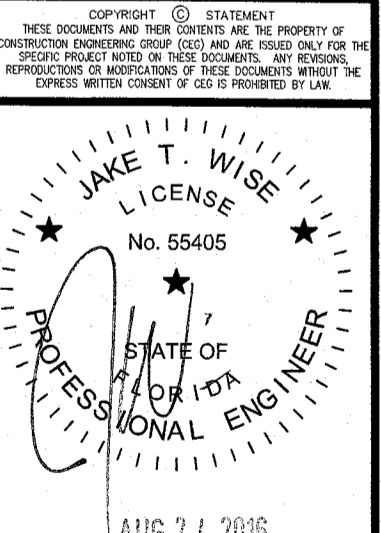


REV#	DATE	REVISION
1	6/14/16	PALM BAY AND SURVIM COMMENTS
2	7/01/16	SURVIM COMMENTS

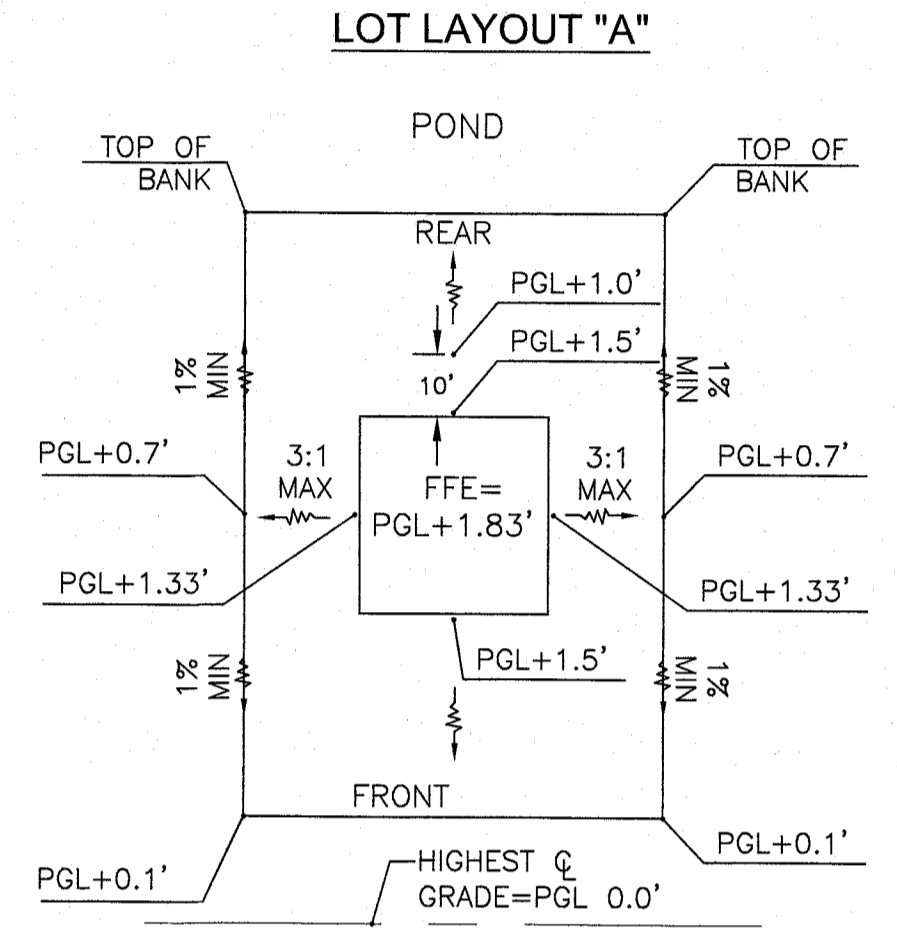
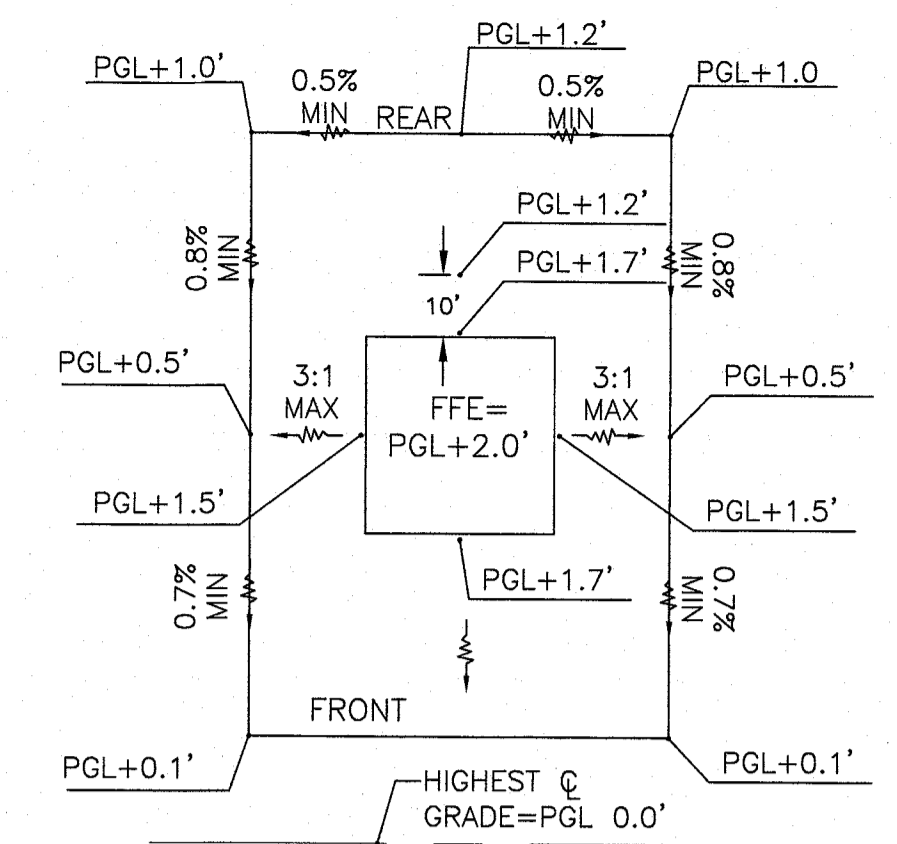
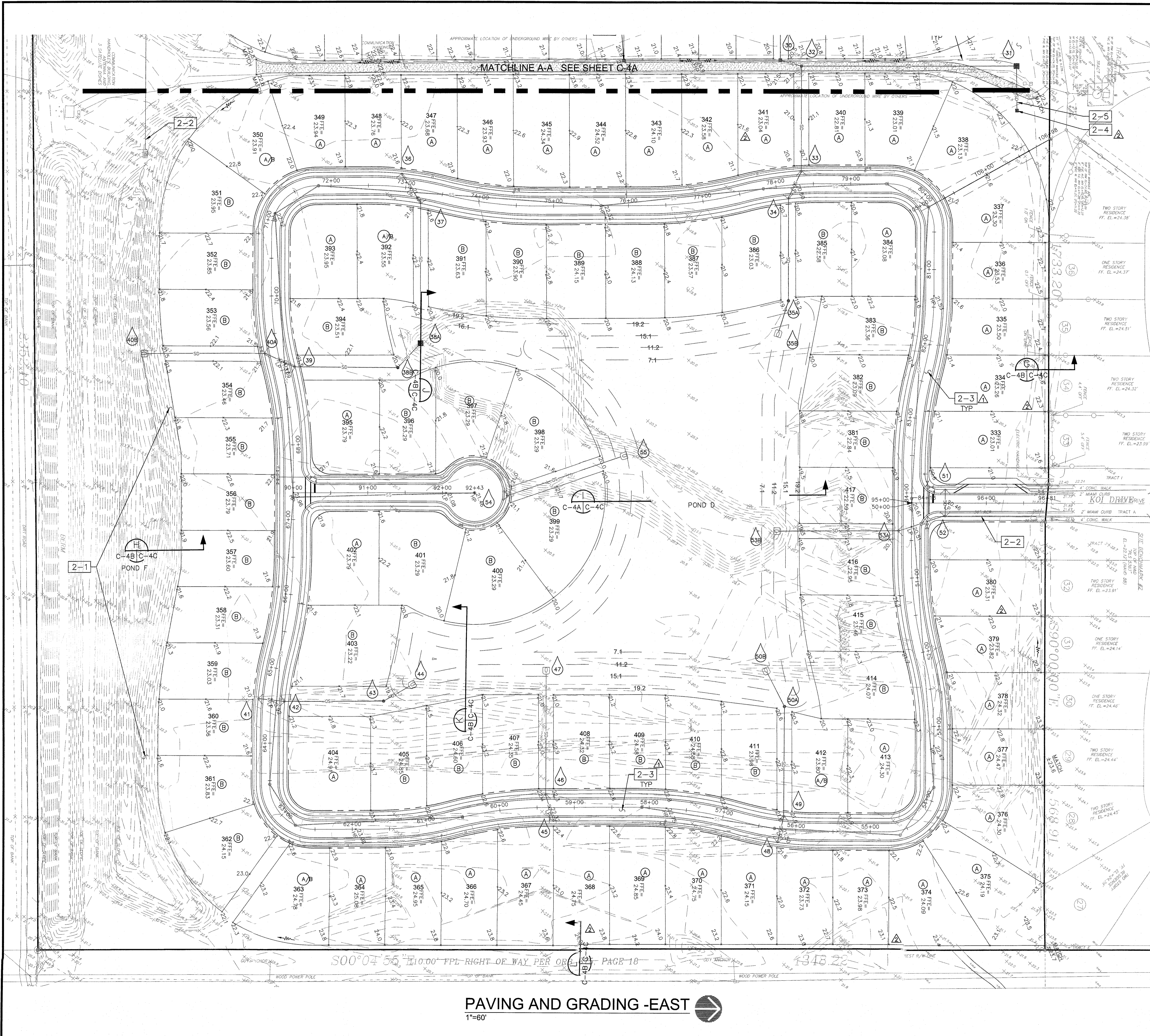
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MALABAR ROAD PALM BAY, FLORIDA
DRAWING TITLE
PAVING AND GRADING - WEST



DATE	4-26-16
SCALE	1"=60'
PROJ. NO.:	160163
DESIGNED BY:	JRT
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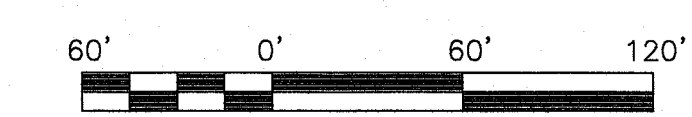


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 - PROFILE GRADE LINE (PGL) OR CENTERLINE OF ROAD.

TYPICAL LOT LAYOUT DETAIL
NTS

- NOTES:**
- REGRADE POND BANK AS NEEDED TO 4:1 MAX SLOPE TO ACHIEVE REAR LOT CORNER ELEVATIONS AS SHOWN ON PLAN.
 - CONTRACTOR SHALL CLEAN OUT EXISTING STORM PIPE TO REMAIN.
 - OVEREXCAVATE BENEATH ALL ROADS AND REMOVE HARDPAN AND UNSUITABLE MATERIAL.
 - PROVIDE 15" IN-LINE NYLOPLAST YARD DRAIN. CONNECT TO ADS STORM DRAIN PIPE. TOP OF STRUCTURE AT 19.80', INVERT: 17.40'.
 - PROVIDE ±60 LF OF 15" N-12 ADS WATERTIGHT JOINT STORM DRAIN PIPE AT 1% SLOPE.

Approved For Construction
AUG 26 2016
City of Palm Bay



REV#	DATE	REVISION
1	6/14/16	PALM BAY AND SURVIMD COMMENTS
2	7/07/16	SURVIMD COMMENTS

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MALABAR ROAD PALM BAY, FLORIDA
DRAWING TITLE
PAVING AND GRADING - EAST

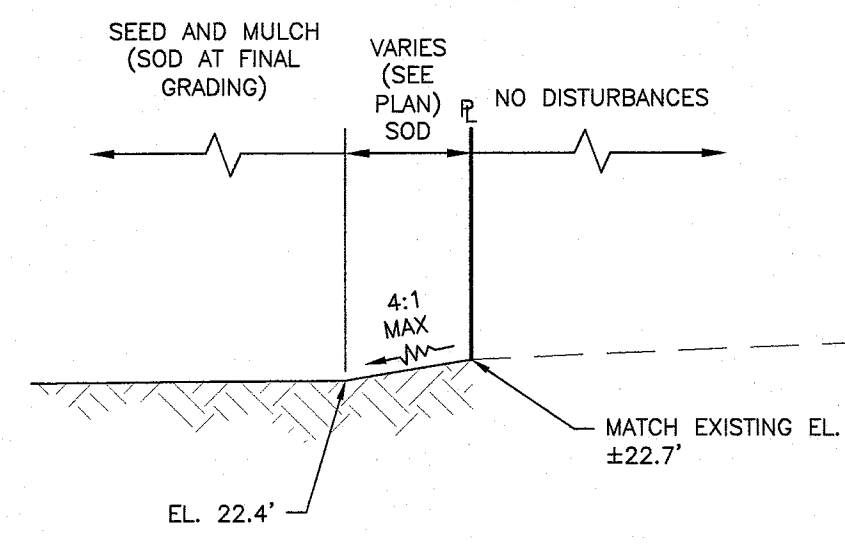
STATE OF FLORIDA
PROFESSIONAL ENGINEER
JAKE T. WISE
LICENSE No. 55405
AUG 24 2016

DATE	4-26-16
SCALE	1"=60'
PROJ. NO. :	160163
DESIGNED BY:	JRT
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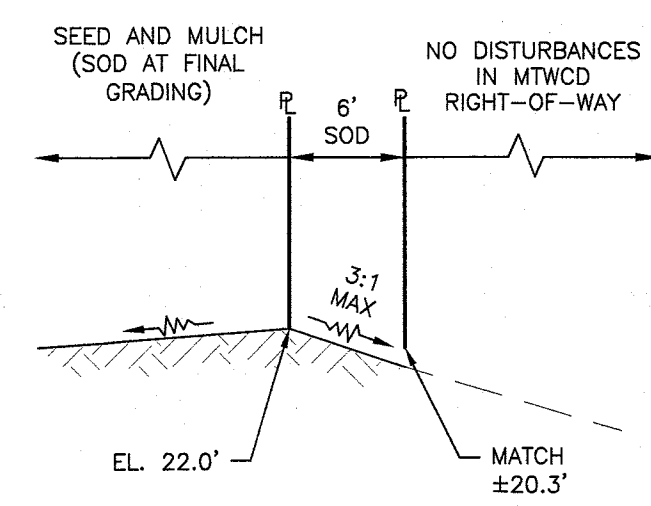
PAVING AND GRADING - EAST

1"=60'

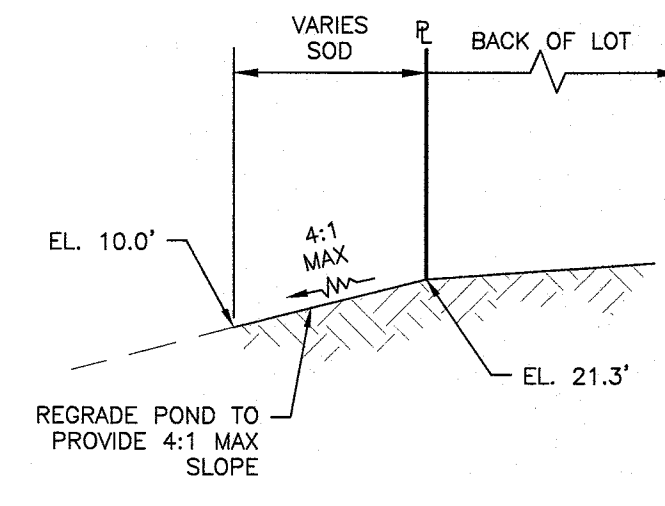
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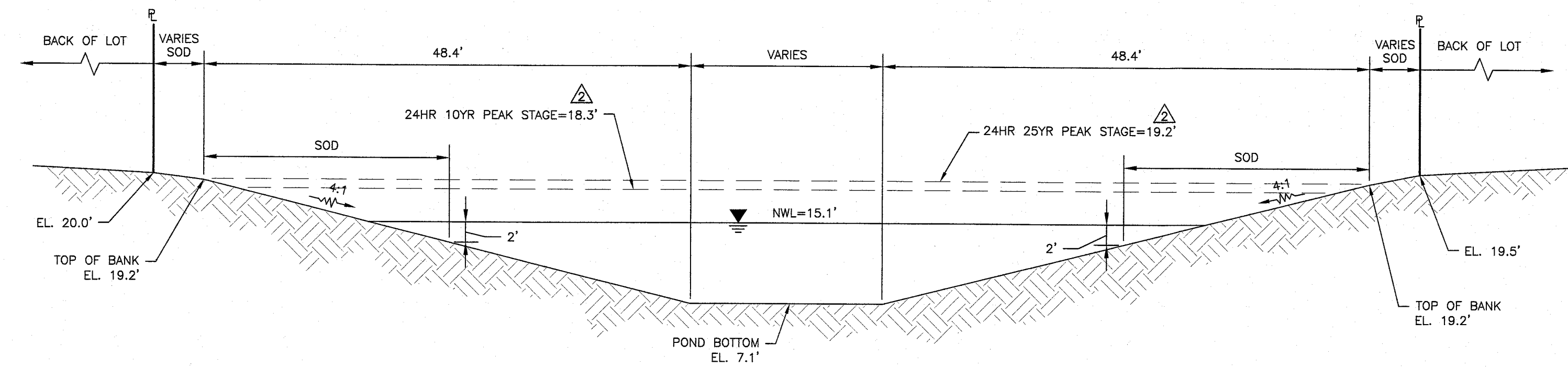
SECTION A
NTS C-4A|C-4C



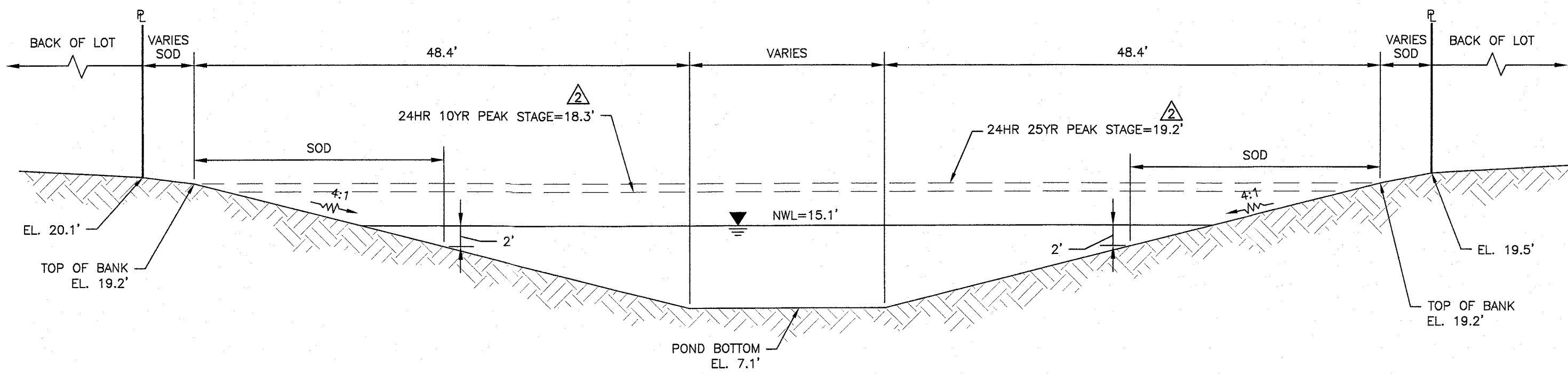
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NTS C-4A|C-4C



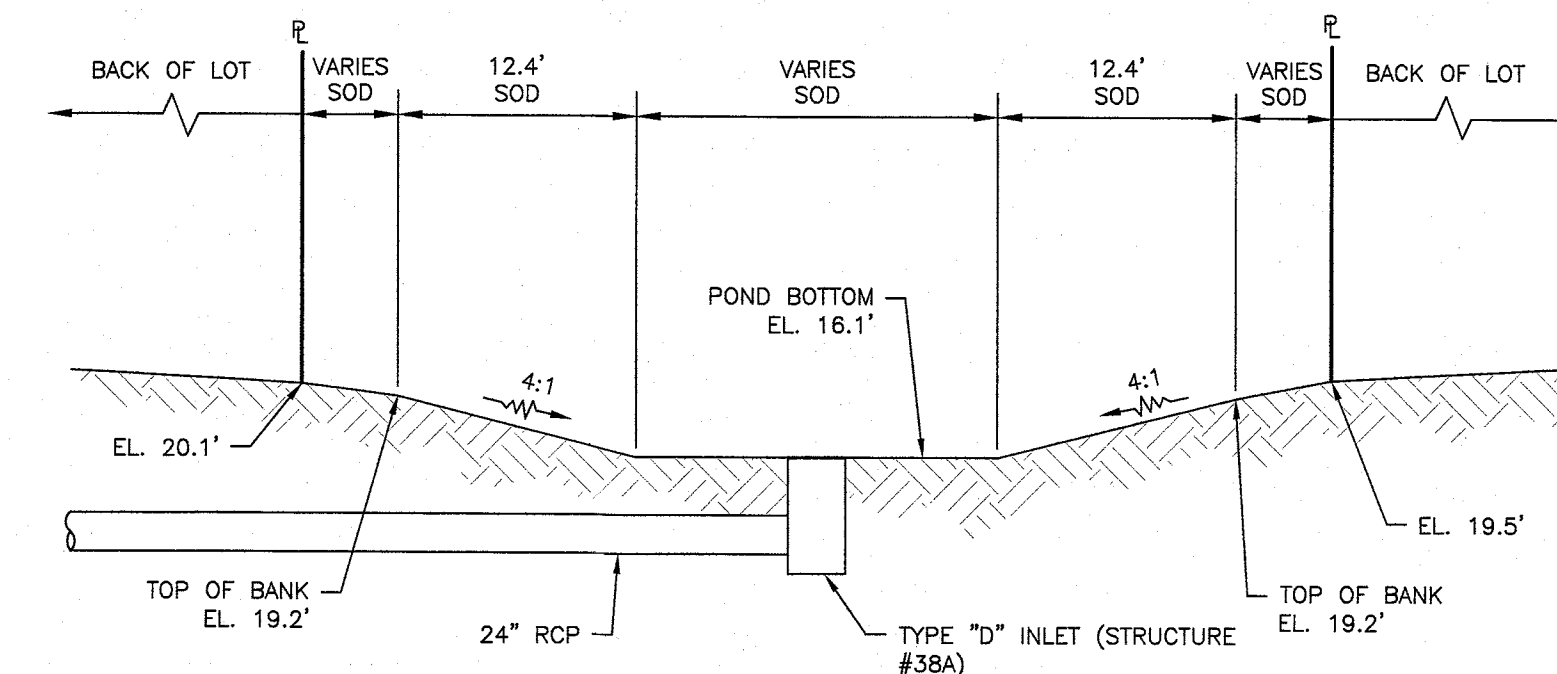
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NTS C-4A|C-4C



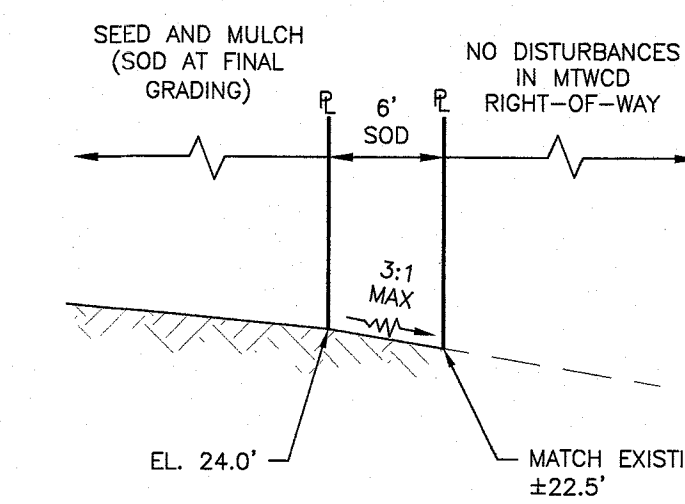
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NTS C-4B|C-4C



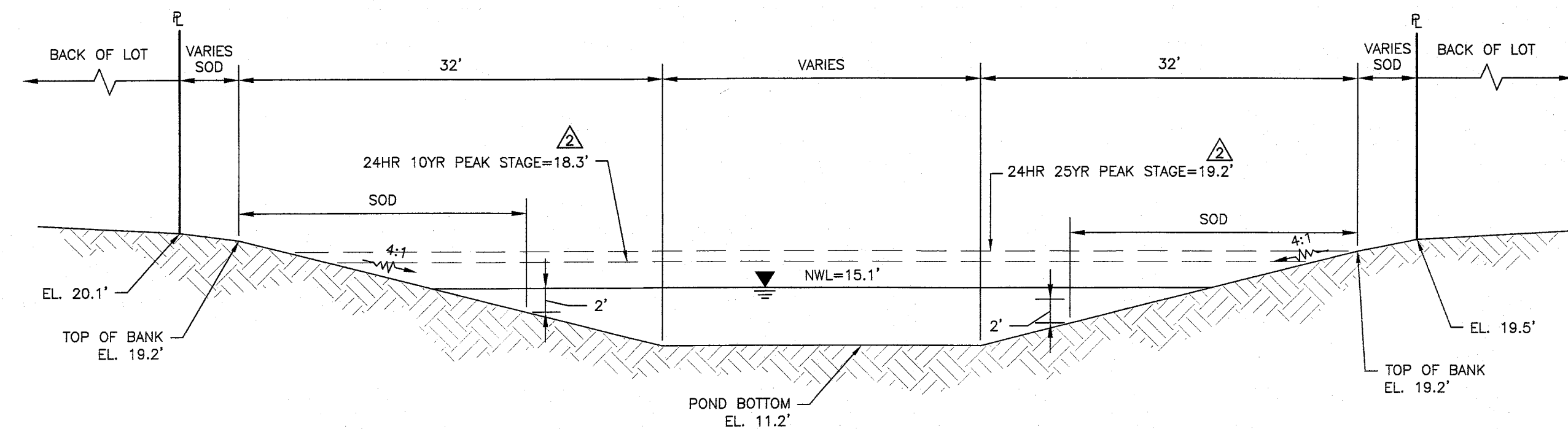
SECTION E
NTS C-4A|C-4C



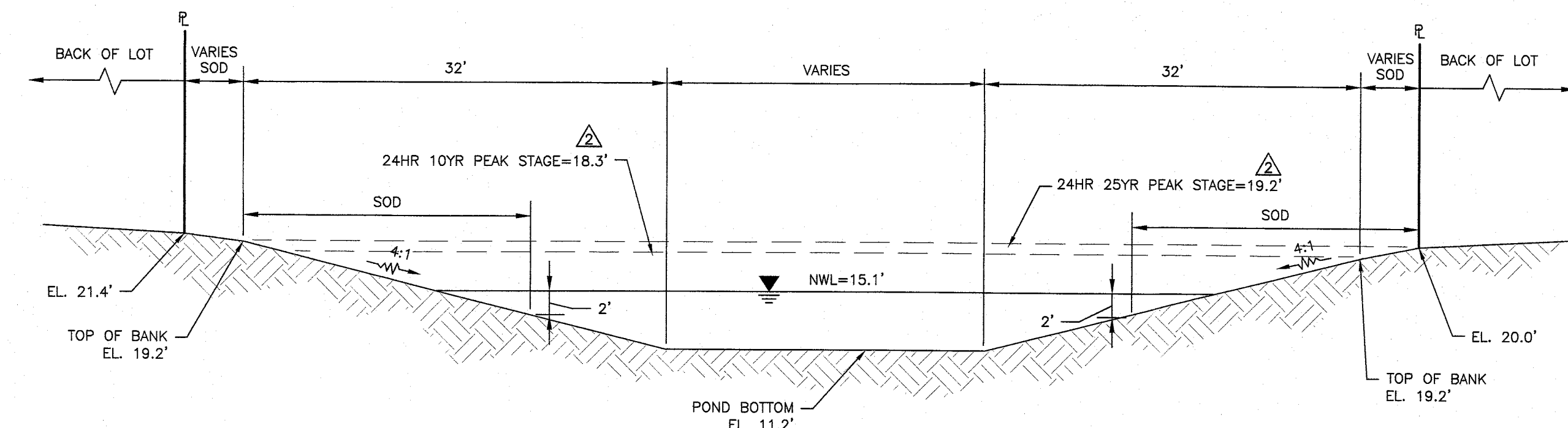
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NTS C-4B|C-4C



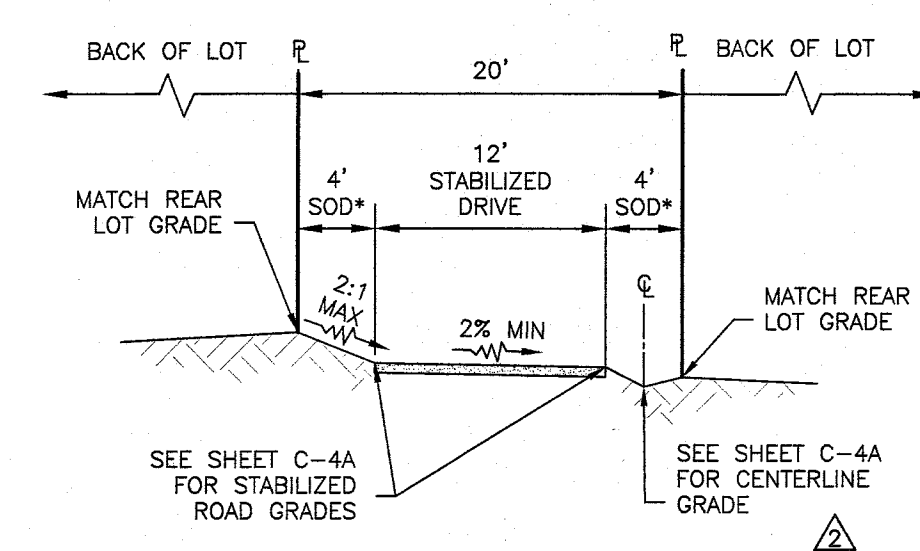
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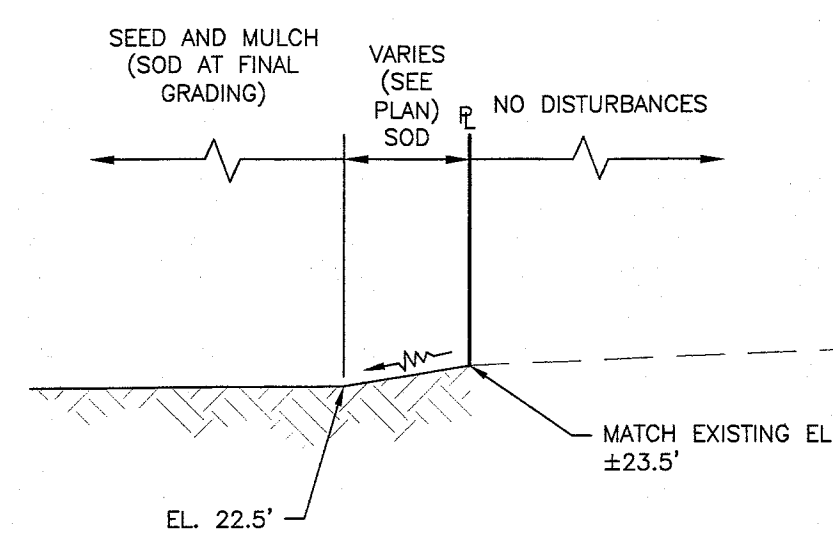
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NTS C-4A|C-4C



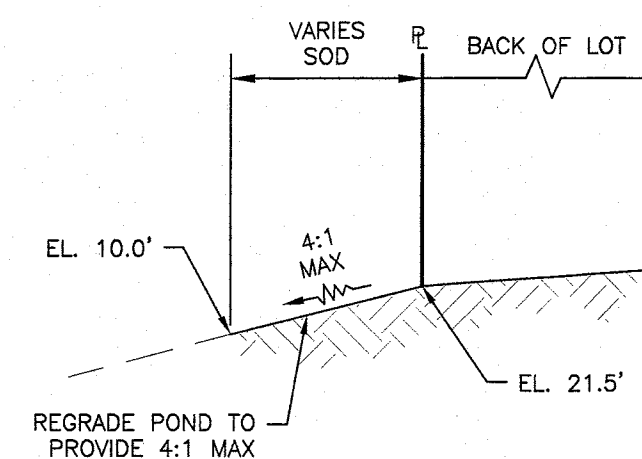
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NTS C-4B|C-4C



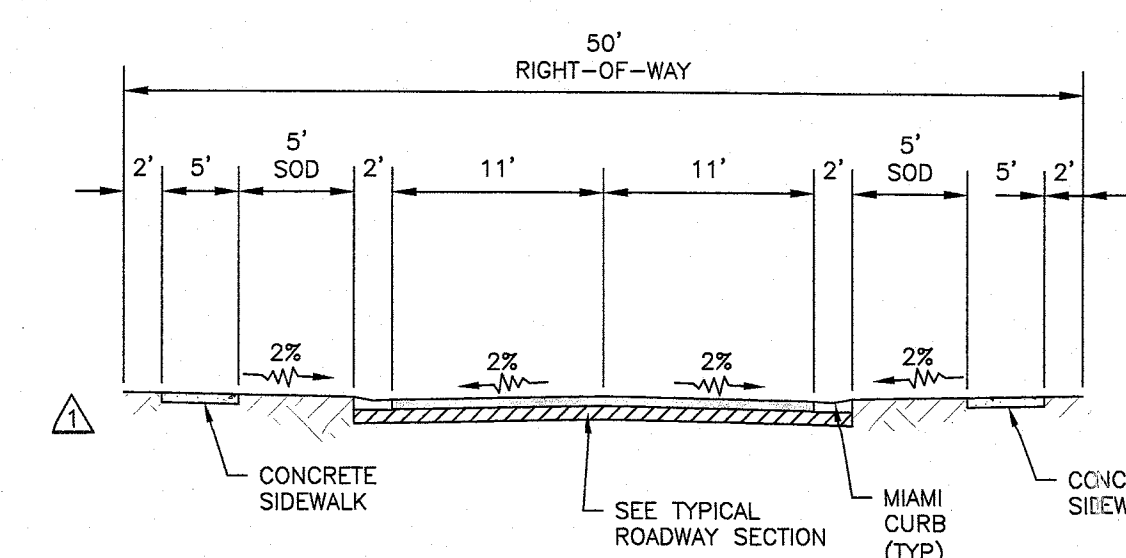
TYPICAL STABILIZED ROAD SECTION
NTS



SECTION K
NTS C-4A|C-4C



SECTION L
NTS C-4A|C-4C



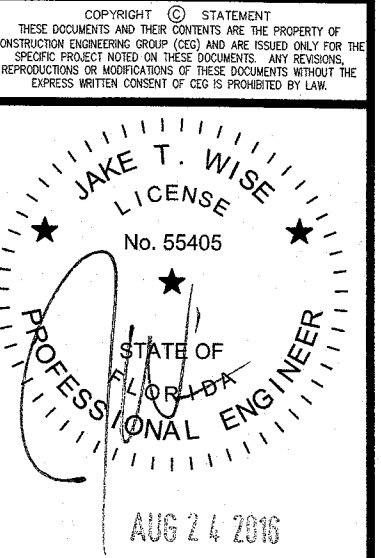
TYPICAL RIGHT-OF-WAY SECTION
NTS

REV#	DATE	REVISION
1	6/14/15	PALM BAY AND SURVIV COMMENTS
2	7/01/16	SURVIV COMMENTS

2051 east grille Blvd, suite 200
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Tel: 321.333.1211
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D.R. HORTON
MALABAR ROAD PALM BAY, FLORIDA
DRAWING TITLE
CROSS SECTIONS



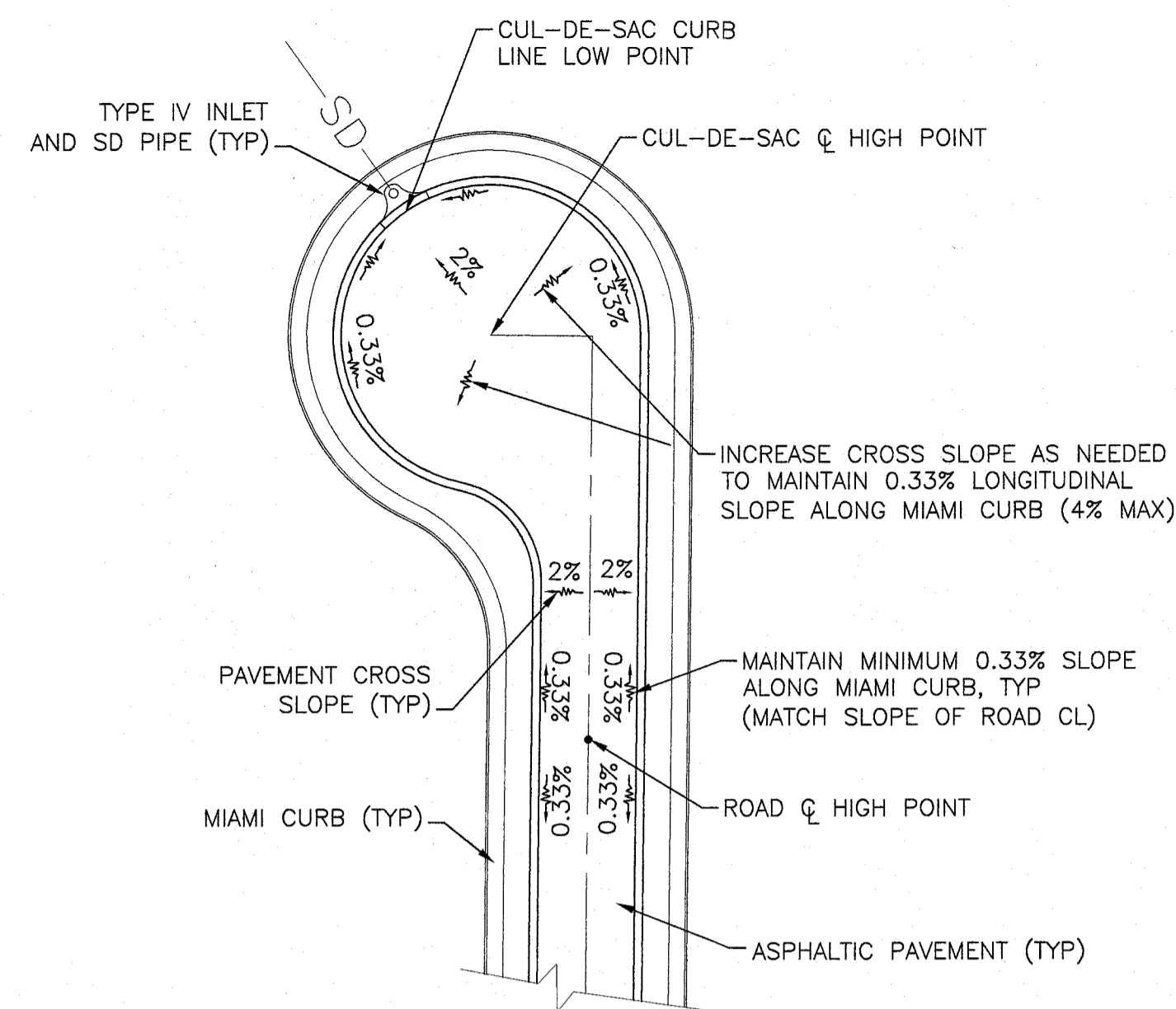
DATE	4-26-16
SCALE	NTS
PROJ. NO.:	160163
DESIGNED BY:	JRT
DRAWN BY:	SMB
CHECKED BY:	JTW
DRAWING NO.	C-4C

Approved For Construction

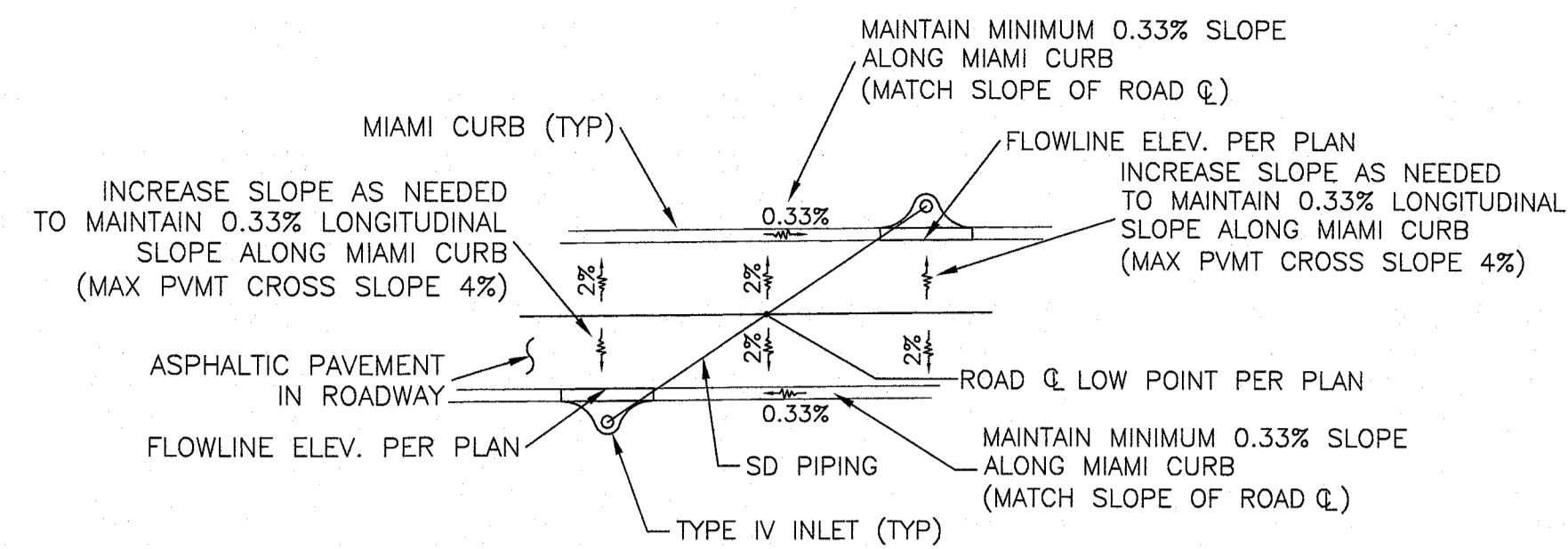
AUG 26 2016

City of Palm Bay

C-4C



TYPICAL GRADING FOR CUL DE SAC WITH LOW POINT AT END DETAIL
NTS



TYPICAL GRADING FOR OFFSET INLETS DETAIL
NTS

STORM STRUCTURE TABLE								
NO.	TYPE	FDOT INDEX NO.	FLOWLINE ELEVATION	INVERT ELEVATION	DOWNSTREAM STRUCTURE NO.	PIPE SIZE	PIPE LENGTH	COMMENTS
1	4	210	19.90	17.00	2	18"	33'	-
2	4	210	19.90	16.75	3	24"	61'	-
3	4	210	20.30	*	4	24"	169'	*16.50N; 12.00S
4	MES	272	-	10.50	-	-	-	-
5	4	210	20.23	13.00	6	18"	38'	-
6	4	210	20.23	*	7	24"	182'	*12.50W; 11.00E
7	MES	272	-	10.00	-	-	-	-
8	MES	272	-	12.00	9	30"	61'	-
9	J-8	200 / 201	22.00	12.50	10	30"	129'	-
10	J-8	200 / 201	22.10	13.50	12	30"	172'	-
11	4	210	21.25	15.00	12	18"	34'	-
12	4	210	21.25	*	13	30"	143'	14.60W; 12.75S&E
13	J-8	200 / 201	20.00	12.00	14	30"	49'	-
14	MES	272	-	11.70	-	-	-	-
15	4	210	21.15	14.00	16	18"	34'	-
16	4	210	21.15	*	17	24"	175'	13.50S; 11.00N
17	MES	272	-	10.00	-	-	-	-
18	4	210	20.80	*	19	18"	164'	-
19	MES	272	-	10.50	-	-	-	-
20	4	210	20.20	13.00	21	18"	34'	-
21	4	210	20.20	*	22	24"	171'	12.50S; 11.00N
22	MES	272	-	10.00	-	-	-	-
23	4	210	19.20	15.75	24	18"	36'	-
24	4	210	19.20	*	25	24"	165'	15.25E; 11.00W
25	MES	272	-	10.00	-	-	-	-
26	MES	272	-	9.50	27	30"	40'	-
27	J-8	200 / 201	19.50	*	28	30"	139'	*14.00E; 10.50SW
28	4	210	19.20	14.75	29	30"	55'	-
29	4	210	19.20	14.75	30	30"	146'	-
30	D	232	20.30	14.75	32	30"	28'	-
31	C	232	19.80	16.80	32	18"	287'	-
32	J-8	200 / 201	21.00	14.75	33	30"	141'	-
33	4	210	20.25	14.75	34	30"	39'	-
34	4	210	20.25	14.75	35A	30"	137'	-
35A	J-8	200 / 201	20.30	*	35B	30"	44'	*14.00W; 10.75SE
35B	MES	272	-	10.00	-	-	-	-
36	4	210	21.10	18.00	37	24"	45'	-
37	4	210	21.10	17.50	38A	24"	188'	-
38A	D	232	15.90	12.35	38B	30"	44'	-
38B	J-8	200 / 201	20.20	11.45	39	30"	139'	-
39	4	210	21.10	11.25	40A	30"	42'	-
40A	4	210	21.10	10.75	40B	-	160'	-
40B	MES	272	-	10.50	-	-	-	-
41	4	210	20.70	14.00	42	18"	33'	-
42	4	210	20.70	13.50	43	24"	134'	-
43	J-8	200 / 201	20.00	13.00	44	24"	49'	-
44	MES	272	-	12.00	-	-	-	-
45	4	210	22.00	17.80	46	18"	35'	-
46	4	210	22.00	17.30	47	24"	170'	-
47	MES	272	-	15.50	-	-	-	-
48	4	210	21.28	17.50	49	18"	33'	-
49	4	210	21.28	17.00	50A	24"	147'	-
50A	J-8	200 / 201	19.50	*	50B	24"	51'	*16.50E; 11.00SW
50B	MES	272	-	10.00	-	-	-	-
51	4	210	20.24	15.50	52	18"	33'	-
52	4	210	20.24	14.60	53A	36"	65'	CONNECT TO EXISTING PIPE
53A	4	210	20.29	*	53B	36"	161'	*14.60N; 12.00S
53B	MES	272	-	10.50	-	-	-	-
54	4	210	20.70	17.70	55	18"	170'	-
55	MES	272	-	16.00	-	-	-	-

- STORM DRAIN STRUCTURE NOTES:**
1. ALL STRUCTURES SHALL BE MINIMUM 6" DEEPER THAN LOWEST PIPE INVERT.
 2. ALL GRATES SHALL BE GALVANIZED STEEL WITH H-20 LOADING.
 3. FLOWLINE ELEVATION IS TOP OF ALL STRUCTURES AND MANHOLES.
 4. PROVIDE ADEQUATE BOX SIZE AT BASE OF TYPE 4 INLETS AND TYPE J-8 MANHOLES FOR PIPE SIZES PER THIS PLAN.
 5. ALL PIPING SHALL BE RCP. ADS N-12 PIPING IS AN ACCEPTABLE ALTERNATIVE ON-SITE WITH WATERTIGHT JOINTS IF MINIMUM 2' OF COVER IS PROVIDED UNLESS COMMENTS SPECIFY RCP.
 6. ALL PROPOSED ELEVATIONS ARE REFERENCED IN NAVD 88.

Approved For Construction
AUG 26 2016
City of Palm Bay

REVISION	DATE	BY	COMMENTS
1	6/14/16		PALM BAY AND SURVIMD COMMENTS
2	7/01/16		SURVIMD COMMENTS

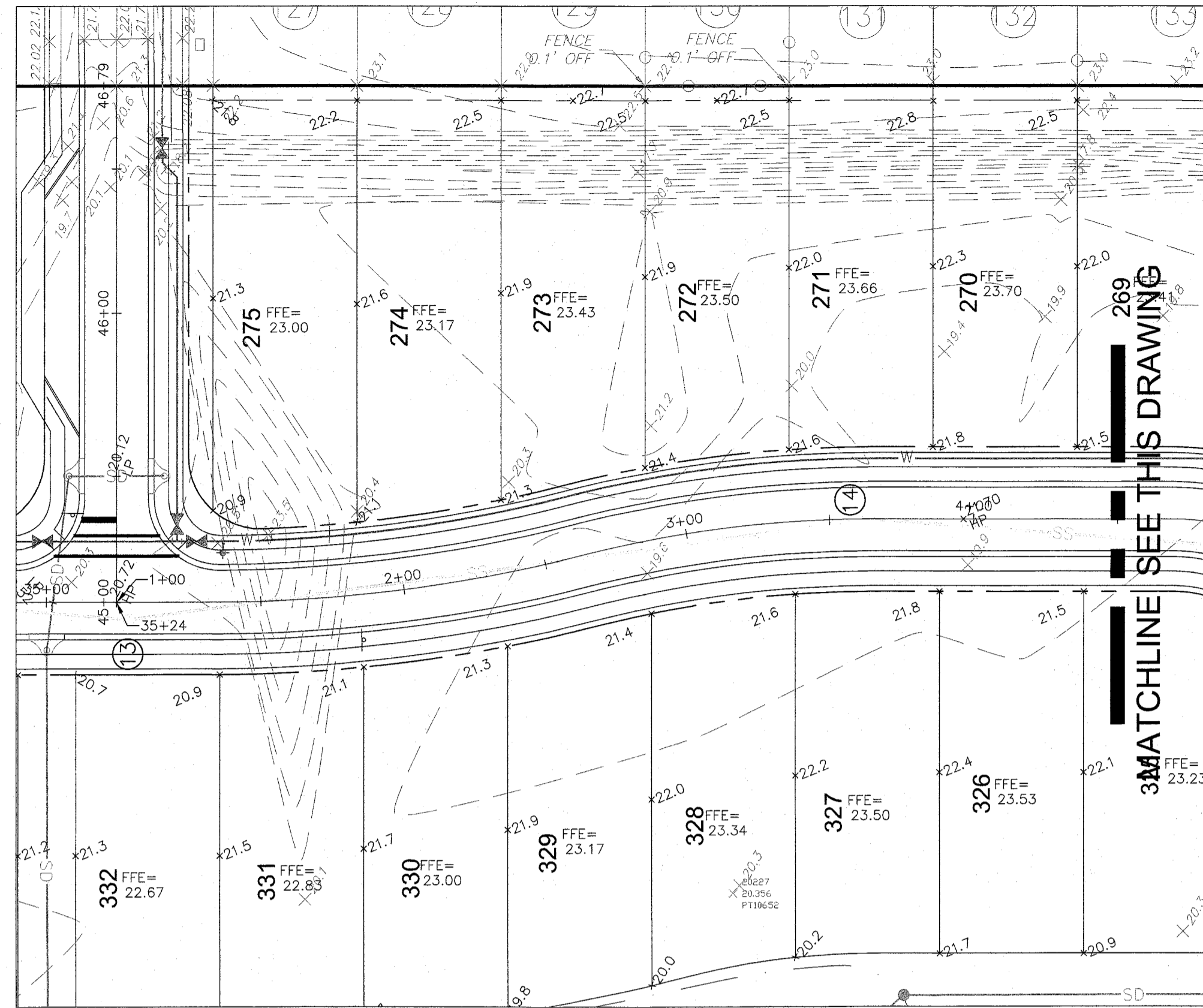
2651 centerville rd, suite 100
melbourne, fl 32935
Tel: 321.453.1271
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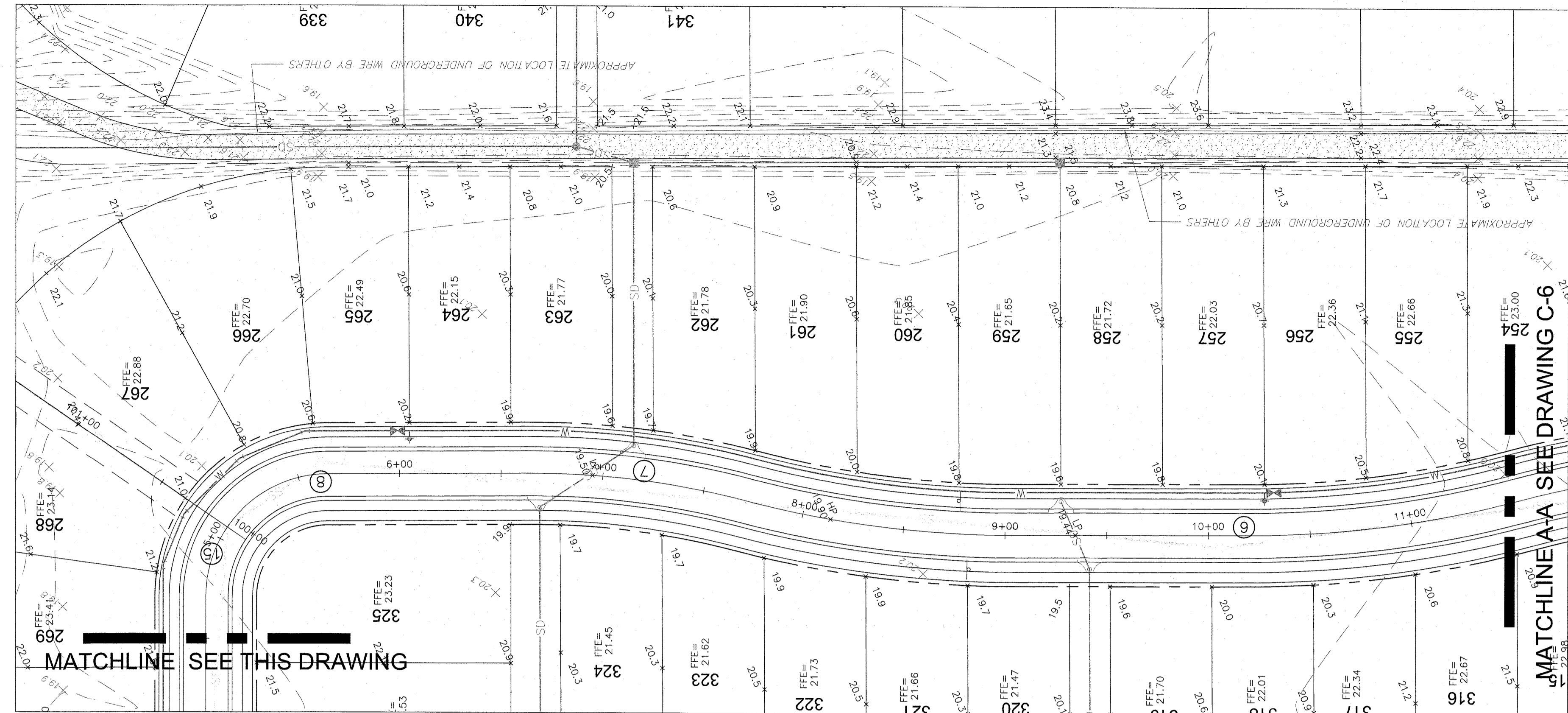
BRENTWOOD LAKES SOUTH
D.R. HORTON
MALABAR ROAD PALM BAY, FLORIDA
DRAWING TITLE
PAVING AND GRADING DETAILS

DATE: 4-26-16
SCALE: NTS
PROJ. NO.: 160163
DESIGNED BY: JRT
DRAWN BY: SMB
CHECKED BY: JTW
DRAWING NO. C-4D

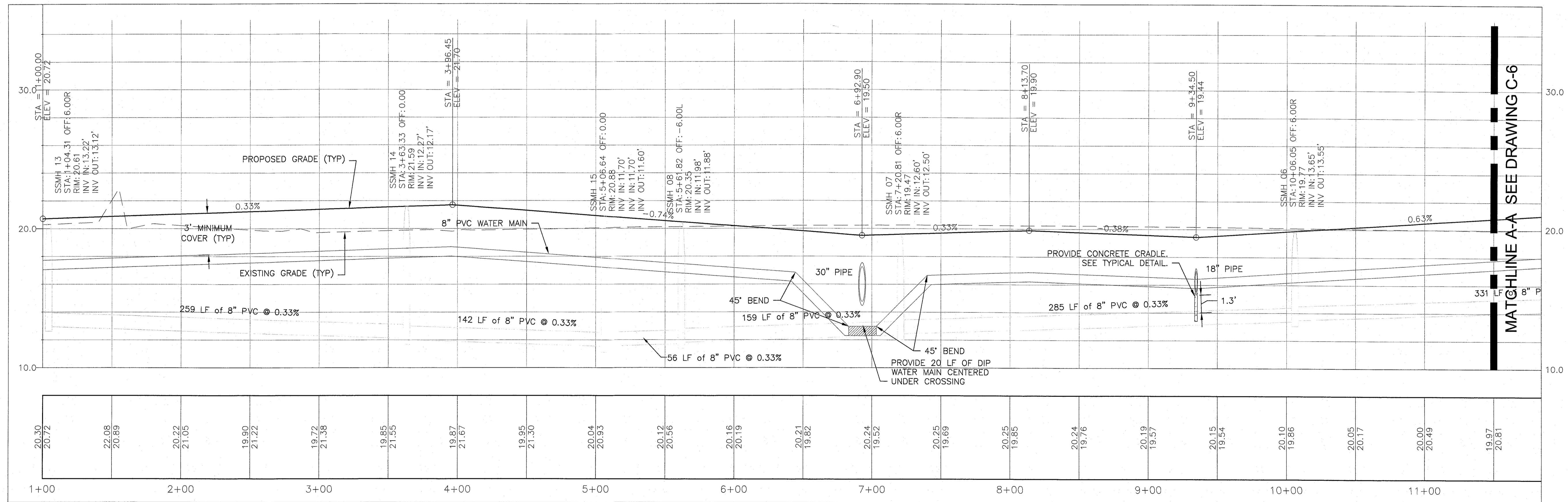
STATE OF FLORIDA
LICENSED PROFESSIONAL ENGINEER
No. 55405
AUG 24 2016



PLAN STA: 1+00 THRU 4+50
1"=40'



PLAN STA: 4+50 THRU 11+50
1"=40'

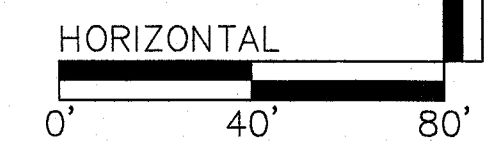


PROFILE STA: 1+00 THRU 11+50
1"=40'

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AUG 26 2016

City of Palm Bay

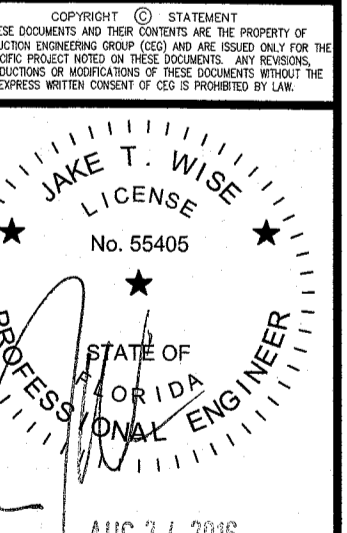


REV#	DATE	REVISION

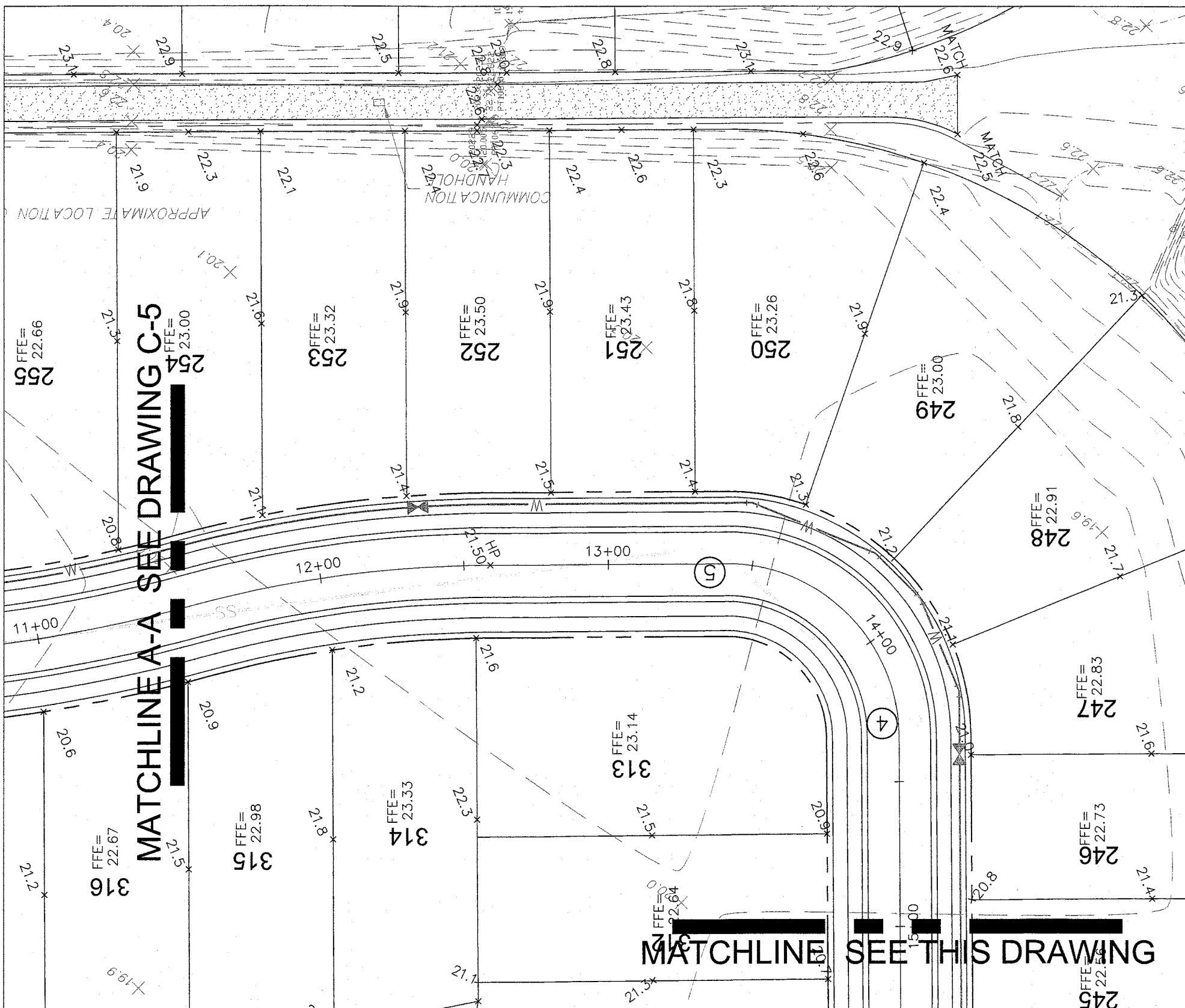
2651 emu gate Blvd., suite 100
Melbourne, FL 32935
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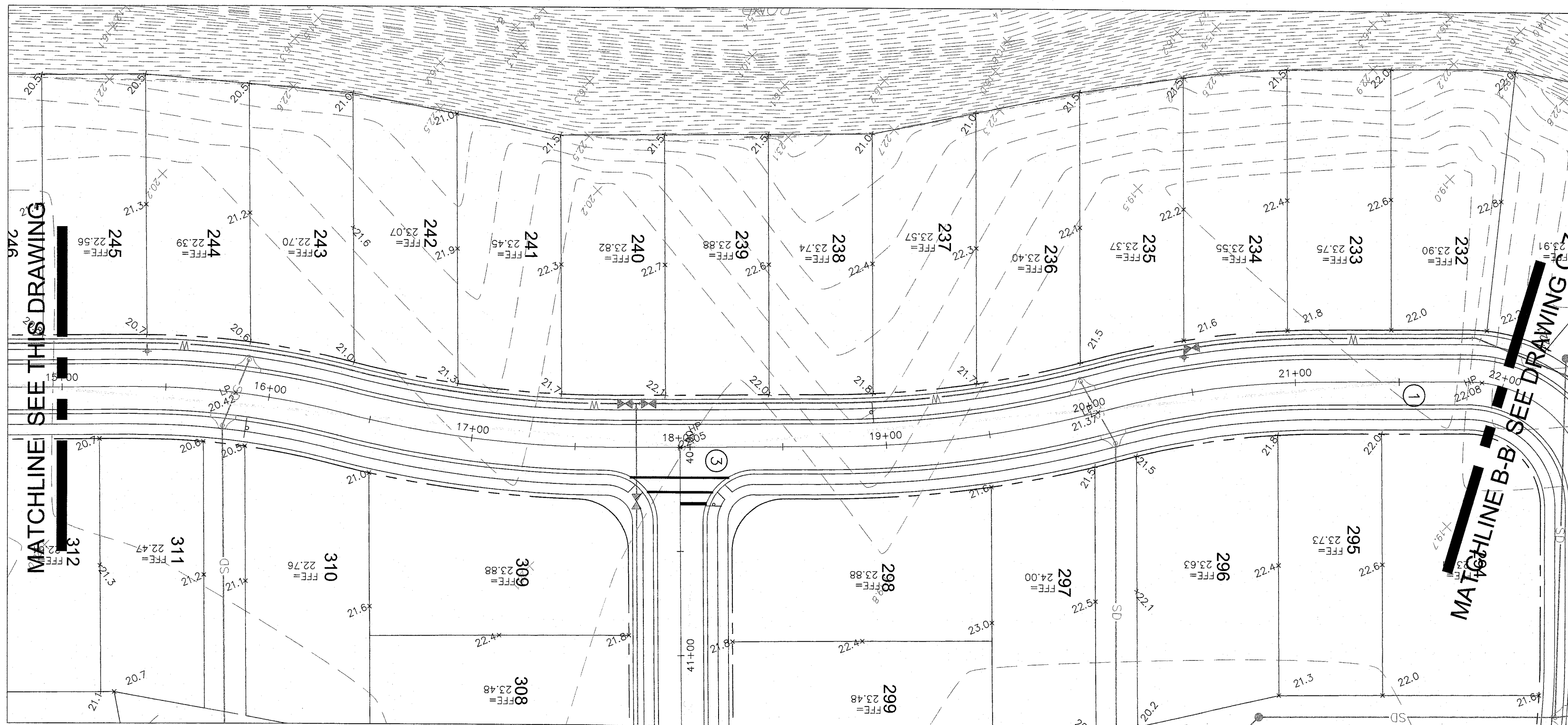
BRENTWOOD LAKES SOUTH
D.R. HORTON
MALABAR ROAD PALM BAY, FLORIDA
DRAWING TITLE
PLAN AND PROFILE STA: 1+00 THRU 11+50



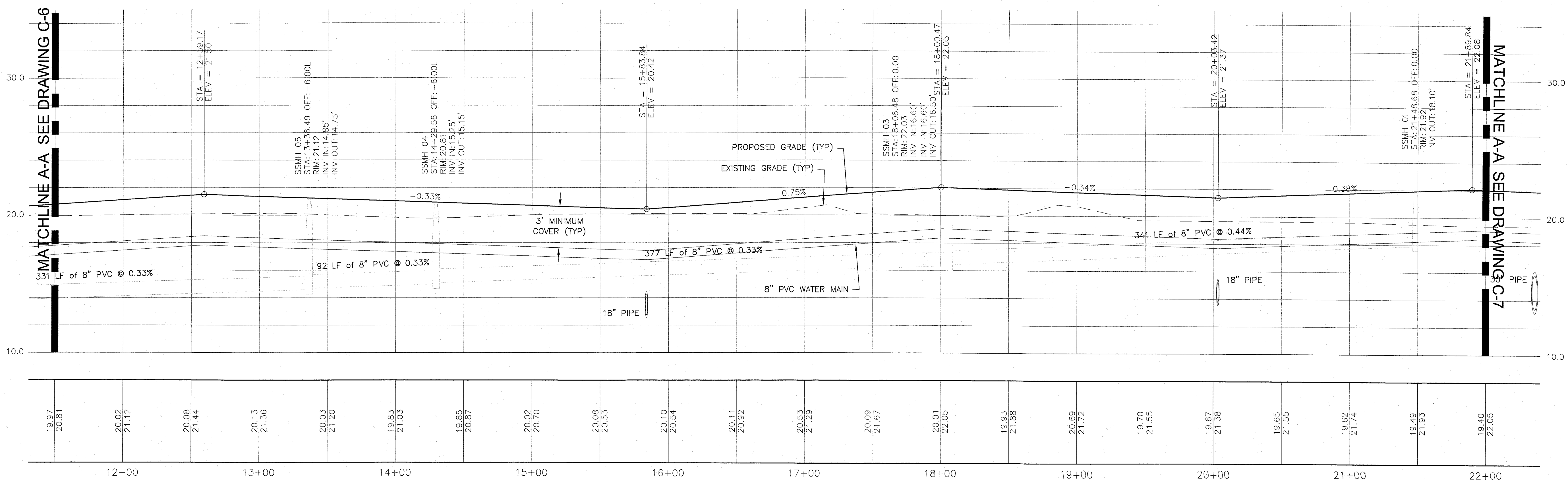
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SCALE	1"=60'
PROJ. NO.:	160163
DESIGNED BY:	JRT
DRAWN BY:	SMB
CHECKED BY:	JTW
DRAWING NO.	C-5



PLAN STA: 11+50 THRU 15+00
1"=40'



PLAN STA: 15+00 THRU 22+00
1"=40'

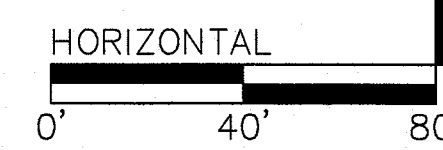


PROFILE STA: 11+50 THRU 22+00
HORIZONTAL: 1"=40' VERTICAL: 1"=4'

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AUG 26 2016

City of Palm Bay

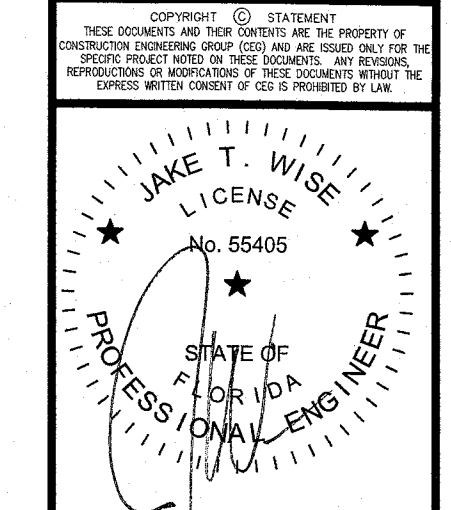


REV#	DATE	REVISION

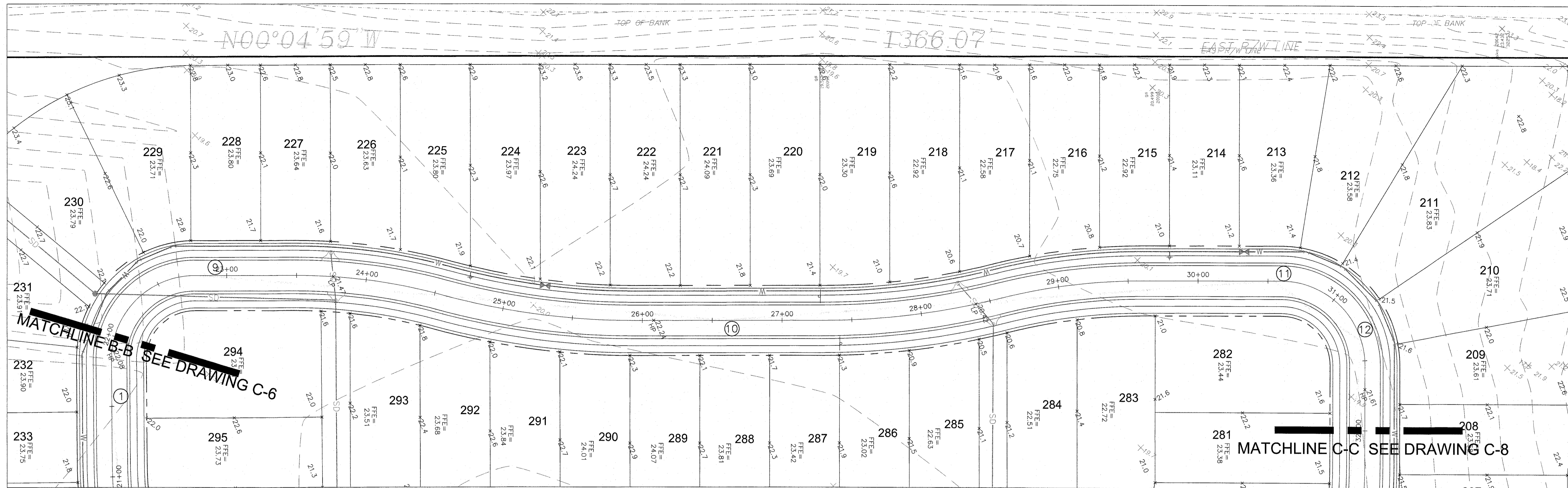
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191.521.533.123
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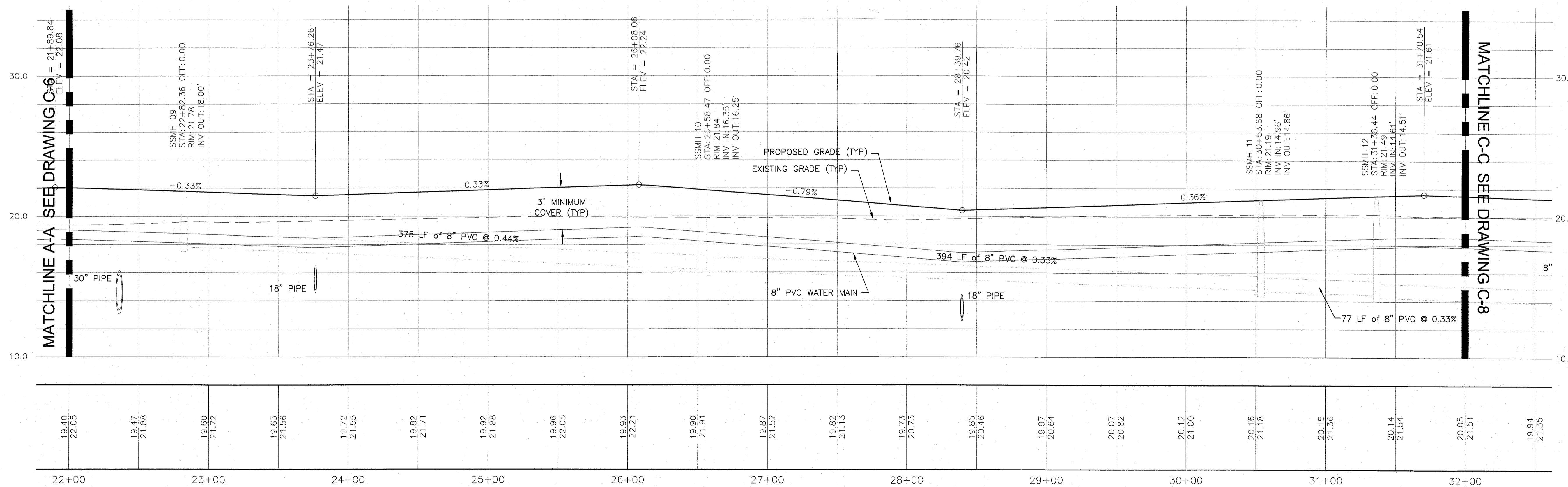
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MALABAR ROAD PALM BAY, FLORIDA
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PLAN AND PROFILE STA: 11+50 THRU 22+00



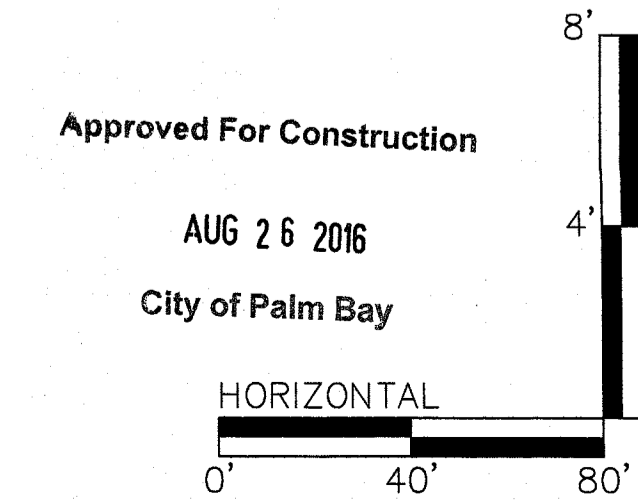
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PROJ. NO.:	160163
DESIGNED BY:	JRT
DRAWN BY:	SMB
CHECKED BY:	JTW
DRAWING NO.	C-6



PLAN STA: 22+00 THRU 32+00
1"=40'



PROFILE STA: 22+00 THRU 32+00
1"=40'



REV#	DATE	REVISION

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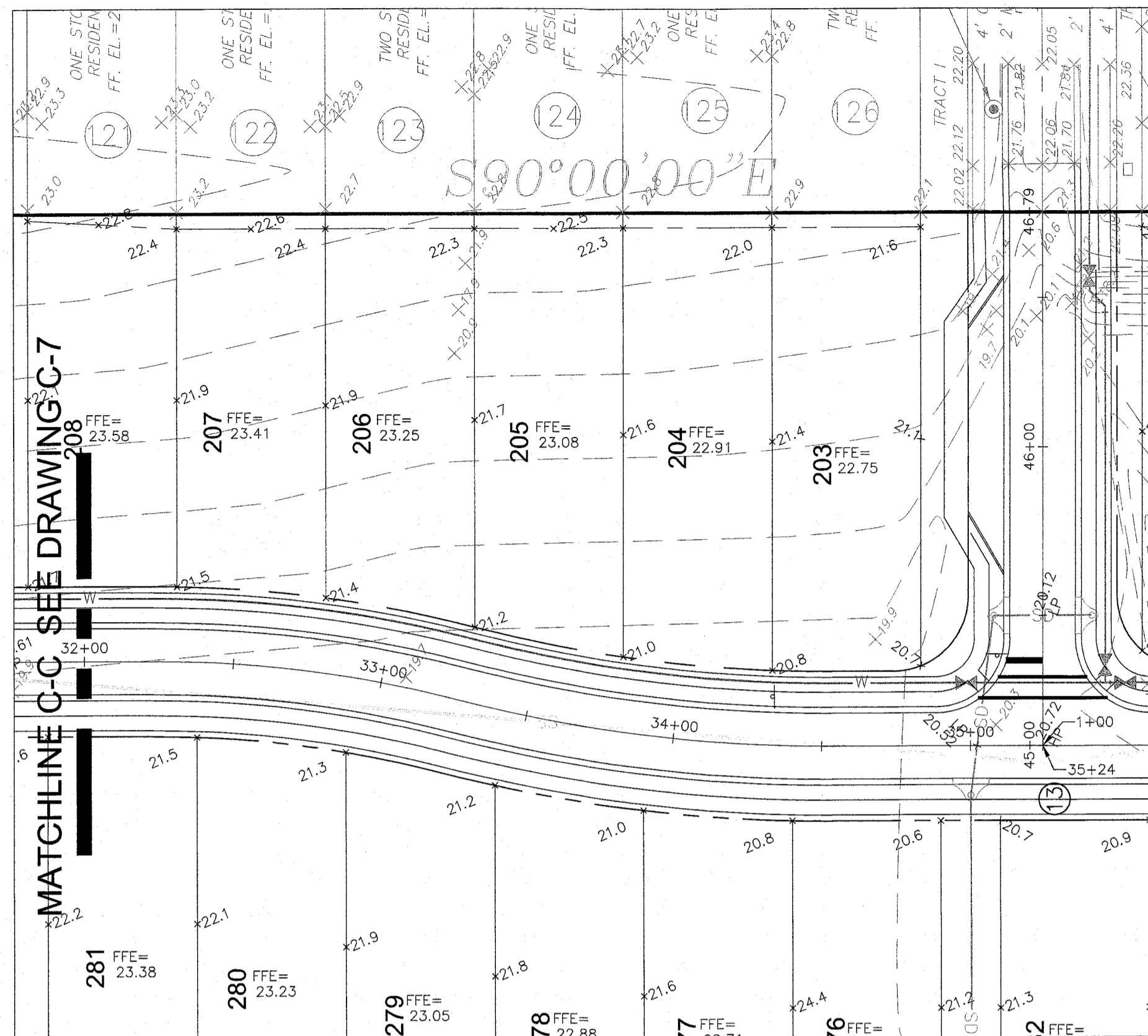
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D.R. HORTON
MALABAR ROAD PALM BAY, FLORIDA
DRAWING TITLE
PLAN AND PROFILE STA: 22+00 THRU 32+00

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LICENSE
No. 55405
STATE OF FLORIDA
PROFESSIONAL ENGINEER
AUG 24 2016

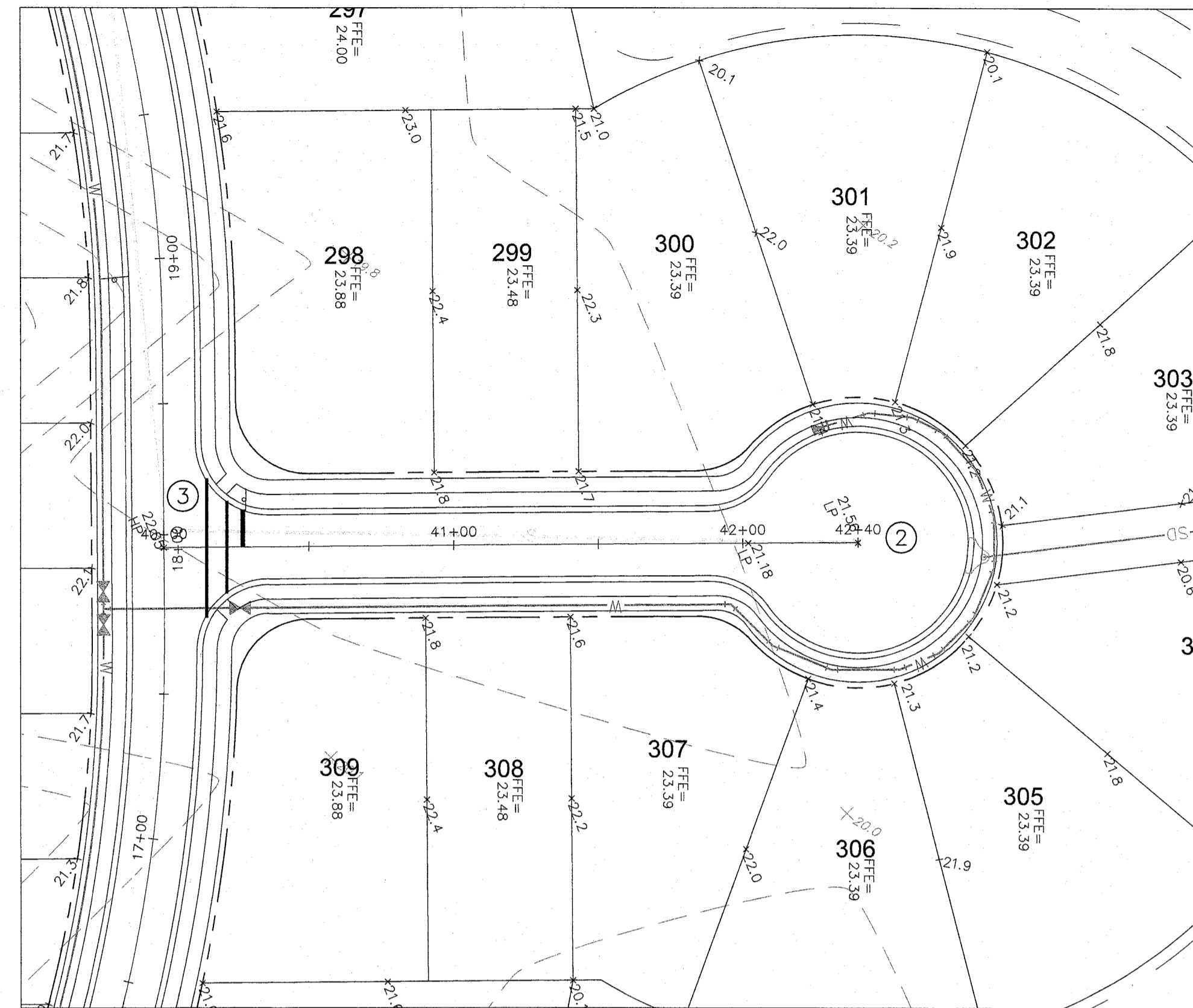
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SCALE: 1"=60'
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DESIGNED BY: JRT
DRAWN BY: SMB
CHECKED BY: JTW
DRAWING NO.: **C-7**

Approved For Construction

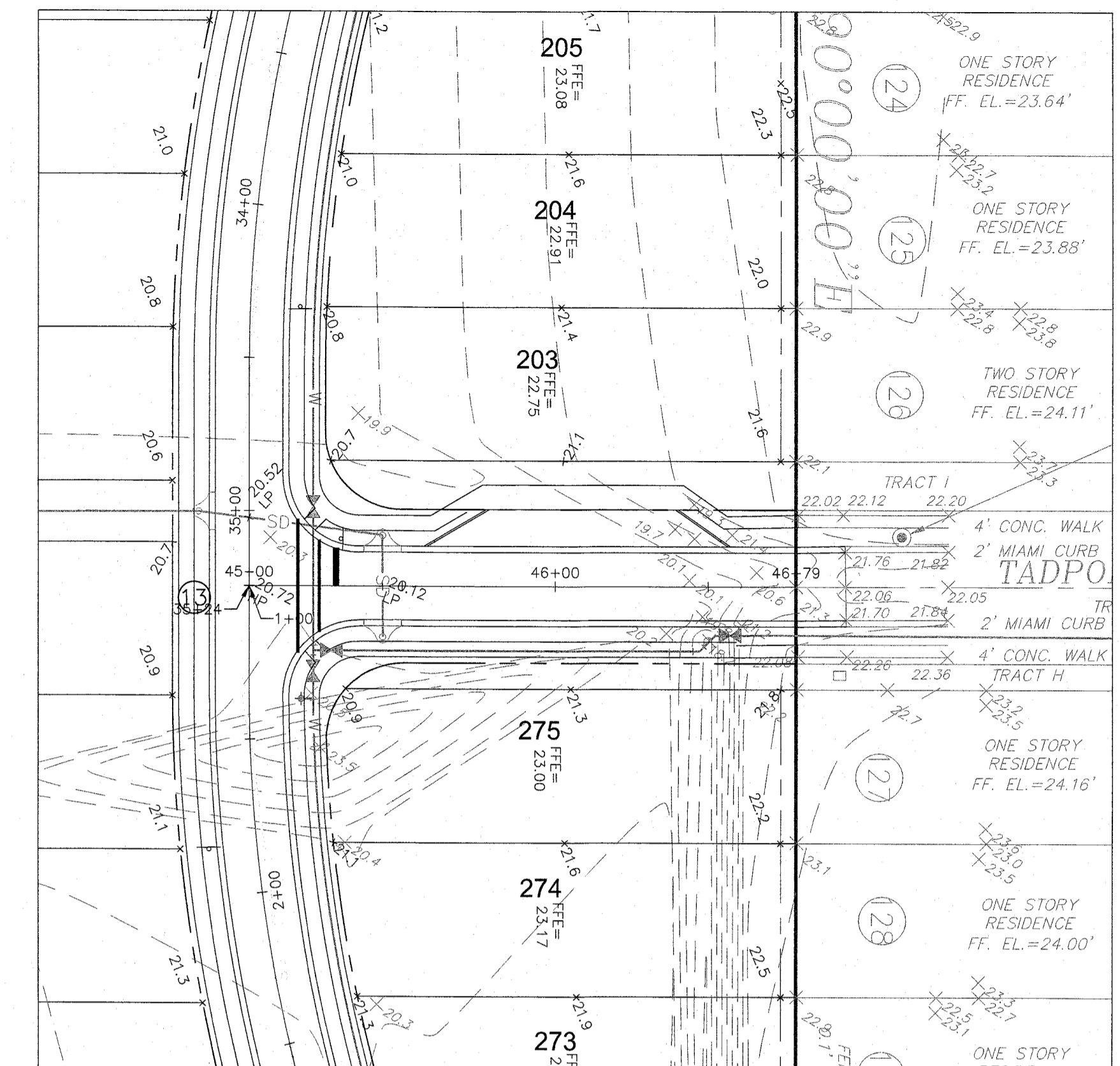
AUG 26 2016
City of Palm Bay



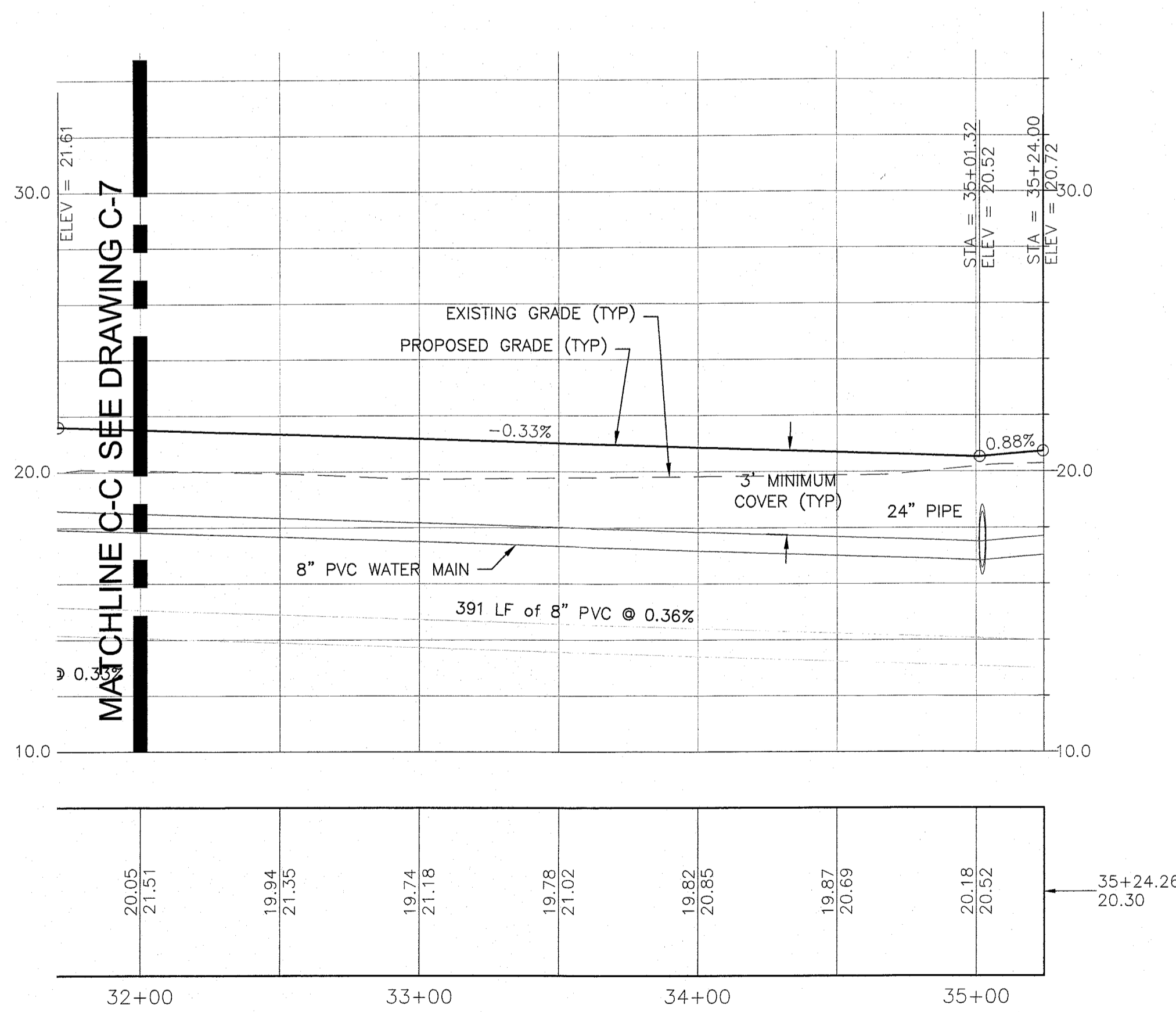
PLAN STA: 32+00 THRU 35+24.26
1"=40'



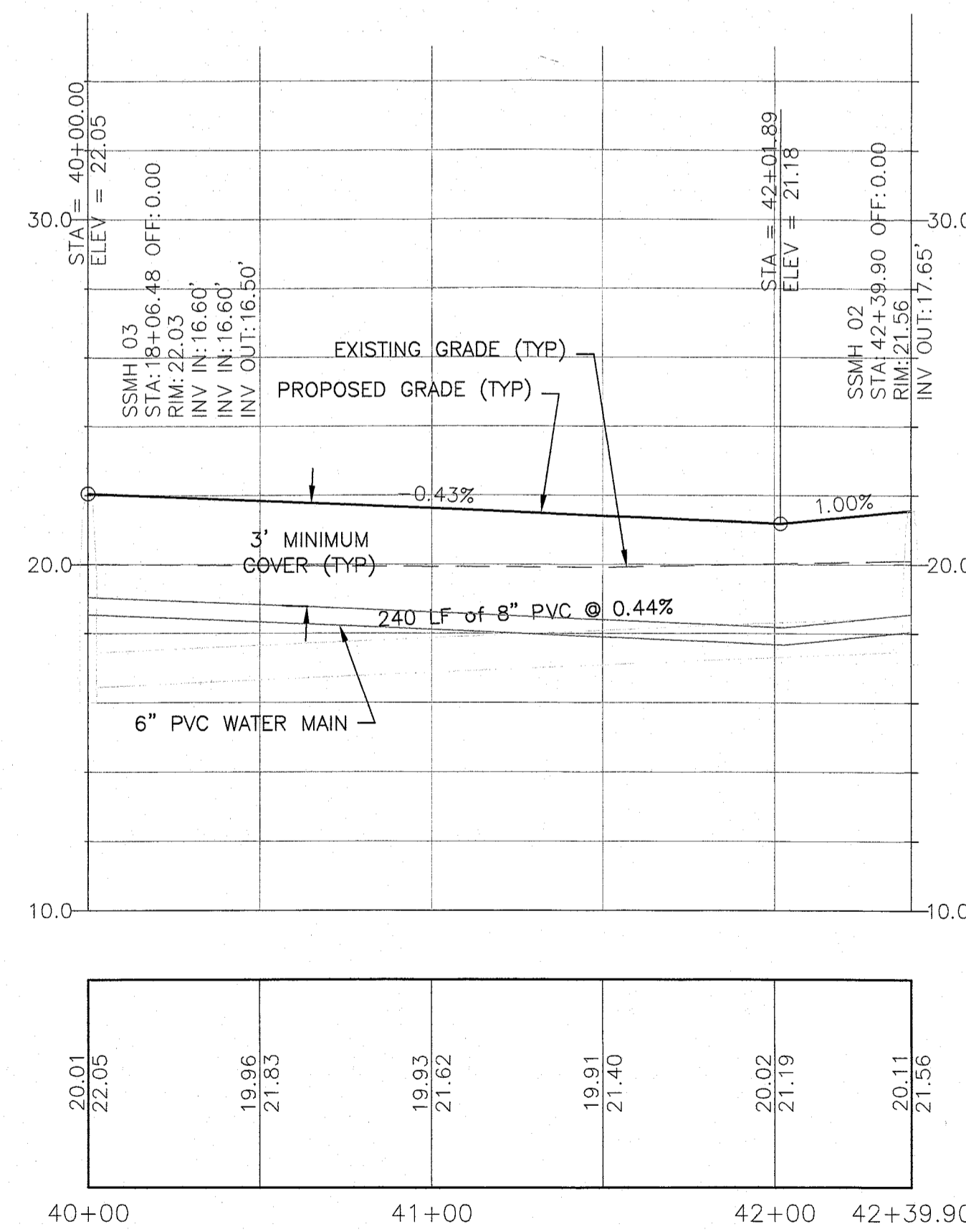
PLAN STA: 40+00 THRU 42+39.90
1"=40'



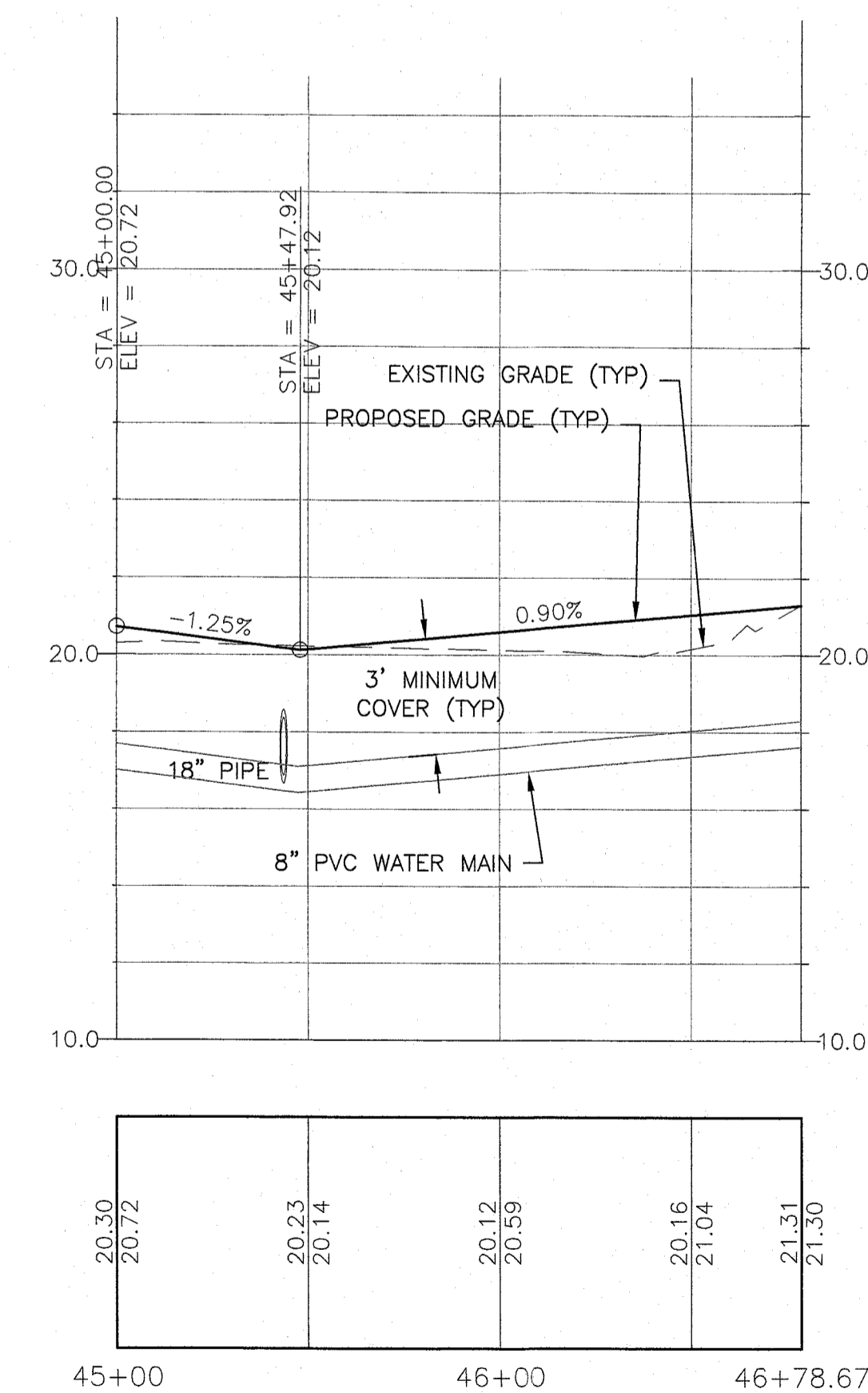
PLAN STA: 45+00 THRU 46+78.67
1"=40'



PROFILE STA: 32+00 THRU 35+24.26
1"=40'



PROFILE STA: 40+00 THRU 42+39.90



PROFILE STA: 45+00 THRU 46+78.67

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AUG 26 2016

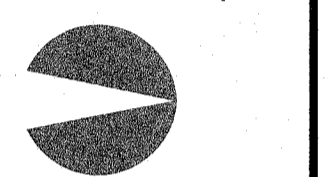
City of Palm Beach

HORIZONTAL

VERTICAL

REV#	DATE	REVISION

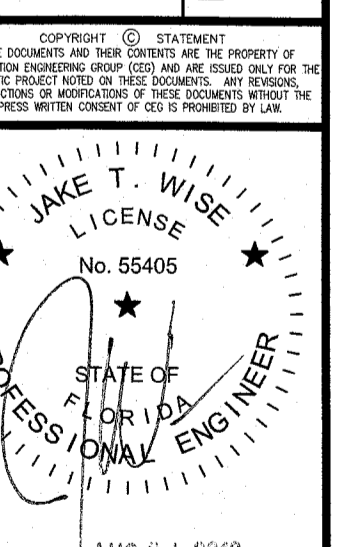
2651 Eau Gallie Blvd, Suite 100
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Fax: 321.253.1222
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license #0006077



BRENTWOOD LAKES SOUTH

D.R. HORTON
MALABAR ROAD PALM BAY, FLORIDA

DRAWING TITLE
PLAN AND PROFILE STA: 32+00 THRU 35+24.26;
40+00 THRU 42+39.90; 45+00 THRU 46+78.67



AUG 24 2016

DATE

4-26-16

SCALE

1"=60'

PROJ. NO.:

160163

DESIGNED BY:

JRT

DRAWN BY:

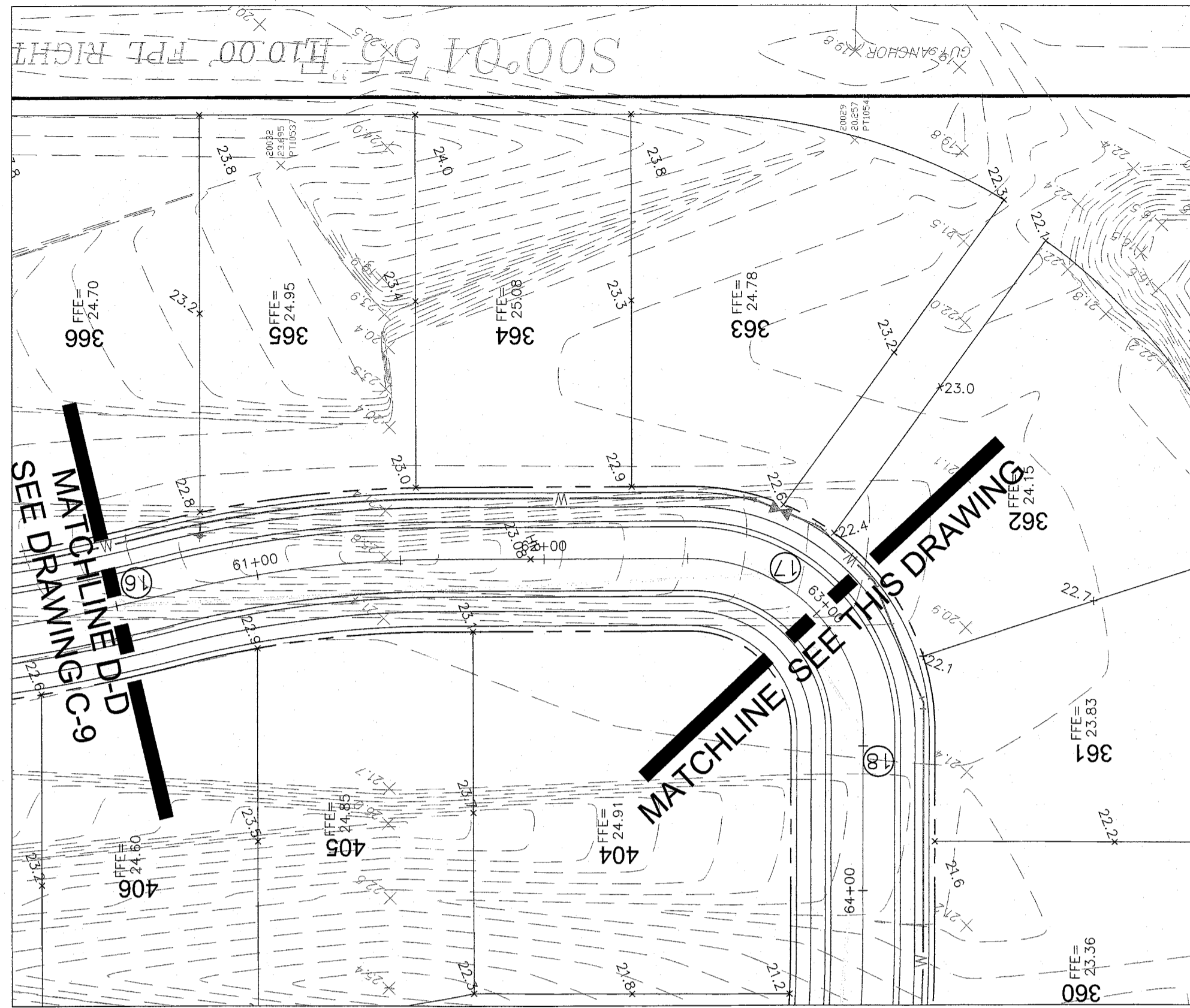
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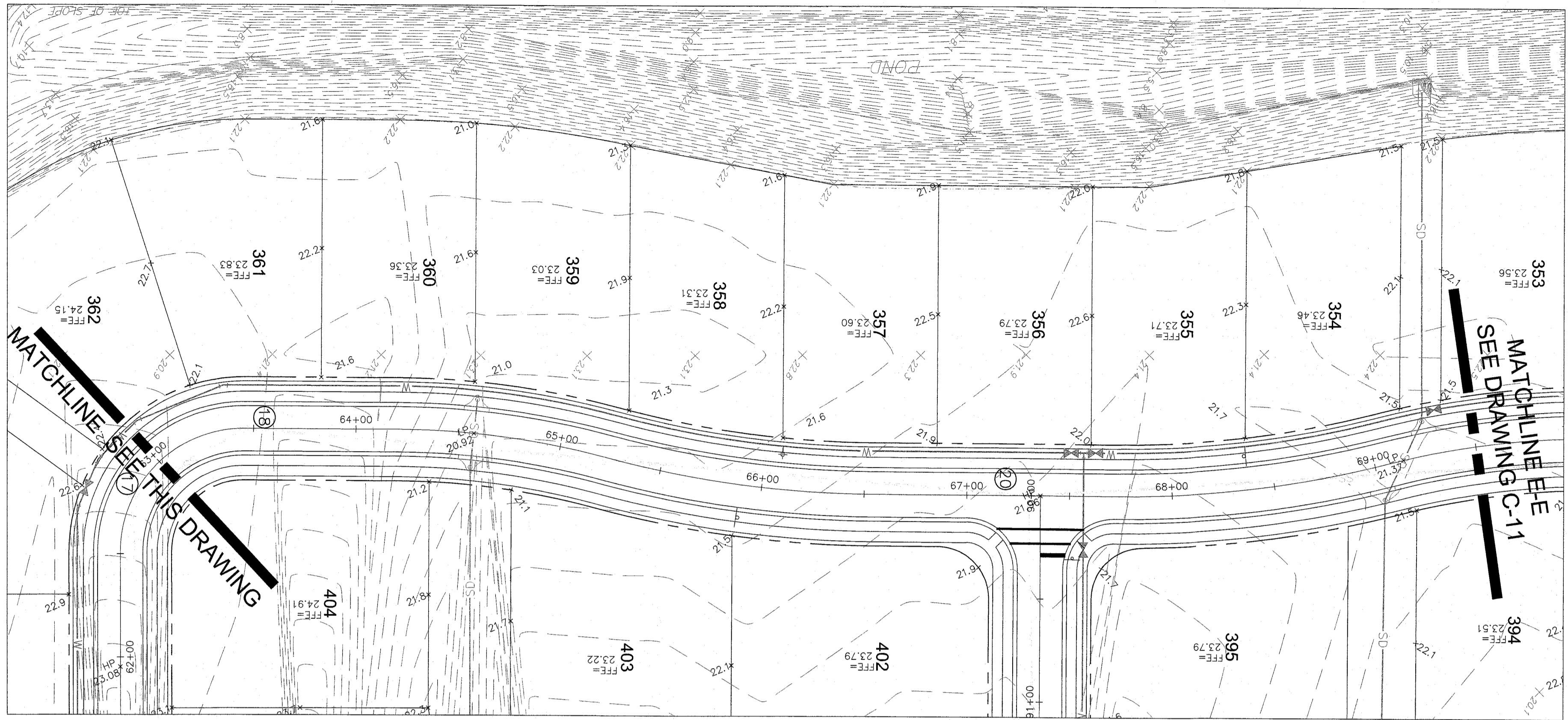
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DRAWING NO.

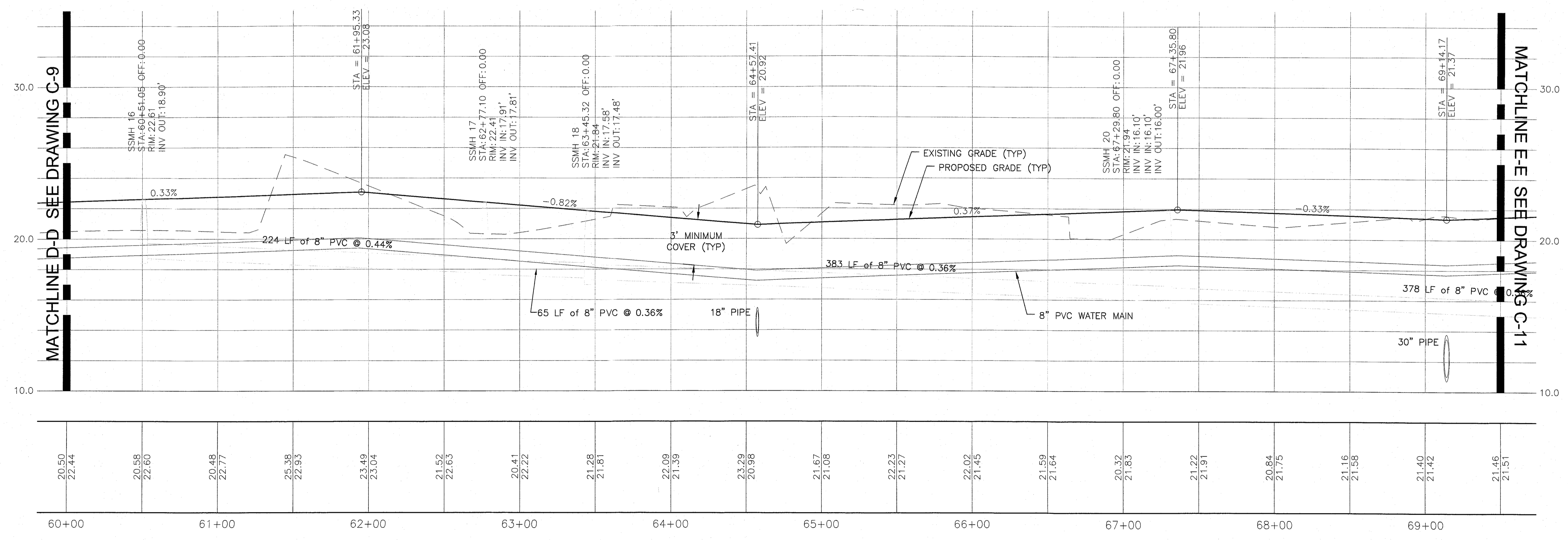
C-8



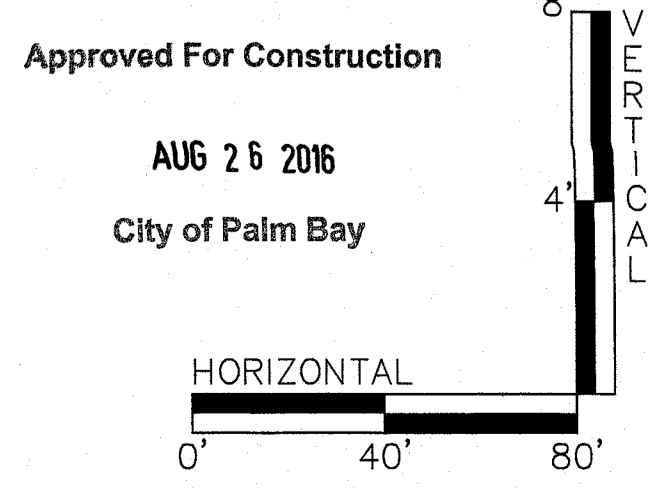
PLAN STA: 60+50 THRU 63+00
1"=40'



PLAN STA: 63+00 THRU 69+50
1"=40'

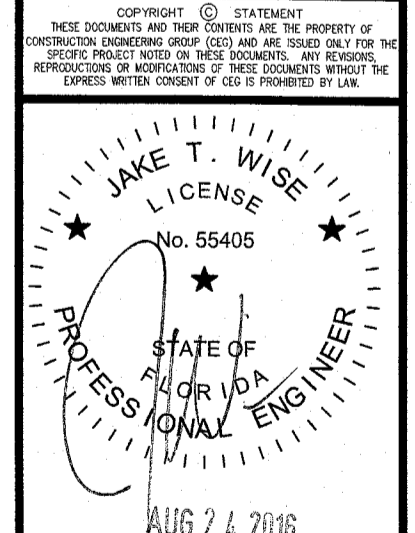


PROFILE STA: 60+50 THRU 69+50
HORIZONTAL: 1"=40' VERTICAL: 1"=4'

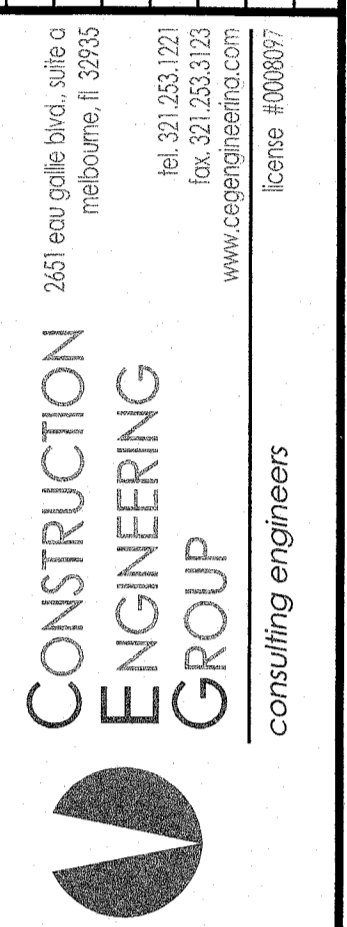


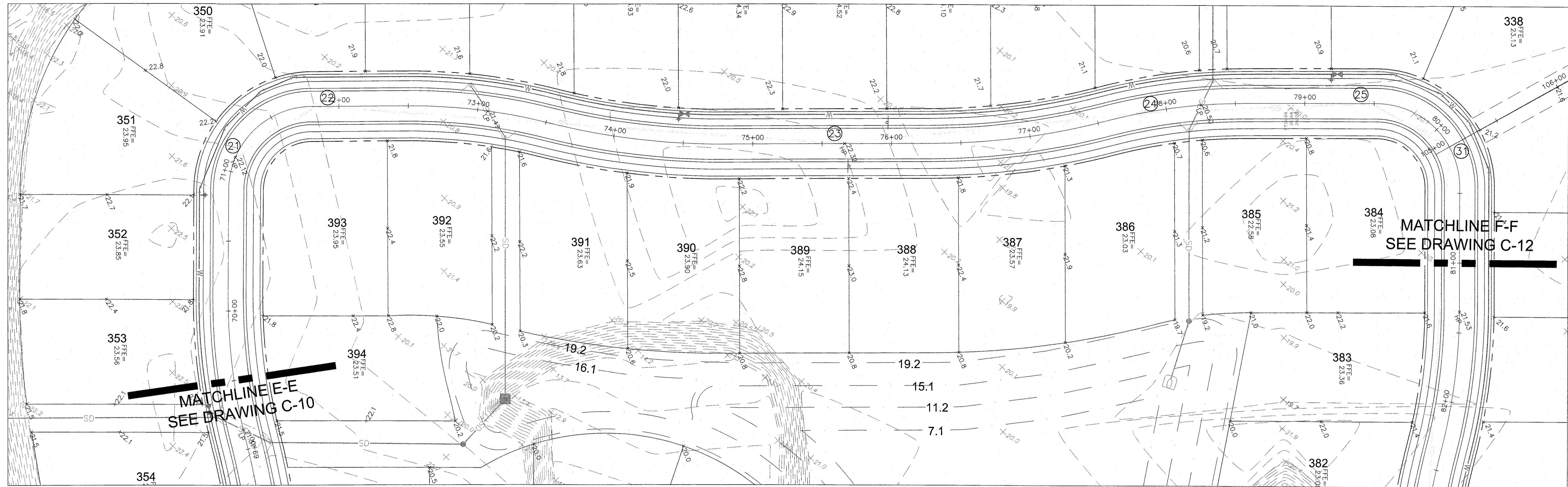
REV#	DATE	REVISION

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 DR. HORTON
 MALABAR ROAD PALM BAY, FLORIDA
 DRAWING TITLE
 PLAN AND PROFILE STA: 11+50 THRU 22+00

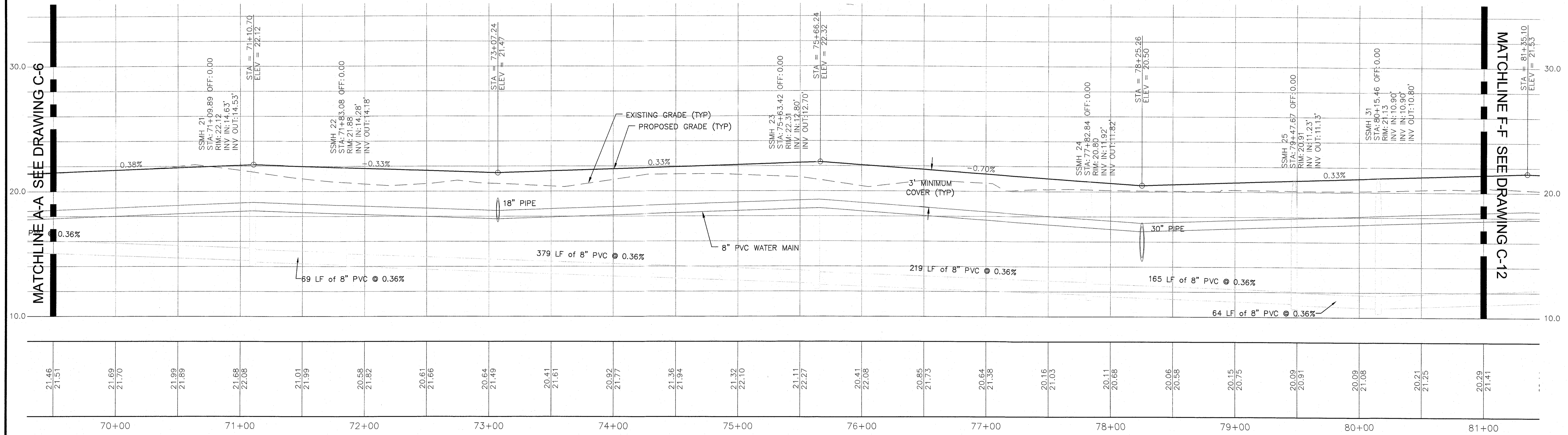


DATE	4-26-16
SCALE	H:1"=40'; V:1"=4'
PROJ. NO.:	160163
DESIGNED BY:	JRT
DRAWN BY:	SMB
CHECKED BY:	JTW
DRAWING NO.	C-10





PLAN STA: 69+50 THRU 81+00
1"=40'



PROFILE STA: 69+50 THRU 81+00
HORIZONTAL: 1"=40' VERTICAL: 1"=4'

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AUG 26 2016
City of Palm Bay

REV#	DATE	REVISION

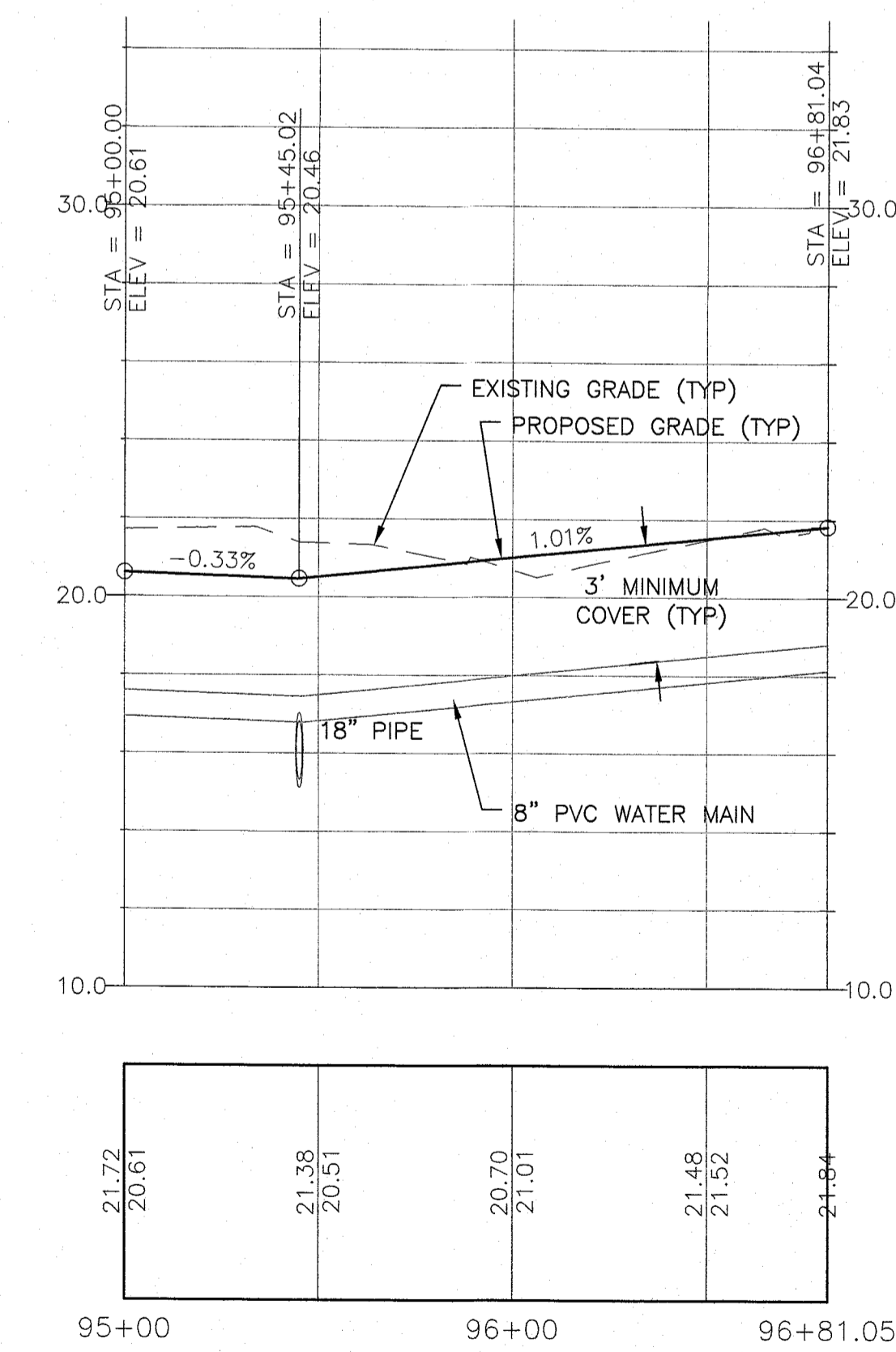
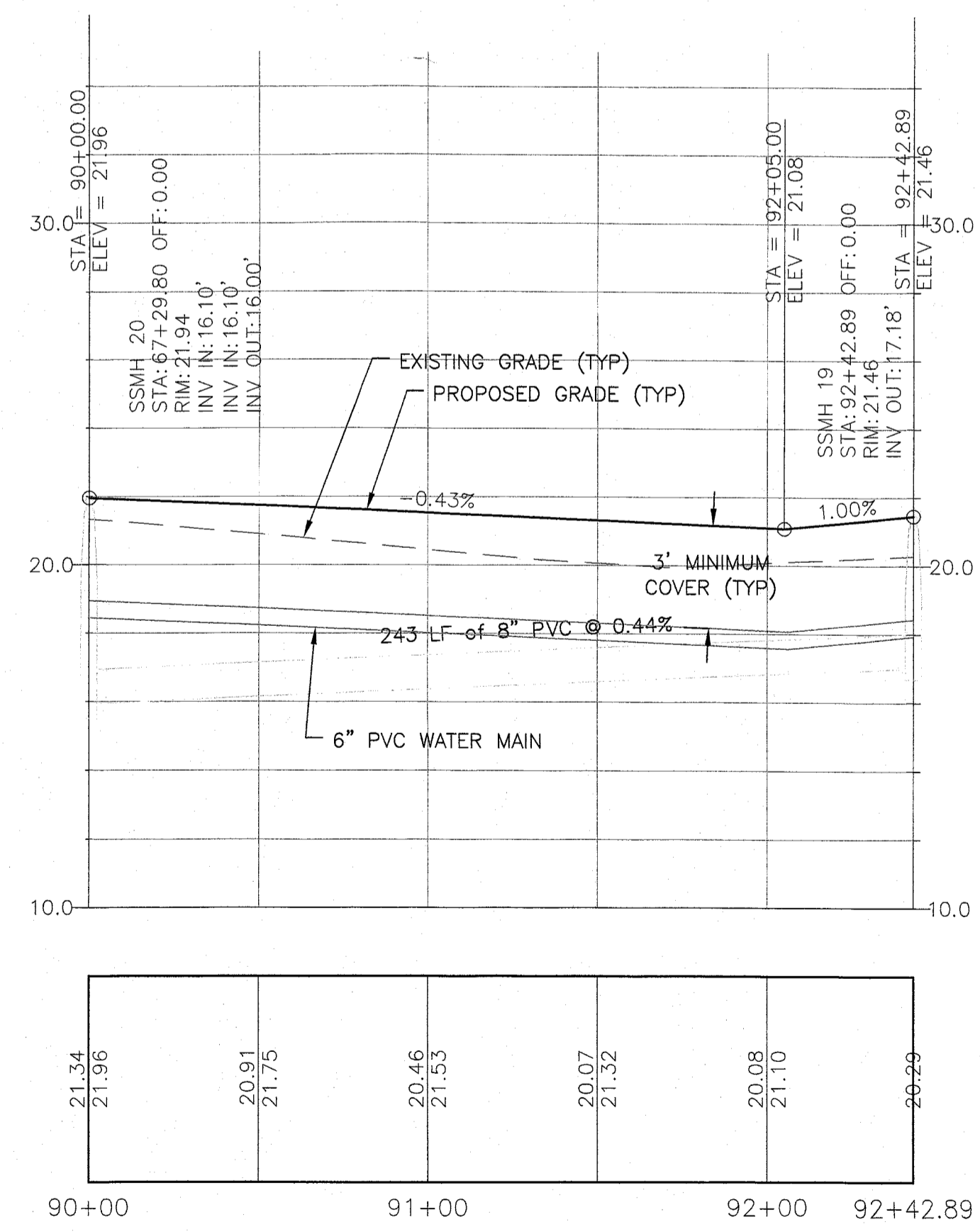
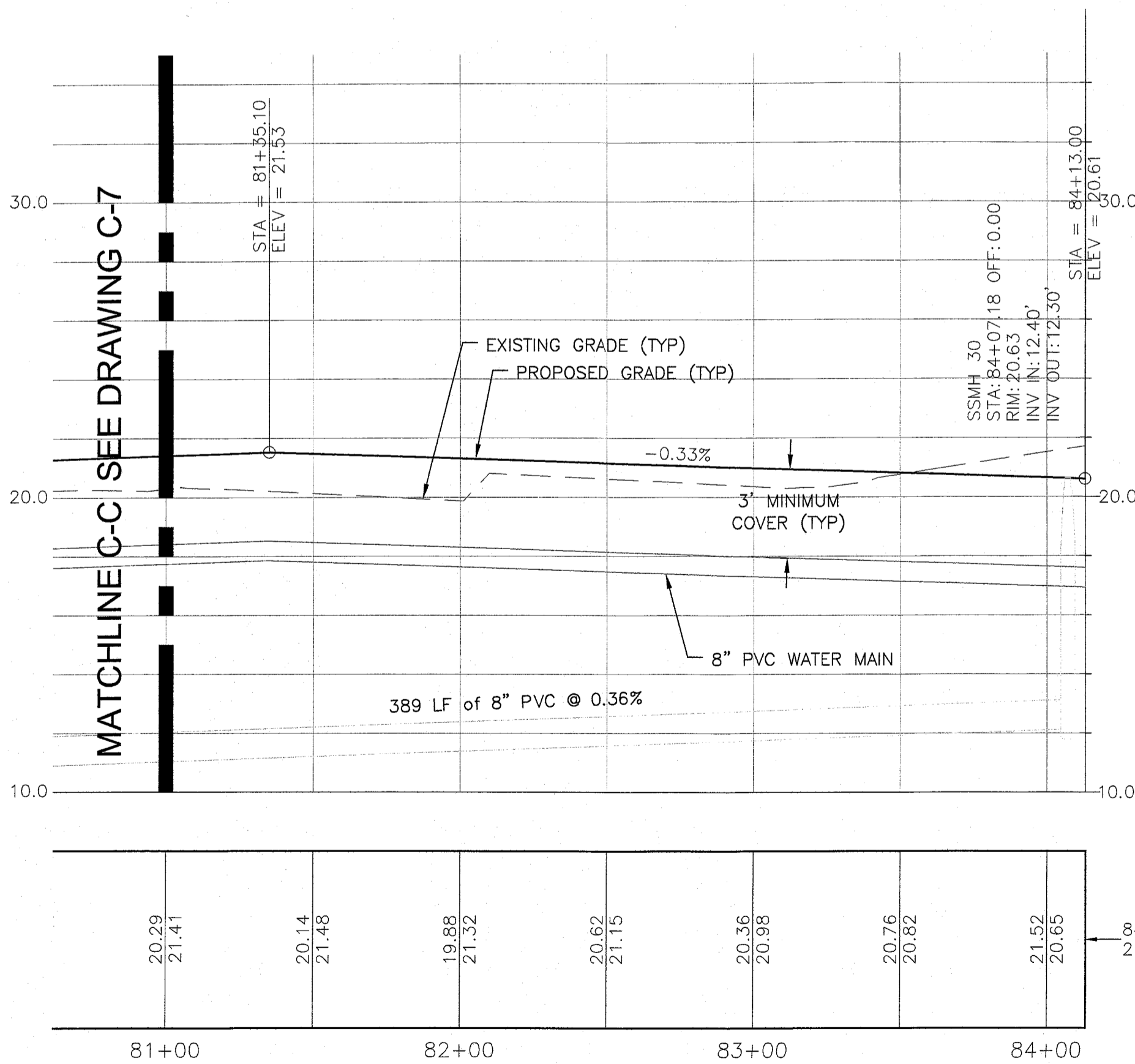
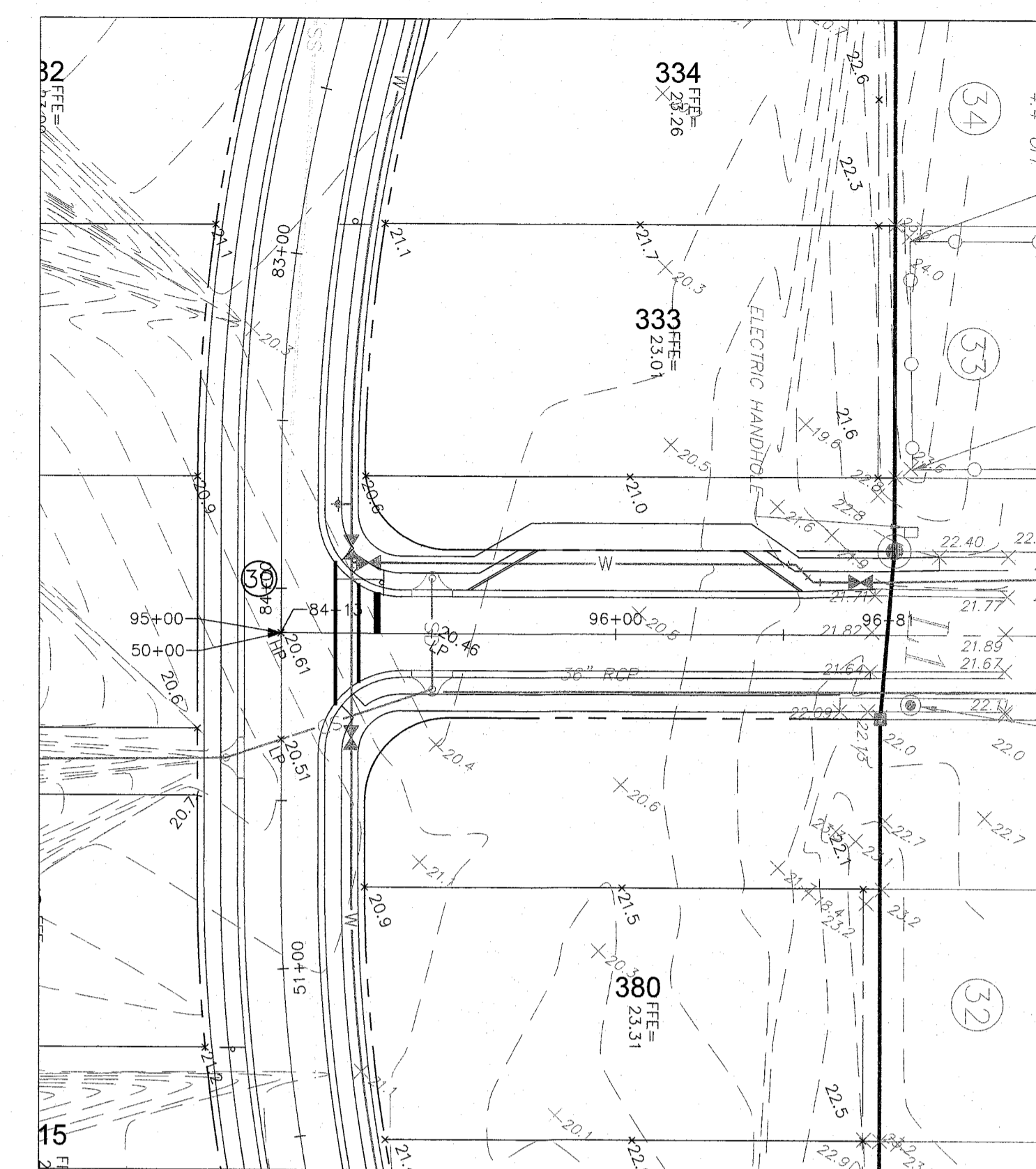
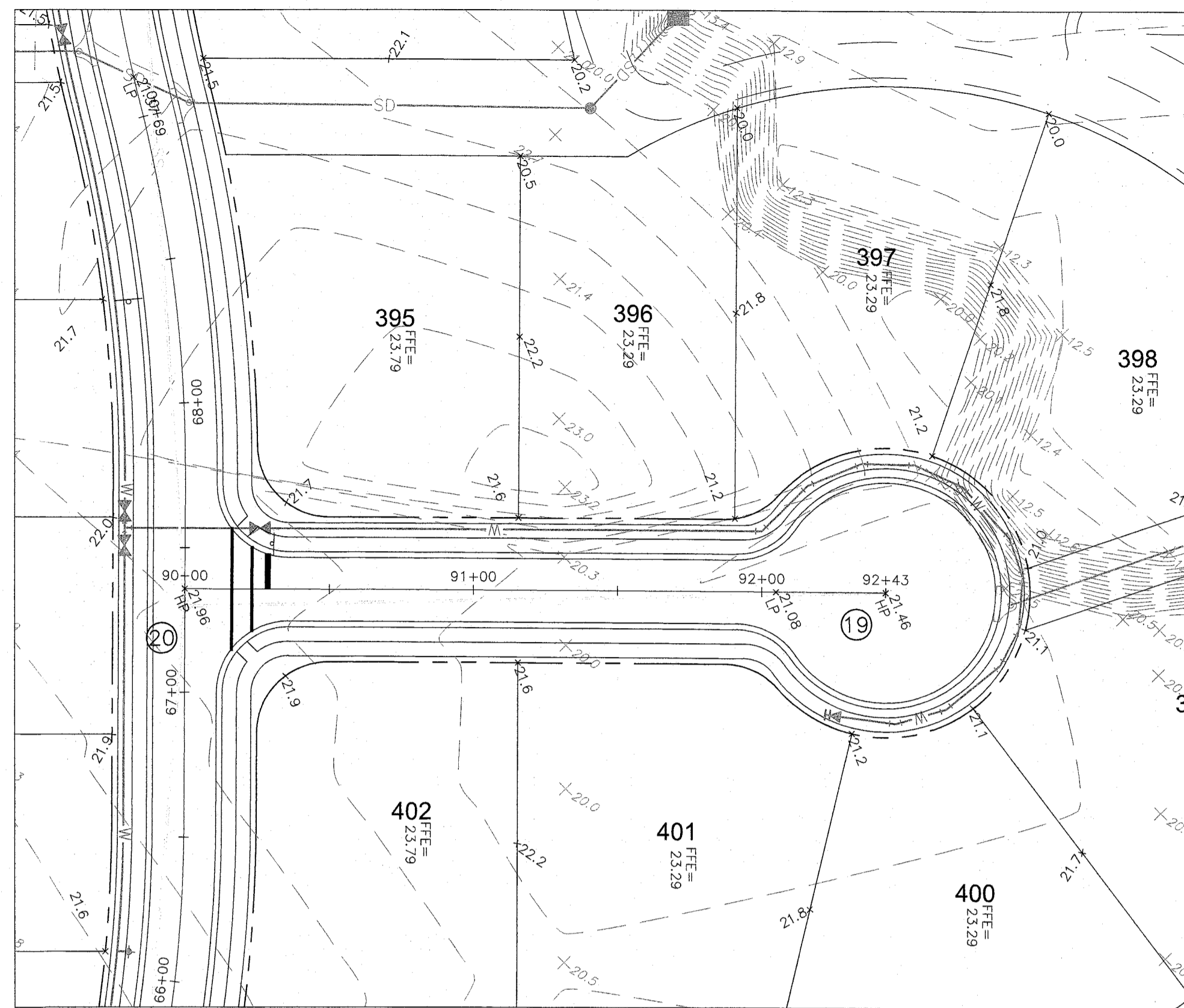
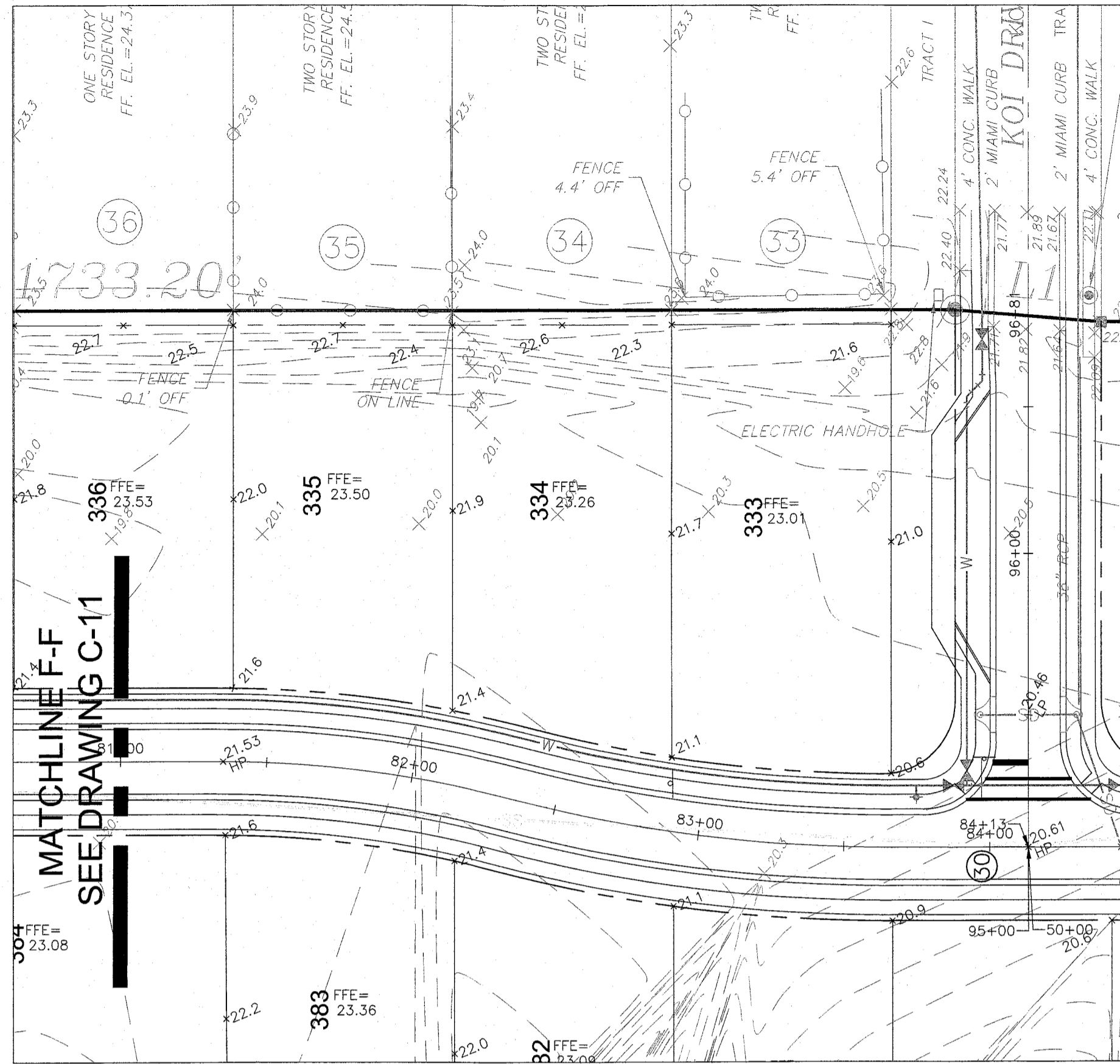
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D.R. HORTON
MALABAR ROAD PALM BAY, FLORIDA
DRAWING TITLE
PLAN AND PROFILE STA: 69+50 THRU 81+00

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DATE	4-26-16
SCALE	H: 1"=40'; V: 1"=4'
PROJ. NO.:	160163
DESIGNED BY:	JRT
DRAWN BY:	SMB
CHECKED BY:	JTW
DRAWING NO.	C-11



PROFILE STA: 81+00 THRU 84+13.13
HORIZONTAL: 1"=40' VERTICAL: 1"=4'

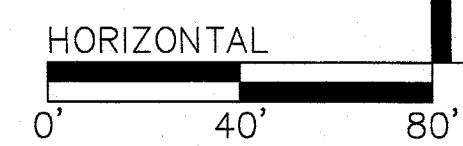
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HORIZONTAL: 1"=40' VERTICAL: 1"=4'

PROFILE STA: 95+00 THRU 96+81.05
HORIZONTAL: 1"=40' VERTICAL: 1"=4'

Approved For Construction

AUG 26 2016

City of Palm Bay



REV#	DATE	REVISION

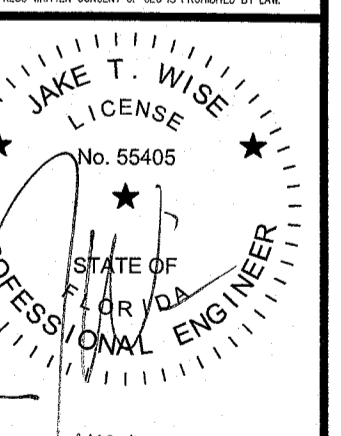
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CONSTRUCTION ENGINEERING GROUP
consulting engineers

BRENTWOOD LAKES SOUTH

D.R. HORTON
MALABAR ROAD PALM BAY, FLORIDA

DRAWING TITLE
PLAN AND PROFILE STA: 81+00 THRU 84+13.13;
90+00 THRU 92+42.89; 95+00 THRU 96+81.05



AUG 24 2016

DATE

4-26-16

SCALE

H: 1"=40'; V: 1"=4'

PROJ. NO.:

160163

DESIGNED BY:

JRT

DRAWN BY:

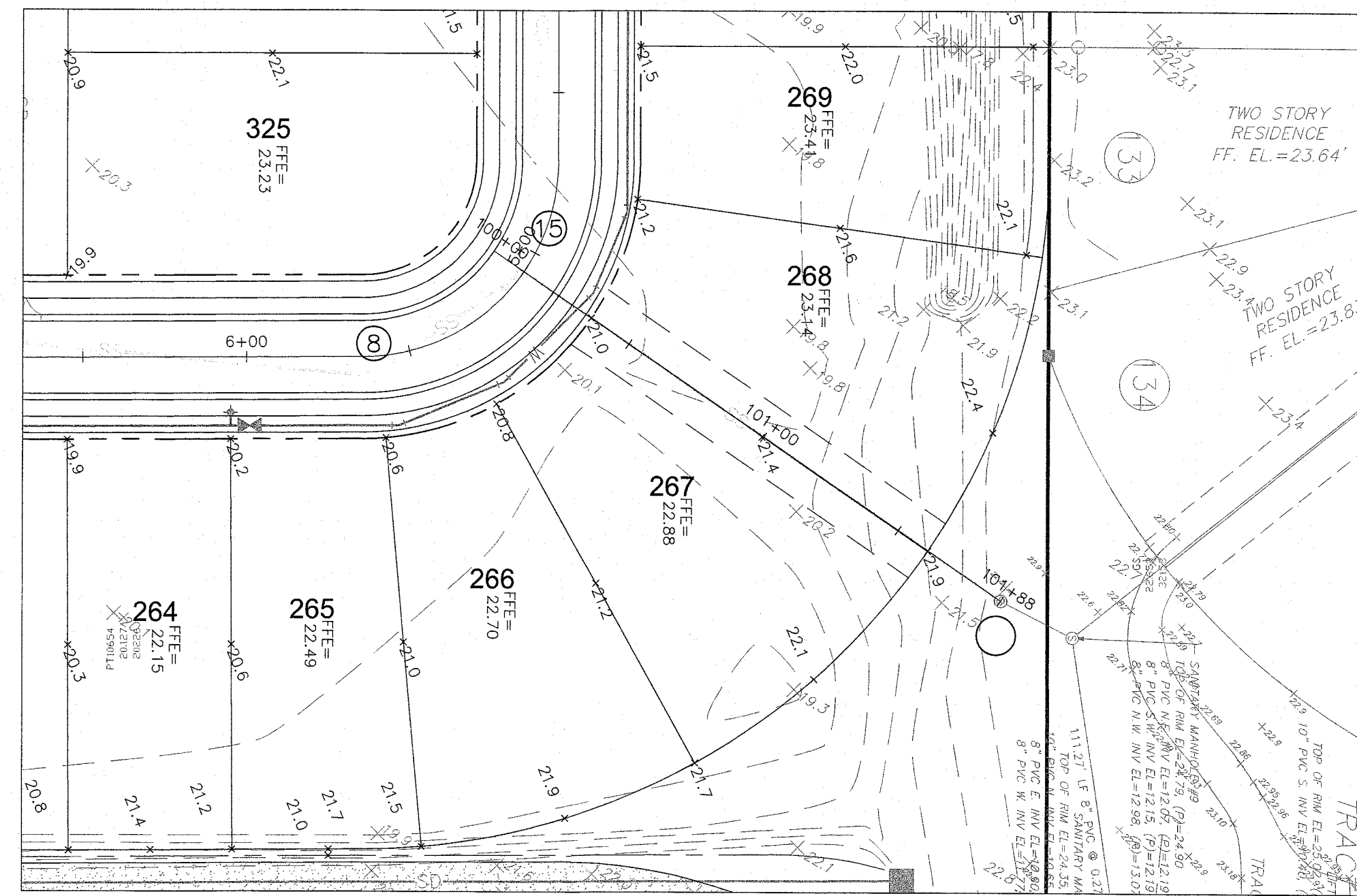
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CHECKED BY:

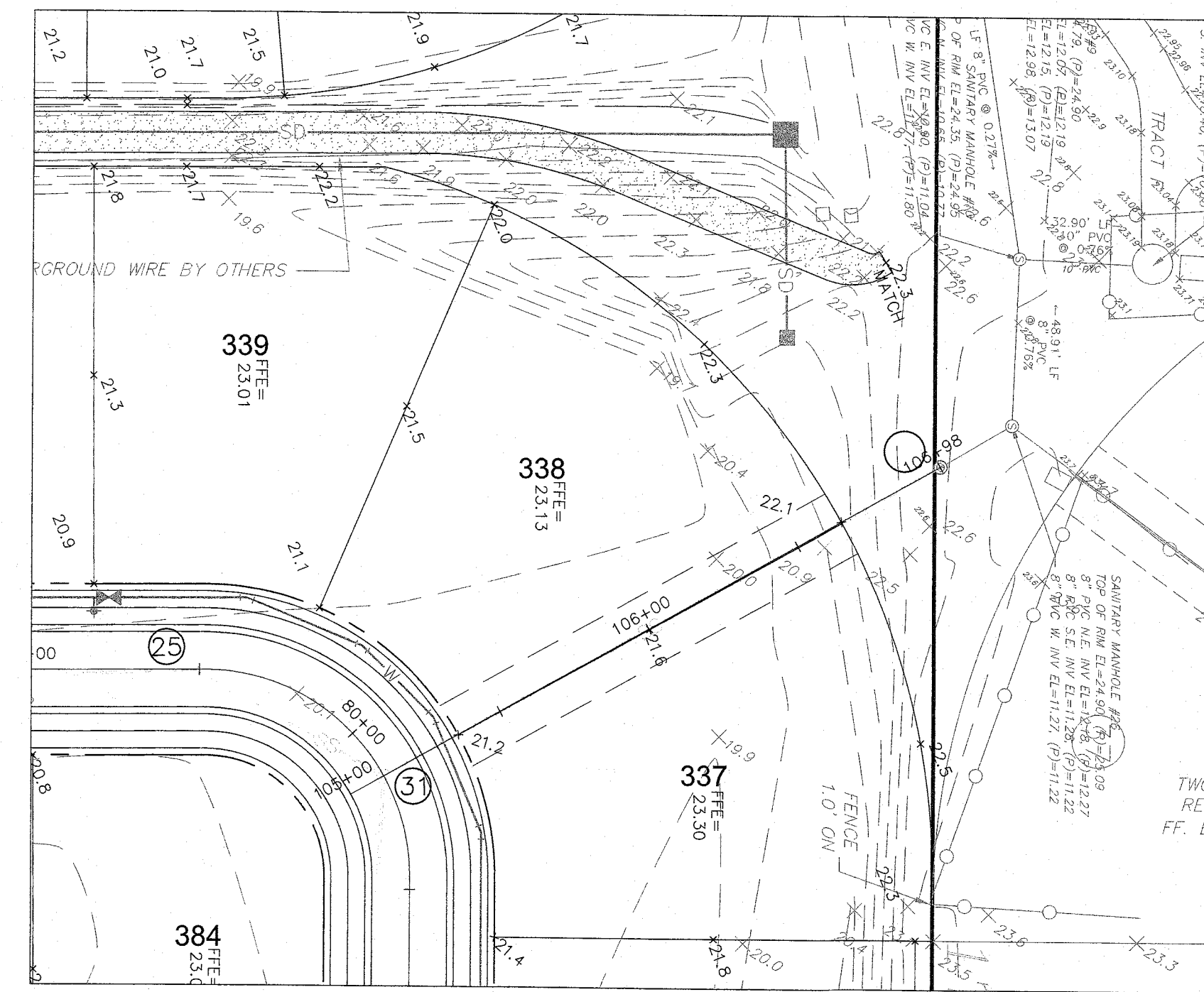
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DRAWING NO.

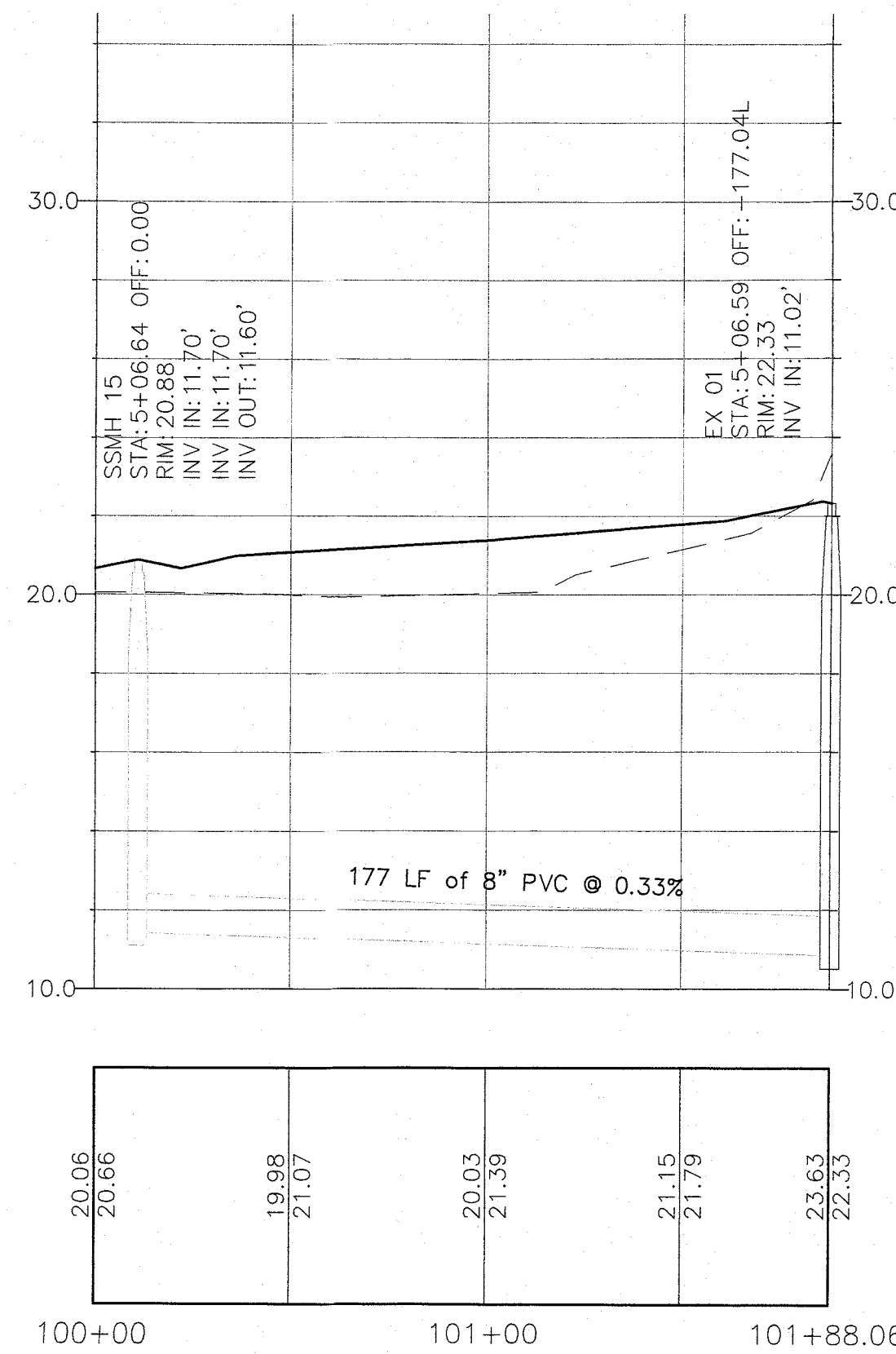
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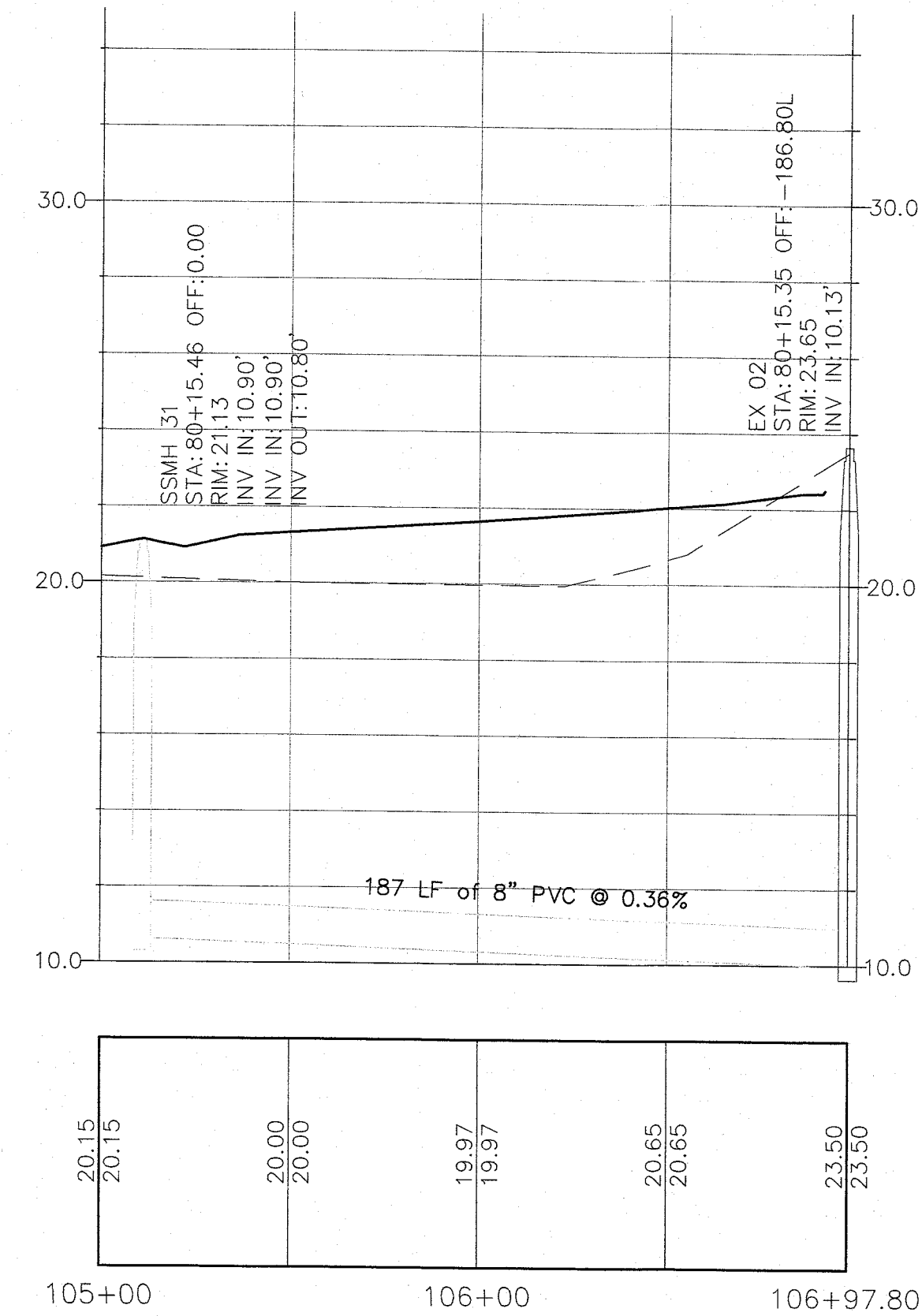
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1"=40'



PLAN STA: 105+00 THRU 106+97.80
1"=40'



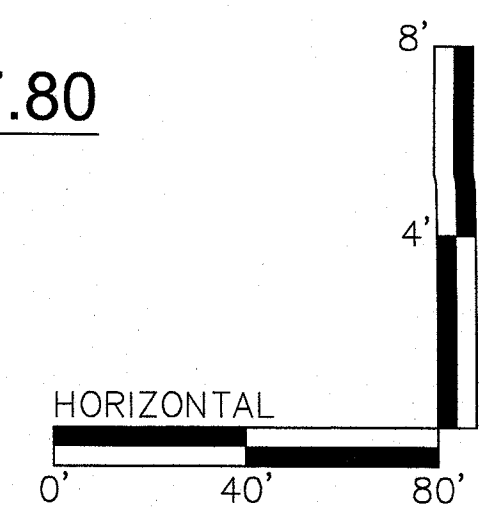
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HORIZONTAL: 1"=40' VERTICAL: 1"=4'



PROFILE STA: 105+00 THRU 106+97.80
HORIZONTAL: 1"=40' VERTICAL: 1"=4'

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City of Palm Bay



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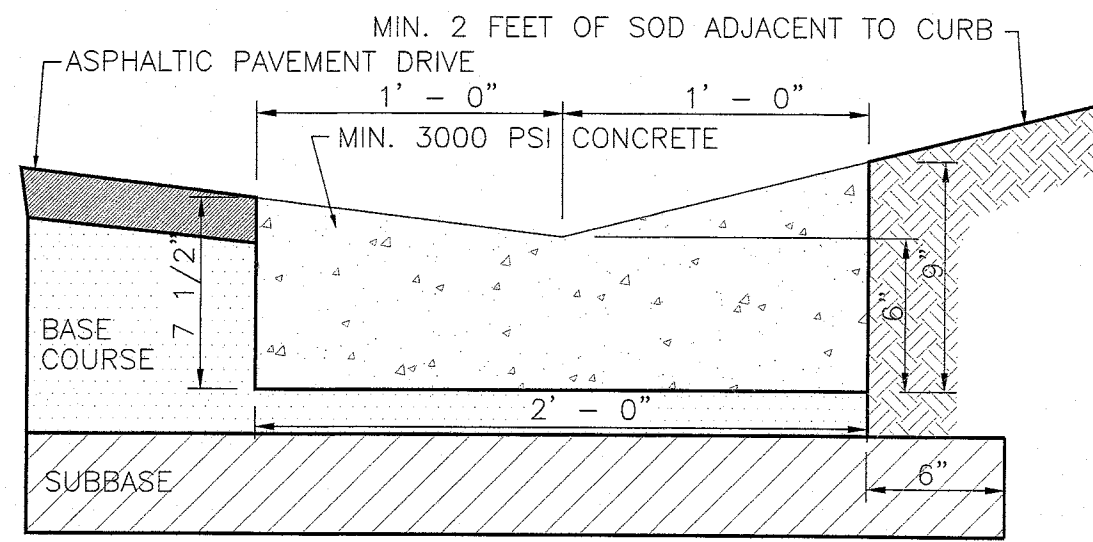
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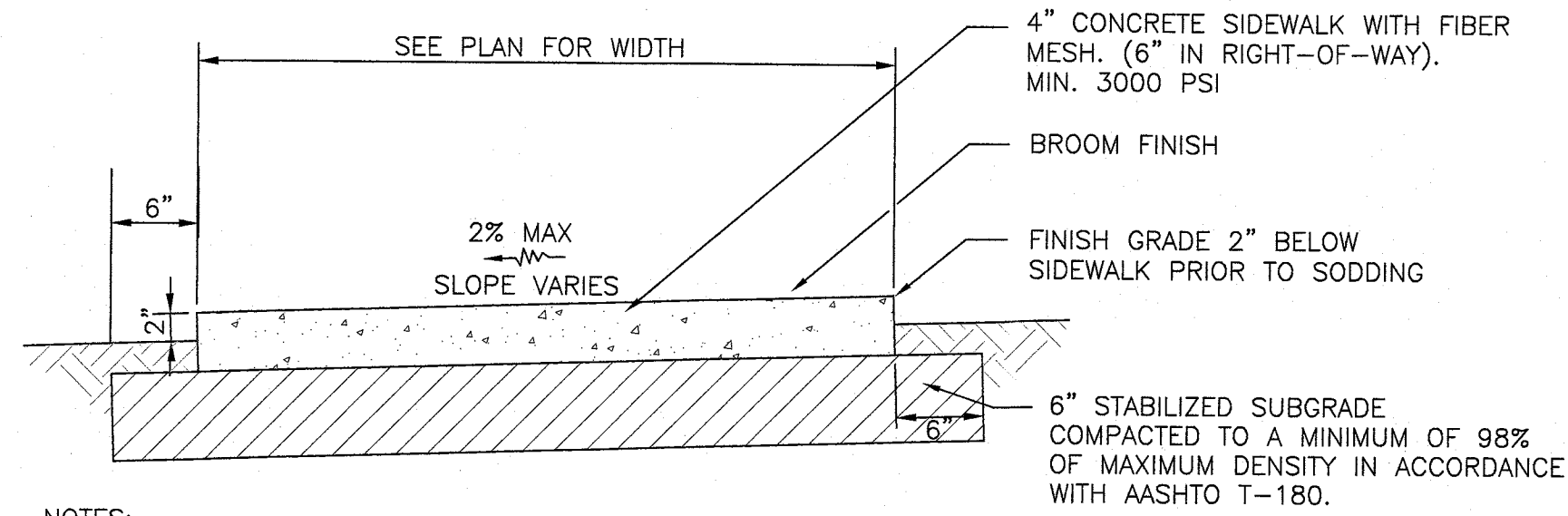
BRENTWOOD LAKES SOUTH
D.R. HORTON
MALABAR ROAD PALM BAY, FLORIDA
DRAWING TITLE
**PLAN AND PROFILE STA: 100+00 THRU 101+88.06
AND 105+00 THRU 106+97.80**

STATE OF FLORIDA
PROFESSIONAL ENGINEER
JAKE T. WISE
LICENSE No. 55405
AUG 24 2016

DATE	4-26-16
SCALE	H: 1"=40'; V: 1"=4'
PROJ. NO.:	160163
DESIGNED BY:	JRT
DRAWN BY:	SMB
CHECKED BY:	JTW
DRAWING NO.	C-13

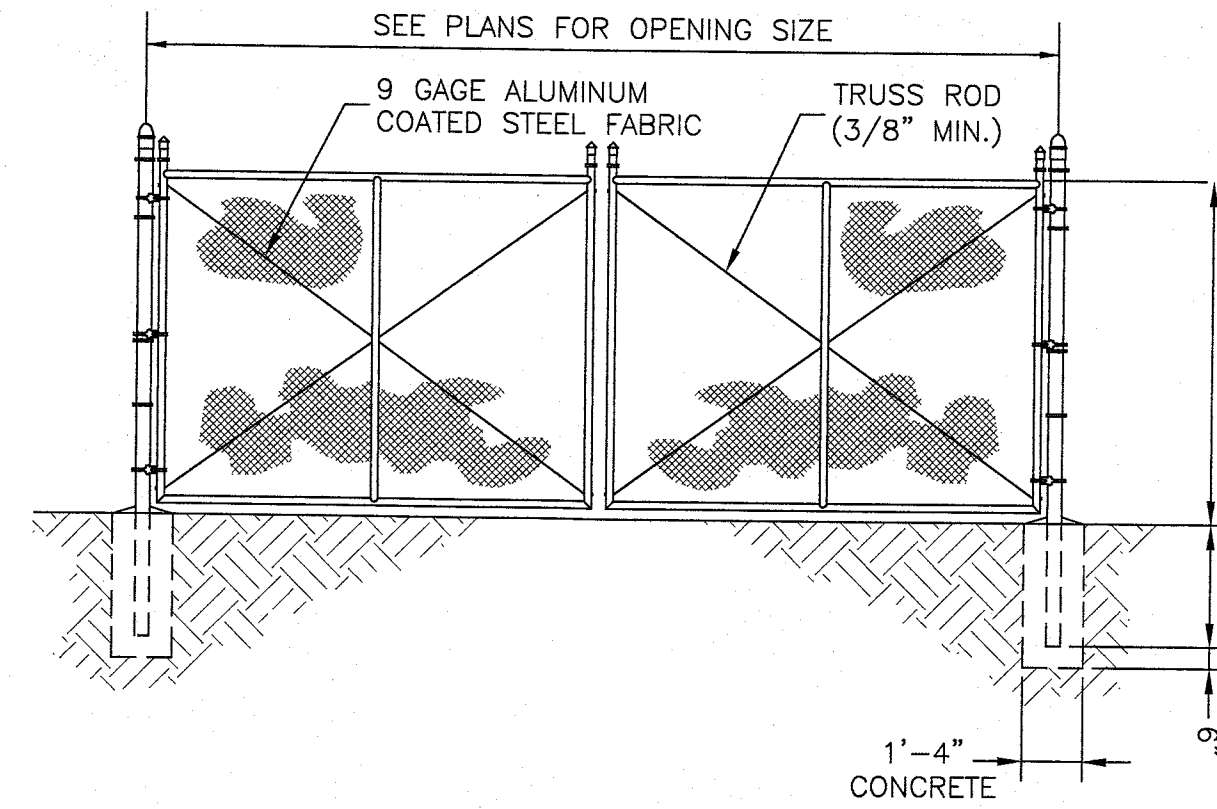


TYPICAL MIAMI CURB AND GUTTER DETAIL
NTS



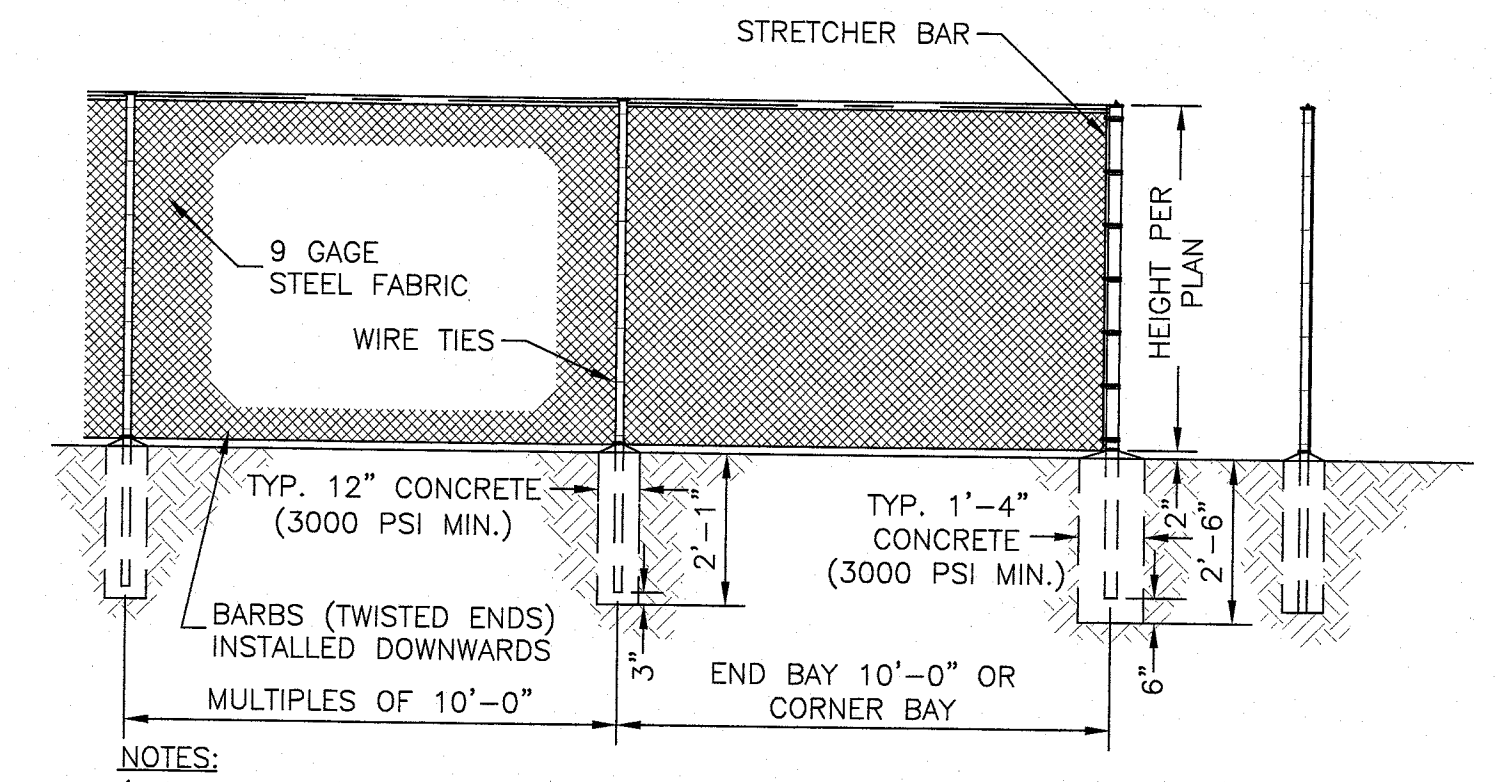
- NOTES:**
1. PROVIDE EXPANSION JOINTS AT CONNECTION POINTS OF OTHER IMPERVIOUS SURFACES INCLUDING BUT NOT LIMITED TO PAVEMENT, CURBS, OTHER SIDEWALKS, ETC.
 2. PROVIDE CONTRACTION JOINTS AT LOCATIONS PER FDOT INDEX NO. 310 FOR ENTIRE LENGTH OF SIDEWALK. CONSTRUCT JOINTS PER THIS INDEX AND FDOT REQUIREMENTS.
 3. CONSTRUCT 2" BUFFERS AT FRONT AND BACK OF SIDEWALK WITH MAXIMUM SLOPE OF 3/4" PER FOOT.
 4. CURE WITH A WHITE CURING COMPOUND PER FDOT STANDARD SPECIFICATION SECTION 925-2 APPLIED AT A RATE OF 1 GAL/200 S.F.

TYPICAL SIDEWALK DETAIL
NTS



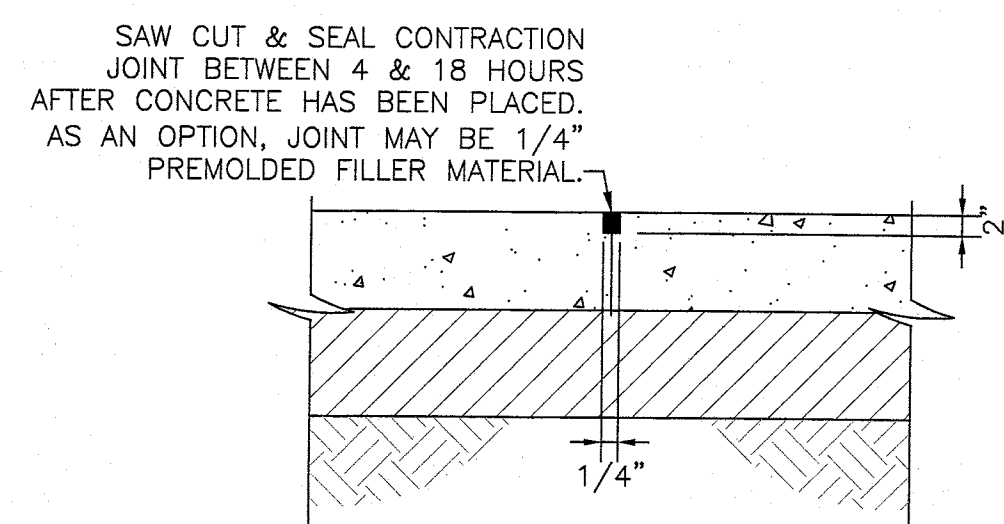
- NOTES:**
1. GATE TO BE SECURED OPEN WITH GATE STOP SET IN CONCRETE. ALL GATES TO BE PROVIDED WITH DROP BAR WITH PADLOCK AND HASP TO 1" SCHEDULE 40 IN 1'-6" X 12" CONCRETE FOOTING. GATE POSTS SHALL BE 4" OUTSIDE DIAMETER GSP SCHEDULE 40 AT GATE OPENING.
 2. FOLLOW MANUFACTURER'S INSTRUCTIONS FOR INSTALLATION.
 3. SEE FENCE DETAIL & SPECIFICATIONS FOR MORE INFORMATION.

TYPICAL CHAIN-LINK FENCE GATES DETAIL
NTS

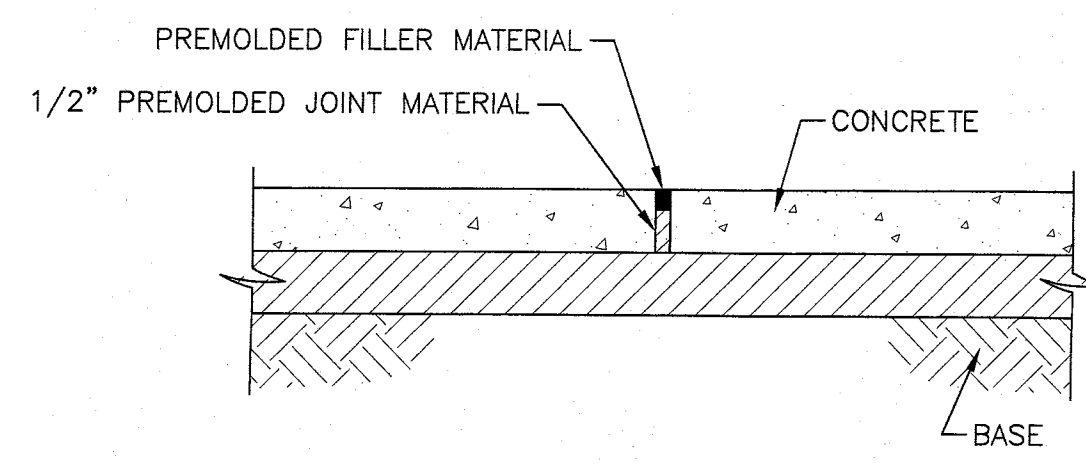


- NOTES:**
1. COATED STEEL WOVEN WIRE FABRIC TO BE STRETCHED TAUT WITH STRETCHER BARS & STRAPS AND FASTENED TOP & BOTTOM AND AT LINE POSTS WITH GALVANIZED PIG RING TIES.
 2. GATES SHALL BE PROVIDED WITH DROP BAR WITH PADLOCK AND HASP TO 1" SCHEDULE 40 IN 1'-6" X 12" CONCRETE FOOTING.
 3. CONSTRUCT PER MANUFACTURE RECOMMENDATIONS & SPECIFICATIONS.

TYPICAL CHAIN LINK FENCE DETAIL
NTS



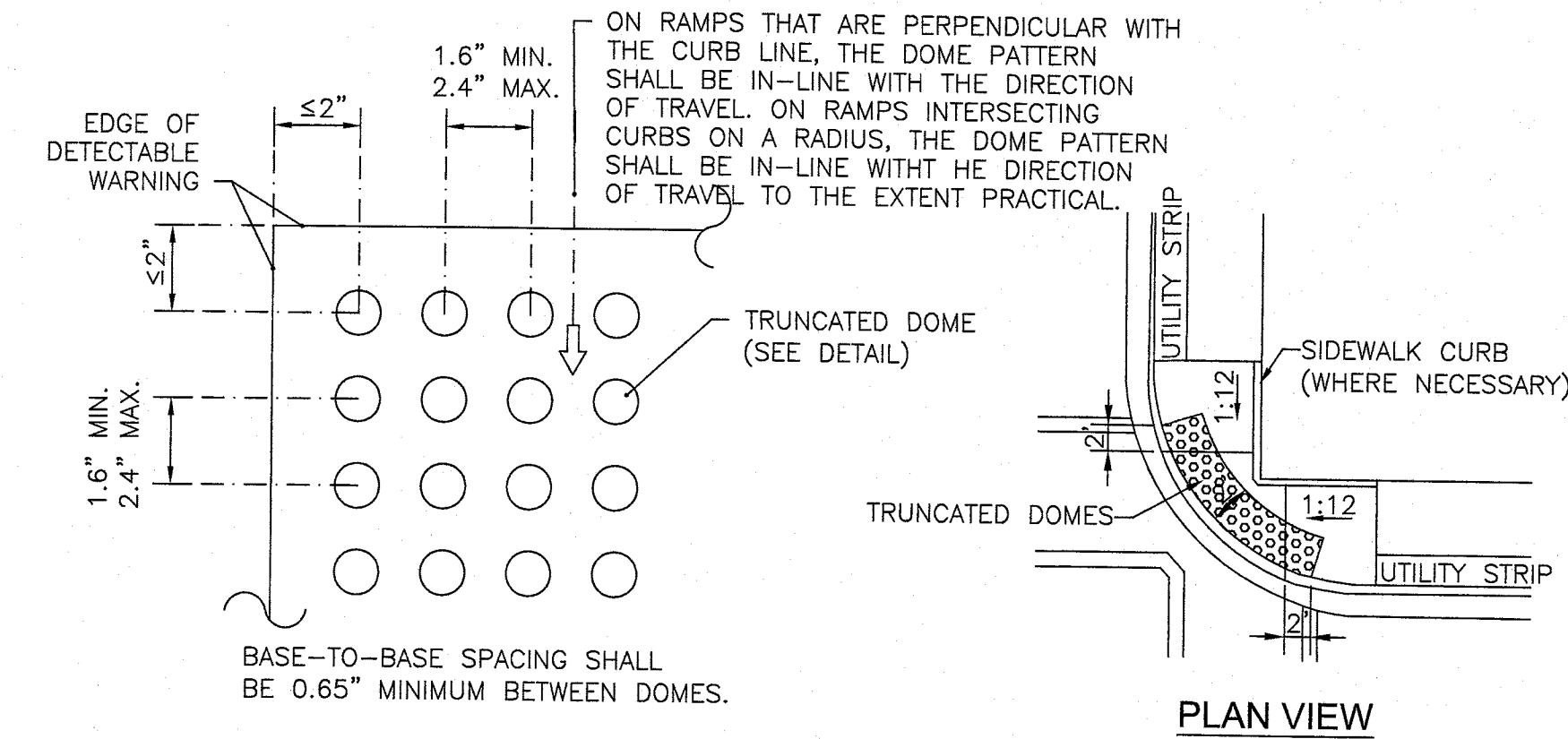
TYPICAL CONTRACTION JOINT (CJ) DETAIL
NTS



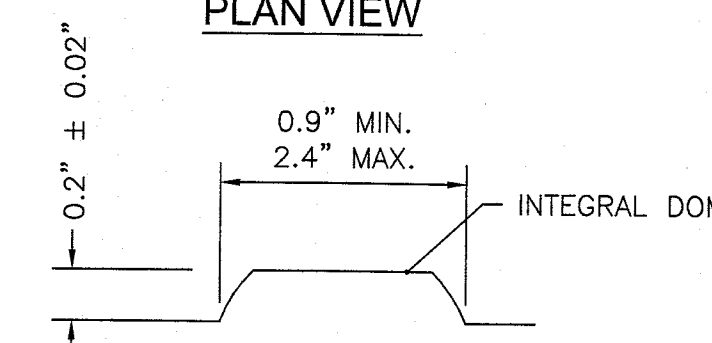
TYPICAL EXPANSION JOINT (EJ) DETAIL
NTS

GENERAL NOTES:

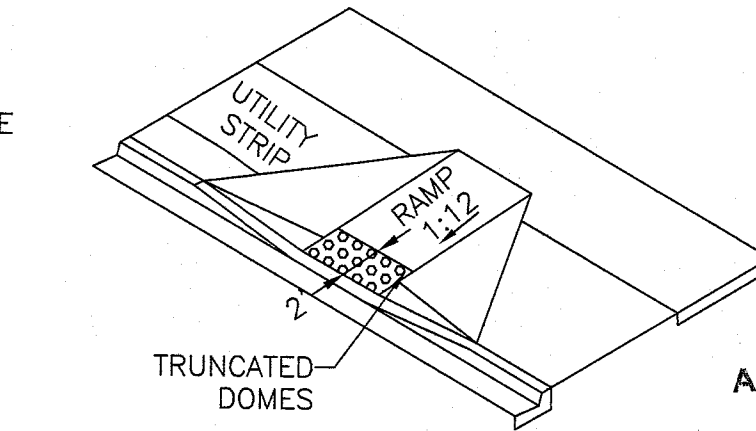
1. PUBLIC SIDEWALK CURB RAMPS SHALL BE CONSTRUCTED IN THE PUBLIC RIGHT OF WAY AT LOCATIONS THAT WILL PROVIDE CONTINUOUS UNOBSTRUCTED PEDESTRIAN CIRCULATION PATHS TO PEDESTRIAN AREAS, ELEMENTS AND FACILITIES IN THE PUBLIC RIGHT OF WAY AND TO ACCESSIBLE PEDESTRIAN ROUTES ON ADJACENT SITES. CURBED FACILITIES WITH SIDEWALKS AND THOSE WITHOUT SIDEWALKS ARE TO HAVE CURB RAMPS CONSTRUCTED AT ALL STREET INTERSECTIONS AND AT TURNOUTS THAT HAVE CURBED RETURNS. PARTIAL CURB RETURNS SHALL EXTEND TO THE LIMIT PRESCRIBED BY INDEX NO. 515 TO ACCOMMODATE CURB RAMPS. RAMPS CONSTRUCTED AT LOCATIONS WITHOUT SIDEWALKS SHALL HAVE A LANDING CONSTRUCTED AT THE TOP OF EACH RAMP, SEE SHEET 5.
2. THE LOCATION AND ORIENTATION OF CURB RAMPS SHALL BE AS SHOWN IN THE PLANS.
3. CURB RAMP RUNNING SLOPES AT UNRESTRAINED SITES SHALL NOT BE STEEPER THAN 1:12 AND ACROSS SLOPE SHALL BE 0.02 OR FLATTER. TRANSITION SLOPES SHALL NOT BE STEEPER THAN 1:12. WHEN ALTERING EXISTING PEDESTRIAN FACILITIES WHERE EXISTING SITE DEVELOPMENT PRECLUDES THE ACCOMMODATION OF A RAMP SLOPE OF 1:12, A RUNNING SLOPE BETWEEN 1:12 AND 1:10 IS PERMITTED FOR A RISE OF 6" MAXIMUM AND A RUNNING SLOPE OF BETWEEN 1:10 AND 1:8 IS PERMITTED FOR A RISE OF 3" MAXIMUM. WHERE COMPLIANCE WITH THE REQUIREMENTS FOR CROSS SLOPE CANNOT BE FULLY MET, THE MINIMUM FEASIBLE CROSS SLOPE SHALL BE PROVIDED. RAMP RUNNING SLOPE IS NOT REQUIRED TO EXCEED 8' IN LENGTH, EXCEPT AT SITES WHERE THE PLANS SPECIFY A GREATER LENGTH.
4. IF A CURB RAMP IS LOCATED WHERE PEDESTRIANS MUST WALK ACROSS THE RAMP, THEN THE WALK SHALL HAVE TRANSITION SLOPES TO THE RAMP; THE MAXIMUM SLOPE OF THE TRANSITIONS SHALL BE 1:12. RAMPS WITH CURB RETURNS MAY BE USED AT LOCATIONS WHERE OTHER IMPROVEMENTS PROVIDE GUIDANCE AWAY FROM THAT PORTION OF CURB PERPENDICULAR TO THE SIDEWALKS; IMPROVEMENTS FOR GUIDANCE ARE NOT REQUIRED AT CURB RAMPS FOR LINEAR PEDESTRIAN TRAFFIC.
5. CURB RAMP DETECTABLE WARNING SURFACES SHALL EXTEND THE FULL WIDTH OF THE RAMP AND 24" DEEP. DETECTABLE WARNING SURFACES SHALL BE CONSTRUCTED IN ACCORDANCE WITH SPECIFICATION 527. SEE SHEET 6 OF 6 FOR DETECTABLE WARNING LAYOUTS. TRANSITION SLOPES ARE NOT TO HAVE DETECTABLE WARNINGS.
6. WHERE A CURB RAMP IS CONSTRUCTED WITHIN EXISTING CURB, CURB AND GUTTER AND/OR SIDEWALK, THE EXISTING CURB OR CURB AND GUTTER SHALL BE REMOVED TO THE NEAREST JOINT BEYOND THE CURB TRANSITIONS OR TO THE EXTENT THAT NO REMAINING SECTION OF CURB OR CURB AND GUTTER IS LESS THAN 5' LONG. THE EXISTING SIDEWALK SHALL BE REMOVED TO THE NEAREST JOINT BEYOND THE TRANSITION SLOPE OR WALK AROUND OR TO THE EXTENT THAT NO REMAINING SECTION OF SIDEWALK IS LESS THAN 5' LONG. FOR DETAILS OF CONCRETE SIDEWALK SEE INDEX 310.
7. ALPHA-NUMERIC IDENTIFICATIONS ARE FOR REFERENCE (PLANS, PERMITS, ETC.)
8. PUBLIC CURB RAMPS ARE TO BE PAID FOR AS FOLLOWS: RAMPS, RECONSTRUCTED SIDEWALKS, WALK AROUND SIDEWALKS, SIDEWALK LANDINGS AND SIDEWALK CURBS ARE TO BE PAID FOR UNDER THE CONTRACT UNIT PRICE FOR SIDEWALK CONCRETE, (TYPE ---) THICK, SY. CURB TRANSITIONS AND RECONSTRUCTED CURBS ARE TO BE PAID FOR UNDER THE CONTRACT UNIT PRICE FOR THE PARENT CURB, I.E., CURB CONCRETE, (TYPE ---), LF OR CURB AND GUTTER CONCRETE, (TYPE ---), LF. WHEN A SEPARATE PAY ITEM FOR THE REMOVAL AND DISPOSAL OF EXISTING CURB, CURB AND GUTTER, AND/OR SIDEWALK IS NOT PROVIDED IN THE PLANS, THE COST OF REMOVAL AND DISPOSAL OF THESE FEATURES SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR NEW CURB, CURB AND GUTTER AND/OR SIDEWALK RESPECTIVELY.
9. ACCEPTANCE CRITERIA FOR DETECTABLE WARNINGS:
 - (A) THE RAMP DETECTABLE WARNING SURFACE SHALL BE COMPLETE AND UNIFORM IN COLOR (BRICK RED IN BREVARD COUNTY) AND TEXTURE.
 - (B) 90% OF THE INDIVIDUAL TRUNCATED DOMES MUST COMPLY WITH THE DESIGN CRITERIA.
 - (C) THERE MAY BE NO MORE THAN 4 NON-COMPLYING DOMES IN ANY ONE SQUARE FOOT OF SURFACE.
 - (D) NO TWO ADJACENT DOMES MAY BE NON-COMPLYING.
 - (E) SURFACE MAY NOT DEVIATE MORE THAN 0.10" FROM A TRUE PLANE.
10. ALL SIDEWALK SURFACES, RAMP SURFACES, AND LANDINGS WITH A CROSS SLOPE SHOWN IN THIS INDEX TO BE 0.02 MAXIMUM. ALL RAMP SURFACES AND RAMP TRANSITION SLOPES WITH A SLOPE SHOWN IN THIS INDEX TO BE 1:12 SHALL BE 1:12 MAXIMUM.



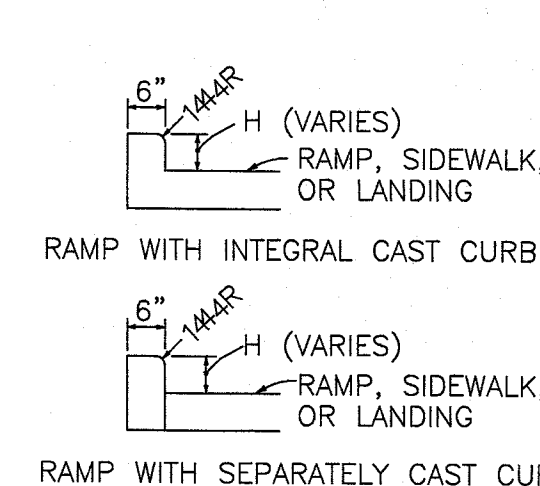
PLAN VIEW



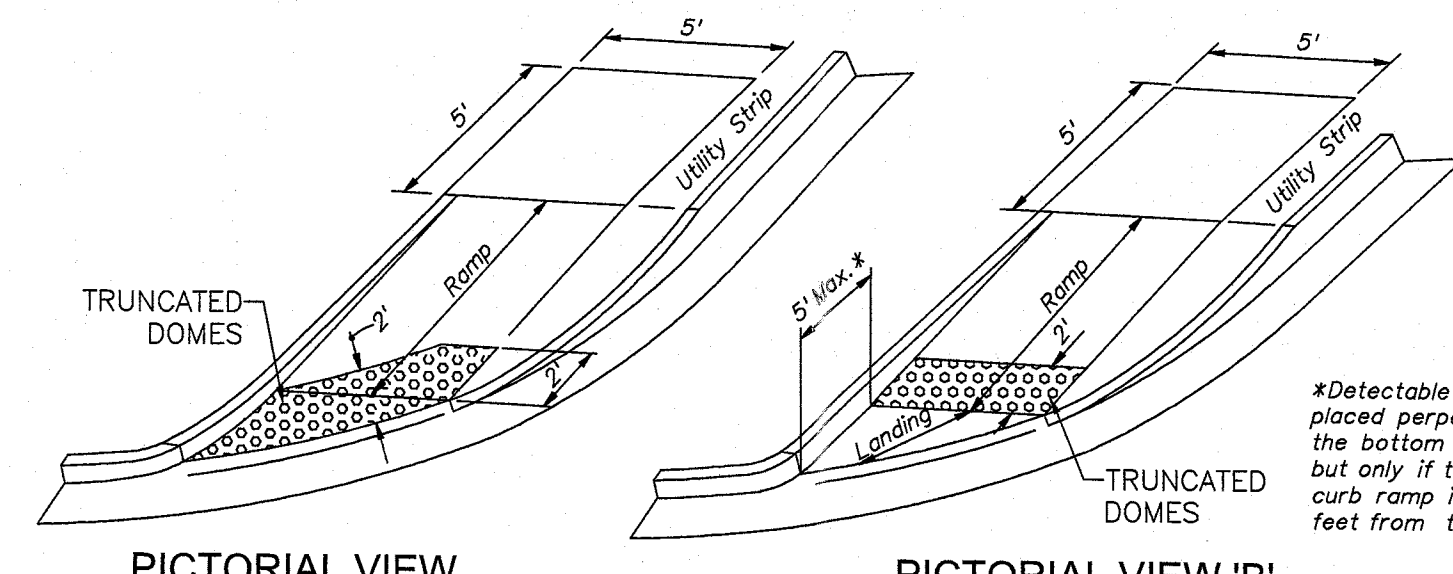
TRUNCATED DOME



PICTORIAL VIEW



RAMP CURB OPTIONS



PICTORIAL VIEW

PICTORIAL VIEW 'B'

NOTE: SEE PICTORIAL VIEW 'C' ON INDEX NO. 304 SHEET 6 OF 6 FOR ANOTHER OPTION.

BRENTWOOD LAKES SOUTH

D.R. HORTON
MALABAR ROAD PALM BAY, FLORIDA

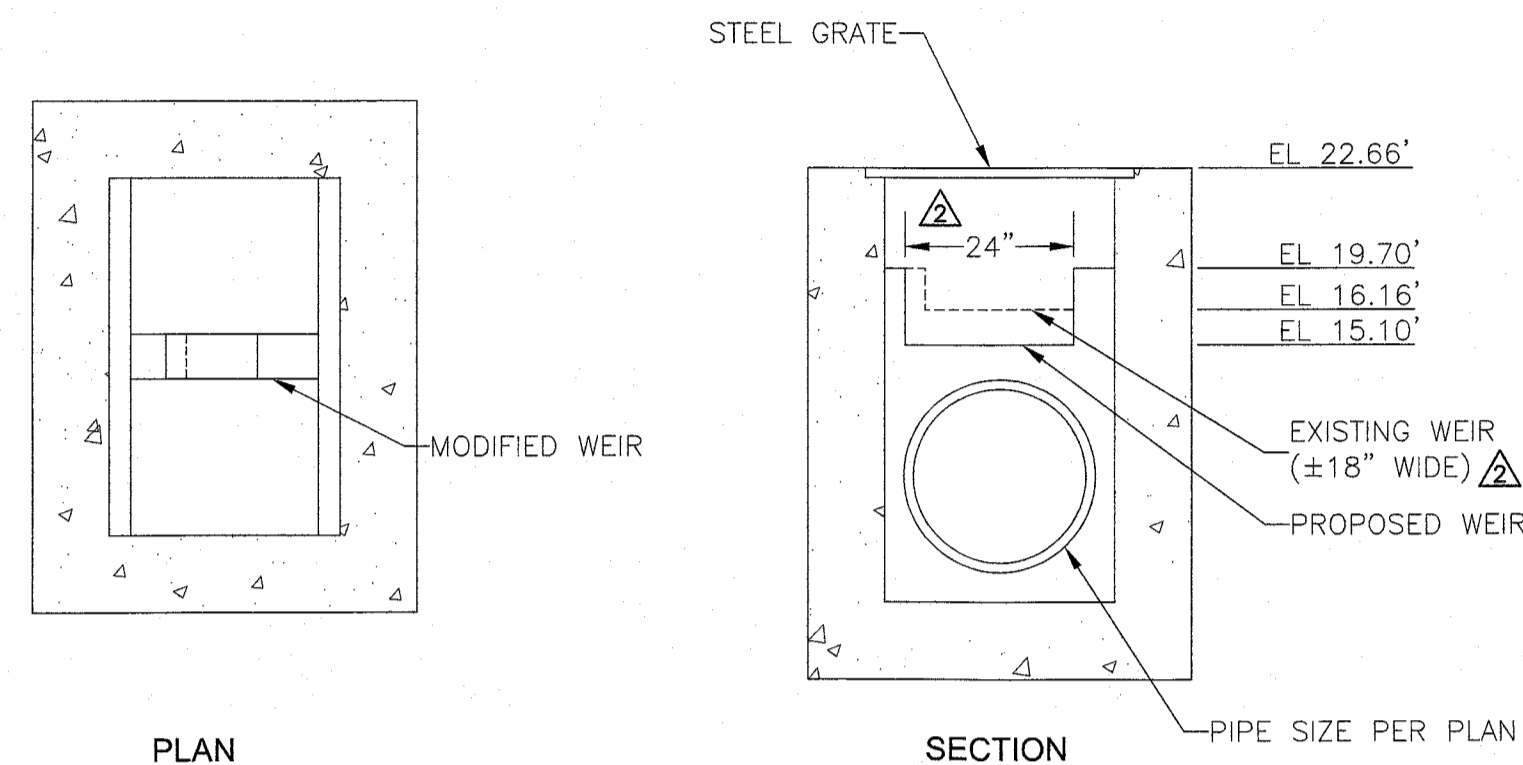
DRAWING TITLE
DETAILS

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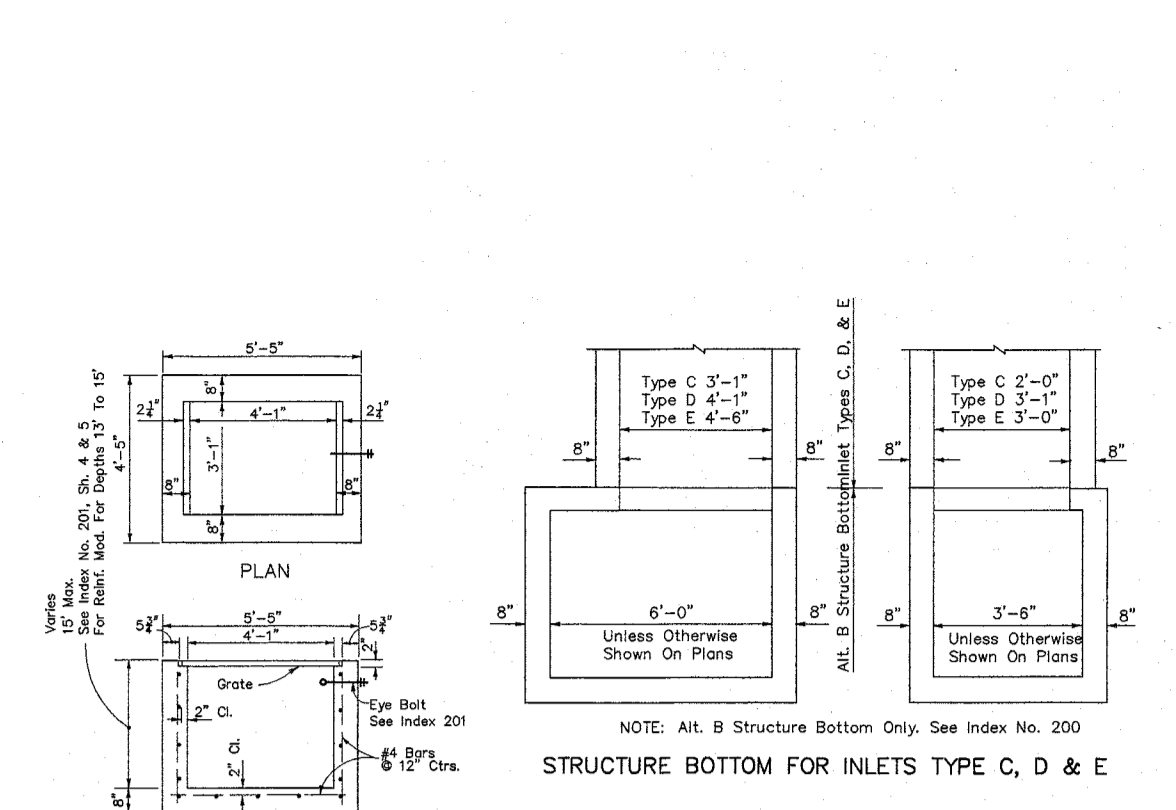
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DATE: 4-26-16
SCALE: 1"=60'
PROJ. NO.: 160163
DESIGNED BY: JRT
DRAWN BY: SMB
CHECKED BY: JTW
DRAWING NO.

C-14
J-319



NOTE: DATUM IS NAVD 88
MODIFIED CONTROL STRUCTURE DETAIL

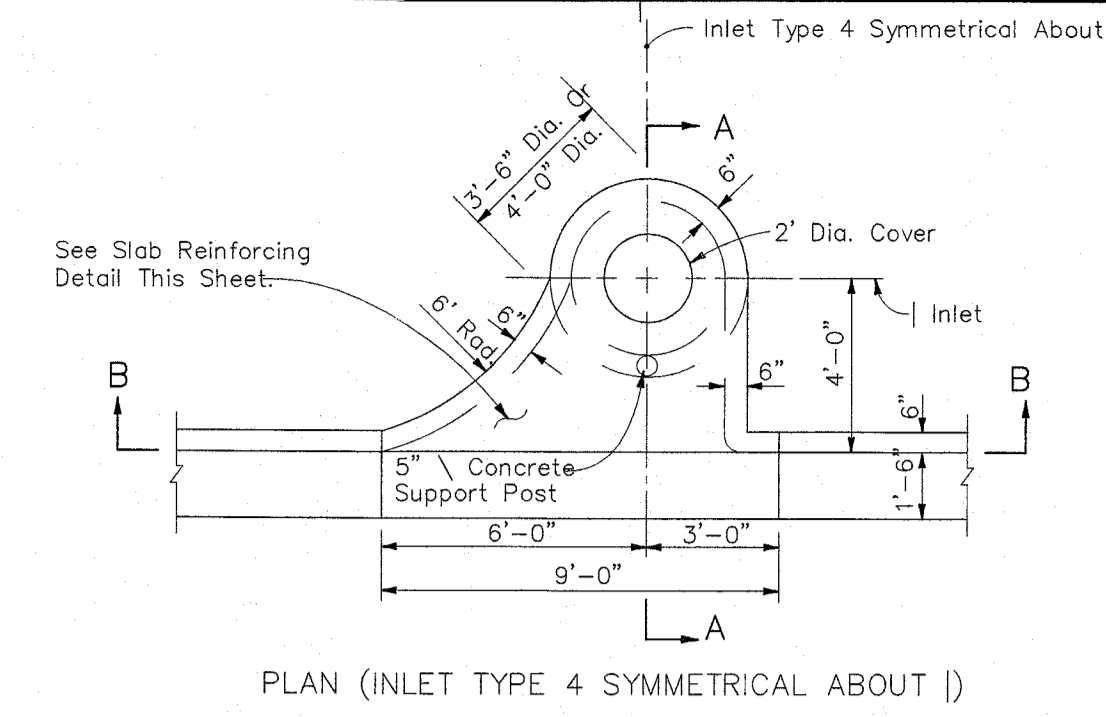


STRUCTURE BOTTOM FOR INLETS TYPE C, D & E

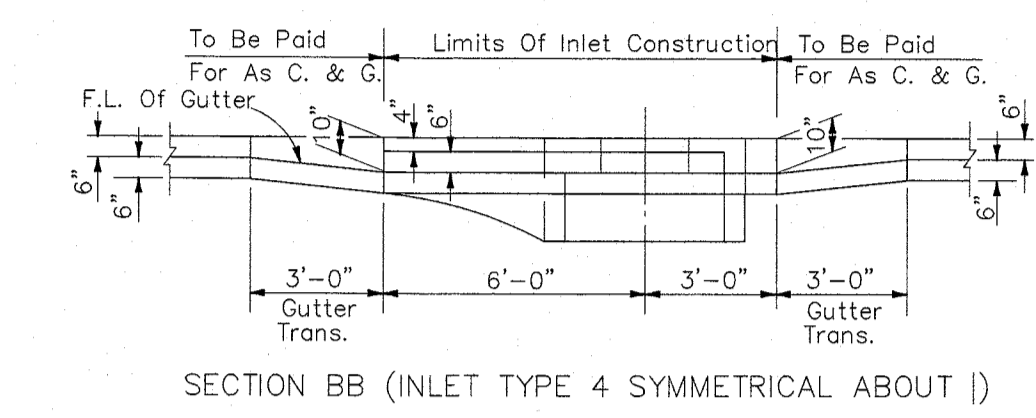
GENERAL NOTES

1. These inlets are suitable for bicycle and pedestrian areas and are to be used in ditches, medians and other areas subject to infrequent traffic loadings but are not to be placed in areas subject to heavy traffic loadings.
2. Inlets subject to minimal traffic should be constructed without slots. Where a slot is a system inlet should be constructed with slots. Slotted inlets located with roadway curbs and/or in areas accessible to pedestrians shall have traversable slots. The traversable slot modification is not available to inlet Type H. Slots may be constructed at either or both ends or shown on plans.
3. Steel grates are to be used on all inlets where bicycle traffic is anticipated. Steel grates are to be used on all inlets with traversable slots. Either cast iron or steel grates may be used on inlets without slots where bicycle traffic is not anticipated. Either cast iron or steel grates may be used on all inlets with non-traversable slots. Subject to the selection described above, when Alternative G grates is specified in the plans, either the steel grate, not-dipped galvanized steel fabrication, or the cast iron grate may be used, unless the plans stipulate the particular type.
4. Recommended maximum pipe sizes shown are for concrete pipe. Pipe sizes larger than those recommended must be checked for fit.
5. All exposed corners and edges of concrete are to be chamfered.
6. Treatment to be used on inlets without slots and inlets with non-traversable slots only when called for in the plans, but required on all traversable slot inlets. Call to be included in contract unit price for inlets. Concrete areas on the interior only.
7. Traversable slots constructed in existing inlets shall be paid for in inlet portion. One shall include the cost for slot supports, string and any required reinforcement grates.
8. Soding to be used on all inlets not located in paved areas and paid for under contract unit price for Soding ST.
9. For supplementary details see index No. 201.

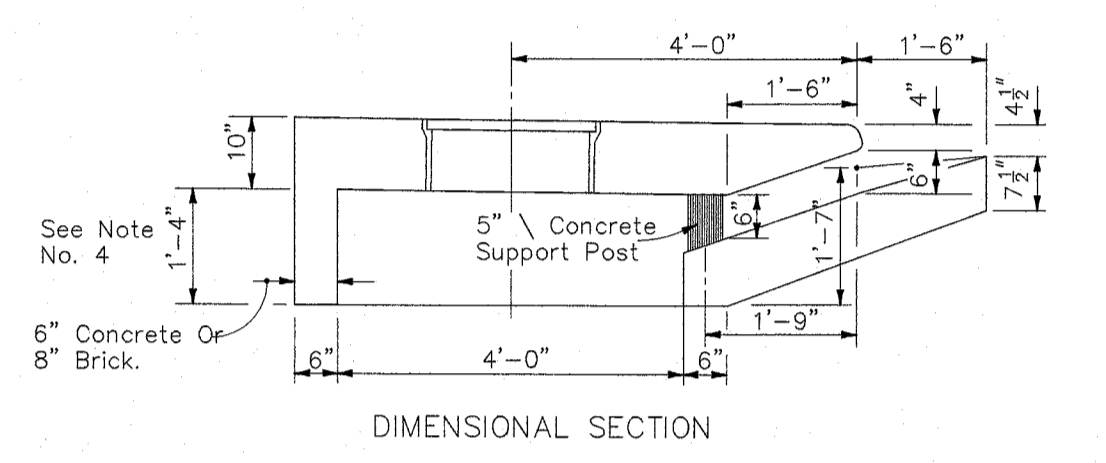
TYPICAL FDOT TYPE 'D' INLET DETAIL



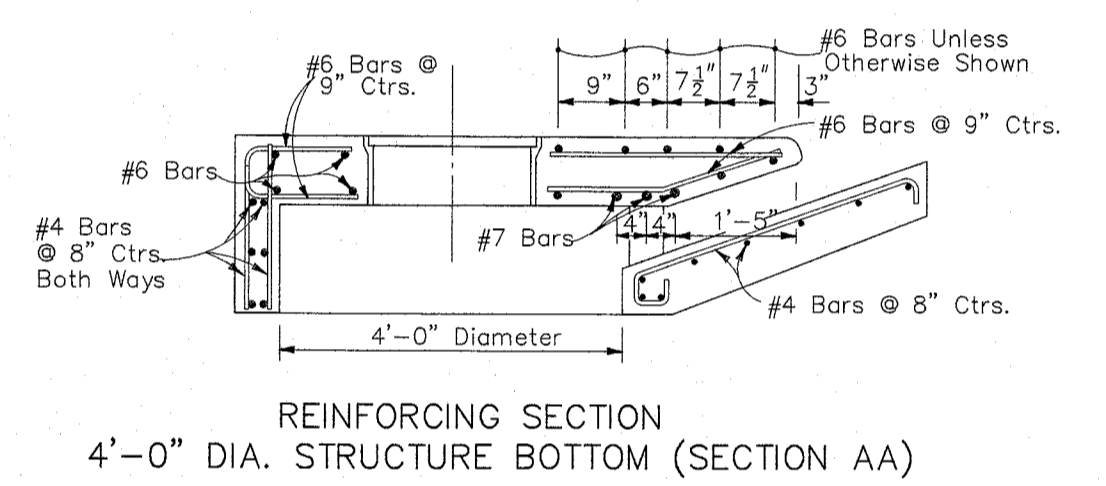
PLAN (INLET TYPE 4 SYMMETRICAL ABOUT I)



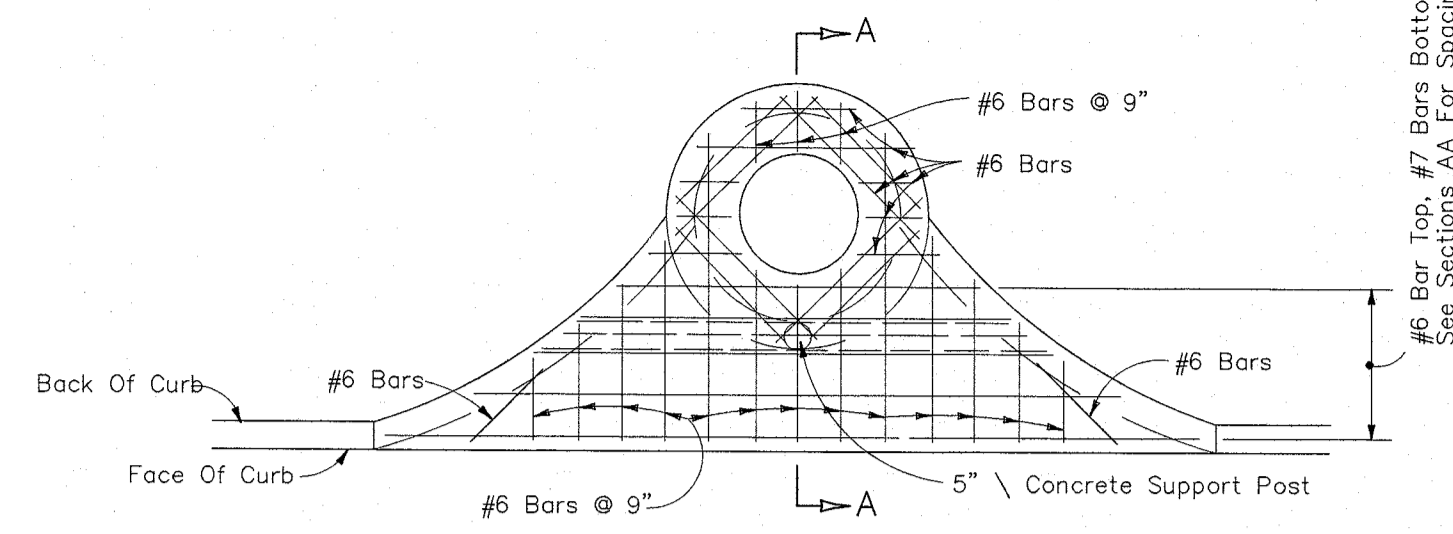
SECTION BB (INLET TYPE 4 SYMMETRICAL ABOUT I)



INLETS TYPES 3 AND 4

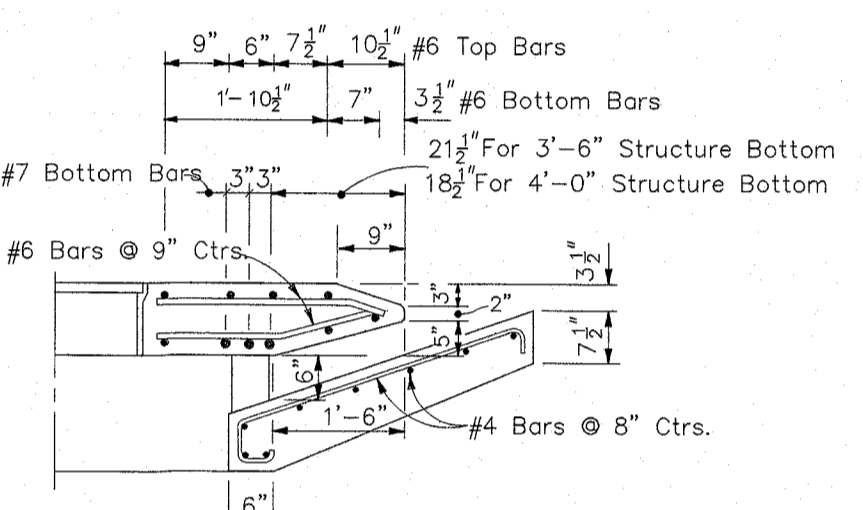


REINFORCING SECTION
 4'-0" DIA. STRUCTURE BOTTOM (SECTION AA)

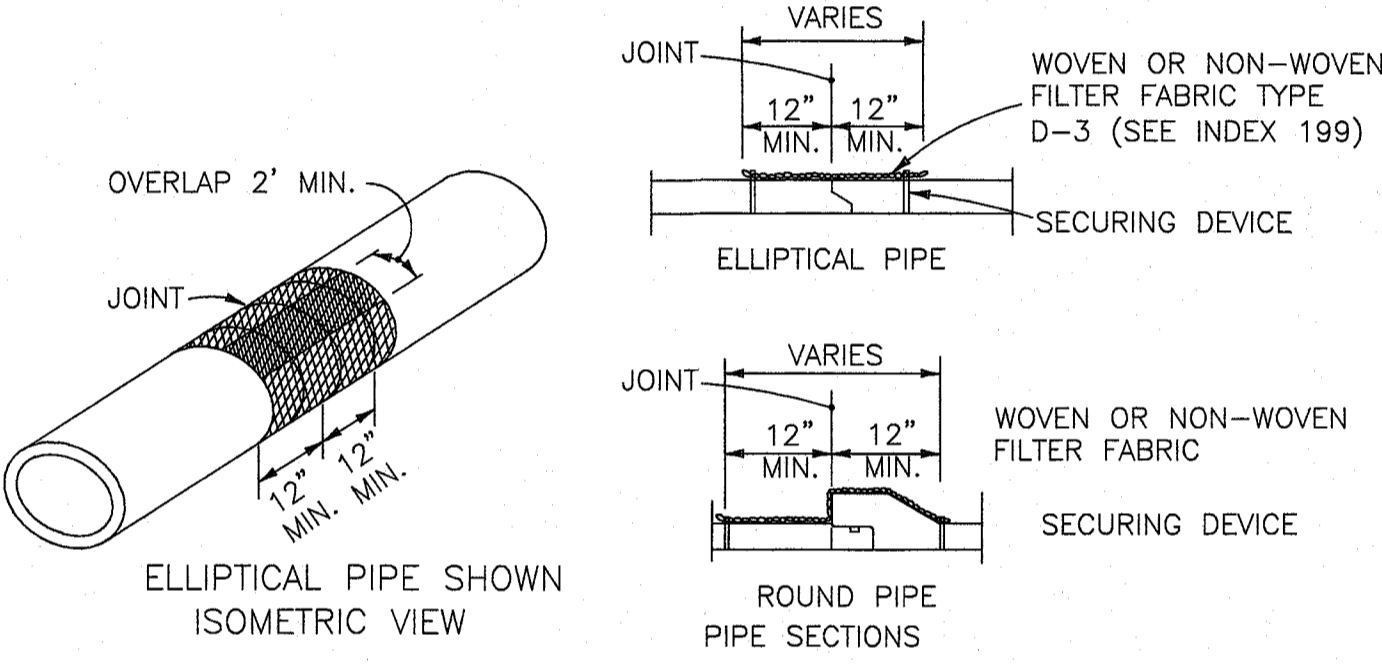


INLETS TYPES 2 AND 4
 SLAB REINFORCING

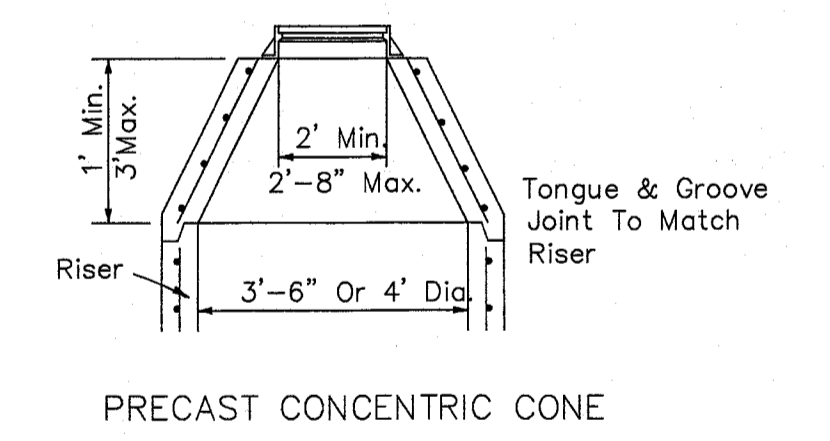
- GENERAL NOTES**
1. The finished grade and slope of the inlet tops are to conform with the finished cross slope and grade of the proposed sidewalk and/or border.
 2. When inlets are to be constructed on a curve, refer to the plans to determine the radius and, where necessary, modify the inlet details accordingly. Bend steel when necessary.
 3. All steel in inlet top shall have a minimum cover unless otherwise shown. Inlet tops shall be either cast-in-place or precast concrete.
 4. The rear wall portion of inlet tops Types 1, 2, 3 & 4 may be constructed with brick. Dowels to top slab required.
 5. For supplemental details see index No. 201.
 6. Only round concrete support post will be acceptable.
 7. These inlets are to be used with Curb and Gutter Types E and F. Locate outside of pedestrian crosswalk where practical.
 8. For structure bottoms see index No. 200.
 9. Inlet to be paid for under the contract unit price for Inlets (Curb) (Type), Each.



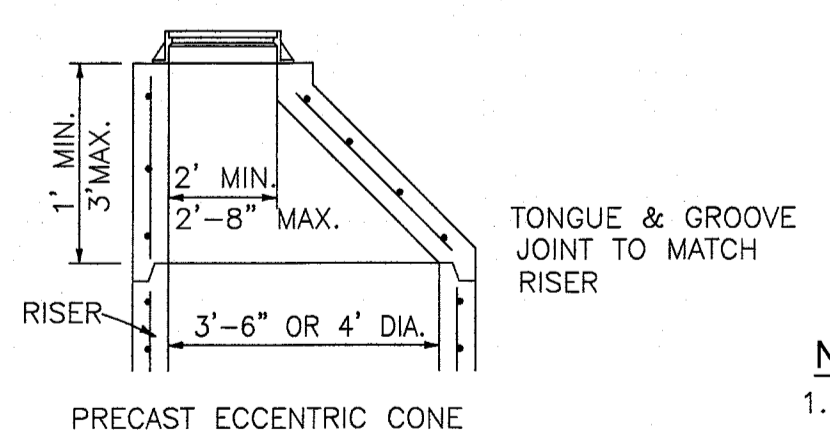
DIMENSION & REINFORCING HALF SECTION
 TYPES A & E CURB (HALF SECTION AA)
 (TYPE E GUTTER SHOWN)



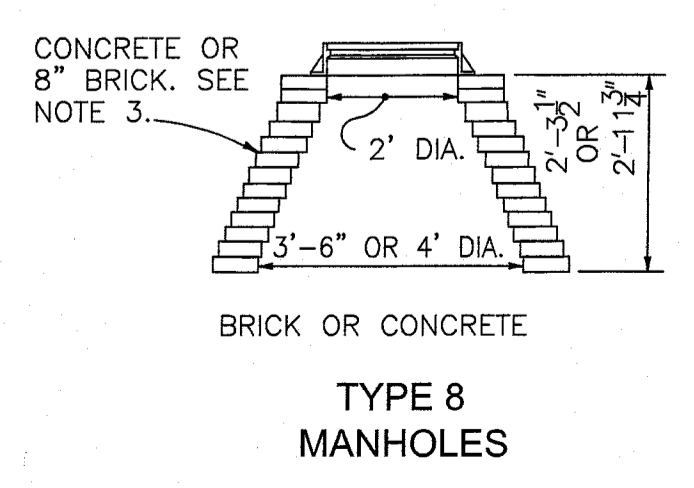
TYPICAL FILTER FABRIC JACKET DETAIL



PRECAST CONCENTRIC CONE



PRECAST ECCENTRIC CONE

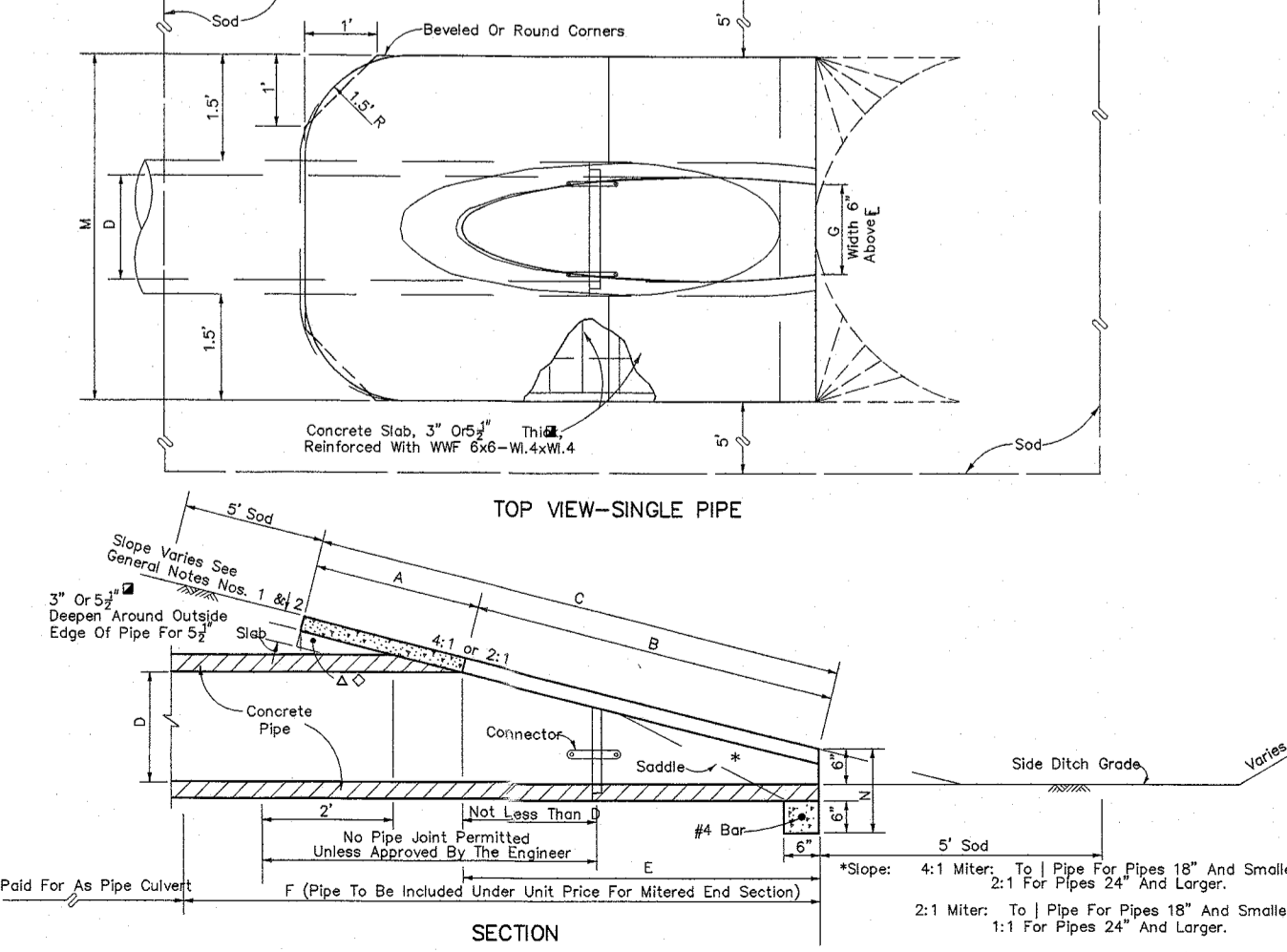


TYPE 8
 MANHOLES

TYPICAL J-8 MANHOLE DETAIL

- NOTES (TOPS)**
1. MANHOLE TOP TYPE 7 SLABS SHALL BE OF CLASS ~ CONCRETE. CONCRETE AS SPECIFIED IN ASTM C-478 MAY BE USED FOR PRECAST UNITS; SEE GENERAL NOTE NO. 3.
 2. MANHOLE TOP TYPE 7 SLABS MAY BE OF CAST-IN-PLACE OR PRECAST CONSTRUCTION. THE OPTIONAL KEY IS FOR PRECAST TOPS AND IN LIEU OF DOWELS, FRAME AND SLAB OPENINGS ARE TO BE OMITTED WHEN TOP IS USED OVER A JUNCTION BOX. FRAMES CAN BE ADJUSTED WITH FROM ONE TO SIX COURSES OF BRICK.
 3. MANHOLE TOP TYPE 8 MAY BE OF CAST-IN-PLACE OR PRECAST CONCRETE CONSTRUCTION OR BRICK CONSTRUCTION. FOR CONCRETE CONSTRUCTION, THE CONCRETE AND STEEL REINFORCEMENT SHALL BE THE SAME AS THE SUPPORTING WALL UNIT. AN ECCENTRIC CONE MAY BE USED.
 4. MANHOLE TOPS SHALL BE SECURED TO STRUCTURES BY OPTIONAL CONSTRUCTION JOINTS AS SHOWN ON SHEET 3 OF 6.

D	X	A	B	C	E	F	G	DIMENSIONS AND QUANTITIES				SODDING (SQ. YDS.)			
								Single	Double	Triple	Quad	Single	Double	Triple	Quad
12"	12"	12"	12"	12"	12"	12"	12"	1.20	2.40	3.60	4.80	1.20	2.40	3.60	4.80
18"	18"	18"	18"	18"	18"	18"	18"	1.80	3.60	5.40	7.20	1.80	3.60	5.40	7.20
24"	24"	24"	24"	24"	24"	24"	24"	2.40	4.80	7.20	9.60	2.40	4.80	7.20	9.60
30"	30"	30"	30"	30"	30"	30"	30"	3.00	6.00	9.00	12.00	3.00	6.00	9.00	12.00



TYPICAL FDOT MITERED END SECTION DETAIL

- GENERAL NOTES**
1. Mitred end sections for pipe sizes 15", 18" and 24" round or equivalent pipe arch or elliptical pipe are permitted within the clear zone. When the slope intersection permits, the mitred end section may be located with the culvert opening as close as 8' beyond the outside edge of the shoulder.
 2. Slope and ditch transitions shall be used when the normal roadway slope must be flattened to place and section outside clear zone. See detail left.
 3. The reinforced concrete slab shall be constructed for all sizes of cross drain pipe and cast in place with Class ~ concrete. Slab shall be 2" thick unless 3" thickness called for in plans.
 4. Concrete pipe used in the assembly of mitred end sections shall be selective lengths to avoid excessive connections.
 5. Corrugated metal pipe galvanizing that is damaged during beveling and perforating for mitred end section shall be repaired.
 6. That portion of corrugated metal pipe in direct contact with the concrete slab shall be bituminous coated prior to placing of the concrete.
 7. Unless otherwise designated in the plans, concrete pipe mitred end sections may be used with any type of cross drain pipe; corrugated aluminum mitred end sections may be used with any type of cross drain pipe except ductum pipe, and, corrugated aluminum mitred end sections may be used with any type of cross drain pipe except steel pipe. When bituminous coated metal pipe is specified for cross drain pipe, mitred end sections shall be constructed with the pipe or concrete pipe.
 8. When the mitred end section pipe is dissimilar to the cross drain pipe, a concrete jacket shall be constructed in accordance with Standard Index 280.
 9. When selecting multiple cross drain pipes are spaced other than the dimensions shown in this detail, or have non-parallel axes, or have non-uniform sections, the mitred end sections will be constructed either separately as single pipe mitred end sections, or collectively as multiple pipe sections as directed by the Engineer; however, mitred end sections will be parallel for each based on each independent pipe end.
 10. The cost of all pipe(s), fasteners, reinforcing, connectors, anchors, concrete, sealants, jackets, and coupling bands shall be included in the cost for the mitred end section. Soding shall be paid for separately under the contract unit price of Soding, ST.
 11. Mitred end sections shall be paid for under the contract unit price for Mitred End Section (CE). Each, based on each independent pipe end. Mitred end sections use for detour/reinforcement units are to be paid for under the contract unit price for Mitred End Section, (BO). Each.

Approved For Construction

AUG 2 6 2016
 City of Palm Bay

REVISION

REV#	DATE	DESCRIPTION
1	6/14/16	PALM BAY AND SURVIMD COMMENTS
2	7/01/16	SURVIMD COMMENTS

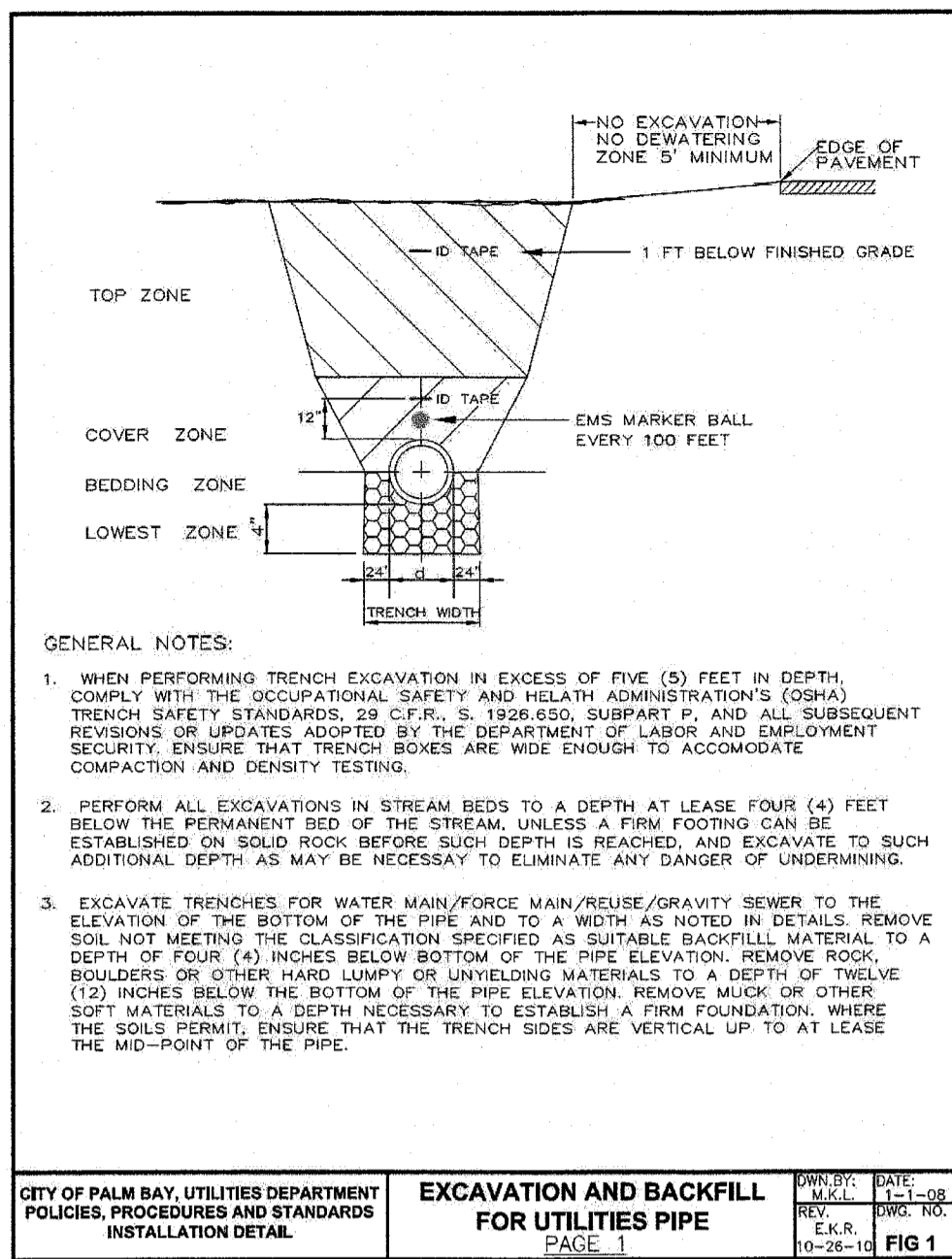
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 DRAWING TITLE
DETAILS

PROFESSIONAL ENGINEER
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 No. 55405
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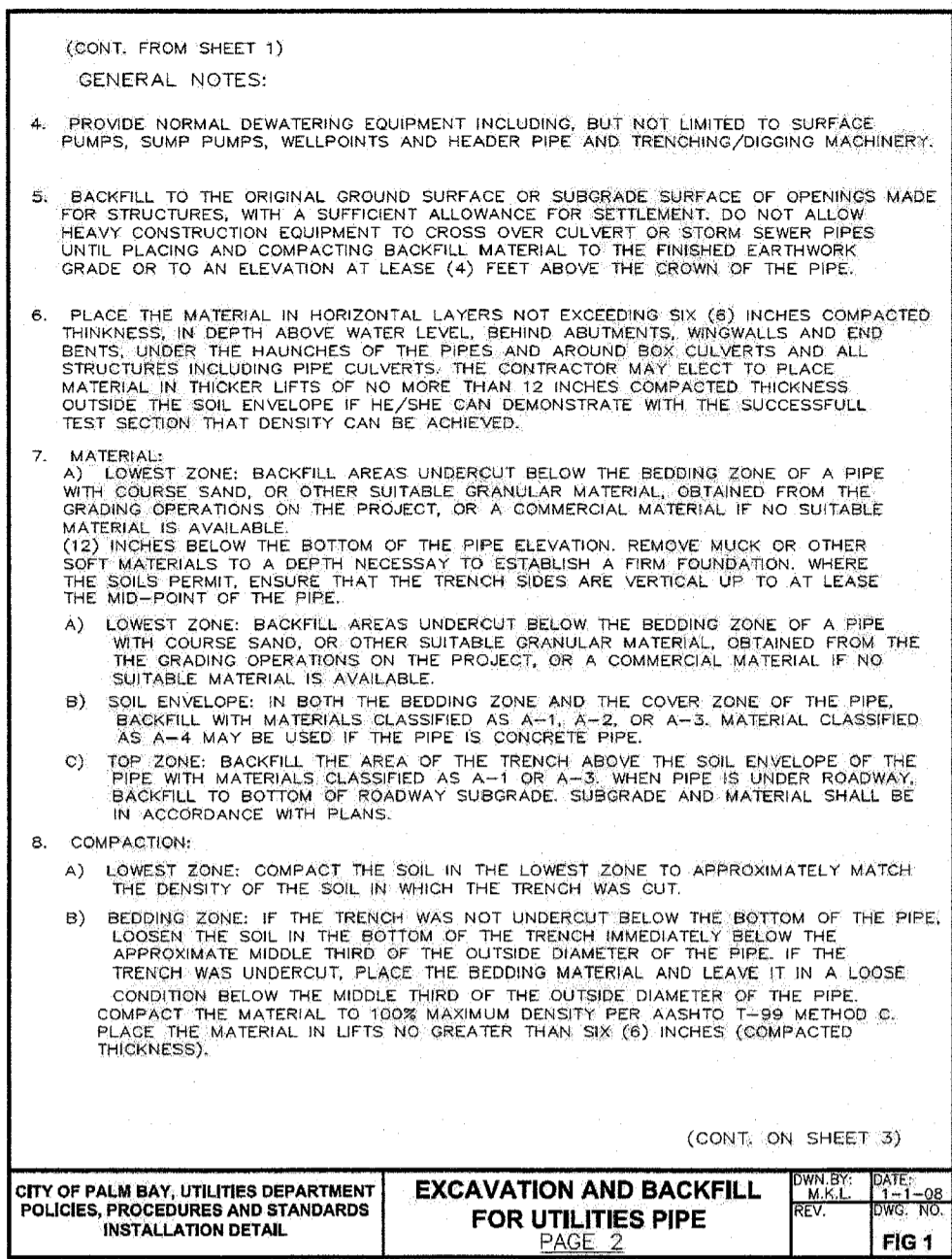
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 CHECKED BY: JTW
 DRAWING NO.: C-15



CITY OF PALM BAY, UTILITIES DEPARTMENT
POLICIES, PROCEDURES AND STANDARDS
INSTALLATION DETAIL

EXCAVATION AND BACKFILL FOR UTILITIES PIPE
PAGE 1

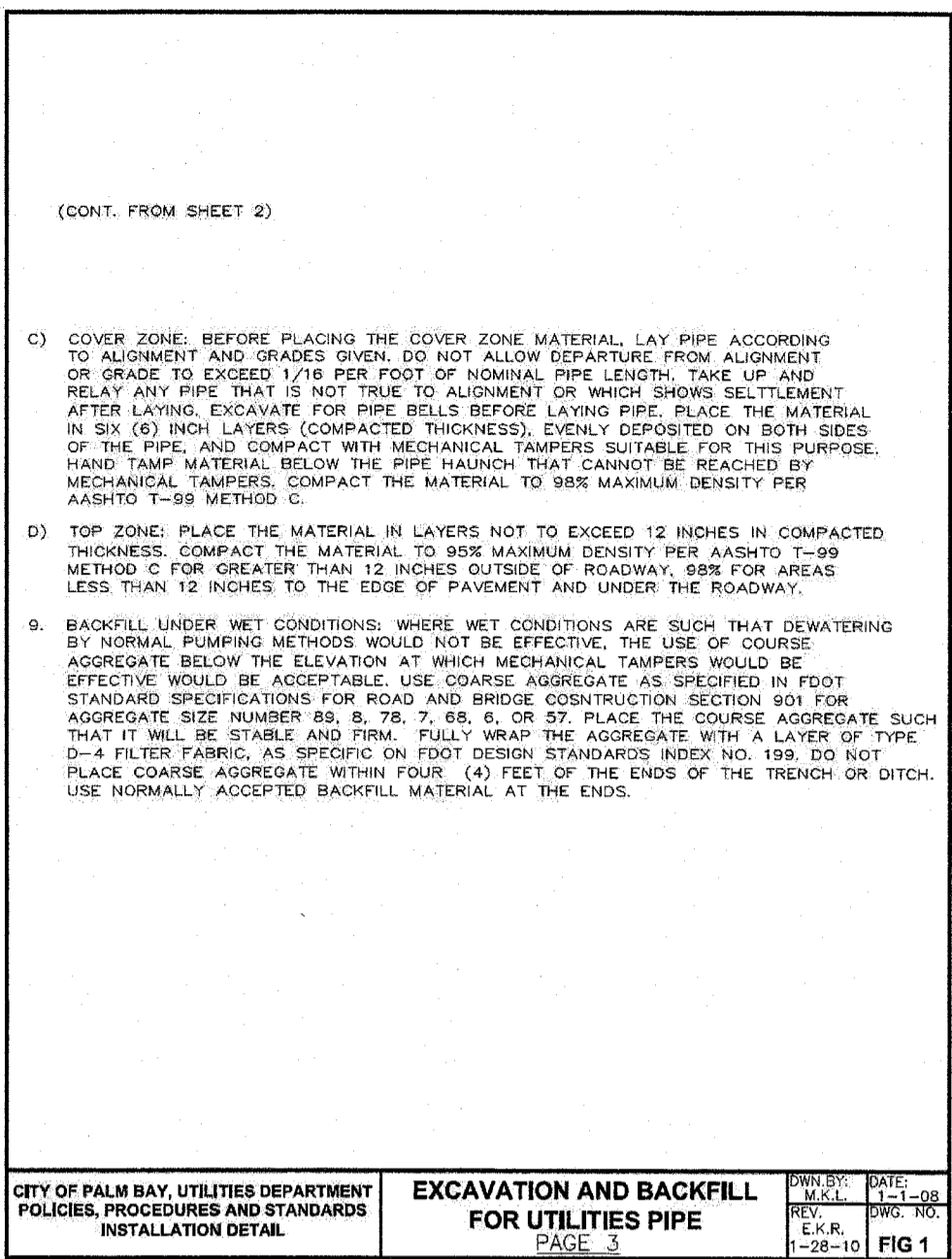
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FIG 11



CITY OF PALM BAY, UTILITIES DEPARTMENT
POLICIES, PROCEDURES AND STANDARDS
INSTALLATION DETAIL

EXCAVATION AND BACKFILL FOR UTILITIES PIPE
PAGE 2

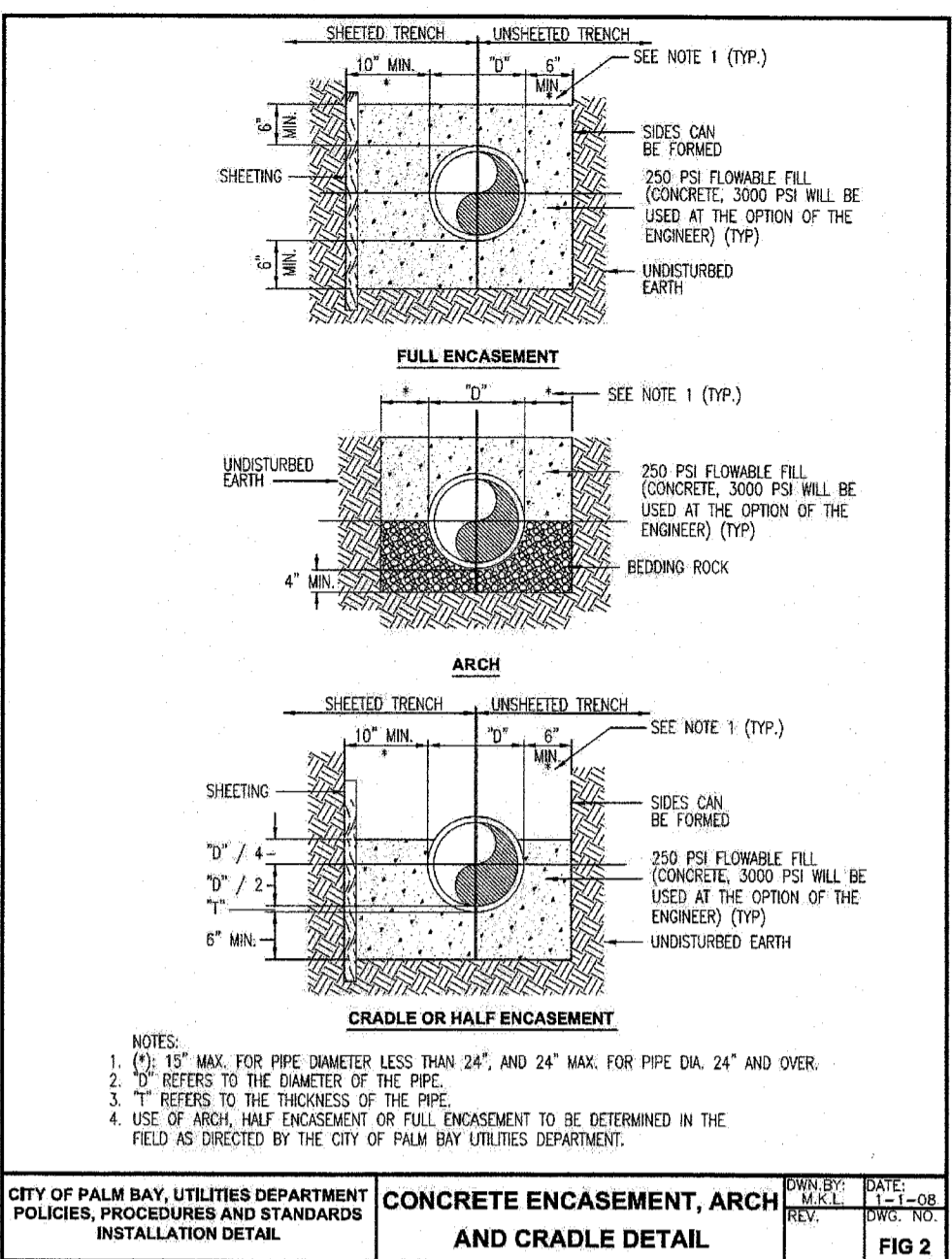
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FIG 11



CITY OF PALM BAY, UTILITIES DEPARTMENT
POLICIES, PROCEDURES AND STANDARDS
INSTALLATION DETAIL

EXCAVATION AND BACKFILL FOR UTILITIES PIPE
PAGE 3

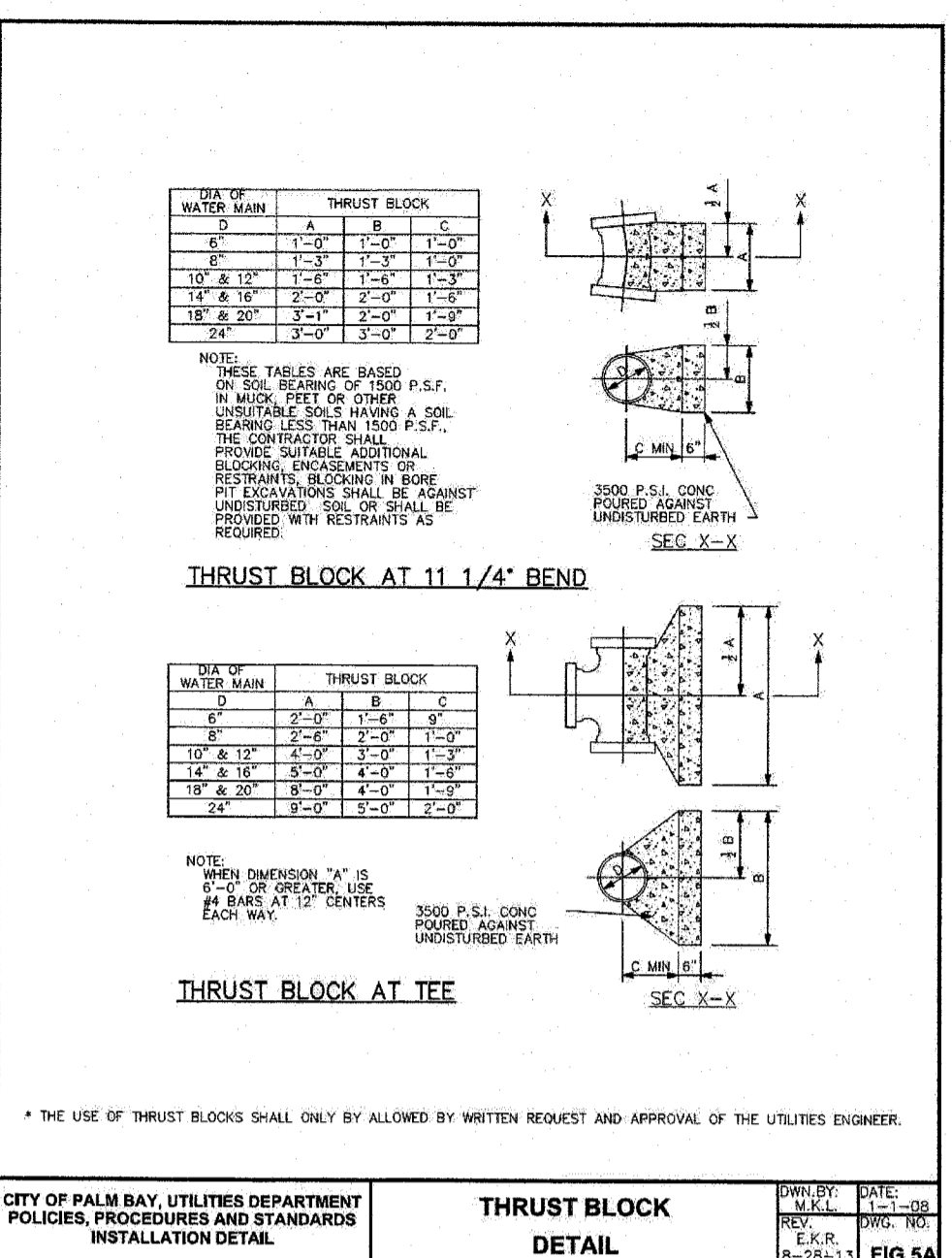
DATE: 1-11-08
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FIG 11



CITY OF PALM BAY, UTILITIES DEPARTMENT
POLICIES, PROCEDURES AND STANDARDS
INSTALLATION DETAIL

CONCRETE ENCASUREMENT, ARCH AND CRADLE DETAIL

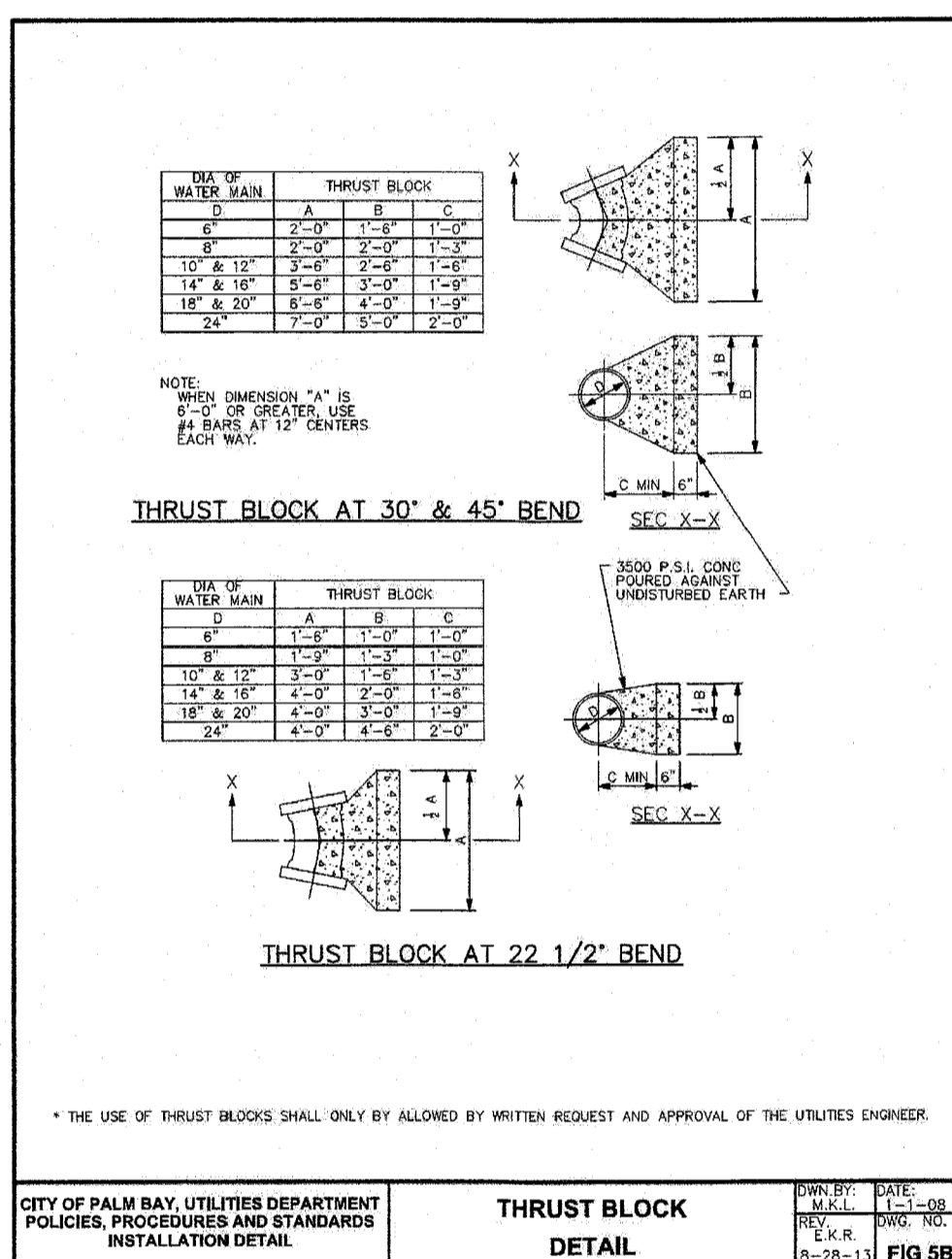
DATE: 1-11-08
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FIG 12



CITY OF PALM BAY, UTILITIES DEPARTMENT
POLICIES, PROCEDURES AND STANDARDS
INSTALLATION DETAIL

THRUST BLOCK

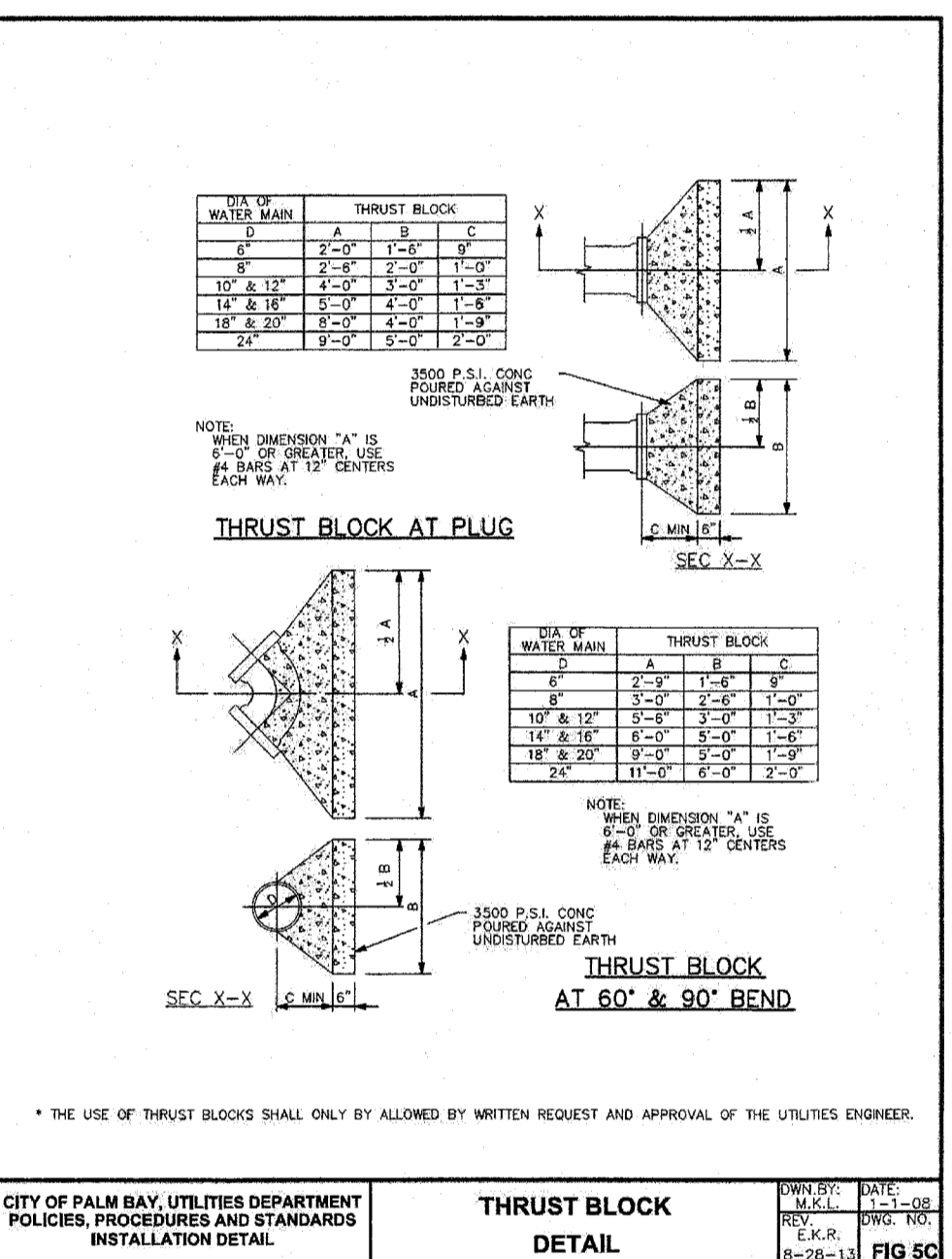
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FIG 10A



CITY OF PALM BAY, UTILITIES DEPARTMENT
POLICIES, PROCEDURES AND STANDARDS
INSTALLATION DETAIL

THRUST BLOCK

DATE: 1-11-08
REV. NO.: 10-28-13
FIG 10B



CITY OF PALM BAY, UTILITIES DEPARTMENT
POLICIES, PROCEDURES AND STANDARDS
INSTALLATION DETAIL

THRUST BLOCK

DATE: 1-11-08
REV. NO.: 10-28-13
FIG 10C

THRUST RESTRAINTS FOR DUCTILE IRON PIPE
MINIMUM LENGTH (FT) TO BE RESTRAINED ON EACH SIDE OF FITTING(S)

FITTINGS	PIPE SIZE					
	4"	6"	8"	10"	12"	16"
90° BEND	43(24)	51(28)	72(37)	88(47)	110(57)	140(73)
45° BEND	18(20)	20(21)	23(24)	28(29)	34(35)	43(44)
22.5° BEND	8(11)	12(15)	16(19)	19(23)	22(27)	28(34)
TEE BRANCH	43(24)	51(28)	72(37)	88(47)	110(57)	140(73)
DEAD END	67(80)	85(100)	120(140)	149(172)	189(220)	227(266)

THRUST RESTRAINTS FOR PVC AND PE PIPE
MINIMUM LENGTH (FT) TO BE RESTRAINED ON EACH SIDE OF FITTING(S)

FITTINGS	PIPE SIZE					
	4"	6"	8"	10"	12"	16"
90° BEND	58	82	107	128	149	189
45° BEND	24	34	45	53	62	79
22.5° BEND	12	16	22	26	30	38
TEE BRANCH	58	82	107	128	149	189
DEAD END	90	128	166	201	235	298

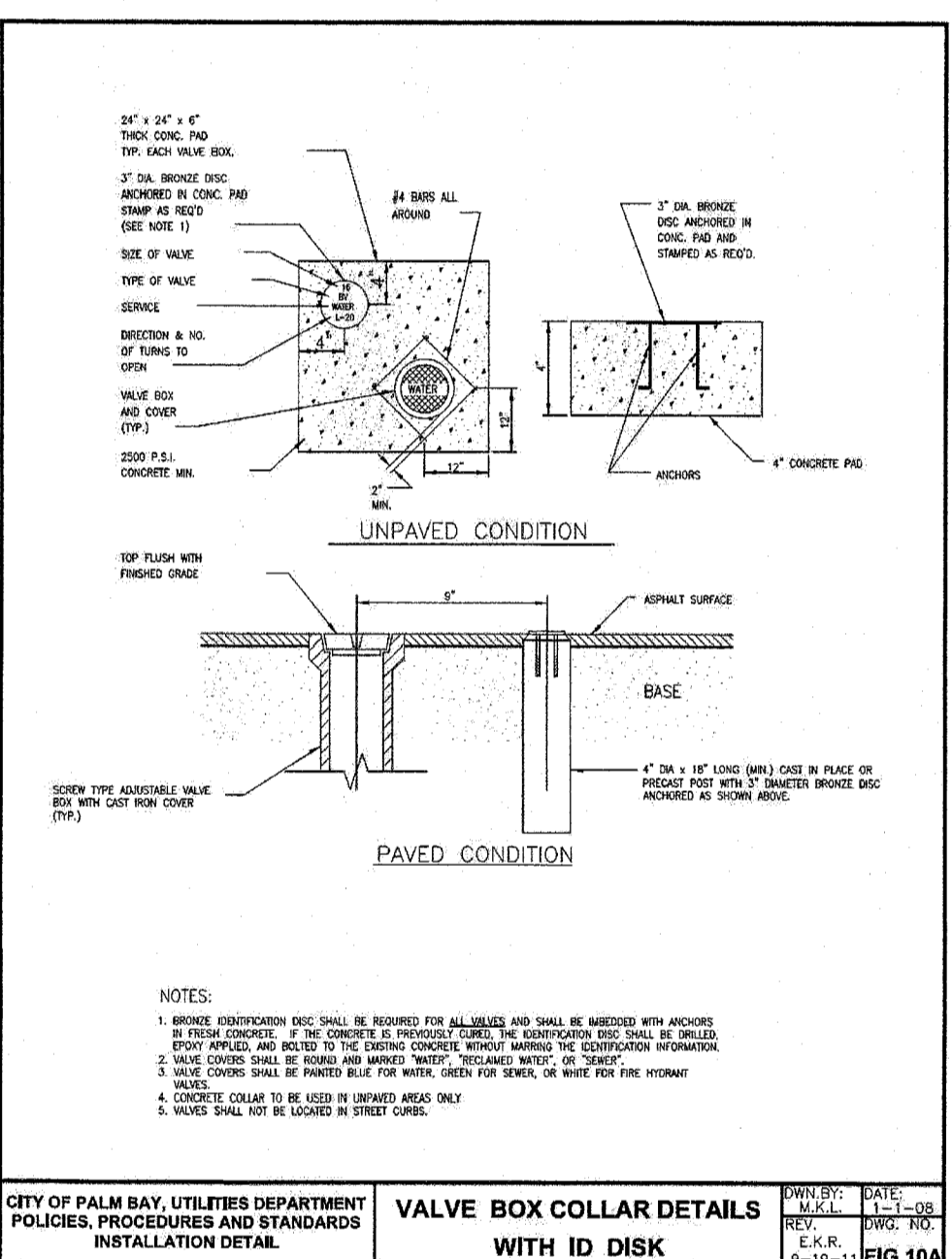
NOTES:

- FITTINGS SHALL BE RESTRAINED JOINTS UNLESS OTHERWISE INDICATED.
- INSTALL FULL LENGTH JOINTS WITH TOTAL LENGTH EQUAL TO OR GREATER THAN SHOWN IN THE TABLE.
- WHERE TWO OR MORE FITTINGS ARE TOGETHER, USE FITTING WHICH YIELDS GREATEST LENGTH OF RESTRAINED PIPE.
- IN LINE VALUES AND THROUGH RUNS OF TEES OUTSIDE LIMITS OF RESTRAINED JOINTS FROM OTHER FITTINGS NEED NOT BE RESTRAINED UNLESS OTHERWISE INDICATED.
- LENGTHS SHOWN IN THE TABLE WILL HAVE BEEN CALCULATED IN ACCORDANCE WITH THE PROCEDURE OUTLINED IN "THRUST RESTRAINT DESIGN FOR DUCTILE IRON PIPE" AS PUBLISHED BY CIPRA, WITH THE FOLLOWING ASSUMPTIONS:
 - WORKING PRESSURE = 7.5 P.S.I.
 - SOIL DESIGNATION = 2000 P.S.F.
 - LOADING CONDITION = TYPE 2
 - SAFETY FACTOR = 1.5
- FOR PIPE ENCASED IN POLYETHYLENE, INCREASE THE GIVEN VALUES BY A FACTOR OF 1.2. OR USE VALUES IN PARENTHESES.

CITY OF PALM BAY, UTILITIES DEPARTMENT
POLICIES, PROCEDURES AND STANDARDS
INSTALLATION DETAIL

RESTRAINED JOINT

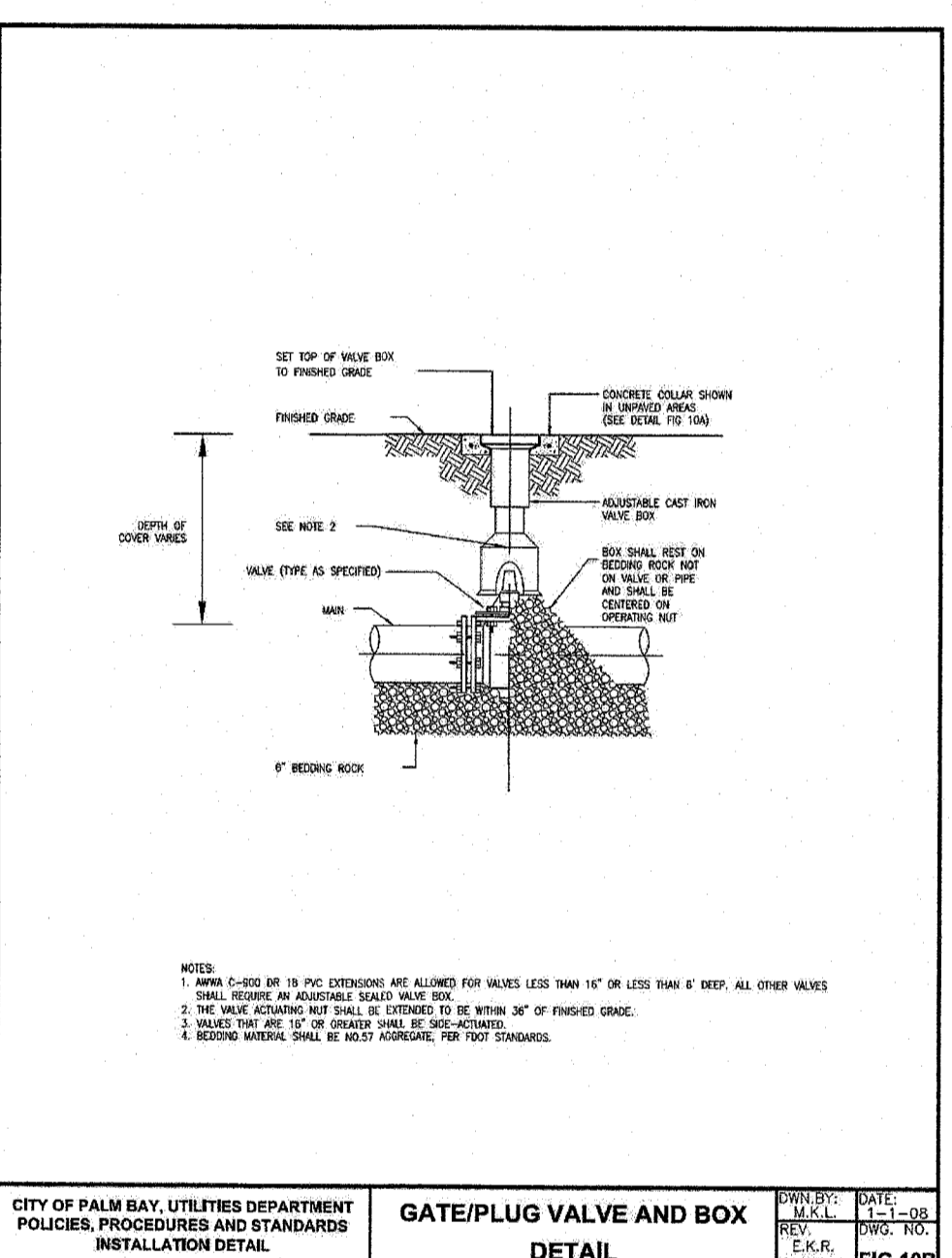
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FIG 6



CITY OF PALM BAY, UTILITIES DEPARTMENT
POLICIES, PROCEDURES AND STANDARDS
INSTALLATION DETAIL

VALVE BOX COLLAR DETAILS WITH ID DISK

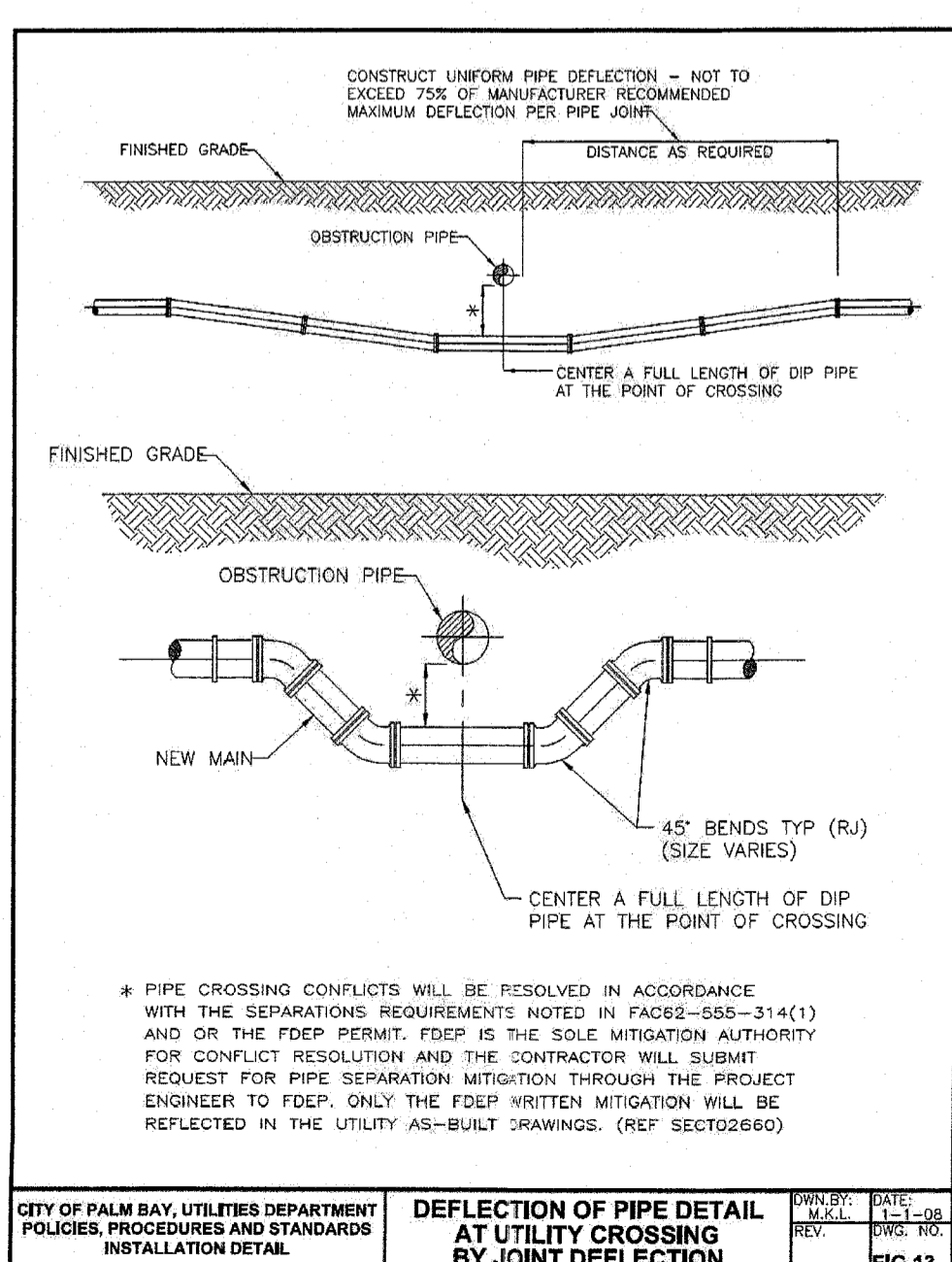
DATE: 1-11-08
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FIG 10A



CITY OF PALM BAY, UTILITIES DEPARTMENT
POLICIES, PROCEDURES AND STANDARDS
INSTALLATION DETAIL

GATE/PLUG VALVE AND BOX

DATE: 1-11-08
REV. NO.: 10-28-13
FIG 10B



CITY OF PALM BAY, UTILITIES DEPARTMENT
POLICIES, PROCEDURES AND STANDARDS
INSTALLATION DETAIL

DEFLECTION OF PIPE DETAIL AT JOINT CROSSING BY JOINT DEFLECTION

DATE: 1-11-08
REV. NO.: 10-28-13
FIG 13

LOCATION OF PUBLIC WATER SYSTEM MAINS IN ACCORDANCE WITH F.A.C. RULE 62-555.314

OTHER PIPE	HORIZONTAL SEPARATION	CROSSINGS (1)	JOINT SPACING @ CROSSINGS (FULL JOINT CENTERED)
STORM SEWER, STORMWATER FORCE MAIN, RECLAIMED WATER (2)	3 FT. MINIMUM	Water Main 12 INCHES IS THE MINIMUM, EXCEPT FOR STORM SEWER, THEN 8 INCHES IS THE MINIMUM AND 12 INCHES IS PREFERRED	ALTERNATE 3 FT. MINIMUM Water Main
VACUUM SANITARY SEWER	10 FT. PREFERRED 3 FT. MINIMUM	Water Main 12 INCHES PREFERRED 8 INCHES MINIMUM	ALTERNATE 3 FT. MINIMUM Water Main
GRAVITY OR PRESSURE SANITARY SEWER, FORCE MAIN, RECLAIMED WATER (4)	10 FT. PREFERRED 6 FT. MINIMUM (3)	Water Main 12 INCHES IS THE MINIMUM, EXCEPT FOR GRAVITY SEWER, THEN 8 INCHES IS THE MINIMUM AND 12 INCHES IS PREFERRED	ALTERNATE 6 FT. MINIMUM Water Main
ON-SITE SEWAGE TREATMENT & DISPOSAL SYSTEM	10 FT. MINIMUM	-	-

- (1) WATER MAIN SHOULD CROSS ABOVE OTHER PIPE. WHEN WATER MAIN MUST BE BELOW OTHER PIPE, THE MINIMUM SEPARATION IS 12 INCHES.
- (2) RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 63-610, F.A.C.
- (3) 3 FEET FOR GRAVITY SANITARY SEWER WHERE THE BOTTOM OF THE WATER MAIN IS LAID AT LEAST 6 INCHES ABOVE THE TOP OF THE GRAVITY SANITARY SEWER.
- (4) RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.

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CONSTRUCTION ENGINEERING GROUP
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LICENSE
 STATE OF FLORIDA
 PROFESSIONAL ENGINEER
 No. 55405
 AUG 24 2016

DATE: 4-26-16
 SCALE: 1"=60'
 PROJ. NO.: 160163
 DESIGNED BY: JRT
 DRAWN BY: SMB
 CHECKED BY: JTW
 DRAWING NO.: C-16

City of Palm Bay
 AUG 26 2016

GENERAL SPECIFICATION NOTES:

- PROJECT REPRESENTATIVE REFERRED TO IN THE FOLLOWING SPECIFICATIONS INCLUDE OWNER OR DESIGNATED REPRESENTATIVE, ENGINEER OR MUNICIPALITY OF JURISDICTION FOR SPECIFIED WORK.
- CONTRACTOR SHALL BECOME FAMILIAR WITH AND ADHERE TO ALL PROJECT SITE PERMITS AND THEIR CONDITIONS AND POST ON-SITE CONSTRUCTION AND PROTECT PROJECT UNTIL FINAL CLEARANCE PERMIT AGENCIES WITH JURISDICTION FOR THIS PROJECT INCLUDE:
 - CITY OF PALM BAY
 - DEED NOI
 - SFWMD

SITE CLEARING

- PROTECTION OF EXISTING TREES AND VEGETATION: PROTECT EXISTING TREES AND OTHER VEGETATION INDICATED TO REMAIN IN PLACE AGAINST UNNECESSARY CUTTING, BREAKING OR SKINNING OF ROOTS, SKINNING OR BRUISING OF BARK, SMOTHERING OF TREES BY STOCKPILING CONSTRUCTION MATERIALS OR OTHER MATERIALS WITHIN DRIP LINE, EXCESS FOOT OR VEHICULAR TRAFFIC, OR PARKING OF VEHICLES WITHIN DRIP LINE. PROVIDE TEMPORARY GUARDS AT THE DRIP LINE TO PROTECT TREES AND VEGETATION TO BE LEFT STANDING.
- REMOVE ALL TREES, SHRUBS, GRASS, AND OTHER VEGETATION, IMPROVEMENTS, OR OBSTRUCTIONS, AS REQUIRED, TO PERMIT INSTALLATION OF NEW CONSTRUCTION. REMOVE SIMILAR ITEMS ELSEWHERE ON SITE OR PREMISES AS SPECIFICALLY INDICATED.
- CUT MINOR ROOTS AND BRANCHES OF TREES INDICATED TO REMAIN IN A CLEAN AND CAREFUL MANNER WHERE SUCH ROOTS AND BRANCHES DO NOT OBSTRUCT INSTALLATION OF NEW CONSTRUCTION.
- TOPSOIL IS DEFINED AS FRIABLE CLAY LOAM SURFACE SOIL. SATISFACTORY TOPSOIL IS REASONABLY FREE OF SUBSOIL, CLAY LUMPS, STONES, AND OTHER OBJECTS OVER 2 INCHES IN DIAMETER, AND WEEDS, ROOTS, AND OTHER OBJECTIONABLE MATERIAL.
- STRIP TOPSOIL TO A MINIMUM DEPTH OF 200 PERCENT TO EXPOSE SUBSOIL TO PREVENT INTERMINGLING WITH UNDESIRABLE SUBSOIL OR OTHER OBJECTIONABLE MATERIAL. REMOVE HEAVY GROWTHS OF VEGETATION AND ROOTS FROM AREAS BEFORE STRIPPING.
- STOCKPILE TOPSOIL IN STORAGE PILES IN AREAS INDICATED OR DIRECTED. CONSTRUCT STORAGE PILES TO DRAINAGE FREE DRAINAGE TO PREVENT STORAGE PILES FROM BEING, IF REQUIRED, TO PREVENT WIND EROSION, TRANSPORT WASTE MATERIALS AND UNSUITABLE TOPSOIL MATERIALS OFF OWNER'S PROPERTY AND DISPOSE OF LEGALLY.
- TRAFFIC: CONDUCT SITE CLEARING OPERATIONS TO ENSURE MINIMUM INTERFERENCE WITH ROADS AND OTHER ADJACENT FACILITIES. DO NOT CLOSE OR OBSTRUCT STREETS, WALKS OR OTHER OCCUPIED OR USED FACILITIES WITHOUT PERMISSION FROM AUTHORITIES HAVING JURISDICTION.
- PROTECTION OF EXISTING IMPROVEMENTS: PROVIDE PROTECTION NECESSARY TO PREVENT DAMAGE TO EXISTING IMPROVEMENTS INDICATED TO REMAIN IN PLACE. PROTECT IMPROVEMENTS ON ADJOINING PROPERTIES, RESTORE DAMAGED IMPROVEMENTS TO THEIR ORIGINAL CONDITION, IF ACCEPTABLE TO PARTIES HAVING JURISDICTION OVER THE AREAS.
- AS AN INITIAL EFFORT ON THE CONSTRUCTION SITE THE CONTRACTOR SHALL LOCATE AND FLAG ALL TREES INDICATED TO REMAIN. CONTACT ENGINEER PRIOR TO CLEARING. THE PROJECT SHALL ANTICIPATE THE REMOVAL OF UP TO 10% MORE TREES THAN INDICATED ON THE PLANS PER EACH TREE. AS PART OF THIS INSPECTION, TREES REQUIRING SPECIAL PRUNING SHALL BE IDENTIFIED.
- WATER TREES AND OTHER VEGETATION TO REMAIN WITHIN LIMITS OF CONTRACT WORK AS REQUIRED TO MAINTAIN THEIR HEALTH DURING COURSE OF CONSTRUCTION OPERATIONS.
- PROVIDE PROTECT OVER DIAMETER CUT DURING CONSTRUCTION OPERATIONS. TEMPORARILY COVER EXPOSED ROOTS WITH WET BURLAP TO PREVENT ROOTS FROM DRYING OUT; COVER WITH EARTH AS SOON AS POSSIBLE.
- VERIFY DESIGN TREE BEARING CAPACITIES, SUBSEQUENT VERIFICATION AND APPROVAL OF OTHER FOOTING SUBGRADES MAY BE BASED ON A VISUAL COMPARISON OF EACH SUBGRADE WITH RELATED TESTED STRATA WHEN ACCEPTABLE TO THE PROJECT REPRESENTATIVE.
- COMPLETELY REMOVE STUMPS, ROOTS, AND OTHER DEBRIS UNLESS SPECIFICALLY IDENTIFIED TO REMAIN.
- USE ONLY HAND METHODS FOR GRUBBING INSIDE DRIP LINE OF TREES INDICATED TO BE LEFT STANDING.
- PLACE FILL MATERIAL IN HORIZONTAL LAYERS NOT EXCEEDING 6" LOOSE DEPTH, AND THOROUGHLY COMPACT TO A DENSITY EQUAL TO ADJACENT ORIGINAL GROUND.

EARTHWORK

- SUBGRADE EXCAVATION, BACKFILL, AND PREPARATION SHALL BE DONE IN ACCORDANCE WITH THE GEOTECHNICAL ENGINEERING REPORT FOR THIS SITE AS IDENTIFIED ON DWG. C-1, UNLESS NOTED OTHERWISE IN THE CONTRACT DRAWINGS.
- PROVIDE APPROVED BORROW SOIL MATERIALS FROM OFF-SITE WHEN SUFFICIENT APPROVED SOIL MATERIALS ARE NOT AVAILABLE FROM ON-SITE EXCAVATIONS.
- SATISFACTORY SOIL MATERIALS: ASTM D 2487 SOIL CLASSIFICATION GROUPS GW, GP, GM, SW, SP, AND SM; FREE OF ROCK OR GRAVEL LARGER THAN 2 INCHES IN ANY DIMENSION, DEBRIS, WASTE, FROZEN MATERIALS, VEGETATION AND OTHER DELETERIOUS MATTER.
- UNSATISFACTORY SOIL MATERIALS: ASTM D 2487 SOIL CLASSIFICATION GROUPS GC, SC, ML, MH, CL, CH, OL, OH, AND PT.
- BACKFILL AND FILL MATERIALS: SATISFACTORY SOIL MATERIALS AS IDENTIFIED ABOVE. SUBGRADE AND BASE MATERIAL: NATURALLY OR ARTIFICIALLY GRADED MIXTURE OF NATURAL OR CRUSHED GRAVEL, CRUSHED STONE, AND NATURAL OR CRUSHED SAND, ASTM D 2940, MEETING THE REQUIREMENTS OF SECTION 911 OF THE FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
- DRAINAGE FILL MATERIAL: WASHED EVENLY GRADED MIXTURE OF UNCRUSHED OR CRUSHED GRAVEL OR CRUSHED STONE, ASTM D 448, COURSE A AGGREGATE GRADING SIZE 57, WITH 100 PERCENT PASSING A 1-1/2 INCH sieve AND 0 TO 5 PERCENT PASSING A NO. 50 SIEVE.
- ENGINEERED FILL: BASE MATERIALS AS IDENTIFIED ABOVE.
- BEDDING MATERIAL: SUBBASE OR BASE MATERIALS AS IDENTIFIED ABOVE.
- FILTER FABRIC: MANUFACTURER'S STANDARD NONWOVEN PERVIOUS GEOTEXTILE FABRIC OF POLYPROPYLENE, NYLON OR POLYESTER FIBERS, OR A COMBINATION IN ACCORDANCE WITH ASTM D 4759.
- GRAB TENSILE STRENGTH (ASTM D 4652): 100 LB.
- APPARENT OPENING SIZE (ASTM D 4751): #100 US STANDARD SIEVE.
- PERMEABILITY (ASTM D 4491): 150 GALLONS PER MINUTE PER SQ. FT.
- COMPLY WITH LOCAL CODES, ORDINANCES, AND REQUIREMENTS OF AUTHORITIES HAVING JURISDICTION TO MAINTAIN STABLE EXCAVATIONS. CONTRACTOR SHALL COMPLY WITH THE TRENCH SAFETY ACT.
- EXCAVATION FOR STRUCTURES: EXCAVATE TO INDICATED ELEVATIONS AND DIMENSIONS WITHIN A TOLERANCE OF PLUS OR MINUS 0.10 FOOT, EXTEND EXCAVATIONS A SUFFICIENT DISTANCE FROM STRUCTURES FOR PLACING AND REMOVING CONCRETE FORMWORK, INSTALLING SERVICE LINE AND OTHER CONSTRUCTION, AND FOR INSPECTIONS.
- EXCAVATIONS FOR FOOTINGS AND FOUNDATIONS: DO NOT DISTURB BOTTOM OF EXCAVATION. EXCAVATE BY HAND TO FINAL GRADE JUST BEFORE PLACING CONCRETE REINFORCEMENT. TRIM BOTTOMS TO REQUIRED LINES AND GRADES TO LEAVE SOLID BASE TO RECEIVE OTHER WORK.
- EXCAVATION FOR UNDERGROUND STRUCTURES AND MECHANICAL OR ELECTRICAL APPURTENANCES: EXCAVATE TO ELEVATIONS AND DIMENSIONS INDICATED WITHIN A TOLERANCE OF PLUS OR MINUS 0.10 FOOT, DO NOT DISTURB BOTTOM OF EXCAVATIONS INTENDED FOR BEARING SURFACE.
- EXCAVATE TRENCHES TO UNIFORM WIDTHS TO PROVIDE A WORKING CLEARANCE ON EACH SIDE OF PIPE OR CONDUIT. EXCAVATE TRENCH WALLS VERTICALLY FROM TRENCH BOTTOM TO 2 INCHES HIGHER THAN TOP OF PIPE OR CONDUIT, UNLESS OTHERWISE INDICATED.
- TRENCH BOTTOMS: EXCAVATE AND SHAPE TRENCH BOTTOMS TO PROVIDE UNIFORM BEARING AND SUPPORT OF PIPES AND CONDUIT. SHAPE SUBGRADE TO PROVIDE CONTINUOUS SUPPORT FOR BELLS, JOINTS, AND BARRIERS OF PIPES AND FITTINGS, AND BODIES OF CONDUITS. REMOVE STONES AND SHARP OBJECTS TO AVOID POINT LOADING.
 - FOR PIPES OR CONDUIT LESS THAN 6 INCHES IN NOMINAL DIAMETER AND FLAT-BOTTOM MULTIPLE-PIECE CONDUIT UNITS, HAND-EXCAVATE TRENCH BOTTOMS AND SUPPORT PIPE AND CONDUIT ON AN UNDISTURBED SUBGRADE.
 - FOR PIPES AND CONDUIT 6 INCHES OR LARGER IN NOMINAL DIAMETER, SHAPE BOTTOM OF TRENCH TO SUPPORT BOTTOM 90 DEGREES OF PIPE CIRCUMFERENCE, FILL DEPRESSIONS WITH TAMPED SAND BACKFILL.
 - WHERE ENCOUNTERING ROCK OR ANOTHER UNYIELDING BEARING SURFACE, CARRY TRENCH EXCAVATION 6 INCHES BELOW INVERT ELEVATION TO RECEIVE BEDDING COURSE.
- RECONSTRUCT SUBGRADES DAMAGED BY RAIN, ACCUMULATED WATER, OR CONSTRUCTION ACTIVITIES.
- STOCKPILE EXCAVATED MATERIALS ACCEPTABLE FOR BACKFILL AND FILL SOIL MATERIALS, INCLUDING ACCEPTABLE BORROW MATERIALS. STOCKPILE SOIL MATERIALS WITHOUT INTERMINGLING. PLACE, GRADE, AND SHAPE STOCKPILES TO DRAIN SURFACE COVER TO PREVENT WIND-BLOWN DUST IF DIRECTED BY PROJECT REPRESENTATIVE.
- CONTRACTOR SHALL PROVIDE DETECTABLE WARNING FROM ACID AND ALKALI RESISTANT POLYETHYLENE FILM TO MARK AND IDENTIFY UNDERGROUND UTILITIES. TAPE SHALL BE 6 INCHES WIDE AND 4 MILS THICK, CONTINUOUSLY INSCRIBED WITH A DESCRIPTION OF THE UTILITY, WITH A METALLIC CORE ENCASED IN A PROTECTIVE JACKET FOR CORROSION PROTECTION. DETECTOR WHEN BURIED UP TO 2'-6" DEEP OVER NON FERROUS PIPE. PROVIDE TAPE COLORS TO MATCH UTILITIES AS FOLLOWS:
 - GREEN: ELECTRIC
 - YELLOW: GAS, OIL, STEAM AND DANGEROUS MATERIALS
 - ORANGE: TELEPHONE AND OTHER COMMUNICATIONS
 - BLUE: WATER SYSTEMS
 - CREAM: SEWER SYSTEMS
- UTILITY TRENCH BACKFILL: PLACE AND COMPACT INITIAL BACKFILL OF SATISFACTORY SOIL MATERIAL OR SUBBASE MATERIAL, FREE OF PARTICLES LARGER THAN 1 INCH, TO A HEIGHT OF 12 INCHES ABOVE UTILITY PIPE OR CONDUIT.
- CAREFULLY COMPACT MATERIAL UNDER PIPE HAUNCHES AND BRING BACKFILL EVENLY UP ON BOTH SIDES AND ALONG THE FULL LENGTH OF UTILITY PIPING OR CONDUIT TO AVOID DAMAGE OR DISPLACEMENT OF UTILITY SYSTEM.
- PLACE AND COMPACT FINAL BACKFILL OF SATISFACTORY SOIL MATERIAL TO FINAL SUBGRADE.
- REMOVE VEGETATION, TOPSOIL, DEBRIS, WET, AND UNSATISFACTORY SOIL MATERIALS, OBSTRUCTIONS, AND DELETERIOUS MATERIALS FROM GROUND SURFACE PRIOR TO PLACING FILLS.
- WHEN SUBGRADE OR EXISTING GROUND SURFACE TO RECEIVE FILL HAS A DENSITY LESS THAN THAT REQUIRED FOR FILL, BREAK UP GROUND SURFACE TO DEPTH REQUIRED, PULVERIZE, MOISTURE-CONDITION OR AERATE SOIL AND RECOMPACT TO REQUIRED DENSITY. PLACE FILL MATERIAL IN LAYERS TO REQUIRED ELEVATIONS FOR EACH LOCATION LISTED BELOW.
 - UNDER GRASS, USE SATISFACTORY EXCAVATED OR BORROW SOIL MATERIAL.
 - UNDER WALKS AND PAVEMENTS, USE SUBBASE OR BASE MATERIAL, OR SATISFACTORY EXCAVATED OR BORROW SOIL MATERIAL.
 - UNDER EXISTING SATISFACTORY PAVEMENTS, USE SATISFACTORY EXCAVATED OR BORROW SOIL MATERIAL.
 - UNDER FOOTINGS AND FOUNDATIONS, USE ENGINEERED FILL.

- UNIFORMLY MOISTEN OR AERATE SUBGRADE AND EACH SUBSEQUENT FILL OR BACKFILL LAYER BEFORE COMPACTION TO WITHIN 2 PERCENT OF OPTIMUM MOISTURE CONTENT.
 - DO NOT PLACE BACKFILL OR FILL MATERIAL ON SURFACES THAT ARE MUDDY OR CONTAIN ICE.
 - REMOVE AND REPLACE, OR SCARIFY AND AIR-DRY SATISFACTORY SOIL MATERIAL THAT IS TOO WET TO COMPACT TO SPECIFIED DENSITY.
 - STOCKPILE OR SPREAD AND REMOVE WET SATISFACTORY SOIL MATERIAL.
- PLACE BACKFILL AND FILL MATERIALS IN LAYERS NOT MORE THAN 8 INCHES IN LOOSE DEPTH FOR MATERIAL COMPACTED BY HEAVY COMPACTION EQUIPMENT, AND NOT MORE THAN 4 INCHES IN LOOSE DEPTH FOR MATERIAL COMPACTED BY HAND-OPERATED TAMPERS.
- REMOVE AND REPLACE SUBGRADE MATERIALS WHICH HAVE NOT BEEN BELOW SUBGRADE THE FOLLOWING PERCENTAGES OF MAXIMUM DRY DENSITY ACCORDING TO ASTM D 1557 UNLESS PLAN SPECIFICALLY NOTE OTHERWISE:
 - UNDER BUILDINGS AND PAVEMENTS, COMPACT THE TOP 12 INCHES BELOW SUBGRADE AND EACH LAYER OF BACKFILL OR FILL MATERIAL AT 95 PERCENT MAXIMUM DRY DENSITY.
 - UNDER WALKWAYS, COMPACT THE TOP 6 INCHES BELOW SUBGRADE AND EACH LAYER OF BACKFILL OR FILL MATERIAL AT 95 PERCENT MAXIMUM DRY DENSITY.
 - UNDER LAWN OR UNPAVED AREAS, COMPACT THE TOP 6 INCHES BELOW SUBGRADE AND EACH LAYER OF BACKFILL OR FILL MATERIAL AT 90 PERCENT MAXIMUM DRY DENSITY.
- SITE GRADING: SLOPE GRADES TO DIRECT WATER AWAY FROM BUILDING AND TO PREVENT PONDING. FINISH SUBGRADES TO REQUIRED ELEVATIONS WITHIN THE FOLLOWING TOLERANCES:
 - LAWN OR UNPAVED AREAS: PLUS OR MINUS 0.10 FOOT. WALKS: PLUS OR MINUS 0.10 FOOT. PAVEMENTS: PLUS OR MINUS 1/2 INCH.
 - UNDER PAVEMENTS AND WALKS, CONSTRUCT SUBBASE COURSE AND BASE COURSE MATERIAL IN ACCORDANCE WITH SECTIONS 160 AND 200 OF THE FDOT STANDARD SPECIFICATIONS.
 - COMPACT SUBBASE AND BASE COURSES AT OPTIMUM MOISTURE CONTENT TO REQUIRED GRADES, LINES, CROSS SECTIONS AND THICKNESS TO NOT LESS THAN 95 PERCENT OF ASTM D 4254 RELATIVE DENSITY. SHARP SUBBASE AND BASE TO REQUIRED CROWN ELEVATIONS AND CROSS-SLOPE GRADES.
 - WHEN THICKNESS OF COMPACTED SUBBASE OR BASE COURSE IS 6 INCHES OR LESS, PLACE MATERIALS IN A SINGLE LAYER.
 - PAVEMENT SHOULDERS: PLACE SHOULDERS ALONG EDGES OF SUBBASE AND BASE COURSE TO PREVENT LATERAL MOVEMENT. CONSTRUCT SHOULDERS OF ACCEPTABLE MATERIALS AND COMPACT SIMULTANEOUSLY WITH EACH SUBBASE AND BASE LAYER.
 - UNDER SLABS-ON-GRADE, PLACE ENGINEERED FILL ON PREPARED SUBGRADE.
 - TESTING AGENCY SERVICES: ALLOW TESTING AGENCY TO INSPECT AND TEST EACH SUBGRADE AND EACH FILL OR BACKFILL LAYER. DO NOT PROCEED UNTIL TEST RESULTS FOR CHECKS OF BOTH DENSITY AND MOISTURE RANGES AT BEGINNING OF WORK, ON EACH DIFFERENT TYPE OF MATERIAL ENCOUNTERED, AND AT INTERVALS AS DIRECTED BY THE PROJECT REPRESENTATIVE.
 - FOOTING SUBGRADE: AT FOOTING SUBGRADES, PERFORM AT LEAST ONE TEST OF EACH SOIL PERIODICALLY CHECKED AND ADJUSTED TO CORRELATE TO TESTS PERFORMED USING ASTM D 1557 WITH EACH DENSITY CALIBRATION CHECK. CHECK THE CALIBRATION CURVES FURNISHED WITH THE MOISTURE GRAPHS ACCORDING TO ASTM D 3017, WHEN FIELD IN-PLACE DENSITY TESTS ARE PERFORMED USING NUCLEAR METHODS, MAKE CALIBRATION CHECKS OF BOTH DENSITY AND MOISTURE RANGES AT BEGINNING OF WORK, ON EACH DIFFERENT TYPE OF MATERIAL ENCOUNTERED, AND AT INTERVALS AS DIRECTED BY THE PROJECT REPRESENTATIVE.
 - FOOTING SUBGRADE: AT FOOTING SUBGRADES, PERFORM AT LEAST ONE TEST OF EACH SOIL PERIODICALLY CHECKED AND ADJUSTED TO CORRELATE TO TESTS PERFORMED USING ASTM D 1557 WITH EACH DENSITY CALIBRATION CHECK. CHECK THE CALIBRATION CURVES FURNISHED WITH THE MOISTURE GRAPHS ACCORDING TO ASTM D 3017, WHEN FIELD IN-PLACE DENSITY TESTS ARE PERFORMED USING NUCLEAR METHODS, MAKE CALIBRATION CHECKS OF BOTH DENSITY AND MOISTURE RANGES AT BEGINNING OF WORK, ON EACH DIFFERENT TYPE OF MATERIAL ENCOUNTERED, AND AT INTERVALS AS DIRECTED BY THE PROJECT REPRESENTATIVE.
 - PAVED AND BUILDING SLAB AREAS: AT SUBGRADE AND AT EACH COMPACTED FILL AND BACKFILL LAYER, PERFORM AT LEAST ONE FIELD IN-PLACE DENSITY TEST FOR EVERY 2,000 SQ. FT. OR LESS OF PAVED AREA OR BUILDING SLAB, BUT IN NO CASE FEWER THAN TWO TESTS.
 - TRENCH BACKFILL: IN EACH COMPACTED INITIAL AND FINAL BACKFILL LAYER, PERFORM AT LEAST ONE FIELD IN-PLACE DENSITY TEST FOR EACH 300 FEET OR LESS OF UTILITY TRENCH, BUT NO FEWER THAN TWO TESTS.
 - WHEN TESTING AGENCY REPORTS THAT SUBGRADES, FILLS, OR BACKFILLS ARE BELOW SPECIFIED DENSITY, SCARIFY AND MOISTEN OR AERATE, OR REMOVE AND REPLACE SOIL TO THE DEPTH REQUIRED TO RECOMPACT AND RETEST UNTIL REQUIRED DENSITY IS OBTAINED.
 - EXISTING UTILITIES: DO NOT INTERRUPT UTILITIES SERVING FACILITIES OCCUPIED BY OWNER OR OTHERS UNLESS PERMITTED IN WRITING BY PROJECT REPRESENTATIVE AND THEN ONLY AFTER ARRANGING TO PROVIDE TEMPORARY UTILITY SERVICES ACCORDING TO REQUIREMENTS INDICATED.
 - NOTIFY ENGINEER NOT LESS THAN TWO DAYS IN ADVANCE OF PROPOSED UTILITY INTERRUPTIONS.
 - DO NOT PROCEED WITH UTILITY INTERRUPTIONS WITHOUT ENGINEER WRITTEN PERMISSION.
 - CONTACT UTILITY-LOCATOR SERVICE FOR AREA WHERE PROJECT IS LOCATED BEFORE EXCAVATING.
 - DEMOLISH AND COMPLETELY REMOVE FROM SITE EXISTING UNDERGROUND UTILITIES INDICATED TO BE REMOVED. COORDINATE WITH UTILITY COMPANIES TO SHUT OFF SERVICES IF LINES ARE ACTIVE.
 - EXPLOSIVES: DO NOT USE EXPLOSIVES.
 - AREA OF BUILDINGS PLUS A MARGIN OF 10' ON ALL SIDES SHALL BE CLEARED AND GRUBBED TO REMOVE AND DISPOSE OF ANY SURFACE VEGETATION, ROOTS, AND DEBRIS UNLESS PLANS SPECIFICALLY NOTE OTHERWISE.
 - RECONSTRUCT SUBGRADES DAMAGED BY FREEZING TEMPERATURES, FROST, RAIN, ACCUMULATED WATER, OR CONSTRUCTION ACTIVITIES, AS DIRECTED BY ARCHITECT.

STORM SEWER SYSTEM

- EXCEPT AS OTHERWISE PROVIDED, ALL STORM SEWER MATERIALS SHALL COMPLY WITH THE ACCEPTABLE SECTIONS OF THE FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" CURRENT EDITION WHICH ARE HEREBY INCORPORATED INTO THESE SPECIFICATIONS BY REFERENCE. FURTHER, ALL CONSTRUCTION DETAILS INCLUDED IN THE CURRENT EDITION OF FDOT'S "ROADWAY AND TRAFFIC DESIGN STANDARDS" ARE INCORPORATED INTO THESE SPECIFICATIONS BY REFERENCE.
- FOR PIPES SMALLER THAN 12"; SELECTION OF MATERIALS SPECIFIED BELOW IS AT THE INSTALLER'S OPTION.
 - POLYVINYL CHLORIDE (PVC), ASTM D-3034, SDR 35 PIPE AND FITTINGS. FITTINGS SHALL BE WITH RUBBER GASKETED JOINTS.
 - CORRUGATED POLYETHYLENE PIPE (CPEP) IN ACCORDANCE WITH ASHOTO M294 AND ASTM D-3350. CPEP SHALL HAVE A SMOOTH INTERIOR.
- FOR PIPES 12" AND LARGER: REINFORCED CONCRETE PIPE(RCP); FDOT SECTION 941, ROUND OR ELIPTICAL PER DWG. PLANS, STANDARD CLASS III CONCRETE CULVERT PIPE TO EXCEED CLASS IV PIPE IS CALLED FOR.
- FOOT SECTION 425. USE STEEL GRATES ON ALL INLETS, TRAFFIC BEARING.
- ADHERE TO MANUFACTURER'S RECOMMENDATIONS ON THE INSTALLATION OF PVC, CPEP, AND RCP STORM SEWERS.

TERMITE CONTROL

- ENGAGE A LICENSED PROFESSIONAL PEST CONTROL OPERATOR FOR APPLICATION OF SOIL TREATMENT SOLUTION.
- DO NOT APPLY SOIL TREATMENT SOLUTION UNTIL EXCAVATING, FILLING AND GRADING OPERATIONS ARE COMPLETED, EXCEPT AS OTHERWISE REQUIRED IN CONSTRUCTION OPERATIONS, TO ENSURE PENETRATION, DO NOT APPLY SOIL TREATMENT TO FROZEN OR EXCESSIVELY WET SOILS OR DURING INCLEMENT WEATHER.
- FURNISH WRITTEN WARRANTY CERTIFYING THAT APPLIED SOIL POISONING TREATMENT WILL PREVENT INFESTATION OF SUBTERRANEAN TERMITES AND, THAT IF SUBTERRANEAN TERMITE ACTIVITY IS DISCOVERED DURING WARRANTY PERIOD, THE CONTRACTOR WILL RE-TREAT SOIL AND REPAIR OR REPLACE DAMAGE CAUSED BY TERMITE INFESTATION. PROVIDE WARRANTY FOR A PERIOD OF FIVE (5) YEARS FROM DATE OF TREATMENT, SIGNED BY APPLICATOR AND CONTRACTOR.
- USE EMULSIBLE CONCENTRATE INSECTICIDE FOR DILUTION WITH WATER, SPECIALLY FORMULATED TO PREVENT TERMITE INFESTATION. PROVIDE A WORKING SOLUTION OF THE CHEMICAL ELEMENTS AND CONCENTRATIONS PER MANUFACTURER RECOMMENDATIONS. PROVIDE ENGINEER WITH COPY OF SOLUTION, MANUFACTURER, AND ALL MANUFACTURER DIRECTIONS.
- REMOVE FOREIGN MATTER WHICH COULD DECREASE EFFECTIVENESS OF TREATMENT ON AREAS TO BE TREATED. LOOSEN, BREAK UP AND REMOVE FOREIGN MATTER FROM AREAS PREVIOUSLY COMPACTED AREAS UNDER SLABS AND FOUNDATIONS. TERMITICIDE MAY BE APPLIED BEFORE PLACEMENT OF COMPACTED FILL UNDER SLABS, IF RECOMMENDED BY TERMITE MANUFACTURER.
- APPLY SOIL TREATMENT SOLUTION AT RATES SPECIFIED BY TERMITICIDE MANUFACTURER.
- ALLOW NOT LESS THAN 12 HOURS FOR DRYING AFTER APPLICATION, BEFORE BEGINNING CONCRETE PLACEMENT OR OTHER CONSTRUCTION ACTIVITIES.
- POST SIGNS IN AREAS OF APPLICATION OF TERMITICIDE THAT SOIL TREATMENT HAS BEEN APPLIED. REMOVE SIGNS WHEN AREAS ARE COVERED BY OTHER CONSTRUCTION.
- REAPPLY SOIL TREATMENT SOLUTION TO AREAS DISTURBED BY SUBSEQUENT EXCAVATION, MODIFICATIONS, OR OTHER CONSTRUCTION ACTIVITIES FOLLOWING APPLICATION.

SEWAGE COLLECTION SYSTEM

- ALL VERTICAL AND HORIZONTAL SPACING BETWEEN SEWAGE COLLECTION SYSTEMS AND WATER DISTRIBUTION SYSTEMS AND/OR STORM SEWER SYSTEMS ARE TO COMPLY WITH THE LATEST FDEP STANDARDS.
- ADHERE TO MANUFACTURER'S RECOMMENDATIONS ON THE INSTALLATION OF PVC, CPEP, AND RCP STORM SEWERS.
- GENERAL: ALL PIPE SHALL BE INSTALLED IN ACCORDANCE WITH UNI-BELL, UNI-B-5.
- PIPE PREPARATION AND HANDLING: INSPECT ALL PIPE AND FITTINGS PRIOR TO LOWERING INTO TRENCH TO ENSURE NOT CRACKED, BROKEN, OR OTHERWISE DEFECTIVE. MATERIALS ARE BEING USED TO REPLACE STANDARDLY. REMOVE FOREIGN MATTER AND EXCESS DIRT FROM INSIDE OF PIPE AND KEEP CLEAN DURING AND AFTER LAYING. REMOVE ALL DAMAGED PIPE FROM THE JOB SITE.
- GRAVITY AND WHEN TEMPERATURE HAS NOT BEEN BELOW 32 DEG F (0 DEG C) FOR 24 HOURS IMMEDIATELY PRIOR TO APPLICATION, DO NOT APPLY WHEN BASE IS WET OR CONTAINS EXCESS OF MOISTURE.
 - CONSTRUCT HOT-MIXED ASPHALT SURFACE COURSE WHEN ATMOSPHERIC TEMPERATURE IS ABOVE 40 DEG F (4 DEG C) AND WHEN BASE IS DRY. BASE COURSE MAY BE PLACED WHEN AIR TEMPERATURE IS ABOVE 30 DEG F (MINUS 1 DEG C) AND RISING.
 - PRIME COAT SHALL BE IN ACCORDANCE WITH SECTION 330 OF THE STANDARD SPECIFICATIONS APPLIED AT A RATE OF 0.35 TO 0.40 GALLONS PER SQUARE YARD.
 - SUBGRADE STABILIZING MATERIAL: FDOT SECTION 914.
 - BASE COURSE: THE BASE COURSE SHALL BE CONSTRUCTED OF THE FOLLOWING MATERIALS:
 - LIEMEROCK BASE COURSE: FDOT SECTION 911. LIEMEROCK SHALL HAVE A MINIMUM LBR OF 100% AND SHALL BE MINED FROM AN FDOT APPROVED SOURCE.
 - PRIME AND TACK COATS: FDOT SECTION 300.
 - LANE MARKINGS
 - PAINT: FDOT SECTION 971, CODE T-1 OR T-2, COLOR AS INDICATED ON THE DRAWINGS.
 - THERMOPLASTIC: FDOT SECTION 971, COLOR AS INDICATED ON THE DRAWINGS.
 - PLACE LIEMEROCK IN MAXIMUM 6" LIFTS AND COMPACT EACH LIFT TO A MINIMUM DRY DENSITY OF 98% OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY. (ASHOTO T-180)
 - PERFORM COMPACTION TESTING FOR LIEMEROCK THE FULL DEPTH AT A FREQUENCY OF ONE TEST PER 10,000 SQUARE FOOT, OR AT A MINIMUM OF TWO TEST LOCATIONS, WHICHEVER IS GREATER.
 - CONSTRUCTION OF WEARING COURSE: FDOT SECTION 330.
 - PAVEMENT MARKINGS: FDOT SECTIONS 710 AND 711.
- TAKE THE NECESSARY PRECAUTIONS REQUIRED TO PREVENT EXCAVATED OR OTHER FOREIGN MATERIAL FROM GETTING INTO THE PIPE DURING THE LAYING OPERATION. AT ALL TIMES, WHEN LAYING OPERATIONS ARE NOT IN PROGRESS, AT THE CLOSE OF THE DAY'S WORK, OR WHENEVER OPERATIONS ARE ABSENT FROM THE JOB LOCATION, THE JOINTS ON THE OPEN END OF THE LAST Laid SECTION OF PIPE TO PREVENT ENTRY OF FOREIGN MATERIAL OR CREEP OF THE GASKETED JOINTS.
- WHERE NECESSARY, PROVIDE PROTECTIVE GASKETS AT MANHOLE CONSTRUCTION OR FOR CONSTRUCTION BY OTHERS, WITH TEMPORARY PLUGS.
- WHERE NONREINFORCED PIPE IS CONNECTED TO MANHOLES OR CONCRETE STRUCTURES, MAKE CONNECTION SO THAT THE STANDARD PIPE JOINT IS LOCATED NOT MORE THAN 3" FROM THE MANHOLE OR CONCRETE STRUCTURE.
- UNDERGROUND STRUCTURES:
 - ROCK SLABS: TO SETTING PRECAST CONCRETE BASE SECTION, REMOVE WATER FROM THE EXCAVATION, PLACE A MINIMUM OF 6" OF ROCK BASE AND THOROUGHLY COMPACT WITH A MECHANICAL VIBRATING OR POWER TAMPER.
 - MANHOLES: JOINTS SHALL BE CAREFULLY INSPECTED. PRECAST MANHOLE SECTIONS TO BE JOINED. SECTIONS WITH CHIPS OR CRACKS IN THE TONGUE SHALL NOT BE USED. JOINT SEALS SHALL BE INSTALLED IN STRICT CONFORMANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. ONLY PIPE PRIMER FURNISHED BY THE JOINT MANUFACTURER SHALL BE USED.
 - PRECAST CONCRETE MANHOLES: PLACE PRECAST CONCRETE SECTIONS AS SHOWN ON THE DRAWINGS, WHERE MANHOLES OCCUR IN PAVEMENTS, SET TIPS OF FRAMES AND COVERS FLUSH WITH FINISH SURFACE ELSEWHERE, SET TOPS 3" ABOVE FINISH SURFACE, UNLESS OTHERWISE INDICATED.
 - MANHOLE INVERT: CONSTRUCT MANHOLE INVERTS IN CONFORMANCE WITH DETAILS SHOWN ON THE DRAWINGS, AND WITH SMOOTH TRANSITIONS TO ENSURE AN OPEN FLOW THROUGH ALL MANHOLE. REMOVE ALL SHARP EDGES OR ROUGH SECTIONS WHICH TEND TO OBSTRUCT FLOW, WHERE NECESSARY. IF PIPE IS LAID THROUGH A MANHOLE, BREAK OUT THE TOP SECTION AS INDICATED AND COVER EXPOSED EDGE OF PIPE COMPLETELY WITH MORTAR. TROWEL ALL MORTAR SURFACES REPRESENTATIVE.
 - PROVIDE RUBBER JOINT GASKET COMPLYING WITH ASTM C-443.
 - APPLY BITUMINOUS MASTIC COATING AT JOINTS OF SECTIONS.
- WELDED WIRE FABRIC SHALL BE USED TO ADEQUATELY SUBSTRUTED TO PROTECT THE PIPE FROM CONSTRUCTION EQUIPMENT. THE FABRIC SHALL BE THOROUGHLY CLEANED AND VISUALLY INSPECTED IN THE PRESENCE OF THE ENGINEER AND LOCAL AUTHORITIES HAVING JURISDICTION.
- FOLLOWING VISUAL INSPECTION, THE SEWER SYSTEM INCLUDING SERVICE LINES SHALL BE TESTED IN THE PRESENCE OF THE ENGINEER AND LOCAL AUTHORITIES HAVING JURISDICTION.
- ACCEPTABLE METHODS OF TESTING SHALL BE LOW PRESSURE AIR EXFILTRATION OR WATER EXFILTRATION RECOMMENDED BY THE LOCAL AUTHORITY.
- CONTRACTOR SHALL FURNISH ALL NECESSARY TOOLS, SUPPLIES, LABOR AND EQUIPMENT FOR TESTING.
- LOW PRESSURE AIR EXFILTRATION TESTING SHALL BE IN ACCORDANCE WITH UNI-BELL, UNI-B-6.
- WATER EXFILTRATION TESTING SHALL BE IN ACCORDANCE WITH UNI-BELL, UNI-B-5.
- VISUAL INSPECTION AND TESTING SHALL BE PERFORMED ON THE SAME DAY. NOTIFY ENGINEER AND PERMIT AGENCY OF JURISDICTION MINIMUM 72 HOURS OF WEEKDAYS NOTICE.

WATER DISTRIBUTION AND SERVICE PIPING

- ALL VERTICAL AND HORIZONTAL SPACING BETWEEN WATER DISTRIBUTION SYSTEMS AND SEWAGE COLLECTION SYSTEMS AND/OR STORM SEWER SYSTEMS ARE TO COMPLY WITH THE LATEST FDEP STANDARDS.
- NEW OR RELOCATED, UNDERGROUND WATER MAINS INCLUDING IN THIS PROJECT WILL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST THREE FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED VACUUM-TYPE SANITARY SEWER, STORM SEWER, STORMWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER.
- DUCTILE IRON PIPE: DUCTILE IRON PIPE SHALL BE CEMENT-MORTAR LINED, CLASS 150, MECHANICAL OR PUSH-ON JOINT AND SHALL MEET ALL THE REQUIREMENTS OF THE FOLLOWING: ANSI/AWWA C-104/A-21.4; ANSI/AWWA C-111/A-21.11 (FOR RUBBER GASKET JOINTS); ANSI/AWWA C-150/A-21.50 (FOR THICKNESS DESIGN); AND ANSI/AWWA C-151/A-21.51 (FOR DUCTILE IRON PIPE).
- LINING: ALL DUCTILE IRON PIPE AND FITTINGS SHALL BE CEMENT-MORTAR LINED AND SEAL COATED IN CONFORMANCE WITH ANSI A-21.4.
- STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, CLASS 150 AND 200; WITH BELL END AND ELASTOMERIC GASKET, WITH PLAN END FOR CAST-IRON OR DUCTILE-IRON FITTINGS.
 - PIPE MARKING: NSF 14, "NSF-PVC CTO ONLY."
 - GASKETS: ASTM F 477; ELASTOMERIC SEAL.
 - JOINTS: MECHANICAL OR PUSH-ON JOINTS, EXCEPT WHERE SPECIFICALLY SHOWN OR DETAILED OTHERWISE.
- PIPE FITTINGS: ALL FITTINGS 4" IN DIAMETER AND LARGER SHALL BE DUCTILE IRON PIPE WITH MECHANICAL OR PUSH-ON JOINTS AND SHALL CONFORM TO ANSI A-21.10 (AWWA C-110) FOR SHORT BODY FITTINGS WITH A 250 PSI PRESSURE RATING FOR FITTINGS UP TO 12" IN DIAMETER.
- MECHANICAL JOINT FITTINGS: MECHANICAL JOINT DUCTILE IRON FITTINGS SHALL CONFORM TO ANSI/AWWA C-110/A-21.10 AND ANSI/AWWA C-111/A-21.11 AND SHALL BE OF A CLASS AT LEAST EQUAL TO THAT OF THE ADJACENT PIPE. MORTAR LINED AND SEAL COAT FOR FITTINGS SHALL BE SAME THICKNESS SPECIFIED FOR PIPE.
- GASKETS: THE RUBBER-RING GASKETS SHALL BE SUITABLE FOR THE SPECIFIED PIPE SIZES AND PRESSURE AND SHALL CONFORM TO APPLICABLE PARTS OF THE LATEST FEDERAL SPECIFICATION AND SHALL BE FURNISHED WITH MECHANICAL JOINT ENDS OR IRON PIPE SQUARE OPERATING END.
- JOINT LUBRICANT: THE JOINT LUBRICANT FOR PUSH-ON JOINT PIPE SHALL HAVE BEEN TESTED AND APPROVED FOR POTABLE WATER SERVICE. NO LUBRICANT SHALL BE USED THAT WILL HARM BACTERIA OR DAMAGE WATER MASKING TESTS.
- POLYVINYL CHLORIDE(PVC) PRESSURE PIPE UNDER 4" SHALL BE MINIMUM PRESSURE CLASS OF 200 PSI SCHEDULE 40 CONFORMING TO ASTM D-1785 OR SDR 21 CONFORMING TO ASTM D-2241 WITH CEMENT-SOLVENT WELDED JOINTS OR PUSH ON ELASTOMERIC JOINTS.
- CONTROL VALVES: PROVIDE VALVES AND FLOW CONTROL DEVICES AS INDICATED. ALL VALVES SHALL BE FURNISHED WITH MECHANICAL JOINT ENDS.
 - MINIMUM WORKING PRESSURE: 200 PSI UNLESS OTHERWISE INDICATED.
 - WATER VALVES: SHALL BE CAST IRON WITH NON-RISING STEM, CAST IRON BODY AND BRONZE FITTINGS CONFORMING TO AWWA C-500. GATE VALVES LOCATED ON FIRE PROTECTION MAINS MUST BE FM APPROVED.
 - WASTE VALVES: SHALL BE CAST IRON WITH WASTELIFT EASE. THE SIZE SHALL BE LARGE ENOUGH FOR OPERATION OF THE VALVE ON WHICH IT IS USED WITH A MINIMUM SHAFT DIAMETER OF 5-1/4". THE COVER SHALL HAVE THE WORD "WATER" CAST ON IT.
 - GATE VALVES (SMALLER THAN 4"): SHALL BE NON-RISING STEM, HANDWHEEL OPERATED, WEDGE DISCS, ALL BRONZE WITH FLANGED ENDS, CONFORMING TO FED. SPEC. WW-V-54, CLASS B, TYPE 1. FOR BELOW GROUND INSTALLATION, VALVES SHALL BE FURNISHED WITH MECHANICAL JOINT ENDS OR IRON PIPE THREAD AND 2" SQUARE OPERATING END.
- WATER SERVICE PIPING: EXTEND WATER SERVICE PIPING OF SIZE AND IN LOCATIONS INDICATED TO WATER SERVICE ENTRANCE AT BUILDINGS. PROVIDE SLEEVE IN FOUNDATION WALL FOR WATER SERVICE ENTRY; MAKE ENTRY WATER TIGHT.
- POLYVINYL CHLORIDE (PVC) PIPE AND FITTINGS: INSTALL IN ACCORDANCE WITH UNI-BELL HANDBOOK OF PVC PIPE.
- DUCTILE IRON PIPE: INSTALL IN ACCORDANCE WITH AWWA C-600.
- CONTROL VALVES: INSTALL IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
- INTERIOR INSPECTION OF CONDUIT TO DETERMINE WHETHER LINE PLACEMENT OR OTHER DAMAGE HAS OCCURRED.
- IF THE INSPECTION INDICATES POOR ALIGNMENT, DEBRIS, DISPLACED PIPE, INFILTRATION OR OTHER DEFECTS, CORRECT SUCH DEFECTS TO SATISFACTION OF ENGINEER AND PERMITTING AGENCIES HAVING JURISDICTION.
- CLEANING CONDUIT: CLEAR INTERIOR OF CONDUIT OF DIRT AND OTHER SUPERFLUOUS MATERIAL AS WORK PROGRESSES. MAINTAIN SWAB OR DRAG IN LINE AND PULL PAST EACH JOINT AS IT IS COMPLETED.
- PLACE PLOGS IN END OF UNCOMPLETED CONDUIT AT END OF DAY OR WHENEVER WORK STOPS.
- DISINFECTION: AT COMPLETION OF WATER SERVICE LINE INSTALLATION, FLUSH AND DISINFECT IN CONFORMANCE WITH AWWA C-651, TO THE SATISFACTION OF LOCAL AUTHORITIES HAVING JURISDICTION.
- HYDROSTATIC AND LEAKAGE TEST: ALL SITE WATER DISTRIBUTION PIPING SHALL BE TESTED AFTER INSTALLATION. DUCTILE IRON PIPE SHALL BE TESTED IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF AWWA STANDARD C-600, AND PVC PIPE SHALL BE TESTED IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF AWWA STANDARD C-603. ACCEPTABLE LEAKAGE MUST BE LESS THAN THE NUMBER OF GALLONS PER HOUR AS DETERMINED BY THE FORMULAS IN AWWA C-600 AND C-603.
- THE POTABLE WATER LINES SHALL BE TESTED TO 150 PSI TEST PRESSURE AND THE FIRE LINE SHALL BE TESTED TO 200 PSI TEST PRESSURE, BOTH FOR TWO (2) HOURS.
- INTERIOR INSPECTION OF CONDUIT TO DETERMINE WHETHER LINE PLACEMENT OR OTHER DAMAGE HAS OCCURRED.
- IF THE INSPECTION INDICATES POOR ALIGNMENT, DEBRIS, DISPLACED PIPE, INFILTRATION OR OTHER DEFECTS, CORRECT SUCH DEFECTS TO SATISFACTION OF ENGINEER AND PERMITTING AGENCIES HAVING JURISDICTION.
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- DISINFECTION: AT COMPLETION OF WATER SERVICE LINE INSTALLATION, FLUSH AND DISINFECT IN CONFORMANCE WITH AWWA C-651, TO THE SATISFACTION OF LOCAL AUTHORITIES HAVING JURISDICTION.
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- THE POTABLE WATER LINES SHALL BE TESTED TO 150 PSI TEST PRESSURE AND THE FIRE LINE SHALL BE TESTED TO 200 PSI TEST PRESSURE, BOTH FOR TWO (2) HOURS.
- INTERIOR INSPECTION OF CONDUIT TO DETERMINE WHETHER LINE PLACEMENT OR OTHER DAMAGE HAS OCCURRED.
- IF THE INSPECTION INDICATES POOR ALIGNMENT, DEBRIS, DISPLACED PIPE, INFILTRATION OR OTHER DEFECTS, CORRECT SUCH DEFECTS TO SATISFACTION OF ENGINEER AND PERMITTING AGENCIES HAVING JURISDICTION.
- CLEANING CONDUIT: CLEAR INTERIOR OF CONDUIT OF DIRT AND OTHER SUPERFLUOUS MATERIAL AS WORK PROGRESSES. MAINTAIN SWAB OR DRAG IN LINE AND PULL PAST EACH JOINT AS IT IS COMPLETED.
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- THE POTABLE WATER LINES SHALL BE TESTED TO 150 PSI TEST PRESSURE AND THE FIRE LINE SHALL BE TESTED TO 200 PSI TEST PRESSURE, BOTH FOR TWO (2) HOURS.
- INTERIOR INSPECTION OF CONDUIT TO DETERMINE WHETHER LINE PLACEMENT OR OTHER DAMAGE HAS OCCURRED.
- IF THE INSPECTION INDICATES POOR ALIGNMENT, DEBRIS, DISPLACED PIPE, INFILTRATION OR OTHER DEFECTS, CORRECT SUCH DEFECTS TO SATISFACTION OF ENGINEER AND PERMITTING AGENCIES HAVING JURISDICTION.
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- PLACE PLOGS IN END OF UNCOMPLETED CONDUIT AT END OF DAY OR WHENEVER WORK STOPS.
- DISINFECTION: AT COMPLETION OF WATER SERVICE LINE INSTALLATION, FLUSH AND DISINFECT IN CONFORMANCE WITH AWWA C-651, TO THE SATISFACTION OF LOCAL AUTHORITIES HAVING JURISDICTION.
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- PLACE PLOGS IN END OF UNCOMPLETED CONDUIT AT END OF DAY OR WHENEVER WORK STOPS.
- DISINFECTION: AT COMPLETION OF WATER SERVICE LINE INSTALLATION, FLUSH AND DISINFECT IN CONFORMANCE WITH AWWA C-651, TO THE SATISFACTION OF LOCAL AUTHORITIES HAVING JURISDICTION.
- HYDROSTATIC AND LEAKAGE TEST: ALL SITE WATER DISTRIBUTION PIPING SHALL BE TESTED AFTER INSTALLATION. DUCTILE IRON PIPE SHALL BE TESTED IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF AWWA STANDARD C-600, AND PVC PIPE SHALL BE TESTED IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF AWWA STANDARD C-603. ACCEPTABLE LEAKAGE MUST BE LESS THAN THE NUMBER OF GALLONS PER HOUR AS DETERMINED BY THE FORMULAS IN AWWA C-600 AND C-603.
- THE POTABLE WATER LINES SHALL BE TESTED TO 150 PSI TEST PRESSURE AND THE FIRE LINE SHALL BE TESTED TO 200 PSI TEST PRESSURE, BOTH FOR TWO (2) HOURS.
- INTERIOR INSPECTION OF CONDUIT TO DETERMINE WHETHER LINE PLACEMENT OR OTHER DAMAGE HAS OCCURRED.
- IF THE INSPECTION INDICATES POOR ALIGNMENT, DEBRIS, DISPLACED PIPE, INFILTRATION OR OTHER DEFECTS, CORRECT SUCH DEFECTS TO SATISFACTION OF ENGINEER AND PERMITTING AGENCIES HAVING JURISDICTION.
- CLEANING CONDUIT: CLEAR INTERIOR OF CONDUIT OF DIRT AND OTHER SUPERFLUOUS MATERIAL AS WORK PROGRESSES. MAINTAIN SWAB OR DRAG IN LINE AND PULL PAST EACH JOINT AS IT IS COMPLETED.
- PLACE PLOGS IN END OF

FDEP WASTEWATER SPECIFICATIONS

- 1. APPROPRIATE DEFLECTION TESTS ARE SPECIFIED FOR ALL FLEXIBLE PIPE...
2. LEAKAGE TESTS ARE SPECIFIED REQUIRING THAT: 1) THE LEAKAGE INFILTRATION OR INFLATATION DOES NOT EXCEED 200 GALLONS PER INCH OF PIPE DIAMETER PER MILE PER DAY...
3. DESIGN REQUIRES DROP PIPES TO BE PROVIDED FOR SEWERS ENTERING MANHOLES AT ELEVATIONS OF 24 INCHES OR MORE ABOVE THE MANHOLE INVERT...
4. DESIGN REQUIRES THAT A BENCH BE PROVIDED ON EACH SIDE OF ANY MANHOLE CHANNEL WHEN THE PIPE DIAMETER(S) ARE LESS THAN THE MANHOLE DIAMETER...
5. DESIGN REQUIRES: 1) MANHOLE LIFT HOLES AND GRADE ADJUSTMENT RINGS BE SEALED WITH NON-SHRINKING MORTAR OR OTHER APPROPRIATE MATERIAL...
6. MANHOLE INSPECTION AND TESTING FOR WATERTIGHTNESS OR DAMAGE PRIOR TO PLACING INTO SERVICE...
7. THE DESIGN REQUIRES 1) ELECTRICAL SYSTEMS AND COMPONENTS (E.G., MOTORS, LIGHTS, CABLES, CONDUITS, SWITCH BOXES, CONTROL CIRCUITS, ETC.) IN RAW WASTEWATER WET WELLS, OR IN ENCLOSED OR PARTIALLY ENCLOSED SPACES...
8. THE DESIGN REQUIRES WET WELL FLOORS HAVE A MINIMUM SLOPE OF 1 TO 1 TO THE HOPPER BOTTOM AND THE HORIZONTAL AREA OF HOPPER BOTTOMS BE NO GREATER THAN NECESSARY FOR PROPER INSTALLATION AND FUNCTION OF THE INLET...
9. THE DESIGN REQUIRES PUMP STATIONS BE ENCLOSED WITH A FENCE OR OTHERWISE DESIGNED WITH APPROPRIATE FEATURES TO DISCOURAGE THE ENTRY OF ANIMALS AND UNAUTHORIZED PERSONS...
10. IN SUBMERSIBLE PUMP STATIONS, THE DESIGN REQUIRES: 1) PUMP MOTOR POWER CORDS BE FLEXIBLE AND SERVICEABLE UNDER CONDITIONS OF EXTRA HARD USAGE...
11. THE DESIGN REQUIRES: 1) EMERGENCY STANDBY SYSTEMS TO HAVE SUFFICIENT CAPACITY TO START UP AND MAINTAIN THE TOTAL RATED RUNNING CAPACITY OF THE STATION...
12. THE DESIGN PROVIDES FOR EMERGENCY EQUIPMENT TO BE PROTECTED FROM OPERATION CONDITIONS THAT WOULD RESULT IN DAMAGE TO THE EQUIPMENT AND FROM DAMAGE AT THE RESTORATION OF REGULAR ELECTRICAL POWER...
13. FOR PERMANENTLY-INSTALLED OR PORTABLE ENGINE-DRIVEN PUMPS ARE USED, THE DESIGN INCLUDES PROVISIONS FOR MANUAL START-UP...
14. WHERE INDEPENDENT SUBSTATIONS ARE USED FOR EMERGENCY POWER, EACH SEPARATE SUBSTATION AND ITS ASSOCIATED TRANSMISSION LINES IS DESIGNED TO BE CAPABLE OF STARTING AND OPERATING THE PUMP STATION AT ITS RATED CAPACITY.

FDEP SEPARATION NOTES:

- 1. HORIZONTAL SEPARATION BETWEEN UNDERGROUND WATER MAINS AND SANITARY OR STORM SEWERS, WASTEWATER OR STORMWATER FORCE MAINS, RECLAIMED WATER PIPELINES, AND ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEMS.
a. NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST THREE FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED STORM SEWER, STORMWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.
b. NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST THREE FEET, AND PREFERABLY TEN FEET, BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED VACUUM-TYPE SANITARY SEWER.
c. NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST SIX FEET, AND PREFERABLY TEN FEET, BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED GRAVITY- OR PRESSURE-TYPE SANITARY SEWER, WASTEWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.
d. NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST TEN FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND ALL PARTS OF ANY EXISTING OR PROPOSED "ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEM" AS DEFINED IN SECTION 381.0065(2), F.S., AND RULE 64E-6.002, F.A.C.(2)
2. VERTICAL SEPARATION BETWEEN UNDERGROUND WATER MAINS AND SANITARY OR STORM SEWERS, WASTEWATER OR STORMWATER FORCE MAINS, AND RECLAIMED WATER PIPELINES.
a. NEW OR RELOCATED, UNDERGROUND WATER MAINS CROSSING ANY EXISTING OR PROPOSED GRAVITY- OR VACUUM-TYPE SANITARY SEWER OR STORM SEWER SHALL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST SIX INCHES, AND PREFERABLY 12 INCHES, ABOVE OR AT LEAST 12 INCHES BELOW THE OUTSIDE OF THE OTHER PIPELINE. HOWEVER, IT IS PREFERABLE TO LAY THE WATER MAIN ABOVE THE OTHER PIPELINE.
b. NEW ASPHALT UNDERGROUND WATER MAINS CROSSING ANY EXISTING OR PROPOSED PRESSURE-TYPE SANITARY SEWER, WASTEWATER OR STORMWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER SHALL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST 12 INCHES ABOVE OR BELOW THE OUTSIDE OF THE OTHER PIPELINE. HOWEVER, IT IS PREFERABLE TO LAY THE WATER MAIN ABOVE THE OTHER PIPELINE.
c. AT THE UTILITY CROSSINGS DESCRIBED IN PARAGRAPHS (A) AND (B) ABOVE, ONE FULL LENGTH OF WATER MAIN PIPE SHALL BE CENTERED ABOVE OR BELOW THE OTHER PIPELINE. JOINTS WILL BE AS FAR AS POSSIBLE FROM THE OTHER PIPELINE. ALTERNATIVELY, AT SUCH CROSSINGS, THE PIPES SHALL BE ARRANGED SO THAT ALL WATER MAIN JOINTS ARE AT LEAST THREE FEET FROM ALL JOINTS IN VACUUM-TYPE SANITARY SEWERS, STORMWATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C., AND AT LEAST SIX FEET FROM ALL JOINTS IN GRAVITY- OR PRESSURE-TYPE SANITARY SEWERS, WASTEWATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.(3)
3. SEPARATION BETWEEN WATER MAINS AND SANITARY OR STORM SEWER MANHOLES
a. NO WATER MAIN JOINTS SHALL BE THROUGH, OR COME INTO CONTACT WITH, ANY PART OF A SANITARY SEWER MANHOLE.
b. EFFECTIVE AUGUST 28, 2003, WATER MAINS SHALL NOT BE CONSTRUCTED OR ALTERED TO PASS THROUGH, OR COME INTO CONTACT WITH, ANY PART OF A STORM SEWER MANHOLE STRUCTURE WHERE IT IS NOT TECHNICALLY FEASIBLE OR ECONOMICALLY SENSIBLE TO COMPLY WITH THIS REQUIREMENT (I.E., WHERE THERE IS A CONFLICT IN THE ROUTING OF A WATER MAIN AND A STORM SEWER AND WHERE ALTERNATIVE ROUTING OF THE WATER MAIN OR THE STORM SEWER IS NOT TECHNICALLY FEASIBLE OR IS NOT ECONOMICALLY SENSIBLE), THE DEPARTMENT SHALL ALLOW EXCEPTIONS TO THIS REQUIREMENT (I.E., THE DEPARTMENT SHALL ALLOW CONSTRUCTION OF CONFLICT MANHOLES), BUT SUPPLIERS OF WATER OR PERSONS PROPOSING TO CONSTRUCT CONFLICT MANHOLES MUST FIRST OBTAIN A SPECIFIC PERMIT FROM THE DEPARTMENT IN ACCORDANCE WITH PART V OF THIS CHAPTER AND MUST PROVIDE IN THE PRELIMINARY DESIGN REPORT OR DRAWINGS, SPECIFICATIONS, AND DESIGN DATA ACCOMPANYING THEIR PERMIT APPLICATION THE FOLLOWING INFORMATION:
1. TECHNICAL OR ECONOMIC JUSTIFICATION FOR EACH CONFLICT MANHOLE.
2. A STATEMENT IDENTIFYING THE PARTY RESPONSIBLE FOR MAINTAINING EACH CONFLICT MANHOLE.
3. ASSURANCE OF COMPLIANCE WITH THE DESIGN AND CONSTRUCTION REQUIREMENTS IN SUB-SUBPARAGRAPHS a. THROUGH d. BELOW.
c. EACH WATER MAIN PASSING THROUGH A CONFLICT MANHOLE SHALL HAVE A FLEXIBLE, WATERTIGHT JOINT ON EACH SIDE OF THE MANHOLE TO ACCOMMODATE DIFFERENTIAL SETTLING BETWEEN THE MAIN AND THE MANHOLE.
d. WITHIN EACH CONFLICT MANHOLE, THE WATER MAIN PASSING THROUGH THE MANHOLE SHALL BE INSTALLED IN A PIPE HAVING HIGH IMPACT STRENGTH (I.E., HAVING AN IMPACT STRENGTH AT LEAST EQUAL TO THAT OF 0.25-INCH-THICK DUCTILE IRON PIPE).
e. EACH CONFLICT MANHOLE SHALL HAVE AN ACCESS OPENING, AND SHALL BE SIZED TO ALLOW FOR EASY CLEANING.
f. GRATINGS SHALL BE INSTALLED AT ALL STORM SEWER INLETS UPSTREAM OF EACH CONFLICT MANHOLE TO PREVENT LARGE OBJECTS FROM ENTERING THE MANHOLE.
4. SEPARATION BETWEEN FIRE HYDRANT DRAINS AND SANITARY OR STORM SEWERS, WASTEWATER OR STORMWATER FORCE MAINS, RECLAIMED WATER PIPELINES, AND ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEMS. NEW OR RELOCATED FIRE HYDRANTS WITH UNDERGROUND DRAINS SHALL BE LOCATED SO THAT THE DRAINS ARE AT LEAST THREE FEET FROM ANY EXISTING OR PROPOSED STORM SEWER, STORMWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.; AT LEAST THREE FEET, AND PREFERABLY TEN FEET, FROM ANY EXISTING OR PROPOSED VACUUM-TYPE SANITARY SEWER; AT LEAST SIX FEET, AND PREFERABLY TEN FEET, BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED GRAVITY- OR PRESSURE-TYPE SANITARY SEWER, WASTEWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.; AND AT LEAST TEN FEET FROM ANY EXISTING OR PROPOSED "ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEM" AS DEFINED IN SECTION 381.0065(2), F.S., AND RULE 64E-6.002, F.A.C. HORIZONTAL SEPARATION BETWEEN UNDERGROUND WATER MAINS AND SANITARY OR STORM SEWERS, WASTEWATER OR STORMWATER FORCE MAINS, RECLAIMED WATER PIPELINES, AND ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEMS.
a. NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST THREE FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED STORM SEWER, STORMWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.
b. NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST THREE FEET, AND PREFERABLY TEN FEET, BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED VACUUM-TYPE SANITARY SEWER.
c. NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST SIX FEET, AND PREFERABLY TEN FEET, BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED GRAVITY- OR PRESSURE-TYPE SANITARY SEWER, WASTEWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C. THE MINIMUM HORIZONTAL SEPARATION DISTANCE BETWEEN WATER MAINS AND GRAVITY-TYPE SANITARY SEWERS SHALL BE REDUCED TO THREE FEET WHERE THE BOTTOM OF THE WATER MAIN IS LAID AT LEAST SIX INCHES ABOVE THE TOP OF THE SEWER.
d. NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST TEN FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND ALL PARTS OF ANY EXISTING OR PROPOSED "ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEM" AS DEFINED IN SECTION 381.0065(2), F.S., AND RULE 64E-6.002, F.A.C.(2)
5. THE CONTRACTOR IS TO CONTACT THE ENGINEER TO RESOLVE ALL SEPARATION PROBLEMS ENCOUNTERED IN THE FIELD. NOTE: MOST STRINGENT LOCAL, STATE AND FEDERAL RULES TO APPLY.

GENERAL NOTES:(ALL DRAWINGS)

- 1. SEE TYPICAL DETAILS ON DETAIL SHEETS FOR ADDITIONAL CONSTRUCTION DETAIL INFORMATION.
2. CONTRACTOR SHALL BECOME FAMILIAR AND COMPLY WITH ALL PERMITS AND PERMIT CONDITIONS. CONTRACTOR SHALL OBTAIN PERMISSION FROM CEG OR ALL PERMIT AGENCIES IDENTIFIED IN SPECIFICATIONS PRIOR TO COMMENCING SITE WORK.
3. ALL AREAS DISTURBED OFF-SITE SHALL BE RESTORED TO EQUAL OR BETTER CONDITION THAN PRE-CONSTRUCTION WITH SAME TYPE OF SOIL AS EXISTING.
4. CONTRACTOR SHALL COMPLY WITH ALL RECOMMENDATIONS OF UNIVERSAL ENGINEERING SURFACE EXPLORATION REPORT FOR THIS SITE.
5. PROVIDE CONSTANT SLOPE BETWEEN ALL SPOT ELEVATIONS.
6. UTILITY LENGTHS ARE APPROXIMATE BASED ON FIELD OBSERVATIONS AND AS-BUILT DRAWINGS. CONTRACTOR SHALL VERIFY EXACT LOCATION, SIZE, DEPTH, AND MATERIAL OF EXISTING UTILITIES. PROVIDE ADDITIONAL PIPING AND FITTINGS AS NECESSARY. NOTIFY ENGINEER OF SIGNIFICANT INCREASES. NOTIFY ENGINEER MINIMUM 72 HOURS (WEEKDAYS) PRIOR TO MAKING UTILITY CONNECTIONS OR BACK FILLING UTILITY TRENCHES FOR INSPECTION. IF NOT NOTIFIED, CONTRACTOR SHALL EXPOSE LINES PER ENGINEER'S REQUEST FOR INSPECTIONS.
7. ALL TRAFFIC SIGNS SHALL BE INSTALLED PER STANDARD FDOT INDEX NOS. 11860 AND 17302.
8. ALL RADIUS ARE 5' UNLESS IDENTIFIED OTHERWISE.
9. PROVIDE 36" LONG TRANSITION WITH CONSTANT SLOPE FROM TOP OF CURB TO GRADE AT TERMINATION POINT OF CURBS.
10. CONTRACTOR SHALL CLEAR AND GRUB ALL VEGETATION ON-SITE EXCEPT TREES SHOWN TO REMAIN ON DWG C-1 OR LANDSCAPE PLANS.
11. PROVIDE SILT FENCE ALONG ENTIRE PERIMETER OF PROJECT AREA EXCLUDING ENTRANCE DRIVEWAYS OR AS SHOWN ON DRAWING G-2, EXCLUDING ENTRANCE DRIVEWAYS OR AS SHOWN ON DRAWING G-2.
12. ALL WASTE SHALL BE DISPOSED OF OFF-SITE IN A SAFE AND LEGAL MANNER UNLESS OWNER SPECIFICALLY REQUESTS OTHERWISE.
13. FOR DEMOLITION OF ALL ASPHALT AND CONCRETE MATERIALS, SAWCUT EDGES FOR SMOOTH STRAIGHT EDGE. ALSO SAWCUT ALL EXISTING PAVEMENT EDGES FOR SMOOTH STRAIGHT EDGE AT ALL TIE-IN POINTS WITH NEW PAVEMENT OR CONCRETE.
14. PROVIDE HANDICAP ACCESSIBLE CONNECTION WITH TRUNCATED DOMES AT TERMINATION POINT OF ALL SIDEWALKS ADJACENT TO DRIVING LINES WITHIN COUNTY OR CITY RIGHTS-OF-WAY PER FDOT STANDARD INDEX NO. 304.
15. CONTRACTOR SHALL VERIFY ON-SITE PRIOR TO BIDDING WORK THE FULL EXTENT OF DEMOLITION REQUIRED BASED ON SITE PLAN CONSTRUCTION DRAWINGS. ALL ITEMS SHALL BE INCLUDED IN BASE BID.
16. REMOVE ALL ABOVE GROUND IMPROVEMENTS IN AREAS SHOWN FOR DEMOLITION UNLESS SPECIFICALLY IDENTIFIED OTHERWISE.
17. ALL SLOPES 4H:1V OR STEEPER SHALL BE SODDED. ALL SLOPES STEEPER THEN 3H:1V SHALL BE SODDED AND STAKED.
18. ADD BARS SPACED 6" O.C. TO ALL MES PER FDOT INDEX NO. 273 UNLESS FENCING PROHIBITS PUBLIC ACCESS.
19. CONTRACTOR SHALL PROVIDE ALL FITTINGS REQUIRED TO INSTALL UTILITIES PER PLAN.
20. CONTACT UNDERGROUND UTILITIES LOCATE BEFORE COMMENCING ANY DIGGING A MINIMUM OF 48 HOURS IN ADVANCE AT 811.
21. SUBMIT PROPOSED JOINT PLAN TO ENGINEER A MINIMUM OF ONE WEEK PRIOR TO POURING CONCRETE PAVEMENT FOR APPROVAL OR MODIFICATIONS.
22. VERIFY THAT THE LANDSCAPE WORK IS COORDINATED WITH ALL UTILITIES AND STORMWATER SYSTEMS. A MINIMUM OF FIVE (5) FOOT HORIZONTAL SEPARATION BETWEEN TREES AND BURIED, AERIAL, OR GRADE-MOUNTED UTILITY SYSTEMS IS REQUIRED.
23. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO PUBLIC ROADWAYS, EASEMENTS, CURBS, SIDEWALKS, DRAINAGE SYSTEM, BENCHMARKS, OR UTILITIES AS A DIRECT RESULT OF CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR HAVING ALL BOUNDARY CORNERS AND BENCHMARKS DISTURBED OR DESTROYED DURING CONSTRUCTION REPLACED BY A FLORIDA LICENSED LAND SURVEYOR.
24. ALL EXCAVATIONS OF GREATER DEPTH THAN 5' SHALL COMPLY WITH THE CURRENT OSHA TRENING SAFETY STANDARDS 29 C.F.R. S. 1926.650 SUSPART P. ANY EXCAVATION WITHIN THE CLEARZONE SHALL ALSO COMPLY WITH ALL WARNING AND/OR BARRIER REQUIREMENTS OF FDOT INDEX NO. 800.
25. CONSTRUCTION ENGINEERING GROUP DOES NOT WARRANT THE ACCURACY OF THE RECORD SURVEY.
26. GRADING ADJACENT TO BUILDINGS SHALL BE 6" BELOW FINISHED FLOOR UNLESS IDENTIFIED OTHERWISE BY ARCHITECT OR ON GRADING PLANS.
27. PROVIDE TRUNCATED DOMES AND TACTILE SURFACE PER FLORIDA BUILDING CODE REQUIREMENTS.
28. ALL PROPOSED ELEVATIONS ARE REFERENCED IN _____.

PALM BAY (ALL DRAWINGS)

- 1. PROVIDE AS-BUILT INFORMATION WHEN REQUESTING A CERTIFICATE OF OCCUPANCY AND ALLOW FIVE (5) DAYS FOR PROCESSING.
2. ALL DISTURBED AREAS SHALL HAVE GRASS/VEGETATION ESTABLISHED (80% GERMINATION) PRIOR TO FINAL INSPECTION FOR THE CERTIFICATE OF OCCUPANCY.
3. CONTACT THE TECHNICAL SERVICES BUREAU TO DETERMINE INSPECTIONS NEEDED FOR THIS FACILITY.
4. DURING CONSTRUCTION AN ALL-WEATHER ACCESSIBLE ROADWAY SHALL BE MAINTAINED AT ALL TIMES FOR FIRE APPARATUS.
5. TESTING OF PAVED AREAS IS REQUIRED AND SHALL BE SPECIFIED ON THE METHODS WITH A DESCRIPTION OF THE IMPROVEMENTS AND THE TESTING METHODS TO BE USED.
6. PROVIDE FILTER FABRIC JACKET AT JOINTS OF STORM DRAIN PIPING PER FDOT INDEX NO. 280. SEE TYPICAL DETAIL ON THESE PLANS.
7. ALL WORK IN PALM BAY RIGHT-OF-WAY SHALL CONFORM TO LATEST EDITION OF CITY OF PALM BAY GENERAL RIGHT-OF-WAY USE SPECIFICATIONS, CONDITIONS, AND DETAILS.
8. ACCESS ROADS SHALL BE INSTALLED AT THE START OF THE PROJECT AND MAINTAINED.
9. ALL ON-SITE UTILITIES ARE TO BE PRIVATELY MAINTAINED.
10. PROVIDE NOTIFICATION TO ENGINEERING INSPECTOR GROWTH MANAGEMENT LAND DEVELOPMENT DIVISION FAX 321-953-8920 AND THE UTILITY INSPECTOR, PETER CARR, COSS, PHONE AT 321-952-3410 OR SEND E-MAIL TO: PETER.CARR@PALMBAYFLORIDA.ORG 72 HOURS PRIOR TO CONSTRUCTION START WITH CORRECT INFORMATION (NAME AND PHONE NUMBER TO CONTACT CONTRACTOR, SUB-CONTRACTOR), SEQUENCE OF WORK ARE REQUIRED. ADDITIONAL INFORMATION OR CHANGES YOU CAN CONTACT AT 321-733-3042 EXT. 5348.
11. FIRE HYDRANTS AND FIRE PROTECTION APPLIANCES SHALL BE KEPT ACCESSIBLE TO THE FIRE DEPARTMENT AT ALL TIMES. CLEARANCE OF 7.5 FEET IN FRONT OF AND TO THE SIDES OF FIRE HYDRANTS AND APPLIANCES SHALL BE MAINTAINED. CLEARANCE OF FOUR FEET TO THE REAR OF FIRE HYDRANTS SHALL BE MAINTAINED. NFPA 1, 3-6.6.2, 3-5.6.2.1, 3-5.6.2.2.
12. WATER TUBING SERVICE SHALL BE POLYETHYLENE (PE) 3/4" TUBING WITH DIFFERENT END STORIES OR AN EQUAL.
13. PROVIDE A BRASS CORPORATION STOP AND CURB STOP MANUFACTURED BY FORD FOR PE 3/4" TUBING.
14. NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEMS CONSTRUCTION PERMIT IS REQUIRED FOR PROJECTS OVER 1 ACRES IN SIZE. THE CONTRACTOR SHALL PREPARE THE NECESSARY NOTICE OF INTENT (N.O.I.) AND STORMWATER POLLUTION PREVENTION PLAN (S.W.P.P.P.) PERMIT SHALL BE POSTED AT THE PROJECT SITE AT ALL TIMES.
15. THE N.O.I. WILL BE FILED TO THE APPROPRIATE SECTION OF F.D.E.P. COPIES OF THE N.O.I. AND S.W.P.P.P. WILL BE SUBMITTED TO THE LAND DEVELOPMENT DIVISION BEFORE ANY WORK CAN START ON SITE.
16. PROVIDE NOTIFICATION SCHEDULE OF WORK IN 30 DAY PERIODS WITH DATE OF WORK DESCRIPTION OF WORK, NAMES, PHONE NUMBERS AND FAX NUMBERS OF CONTRACTORS AND SUB-CONTRACTORS.
17. SILT FENCE SEPARATION SHALL BE PER F.D.O.T. EROSION AND SEDIMENT CONTROL DESIGNER AND REVEAL MANUAL.
18. AFTER INSTALLATION OF EROSION CONTROL MEASURES AND PRIOR TO LEAVING, AN INSPECTION IS REQUIRED.
19. SILT FENCE IS REQUIRED AROUND PROPERTY. CHANGES REQUIRE INSPECTOR APPROVAL.
20. FOR TREES ALONG THE PERIMETER OF PROPERTY PRIOR TO REMOVAL CONTRACTOR SHALL OBTAIN ADJUTING PROPERTY OWNER AUTHORIZATION.
21. TEMPORARY CONSTRUCTION DRIVEWAY REQUIRED.
22. A 72 HOURS NOTIFICATION IS REQUIRED FOR ROAD WORK PROPOSED IN PUBLIC RIGHT OF WAY.
23. CONTRACTOR SHALL PROVIDE F.D.O.T. MAINTENANCE OF TRAFFIC PLAN, INDEX TO BE USED, INCLUDE TAPER LENGTH, TRAFFIC OPERATION AND DESCRIPTION OF WORK.
24. NOTIFICATION OF RIGHT OF WAY, DRAINAGE PIPES, ETC., "CITY PROPERTY" AROUND PROJECT SHALL BE KEPT IN GOOD CONDITION AND MAINTAINED. THIS IS A PRIVATE SEWER AND STORM DRAIN SYSTEM THAT WILL BE PRIVATELY MAINTAINED.
25. PAVEMENT MARKINGS AND SIGNAGE AT THE DRIVEWAY ENTRANCE AND ON-SITE ARE THE PERPETUAL MAINTENANCE RESPONSIBILITY OF THE OWNER AND ASSIGNS.
26. CONSTRUCTION ENGINEERING GROUP DOES NOT WARRANT THE ACCURACY OF THE RECORD SURVEY.
27. NOTIFICATION OF RIGHT OF WAY USE SERVICES DIVISION AT 321-952-3403 A MINIMUM OF 72 HOURS PRIOR TO THE START OF ANY OFFSITE CONSTRUCTION ACTIVITIES IN THE PUBLIC RIGHTS-OF-WAY SUCH AS PAVING, PLACING OF PIPE, ETC. THESE ACTIVITIES SHALL BE PERFORMED ONLY IN THE PRESENCE OF A PALM BAY PUBLIC WORKS DEPARTMENT INSPECTOR.
28. NOTIFY BRUCE MOJA TO SET UP A PRE-SITE WORK MEETING. NOTIFY EMANUEL ODIES OF THE PALM BAY UTILITIES DEPARTMENT AT 321-952-3410, AND HECTOR FRANCO, OF THE PUBLIC WORKS DEPARTMENT AT 952-3403, 72 HOURS PRIOR TO CONSTRUCTION START WITH THE CORRECT INFORMATION (NAMES AND PHONE NUMBERS OF CONTRACTOR, SUB-CONTRACTORS). A SEQUENCE OF WORK AND COORDINATION WITH CITY STAFF IS REQUIRED PRIOR TO THE START OF CONSTRUCTION.
29. FIRE HYDRANT SHALL BE INSTALLED AND OPERATIONAL PRIOR TO CONSTRUCTION WORK. NFPA 241, 6-7.2.2.
30. ALL UTILITY CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST REVISION OF THE PALM BAY UTILITY DEPARTMENT'S "POLICIES, PROCEDURES, AND STANDARDS" HANDBOOK AND THE STANDARD DETAIL DRAWINGS.
31. THE OWNER OR AUTHORIZED AGENT TO CALL THE DRIVEWAY PERMIT SECTION (321-952-3403) FOR A DRIVEWAY PRE-POUR INSPECTION. CITY INSPECTORS WILL VERIFY THE INVERT ELEVATION AND CONSTRUCTION REQUIREMENTS PRIOR TO THE PLACEMENT OF THE DRIVEWAYS. FAILURE TO COMPLY WITH THE SPECIFIED INVERT ELEVATIONS WILL RESULT IN CORRECTIVE MEASURES AT THE EXPENSE OF THE PERMITEE. THE INSPECTOR WILL LEAVE A PASS OR FAIL NOTICE ON-SITE.
32. THE OWNER OR AUTHORIZED AGENT TO CALL THE RIGHT-OF-WAY USE SECTION (321-952-8985) FOR THE PRE-POUR INSPECTION OF THE PROPOSED SIDEWALK WITHIN THE RIGHT-OF-WAY. CITY INSPECTORS WILL VERIFY THE CONSTRUCTION REQUIREMENTS PRIOR TO THE PLACEMENT OF THE SIDEWALK.
33. NOTIFY THE LAND DEVELOPMENT DIVISION ENGINEERING INSPECTOR HECTOR FRANCO AT FAX: 321-733-3042 OR BY EMAIL: FRANCOH@PALMBAYFLORIDA.ORG
34. DRIVEWAY SIGNS AND PAVEMENT MARKINGS IN DRIVE SHALL BE THE PERPETUAL MAINTENANCE RESPONSIBILITY OF THE SITE OWNERS.
35. THE CONTRACTOR WILL NOTIFY RIGHT-OF-WAY USE SERVICES 72 HOURS PRIOR TO ANY OFFSITE CONSTRUCTION ACTIVITIES, INCLUDING EXCAVATION WORK. THE CONTRACTOR WILL PROVIDE RIGHT-OF-WAY USE SERVICES WITH A COPY OF ALL TEST RESULTS FROM PROPOSED IMPROVEMENTS, ALL CONCRETE TESTS AND ALL DENSITY AND COMPACTION RESULTS FROM THE PROJECT THAT ARE LOCATED IN THE PUBLIC ROAD ROW. ALL COORDINATION FOR RIGHT-OF-WAY USE SERVICES CAN BE ACCOMPLISHED USING THE FOLLOWING CONTACT INFORMATION: PUBLIC WORKS DEPARTMENT, RIGHT-OF-WAY USE SERVICES, 321-952-3403 OR FAX: 321-768-6401 OR EMAIL: PWP@PALMBAYFLORIDA.ORG, OR MAIL: PUBLIC WORKS DEPARTMENT, RIGHT-OF-WAY USE SERVICES, 1050 MALABAR ROAD SW, PALM BAY, FL 32909.

Table with columns: REVISE, DATE, SURV AND CITY COMMENTS, REVISION. Includes project information: BRENTWOOD LAKES SOUTH, D.R. HORTON MALABAR ROAD PALM BAY, FLORIDA, DRAWING TITLE SPECIFICATIONS AND GENERAL NOTES. Includes professional seal for JAKE T. WISE, LICENSE No. 55405, STATE OF FLORIDA PROFESSIONAL ENGINEER, dated AUG 2 6 2016. Includes project details: DATE 4-26-16, SCALE NTS, PROJ. NO. 160163, DESIGNED BY: JRT, DRAWN BY: SMB, CHECKED BY: JTW, DRAWING NO. C-19. Includes approval: Approved For Construction, AUG 2 6 2016, City of Palm Bay.

APPENDIX F – TRAFFIC FORECASTING INFORMATION

Contained in this Appendix –

- Specific Intersection Volume Growth Explanation
- NCHRP Tool Supporting Information
- Traffic Forecast Volumes Supporting Information

VOLUME GROWTH EXPLANATION

ST. JOHNS HERITAGE PARKWAY GROWTH EXPLANATION

**Calculation of Forecasted Trips by Turning Movement
Malabar Road & St. Johns Heritage Parkway**

The intersection volumes for major intersections along Malabar Road were forecasted by using existing turning movements and future Directional Design-Hour Volumes (DDHVs) into the FDOT Turns tool. The intersection of Malabar Road and St. Johns Heritage Parkway changes from a three-leg intersection in the existing condition to a four-leg intersection in the future condition. In order to estimate appropriate “existing” volumes for the four-leg intersection, the forecasted trips at the intersection were calculated based on the forecasted approach and departure volumes from the adjacent roadway segments. The procedure of this calculation is outlined below:

1. The City’s peak-hour forecasted approach and departure volumes for the study intersection were obtained from the forecasted traffic volumes.
2. Two different approaches (approach-based and departure-based) were used in distributing the City’s peak-hour forecasted trips on each intersection leg to the different turning movements. As an example,
3. In approach-based analysis:

$$\text{EBL Volume} = \text{EB Approach Vested Volume} \times \frac{\text{NB Departure Volume}}{\text{NB Departure Volume} + \text{EB Departure Volume} + \text{SB Departure Volume}}$$

4. In departure-based analysis:

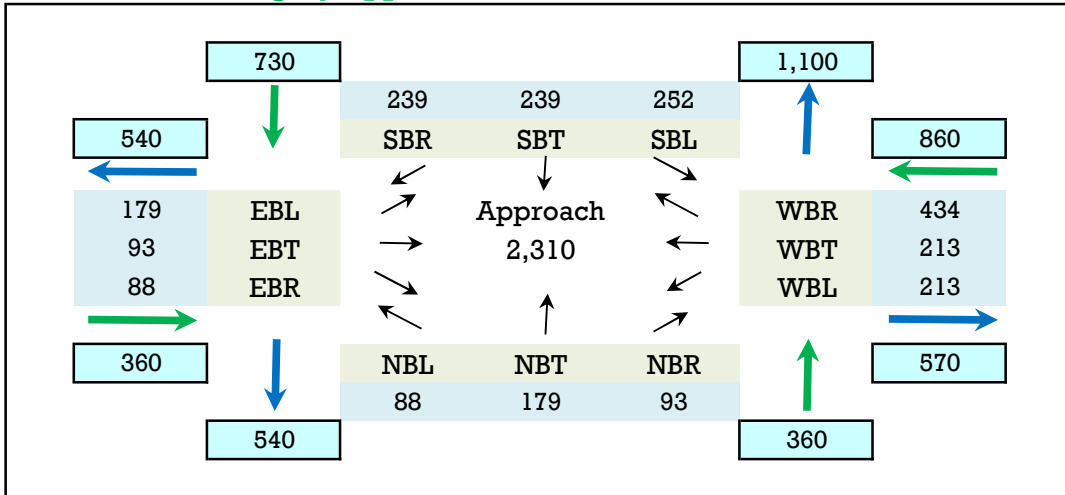
$$\text{EBL Volume} = \text{NB Departure Vested Volume} \times \frac{\text{EB Approach Volume}}{\text{NB Approach Volume} + \text{EB Approach Volume} + \text{SB Approach Volume}}$$

5. The final peak-hour forecasted turning movement volumes were calculated by averaging the volumes obtained from both the analyses in Steps 3 and 4.

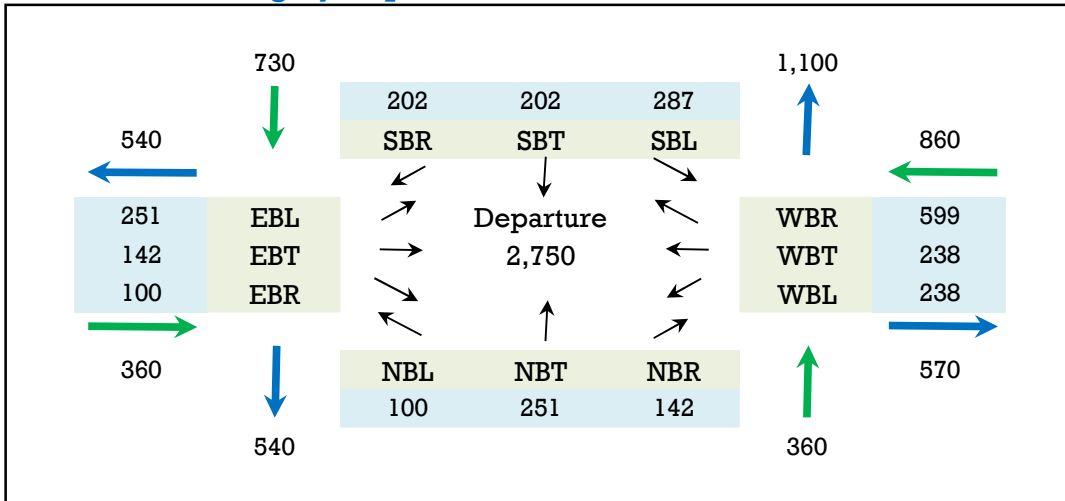
ROAD A & ROAD B

Committed Turning Movement Volume Development 2050 AM

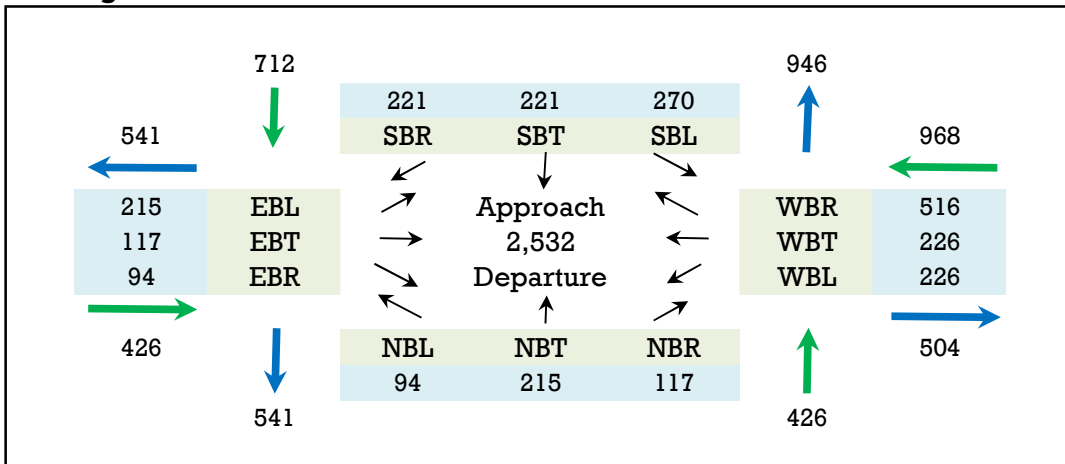
Volume Balancing by Approach



Volume Balancing by Departure



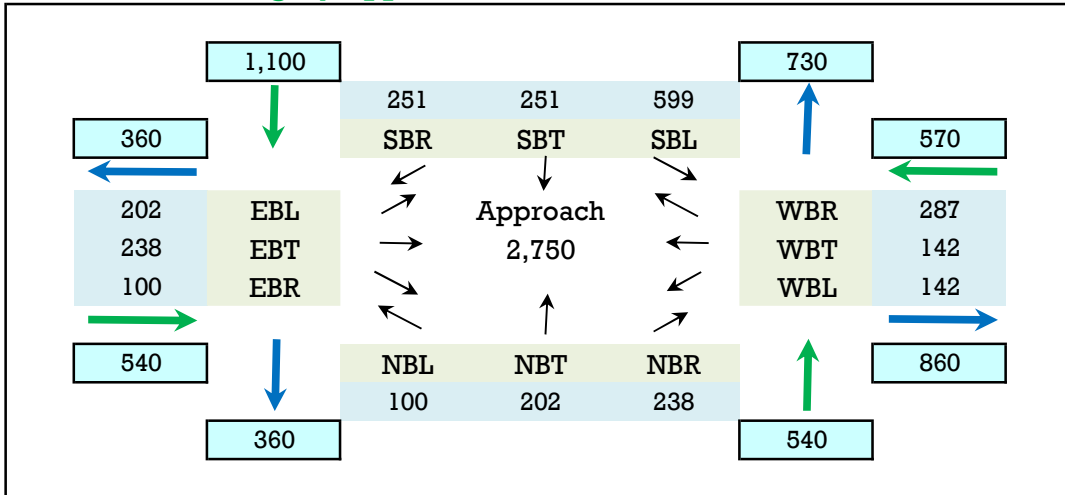
Average Balanced Volumes



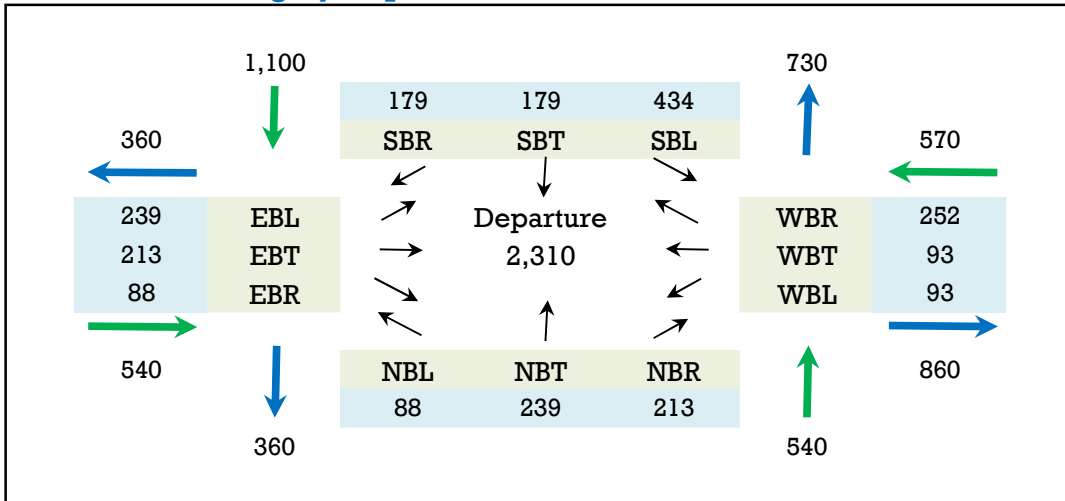
ROAD A & ROAD B

Committed Turning Movement Volume Development 2050 PM

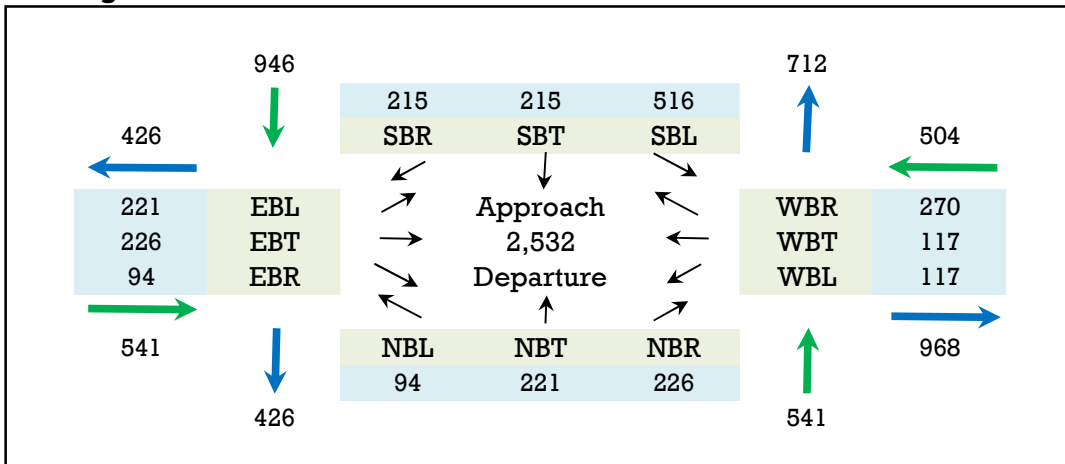
Volume Balancing by Approach



Volume Balancing by Departure



Average Balanced Volumes



WISTERIA AVENE/ABILENE DRIVE GROWTH EXPLANATION

Wisteria Ave.

Land Use	Code	Quantity	Units	Daily Trips	AM Trips	AM Entering	AM Exiting	PM Trips	PM Entering	PM Exiting	
Single Family Homes		210	78 DU	827		60	15	45	80	50	30
Estimated Homes (east side of Wisteria quadrant)											
	AM WB		PM WB	PM EB							
Directionality		60%	40%	40%	60%	AM Entering from West	AM Entering from East	PM Exiting West	PM Exiting East		
		6	9	27	18	30	20	12	18		

Abilene Dr. (Chaparral)

Land Use	Code	Quantity	Units	Daily Trips	AM Trips	AM Entering	AM Exiting	PM Trips	PM Entering	PM Exiting	
Single Family Homes		210	173 DU	1722		128	32	96	172	108	64
Multi-Family Homes		220	98 DU	700		47	11	36	58	37	21
			SUM	2422		175	43	132	230	145	85
	AM WB		PM WB	PM EB							
Directionality		60%	40%	40%	60%	AM Entering from West	AM Entering from East	PM Exiting West	PM Exiting East		
		17	26	79	53	87	58	34	51		

KRASSNER DRIVE/BENDING BRANCH LANE GROWTH EXPLANATION

Bending Branch Ln.

332 homes have been built, 97 homes still to be built

Land Use	Code	Quantity	Units	Daily Trips	AM Trips	AM Entering	AM Exiting	PM Trips	PM Entering	PM Exiting
Single Family Homes		210	97 DU	1011		74	19	56	99	62 37
Directionality	AM WB	AM EB	PM WB	PM EB						
	60%	40%	40%	60%						
	AM Entering from West	AM Entering from East	AM Exiting West	AM Exiting East	PM Entering from West	PM Entering from East	PM Exiting West	PM Exiting East		
	8	11	34	22	37	25	15	22		

GARVEY ROAD GROWTH EXPLANATION

Garvey AM					Garvey AM							
Growth Rate					Growth Rate							
Existing	7290	2050 AADT	NBL	NBR	WBR	Existing	3743	2030 AADT	NBL	NBR	WBR	
				14	122				14	122		
				10%	90%				10%	90%		
Entering				40%		Entering			40%			
Exiting				60%		Exiting			60%			
2050 DHV				656		2030 DHV			337			
2050 Entering				262		2030 Entering			135			
2050 Exiting				394		2030 Exiting			202			
2050 NBL				217		2030 NBL			111			
2050 NBR				177		2030 NBR			91			
Thrifty Produce				Malabar WB	55%	Thrifty Produce			Malabar WB	55%		
40000 SF				Malabar EB	45%	40000 SF			Malabar EB	45%		
	153	Total AM Trips					153	Total AM Trips				
	92	Entering					92	Entering				
	61	Exiting		Exit to Garvey	22%		61	Exiting		Exit to Garvey	22%	
Add Future NBL			40		Exit to Malabar	78%	Add Future NBL		40		Exit to Malabar	78%
Add Future NBR			21				Add Future NBR		21			
Final 2050 NBL			257				Final 2050 NBL		151			
Final 2050 NBR			198				Final 2050 NBR		112			

PM					PM							
Growth Rate					Growth Rate							
Existing	7290	2050 AADT	NBL	NBR	WBR	Existing	3743	2030 AADT	NBL	NBR	WBR	
				12	69				12	69		
				15%	85%				15%	85%		
Entering				60%		Entering			60%			
Exiting				40%		Exiting			40%			
2050 DHV				656		2030 DHV			337			
2050 Entering				394		2030 Entering			202			
2050 Exiting				262		2030 Exiting			135			
2050 NBL				118		2030 NBL			61			
2050 NBR				144		2030 NBR			74			
Thrifty Produce				Malabar WB	45%	Thrifty Produce			Malabar WB	45%		
40000 SF				Malabar EB	55%	40000 SF			Malabar EB	55%		
	370	Total PM Trips					370	Total PM Trips				
	188	Entering					188	Entering				
	182	Exiting		Exit to Garvey	22%		182	Exiting		Exit to Garvey	22%	
Add Future NBL			64		Exit to Malabar	78%	Add Future NBL		64		Exit to Malabar	78%
Add Future NBR			78				Add Future NBR		78			
Final 2050 NBL			182				Final 2050 NBL		125			
Final 2050 NBR			222				Final 2050 NBR		152			

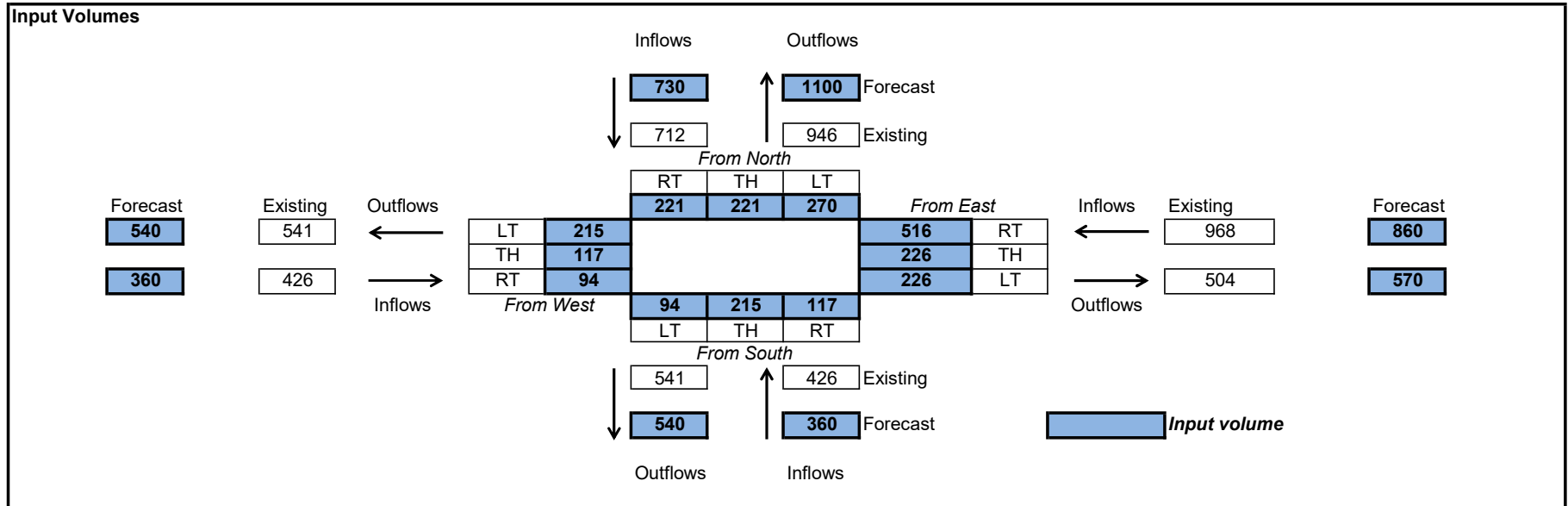
Brentwood Lakes
 332 Home Built
 97 Homes Under Construction
 Per ITE Trip Gen for Housing 210
 60 Entering
 36 Leaving

Brentwood Lakes
 332 Home Built
 97 Homes Under Construction
 Per ITE Trip Gen for Housing 210
 18 Entering
 54 Leaving

NCHRP TOOL

2050 AM ST. JOHNS HERITAGE PARKWAY NCHRP TOOL INPUTS AND OUTPUTS

Iterative Method Estimated Turning Movements



Initial Turning Movement Matrix, T_{ij}

	Forecasts	East Leg	North Leg	West Leg	South Leg	D_{jf}
East Leg	860	504	946	541	541	outflows, j
North Leg	730	0	516	226	226	
West Leg	360	712	0	221	221	
South Leg	360	426	117	215	94	
	O_{if}	504	117	215	94	
	inflows, i	570	1100	540	540	

first row iteration

		D_{jf}^*			
		475	822	507	507
	860	0	458	201	201
	730	277	0	227	227
	360	99	182	0	79
	360	99	182	79	0

compare

	D_{jf}^*	D_{jf}	change
j=1	475	570	-17.0%
j=2	822	1100	-25.0%
j=3	507	540	-6.0%
j=4	507	540	-6.0%
Totals	2311	2750	

first column iteration

		570	1100	540	540
	1041	0	613	214	214

Iterative Method Estimated Turning Movements

816	332	0	242	242
447	119	244	0	84
447	119	244	84	0

Oif*

compare	<u>Oif*</u>	<u>Oif</u>	<u>change</u>
i=1	1041	860	21.00%
i=2	816	730	12.00%
i=3	447	360	24.00%
i=4	447	360	24.00%
Totals	2751	2310	

second row iteration

	489	900	461	461
860	0	506	177	177
730	297	0	216	216
360	96	197	0	68
360	96	197	68	0

compare	<u>Djf*</u>	<u>Djf</u>	<u>change</u>
j=1	489	570	-14.00%
j=2	900	1100	-18.00%
j=3	461	540	-15.00%
j=4	461	540	-15.00%
Totals	2311	2750	

second column iteration

	570	1100	540	540
1032	0	618	207	207
852	346	0	253	253
433	112	241	0	80
433	112	241	80	0

compare	<u>Oif*</u>	<u>Oif</u>	<u>change</u>
i=1	1032	860	20.00%
i=2	852	730	17.00%
i=3	433	360	20.00%
i=4	433	360	20.00%
Totals	2750	2310	

third row iteration

	482	915	457	457
860	0	515	173	173
730	296	0	217	217
360	93	200	0	67
360	93	200	67	0

compare	<u>Djf*</u>	<u>Djf</u>	<u>change</u>
j=1	482	570	-15.00%
j=2	915	1100	-17.00%
j=3	457	540	-15.00%

Iterative Method Estimated Turning Movements

j=4	457	540	-15.00%
Totals	2311	2750	

third column iteration

	570	1100	540	540
1027	0	619	204	204
862	350	0	256	256
429	110	240	0	79
429	110	240	79	0

	<u>Oif*</u>	<u>Oif</u>	<u>change</u>
i=1	1027	860	19.00%
i=2	862	730	18.00%
i=3	429	360	19.00%
i=4	429	360	19.00%
Totals	2747	2310	

fourth row iteration

	480	920	454	454
860	0	518	171	171
730	296	0	217	217
360	92	201	0	66
360	92	201	66	0

	<u>Djf*</u>	<u>Djf</u>	<u>change</u>
j=1	480	570	-16.00%
j=2	920	1100	-16.00%
j=3	454	540	-16.00%
j=4	454	540	-16.00%
Totals	2308	2750	

fourth column iteration

	570	1100	540	540
1025	0	619	203	203
868	352	0	258	258
428	109	240	0	79
428	109	240	79	0

	<u>Oif*</u>	<u>Oif</u>	<u>change</u>
i=1	1025	860	19.00%
i=2	868	730	19.00%
i=3	428	360	19.00%
i=4	428	360	19.00%
Totals	2749	2310	

fifth row iteration

480	923	453	453
-----	-----	-----	-----

Iterative Method Estimated Turning Movements

860	0	519	170	170
730	296	0	217	217
360	92	202	0	66
360	92	202	66	0

	Djf*	Djf	change
j=1	480	570	-16.00%
j=2	923	1100	-16.00%
j=3	453	540	-16.00%
j=4	453	540	-16.00%
Totals	2309	2750	

	e	n	w	s
fifth column iteration	570	1100	540	540
e	1025	0	619	203
n	870	352	0	259
w	429	109	241	0
s	429	109	241	79

	Oif*	Oif	change
i=1	1025	860	19.00%
i=2	870	730	19.00%
i=3	429	360	19.00%
i=4	429	360	19.00%
Totals			

	e	n	w	s
sixth row iteration	477	923	453	453
860	0	519	170	170
730	295	0	217	217
360	91	202	0	66
360	91	202	66	0

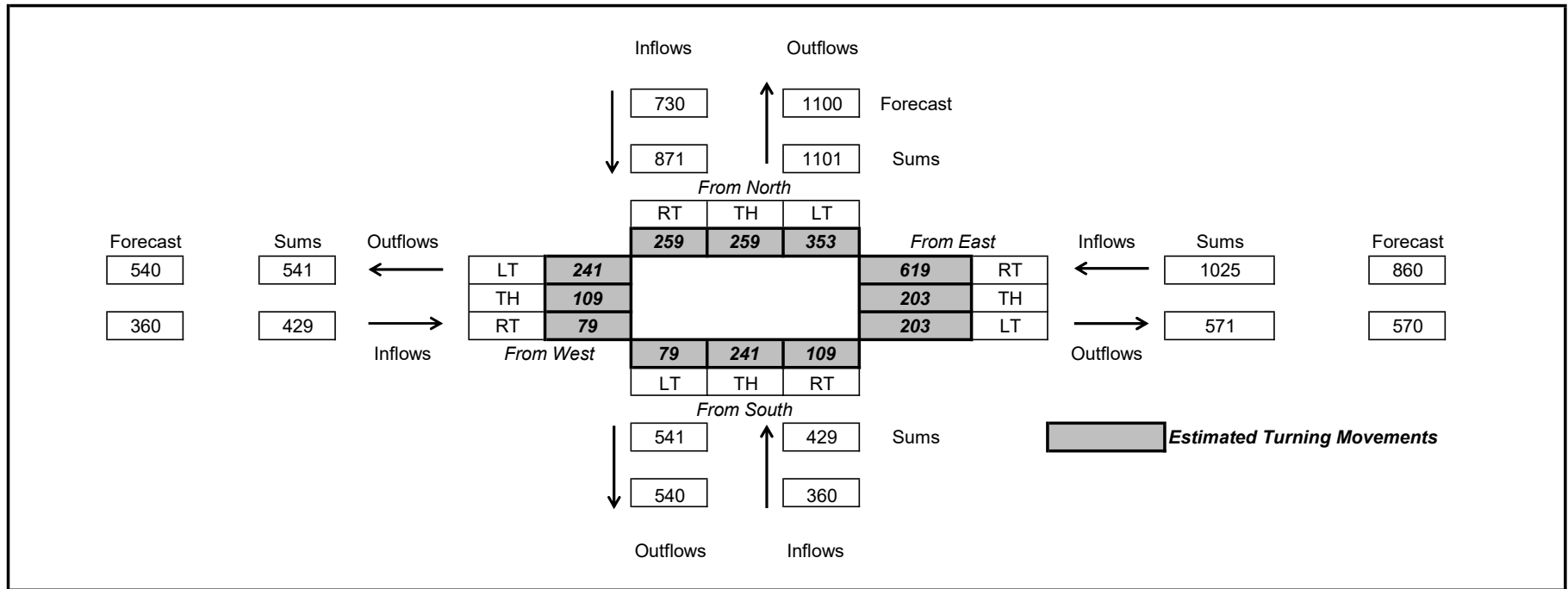
	Djf*	Djf	change
j=1	477	570	-16.00%
j=2	923	1100	-16.00%
j=3	453	540	-16.00%
j=4	453	540	-16.00%
Totals	2306	2750	

	e	n	w	s
sixth column iteration	570	1100	540	540
e	1025	0	619	203
n	871	353	0	259
w	429	109	241	0
s	429	109	241	79

Iterative Method Estimated Turning Movements

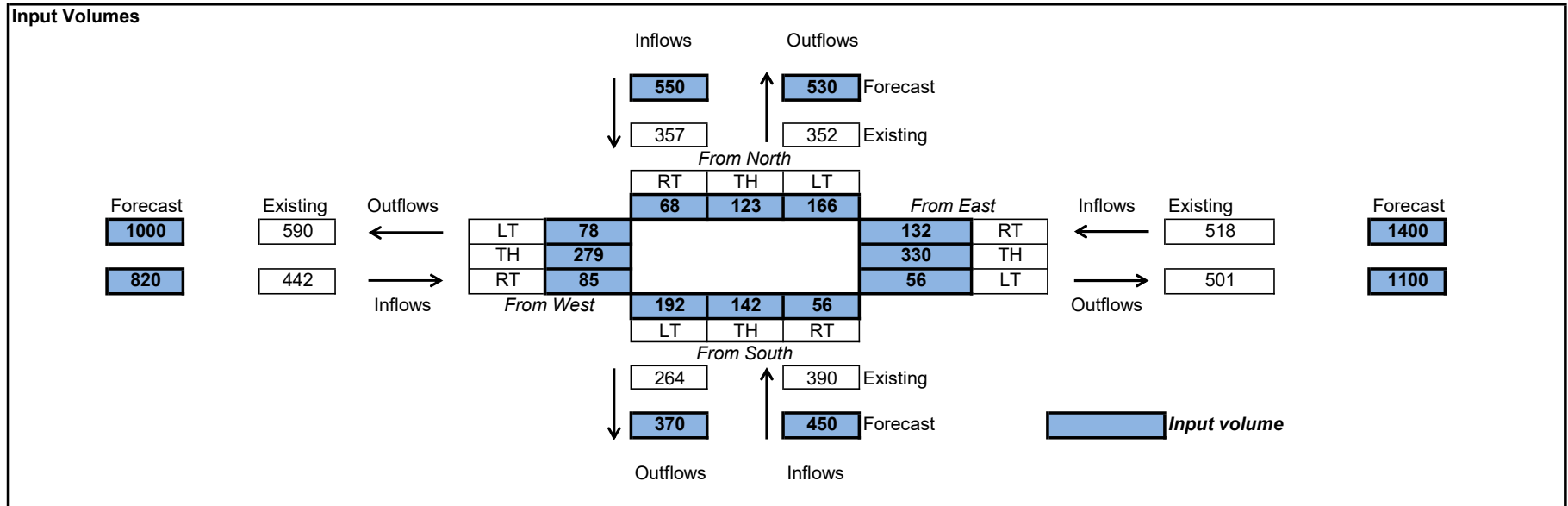
	Oif*	Oif	change
i=1	1025	860	19.00%
i=2	871	730	19.00%
i=3	429	360	19.00%
i=4	429	360	19.00%
Totals			

Estimated Turning Movements



2050 AM JUPITER BOULEVARD NCHRP TOOL INPUTS AND OUTPUTS

Iterative Method Estimated Turning Movements



Initial Turning Movement Matrix, T_{ij}

	Forecasts	East Leg	North Leg	West Leg	South Leg	D _{ij}	outflows, j
Counts		1100	530	1000	370		
East Leg	1400	518	0	132	330	56	
North Leg	550	357	166	0	68	123	
West Leg	820	442	279	78	0	85	
South Leg	450	390	56	142	192	0	
O _{if}		O _{ib}					
inflows, i							
first row iteration			D _{ij} *				
		839	666	1219	498		
1400	0	357	892	151			
550	256	0	105	189			
820	518	145	0	158			
450	65	164	222	0			
compare							
		D _{ij} *	D _{ij}	change			
j=1		839	1100	-24.0%			
j=2		666	530	26.0%			
j=3		1219	1000	22.0%			
j=4		498	370	35.0%			
Totals		3222	3000				
first column iteration							
		1100	530	1000	370		
1128	0	284	732	112			

Iterative Method Estimated Turning Movements

562	336	0	86	140
911	679	115	0	117
398	85	131	182	0

Oif*

compare	<u>Oif*</u>	<u>Oif</u>	<u>change</u>
i=1	1128	1400	-19.00%
i=2	562	550	2.00%
i=3	911	820	11.00%
i=4	398	450	-12.00%
Totals	2999	3220	

second row iteration

	1036	604	1199	381
1400	0	352	909	139
550	329	0	84	137
820	611	104	0	105
450	96	148	206	0

compare	<u>Djf*</u>	<u>Djf</u>	<u>change</u>
j=1	1036	1100	-6.00%
j=2	604	530	14.00%
j=3	1199	1000	20.00%
j=4	381	370	3.00%
Totals	3220	3000	

second column iteration

	1100	530	1000	370
1202	0	309	758	135
552	349	0	70	133
842	649	91	0	102
404	102	130	172	0

compare	<u>Oif*</u>	<u>Oif</u>	<u>change</u>
i=1	1202	1400	-14.00%
i=2	552	550	0.00%
i=3	842	820	3.00%
i=4	404	450	-10.00%
Totals	3000	3220	

third row iteration

	1094	594	1145	389
1400	0	360	883	157
550	348	0	70	133
820	632	89	0	99
450	114	145	192	0

compare	<u>Djf*</u>	<u>Djf</u>	<u>change</u>
j=1	1094	1100	-1.00%
j=2	594	530	12.00%
j=3	1145	1000	15.00%

Iterative Method Estimated Turning Movements

j=4	389	370	5.00%
Totals	3222	3000	

third column iteration

	1100	530	1000	370
1241	0	321	771	149
538	350	0	61	127
808	635	79	0	94
412	115	129	168	0

	<u>Oif*</u>	<u>Oif</u>	<u>change</u>
i=1	1241	1400	-11.00%
i=2	538	550	-2.00%
i=3	808	820	-1.00%
i=4	412	450	-8.00%
Totals	2999	3220	

fourth row iteration

	1128	583	1115	393
1400	0	362	870	168
550	358	0	62	130
820	644	80	0	95
450	126	141	183	0

	<u>Djf*</u>	<u>Djf</u>	<u>change</u>
j=1	1128	1100	3.00%
j=2	583	530	10.00%
j=3	1115	1000	12.00%
j=4	393	370	6.00%
Totals	3219	3000	

fourth column iteration

	1100	530	1000	370
1267	0	329	780	158
527	349	0	56	122
790	628	73	0	89
415	123	128	164	0

	<u>Oif*</u>	<u>Oif</u>	<u>change</u>
i=1	1267	1400	-10.00%
i=2	527	550	-4.00%
i=3	790	820	-4.00%
i=4	415	450	-8.00%
Totals	2999	3220	

fifth row iteration

1149	579	1098	394
------	-----	------	-----

Iterative Method Estimated Turning Movements

1400	0	364	862	175
550	364	0	58	127
820	652	76	0	92
450	133	139	178	0

	Djf*	Djf	change
j=1	1149	1100	4.00%
j=2	579	530	9.00%
j=3	1098	1000	10.00%
j=4	394	370	6.00%
Totals	3220	3000	

fifth column iteration	e	n	w	s
	1100	530	1000	370
e	1282	0	785	164
n	520	348	53	119
w	780	624	0	86
s	416	127	127	0

	Oif*	Oif	change
i=1	1282	1400	-8.00%
i=2	520	550	-5.00%
i=3	780	820	-5.00%
i=4	416	450	-8.00%
Totals			

sixth row iteration		1161	575	1088	395
1400	0	364	857	179	
550	368	0	56	126	
820	656	74	0	90	
450	137	137	175	0	

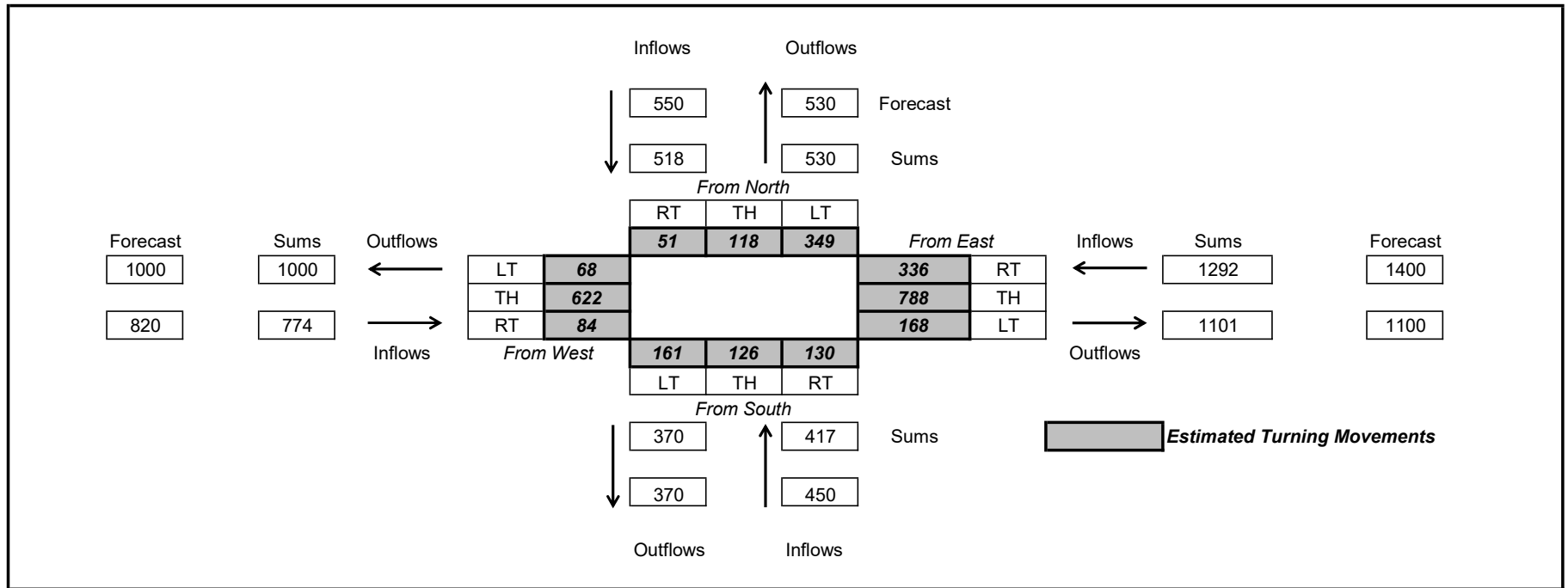
	Djf*	Djf	change
j=1	1161	1100	6.00%
j=2	575	530	8.00%
j=3	1088	1000	9.00%
j=4	395	370	7.00%
Totals	3219	3000	

sixth column iteration	e	n	w	s
	1100	530	1000	370
e	1292	0	788	168
n	518	349	51	118
w	774	622	0	84
s	417	130	126	0

Iterative Method Estimated Turning Movements

	Oif*	Oif	change
i=1	1292	1400	-8.00%
i=2	518	550	-6.00%
i=3	774	820	-6.00%
i=4	417	450	-7.00%
Totals			

Estimated Turning Movements



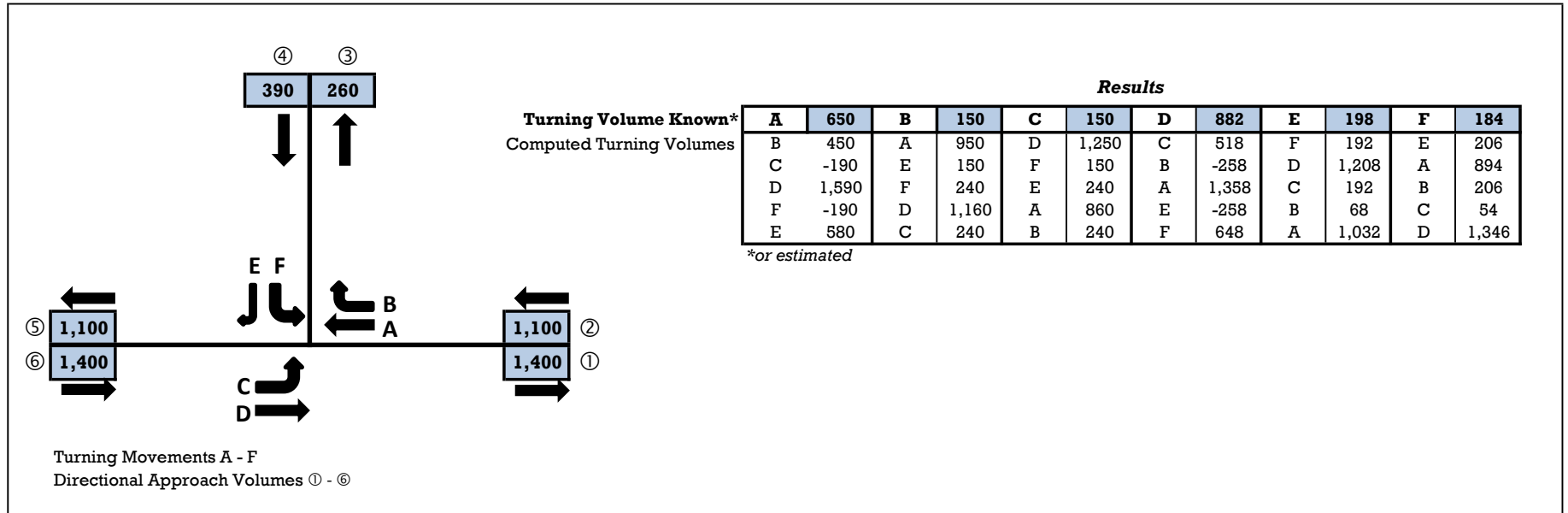
2050 AM GARVEY ROAD NCHRP TOOL INPUTS AND OUTPUTS

"T" Intersection Directional Turning Movements

Directional Turning Movement Method

- Known***
1. Directional approach volumes for each leg
 2. One of the six turning movements

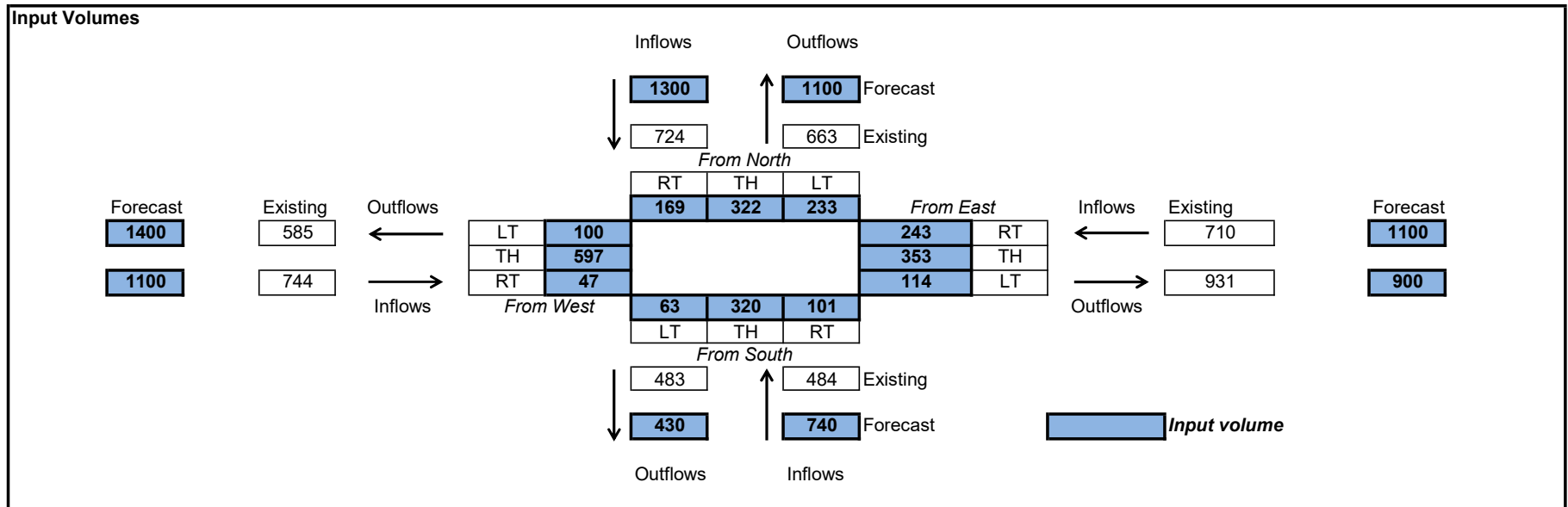
Application: For the known turning movement (A, B, C, D, E or F), the user enters the value in the corresponding cell and the remaining turning movements are calculated.



Input Volume

2050 AM MINTON ROAD NCHRP TOOL INPUTS AND OUTPUTS

Iterative Method Estimated Turning Movements



Initial Turning Movement Matrix, T_{ij}

	Forecasts	East Leg	North Leg	West Leg	South Leg	D_{jf}	outflows, j
East Leg	1100	931	663	585	483		
North Leg	1300	710	243	353	114		
West Leg	1100	724	233	169	322		
South Leg	740	744	597	100	47		
	O_{if}	O_{ib}					

first row iteration

		D_{jf}^*			
		1455	1013	946	824
1100		0	376	547	177
1300		418	0	303	578
1100		883	148	0	69
740		154	489	96	0

compare

	D_{jf}^*	D_{jf}	change
j=1	1455	900	62.0%
j=2	1013	1100	-8.0%
j=3	946	1400	-32.0%
j=4	824	430	92.0%
Totals	4238	3830	

first column iteration

		900	1100	1400	430
1310		0	408	810	92

Iterative Method Estimated Turning Movements

1009	259	0	448	302
743	546	161	0	36
768	95	531	142	0
Oif*				

compare	<u>Oif*</u>	<u>Oif</u>	<u>change</u>
i=1	1310	1100	19.00%
i=2	1009	1300	-22.00%
i=3	743	1100	-32.00%
i=4	768	740	4.00%
Totals	3830	4240	

second row iteration	1234	1093	1394	519
1100	0	343	680	77
1300	334	0	577	389
1100	808	238	0	53
740	92	512	137	0

compare	<u>Djf*</u>	<u>Djf</u>	<u>change</u>
j=1	1234	900	37.00%
j=2	1093	1100	-1.00%
j=3	1394	1400	0.00%
j=4	519	430	21.00%
Totals	4240	3830	

second column iteration	900	1100	1400	430
1092	0	345	683	64
1145	244	0	579	322
873	589	240	0	44
720	67	515	138	0

compare	<u>Oif*</u>	<u>Oif</u>	<u>change</u>
i=1	1092	1100	-1.00%
i=2	1145	1300	-12.00%
i=3	873	1100	-21.00%
i=4	720	740	-3.00%
Totals	3830	4240	

third row iteration	1088	1179	1487	485
1100	0	348	688	64
1300	277	0	657	366
1100	742	302	0	55
740	69	529	142	0

	<u>Djf*</u>	<u>Djf</u>	<u>change</u>
j=1	1088	900	21.00%
j=2	1179	1100	7.00%
j=3	1487	1400	6.00%

Iterative Method Estimated Turning Movements

j=4	485	430	13.00%
Totals	4239	3830	

third column iteration

	900	1100	1400	430
1030	0	325	648	57
1172	229	0	619	324
945	614	282	0	49
685	57	494	134	0

	<u>Oif*</u>	<u>Oif</u>	<u>change</u>
i=1	1030	1100	-6.00%
i=2	1172	1300	-10.00%
i=3	945	1100	-14.00%
i=4	685	740	-7.00%
Totals	3832	4240	

fourth row iteration

	1031	1209	1524	477
1100	0	347	692	61
1300	254	0	687	359
1100	715	328	0	57
740	62	534	145	0

	<u>Djf*</u>	<u>Djf</u>	<u>change</u>
j=1	1031	900	15.00%
j=2	1209	1100	10.00%
j=3	1524	1400	9.00%
j=4	477	430	11.00%
Totals	4241	3830	

fourth column iteration

	900	1100	1400	430
1007	0	316	636	55
1177	222	0	631	324
973	624	298	0	51
673	54	486	133	0

	<u>Oif*</u>	<u>Oif</u>	<u>change</u>
i=1	1007	1100	-8.00%
i=2	1177	1300	-9.00%
i=3	973	1100	-12.00%
i=4	673	740	-9.00%
Totals	3830	4240	

fifth row iteration

1009	1216	1538	476
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Iterative Method Estimated Turning Movements

1100	0	345	695	60
1300	245	0	697	358
1100	705	337	0	58
740	59	534	146	0

	Djf*	Djf	change
j=1	1009	900	12.00%
j=2	1216	1100	11.00%
j=3	1538	1400	10.00%
j=4	476	430	11.00%
Totals	4239	3830	

	e	n	w	s
fifth column iteration	900	1100	1400	430
e	999	0	633	54
n	1176	219	634	323
w	986	629	0	52
s	669	53	483	133

	Oif*	Oif	change
i=1	999	1100	-9.00%
i=2	1176	1300	-10.00%
i=3	986	1100	-10.00%
i=4	669	740	-10.00%
Totals			

	e	n	w	s
sixth row iteration	1003	1218	1545	474
1100	0	344	697	59
1300	242	0	701	357
1100	702	340	0	58
740	59	534	147	0

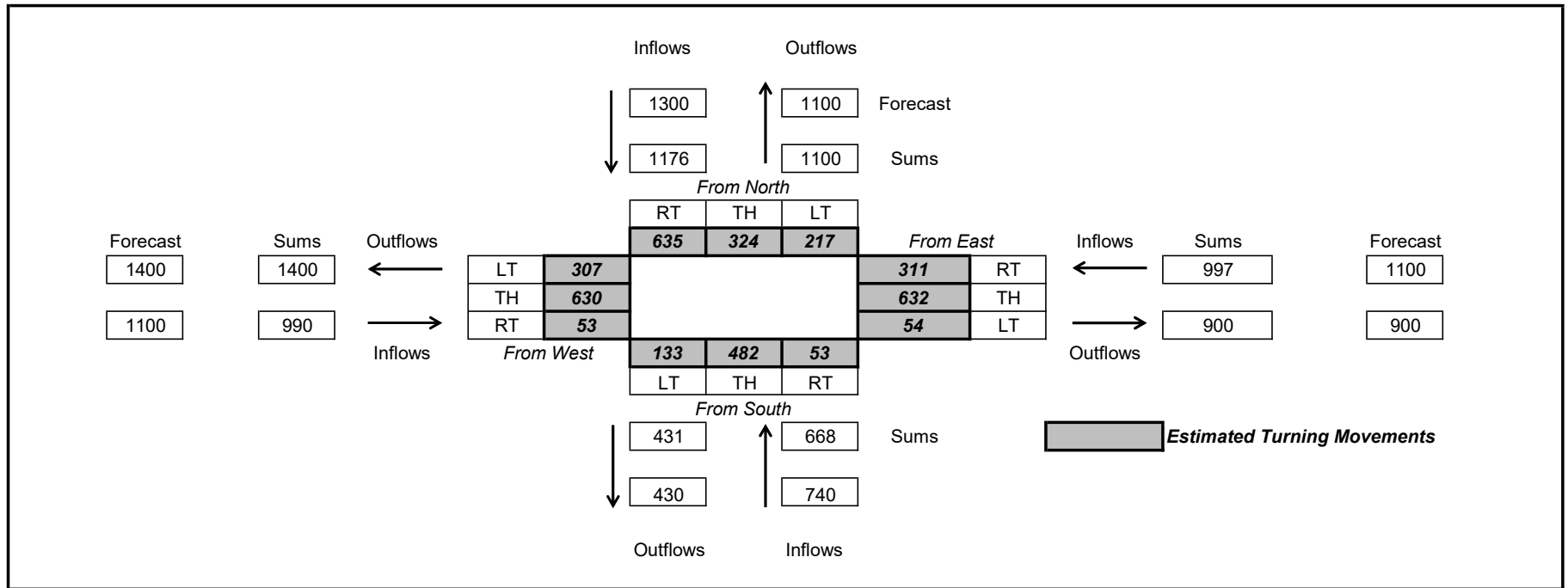
	Djf*	Djf	change
j=1	1003	900	11.00%
j=2	1218	1100	11.00%
j=3	1545	1400	10.00%
j=4	474	430	10.00%
Totals	4240	3830	

	e	n	w	s
sixth column iteration	900	1100	1400	430
e	997	0	632	54
n	1176	217	635	324
w	990	630	0	53
s	668	53	482	133

Iterative Method Estimated Turning Movements

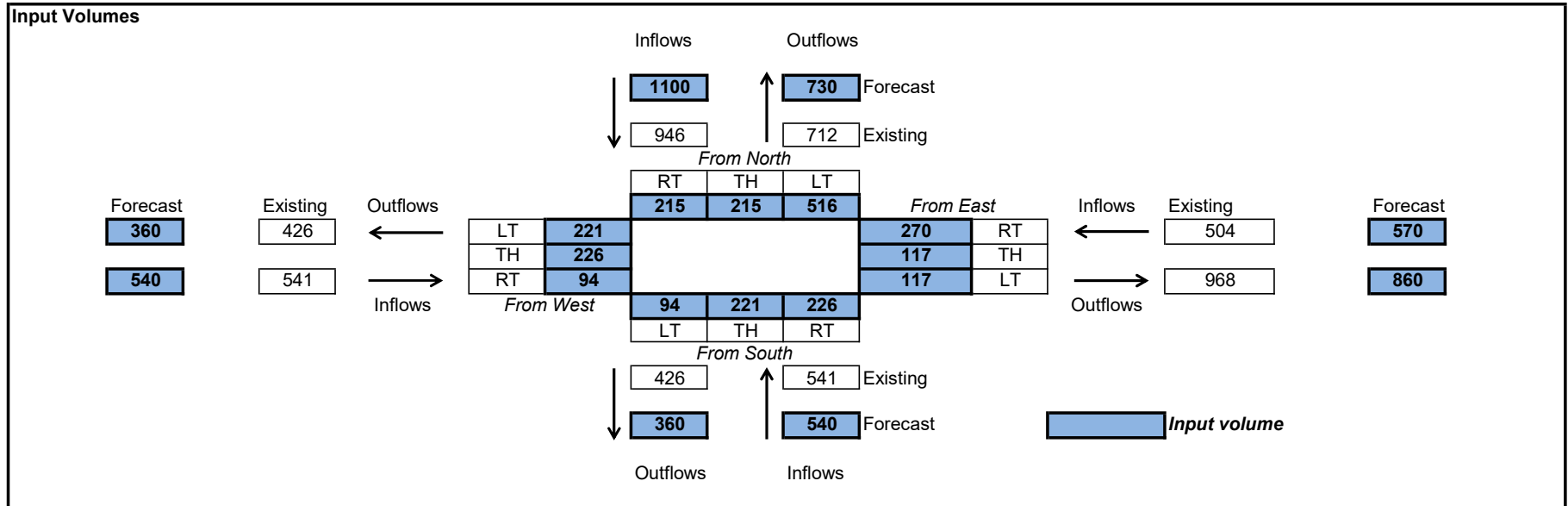
	Oif*	Oif	change
i=1	997	1100	-9.00%
i=2	1176	1300	-10.00%
i=3	990	1100	-10.00%
i=4	668	740	-10.00%
Totals			

Estimated Turning Movements



2050 PM ST. JOHNS HERITAGE PARKWAY NCHRP TOOL INPUTS AND OUTPUTS

Iterative Method Estimated Turning Movements



Initial Turning Movement Matrix, T_{ij}

	Forecasts	East Leg	North Leg	West Leg	South Leg	D_{jf}
Counts		968	712	426	426	outflows, j
East Leg	570	504	0	270	117	117
North Leg	1100	946	516	0	215	215
West Leg	540	541	226	221	0	94
South Leg	540	541	226	221	94	0
O_{if}		Oib				

first row iteration

		D_{jf}^*			
		1052	747	476	476
570		0	305	132	132
1100		600	0	250	250
540		226	221	0	94
540		226	221	94	0

compare

	D_{jf}^*	D_{jf}	change
j=1	1052	860	22.0%
j=2	747	730	2.0%
j=3	476	360	32.0%
j=4	476	360	32.0%
Totals	2751	2310	

first column iteration

		860	730	360	360
498		0	298	100	100

Iterative Method Estimated Turning Movements

868	490	0	189	189
472	185	216	0	71
472	185	216	71	0

Oif*

compare	<u>Oif*</u>	<u>Oif</u>	<u>change</u>
i=1	498	570	-13.00%
i=2	868	1100	-21.00%
i=3	472	540	-13.00%
i=4	472	540	-13.00%
Totals	2310	2750	

second row iteration

	1045	835	435	435
570	0	341	114	114
1100	621	0	240	240
540	212	247	0	81
540	212	247	81	0

compare	<u>Djf*</u>	<u>Djf</u>	<u>change</u>
j=1	1045	860	22.00%
j=2	835	730	14.00%
j=3	435	360	21.00%
j=4	435	360	21.00%
Totals	2750	2310	

second column iteration

	860	730	360	360
486	0	298	94	94
909	511	0	199	199
457	174	216	0	67
457	174	216	67	0

compare	<u>Oif*</u>	<u>Oif</u>	<u>change</u>
i=1	486	570	-15.00%
i=2	909	1100	-17.00%
i=3	457	540	-15.00%
i=4	457	540	-15.00%
Totals	2309	2750	

third row iteration

	1030	860	430	430
570	0	350	110	110
1100	618	0	241	241
540	206	255	0	79
540	206	255	79	0

	<u>Djf*</u>	<u>Djf</u>	<u>change</u>
j=1	1030	860	20.00%
j=2	860	730	18.00%
j=3	430	360	19.00%

Iterative Method Estimated Turning Movements

j=4	430	360	19.00%
Totals	2750	2310	

third column iteration

	860	730	360	360
481	0	297	92	92
920	516	0	202	202
454	172	216	0	66
454	172	216	66	0

	<u>Oif*</u>	<u>Oif</u>	<u>change</u>
i=1	481	570	-16.00%
i=2	920	1100	-16.00%
i=3	454	540	-16.00%
i=4	454	540	-16.00%
Totals	2309	2750	

fourth row iteration

	1027	866	430	430
570	0	352	109	109
1100	617	0	242	242
540	205	257	0	79
540	205	257	79	0

	<u>Djf*</u>	<u>Djf</u>	<u>change</u>
j=1	1027	860	19.00%
j=2	866	730	19.00%
j=3	430	360	19.00%
j=4	430	360	19.00%
Totals	2753	2310	

fourth column iteration

	860	730	360	360
479	0	297	91	91
923	517	0	203	203
455	172	217	0	66
455	172	217	66	0

	<u>Oif*</u>	<u>Oif</u>	<u>change</u>
i=1	479	570	-16.00%
i=2	923	1100	-16.00%
i=3	455	540	-16.00%
i=4	455	540	-16.00%
Totals	2312	2750	

fifth row iteration

1024	869	428	428
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Iterative Method Estimated Turning Movements

570	0	353	108	108
1100	616	0	242	242
540	204	258	0	78
540	204	258	78	0

	Djf*	Djf	change
j=1	1024	860	19.00%
j=2	869	730	19.00%
j=3	428	360	19.00%
j=4	428	360	19.00%
Totals	2749	2310	

	e	n	w	s
fifth column iteration	860	730	360	360
e	479	0	297	91
n	925	517	0	204
w	454	171	217	0
s	454	171	217	66

	Oif*	Oif	change
i=1	479	570	-16.00%
i=2	925	1100	-16.00%
i=3	454	540	-16.00%
i=4	454	540	-16.00%
Totals			

	e	n	w	s
sixth row iteration	1021	869	430	430
570	0	353	108	108
1100	615	0	243	243
540	203	258	0	79
540	203	258	79	0

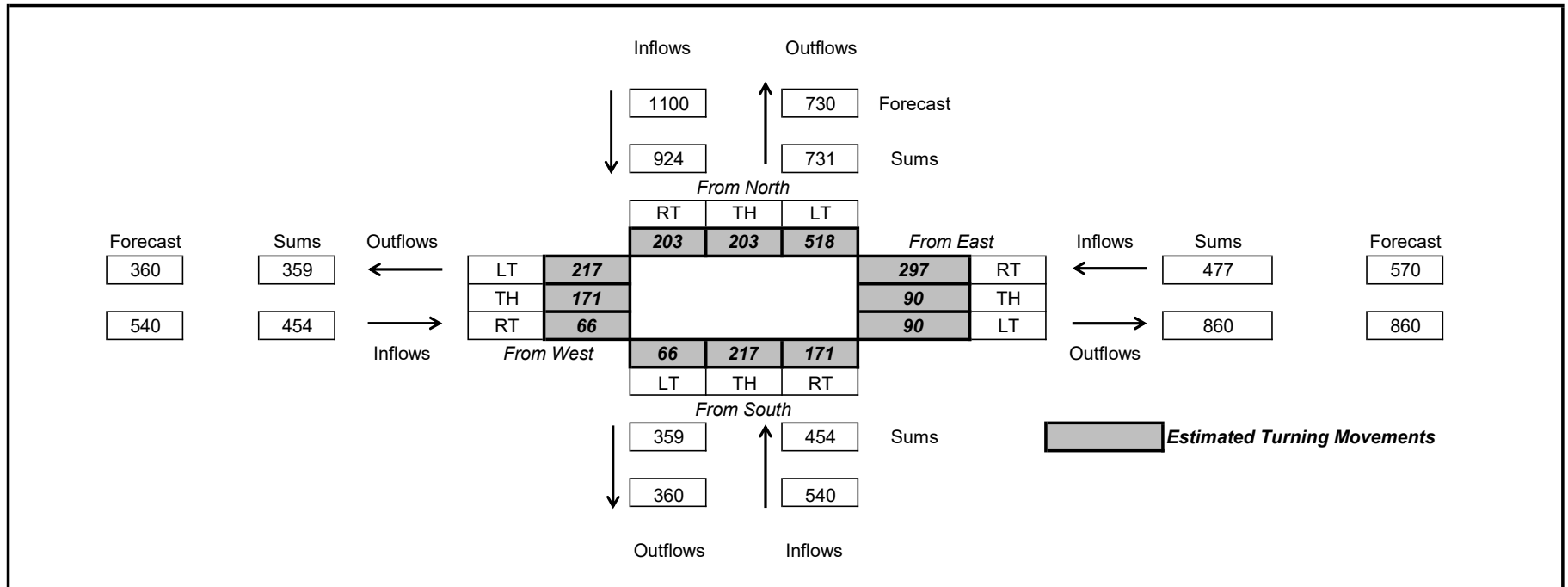
	Djf*	Djf	change
j=1	1021	860	19.00%
j=2	869	730	19.00%
j=3	430	360	19.00%
j=4	430	360	19.00%
Totals	2750	2310	

	e	n	w	s
sixth column iteration	860	730	360	360
e	477	0	297	90
n	924	518	0	203
w	454	171	217	0
s	454	171	217	66

Iterative Method Estimated Turning Movements

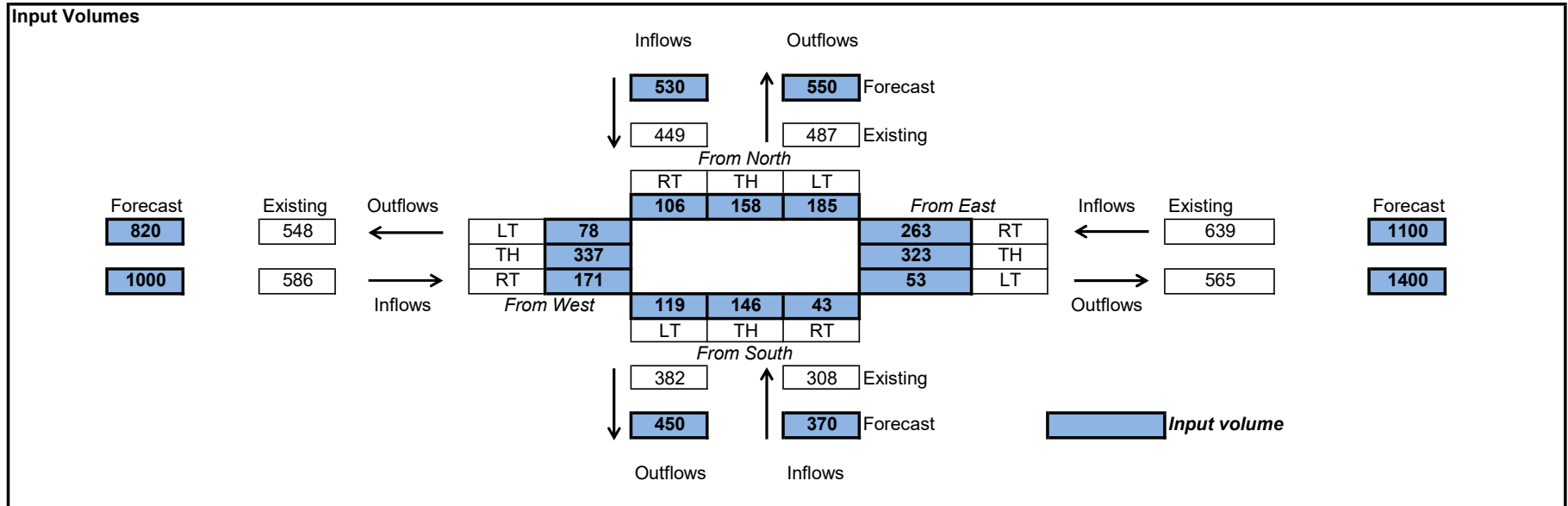
	Oif*	Oif	change
i=1	477	570	-16.00%
i=2	924	1100	-16.00%
i=3	454	540	-16.00%
i=4	454	540	-16.00%
Totals			

Estimated Turning Movements



2050 PM JUPITER BOULEVARD NCHRP TOOL INPUTS AND OUTPUTS

Iterative Method Estimated Turning Movements



Initial Turning Movement Matrix, T_{ij}

	Forecasts	East Leg	North Leg	West Leg	South Leg	D_{jf}
Counts		1400	550	820	450	outflows, j
East Leg	1100	639	0	263	323	53
North Leg	530	449	185	0	106	158
West Leg	1000	586	337	78	0	171
South Leg	370	308	43	146	119	0
O_{if}		inflows, i				

first row iteration

		D_{jf}^*			
		845	761	824	570
1100	0	453	556	91	
530	218	0	125	187	
1000	575	133	0	292	
370	52	175	143	0	

compare

	D_{jf}^*	D_{jf}	change
j=1	845	1400	-40.0%
j=2	761	550	38.0%
j=3	824	820	0.0%
j=4	570	450	27.0%
Totals	3000	3220	

first column iteration

		1400	550	820	450
952	0	327	553	72	

Iterative Method Estimated Turning Movements

633	361	0	124	148
1280	953	96	0	231
354	86	126	142	0

Oif*

compare	<u>Oif*</u>	<u>Oif</u>	<u>change</u>
i=1	952	1100	-13.00%
i=2	633	530	19.00%
i=3	1280	1000	28.00%
i=4	354	370	-4.00%
Totals	3219	3000	

second row iteration	1137	585	891	387
1100	0	378	639	83
530	302	0	104	124
1000	745	75	0	180
370	90	132	148	0

compare	<u>Djf*</u>	<u>Djf</u>	<u>change</u>
j=1	1137	1400	-19.00%
j=2	585	550	6.00%
j=3	891	820	9.00%
j=4	387	450	-14.00%
Totals	3000	3220	

second column iteration	1400	550	820	450
1040	0	355	588	97
612	372	0	96	144
1197	917	71	0	209
371	111	124	136	0

compare	<u>Oif*</u>	<u>Oif</u>	<u>change</u>
i=1	1040	1100	-5.00%
i=2	612	530	15.00%
i=3	1197	1000	20.00%
i=4	371	370	0.00%
Totals	3220	3000	

third row iteration	1199	558	841	403
1100	0	375	622	103
530	322	0	83	125
1000	766	59	0	175
370	111	124	136	0

compare	<u>Djf*</u>	<u>Djf</u>	<u>change</u>
j=1	1199	1400	-14.00%
j=2	558	550	1.00%
j=3	841	820	3.00%

Iterative Method Estimated Turning Movements

j=4	403	450	-10.00%
Totals	3001	3220	

third column iteration

	1400	550	820	450
1091	0	370	606	115
597	376	0	81	140
1147	894	58	0	195
385	130	122	133	0

	<u>Oif*</u>	<u>Oif</u>	<u>change</u>
i=1	1091	1100	-1.00%
i=2	597	530	13.00%
i=3	1147	1000	15.00%
i=4	385	370	4.00%
Totals	3220	3000	

fourth row iteration

	1238	541	811	410
1100	0	373	611	116
530	334	0	72	124
1000	779	51	0	170
370	125	117	128	0

	<u>Djf*</u>	<u>Djf</u>	<u>change</u>
j=1	1238	1400	-12.00%
j=2	541	550	-2.00%
j=3	811	820	-1.00%
j=4	410	450	-9.00%
Totals	3000	3220	

fourth column iteration

	1400	550	820	450
1124	0	379	618	127
587	378	0	73	136
1120	881	52	0	187
389	141	119	129	0

	<u>Oif*</u>	<u>Oif</u>	<u>change</u>
i=1	1124	1100	2.00%
i=2	587	530	11.00%
i=3	1120	1000	12.00%
i=4	389	370	5.00%
Totals	3220	3000	

fifth row iteration

1262	530	794	414
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Iterative Method Estimated Turning Movements

1100	0	371	605	124
530	341	0	66	123
1000	787	46	0	167
370	134	113	123	0

	Djf*	Djf	change
j=1	1262	1400	-10.00%
j=2	530	550	-4.00%
j=3	794	820	-3.00%
j=4	414	450	-8.00%
Totals	3000	3220	

	e	n	w	s
fifth column iteration	1400	550	820	450
e	1145	0	625	135
n	580	378	0	134
w	1103	873	48	182
s	393	149	117	127

	Oif*	Oif	change
i=1	1145	1100	4.00%
i=2	580	530	9.00%
i=3	1103	1000	10.00%
i=4	393	370	6.00%
Totals			

	e	n	w	s
sixth row iteration	1276	524	782	417
1100	0	370	600	130
530	345	0	62	122
1000	791	44	0	165
370	140	110	120	0

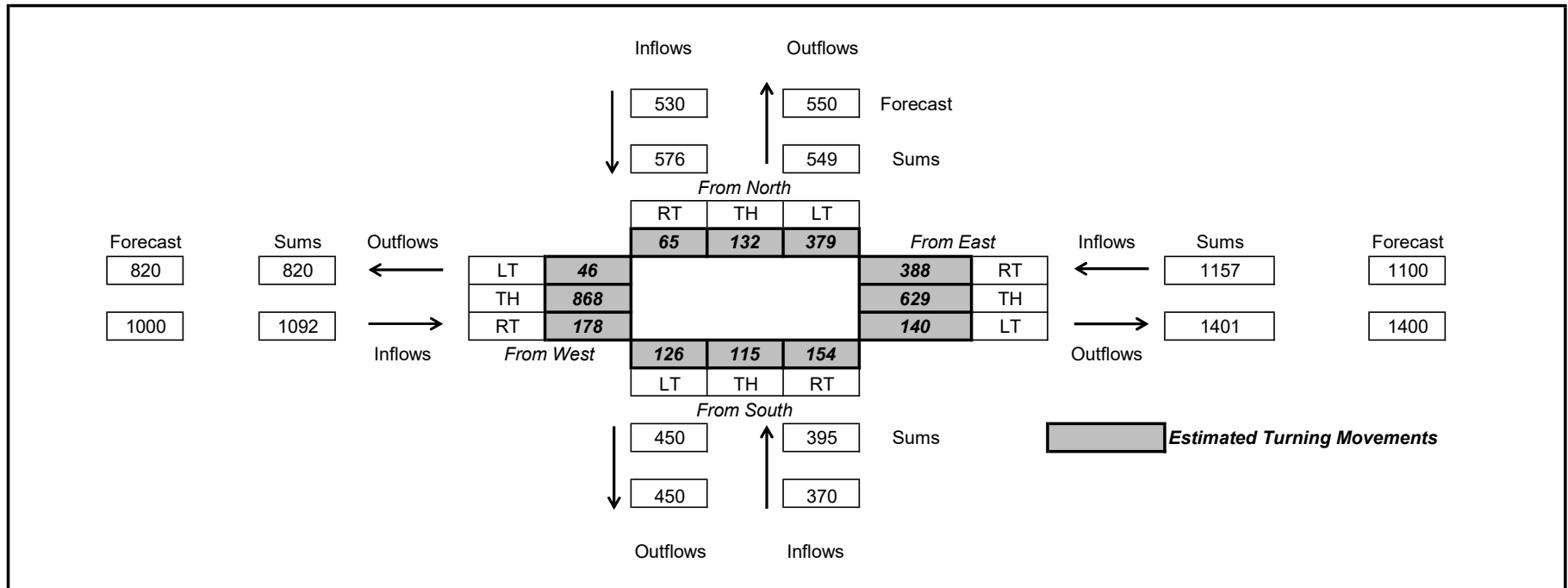
	Djf*	Djf	change
j=1	1276	1400	-9.00%
j=2	524	550	-5.00%
j=3	782	820	-5.00%
j=4	417	450	-7.00%
Totals	2999	3220	

	e	n	w	s
sixth column iteration	1400	550	820	450
e	1157	0	629	140
n	576	379	0	132
w	1092	868	46	178
s	395	154	115	126

Iterative Method Estimated Turning Movements

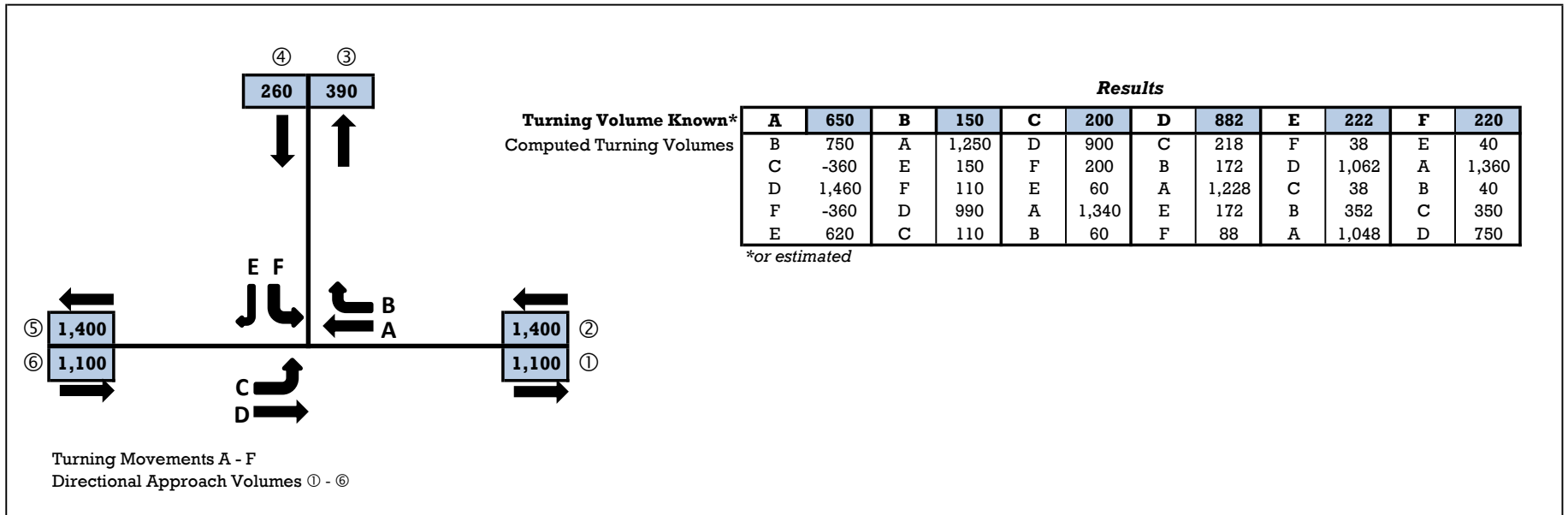
	Oif*	Oif	change
i=1	1157	1100	5.00%
i=2	576	530	9.00%
i=3	1092	1000	9.00%
i=4	395	370	7.00%
Totals			

Estimated Turning Movements



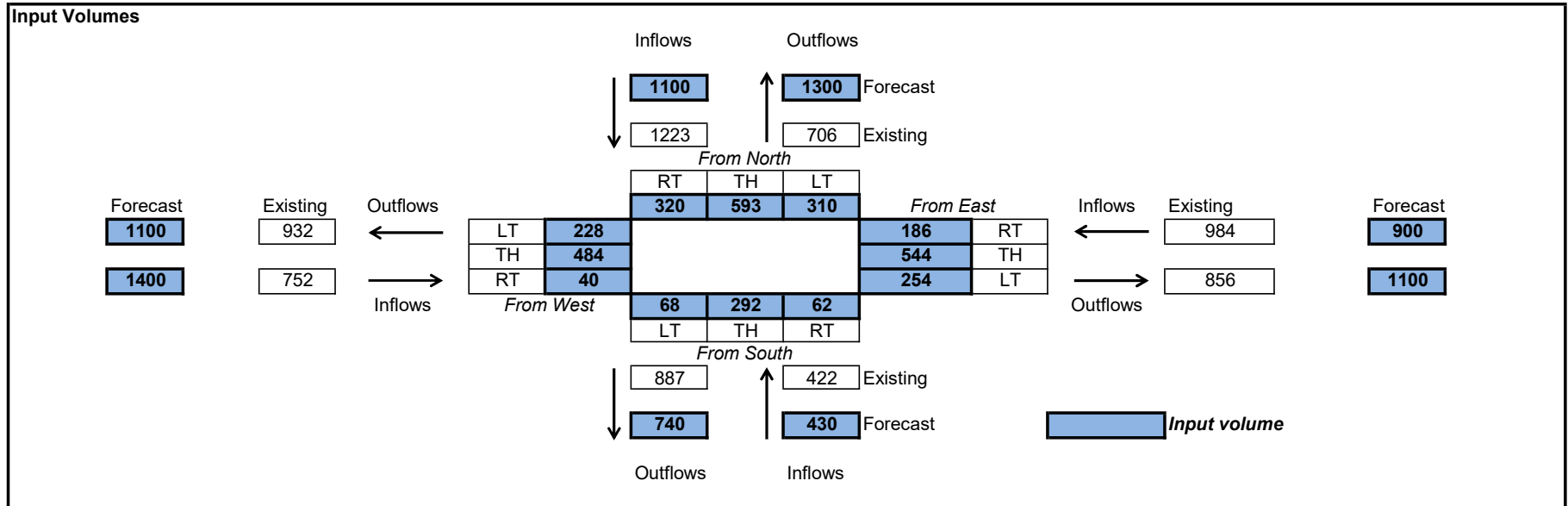
2050 PM GARVEY ROAD NCHRP TOOL INPUTS AND OUTPUTS

"T" Intersection Directional Turning Movements



2050 PM MINTON ROAD NCHRP TOOL INPUTS AND OUTPUTS

Iterative Method Estimated Turning Movements



Initial Turning Movement Matrix, T_{ij}

	Forecasts	East Leg	North Leg	West Leg	South Leg	D_{jf}
East Leg	900	856	706	932	887	outflows, j
North Leg	1100	0	186	544	254	
West Leg	1400	1223	310	0	320	
South Leg	430	752	484	228	0	
O_{if}		422	62	292	68	
inflows, i						

first row iteration

		D_{jf}^*			
		1243	892	855	839
900		0	170	498	232
1100		279	0	288	533
1400		901	424	0	74
430		63	298	69	0

compare

	D_{jf}^*	D_{jf}	change
j=1	1243	1100	13.0%
j=2	892	1300	-31.0%
j=3	855	1100	-22.0%
j=4	839	740	13.0%
Totals	3829	4240	

first column iteration

		1100	1300	1100	740
1094		0	248	641	205

Iterative Method Estimated Turning Movements

1088	247	0	371	470
1480	797	618	0	65
579	56	434	89	0

Oif*

compare	<u>Oif*</u>	<u>Oif</u>	<u>change</u>
i=1	1094	900	22.00%
i=2	1088	1100	-1.00%
i=3	1480	1400	6.00%
i=4	579	430	35.00%
Totals	4241	3830	

second row iteration

	1046	1111	968	705
900	0	204	527	169
1100	250	0	375	475
1400	754	585	0	61
430	42	322	66	0

compare	<u>Djf*</u>	<u>Djf</u>	<u>change</u>
j=1	1046	1100	-5.00%
j=2	1111	1300	-15.00%
j=3	968	1100	-12.00%
j=4	705	740	-5.00%
Totals	3830	4240	

second column iteration

	1100	1300	1100	740
1015	0	239	599	177
1188	263	0	426	499
1542	793	685	0	64
496	44	377	75	0

compare	<u>Oif*</u>	<u>Oif</u>	<u>change</u>
i=1	1015	900	13.00%
i=2	1188	1100	8.00%
i=3	1542	1400	10.00%
i=4	496	430	15.00%
Totals	4241	3830	

third row iteration

	1002	1161	990	677
900	0	212	531	157
1100	244	0	394	462
1400	720	622	0	58
430	38	327	65	0

compare	<u>Djf*</u>	<u>Djf</u>	<u>change</u>
j=1	1002	1100	-9.00%
j=2	1161	1300	-11.00%
j=3	990	1100	-10.00%

Iterative Method Estimated Turning Movements

j=4	677	740	-9.00%
Totals	3830	4240	

third column iteration

	1100	1300	1100	740
999	0	237	590	172
1211	268	0	438	505
1549	790	696	0	63
480	42	366	72	0

	<u>Oif*</u>	<u>Oif</u>	<u>change</u>
i=1	999	900	11.00%
i=2	1211	1100	10.00%
i=3	1549	1400	11.00%
i=4	480	430	12.00%
Totals	4239	3830	

fourth row iteration

	995	1171	995	671
900	0	214	532	155
1100	243	0	398	459
1400	714	629	0	57
430	38	328	65	0

	<u>Djf*</u>	<u>Djf</u>	<u>change</u>
j=1	995	1100	-10.00%
j=2	1171	1300	-10.00%
j=3	995	1100	-10.00%
j=4	671	740	-9.00%
Totals	3832	4240	

fourth column iteration

	1100	1300	1100	740
997	0	238	588	171
1215	269	0	440	506
1550	789	698	0	63
478	42	364	72	0

	<u>Oif*</u>	<u>Oif</u>	<u>change</u>
i=1	997	900	11.00%
i=2	1215	1100	10.00%
i=3	1550	1400	11.00%
i=4	478	430	11.00%
Totals	4240	3830	

fifth row iteration

995	1172	994	669
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Iterative Method Estimated Turning Movements

900	0	215	531	154
1100	244	0	398	458
1400	713	630	0	57
430	38	327	65	0

	Djf*	Djf	change
j=1	995	1100	-10.00%
j=2	1172	1300	-10.00%
j=3	994	1100	-10.00%
j=4	669	740	-10.00%
Totals	3830	4240	

	e	n	w	s
fifth column iteration	1100	1300	1100	740
e	996	0	588	170
n	1217	270	440	507
w	1550	788	0	63
s	477	42	72	0

	Oif*	Oif	change
i=1	996	900	11.00%
i=2	1217	1100	11.00%
i=3	1550	1400	11.00%
i=4	477	430	11.00%
Totals			

	e	n	w	s
sixth row iteration	994	1173	994	669
900	0	215	531	154
1100	244	0	398	458
1400	712	631	0	57
430	38	327	65	0

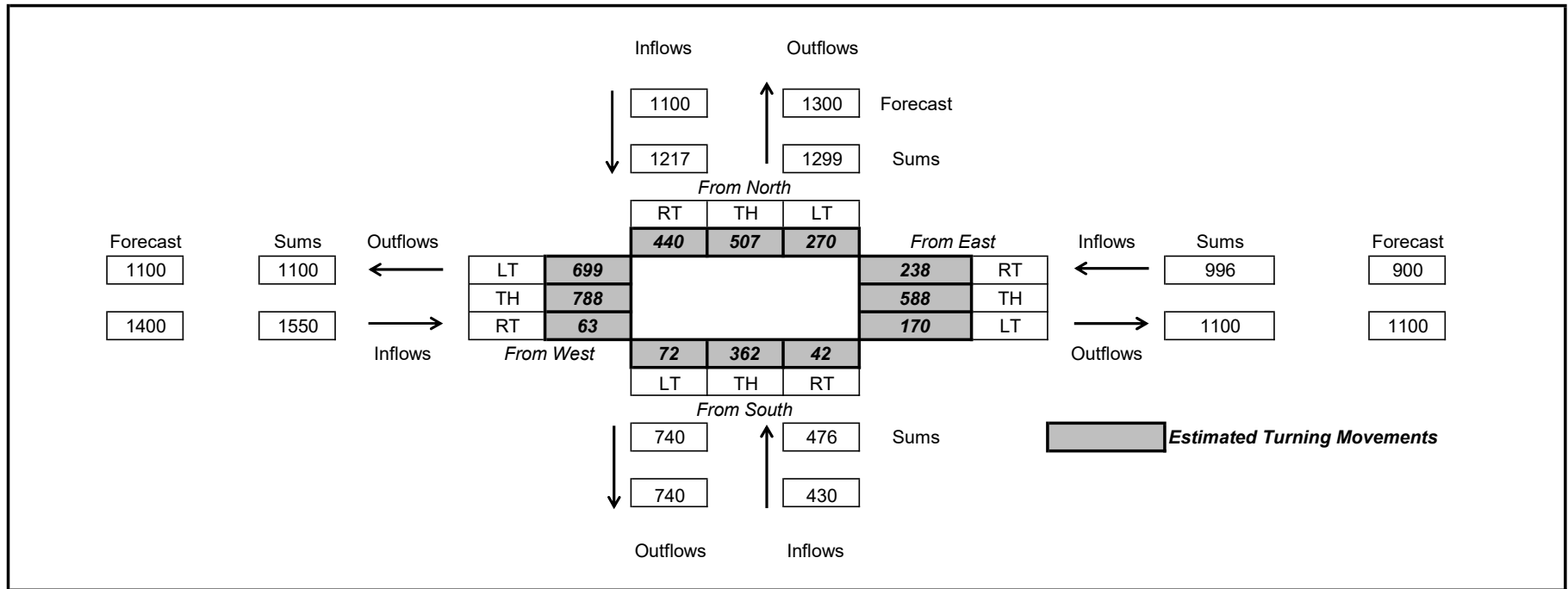
	Djf*	Djf	change
j=1	994	1100	-10.00%
j=2	1173	1300	-10.00%
j=3	994	1100	-10.00%
j=4	669	740	-10.00%
Totals	3830	4240	

	e	n	w	s
sixth column iteration	1100	1300	1100	740
e	996	0	588	170
n	1217	270	440	507
w	1550	788	0	63
s	476	42	72	0

Iterative Method Estimated Turning Movements

	Oif*	Oif	change
i=1	996	900	11.00%
i=2	1217	1100	11.00%
i=3	1550	1400	11.00%
i=4	476	430	11.00%
Totals			

Estimated Turning Movements



TRAFFIC FORECAST VOLUMES

2050 AM NO-BUILD RAW TRAFFIC FORECAST VOLUMES

		871	7%	0%	12%	833			
		0				SB	City:		
		259	259	353			State:		
830	EB	Kittelson & Associates, Inc.		St. Johns Heritage Pkwy.		0	90	1082	
		137	7:45 AM - 8:45 AM			455		3%	
		247	TEV: 2811	1	1.00	492		4%	
		45	2020	1	16	135		0%	
429	0	270	Malabar Rd.				WB	709	
			79	241	109	0			
			NB				0	180	
			439	0%	0%	0%		429	
Notes									

-135

240

		87	0%	0%	0%	44			
		0				SB	City:		
		56	0	31			State:		
947	EB	Associates		Snapdragon Dr.		0	90	927	
		8	7:45 AM - 8:45 AM			36		0%	
		461	TEV: 1483	2	1.00	891		4%	
		0	2020	1	16	0		0%	
469	0	270	Malabar Rd.				WB	492	
			0	0	0	0			
			NB				0	180	
			0	0%	0%	0%		0	
Notes									

0

0

		0	0%	0%	0%	0%	0		
		0					SB	City:	
		0					State:		
800	EB	Associates	Palm Bay Public Works (W)	0	90	0	805		
0%		0	7:45 AM - 8:45 AM	0		0%			
3%		659	TEV: 1469	7	1.00	799		5%	
0%		2	2020	1	16	6		0%	
661		270	Malabar Rd.				WB		661
	NB			1	0	2			
		8		0%	0%	0%		180	
				0%	0%	0%			3
Notes									

0

0

		0	0%	0%	0%	0%	0		
		0					SB	City:	
		0					State:		
805	EB	Associates	Palm Bay Public Works (E)	0	90	0	831		
0%		0	7:45 AM - 8:45 AM	0		0%			
3%		655	TEV: 1516	8	1.00	801		5%	
0%		6	2020	1	16	30		0%	
661		270	Malabar Rd.				WB		675
	NB			4	0	20			
		36		0%	0%	0%		180	
				0%	0%	0%			24
Notes									

0

0

		0	0%	0%	0%	0			
		0					SB	City:	
		0						State:	
831	EB	Post Office				90	834		
		7:45 AM - 8:45 AM							
		TEV: 1539	9	1.00		820			
		2020	1	16		14			
675	WB	Malabar Rd.					676		
		11	0	19		0			
	NB					180			
		32	0%	0%	0%		30		
Notes									

197

-139

9

		518	7%	5%	2%	546			
		0					SB	City:	
		0						State:	
		51		118		349			
1031	EB	Jupiter Blvd.				90	1292		
		7:45 AM - 8:45 AM							
		TEV: 3089	10	1.00		336		3%	
		2020	1	16		168		4%	
815	WB	Malabar Rd.					1101		
		192	142	130		0			
	NB					180			
		411	5%	4%	2%		464		
Notes									

0

0

		94	↓ 4%	↙ 0%	↘ 0%	↑ 6%			
		θ	0				SB	City:	
			48	0	46			State:	
905	↔	EB	Associate: Maywood Ave./Daffodil Dr.		0	90	θ	↔	930
			8	7:45 AM - 8:45 AM		56			5%
			839	TEV: 1937	1.5	1.00	843		2%
			13	2020	1	16	31		0%
860	↔	θ	270	Malabar Rd.			WB	↔	924
			14	0	39	0			
			NB				θ		180
			44	↓ 7%	↙ 0%	↘ 0%	↑ 53		
			Notes						

0

0

		25	↓ 0%	↙ 0%	↘ 0%	↑ 12			
		θ	0				SB	City:	
			14	4	7			State:	
930	↔	EB	Associate: Plaza Entrance		0	90	θ	↔	901
			8	7:45 AM - 8:45 AM		1			0%
			873	TEV: 1999	1.6	1.00	847		3%
			43	2020	1	16	53		0%
924	↔	θ	270	Malabar Rd.			WB	↔	917
			69	3	37	0			
			NB				θ		180
			100	↓ 0%	↙ 0%	↘ 0%	↑ 109		
			Notes						

499

-172

		1274	5%	2%	0%	1100			
		0					SB	City:	
		635		324		315		State:	
1400	EB	Minton Rd.				0	90	1057	
2%		307	7:45 AM - 8:45 AM			311		0%	
1%		710	TEV: 4138	17	1.00	632		3%	
2%		72	2020	1	16	114		2%	
1089	270	Malabar Rd.					WB	1128	
		133		482		103	0		
	NB						180		
		510	0%	1%	0%	718			
Notes									
36.7%									

2050 AM NO-BUILD TRAFFIC FORECAST VOLUME ADJUSTMENTS

0

0

		0	↓ 0%	↶ 0%	↓ 0%	↷ 0%	↑ 0%	0			
		0						0	SB	City:	
		0						0		State:	
277	↶	EB	Associates, P	Post Office			0	90	⊕	↷	277
				7:45 AM - 8:45 AM			0				
				TEV: 649	9	1.00	277				
				2020	1	16	0				
372	↶	⊕	270	Malabar Rd.				WB	↷		372
				0	0	0	0				
				NB			⊕	180			
				↓	↶ 0%	↷ 0%	↑ 0%	0			
Notes											

-197

139

9

		25	↓ 7%	↶ 5%	↓ 5%	↷ 2%	↑ 5%	59			
		0						0	SB	City:	
				12	5	8				State:	
80	↶	EB	Associates, P	Jupiter Blvd.			0	90	⊕	↷	110
				7:45 AM - 8:45 AM			29				
				TEV: 408	10	1.00	68				
				2020	1	16	13				
233	↶	⊕	270	Malabar Rd.				WB	↷		225
				0	0	40	0				
				NB			⊕	180			
				↓	↶ 5%	↷ 4%	↑ 2%	40			
Notes											

422

-369

		0	0%	0%	0%	0%	0	0	City:
		0	0%	0%	0%	0%	0	0	State:
532	EB	Associates, Inc.	Santa Rosa Ave.	0	90	0	532	0%	
		0	7:45 AM - 8:45 AM	0				0%	
		594	TEV: 1126	11	1.00	532		3%	
		0	2020	1	16	0		0%	
594	WB		Malabar Rd.	0	WB	0	594	0%	
		0	0	0					
		NB				180			
		0	0%	0%	0%	0			
Notes									

-532

364

		0	0%	0%	0%	0%	0	0	City:
		0	0%	0%	0%	0%	0	0	State:
0	EB	Associates, Inc.	Garvey Rd.	0	90	0	0	0%	
		0	7:45 AM - 8:45 AM	0				0%	
		222	TEV: 230	12	1.00	0		2%	
		8	2020	1	16	0		2%	
230	WB		Malabar Rd.	0	WB	0	222	2%	
		0	0	0					
		NB				180			
		8	14%	0%	2%	0			
Notes									

-499

172

		0	↓	5%	↘	2%	↓	0%	↘	↑	112	City: State:
		0									SB	
		0									0	
11	↔	EB	Associates, Inc.	Minton Rd.				0	90	↔	11	
↘	2%		112	7:45 AM - 8:45 AM				0		↔	0%	
↘	1%		312	TEV: 511	17	1.00	11		↔	3%		
↘	2%		28	2020	1	16	0		↔	2%		
452	↔	270		Malabar Rd.					WB	↔	360	
				0	0	48	0					
			NB				0	180				
			28	↓	0%	↗	1%	↘	0%	↑	48	
Notes												



2050 NO-BUILD AM FINAL TRAFFIC FORECAST VOLUMES

		911	7%	0%	12%	896			
		0				SB	City:		
		259		259	393		State:		
903	EB	St. Johns Heritage Pkwy.		0	90	1239			
11%		137	7:45 AM - 8:45 AM		518	3%			
6%		305	TEV: 3090	1	1.00	565	4%		
0%		45	2020	1	16	156	0%		
487	0	270	Malabar Rd.			WB	831		
			79	241	133	0			
			NB			180			
		460	0%	0%	0%	453			
Notes									

0

0

		87	0%	0%	0%	44			
		0				SB	City:		
		56		0	31		State:		
1239	EB	Snapdragon Dr.		0	90	1219			
0%		8	7:45 AM - 8:45 AM		36	0%			
7%		823	TEV: 2137	2	1.00	1183	4%		
0%		0	2020	1	16	0	0%		
831	0	270	Malabar Rd.			WB	854		
			0	0	0	0			
			NB			180			
		0	0%	0%	0%	0			
Notes									

0

0

		9	0%	0%	0%	15			
		0				SB	City:		
		3	0	6			State:		
1219	EB	Championship Cir.	0	90	1227				
0%		7:45 AM - 8:45 AM	11	0%					
7%		TEV: 2090	3	1.00	1216				
0%		2020	1	16	0				
854	270	Malabar Rd.	WB	856					
		0	0	0	0				
		NB			180				
		0	0%	0%	0%	0			
		Notes							

		104	3%	0%	1%	49			
		0				SB	City:		
		37	1	66			State:		
1156	EB	Krassner Dr./ Bending Branch Ln	0	90	1118				
7%		7:45 AM - 8:45 AM	33	3%					
6%		TEV: 2275	4	1.00	1040				
21%		2020	1	16	45				
904	270	Malabar Rd.	WB	1002					
		79	2	68	0				
		NB			180				
		68	4%	50%	2%	149			
		Notes							



		45	0%	0%	0%	15			
		0				SB	City:		
		27	0	18			State:		
1227	EB	Wisteria Ave.	0	90	1156				
0%		7:45 AM - 8:45 AM	9	0%					
0%		TEV: 2189	18	1.00	1121				
0%		2020	1	16	26				
856	270	Malabar Rd.	WB	904					
		79	0	53	0				
		NB			180				
		43	0%	0%	0%	132			
		Notes							

0

0

		0	0%	0%	0%	0%	0	City:
		0					SB	State:
1118	EB	0	Bavarian Ave.			0	90	1112
		0	7:45 AM - 8:45 AM			0		0%
		1001	TEV: 2122	5	1.00	1112		4%
		1	2020	1	16	0		0%
1002	WB	270	Malabar Rd.			WB	1003	
		6	0	2	0			
	NB					180		
		1	17%	0%	0%	8		
Notes								

0

0

		0	0%	0%	0%	0%	0	City:
		0					SB	State:
1112	EB	0	Hurley Blvd.			0	90	1077
		0	7:45 AM - 8:45 AM			0		0%
		965	TEV: 2240	6	1.00	1020		5%
		38	2020	1	16	57		3%
1003	WB	270	Malabar Rd.			WB	1033	
		92	0	68	0			
	NB					180		
		95	1%	0%	0%	160		
Notes								

0

0

		0	0%	0%	0%	0%	0	City:	
		0					SB	State:	
1077	EB	Assoc.	Palm Bay Public Works (W)				0	90	1082
		0	7:45 AM - 8:45 AM				0		0%
		1031	TEV: 2118	7	1.00	1076		5%	
		2	2020	1	16	6		0%	
1033	WB	270	Malabar Rd.					WB	1033
			1	0	2	0			
		NB				180			
		8	0%	0%	0%				
Notes									

0

0

		0	0%	0%	0%	0%	0	City:	
		0					SB	State:	
1082	EB	Assoc.	Palm Bay Public Works (E)				0	90	1108
		0	7:45 AM - 8:45 AM				0		0%
		1027	TEV: 2165	8	1.00	1078		5%	
		6	2020	1	16	30		0%	
1033	WB	270	Malabar Rd.					WB	1047
			4	0	20	0			
		NB				180			
		36	0%	0%	0%	24			
Notes									

0

0

0

		0	0%	0%	0%	0%	0	City:
		0					SB	State:
1402	EB	0	0	0	0	0	90	1400
		0	7:45 AM - 8:45 AM					0%
		1325	TEV: 2735	11	1.00	1398		3%
		1	2020	1	16	2		0%
1326	WB	270	Malabar Rd.				WB	1330
		4	0	5		0		
	NB					180		
		0%	0%	0%	0%	9		
Notes								

0

0

		0	0%	0%	0%	0%	0	City:
		0					SB	State:
1400	EB	0	0	0	0	0	90	1400
		0	7:45 AM - 8:45 AM					0%
		1254	TEV: 3120	12	1.00	1208		2%
		76	2020	1	16	192		2%
1330	WB	270	Malabar Rd.				WB	1452
		192	0	198		0		
	NB					180		
		268	14%	0%	2%	390		
Notes								

0

0

		0	0%	0%	0%	0%	0	City:
		0					SB	State:
1400	EB	Associated	Madalyn Landing	0	90	1412		
		0	7:45 AM - 8:45 AM	0		0%		
		1430	TEV: 2931	13	1.00	1377		3%
		22	2020	1	16	35		0%
1452	WB	270	Malabar Rd.			1474		
			23	0	44	0		
			NB			180		
		57		0%	0%	2%		
Notes								

0

0

		0	0%	0%	0%	0%	0	City:
		0					SB	State:
1412	EB	Associated	Sutherland Dr.	0	90	1415		
		0	7:45 AM - 8:45 AM	0		0%		
		1468	TEV: 2911	14	1.00	1406		2%
		6	2020	1	16	9		0%
1474	WB	270	Malabar Rd.			1484		
			6	0	16	0		
			NB			180		
		15		0%	0%	0%		
Notes								

0

0

		94	↓ 4%	↶ 0%	↷ 0%	↸ 0%	↹ 64			
		θ	0				SB	City:		
			48	0	46			State:		
1415	↔	EB	Associates		Maywood Ave./Daffodil Dr.		0	90	θ	↔ 1440
			8	7:45 AM - 8:45 AM			56			5%
			1463	TEV: 3071	15	1.00	1353			2%
			13	2020	1	16	31			0%
1484	↔	θ	270	Malabar Rd.				WB	↔	1548
			14	0	39	0				
			NB				θ	180		
			44	↓ 7%	↶ 0%	↷ 0%	↸ 53			
			Notes							

0

0

		25	↓ 0%	↶ 0%	↷ 0%	↸ 12				
		θ	0				SB	City:		
			14	4	7			State:		
1440	↔	EB	Associates		Plaza Entrance		0	90	θ	↔ 1411
			8	7:45 AM - 8:45 AM			1			0%
			1497	TEV: 3093	16	1.00	1357			3%
			43	2020	1	16	53			0%
1548	↔	θ	270	Malabar Rd.				WB	↔	1541
			69	3	37	0				
			NB				θ	180		
			100	↓ 0%	↶ 0%	↷ 0%	↸ 109			
			Notes							

0

0

		1274	5%	2%	0%	1212		
		0				SB	City:	
		635	324	315			State:	
1411	EB	Minton Rd.			0	90	1068	
		419	7:45 AM - 8:45 AM		311		0%	
		1022	TEV: 4648	17	1.00	643		3%
		100	2020	1	16	114		2%
1541		270	Malabar Rd.			WB	1488	
			133	482	151	0		
			NB			180		
		538	0%	1%	0%	766		
Notes								

11.5%

2050 PM NO-BUILD RAW TRAFFIC FORECAST VOLUMES

		924	7%	0%	0%	704	City:
		0				SB	State:
		203		203	518		
454	0%	EB	Interkhan & Malabar Rd.	St. Johns Heritage Pkwy.	0	90	537
	1%			5:00 PM - 6:00 PM	270		3%
	0%		TEV: 2612	1	1.00	185	4%
			2020	1	16	82	0%
697		270		Malabar Rd.		WB	1103
				66	217	171	0
				NB			180
		351	0%	0%	0%	454	
Notes							

-147

224

		39	0%	0%	0%	97	City:
		0				SB	State:
		15		0	24		
390	0%	EB	Interkhan & Malabar Rd.	Snapdragon Dr.	0	90	425
	0%			5:00 PM - 6:00 PM	50		0%
	0%		TEV: 1343	2	1.00	375	0%
	0%		2020	1	16	0	0%
879		270		Malabar Rd.		WB	856
				0	0	0	0
				NB			180
		0	0%	0%	0%	0	
Notes							

0

0

		40	0%	0%	0%	76	City:
		0				SB	State:
		16	0	24			
425	EB	Championship Cir.	5:00 PM - 6:00 PM	0	90	459	
0%		26	TEV: 1355	3	1.00	50	0%
0%		830	2020	1	16	409	3%
0%		0				0	0%
856		270	Malabar Rd.		WB	854	
		0	0	0	0		
		0	0%	0%	0%	180	
		0				0	

51.5%
99.0%
-43.8%

32

48

		92	11%	0%	0%	142	City:
		0				SB	State:
		17	1	74			
491	EB	Krassner Dr./ Bending Branch Ln	5:00 PM - 6:00 PM	0	90	640	
0%		39	TEV: 1642	4	1.00	100	1%
1%		702	2020	1	16	444	3%
8%		65				96	1%
806		270	Malabar Rd.		WB	847	
		30	3	71	0		
		162	7%	33%	4%	104	

41.7%
110.9%

-413

737

		50	0%	0%	0%	50	City:
		0				SB	State:
		12	0	18			
96	EB	Wisteria Ave.	5:00 PM - 6:00 PM	0	90	78	
0%		30	TEV: 310	18	1.00	20	0%
0%		0	2020	1	16	58	0%
0%		87				0	0%
117		270	Malabar Rd.		WB	69	
		34	0	51	0		
		145	0%	0%	0%	180	
		0				85	

413

-737

-391

412

		1	0%	0%	0%	0	City:
		0				SB	State:
		1	0	0			
786	EB	Santa Rosa Ave.		0	90	769	
		0	5:00 PM - 6:00 PM		0		
		987	TEV: 1771	11	1.00	763	
		2	2020	1	16	6	
989	(f) 270	Malabar Rd.			WB	997	
		2	0	10	0		
			NB		(f) 180		
8		0%	0%	0%	0%	12	
Notes							

331

-403

		0	0%	0%	0%	0	City:
		0				SB	State:
		0	0	0			
1100	EB	Garvey Rd.		0	90	1205	
		0	5:00 PM - 6:00 PM		0		
		1048	TEV: 2865	12	1.00	1062	
		352	2020	1	16	143	
1400	(f) 270	Malabar Rd.			WB	1270	
		38	0	222	0		
			NB		(f) 180		
495		0%	0%	0%	1%	260	
Notes							

263.0%

-331

273

		0	0%	0%	0%	0	0	City:
		0	0	0	0	0	0	State:
874	EB	0	0%	0%	0%	0	90	942
		0	0%	0%	0%	0	0	0%
		979	TEV: 1983	13	1.00	864	0	1%
		18	2020	1	16	78	0	0%
997	WB	270	0	0	0	0	0	1013
		10	0	34	0	0	0	0%
		96	0%	0%	0%	0%	180	44

0

0

		0	0%	0%	0%	0	0	City:
		0	0	0	0	0	0	State:
942	EB	0	0%	0%	0%	0	90	973
		0	0%	0%	0%	0	0	0%
		1011	TEV: 2010	14	1.00	939	0	0%
		2	2020	1	16	34	0	0%
1013	WB	270	0	0	0	0	0	1032
		3	0	21	0	0	0	0%
		36	0%	0%	0%	0%	180	24

0

0

		1412	1%	1%	1%	1403		City:
		0					SB	State:
			440	593	379			
	EB		Minton Rd.			0	90	1184
1100		699	5:00 PM - 6:00 PM			342		1%
		788	TEV: 4657	17	1.00	588		1%
		63	2020	1	16	254		1%
1550		270	Malabar Rd.				WB	1238
			78	362	71	0		
	NB					180		
		910	0%	2%	3%	511		
Notes								
27.0%								



2050 PM NO-BUILD TRAFFIC FORECAST VOLUME ADJUSTMENTS

391

-412

		0	0%	0%	0%	0%	0	City: State:
		0	0	0	0	0	0	SB
391	EB	Edinboro & Kutztown, Pa.	Santa Rosa Ave.	0	90	0	391	City: State:
		0	5:00 PM - 6:00 PM	0	0%	0%	0%	
		634	TEV: 1025	11	1.00	0	391	
		0	2020	1	16	0	0	
634	WB	Malabar Rd.	0	0	0	0	634	
		0	0	0	0	0	0	
		0	NB	0%	0%	0%	180	
		0	0	0%	0%	0%	0	
Notes								

-331

403

		0	0%	0%	0%	0%	0	City: State:
		0	0	0	0	0	0	SB
60	EB	Edinboro & Kutztown, Pa.	Garvey Rd.	0	90	0	165	City: State:
		0	5:00 PM - 6:00 PM	0	0%	0%	0%	
		231	TEV: 396	12	1.00	60	0	
		0	2020	1	16	105	0	
231	WB	Malabar Rd.	0	0	0	0	231	
		0	0	0	0	0	0	
		105	NB	0%	0%	1%	180	
		0	0	0%	0%	0%	0	
Notes								

-49.5%

2050 PM NO-BUILD FINAL TRAFFIC FORECAST VOLUMES

		1007	7%	0%	0%	713		
		0				SB	City:	
		203		203	601		State:	
467	EB	St. Johns Heritage Pkwy.				90	588	
		217		5:00 PM - 6:00 PM				
		442	TEV: 2802	1	1.00			
		66	2020	1	16			
725	WB	Malabar Rd.					1242	
		66		217	199			
	NB						180	
		380	0%	0%	0%		482	
Notes								

0

0

		39	0%	0%	0%	97		
		0				SB	City:	
		15		0	24		State:	
888	EB	Snapdragon Dr.				90	623	
		47		5:00 PM - 6:00 PM				
		1195	TEV: 1904	2	1.00			
		0	2020	1	16			
1242	WB	Malabar Rd.					1219	
		0		0	0			
	NB						180	
		0	0%	0%	0%		0	
Notes								

0

0

		40	0%	0%	0%	76	City:
		0				SB	State:
		16	0	24			
623	EB	Championship Cir.	0	90	657		
		5:00 PM - 6:00 PM	50				
		TEV: 1916	3	1.00	607		
		2020	1	16	0		
1219	WB	Malabar Rd.	0	1217			
		0	0	0			
	NB		0	180			
		0	0%	0%	0%	0	
Notes							

-24.6%

		105	11%	0%	0%	142	City:
		0				SB	State:
		17	1	87			
889	EB	Krassner Dr./ Bending Branch Ln	0	90	838		
		5:00 PM - 6:00 PM	100				
		TEV: 2216	4	1.00	642		
		2020	1	16	96		
1169	WB	Malabar Rd.	0	1223			
		30	3	71	0		
	NB		0	180			
		162	7%	33%	4%	104	
Notes							

		50	0%	0%	0%	50	City:
		0				SB	State:
		12	0	18			
657	EB	Wisteria Ave.	0	90	689		
		5:00 PM - 6:00 PM	20				
		TEV: 2025	18	1.00	611		
		2020	1	16	58		
1217	WB	Malabar Rd.	0	1169			
		34	0	51	0		
	NB		0	180			
		145	0%	0%	0%	85	
Notes							

0

0

0

0

		0	0%	0%	0%	0	0	SB	City:
		0	0	0	0	0	0	0	State:
838	EB	0	Bavarian Ave.			0	90	836	
		0	5:00 PM - 6:00 PM			0			
		1217	TEV: 2063	5	1.00	834			
		6	2020	1	16	2			
1223		270	Malabar Rd.			0	WB	1217	
			4	0	0	0			
	NB					180			
8			0%	0%	0%	4			
Notes									

0

0

		0	0%	0%	0%	0	0	SB	City:
		0	0	0	0	0	0	0	State:
836	EB	0	Hurley Blvd.			0	90	861	
		0	5:00 PM - 6:00 PM			0			
		1120	TEV: 2215	6	1.00	789			
		97	2020	1	16	72			
1217		270	Malabar Rd.			0	WB	1210	
			47	0	90	0			
	NB					180			
169			0%	0%	3%	137			
Notes									

0

0

		1	0%	0%	0%	0	City:
		0				0	State:
		1	0	0		0	
1157	EB	0	Santa Rosa Ave. 5:00 PM - 6:00 PM			0	90 (t) 1160
		0				0	0%
		1621	TEV: 2796	11	1.00	1154	0%
		2	2020	1	16	6	0%
1623	(t) 270		Malabar Rd.				WB 1631
		2	0	10	0		
	NB					180	
		8	0%	0%	0%	12	
Notes							

0

0

		0	0%	0%	0%	0	City:
		0				0	State:
		0	0	0		0	
1160	EB	0	Garvey Rd. 5:00 PM - 6:00 PM			0	90 (t) 1370
		0				0	0%
		1279	TEV: 3261	12	1.00	1122	0%
		352	2020	1	16	248	0%
1631	(t) 270		Malabar Rd.				WB 1501
		38	0	222	0		
	NB					180	
		600	0%	0%	1%	260	
Notes							

31.1%

0

0

		0	0%	0%	0%	0	0	SB	City:
		0							State:
1370	EB	0				0	90	1438	
		0				0			
		1483	TEV: 2983	13	1.00	1360			
		18	2020	1	16	78			
1501	WB	270						1517	
		10				34			
	NB							180	
		96		0%	0%	0%		44	
Notes									

0

0

		0	0%	0%	0%	0	0	SB	City:
		0							State:
1438	EB	0				0	90	1469	
		0				0			
		1515	TEV: 3010	14	1.00	1435			
		2	2020	1	16	34			
1517	WB	270						1536	
		3				21			
	NB							180	
		36		0%	0%	0%		24	
Notes									

0

0

		110	0%	0%	2%	90		
		0				SB	City:	
		54	1	55			State:	
1469	EB	Maywood Ave./Daffodil Dr.		0	90	1533		
		8	5:00 PM - 6:00 PM					
		1523	TEV: 3213	15	1.00	1408		
		5	2020	1	16	44		
1536	(f)	270	Malabar Rd.		WB	1604		
		7	1	26				
		50				180		
			0%	0%	0%	34		
Notes								

0

0

		86	0%	0%	3%	59		
		0				SB	City:	
		35	13	38			State:	
1533	EB	Plaza Entrance		0	90	1465		
		30	5:00 PM - 6:00 PM					
		1459	TEV: 3393	16	1.00	1329		
		115	2020	1	16	115		
1604	(f)	270	Malabar Rd.		WB	1558		
		169	8	61				
		243				180		
			0%	0%	0%	238		
Notes								

0

0

		1534	1%	1%	1%	1403		
		0				SB	City:	
			562	593	379		State:	
1465	EB	Minton Rd.				0	90	1393
		5:00 PM - 6:00 PM				342		1%
		TEV: 5044	17	1.00		797		1%
		2020	1	16		254		1%
1558		Malabar Rd.					WB	1266
			106	362	91	0		
	NB					180		
			0%	2%	3%	559		
Notes								
25.6%								

25.6%

APPENDIX K – FUTURE LAND USE MODEL INFORMATION

Contained in this Appendix –

- Future Land Use Model Information

SECTOR	County	RPMv6POP20	RPMv6Emp20	RPMv7POP20	CFRPMv7Emp2045	PopFactor	EmpFactor
1	Seminole	550,357	372,311	588,817	364,445	1.07	0.98
2	Orange	1,704,572	1,155,981	1,974,372	1,364,417	1.16	1.18
3	Osceola	609,025	269,821	655,199	276,453	1.08	1.02
4	Lake	547,506	226,292	511,433	252,743	1.00	1.00
5	Volusia	608,292	288,250	698,777	305,529	1.15	1.06
6	Brevard	748,793	329,886	705,162	371,095		
7	Marion	532,937	251,895	444,911	174,481	1.00	1.00
8	Sumter	241,201	89,329	223,979	71,336	1.00	1.00
9	Flagler	203,825	51,727	182,148	50,167	1.00	1.00
10	Polk	985,732	435,693	917,298	434,262	1.00	1.00
11	Indian River	71,046	43,286	66,822	18,653	1.00	1.00

Subarea

SECTOR	County	RPMv6POP20	RPMv6Emp20	RPMv7POP20	CFRPMv7Emp2045	PopFactor	EmpFactor
6	Brevard_Malabarsubarea	299254	135111	267,991	137,706	0.90	1.02
6	Brevard_Malabarsubarea_Outside	449539	194775	437171	233389	0.97	1.20

Name	Land Use Info
Avery Springs	140 Single Family Dwellings 226 Single Family Dwellings (Phase As Built) 202 Dwellings in Phase 1 and 2
Brentwood Lakes Phase 3 and 4 Chapparal	Entire Development is 429 dwellings 116 Single Family Dwellings 6100 SF Resturant 12050 SF Retail 20450 SF Grocery
Crown Square	240 Multi-Family Dwelling Units
Malabar Mini Storage	64000 SF Storage
St. Johns Preserve - Housing Units	~625 Dwelling Units
St. Johns Preserve - Commercial	24800 SF Commercial 670000 SF Commercial 350000 SF Office 700 Rooms Hotel 300 Beds Hospital
Emerald Lakes	1263 Single Family DU 1237 Multi-Family DU 210000 SF Commercial 80000 SF Office 250 Single Family DU 260 Multifamily DU 30000 SF Church
Cypress Bay Preserve	2000 Bed Nursing Home 205000 SF Commercial 30000 SF Office 1471 Single Family DU
Waterstone	482 Multifamily DU 304000 SF Commercial 1815 Single Family DU
Rolling Meadows	248 Multifamily DU 365000 SF Commercial 750000 SF Industrial 300 Bed Hospital
Space Coast Town Center	2445 Multifamily DU

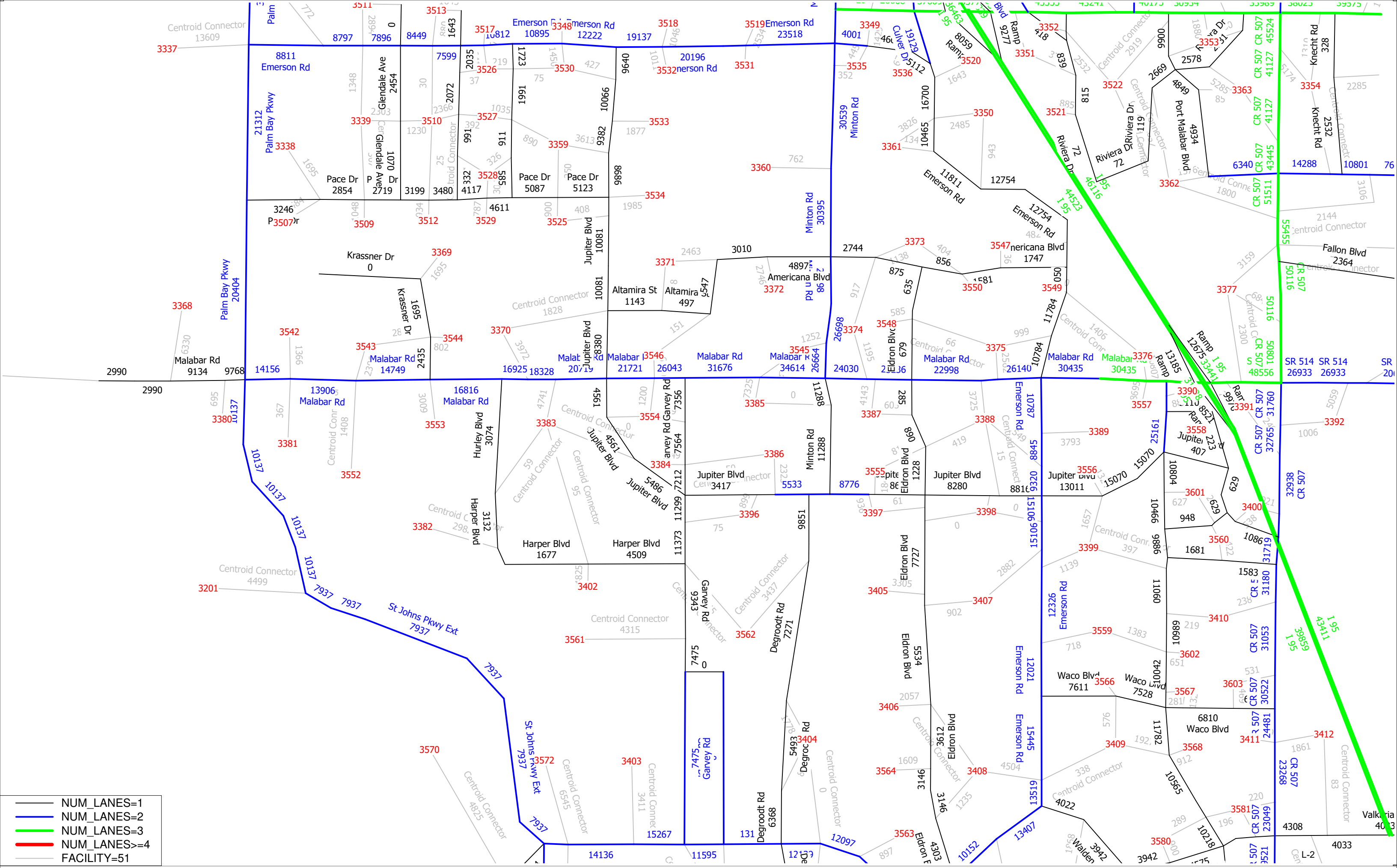
TAZ	Developments	2040 Model										2045 Model (Factored from 2040 SE data)										New 2045 Model									
		SFDU	SFPOP	MFDU	MFPOP	HMDU	HMPOP	INDEMP	COMEMP	SEREMP	TOTEMP	SFDU	SFPOP	MFDU	MFPOP	HMDU	HMPOP	INDEMP	COMEMP	SEREMP	TOTEMP	SFDU	SFPOP	MFDU	MFPOP	HMDU	HMPOP	INDEMP	COMEMP	SEREMP	TOTEMP
3370	Avery Springs	887	2,225	-	-	-	-	145	16	239	400	798	2,002	-	-	-	-	148	16	244	408	938	2,422	-	-	-	-	148	16	244	408
3553	Brentwood Lakes	166	518	16	48	-	-	-	-	-	-	149	466	14	43	-	-	-	-	-	-	578	1,753	14	43	-	-	-	-	-	-
3552	Chapparral	177	470	2	6	-	-	-	-	-	-	159	423	2	5	-	-	-	-	-	-	275	771	2	5	-	-	-	-	-	-
3557	Crown Square and Malabar Mini Storage	2	5	-	-	-	-	6	666	162	834	2	4	-	-	-	-	6	679	165	850	2	4	240	480	-	-	6	800	165	971
3606	Cypress Bay Preserve	12	30	11	21	-	-	8	12	1	21	12	29	11	20	-	-	10	14	1	25	262	779	271	540	-	-	10	434	381	825
3440	Emeral Lake (1/3 of Emeral Lake development assigned)	23	55	-	-	-	-	21	39	-	60	21	50	-	-	-	-	21	40	-	61	442	462	-	-	-	-	21	487	767	1,274
3605	Emeral Lake (1/3 of Emeral Lake development assigned)	710	2,130	757	1,514	-	-	-	1,457	1,767	3,224	689	2,066	734	1,469	-	-	-	1,748	2,120	3,868	689	2,066	734	1,469	-	-	-	1,748	2,120	3,868
5338	Emeral Lake (1/3 of Emeral Lake development assigned)	428	1,284	746	1,492	120	181	-	201	316	517	428	1,284	746	1,492	120	181	-	201	316	517	428	1,284	746	1,492	700	840	-	201	316	517
3204	Space Coast Town Center (1/2 of Space Coast Town Center development assigned)	137	340	2	4	-	-	-	35	11	46	123	306	2	4	-	-	-	36	11	47	123	306	1,225	2,449	-	-	750	401	56	1,207
3206	Space Coast Town Center (1/2 of Space Coast Town Center development assigned)	985	2,471	4	8	-	-	21	72	109	202	886	2,224	4	7	-	-	21	73	111	205	886	2,224	1,227	2,452	-	-	771	438	156	1,365
3368	St. Johns Preserve - Commercial and St. Johns Preserve - Housing Units	636	1,594	1	3	-	-	-	-	-	-	572	1,435	1	3	-	-	-	-	-	-	1,197	3,310	1	3	-	-	-	-	200	200
3435	Waterstone and Rolling Meadows	4,261	10,579	17	32	-	-	27	759	1,026	1,812	3,835	9,521	15	29	-	-	28	774	1,047	1,849	3,835	9,521	745	1,489	-	-	28	774	1,047	1,849

*Land use replaces existing CFRPM land use values

APPENDIX L – FUTURE YEAR SUBAREA MODEL VOLUMES

Contained in this Appendix –

- Future Year (2045) Subarea Model Volumes



- NUM_LANES=1
- NUM_LANES=2
- NUM_LANES=3
- NUM_LANES>=4
- FACILITY=51

APPENDIX M – HISTORIC TRENDS ANALYSES

Contained in this Appendix –

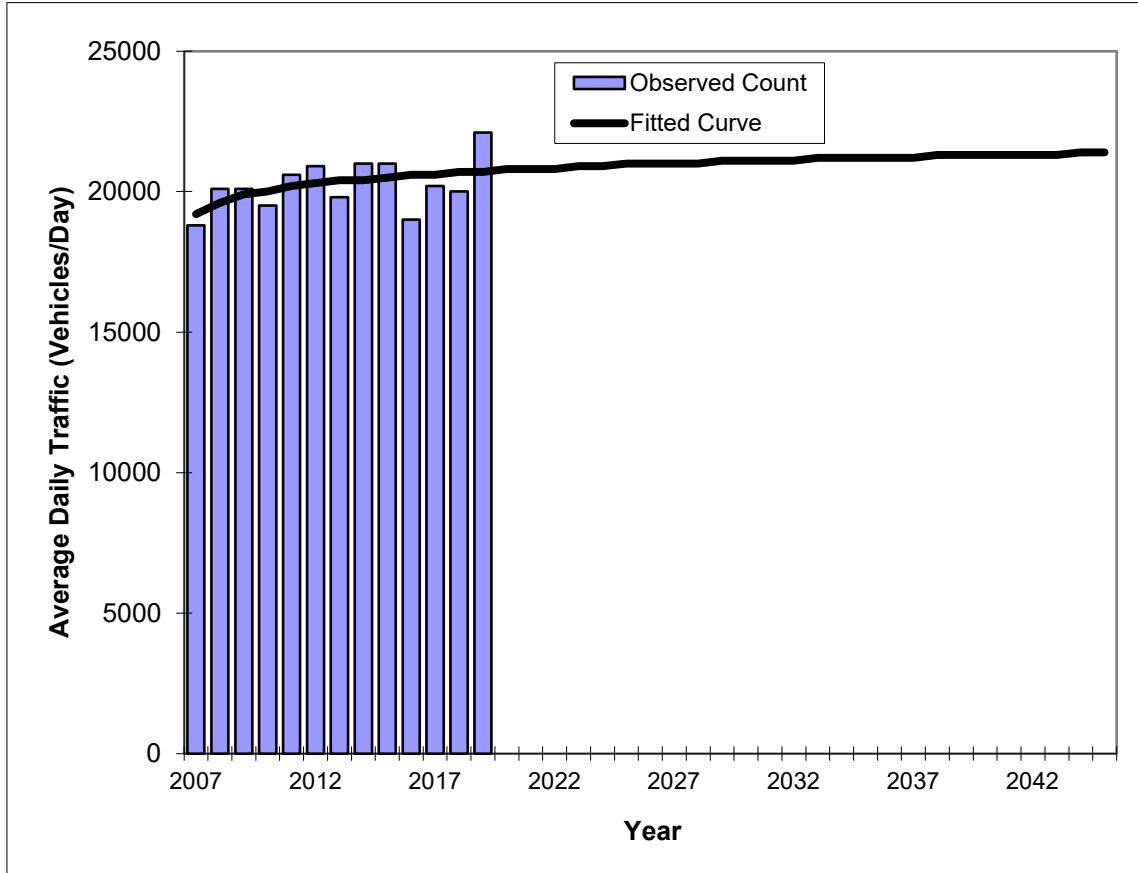
- Historic Trends Analyses

Traffic Trends - V3.0

MALABAR RD. -- W OF MINTON RD

FIN#	1234
Location	1

County:	Brevard (70)
Station #:	371
Highway:	MALABAR RD.



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2007	18800	19200
2008	20100	19600
2009	20100	19900
2010	19500	20000
2011	20600	20200
2012	20900	20300
2013	19800	20400
2014	21000	20400
2015	21000	20500
2016	19000	20600
2017	20200	20600
2018	20000	20700
2019	22100	20700
2025 Opening Year Trend		
2025	N/A	21000
2035 Mid-Year Trend		
2035	N/A	21200
2045 Design Year Trend		
2045	N/A	21400
TRANPLAN Forecasts/Trends		

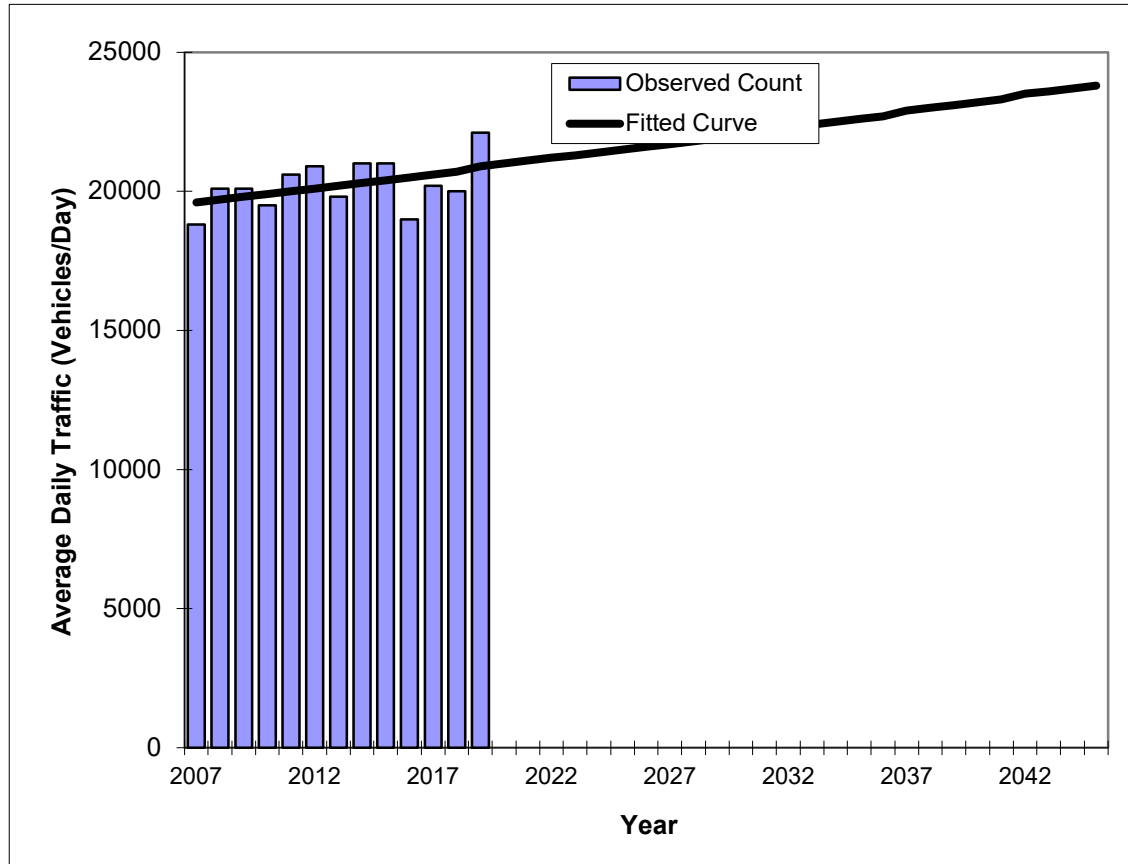
Trend R-squared:	25.28%
Compounded Annual Historic Growth Rate:	0.63%
Compounded Growth Rate (2019 to Design Year):	0.13%
Printed:	4-Jun-20
Decaying Exponential Growth Option	

*Axle-Adjusted

Traffic Trends - V3.0 MALABAR RD. -- W OF MINTON RD

FIN#	1234
Location	1

County:	Brevard (70)
Station #:	371
Highway:	MALABAR RD.



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2007	18800	19600
2008	20100	19700
2009	20100	19800
2010	19500	19900
2011	20600	20000
2012	20900	20100
2013	19800	20200
2014	21000	20300
2015	21000	20400
2016	19000	20500
2017	20200	20600
2018	20000	20700
2019	22100	20900
2025 Opening Year Trend		
2025	N/A	21500
2035 Mid-Year Trend		
2035	N/A	22600
2045 Design Year Trend		
2045	N/A	23800
TRANPLAN Forecasts/Trends		

Trend R-squared:	20.39%
Compounded Annual Historic Growth Rate:	0.54%
Compounded Growth Rate (2019 to Design Year):	0.50%
Printed:	4-Jun-20
Exponential Growth Option	

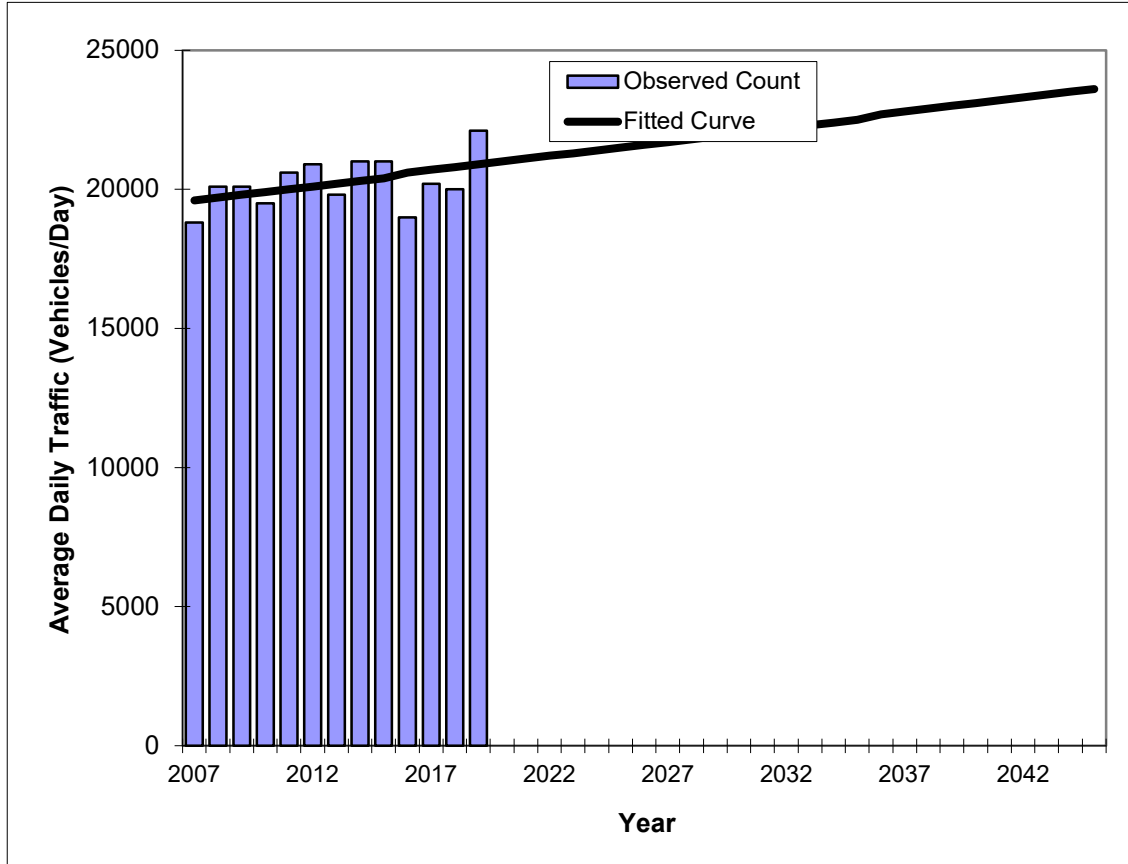
*Axle-Adjusted

Traffic Trends - V3.0

MALABAR RD. -- W OF MINTON RD

FIN#	1234
Location	1

County:	Brevard (70)
Station #:	371
Highway:	MALABAR RD.



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2007	18800	19600
2008	20100	19700
2009	20100	19800
2010	19500	19900
2011	20600	20000
2012	20900	20100
2013	19800	20200
2014	21000	20300
2015	21000	20400
2016	19000	20600
2017	20200	20700
2018	20000	20800
2019	22100	20900
2025 Opening Year Trend		
2025	N/A	21500
2035 Mid-Year Trend		
2035	N/A	22500
2045 Design Year Trend		
2045	N/A	23600
TRANPLAN Forecasts/Trends		

** Annual Trend Increase:	105
Trend R-squared:	20.81%
Trend Annual Historic Growth Rate:	0.55%
Trend Growth Rate (2019 to Design Year):	0.50%
Printed:	4-Jun-20
Straight Line Growth Option	

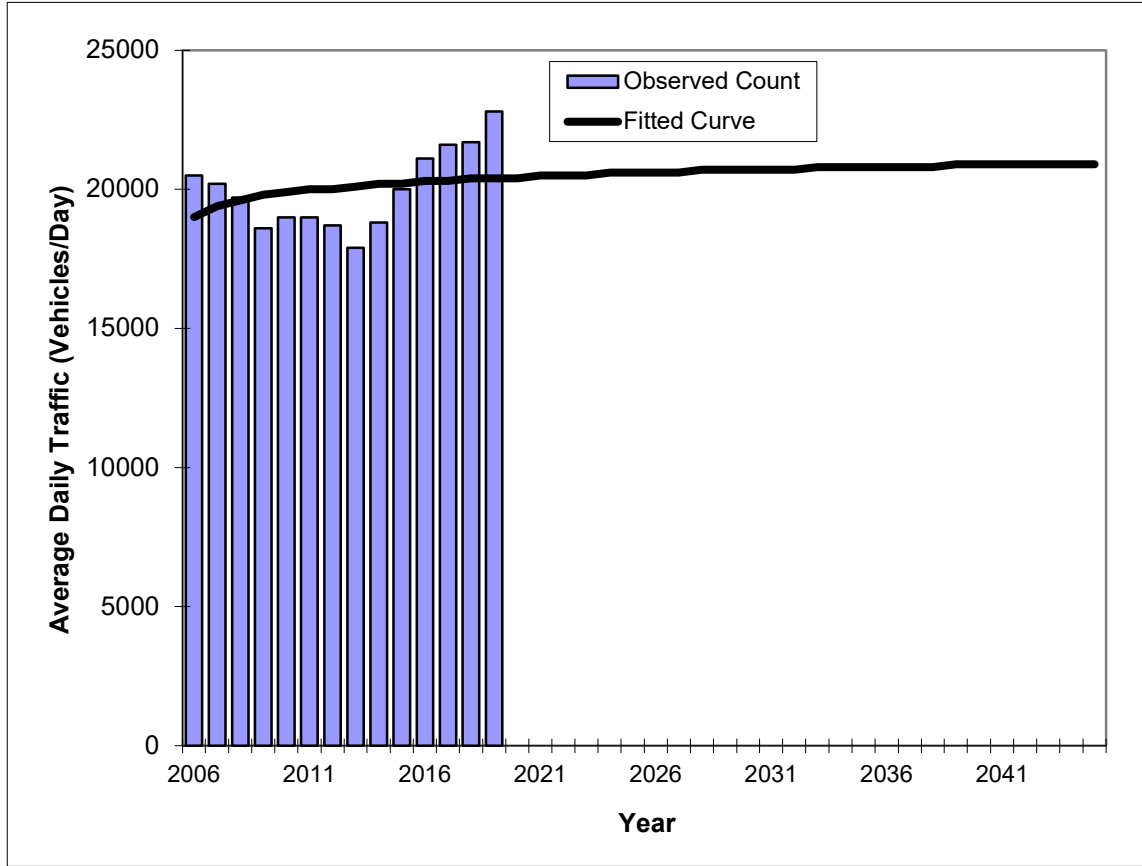
*Axle-Adjusted

Traffic Trends - V3.0

MINTON RD. -- N. OF MALABAR RD.

FIN#	1234
Location	1

County:	Brevard (70)
Station #:	490
Highway:	MINTON RD.



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2006	20500	19000
2007	20200	19400
2008	19700	19600
2009	18600	19800
2010	19000	19900
2011	19000	20000
2012	18700	20000
2013	17900	20100
2014	18800	20200
2015	20000	20200
2016	21100	20300
2017	21600	20300
2018	21700	20400
2019	22800	20400
2025 Opening Year Trend		
2025	N/A	20600
2035 Mid-Year Trend		
2035	N/A	20800
2045 Design Year Trend		
2045	N/A	20900
TRANPLAN Forecasts/Trends		

Trend R-squared:	7.86%
Compounded Annual Historic Growth Rate:	0.55%
Compounded Growth Rate (2019 to Design Year):	0.09%
Printed:	4-Jun-20
Decaying Exponential Growth Option	

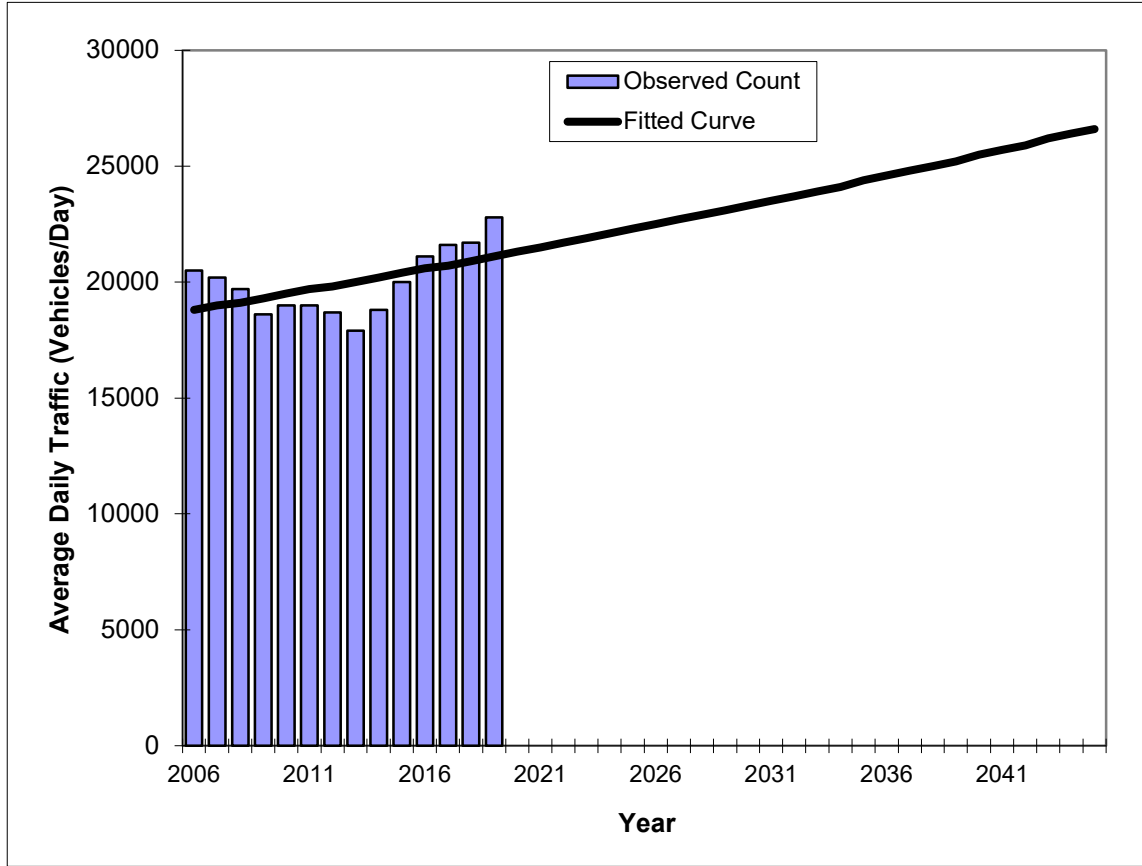
*Axle-Adjusted

Traffic Trends - V3.0

MINTON RD. -- N. OF MALABAR RD.

FIN#	1234
Location	1

County:	Brevard (70)
Station #:	490
Highway:	MINTON RD.



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2006	20500	18800
2007	20200	19000
2008	19700	19100
2009	18600	19300
2010	19000	19500
2011	19000	19700
2012	18700	19800
2013	17900	20000
2014	18800	20200
2015	20000	20400
2016	21100	20600
2017	21600	20700
2018	21700	20900
2019	22800	21100
2025 Opening Year Trend		
2025	N/A	22300
2035 Mid-Year Trend		
2035	N/A	24400
2045 Design Year Trend		
2045	N/A	26600
TRANPLAN Forecasts/Trends		

Trend R-squared:	28.11%
Compounded Annual Historic Growth Rate:	0.89%
Compounded Growth Rate (2019 to Design Year):	0.89%
Printed:	4-Jun-20
Exponential Growth Option	

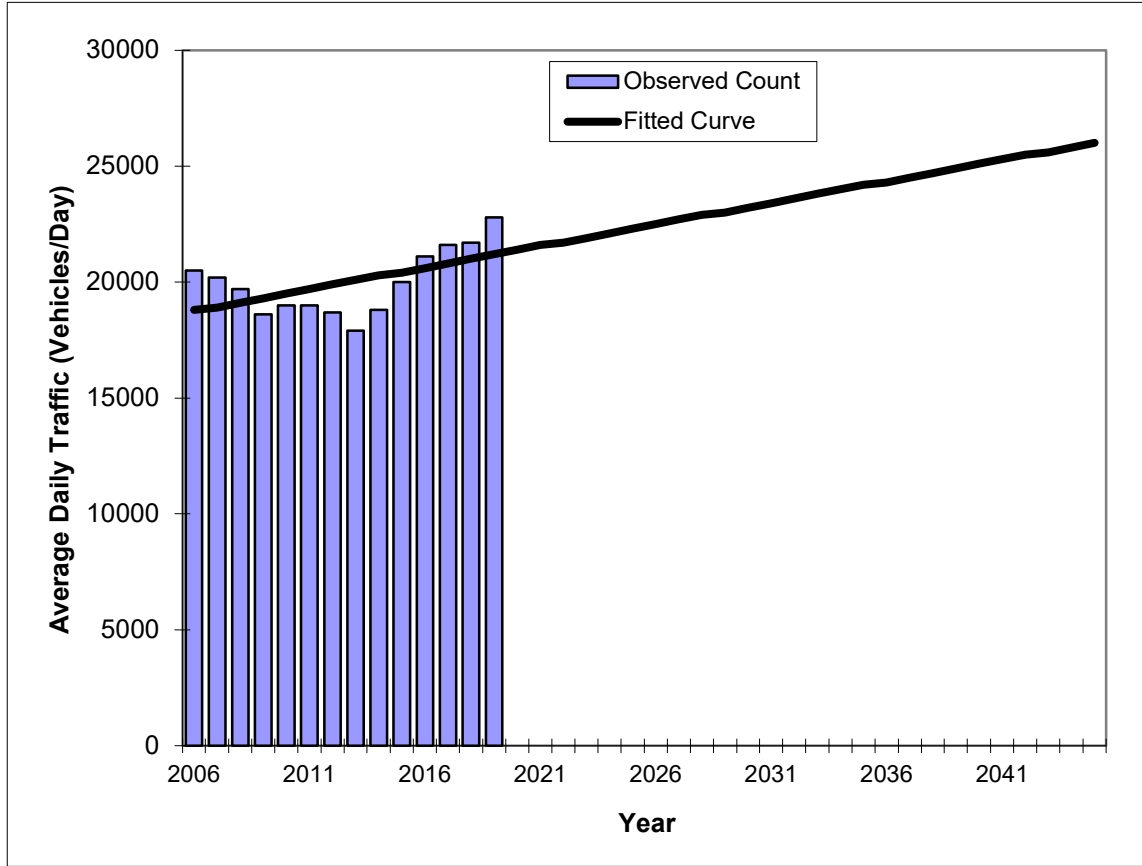
*Axle-Adjusted

Traffic Trends - V3.0

MINTON RD. -- N. OF MALABAR RD.

FIN#	1234
Location	1

County:	Brevard (70)
Station #:	490
Highway:	MINTON RD.



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2006	20500	18800
2007	20200	18900
2008	19700	19100
2009	18600	19300
2010	19000	19500
2011	19000	19700
2012	18700	19900
2013	17900	20100
2014	18800	20300
2015	20000	20400
2016	21100	20600
2017	21600	20800
2018	21700	21000
2019	22800	21200
2025 Opening Year Trend		
2025	N/A	22300
2035 Mid-Year Trend		
2035	N/A	24200
2045 Design Year Trend		
2045	N/A	26000
TRANPLAN Forecasts/Trends		

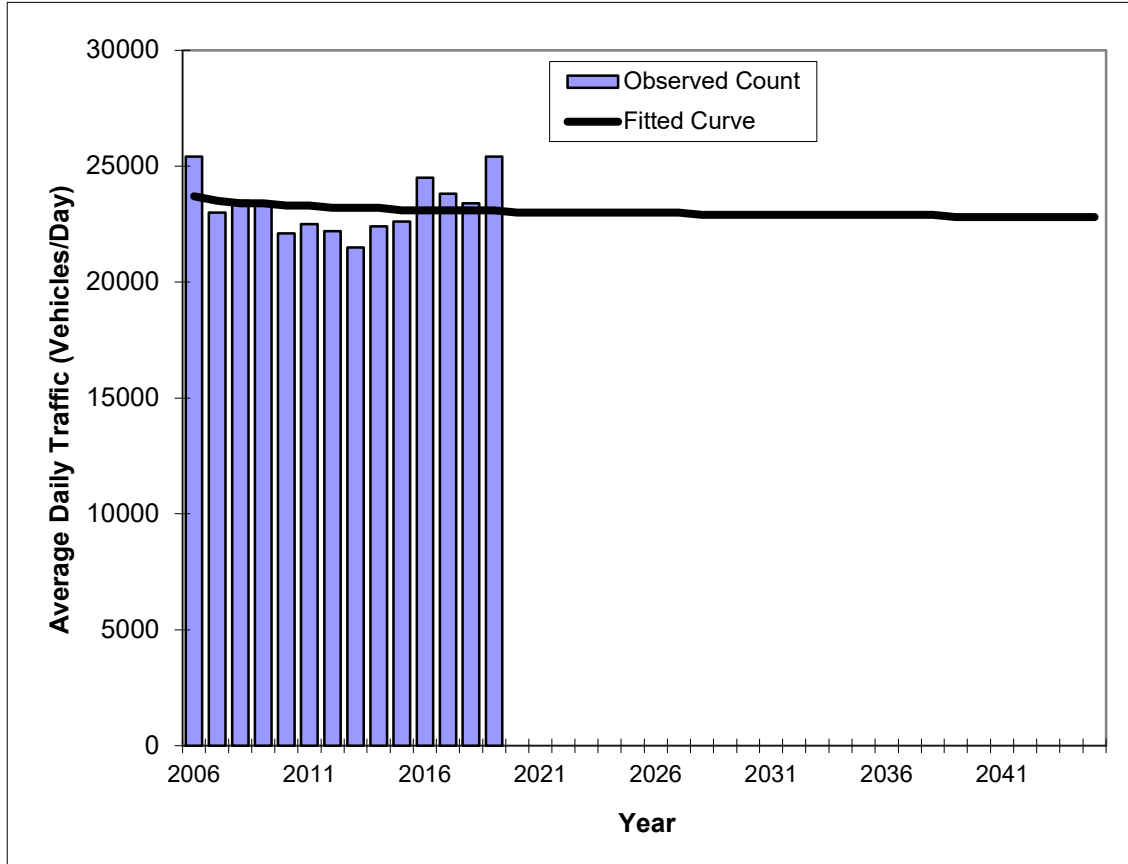
** Annual Trend Increase:	186
Trend R-squared:	29.83%
Trend Annual Historic Growth Rate:	0.98%
Trend Growth Rate (2019 to Design Year):	0.87%
Printed:	4-Jun-20
Straight Line Growth Option	

*Axle-Adjusted

Traffic Trends - V3.0 MALABAR RD. -- E OF MINTON RD

FIN#	1234
Location	1

County:	Brevard (70)
Station #:	491
Highway:	MALABAR RD.



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2006	25400	23700
2007	23000	23500
2008	23500	23400
2009	23400	23400
2010	22100	23300
2011	22500	23300
2012	22200	23200
2013	21500	23200
2014	22400	23200
2015	22600	23100
2016	24500	23100
2017	23800	23100
2018	23400	23100
2019	25400	23100
2025 Opening Year Trend		
2025	N/A	23000
2035 Mid-Year Trend		
2035	N/A	22900
2045 Design Year Trend		
2045	N/A	22800
TRANPLAN Forecasts/Trends		

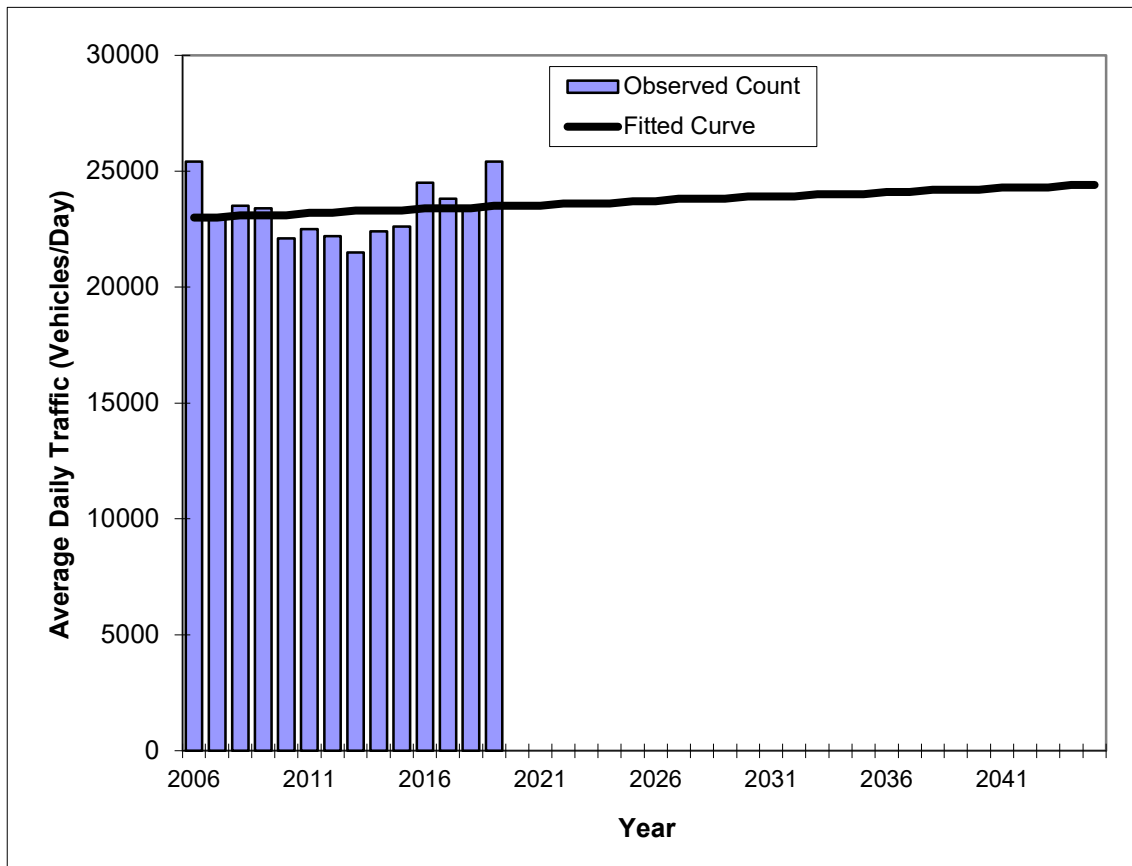
Trend R-squared:	2.43%
Compounded Annual Historic Growth Rate:	-0.20%
Compounded Growth Rate (2019 to Design Year):	-0.05%
Printed:	4-Jun-20
Decaying Exponential Growth Option	

*Axle-Adjusted

Traffic Trends - V3.0 MALABAR RD. -- E OF MINTON RD

FIN#	1234
Location	1

County:	Brevard (70)
Station #:	491
Highway:	MALABAR RD.



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2006	25400	23000
2007	23000	23000
2008	23500	23100
2009	23400	23100
2010	22100	23100
2011	22500	23200
2012	22200	23200
2013	21500	23300
2014	22400	23300
2015	22600	23300
2016	24500	23400
2017	23800	23400
2018	23400	23400
2019	25400	23500
2025 Opening Year Trend		
2025	N/A	23700
2035 Mid-Year Trend		
2035	N/A	24000
2045 Design Year Trend		
2045	N/A	24400
TRANPLAN Forecasts/Trends		

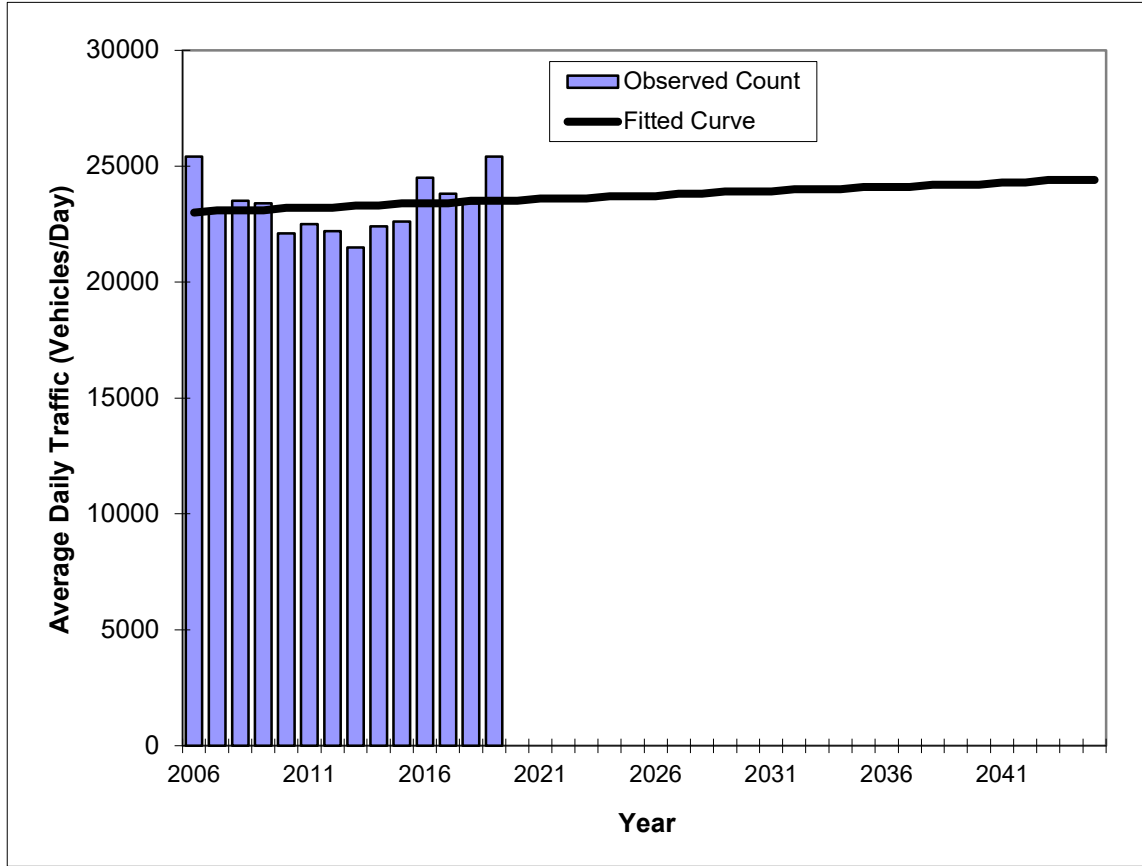
Trend R-squared:	1.58%
Compounded Annual Historic Growth Rate:	0.17%
Compounded Growth Rate (2019 to Design Year):	0.14%
Printed:	4-Jun-20
Exponential Growth Option	

*Axle-Adjusted

Traffic Trends - V3.0 MALABAR RD. -- E OF MINTON RD

FIN#	1234
Location	1

County:	Brevard (70)
Station #:	491
Highway:	MALABAR RD.



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2006	25400	23000
2007	23000	23100
2008	23500	23100
2009	23400	23100
2010	22100	23200
2011	22500	23200
2012	22200	23200
2013	21500	23300
2014	22400	23300
2015	22600	23400
2016	24500	23400
2017	23800	23400
2018	23400	23500
2019	25400	23500
2025 Opening Year Trend		
2025	N/A	23700
2035 Mid-Year Trend		
2035	N/A	24100
2045 Design Year Trend		
2045	N/A	24400
TRANPLAN Forecasts/Trends		

** Annual Trend Increase:	36
Trend R-squared:	1.58%
Trend Annual Historic Growth Rate:	0.17%
Trend Growth Rate (2019 to Design Year):	0.15%
Printed:	4-Jun-20
Straight Line Growth Option	

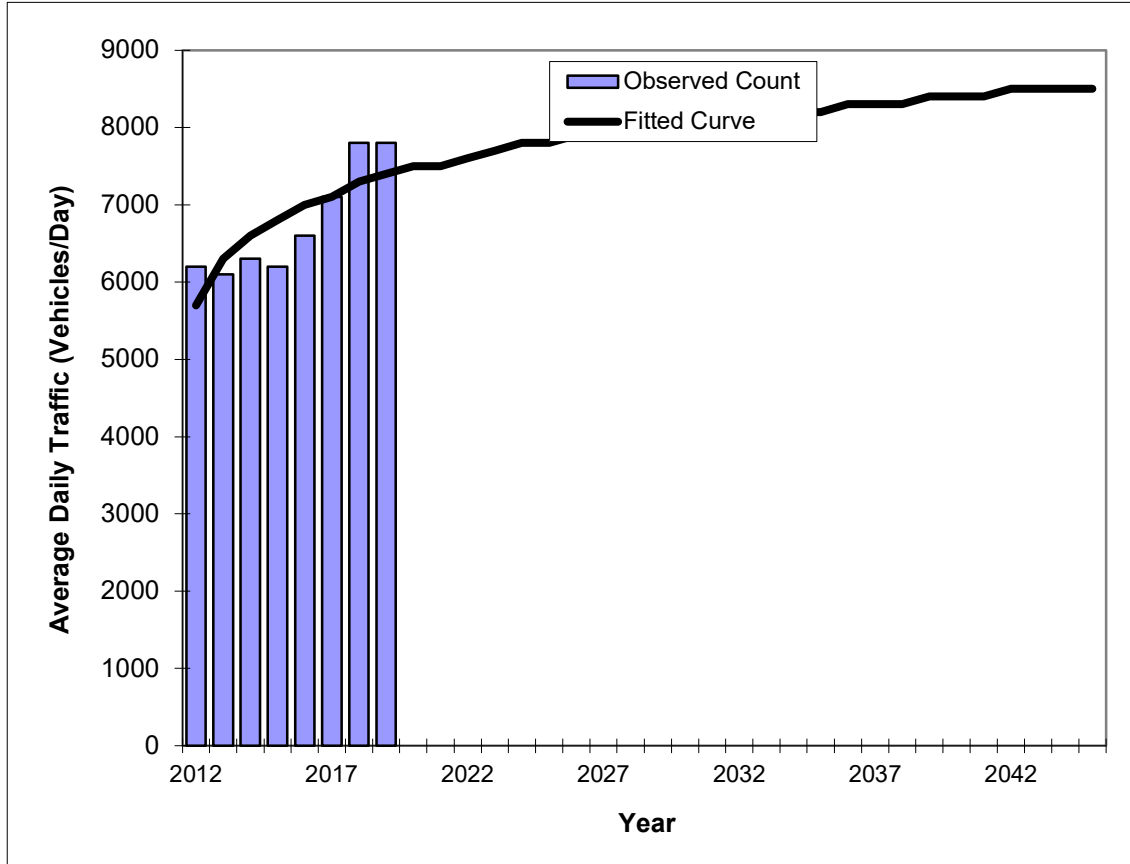
*Axle-Adjusted

Traffic Trends - V3.0

JUPITER BLVD. -- S. OF MALABAR RD.

FIN#	1234
Location	1

County:	Brevard (70)
Station #:	573
Highway:	JUPITER BLVD.



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2012	6200	5700
2013	6100	6300
2014	6300	6600
2015	6200	6800
2016	6600	7000
2017	7100	7100
2018	7800	7300
2019	7800	7400
2025 Opening Year Trend		
2025	N/A	7800
2035 Mid-Year Trend		
2035	N/A	8200
2045 Design Year Trend		
2045	N/A	8500
TRANPLAN Forecasts/Trends		

Trend R-squared:	62.01%
Compounded Annual Historic Growth Rate:	4.21%
Compounded Growth Rate (2018 to Design Year):	0.57%
Printed:	4-Jun-20
Decaying Exponential Growth Option	

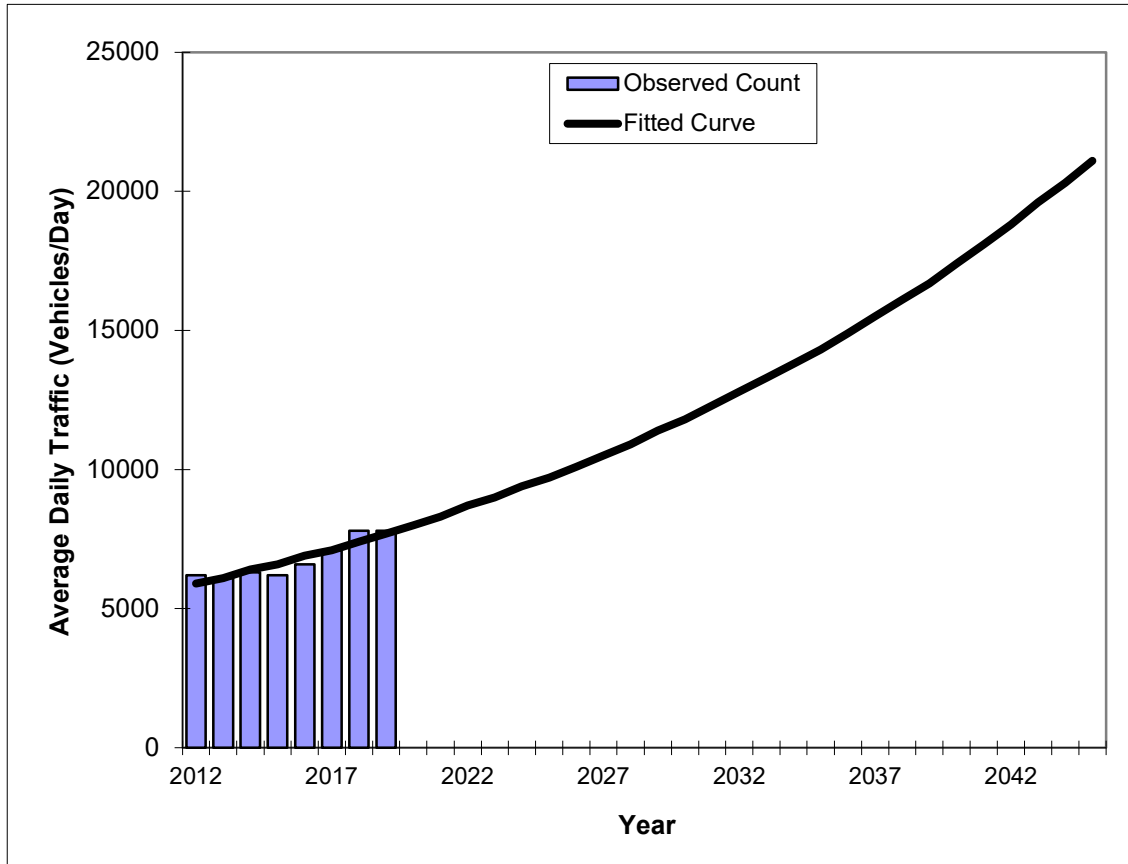
*Axle-Adjusted

Traffic Trends - V3.0

JUPITER BLVD. -- S. OF MALABAR RD.

FIN#	1234
Location	1

County:	Brevard (70)
Station #:	573
Highway:	JUPITER BLVD.



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2012	6200	5900
2013	6100	6100
2014	6300	6400
2015	6200	6600
2016	6600	6900
2017	7100	7100
2018	7800	7400
2019	7800	7700
2025 Opening Year Trend		
2025	N/A	9700
2035 Mid-Year Trend		
2035	N/A	14300
2045 Design Year Trend		
2045	N/A	21100
TRANPLAN Forecasts/Trends		

Trend R-squared:	85.05%
Compounded Annual Historic Growth Rate:	3.88%
Compounded Growth Rate (2019 to Design Year):	3.95%
Printed:	4-Jun-20
Exponential Growth Option	

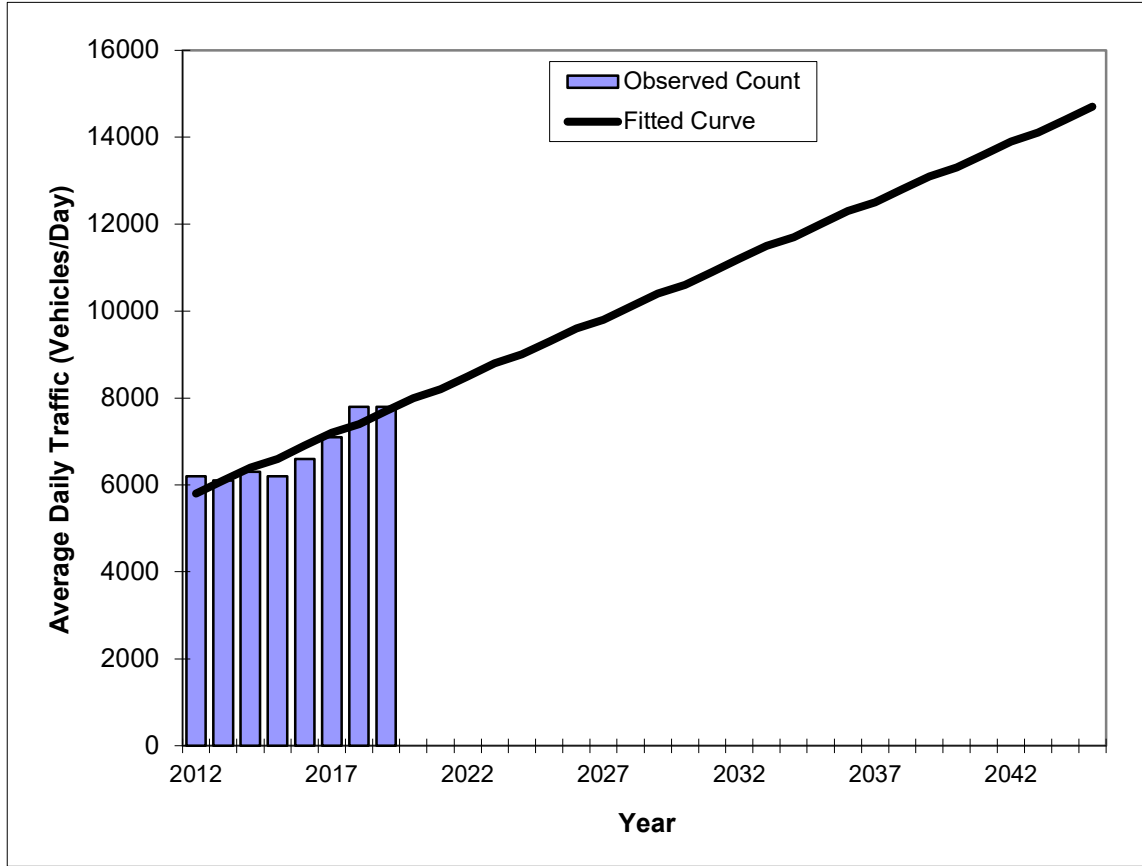
*Axle-Adjusted

Traffic Trends - V3.0

JUPITER BLVD. -- S. OF MALABAR RD.

FIN#	1234
Location	1

County:	Brevard (70)
Station #:	573
Highway:	JUPITER BLVD.



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2012	6200	5800
2013	6100	6100
2014	6300	6400
2015	6200	6600
2016	6600	6900
2017	7100	7200
2018	7800	7400
2019	7800	7700
2025 Opening Year Trend		
2025	N/A	9300
2035 Mid-Year Trend		
2035	N/A	12000
2045 Design Year Trend		
2045	N/A	14700
TRANPLAN Forecasts/Trends		

** Annual Trend Increase:	268
Trend R-squared:	84.20%
Trend Annual Historic Growth Rate:	4.68%
Trend Growth Rate (2019 to Design Year):	3.50%
Printed:	4-Jun-20
Straight Line Growth Option	

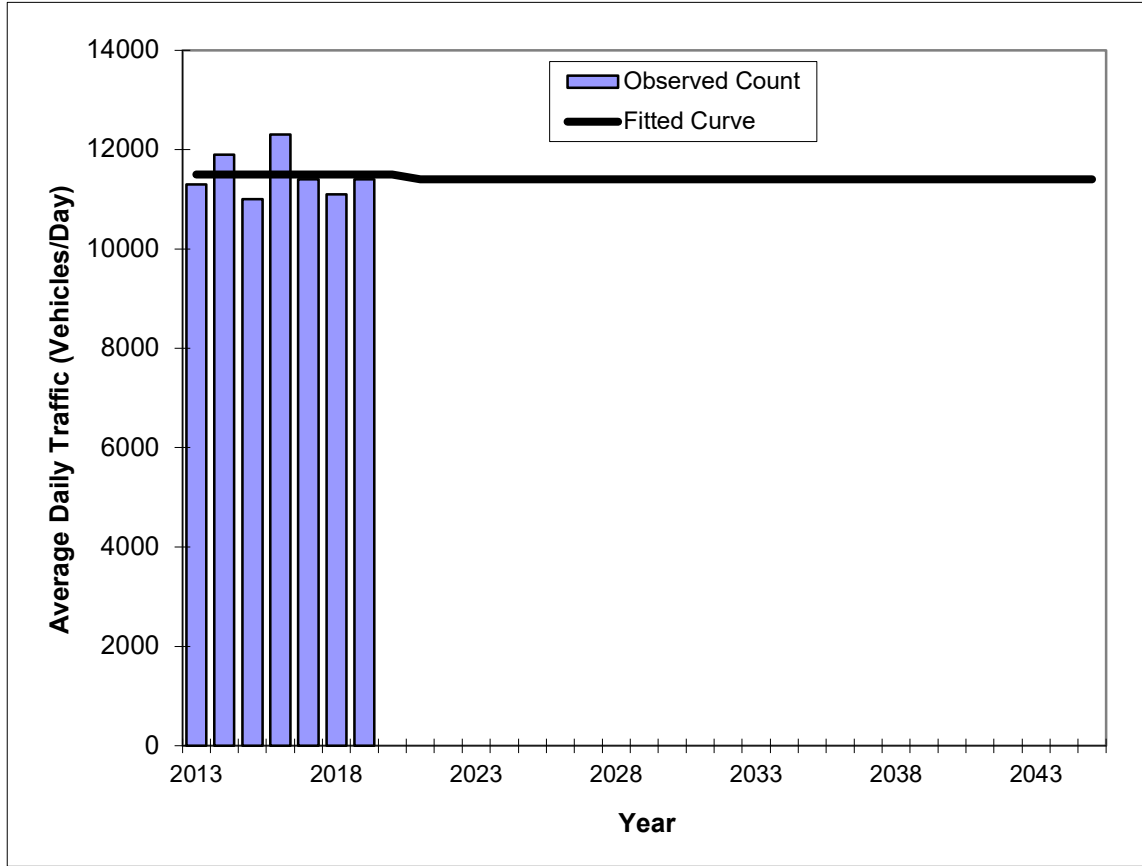
*Axle-Adjusted

Traffic Trends - V3.0

MALABAR RD. -- W OF JUPITER BLVD

FIN#	1234
Location	1

County:	Brevard (70)
Station #:	589
Highway:	MALABAR RD.



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2013	11300	11500
2014	11900	11500
2015	11000	11500
2016	12300	11500
2017	11400	11500
2018	11100	11500
2019	11400	11500
2025 Opening Year Trend		
2025	N/A	11400
2035 Mid-Year Trend		
2035	N/A	11400
2045 Design Year Trend		
2045	N/A	11400
TRANPLAN Forecasts/Trends		

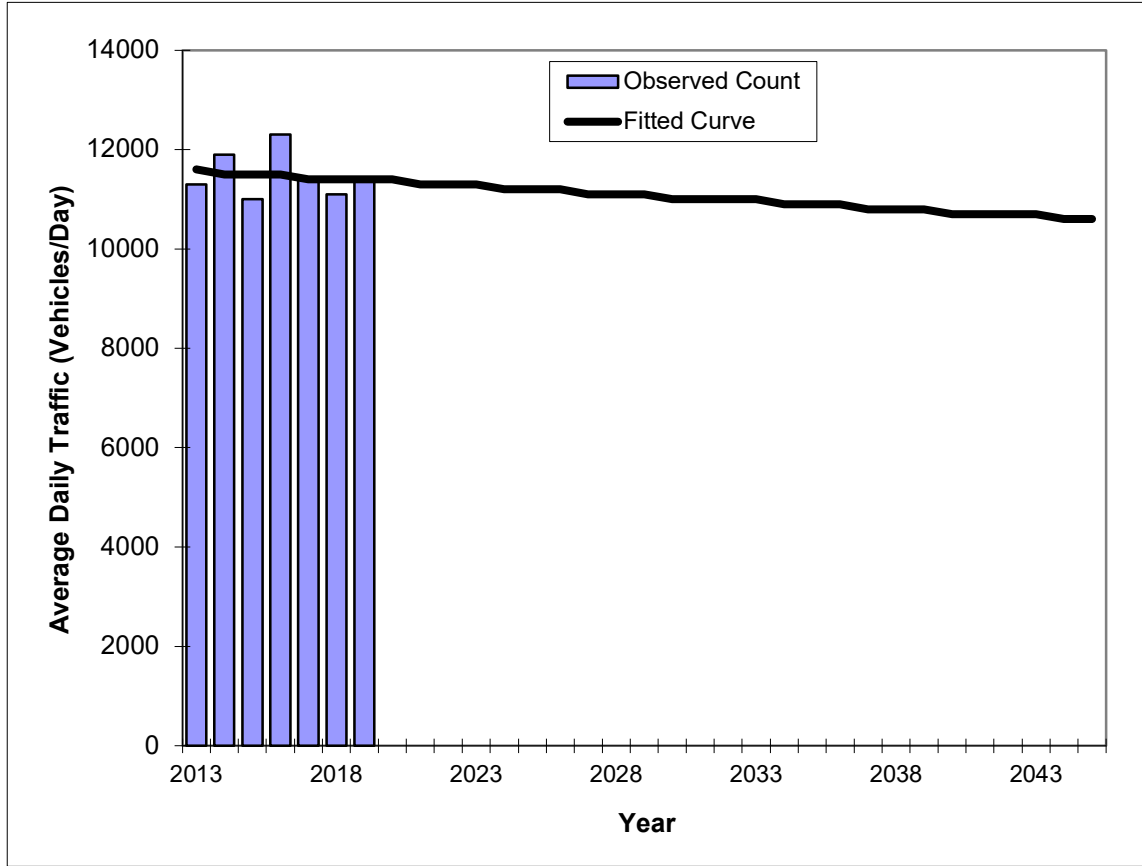
Trend R-squared:	0.36%
Compounded Annual Historic Growth Rate:	0.00%
Compounded Growth Rate (2019 to Design Year):	-0.03%
Printed:	4-Jun-20
Decaying Exponential Growth Option	

*Axle-Adjusted

Traffic Trends - V3.0 MALABAR RD. -- W OF JUPITER BLVD

FIN#	1234
Location	1

County:	Brevard (70)
Station #:	589
Highway:	MALABAR RD.



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2013	11300	11600
2014	11900	11500
2015	11000	11500
2016	12300	11500
2017	11400	11400
2018	11100	11400
2019	11400	11400
2025 Opening Year Trend		
2025	N/A	11200
2035 Mid-Year Trend		
2035	N/A	10900
2045 Design Year Trend		
2045	N/A	10600
TRANPLAN Forecasts/Trends		

Trend R-squared:	2.27%
Compounded Annual Historic Growth Rate:	-0.29%
Compounded Growth Rate (2019 to Design Year):	-0.28%
Printed:	4-Jun-20
Exponential Growth Option	

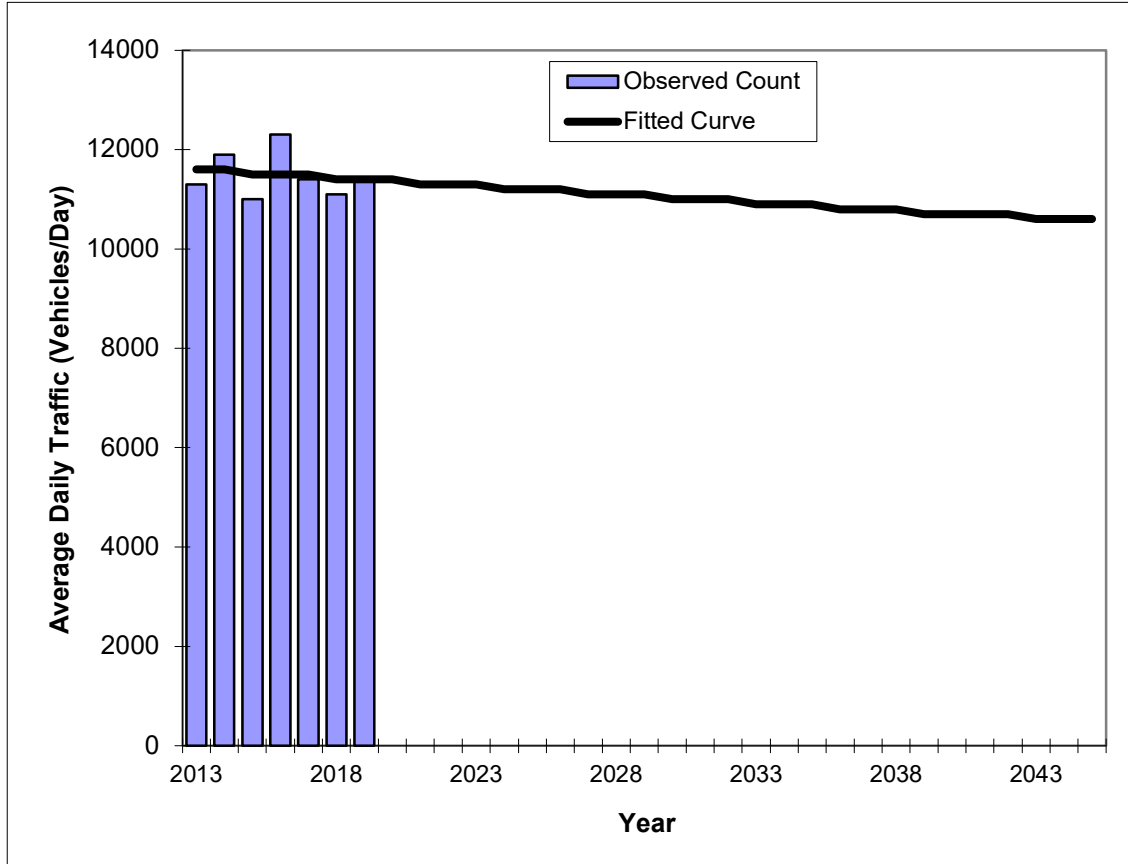
*Axle-Adjusted

Traffic Trends - V3.0

MALABAR RD. -- W OF JUPITER BLVD

FIN#	1234
Location	1

County:	Brevard (70)
Station #:	589
Highway:	MALABAR RD.



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2013	11300	11600
2014	11900	11600
2015	11000	11500
2016	12300	11500
2017	11400	11500
2018	11100	11400
2019	11400	11400
2025 Opening Year Trend		
2025	N/A	11200
2035 Mid-Year Trend		
2035	N/A	10900
2045 Design Year Trend		
2045	N/A	10600
TRANPLAN Forecasts/Trends		

** Annual Trend Increase:	-32
Trend R-squared:	2.28%
Trend Annual Historic Growth Rate:	-0.29%
Trend Growth Rate (2019 to Design Year):	-0.27%
Printed:	4-Jun-20
Straight Line Growth Option	

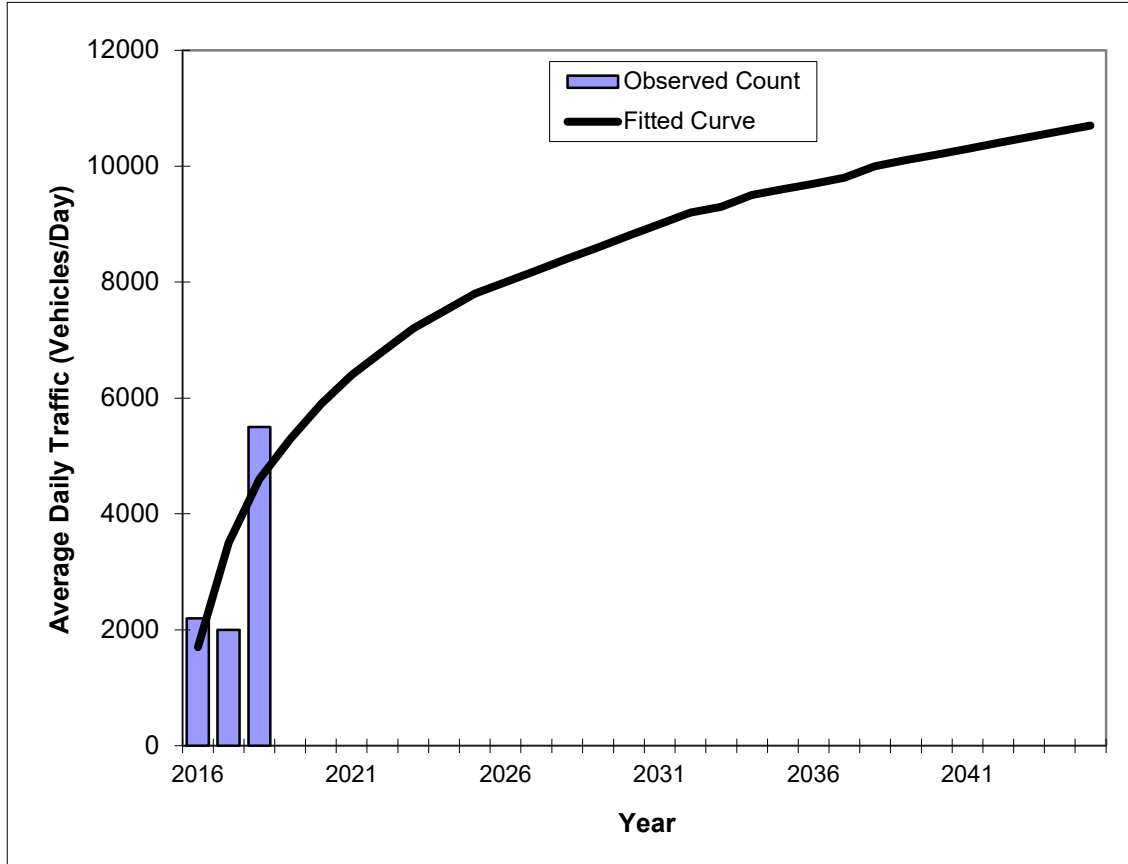
*Axle-Adjusted

Traffic Trends - V3.0

ST. JOHNS HERITAGE PKWY. -- N. OF MALABAR RD.

FIN#	1234
Location	1

County:	Brevard (70)
Station #:	609
Highway:	ST. JOHNS HERITAGE PKWY.



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2016	2200	1700
2017	2000	3500
2018	5500	4600
2025 Opening Year Trend		
2025	N/A	7800
2035 Mid-Year Trend		
2035	N/A	9600
2045 Design Year Trend		
2045	N/A	10700
TRANPLAN Forecasts/Trends		

Trend R-squared:	56.07%
Compounded Annual Historic Growth Rate:	64.50%
Compounded Growth Rate (2018 to Design Year):	3.18%
Printed:	4-Jun-20
Decaying Exponential Growth Option	

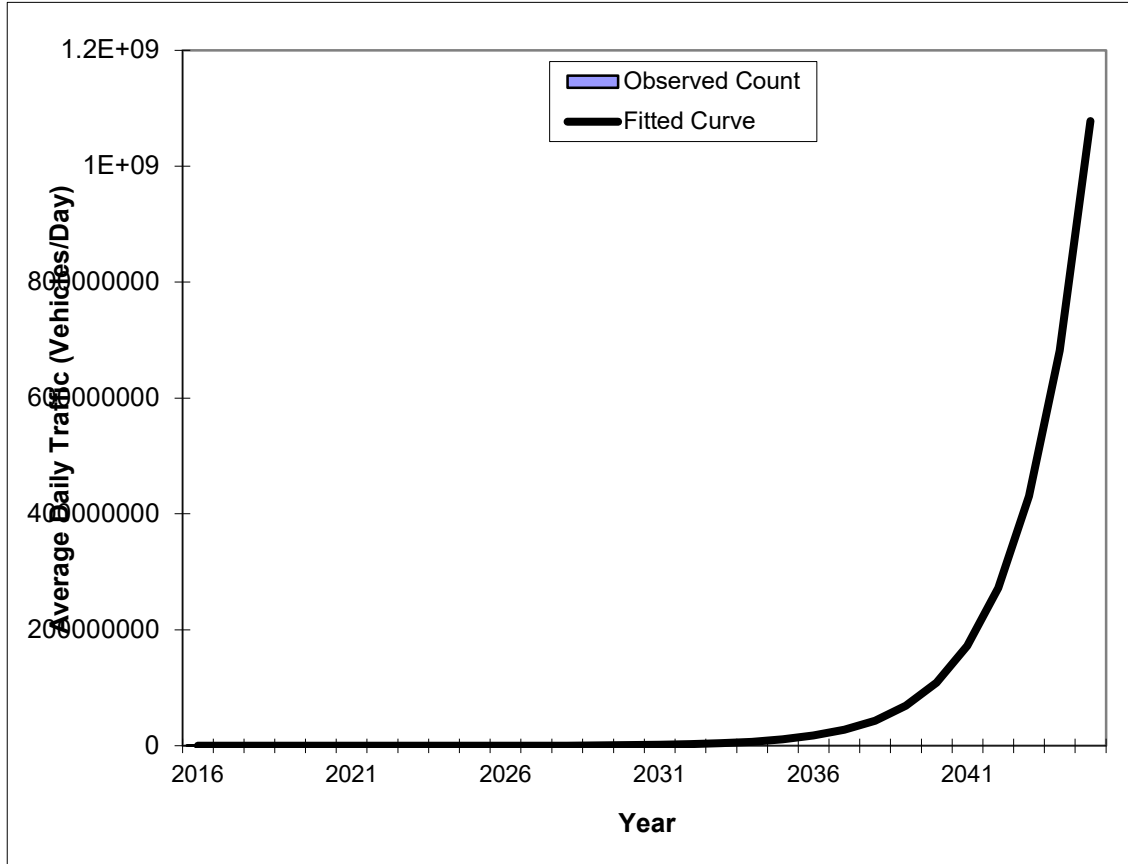
*Axle-Adjusted

Traffic Trends - V3.0

ST. JOHNS HERITAGE PKWY. -- N. OF MALABAR RD.

FIN#	1234
Location	1

County:	Brevard (70)
Station #:	609
Highway:	ST. JOHNS HERITAGE PKWY.



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2016	2200	1800
2017	2000	2900
2018	5500	4600
2025 Opening Year Trend		
2025	N/A	113000
2035 Mid-Year Trend		
2035	N/A	11034000
2045 Design Year Trend		
2045	N/A	1.08E+09
TRANPLAN Forecasts/Trends		

Trend R-squared:	67.27%
Compounded Annual Historic Growth Rate:	59.86%
Compounded Growth Rate (2018 to Design Year):	58.08%
Printed:	4-Jun-20
Exponential Growth Option	

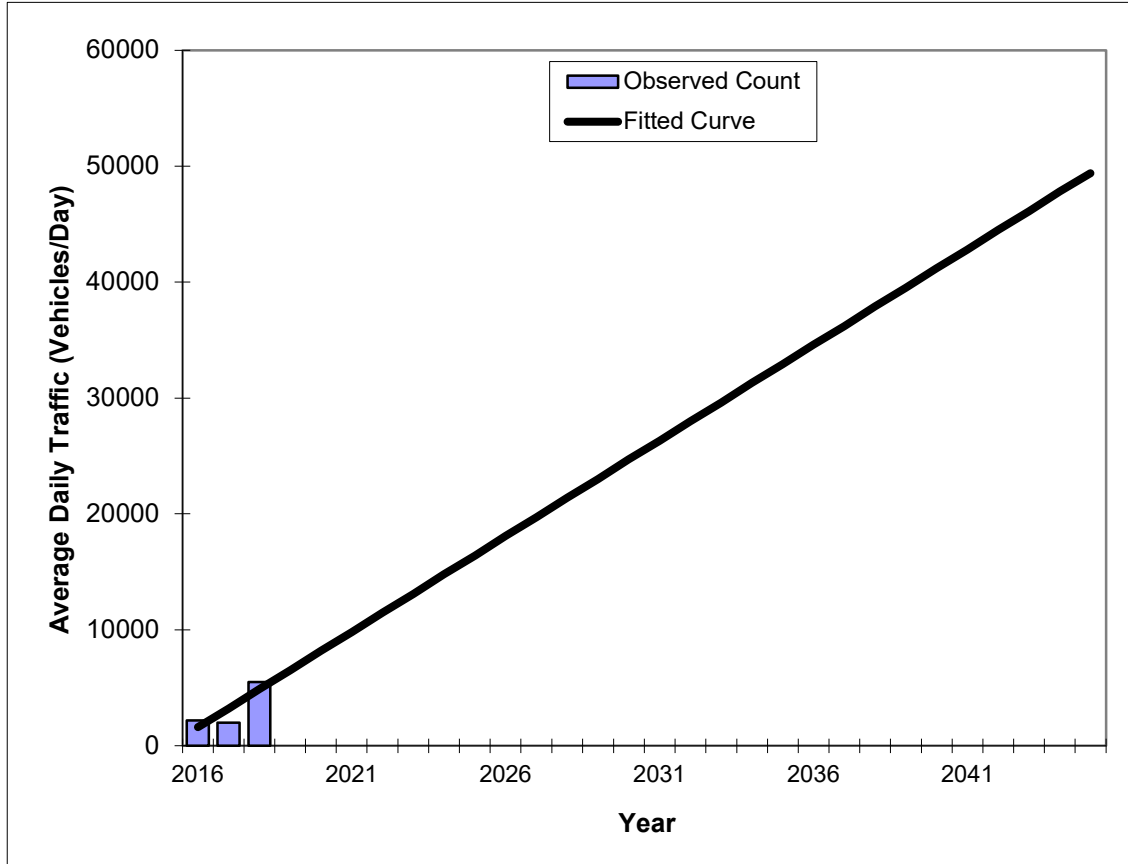
*Axle-Adjusted

Traffic Trends - V3.0

ST. JOHNS HERITAGE PKWY. -- N. OF MALABAR RD.

FIN#	1234
Location	1

County:	Brevard (70)
Station #:	609
Highway:	ST. JOHNS HERITAGE PKWY.



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2016	2200	1600
2017	2000	3200
2018	5500	4900
2025 Opening Year Trend		
2025	N/A	16400
2035 Mid-Year Trend		
2035	N/A	32900
2045 Design Year Trend		
2045	N/A	49400
TRANPLAN Forecasts/Trends		

** Annual Trend Increase:	1,650
Trend R-squared:	70.47%
Trend Annual Historic Growth Rate:	103.13%
Trend Growth Rate (2018 to Design Year):	33.64%
Printed:	4-Jun-20
Straight Line Growth Option	

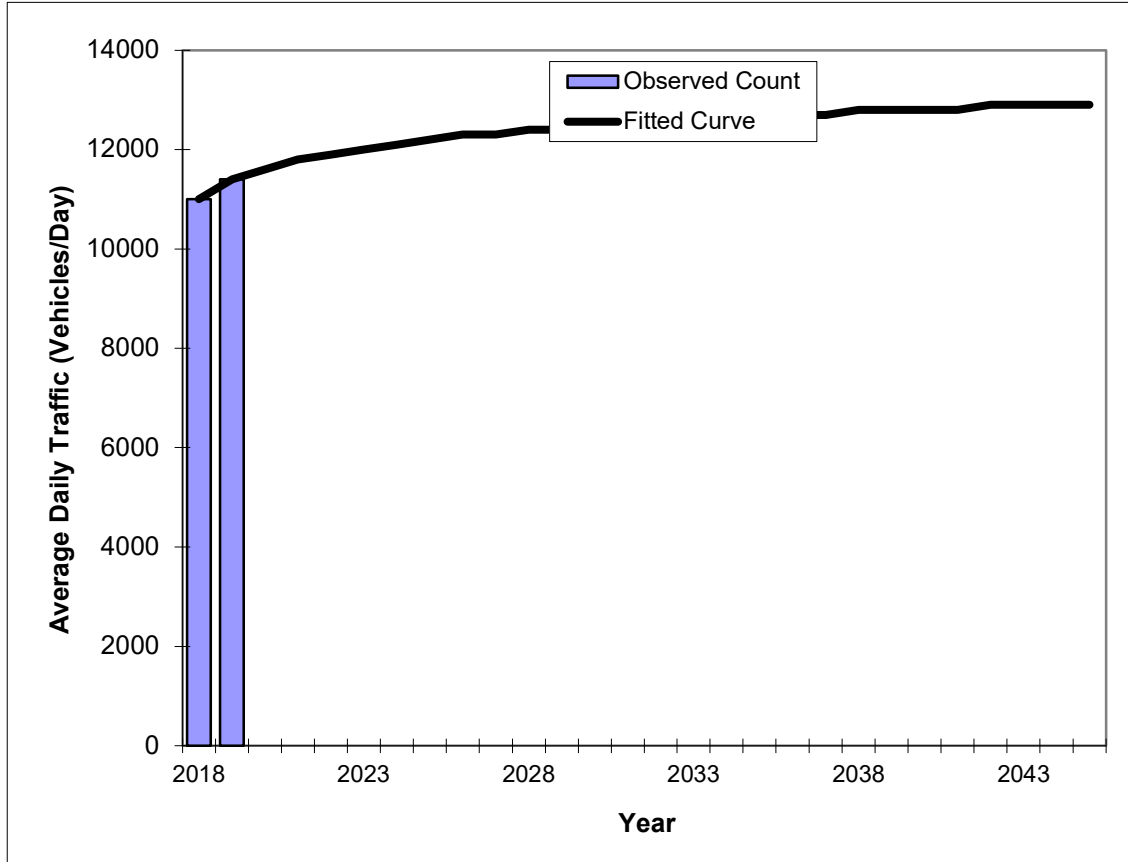
*Axle-Adjusted

Traffic Trends - V3.0

JUPITER BLVD -- N OF MALABAR RD

FIN#	1234
Location	1

County:	Brevard (70)
Station #:	620
Highway:	JUPITER BLVD



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2018	11000	11000
2019	11400	11400
2025 Opening Year Trend		
2025	N/A	12200
2035 Mid-Year Trend		
2035	N/A	12700
2045 Design Year Trend		
2045	N/A	12900
TRANPLAN Forecasts/Trends		

Trend R-squared:	100.00%
Compounded Annual Historic Growth Rate:	3.64%
Compounded Growth Rate (2019 to Design Year):	0.48%
Printed:	4-Jun-20
Decaying Exponential Growth Option	

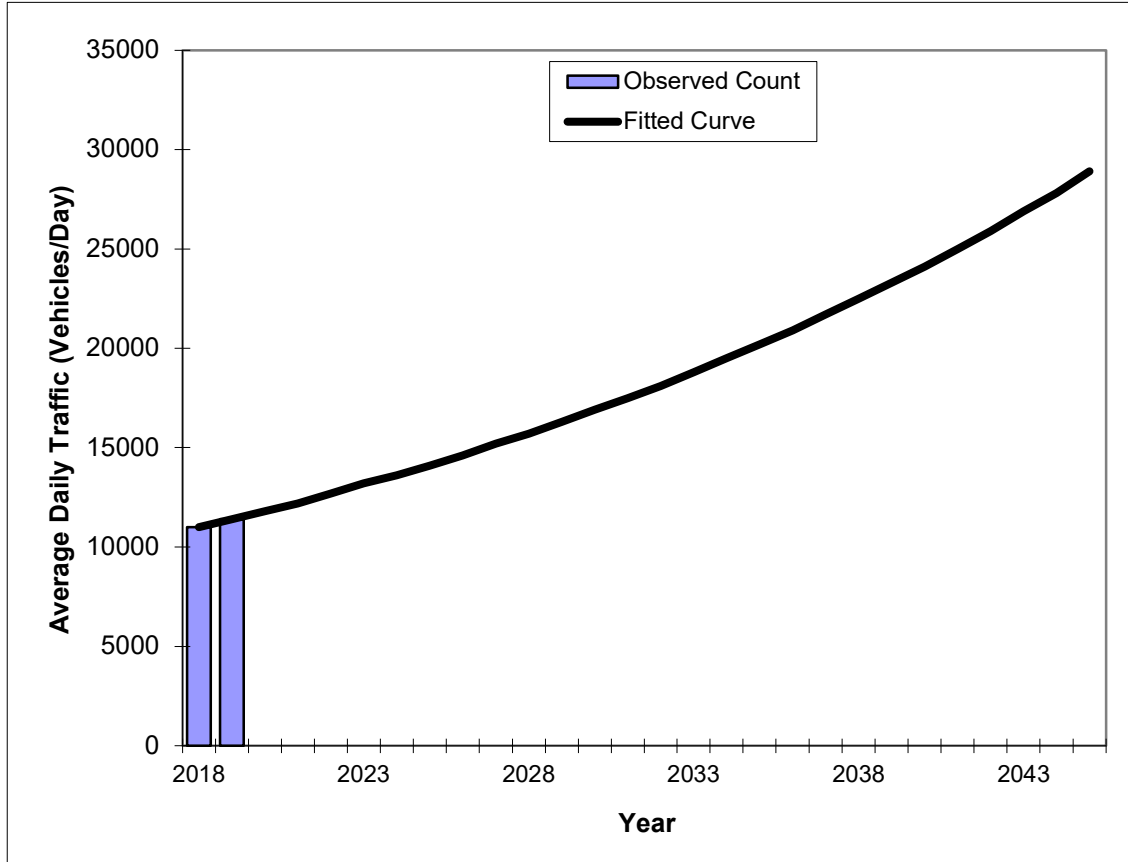
*Axle-Adjusted

Traffic Trends - V3.0

JUPITER BLVD -- N OF MALABAR RD

FIN#	1234
Location	1

County:	Brevard (70)
Station #:	620
Highway:	JUPITER BLVD



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2018	11000	11000
2019	11400	11400
2025 Opening Year Trend		
2025	N/A	14100
2035 Mid-Year Trend		
2035	N/A	20200
2045 Design Year Trend		
2045	N/A	28900
TRANPLAN Forecasts/Trends		

Trend R-squared:	100.00%
Compounded Annual Historic Growth Rate:	3.64%
Compounded Growth Rate (2019 to Design Year):	3.64%
Printed:	4-Jun-20
Exponential Growth Option	

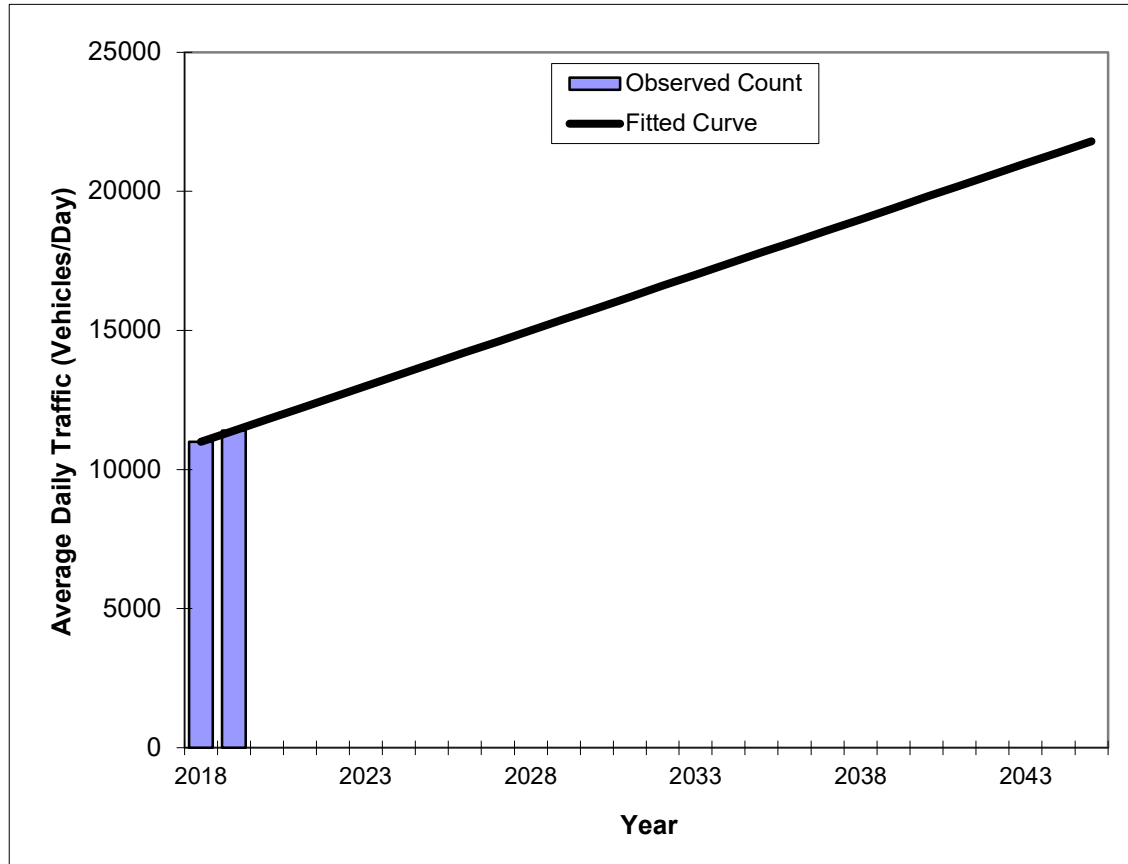
*Axle-Adjusted

Traffic Trends - V3.0

JUPITER BLVD -- N OF MALABAR RD

FIN#	1234
Location	1

County:	Brevard (70)
Station #:	620
Highway:	JUPITER BLVD



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2018	11000	11000
2019	11400	11400
2025 Opening Year Trend		
2025	N/A	13800
2035 Mid-Year Trend		
2035	N/A	17800
2045 Design Year Trend		
2045	N/A	21800
TRANPLAN Forecasts/Trends		

** Annual Trend Increase:	400
Trend R-squared:	100.00%
Trend Annual Historic Growth Rate:	3.64%
Trend Growth Rate (2019 to Design Year):	3.51%
Printed:	4-Jun-20
Straight Line Growth Option	

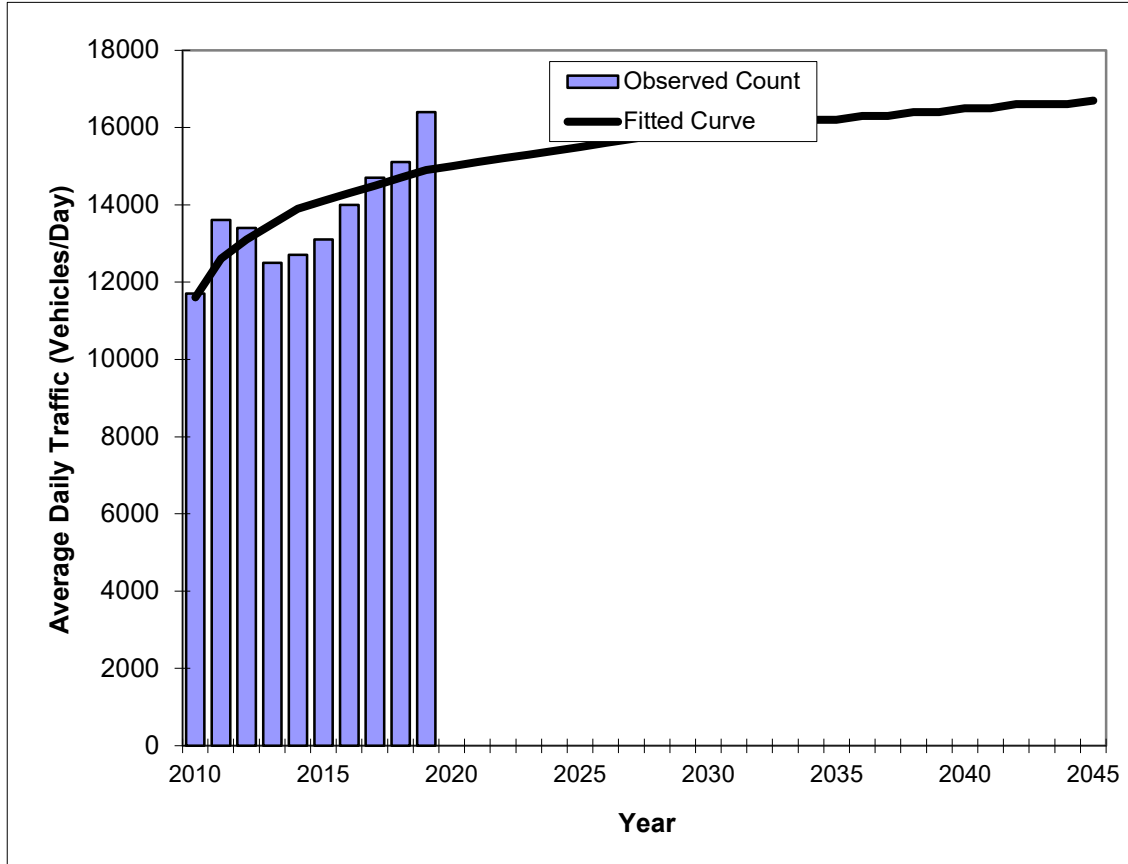
*Axle-Adjusted

Traffic Trends - V3.0

MINTON RD. -- JUPITER BLVD. TO MALABAR RD.

FIN#	1234
Location	1

County:	Brevard (70)
Station #:	7016
Highway:	MINTON RD.



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2010	11700	11600
2011	13600	12600
2012	13400	13100
2013	12500	13500
2014	12700	13900
2015	13100	14100
2016	14000	14300
2017	14700	14500
2018	15100	14700
2019	16400	14900
2025 Opening Year Trend		
2025	N/A	15500
2035 Mid-Year Trend		
2035	N/A	16200
2045 Design Year Trend		
2045	N/A	16700
TRANPLAN Forecasts/Trends		

Trend R-squared:	57.24%
Compounded Annual Historic Growth Rate:	2.82%
Compounded Growth Rate (2019 to Design Year):	0.44%
Printed:	19-Jun-20
Decaying Exponential Growth Option	

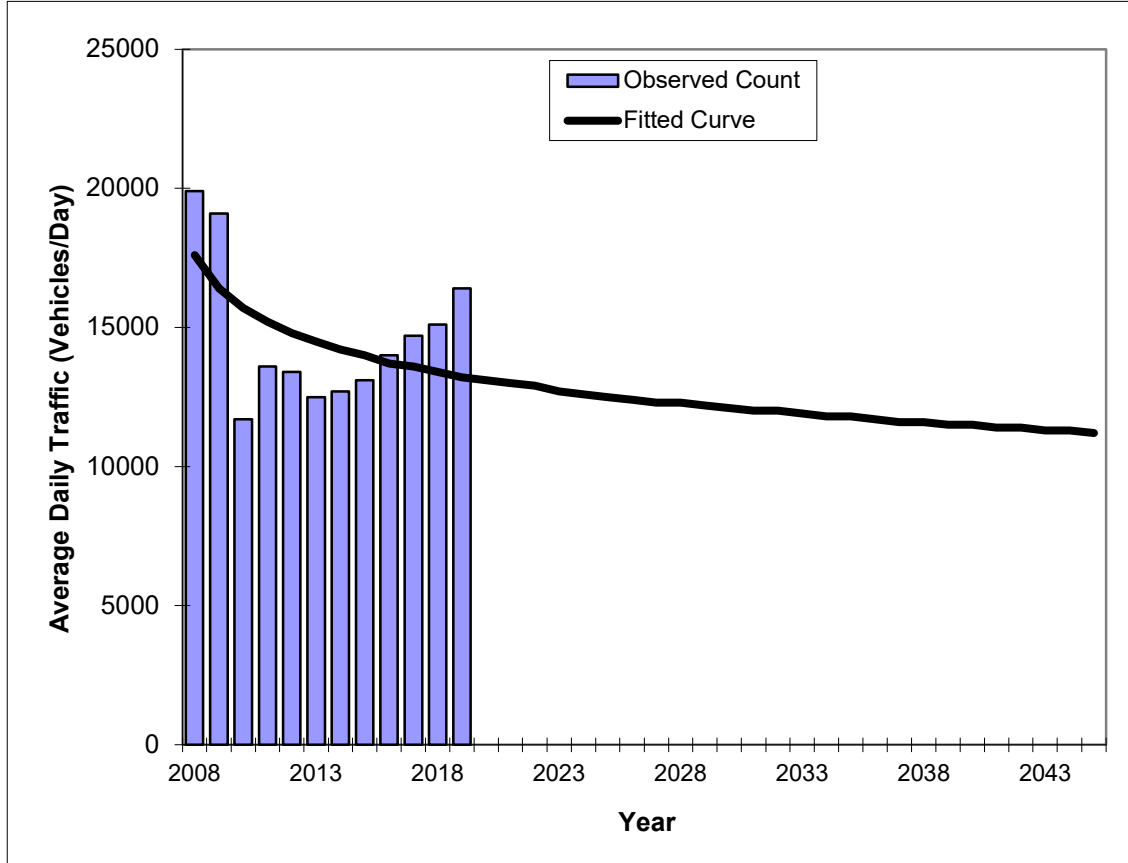
*Axle-Adjusted

Traffic Trends - V3.0

MINTON RD. -- JUPITER BLVD. TO MALABAR RD.

FIN#	1234
Location	1

County:	Brevard (70)
Station #:	7016
Highway:	MINTON RD.



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2008	19900	17600
2009	19100	16400
2010	11700	15700
2011	13600	15200
2012	13400	14800
2013	12500	14500
2014	12700	14200
2015	13100	14000
2016	14000	13700
2017	14700	13600
2018	15100	13400
2019	16400	13200
2025 Opening Year Trend		
2025	N/A	12500
2035 Mid-Year Trend		
2035	N/A	11800
2045 Design Year Trend		
2045	N/A	11200
TRANPLAN Forecasts/Trends		

Trend R-squared:	26.51%
Compounded Annual Historic Growth Rate:	-2.69%
Compounded Growth Rate (2018 to Design Year):	-0.66%
Printed:	4-Jun-20
Decaying Exponential Growth Option	

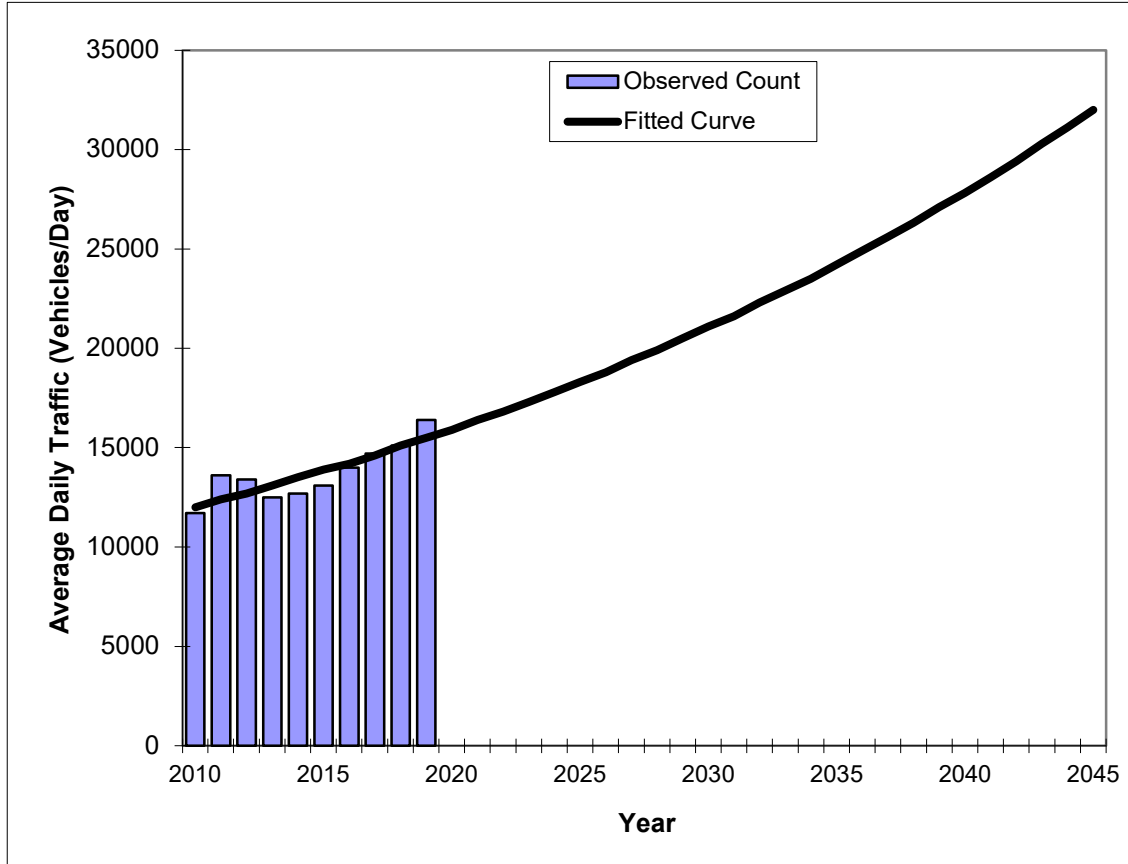
*Axle-Adjusted

Traffic Trends - V3.0

MINTON RD. -- JUPITER BLVD. TO MALABAR RD.

FIN#	1234
Location	1

County:	Brevard (70)
Station #:	7016
Highway:	MINTON RD.



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2010	11700	12000
2011	13600	12400
2012	13400	12700
2013	12500	13100
2014	12700	13500
2015	13100	13900
2016	14000	14200
2017	14700	14600
2018	15100	15100
2019	16400	15500
2025 Opening Year Trend		
2025	N/A	18300
2035 Mid-Year Trend		
2035	N/A	24200
2045 Design Year Trend		
2045	N/A	32000
TRANPLAN Forecasts/Trends		

Trend R-squared:	72.41%
Compounded Annual Historic Growth Rate:	2.88%
Compounded Growth Rate (2019 to Design Year):	2.83%
Printed:	19-Jun-20
Exponential Growth Option	

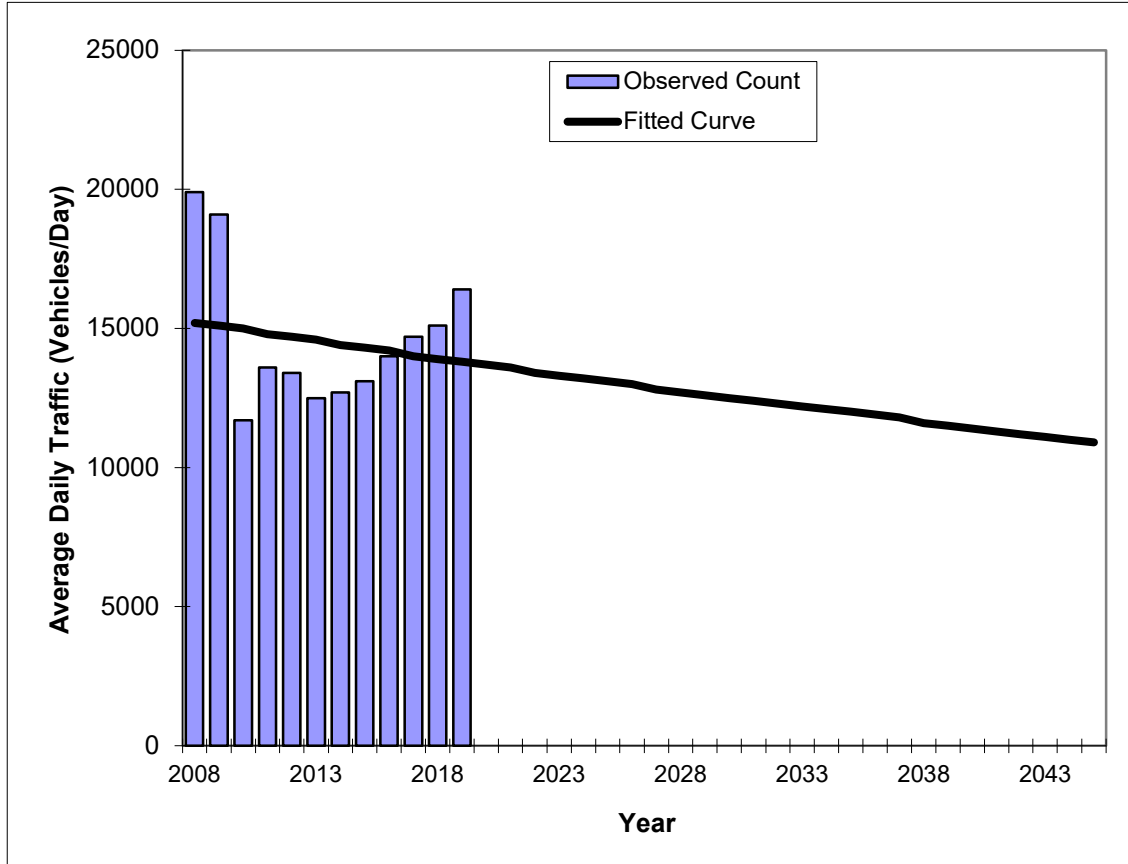
*Axle-Adjusted

Traffic Trends - V3.0

MINTON RD. -- JUPITER BLVD. TO MALABAR RD.

FIN#	1234
Location	1

County:	Brevard (70)
Station #:	7016
Highway:	MINTON RD.



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2008	19900	15200
2009	19100	15100
2010	11700	15000
2011	13600	14800
2012	13400	14700
2013	12500	14600
2014	12700	14400
2015	13100	14300
2016	14000	14200
2017	14700	14000
2018	15100	13900
2019	16400	13800
2025 Opening Year Trend		
2025	N/A	13100
2035 Mid-Year Trend		
2035	N/A	12000
2045 Design Year Trend		
2045	N/A	10900
TRANPLAN Forecasts/Trends		

Trend R-squared:	3.79%
Compounded Annual Historic Growth Rate:	-0.89%
Compounded Growth Rate (2018 to Design Year):	-0.90%
Printed:	4-Jun-20
Exponential Growth Option	

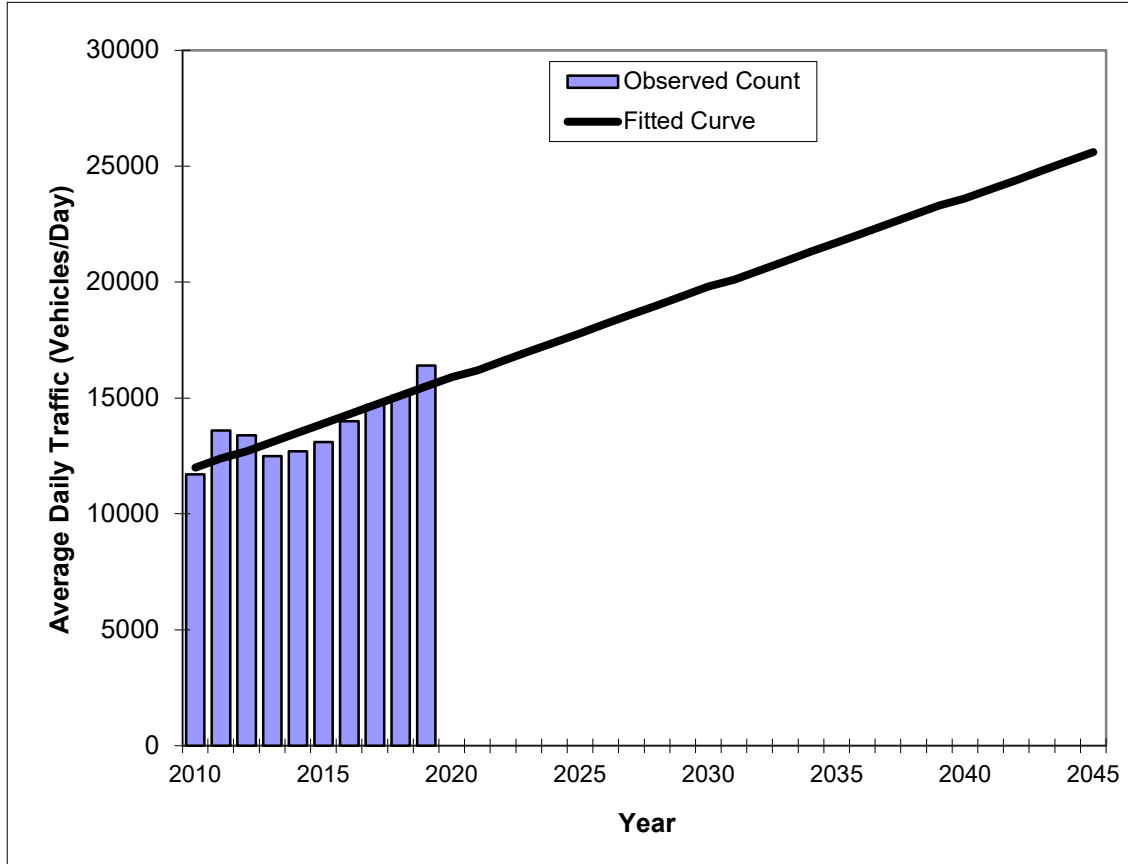
*Axle-Adjusted

Traffic Trends - V3.0

MINTON RD. -- JUPITER BLVD. TO MALABAR RD.

FIN#	1234
Location	1

County:	Brevard (70)
Station #:	7016
Highway:	MINTON RD.



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2010	11700	12000
2011	13600	12400
2012	13400	12700
2013	12500	13100
2014	12700	13500
2015	13100	13900
2016	14000	14300
2017	14700	14700
2018	15100	15100
2019	16400	15500
2025 Opening Year Trend		
2025	N/A	17800
2035 Mid-Year Trend		
2035	N/A	21700
2045 Design Year Trend		
2045	N/A	25600
TRANPLAN Forecasts/Trends		

** Annual Trend Increase:	389
Trend R-squared:	72.46%
Trend Annual Historic Growth Rate:	3.24%
Trend Growth Rate (2019 to Design Year):	2.51%
Printed:	19-Jun-20
Straight Line Growth Option	

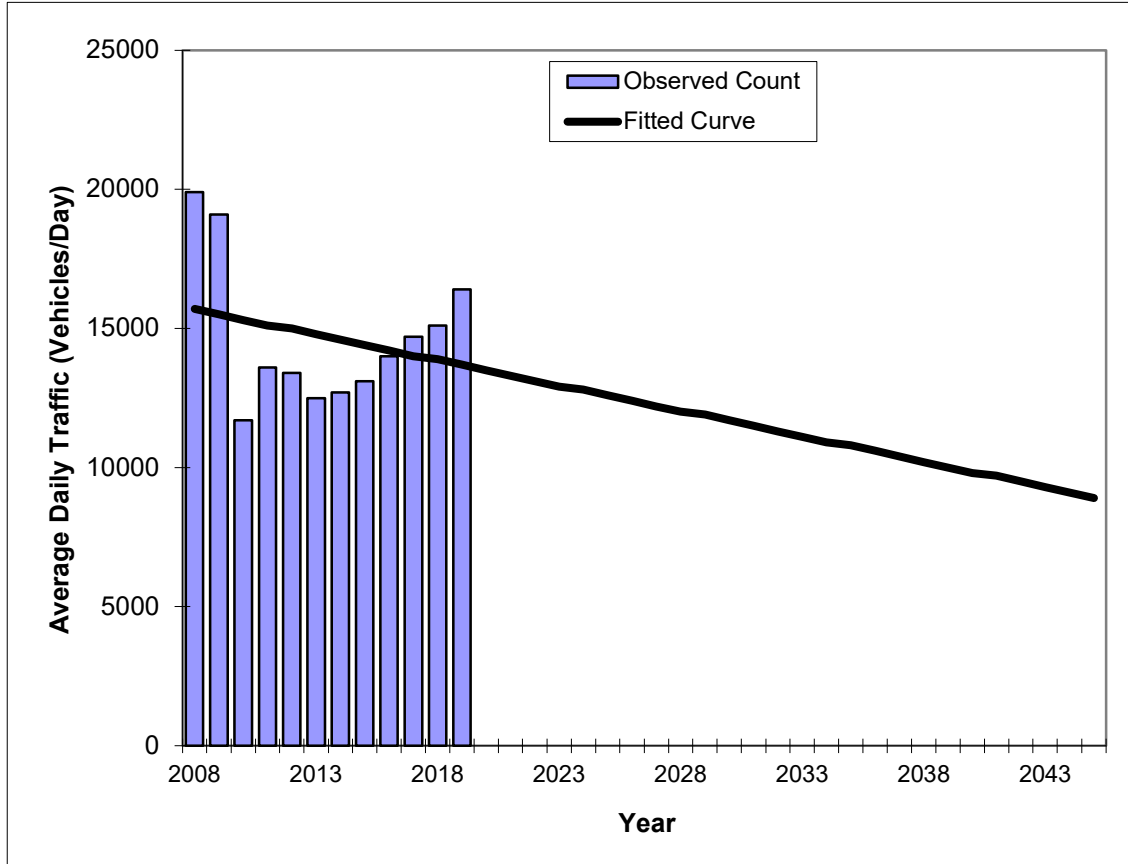
*Axle-Adjusted

Traffic Trends - V3.0

MINTON RD. -- JUPITER BLVD. TO MALABAR RD.

FIN#	1234
Location	1

County:	Brevard (70)
Station #:	7016
Highway:	MINTON RD.



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2008	19900	15700
2009	19100	15500
2010	11700	15300
2011	13600	15100
2012	13400	15000
2013	12500	14800
2014	12700	14600
2015	13100	14400
2016	14000	14200
2017	14700	14000
2018	15100	13900
2019	16400	13700
2025 Opening Year Trend		
2025	N/A	12600
2035 Mid-Year Trend		
2035	N/A	10800
2045 Design Year Trend		
2045	N/A	8900
TRANPLAN Forecasts/Trends		

** Annual Trend Increase:	-183
Trend R-squared:	6.50%
Trend Annual Historic Growth Rate:	-1.15%
Trend Growth Rate (2018 to Design Year):	-1.33%
Printed:	4-Jun-20
Straight Line Growth Option	

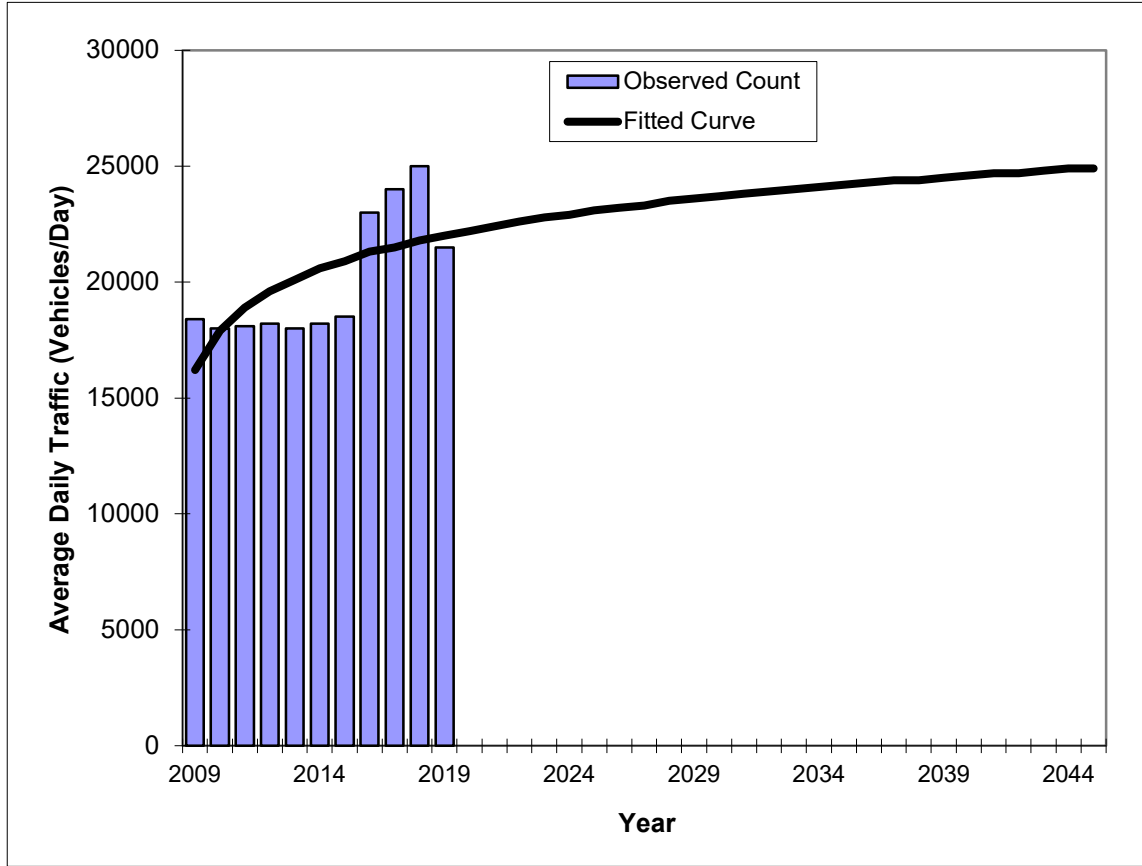
*Axle-Adjusted

Traffic Trends - V3.0

MINTON RD. -- N. OF MALABAR RD.

FIN#	1234
Location	1

County:	Brevard (70)
Station #:	7084
Highway:	MINTON RD.



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2009	18400	16200
2010	18000	17900
2011	18100	18900
2012	18200	19600
2013	18000	20100
2014	18200	20600
2015	18500	20900
2016	23000	21300
2017	24000	21500
2018	25000	21800
2019	21500	22000
2025 Opening Year Trend		
2025	N/A	23100
2035 Mid-Year Trend		
2035	N/A	24200
2045 Design Year Trend		
2045	N/A	24900
TRANPLAN Forecasts/Trends		

Trend R-squared:	42.91%
Compounded Annual Historic Growth Rate:	3.11%
Compounded Growth Rate (2019 to Design Year):	0.48%
Printed:	4-Jun-20
Decaying Exponential Growth Option	

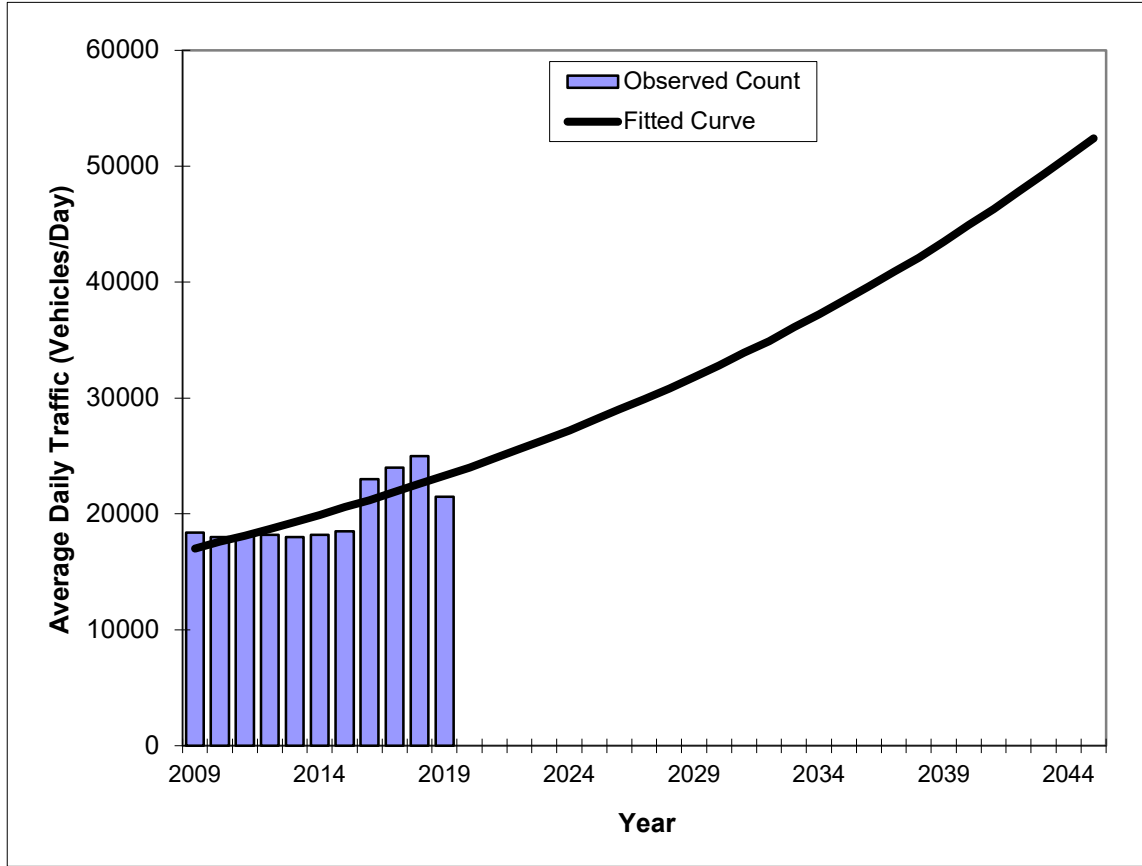
*Axle-Adjusted

Traffic Trends - V3.0

MINTON RD. -- N. OF MALABAR RD.

FIN#	1234
Location	1

County:	Brevard (70)
Station #:	7084
Highway:	MINTON RD.



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2009	18400	17000
2010	18000	17600
2011	18100	18100
2012	18200	18700
2013	18000	19300
2014	18200	19900
2015	18500	20600
2016	23000	21200
2017	24000	21900
2018	25000	22600
2019	21500	23300
2025 Opening Year Trend		
2025	N/A	28100
2035 Mid-Year Trend		
2035	N/A	38400
2045 Design Year Trend		
2045	N/A	52400
TRANPLAN Forecasts/Trends		

Trend R-squared:	62.85%
Compounded Annual Historic Growth Rate:	3.20%
Compounded Growth Rate (2019 to Design Year):	3.17%
Printed:	4-Jun-20
Exponential Growth Option	

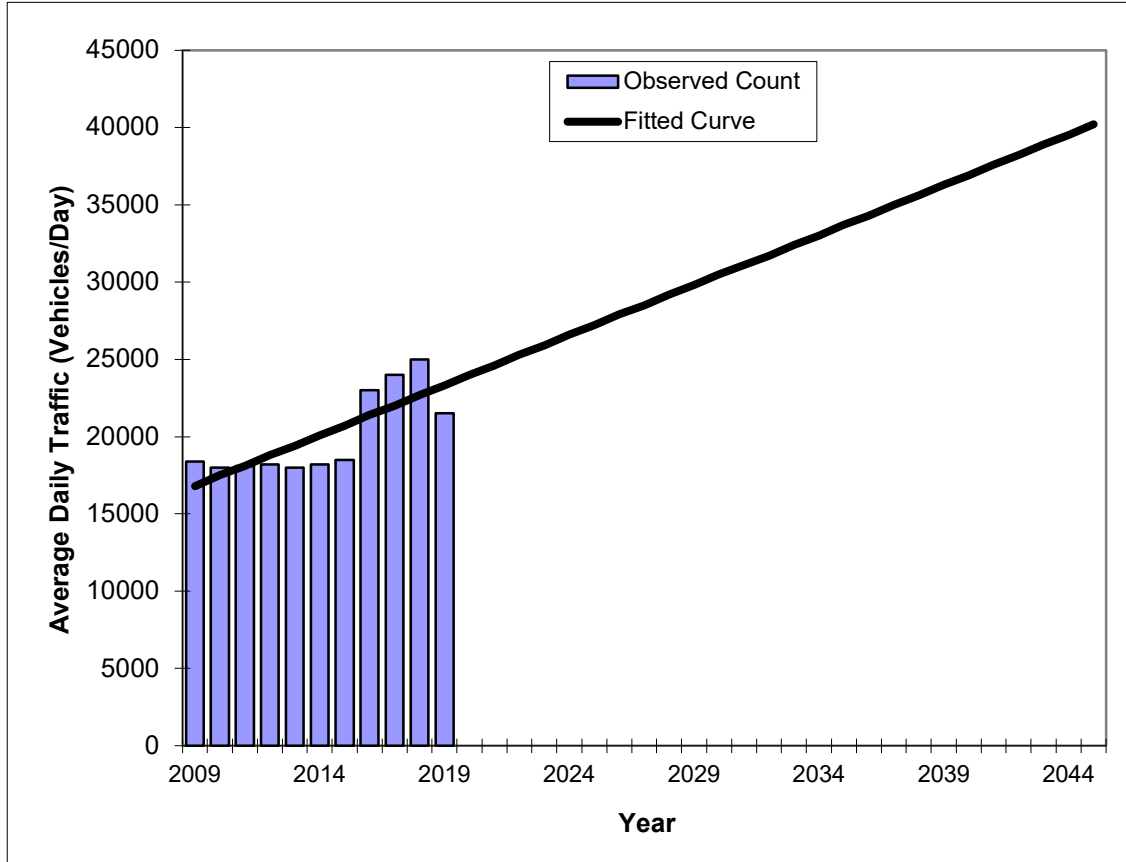
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Traffic Trends - V3.0

MINTON RD. -- N. OF MALABAR RD.

FIN#	1234
Location	1

County:	Brevard (70)
Station #:	7084
Highway:	MINTON RD.



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2009	18400	16800
2010	18000	17500
2011	18100	18100
2012	18200	18800
2013	18000	19400
2014	18200	20100
2015	18500	20700
2016	23000	21400
2017	24000	22000
2018	25000	22700
2019	21500	23300
2025 Opening Year Trend		
2025	N/A	27200
2035 Mid-Year Trend		
2035	N/A	33700
2045 Design Year Trend		
2045	N/A	40200
TRANPLAN Forecasts/Trends		

** Annual Trend Increase:	648
Trend R-squared:	61.56%
Trend Annual Historic Growth Rate:	3.87%
Trend Growth Rate (2019 to Design Year):	2.79%
Printed:	4-Jun-20
Straight Line Growth Option	

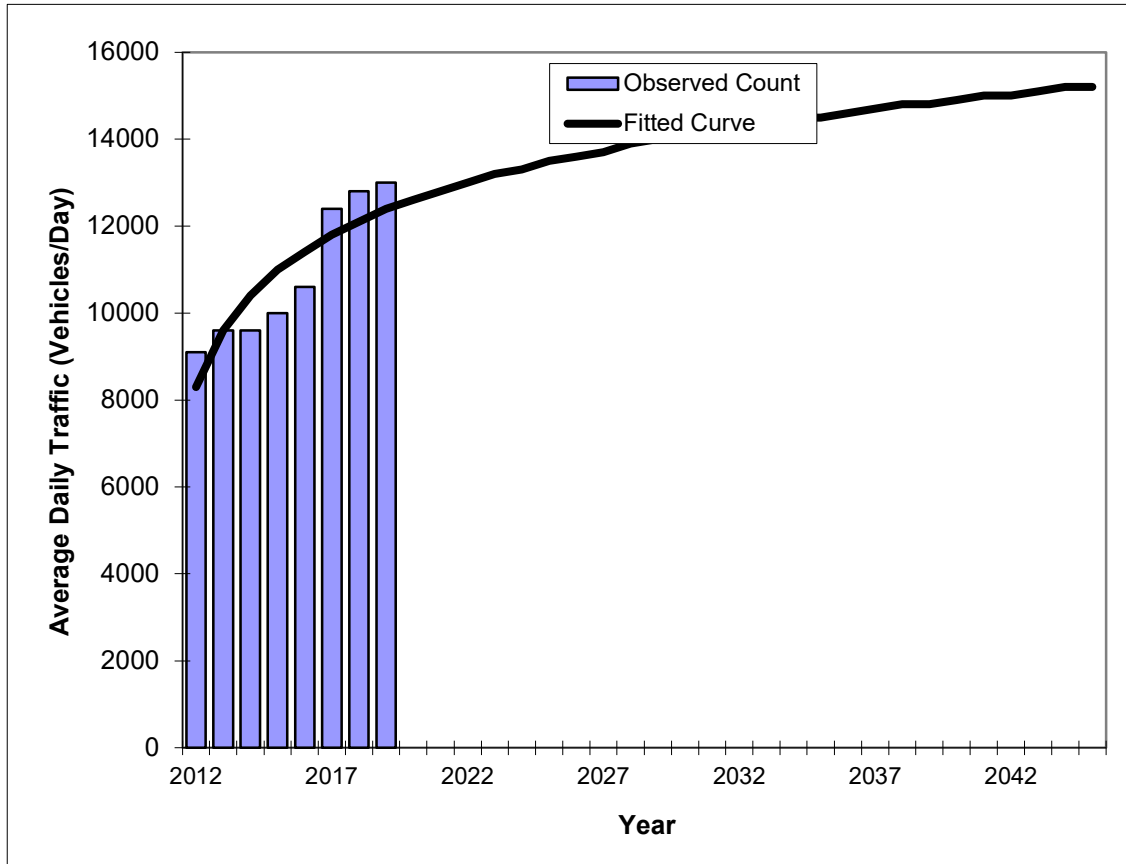
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Traffic Trends - V3.0

MALABAR RD. -- E OF HURLEY BLVD

FIN#	1234
Location	1

County:	Brevard (70)
Station #:	8142
Highway:	MALABAR RD.



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2012	9100	8300
2013	9600	9600
2014	9600	10400
2015	10000	11000
2016	10600	11400
2017	12400	11800
2018	12800	12100
2019	13000	12400
2025 Opening Year Trend		
2025	N/A	13500
2035 Mid-Year Trend		
2035	N/A	14500
2045 Design Year Trend		
2045	N/A	15200
TRANPLAN Forecasts/Trends		

Trend R-squared:	75.60%
Compounded Annual Historic Growth Rate:	6.48%
Compounded Growth Rate (2018 to Design Year):	0.85%
Printed:	4-Jun-20
Decaying Exponential Growth Option	

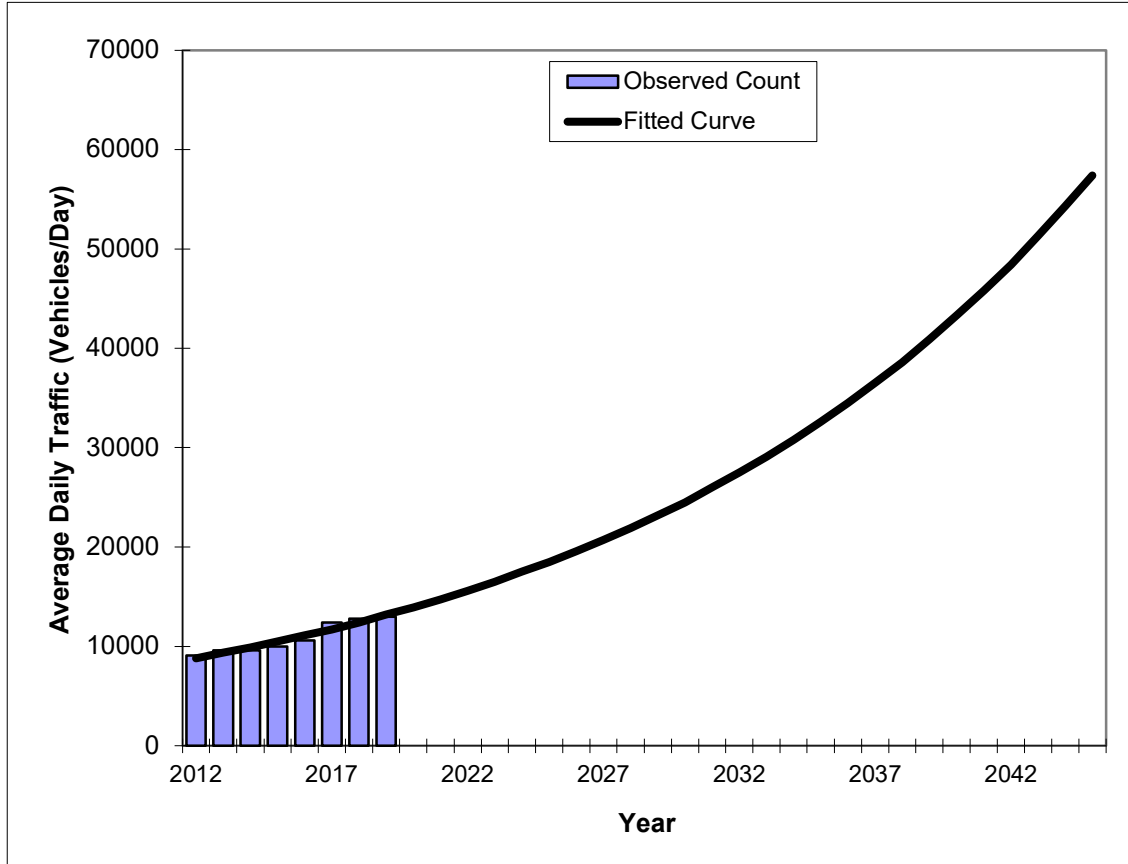
*Axle-Adjusted

Traffic Trends - V3.0

MALABAR RD. -- E OF HURLEY BLVD

FIN#	1234
Location	1

County:	Brevard (70)
Station #:	8142
Highway:	MALABAR RD.



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2012	9100	8800
2013	9600	9400
2014	9600	9900
2015	10000	10500
2016	10600	11100
2017	12400	11700
2018	12800	12400
2019	13000	13200
2025 Opening Year Trend		
2025	N/A	18500
2035 Mid-Year Trend		
2035	N/A	32600
2045 Design Year Trend		
2045	N/A	57400
TRANPLAN Forecasts/Trends		

Trend R-squared:	92.63%
Compounded Annual Historic Growth Rate:	5.88%
Compounded Growth Rate (2018 to Design Year):	5.84%
Printed:	4-Jun-20
Exponential Growth Option	

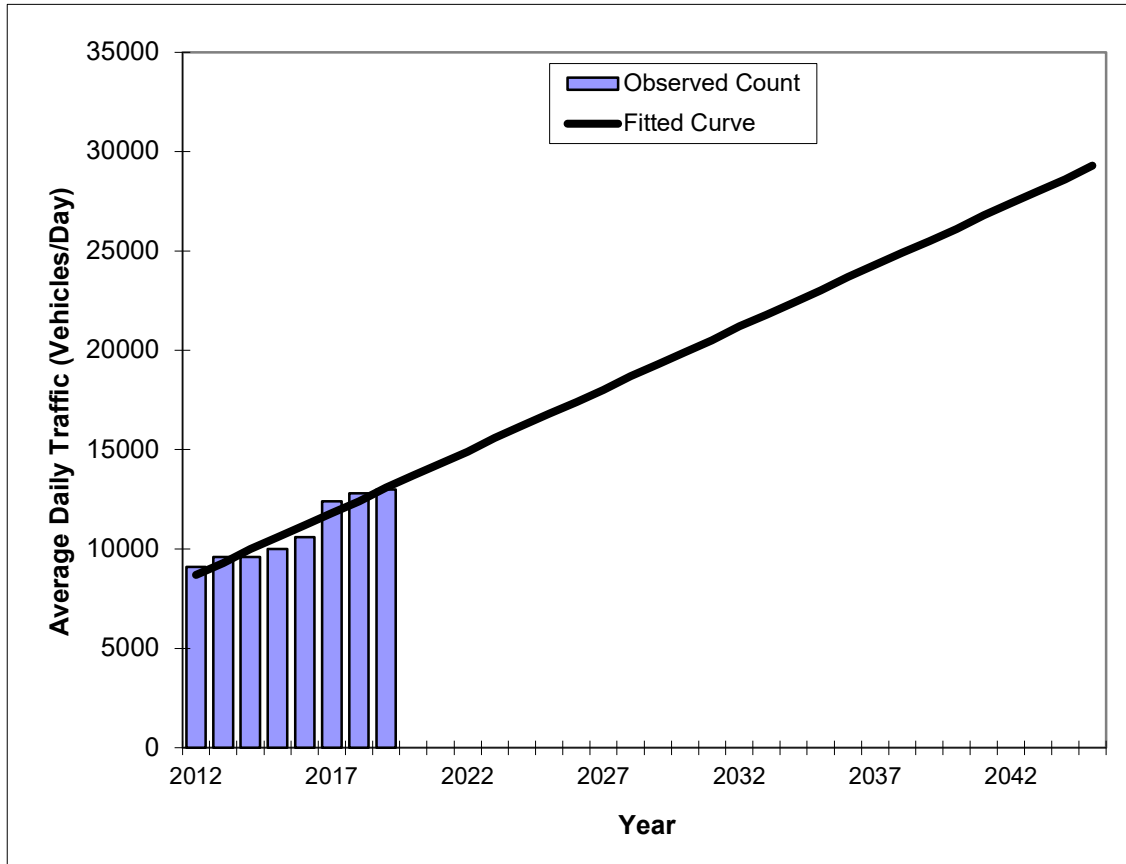
*Axle-Adjusted

Traffic Trends - V3.0

MALABAR RD. -- E OF HURLEY BLVD

FIN#	1234
Location	1

County:	Brevard (70)
Station #:	8142
Highway:	MALABAR RD.



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2012	9100	8700
2013	9600	9300
2014	9600	10000
2015	10000	10600
2016	10600	11200
2017	12400	11800
2018	12800	12400
2019	13000	13100
2025 Opening Year Trend		
2025	N/A	16800
2035 Mid-Year Trend		
2035	N/A	23000
2045 Design Year Trend		
2045	N/A	29300
TRANPLAN Forecasts/Trends		

** Annual Trend Increase:	623
Trend R-squared:	91.53%
Trend Annual Historic Growth Rate:	7.09%
Trend Growth Rate (2018 to Design Year):	5.05%
Printed:	4-Jun-20
Straight Line Growth Option	

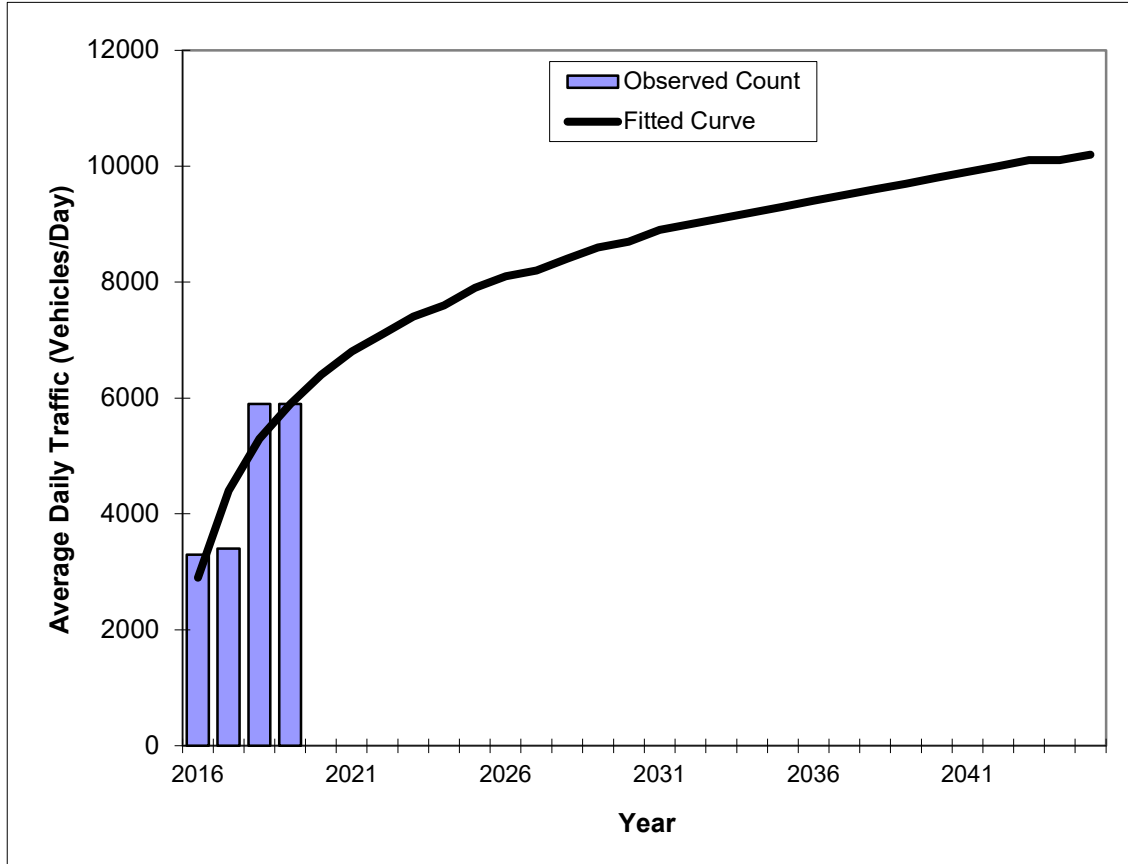
*Axle-Adjusted

Traffic Trends - V3.0

ST. JOHNS HERITAGE PKWY. -- N. OF MALABAR RD.

FIN#	1234
Location	1

County:	Brevard (70)
Station #:	8156
Highway:	ST. JOHNS HERITAGE PKWY.



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2016	3300	2900
2017	3400	4400
2018	5900	5300
2019	5900	5900
2025 Opening Year Trend		
2025	N/A	7900
2035 Mid-Year Trend		
2035	N/A	9300
2045 Design Year Trend		
2045	N/A	10200
TRANPLAN Forecasts/Trends		

Trend R-squared:	76.23%
Compounded Annual Historic Growth Rate:	26.71%
Compounded Growth Rate (2019 to Design Year):	2.13%
Printed:	4-Jun-20
Decaying Exponential Growth Option	

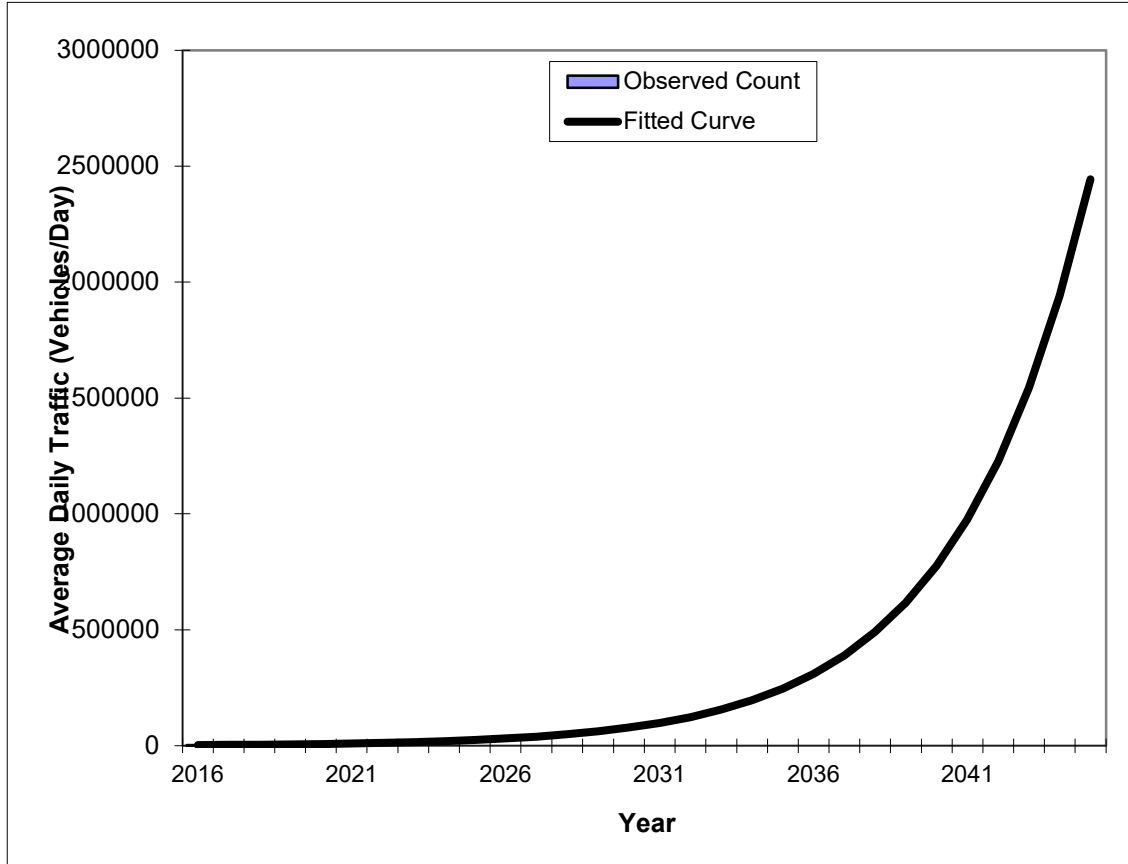
*Axle-Adjusted

Traffic Trends - V3.0

ST. JOHNS HERITAGE PKWY. -- N. OF MALABAR RD.

FIN#	1234
Location	1

County:	Brevard (70)
Station #:	8156
Highway:	ST. JOHNS HERITAGE PKWY.



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2016	3300	3200
2017	3400	4000
2018	5900	5000
2019	5900	6300
2025 Opening Year Trend		
2025	N/A	24800
2035 Mid-Year Trend		
2035	N/A	246400
2045 Design Year Trend		
2045	N/A	2443400
TRANPLAN Forecasts/Trends		

Trend R-squared:	82.01%
Compounded Annual Historic Growth Rate:	25.33%
Compounded Growth Rate (2019 to Design Year):	25.77%
Printed:	4-Jun-20
Exponential Growth Option	

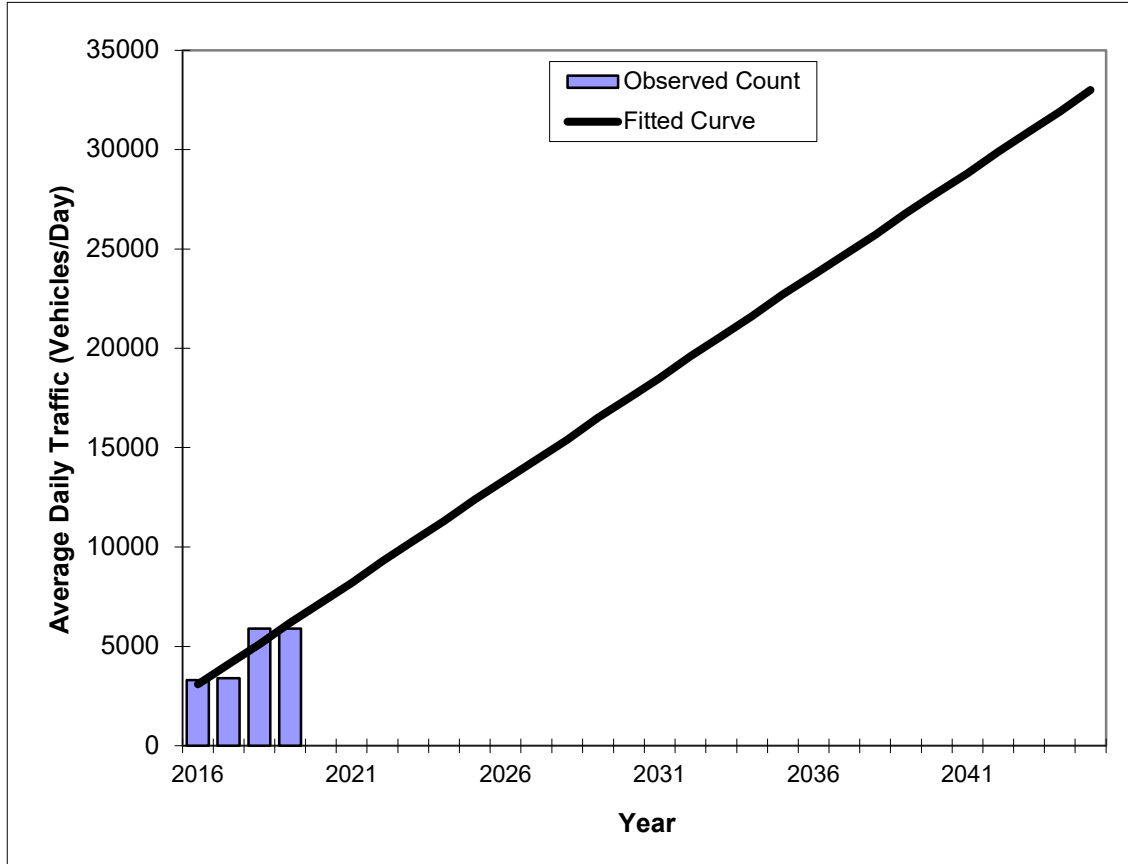
*Axle-Adjusted

Traffic Trends - V3.0

ST. JOHNS HERITAGE PKWY. -- N. OF MALABAR RD.

FIN#	1234
Location	1

County:	Brevard (70)
Station #:	8156
Highway:	ST. JOHNS HERITAGE PKWY.



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2016	3300	3100
2017	3400	4100
2018	5900	5100
2019	5900	6200
2025 Opening Year Trend		
2025	N/A	12400
2035 Mid-Year Trend		
2035	N/A	22700
2045 Design Year Trend		
2045	N/A	33000
TRANPLAN Forecasts/Trends		

** Annual Trend Increase:	1,030
Trend R-squared:	81.51%
Trend Annual Historic Growth Rate:	33.33%
Trend Growth Rate (2019 to Design Year):	16.63%
Printed:	4-Jun-20
Straight Line Growth Option	

*Axle-Adjusted

APPENDIX N – DEVELOPMENT PLANS

Contained in this Appendix –

- Chaparral Development Information
- Brentwood Lakes Development Information
- Avery Springs Development Information

CHAPARRAL DEVELOPMENT PLANS

Chaparral Preliminary PUD Application

Executive Summary

Chaparral is a master planned residential community that was previously granted Preliminary Planned Unit Development (PUD)/Preliminary Development Plan (PDP) approval by the City of Palm Bay on June 5, 2014, as extended until June 5, 2017 (the "Initial PUD Approval"). This PUD/PDP application is being filed to re-establish the overall PUD zoning on the entire property in substantially the same form as was approved on June 5, 2014. The entire PUD/PDP application property consists of:

- 1) The Phase 1A Final PUD/FDP Ordinance No. 2017-63 subsequently approved by the City on October 3, 2017 (the "Ph. 1A Final PUD Approval");
- 2) The portion of the overall PUD that will be known as Phase 2, which is currently undergoing final PUD/FDP review (File No. FD-10-2020) and has been deemed sufficient to be heard at the Planning & Zoning Board hearing on September 2, 2020 and the City Council hearing on October 1, 2020 (the "Ph. 2 Final PUD Application"); and
- 3) The remaining portion of the overall PUD that is currently not designated with PUD zoning or PDP approval (the "Remaining Phases").

Although this request includes the Ph. 1A and Ph. 2 property consistent with the Initial PUD Approval, the PUD/PDP designation is only proposed to encumber the Remaining Phases of the overall PUD that are not currently approved or in the process of review. The Remaining Phases will then subsequently file for overall or phased Final PUD/FDP approval(s) as required by the City's Land Development Code, Sec. 185.067 within one (1) year of PUD/PDP approval for the Remaining Phases, or as may be extended with the City's approval.

The entire project is approximately 246.42 acres of land located off of West Malabar Road in the City of Palm Bay, Florida. See Exhibit EX-1 for a Location and Legal Map. The entire property was annexed into Palm Bay on May 16, 2006 and is located adjacent to single family development to the east, north and west, and two existing gun ranges to the east. To the south and a portion of the west is undeveloped.


Intended Use of the Property and Justification for PUD:

As detailed in the Initial PUD Approval, the overall Chaparral PUD includes 786 total residential units including 711 single family (SF) and 75 multi-family (MF) townhome units on approximately 246.42 acres of property. As explained above, this PUD application is only proposed to encumber the Remaining Phases of the overall PUD. Therefore, the lot mix proposed in the PUD application and PDP plan is as follows:

- 1) SF Units: 711 SF in Initial PUD Approval - 82 SF in Ph. 1A Final PUD Approval – 27 SF Units in Ph. 2 Final PUD Application = 602 SF Units Proposed; and
- 2) MF Units: 75 MF consistent with Initial PUD Approval.

Consistent with the Initial PUD Approval, the multi-family/townhomes are proposed in the southeastern portion of the site adjacent to undeveloped land to the south, and will require a Comprehensive Plan and Future Land Use Map Amendment prior to development. The proposed density, as well as the density permitted in the Initial PUD Approval equates to 3.19 units per acre.





Development will minimize environmental impacts by maintaining proper preserved upland buffers. The overall property is currently a Community Development District (CDD) that was recently approved by Palm Bay on February 7, 2019 (Ordinance No. 2019-08). The project is not proposed to be gated and has extensive amenities including a mixture of traditional recreational tracts with amenities, as well as pocket parks throughout, and a linear trail system with enhanced wifi.

As detailed in the Initial PUD Approval and the Ph. 1A Final PUD Approval staff reports, this PUD application meets the requirements of Sec. 185.067 of the City's Land Development Code, subject to certain items that have or will be addressed (if applicable) as part of subsequent final PUD application, entitlement or permit submittals. Most notably subject to:

- A. A revised traffic study to be submitted with the Ph. 1/Ph. 1A Final PUD; the Traffic Impact Analysis was previously submitted for the entire PUD as part of the submittal for Phase 1A construction plans on October 30, 2018 and approved on September 16, 2019.
- B. Ph. 1A School Concurrency was previously submitted with the Ph. 1A Final PUD on June 30, 2017 and approved in the School Concurrency Availability Determination Letter (SCADL) dated August 23, 2017, as extended on July 25, 2019.
- C. Ph. 2 School Concurrency is being reviewed as part of the Ph. 2 Final PUD Application.

Also, this PUD application is consistent with the following sections of the City's Land Development Code:

- 185.062(A): Single-family detached and multi-family residential dwelling units (including apartments) in semi-detached, attached, and multi-storied structures are permitted uses within the City's PUD ordinance.
- 185.065 (A through L): Proposed development will meet all applicable PUD Land Use Regulations including, but not limited to: minimum parcel size, maximum density of 14 units per acre, 25% common recreation area and open space, minimum lot size and setbacks, structure length, minimum floor living area, off-street parking, underground utilities, and preservation of trees.

The proposed development is also consistent with the following criteria of the City's Comprehensive Plan:

- FLU-1.1E: Ensure compatibility of adjacent land use districts of different intensities by providing requirements for buffering and building setbacks in the Land Development Regulations. As detailed above, the PUD application is consistent with the buffering and building setbacks of the Land Use Regulations contained in the City's Land Development Code, Sec. 185.065.
- FLU-1.3A: The City shall continue to implement Land Development Regulations for Planned Unit Developments. The proposed rezoning for the property is Planned Unit Development and meets and/or exceeds the pertinent criteria of the PUD Land Development Regulations, Sec. 185.065 (A through L).
- FLU-2.1B: Continue to utilize Planned Unit Development (PUD) techniques to protect environmentally sensitive areas, protect amenities, and eliminate flood hazards. The site is partially located in flood zones X and AE and contains preserved historical resources with preserved upland buffers.



Chaparral Residential Development City of Palm Bay, Florida

Traffic Impact Study

Prepared for Construction Engineering Group
By LTG, Inc.
Revised February 2019



PROFESSIONAL ENGINEERING CERTIFICATION

I hereby certify that I am a Professional Engineer properly registered in the State of Florida practicing with Lassiter Transportation Group, Inc., a corporation authorized to operate as an engineering business, EB 0009227, by the State of Florida Department of Professional Regulation, Board of Professional Engineers, and that I have prepared or approved the evaluations, findings, opinions, conclusions, or technical advice attached hereto for:

PROJECT: Chaparral Residential Development
LOCATION: Palm Bay, FL
CLIENT: Construction Engineering Group
JOB #: 4247.03

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

Prepared by:

LTG, Inc.

1450 W. Granada Blvd, Suite 2

Ormond Beach, FL 32174

Certificate of Authorization 9227

386/257-2571

This item has been electronically signed and sealed by: George Galan, PE on date shown using a digital signature.

Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

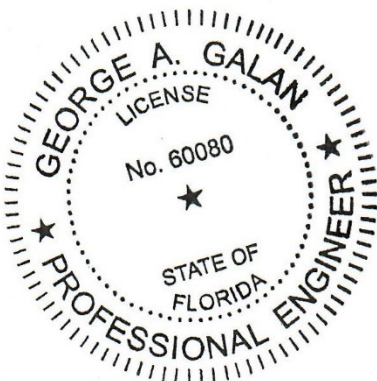


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1

INTRODUCTION

LTG, Inc. has been retained by Construction Engineering Group to prepare a Traffic Impact Study (TIS) for the proposed Chaparral Subdivision development in the City of Palm Bay, Florida. The Phase I development consists of 275 single-family units. The Phase II development consists of 434 single-family units and 75 apartments. The proposed development is located in the southeast quadrant of Malabar Road and Flying U Lane, which is within the influence area of the intersection of Saint John's Heritage Parkway (SJHP) at Malabar Road. The opening of the I-95 interchange at Ellis Road on November 2, 2017 significantly changed the traffic pattern along SJHP and Malabar Road. This analysis was conducted to reevaluate the LOS after the interchange opening. Figure 1 shows the location of the project relative to the surrounding road network. The anticipated build-out year for Phase 1 and Phase 2 of the project are 2020 and 2024, respectively. A preliminary site plan is attached as Appendix A

Study Area

The study area intersections and roadway segments are listed as follows:

Intersections

- Malabar Road at SJHP
- Malabar Road at Wisteria Avenue/Project Driveway
- Malabar Road at Hurley Boulevard
- Malabar Road at Jupiter Boulevard
- Malabar Road at Garvey Road
- Malabar Road at Minton Road
- Jupiter Boulevard at Americana Boulevard
- Jupiter Boulevard at Garvey Road
- Garvey Road at Harper Boulevard

Roadway Segment:

- Malabar Road from SJHP to Wisteria Avenue
- Malabar Road from Wisteria Avenue to Jupiter Boulevard
- Malabar Road from Jupiter Boulevard to Minton Road
- SJHP from Malabar Road to Pace Drive
- SJHP from Pace Drive to Emerson Road
- SJHP from Emerson Road to US 192

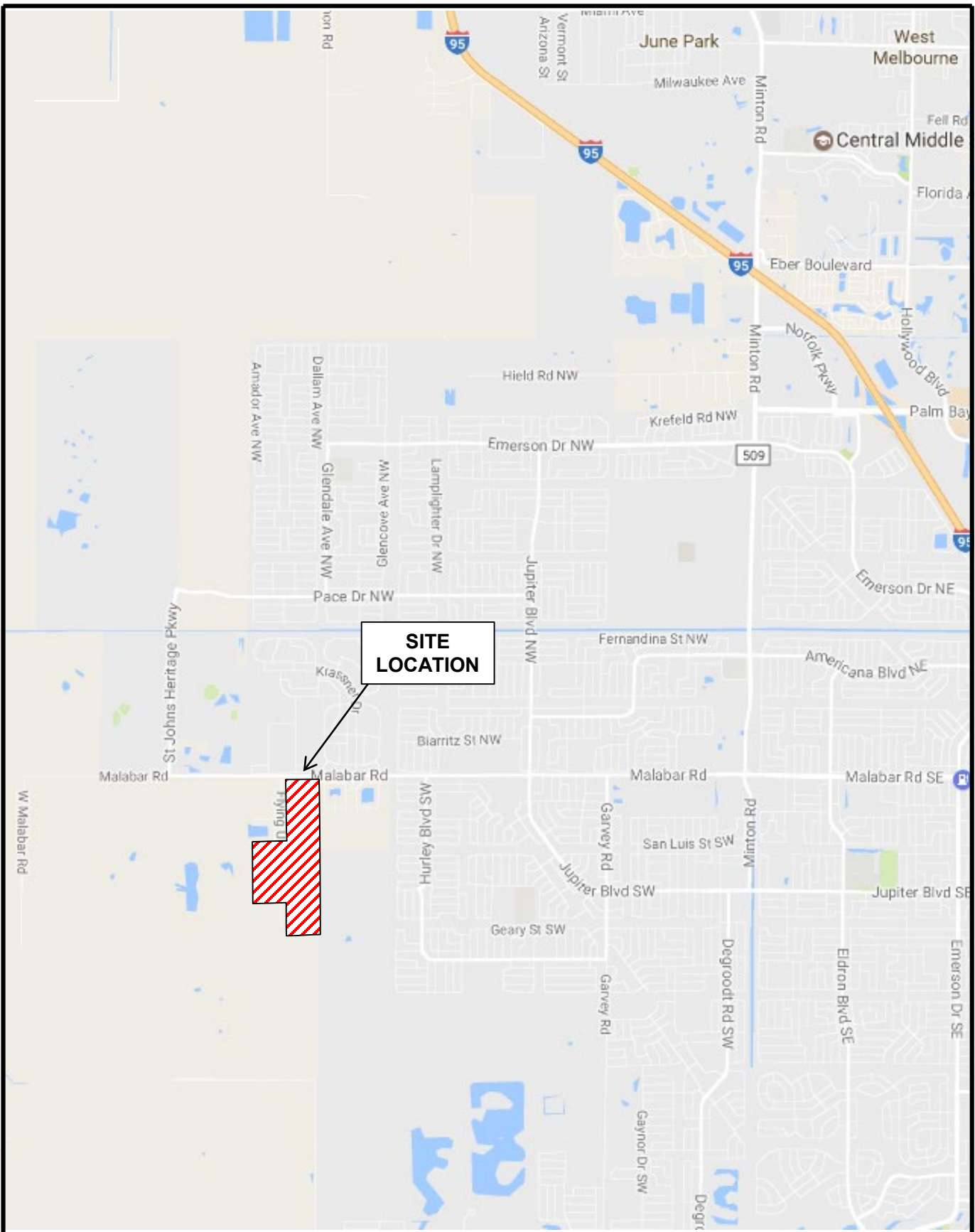
Study Procedures



Standard engineering and planning procedures were used to determine the impacts of the proposed project. Reference data was obtained from the Space Coast Transportation Planning Organization (Space Coast TPO), Brevard County, The City of Palm Bay, the Institute of Transportation Engineers (ITE), and the Florida Department of Transportation (FDOT).

Planned Roadway Improvements

FDOT's Five Year Work Program, Space Coast TPO, Brevard County, and the City of Palm Bay were reviewed to ascertain if there were any programmed or planned roadway improvements within the study area. Based on information available, the following roadway improvement are scheduled for design between 2016 and 2020:

SJHP 4-lane from Malabar Road to Ellis Road
New interchange at I-95 and Ellis Road



Chaparral Residential	 NTS	Site Location Map		
		Project No.: 4247.03	Figure: 1	

2

EXISTING ROADWAY ANALYSIS

New peak-period turning movement counts (TMCs) for the a.m. and p.m. peak-hours were conducted at the intersections of Malabar Road at SJHP and Malabar Road at Wisteria Avenue on August 16, 2018. The traffic counts before and after the I-95 and Ellis Road interchange opening were analyzed and adjusted by comparing the new 2018 TMCs with the 2017 TMCs. The adjusted TMCs were derived based on the engineering judgement and approved by Brevard County. Figures 2 and 3 graphically show the 2017 existing a.m. and p.m. peak-hour turning movements at the study area intersections. The 2017 raw traffic counts are provided in Appendix B. Figures 4 and 5 graphically show the 2018 adjusted a.m. and p.m. peak-hour turning movements. The 2018 raw turning movement counts are provided in Appendix C. The turning movement count justification tables are provided in Appendix D.

Unsignalized Intersection Analysis

The level of service (LOS) at an unsignalized intersection is based on the average stop delay per vehicle for the various movements within the intersection. The operating conditions at the unsignalized intersections were evaluated using the *Highway Capacity Software 7, Version 7.6 (HCS)*. This software utilizes the procedures outlined in Chapter 20 and 21 of the *Highway Capacity Manual, 6th Edition*, titled “Two-Way Stop Controlled Intersections” and “All-Way Stop-Controlled Intersections”, respectively. Table 1 shows the 2018 existing a.m. and p.m. peak-hour LOS at the unsignalized study area intersections. The HCS summary sheets are located in Appendix E. As indicated in the table, the unsignalized intersections currently operate within the adopted LOS except the intersection of Malabar Road at SJHP.

**Table 1
Existing A.M. and P.M. Peak-Hour LOS - Unsignalized Intersections
Chaparral Residential Development**

Intersection	Adopted LOS	Existing Conditions					
		AM Peak-Hour			PM Peak-Hour		
		Critical Approach	Delay	LOS	Critical Approach	Delay	LOS
Malabar Rd. at SJHP.	C	SB	24.5	C	SB	210.5	F
Malabar Rd. at Wisteria Ave/Project Driveway	E	SB	25.1	D	SB	15.7	C
Malabar Rd. at Hurley Blvd.	C	NB	28.7	D	NB	15.1	C
Malabar Rd. at Garvey Rd.	C	NB	19.7	C	NB	14.9	B
Jupiter Blvd. at Americana Blvd.	C	WB	18.7	C	WB	24.2	C
Jupiter Blvd. at Garvey Rd.	C	-	14.5	B	-	11.0	B
Garvey Rd. at Harper Blvd.	C	EB	10.1	B	EB	9.9	A

Signalized Intersection Analysis

The operating conditions at the signalized intersections were evaluated using the agencies' signal timings and *Highway Capacity Software 7, Version 7.6*. This software utilizes the procedures outlined in Chapter 19 of the *Highway Capacity Manual 6th Edition*, titled “Signalized Intersections”. Table 2 shows the 2018 existing a.m. and p.m. peak-hour LOS at the signalized intersections. The HCS summary sheets are located in Appendix F and signal timing sheets are in Appendix G. As indicated in Table 2, both signalized intersections operate outside of the adopted LOS and achieve a v/c ratio greater than 1.0 under existing conditions.

Table 2
Existing A.M. and P.M. Peak-Hour LOS – Signalized Intersections
Chaparral Residential Development

Intersection	Adopted LOS	Existing Conditions					
		AM Peak-Hour			PM Peak-Hour		
		Delay (sec.)	LOS	V/C > 1.0	Delay (sec.)	LOS	V/C >1.0
Malabar Rd. at Jupiter Blvd.	C	68.3	E	Yes	44.3	D	No
Malabar Rd. at Minton Rd	C	39.5	D	No	46.6	D	Yes

Roadway Segment Analysis

Roadway level of service describes the operating condition determined from the number of vehicles passing over a given section of roadway during a specified time period. It is a qualitative measure of several factors which include: speed, travel time, traffic interruptions, freedom to maneuver, driver comfort, convenience, safety and vehicle operating costs. Six levels of service have been established as standards by which to gauge roadway performance, designated by the letters A through F. The level of service categories are defined as follows:

Level of Service A: Free flow, individual users virtually unaffected by the presence of others

Level of Service B: Stable flow with a high degree of freedom to select operating conditions

Level of Service C: Flow remains stable, but with significant interactions with others

Level of Service D: High-density stable flow in which the freedom to maneuver is severely restricted

Level of Service E: This condition represents the capacity level of the road

Level of Service F: Forced flow in which the traffic exceeds the amount that can be served

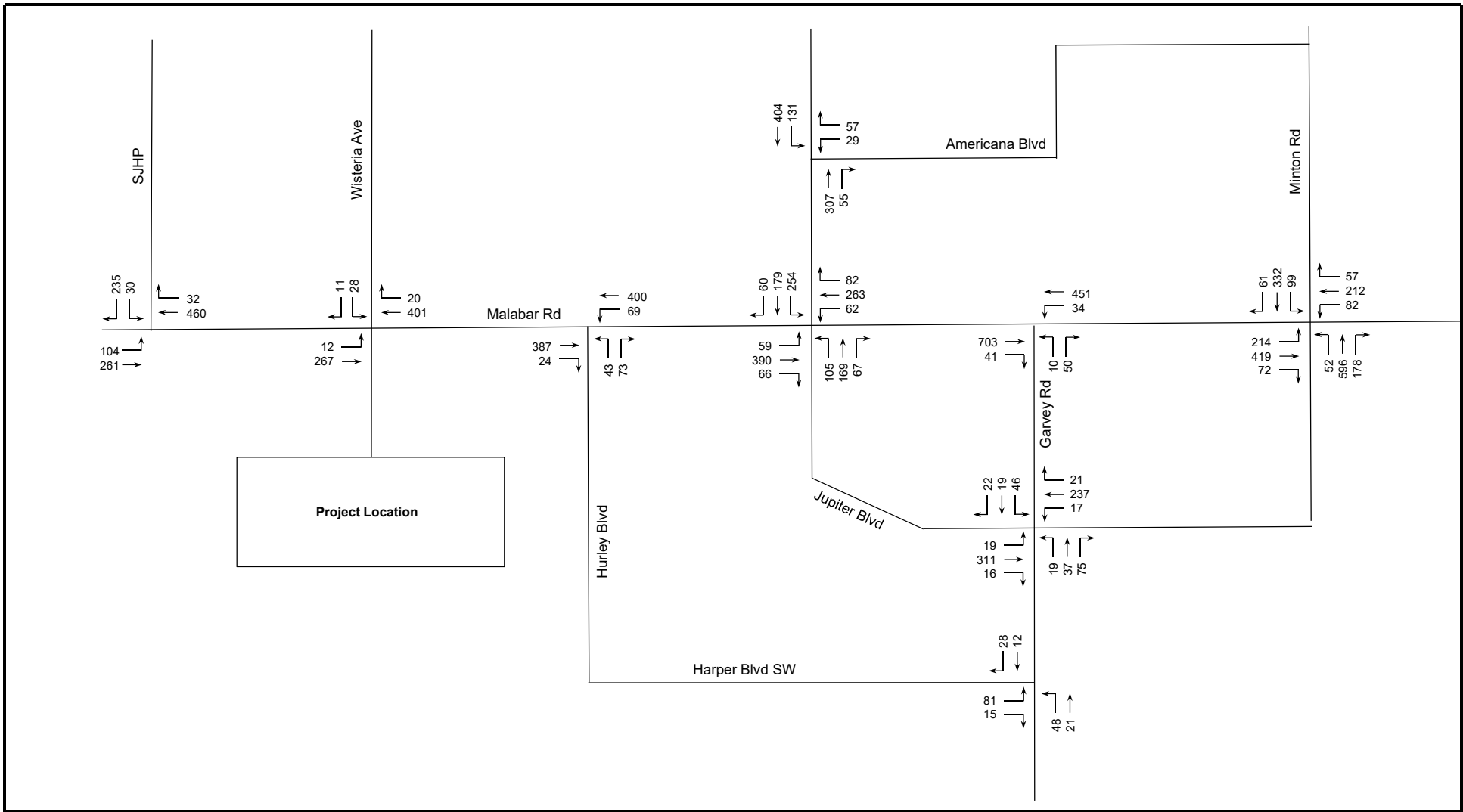
The 2017 AADT for the study roadway segments were obtained from Space Coast TPO Transportation Data Management System. The existing p.m. peak-hour two-way LOS for the study area road segments are shown in Table 3. As indicated in the table below, the study roadway segments currently operate within the adopted level of service except the segment of Malabar Road from Jupiter Boulevard to Minton Road.

Table 3
Existing P.M. Peak-Hour Two-Way LOS - Roadway Segments
Chaparral Residential Development

Roadway	Segment		Functional Classification	Maintaining Entity	Station ID	No. of Lanes	Adopted LOS	Current MAV	Peak-Hour Two-Way Capacity at Adopted LOS	Existing AADT*	Existing PM Peak-Hour Two-Way Volume	V/C Ratio	LOS
Malabar Rd.	SJHP	Bavarian Ave.	Urban Minor Arterial	Brevard County	589	2	E	17,700	1,593	11,370	1,023	0.64	C
		Bavarian Ave.	Jupiter Blvd.	City of Palm Bay	589	2	C	16,800	1,510	11,370	1,023	0.64	C
		Jupiter Blvd.	Minton Rd.	City of Palm Bay	371	2	C	16,800	1,510	20,230	1,821	1.14	F
		Minton Rd.	Emerson Dr.	City of Palm Bay	491	4	E	39,800	3,582	23,810	2,143	0.60	C
SJHP	Malabar Rd.	Pace Dr.	Urban Minor Arterial	Brevard County	609	2	C	16,800	1,510	2,050	185	0.12	C
		Pace Dr.	Emerson Dr.	Brevard County	610	2	C	16,800	1,510	4,570	411	0.26	C
		Emerson Dr.	US 192	Brevard County	610	2	C	16,800	1,510	4,570	411	0.26	C

*Existing AADT is taken from Space Coast Transportation Planning Organization Traffic Counts: 2008-2017

The Maximum acceptable volume of the roadway segment and the LOS or v/c ratio will be exceeded due to existing conditions without the addition of project trips, therefore, in accordance with Florida Statute 163.3180, the project is not responsible for mitigating the deficiencies.



Chaparral Residential Development

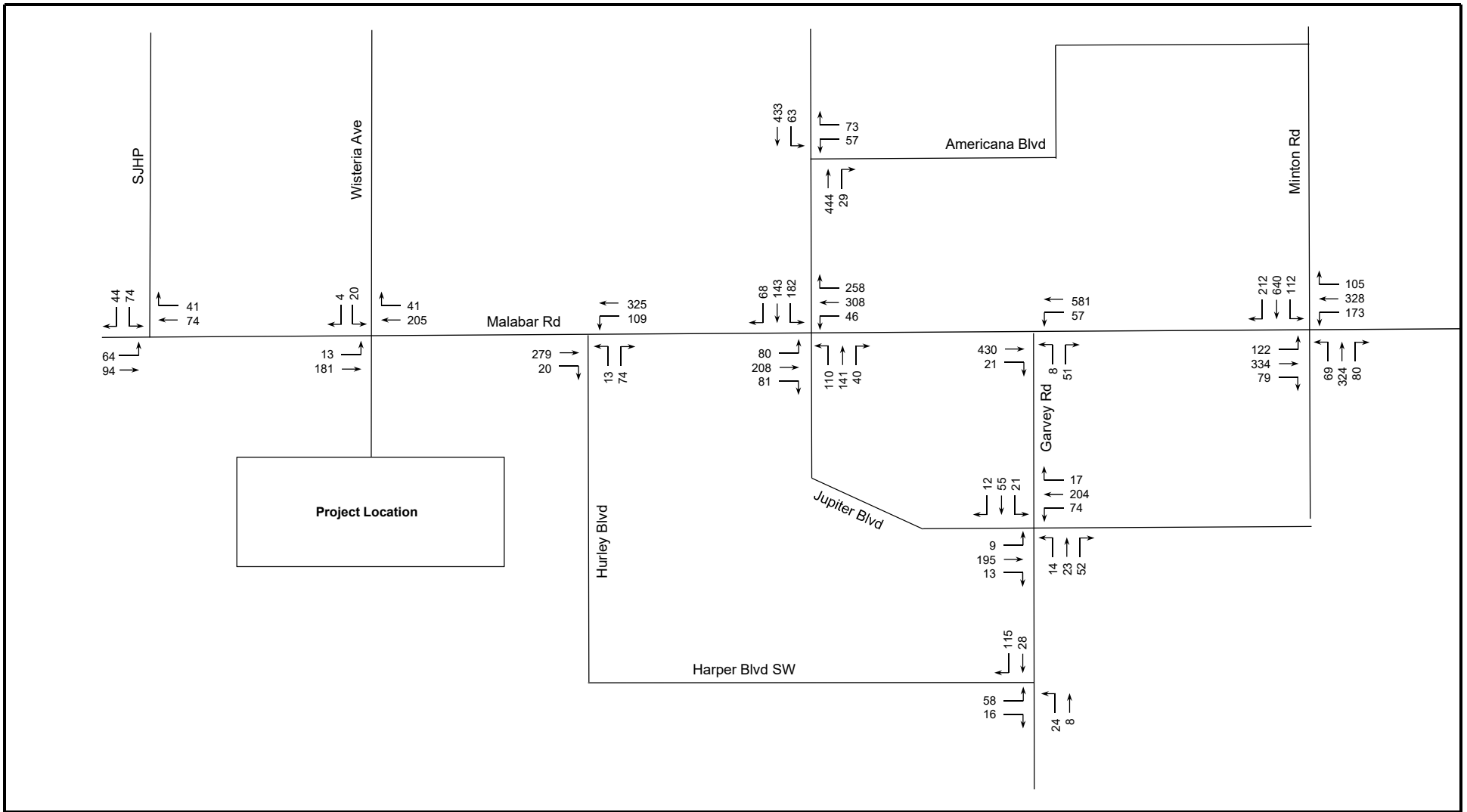


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Jan 2017 Existing A.M. Peak-Hour Turning Movement Counts

Project No.: 4247.03

Figure: 2



Chaparral Residential Development

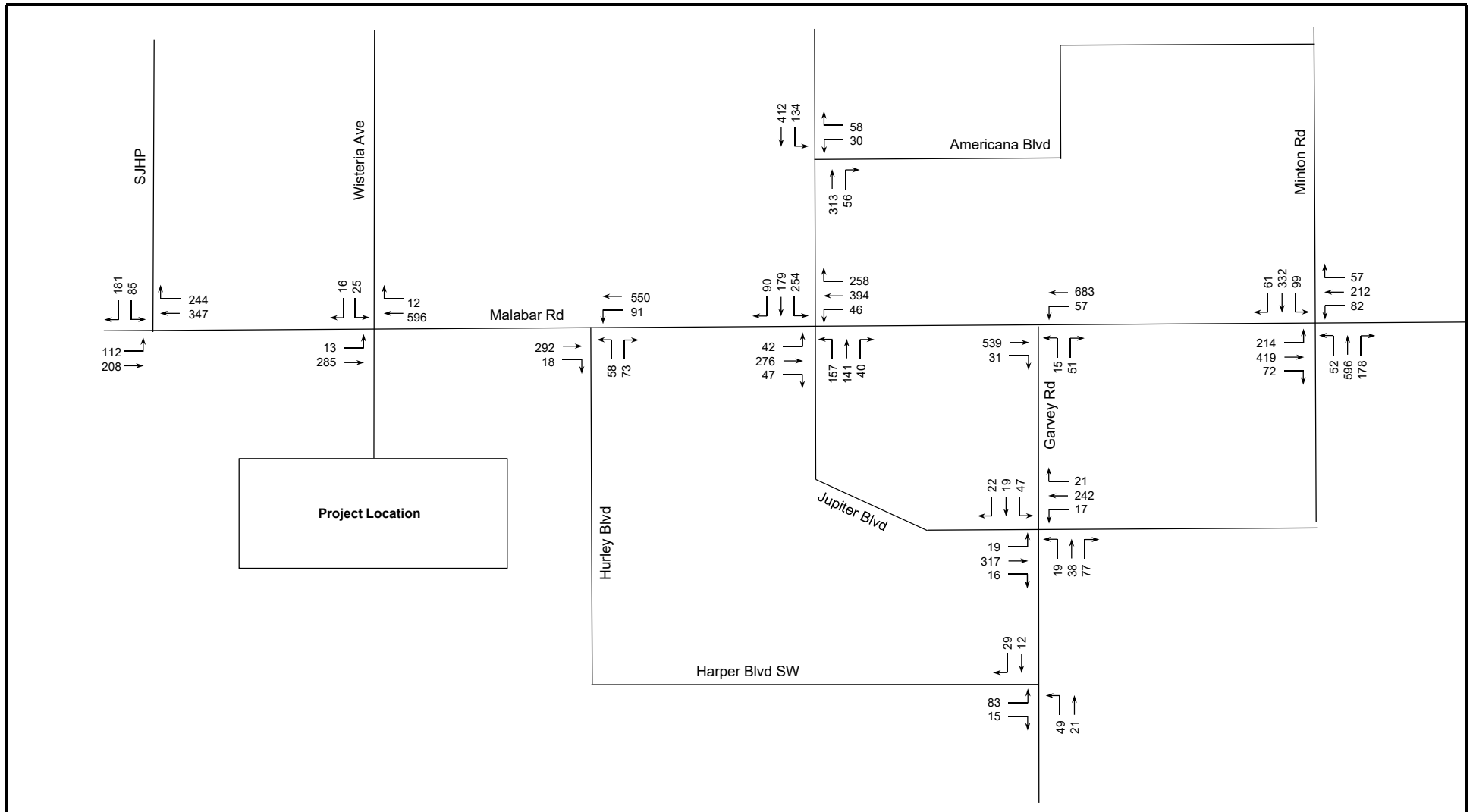


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Jan 2017 Existing P.M. Peak-Hour Turning Movement Counts

Project No.: 4247.03

Figure: 3



Chaparral Residential Development

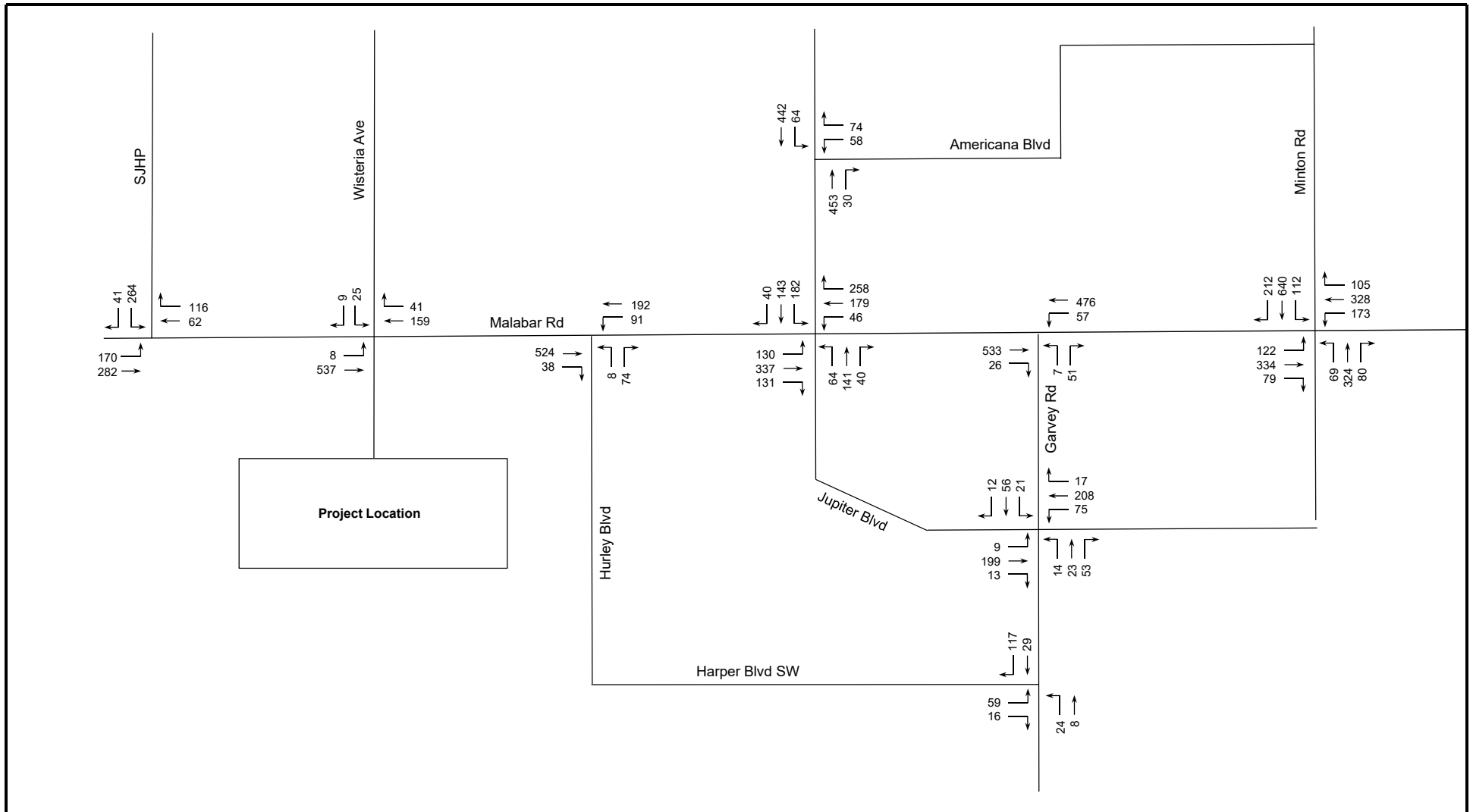


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2018 Adjusted A.M. Peak-Hour Turning Movement Counts

Project No.: 4247.03

Figure: 4



Chaparral Residential Development



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2018 Adjusted P.M. Peak-Hour Turning Movement Counts

Project No.: 4247.03

Figure: 5

3

FUTURE TRAFFIC CONDITIONS

The next step in the analysis was to determine the future traffic conditions on the study area roadways at the times of project Phase I and Phase II completion. The following documents the procedures used to determine the future traffic.

Background Traffic and Annual Growth Rates

The traffic patterns significantly changed after the opening the interchange on I-95 at Ellis Road. A minimum growth of 2% was applied to the 2018 existing traffic volumes.

Trip Generation

Trip generation for the development was determined using the trip generation rates published by the Institute of Transportation Engineers (ITE) in the *Trip Generation Manual, 10th Edition*. The total daily, a.m. and p.m. peak-hour trip generation for Phase I and Phase II are presented in Table 4 and Table 5 for the proposed development.

Table 4
Trip Generation – Phase I
Chaparral Residential Development

Time Period	Land Use	Land Use Code	Trip Rate Equation	Size	Units	Percent Entering	Percent Exiting	Trips Entering	Trips Exiting	Total Trips
Daily	Single-Family Detached Housing	210	$\ln(T) = 0.92\ln(X)+2.71$	275	DUs	50%	50%	1,318	1,319	2,637
AM Peak-Hour	Single-Family Detached Housing	210	$T = 0.71(X)+4.80$	275	DUs	25%	75%	50	150	200
PM Peak-Hour	Single-Family Detached Housing	210	$\ln(T) = 0.96\ln(X)+0.20$	275	DUs	63%	37%	169	99	268

Source: ITE, Trip Generation 10th Edition

Table 5
Trip Generation – Phase II
Chaparral Residential Development

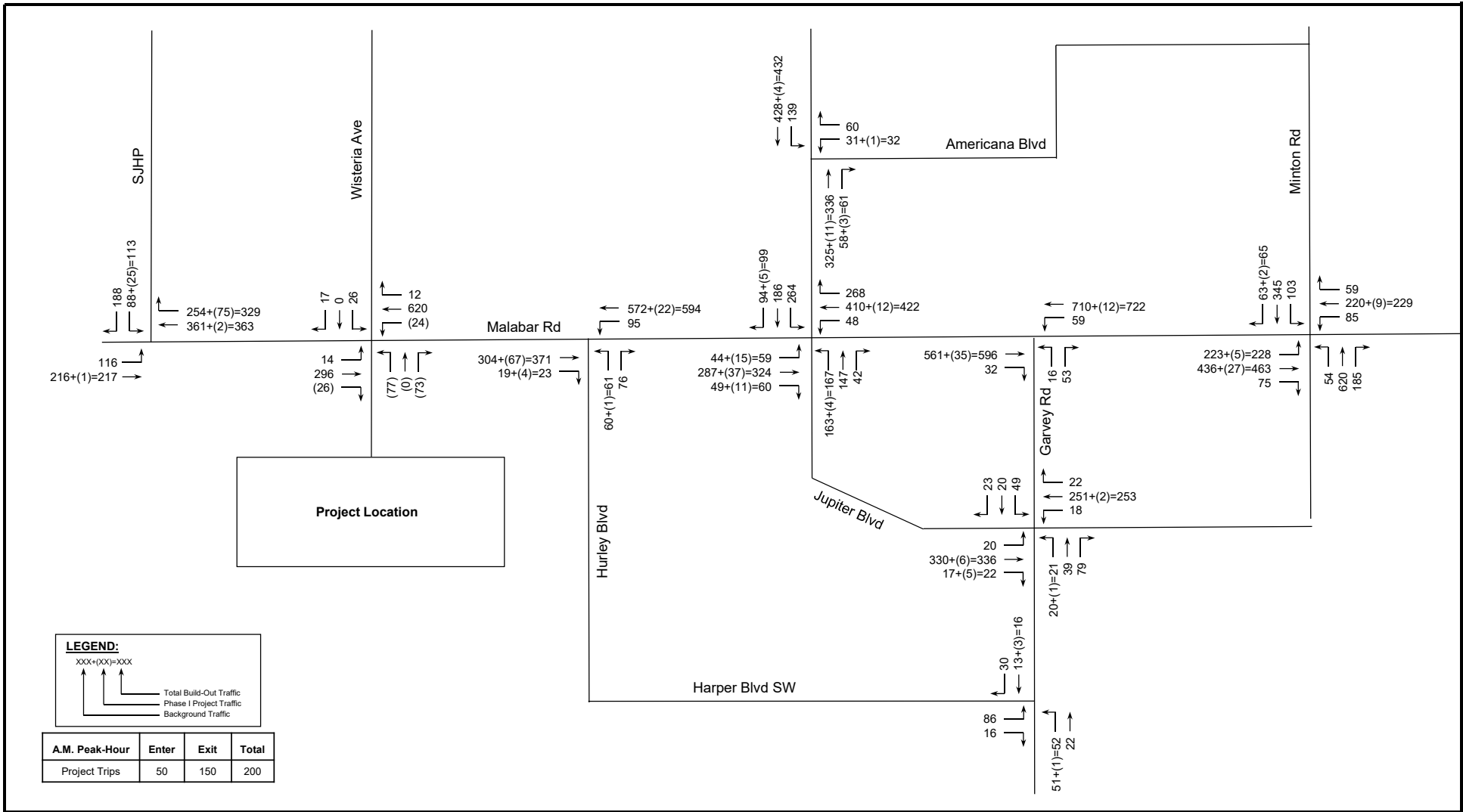
Time Period	Land Use	Land Use Code	Trip Rate Equation	Size	Units	Percent Entering	Percent Exiting	Trips Entering	Trips Exiting	Total Trips
Daily	Single-Family Detached Housing	210	$\ln(T) = 0.92\ln(X)+2.71$	434	DUs	50%	50%	2,006	2,007	4,013
	Multifamily Housing (Low-Rise)	220	$T = 7.56(X)-40.86$	75	DUs	50%	50%	263	263	526
Totals:								2,269	2,270	4,539
AM Peak-Hour	Single-Family Detached Housing	210	$T = 0.71(X)+4.80$	434	DUs	25%	75%	78	235	313
	Multifamily Housing (Low-Rise)	220	$\ln(T) = 0.95\ln(X)-0.51$	75	DUs	23%	77%	8	28	36
Totals:								86	263	349
PM Peak-Hour	Single-Family Detached Housing	210	$\ln(T) = 0.96\ln(X)+0.20$	434	DUs	63%	37%	262	154	416
	Multifamily Housing (Low-Rise)	220	$\ln(T) = 0.89\ln(X)-0.02$	75	DUs	63%	37%	29	17	46
Totals:								291	171	462

Trip Distribution and Assignment

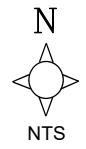
The process of determining the directional flow of traffic associated with a new development is called trip distribution. The Central Florida Regional Planning Model (CFRPM) version 5.1 with model year 2020 and TAZ 3351, was used to determine the trip distribution for this project. The resulting model distribution is included in Figure 6.

Trip Assignment

The next step in the analysis was to assign the project traffic by project phase to the roadway network. Figure 7 and Figure 8 graphically depict Phase I a.m. and p.m. peak-hour project trip assignment for the proposed development. Figure 9 and Figure 10 graphically depict Phase II a.m. and p.m. peak-hour project trip assignment.



Chaparral Residential Development

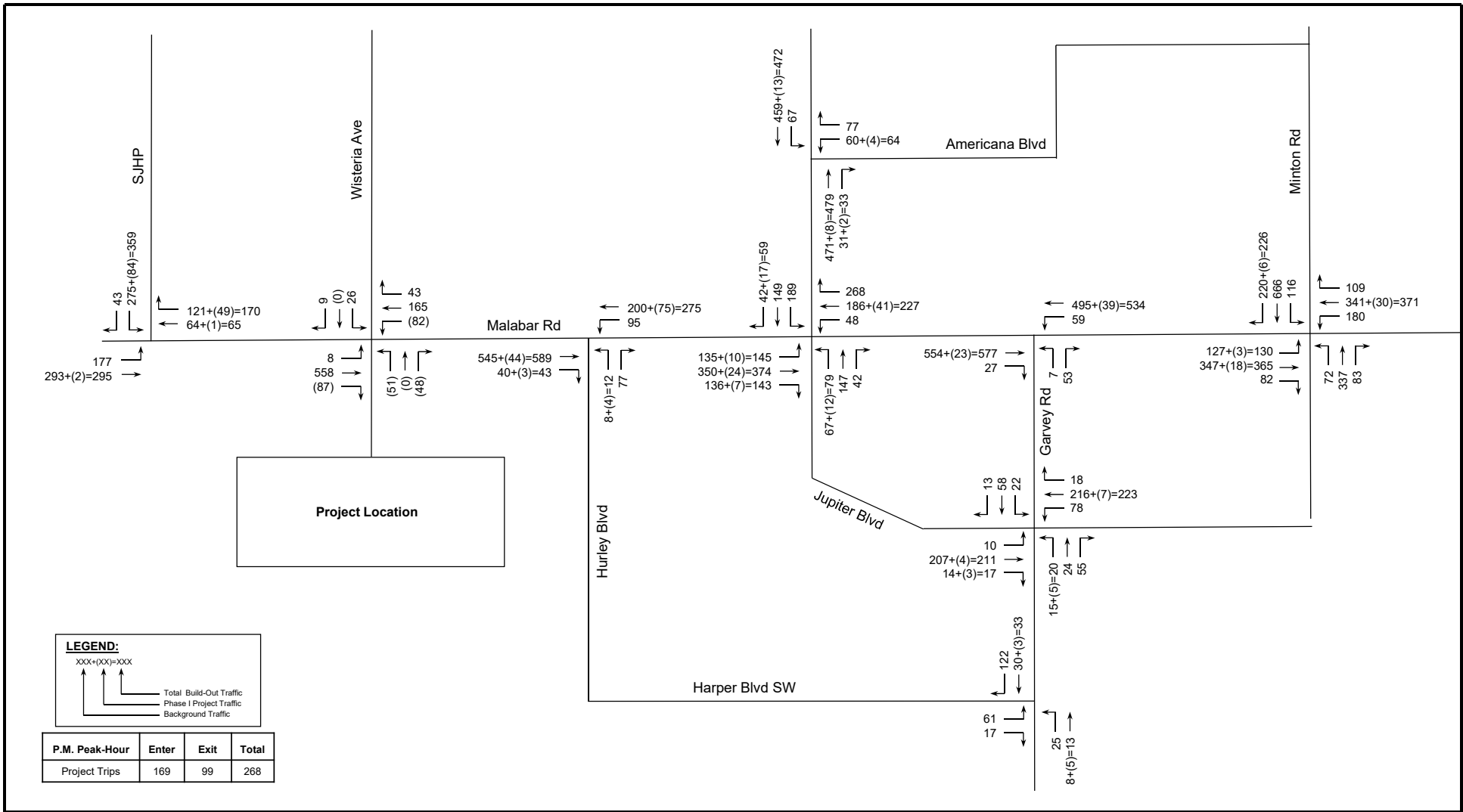


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**2020 Phase I
 A.M. Peak-Hour Trip Assignment**

Project No.: 4247.03

Figure: 7



Chaparral Residential Development

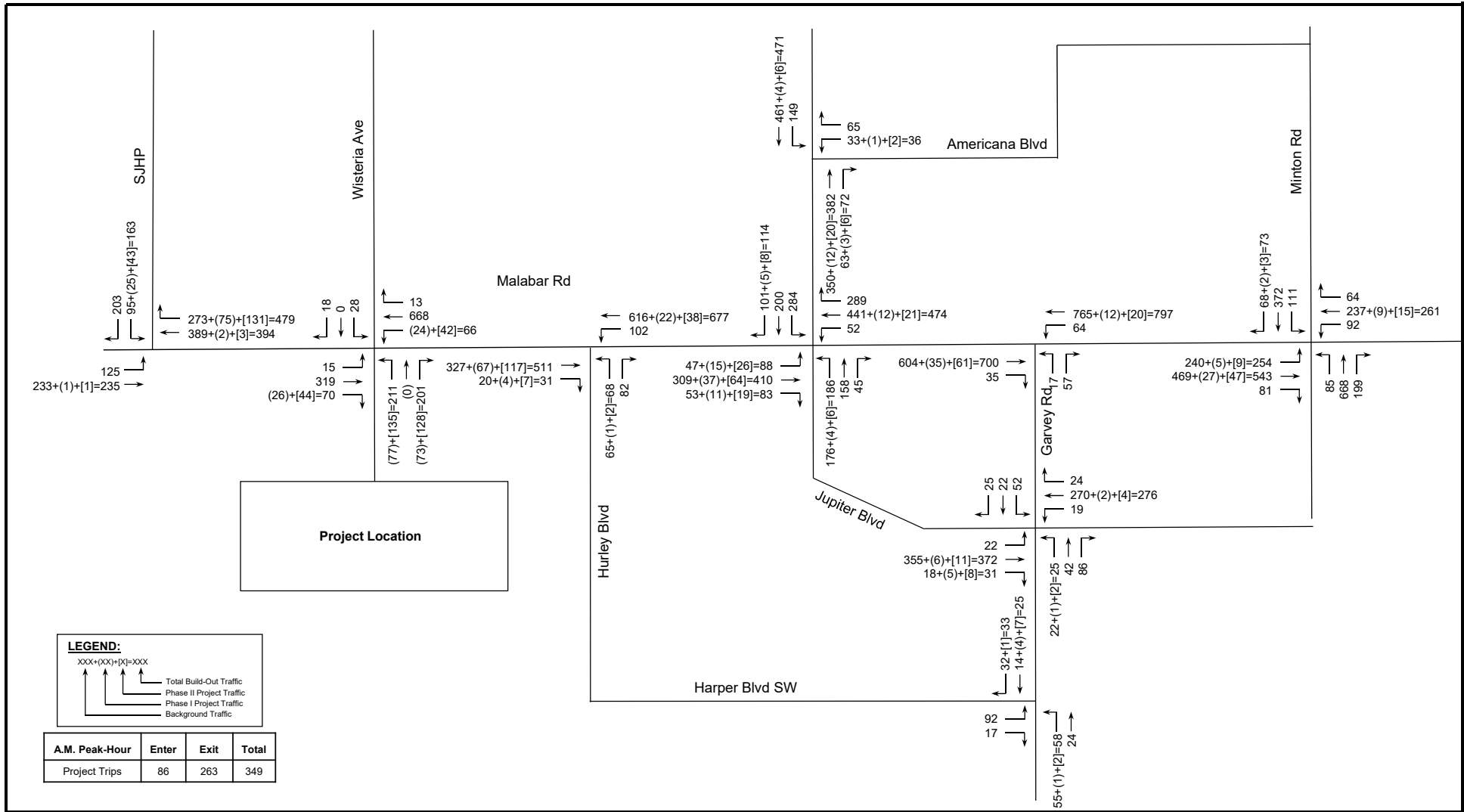


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**2020 Phase I
 P.M. Peak-Hour Trip Assignment**

Project No.: 4247.03

Figure: 8



Chaparral Residential Development

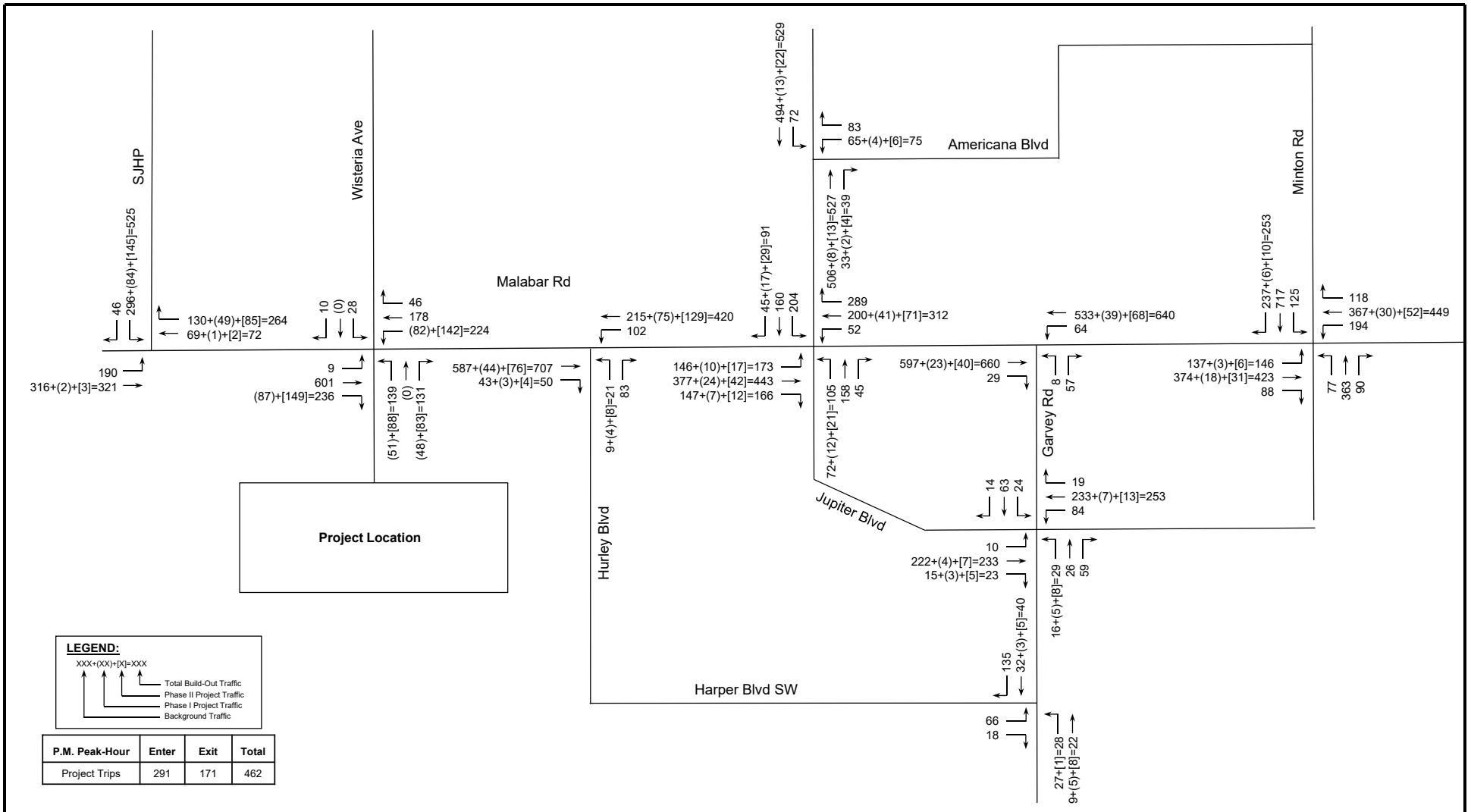


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**2024 Phase II
 A.M. Peak-Hour Trip Assignment**

Project No.: 4247.03

Figure: 9



Chaparral Residential Development



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**2024 Phase II
 P.M. Peak-Hour Trip Assignment**

Project No.: 4247.03

Figure: 10

4

2020 PHASE I ROADWAY ANALYSIS

The study area intersections and road segments were analyzed based on the Phase I roadway conditions to determine potential impacts and to investigate mitigation requirements.

Phase I Unsignalized Intersection Analysis

The unsignalized intersections were analyzed to determine the operational LOS under Phase I conditions. Table 6 shows the projected LOS for the unsignalized intersections at Phase I during the a.m. and p.m. peak-hours. As indicated in the table, all unsignalized intersections are anticipated to operate within the adopted LOS except the intersections of Malabar Road at SJHP, Malabar Road at Wisteria Avenue/Project Driveway, Malabar Road at Hurley Boulevard and Jupiter Boulevard at Americana Boulevard under Phase I conditions. The HCS summary sheets are contained in Appendix L.

**Table 6
Phase I A.M. and P.M. Peak Hour LOS – Unsignalized Intersections
Chaparral Residential Development**

Intersection	Adopted LOS	Phase I Conditions					
		AM Peak-Hour			PM Peak-Hour		
		Critical Approach	Delay	LOS	Critical Approach	Delay	LOS
Malabar Rd. at SJHP.	C	SB	40.8	E	SB	472.8	F
Malabar Rd. at Wisteria Ave/Project Driveway	E	NB	69.7	F	SB	33.3	D
Malabar Rd. at Hurley Blvd.	C	NB	45.2	E	NB	18.1	C
Malabar Rd. at Garvey Rd.	C	NB	22.7	C	NB	16.0	C
Jupiter Blvd. at Americana Blvd.	C	WB	20.8	C	WB	29.1	D
Jupiter Blvd. at Garvey Rd.	C	-	16.1	C	-	11.7	B
Garvey Rd. at Harper Blvd.	C	EB	10.3	B	EB	10.1	B

Phase I Signalized Intersection Analysis

The signalized intersections were analyzed to determine the operational LOS at the time of Phase I. Table 7 depicts the projected LOS for the study area intersections under Phase I conditions during the a.m. and p.m. peak-hours. The HCS summary sheets are contained in Appendix M. As indicated in the table, both signalized intersections operate outside of their adopted LOS or with a v/c ratio greater than 1.0 under Phase I conditions.

**Table 7
Phase I A.M. and P.M. Peak Hour LOS – Signalized Intersections
Chaparral Residential Development**

Intersection	Adopted LOS	Phase I Conditions					
		AM Peak-Hour			PM Peak-Hour		
		Delay (sec.)	LOS	V/C > 1.0	Delay (sec.)	LOS	V/C > 1.0
Malabar Rd. at Jupiter Blvd.	C	85.7	F	Yes	46.4	D	No
Malabar Rd. at Minton Rd	E	39.1	D	No	53.3	D	Yes

Phase I Roadway Segment Analysis

The traffic analysis for the roadway segments involves the comparison of the future peak-hour two-way volumes to available capacity. Table 8 presents the results of the p.m. peak-hour two-way roadway segment analyses for the study area roadways under Phase I conditions. As indicated in the table, all of the study area roadway segments are anticipated to operate within the adopted LOS under Phase I conditions with the exception of Malabar Road from Bavarian Avenue to Minton Road.

**Table 8
Phase I P.M. Peak-Hour Two-Way LOS – Roadway Segments
Chaparral Residential Development**

Roadway	Segment		No. of Lanes	Adopted LOS	Current MAV	Peak-Hour Two-Way Capacity at Adopted LOS	Existing PM Peak-Hour Two-Way Volume**	2020 Growth Factor	2020 Background Traffic	Project Distribution	Project Trips	Brentwood Lakes PH3 Vested Trips	Brentwood Lakes PH4 Vested Trips	Avery Spring Vested Trips	2020 Phase I Traffic	LOS	
Malabar Rd.	SJHP	Bavarian Ave.	2	E	17,700	1,593	1,023	1.06	1,085	100.0%	268	66	67	72	1,559	D	
		Bavarian Ave.	Jupiter Blvd.	2	C	16,800	1,510	1,023	1.06	1,085	47.7%	128	62	63	68	1,406	D
		Jupiter Blvd.	Minton Rd.	2	C	16,800	1,510	1,821	1.06	1,930	23.3%	62	30	31	33	2,087	F
		Minton Rd.	Emerson Dr.	4	E	39,800	3,582	2,143	1.06	2,272	18.0%	48	23	24	26	2,320	D
SJHP	Malabar Rd.	Pace Dr.	2	C	16,800	1,510	185	1.06	196	49.8%	133	65	66	71	531	C	
		Pace Dr.	Emerson Dr.	2	C	16,800	1,510	411	1.06	436	46.5%	125	60	61	66	748	C
		Emerson Dr.	US 192	2	C	16,800	1,510	411	1.06	436	46.5%	125	60	61	66	748	C

Recommended Unsignalized Intersection Improvements

Two traffic signal warrant analyses were conducted to determine if a signal would be warranted at the intersections of Malabar Road at SJHP and Malabar Road at Wisteria Avenue / Project Driveway. Based on the results of the analyses, a traffic signal will be warranted at the intersection of Malabar Road at Wisteria Road by the completion of Chaparral Residential Phase I in 2020. A traffic signal will not be warranted at the intersection of Malabar Road at SJHP. In order to meet LOS criteria, it is recommended that the traffic signals be installed at both intersections prior to the completion of Phase I of the project.

Under Phase I conditions, the following improvements are recommended in order for all the unsignalized intersections to operate within the adopted LOS.

Malabar Road at SJHP:

- Signalize the intersection

Malabar Road at Wisteria Avenue / Project Driveway:

- Signalize the intersection

Malabar Road at Hurley Boulevard:

- Convert northbound shared left-right lane into an exclusive northbound left turn lane.
- Add an exclusive northbound right turn lane.
- Change PHF to 0.95 to considered anticipated traffic volume in the future.

Jupiter Boulevard at Americana Boulevard:

- Convert westbound shared left-right lane into an exclusive westbound right turn lane.
- Add an exclusive westbound left turn lane.

Table 9 depict the a.m. and p.m. peak-hour LOS under the Phase I conditions with the proposed improvements at the unsignalized intersections. As indicated in Table 9, the unsignalized intersections are expected to operate within the adopted LOS with the recommended installation of a traffic signal. The HCS summary sheets are attached as Appendix J.

**Table 9
Phase I A.M. and P.M. Peak Hour LOS – Unsignalized Intersection Improvements
Chaparral Residential Development**

Intersection	Adopted LOS	Phase I Improved Conditions							
		AM Peak-Hour				PM Peak-Hour			
		Critical Approach	Delay	LOS	V/C > 1.0	Critical Approach	Delay	LOS	V/C > 1.0
Malabar Rd. at SJHP.	C	-	10.9	B	No	-	10.8	B	No
Malabar Rd. at Wisteria Ave/Project Driveway	E	-	18.1	B	No	-	29.6	C	No
Malabar Rd. at Hurley Blvd.	C	NB	22.3	C	No	NB	15.5	C	No
Jupiter Blvd. at Americana Blvd.	C	WB	17.7	C	No	WB	21.9	C	No

Recommended Signalized Intersection Improvements

Under Phase I conditions improvements are required in order for the signalized intersections of Malabar Road at Jupiter Boulevard to operate within the adopted LOS and with v/c ratio less than 1.0. The following improvements are recommended to eliminate the deficiency:

Malabar Road at Jupiter Boulevard:

- Optimize signal timing splits

Malabar Road at Minton Road:

- Optimize signal timing splits

Table 10 depicts the a.m. and p.m. peak-hour LOS under Phase I conditions with the proposed improvements at the signalized intersections. With the proposed improvements, the signalized intersections will operate within the adopted LOS. The HCS summary sheets are attached as Appendix K.

**Table 10
Phase I A.M. and P.M. Peak-Hour LOS – Signalized Intersection Improvements
Chaparral Residential Development**

Intersection	Adopted LOS	Phase I Improved Conditions					
		AM Peak-Hour			PM Peak-Hour		
		Delay (sec.)	LOS	V/C > 1.0	Delay (sec.)	LOS	V/C > 1.0
Malabar Rd. at Jupiter Blvd.	C	31.8	C	No	34.4	C	No
Malabar Rd. at Minton Rd	E	37.3	C	No	40.3	D	No

Recommended Roadway Segment Improvements

Under Phase I conditions, the following improvements are recommended in order for all study area roadway segments to achieve acceptable LOS:

Malabar Road from Bavarian Avenue to Jupiter Boulevard:

- Widen the segment from 2 lanes to 4 lanes

Malabar Road from Jupiter Boulevard to Minton Road:

- Widen the segment from 2 lanes to 4 lanes

Table 11 depicts the p.m. peak-hour two-way LOS under the Phase I conditions with the proposed roadway improvement. With the proposed improvement, the segments of Malabar Road from Jupiter Boulevard to Minton Road is expected to operate within the adopted LOS.

Table 11
Phase I P.M. Peak-Hour Two-Way LOS – Roadway Segment Improvement
Chaparral Residential Development

Roadway	Segment		No. of Lanes	Adopted LOS	Current MAV	Peak-Hour Two-Way Capacity at Adopted LOS*	Existing PM Peak-Hour Two-Way Volume	2020 Growth Factor	2020 Background Traffic	Project Distribution	Project Trips	Brentwood Lakes PH3 Vested Trips	Brentwood Lakes PH4 Vested Trips	Avery Spring Vested Trips	2020 Phase 1 Traffic	LOS
Malabar Rd.	Bavarian Ave.	Jupiter Blvd.	4	C	37,900	3,240	1,023	1.06	1,085	47.7%	128	62	63	68	1,406	C
	Jupiter Blvd.	Minton Rd.	4	C	37,900	3,240	1,821	1.06	1,930	23%	62	30	31	33	2,087	C

*New roadway capacity was derived from 2012FDOT QLOS Handbook Tables.

5

2024 PHASE II ROADWAY ANALYSIS

The study intersections and road segments were analyzed based on the Phase II roadway conditions to determine potential impacts and to investigate mitigation requirements. Please note that all recommended improvements in Phase I analyses will be included in Phase II analyses.

Phase II Unsignalized Intersection Analysis

The unsignalized intersections were analyzed to determine the operational LOS under Phase II conditions. Table 12 shows the projected LOS for the unsignalized intersections at Phase II during the a.m. and p.m. peak-hours. As indicated in the table, the unsignalized intersections are anticipated to operate within the adopted LOS except the intersections of Malabar Road at Hurley Boulevard and Jupiter Boulevard at Americana Boulevard. The HCS summary sheets are contained in Appendix L.

Table 12
Phase II A.M. and P.M. Peak Hour LOS – Unsignalized Intersections
Chaparral Residential Development

Intersection	Adopted LOS	Phase II Conditions					
		AM Peak-Hour			PM Peak-Hour		
		Critical Approach	Delay	LOS	Critical Approach	Delay	LOS
Malabar Rd. at Hurley Blvd.	C	NB	38.6	E	NB	23.1	C
Malabar Rd. at Garvey Rd.	C	NB	18.7	C	NB	13.9	B
Jupiter Blvd. at Americana Blvd.	C	WB	21.0	C	WB	28.4	D
Jupiter Blvd. at Garvey Rd.	C	-	21.5	C	-	13.2	B
Garvey Rd. at Harper Blvd.	C	EB	10.6	B	EB	10.4	B

Phase II Signalized Intersection Analysis

The signalized intersections were analyzed to determine the operational LOS at the time of Phase II. Table 13 depicts the projected LOS for the study intersections under Phase II conditions during the a.m. and p.m. peak-hours. The HCS summary sheets are contained in Appendix M. As indicated in the table, all the signalized intersections are anticipated to operate within the adopted LOS except the intersection of Malabar Road at Jupiter Boulevard under Phase II conditions.

Table 13
Phase II A.M. and P.M. Peak Hour LOS – Signalized Intersections
Chaparral Residential Development

	Adopted LOS	Phase II Conditions					
		AM Peak-Hour			PM Peak-Hour		
		Delay (sec.)	LOS	V/C > 1.0	Delay (sec.)	LOS	V/C > 1.0
Malabar Rd. at SJHP.	C	8.9	A	No	10.7	B	No
Malabar Rd. at Wisteria Ave/Project Driveway	E	37.2	D	No	30.9	C	No
Malabar Rd. at Jupiter Blvd.	C	37.3	D	No	42.5	D	No
Malabar Rd. at Minton Rd.	E	43.0	D	No	47.1	D	No

Phase II Roadway Segment Analysis

Table presents the results of the p.m. peak-hour two-way roadway segment analyses for the study area roadways under 2024 Phase II conditions. As indicated in the table, majority of the study area roadway segments are anticipated to operate within the adopted level of service under Phase II conditions except the segment of Malabar Road from SJHP to Bavarian Avenue.

Recommended Unsignalized Intersection and Roadway Segment Improvements

Under 2024 Phase II conditions, the following improvements are recommended in order for the unsignalized intersections and study area roadway segments to achieve the adopted LOS.

Unsignalized intersections

Malabar Road at Hurley Boulevard:

- Add westbound left-turn lane

Jupiter Boulevard at Americana Boulevard:

- Add southbound left-turn lane

Signalized intersection

Malabar Road at Jupiter Boulevard:

- Convert westbound through-right lane into a westbound through lane.
- Add a second through lane
- Add a westbound right-turn lane
- Add a westbound right-turn overlap phase
- Add a second eastbound through lane

Table 15 depict the projected LOS for the study area intersections under Phase II improved conditions during the a.m. and p.m. peak-hours. The HCS summary sheets are contained in Appendix N. As indicated in the tables, both the intersections are anticipated to operate within the adopted LOS under Phase II improved conditions.

Roadway Segments – Malabar Road from SJHP to Bavarian Avenue

- Widen the segment of Malabar Road from SJHP to Bavarian Avenue from 2 lanes to 4 lanes

Table 17 depicts the p.m. peak-hour LOS under Phase II improved conditions with the proposed roadway segment improvement. With the proposed improvement, the segment of Malabar Road from SJHP to Jupiter Boulevard will operate within the adopted LOS.

Table 14
Phase II P.M. Peak Hour Two-Way LOS – Roadway Segments
Chaparral Residential Development

Roadway	Segment	No. of Lanes	Adopted LOS	Current MAV	Peak-Hour Two-Way Capacity at Adopted LOS	Existing PM Peak-Hour Two-Way Volume**	2024 Growth Factor	2024 Background Traffic	Project Distribution	Project Trips	Phase I Project Trips	Brentwood Lakes PH3 Vested Trips	Brentwood Lakes PH4 Vested Trips	Avery Spring Vested Trips	2024 Phase 2 Traffic	LOS
Malabar Rd.	SJHP	Bavarian Ave.	2	E	17,700	1,593	1.14	1,167	100.0%	462	137	66	67	72	1,971	F
	Bavarian Ave.	Jupiter Blvd.	4	C	37,900	3,240	1.14	1,167	47.7%	220	128	62	63	68	1,707	C
	Jupiter Blvd.	Minton Rd.	4	C	37,900	3,240	1.14	2,076	23.3%	108	62	30	31	33	2,340	C
	Minton Rd.	Emerson Dr.	4	E	39,800	3,582	1.14	2,443	18.0%	83	48	23	24	26	2,647	D
SJHP	Malabar Rd.	Pace Dr.	2	C	16,800	1,510	1.14	210	49.8%	230	133	65	66	71	775	C
	Pace Dr.	Emerson Dr.	2	C	16,800	1,510	1.14	469	46.5%	215	125	60	61	66	996	C
	Emerson Dr.	US 192	2	C	16,800	1,510	1.14	469	46.5%	215	125	60	61	66	996	C

Table 15
Phase II A.M. and P.M. Peak Hour LOS – Unsignalized Intersection Improvement Continuous
Chaparral Residential Development

Intersection	Adopted LOS	Phase II Improved Conditions					
		AM Peak-Hour			PM Peak-Hour		
		Critical Approach	Delay	LOS	Critical Approach	Delay	LOS
Malabar Rd. at Hurley Blvd.	C	NB	18.7	C	NB	18.3	C
Jupiter Blvd. at Americana Blvd.	C	WB	15.0	C	WB	17.3	C

Table 16
Phase II A.M. and P.M. Peak Hour LOS – Signalized Intersection Improvement Continuous
Chaparral Residential Development

Intersection	Adopted LOS	Phase II Improved Conditions					
		AM Peak-Hour			PM Peak-Hour		
		Delay (sec.)	LOS	V/C > 1.0	Delay (sec.)	LOS	V/C > 1.0
Malabar Rd. at Jupiter Blvd.	C	28.1	C	No	34.7	C	No

**Table 17
Phase II P.M. Peak Hour Two-Way LOS – Roadway Segment Improvements
Chaparral Residential Development**

Roadway	Segment		No. of Lanes	Adopted LOS	Current MAV	Peak-Hour Two-Way Capacity at Adopted LOS	Existing PM Peak-Hour Two-Way Volume**	2024 Growth Factor	2024 Background Traffic	Project Distribution	Project Trips	Phase I Project Trips	Brentwood Lakes PH3 Vested Trips	Brentwood Lakes PH4 Vested Trips	Avery Spring Vested Trips	2024 Phase 2 Traffic	LOS
Malabar Rd.	SJHP	Bavarian Ave.	4	E	39,800	3,400	1,023	1.14	1,167	100%	462	137	66	67	72	1,971	D

Access Review

Site access to the development is proposed via a single driveway onto Malabar Road. The proposed driveway will form the northbound leg of the intersection of Malabar Road and Wisteria Avenue. The requirements for a westbound left-turn lane and an eastbound right-turn lane were evaluated using NCHRP Report 457, and FDOT Standard Index 301. NCHRP summary sheets are included as Appendix S. The results of the turn lane evaluation are provided below:

Malabar Road at Wisteria Avenue / Project Driveway

The recommended geometry of the ingress and egress at the intersection will consist of:

Malabar Road at Project Driveway at the time of Phase I:

- Add exclusive westbound left-turn lane of 265 feet minimum.
- Add a minimum 240 feet exclusive eastbound right-turn lane. Thus,
 - Eastbound: One through/left-turn shared lane
One exclusive right-turn lane
 - Westbound: One exclusive left-turn lane
One through / right-turn shared lane
 - Southbound: One left-turn / through / right-turn shared lane
 - Northbound: One left-turn lane
One through / right-turn shared lane

Malabar Road at Project Driveway at the time of Phase II:

- Extended the westbound exclusive left-turn lane from 265 feet to 390 feet minimum at Phase II stage.
- Extended the eastbound exclusive right-turn lane from 240 feet to of 365 feet minimum at Phase II stage.

In order to reduce mobilization costs, it is recommended that the eastbound right turn lane and the westbound left turn lane be constructed to meet Phase II requirements.

6

CONCLUSIONS

This study was conducted to evaluate the impact of the proposed Chaparral Residential Development on the surrounding roadway network in the City of Palm Bay. The results of the study are summarized below:

- The proposed development consists of a two-phased project. Phase I consists of 275 single-family units. Phase II consists of 434 single-family units and 75 apartments.
- Phase I will generate a total of 200 a.m. peak-hour trips and 268 p.m. peak-hour trips.
- Phase II will generate a total of 349 a.m. peak-hour trips and 462 p.m. peak-hour trips.

Existing Conditions

- Under existing conditions, all unsignalized intersections operate within the adopted LOS during the a.m. and p.m. peak-hours except the intersections of Malabar Road at SJHP.
- Under existing conditions, both signalized intersections operate with a v/c ratio greater than 1.0 and outside the adopted LOS.
- Under existing conditions, all study area roadway segments currently operate within the adopted LOS with the exception of Malabar Road from Jupiter Boulevard to Minton Road.

Phase I Conditions

- Under Phase I conditions, all unsignalized intersections are anticipated to operate within the adopted LOS except the intersections of Malabar Road at SJHP, Malabar Road at Wisteria Avenue/Project Driveway, Malabar Road at Hurley Boulevard and Jupiter Boulevard at Americana Boulevard.
- Under Phase I conditions, both signalized intersections operate outside of their adopted LOS or with a v/c ratio greater than 1.0.
- Under Phase I conditions, all study roadway segments are anticipated to operate within the adopted LOS with the exception of the segment of Malabar Road from Bavarian Avenue to Minton Road.

Phase I Intersection and Roadway Segment Improvements

- It is recommended to signalize the intersection of Malabar Road and SJHP.
- It is recommended to signalize the intersection of Malabar Road and Wisteria Avenue / Project Driveway at the completion of Chaparral Residential Phase I in 2020.
 - Add an exclusive westbound left-turn lane with a minimum length of 390 feet.
 - Add an exclusive right-turn lane at the intersection with a minimum length of 365 feet
- It is recommended to convert the northbound shared left-right lane into an exclusive northbound left-turn lane, add an exclusive northbound right-turn lane and change the PHF to 0.95 to consider the anticipated increase in traffic volume in the future at the intersection of Malabar Road at Hurley Boulevard.

- It is recommended to convert the westbound shared left-right lane into an exclusive westbound right-turn lane and add an exclusive westbound left-turn lane at the intersection of Jupiter Boulevard at Americana Boulevard.
- It is recommended to optimize signal timing splits of the intersections of Malabar Road at Jupiter Boulevard and Malabar Road at Minton Road.
- It is recommended to widen the roadway segment of Malabar Road from Bavarian Avenue to Minton Road from two lanes to four lanes.

Phase II Conditions

- Under Phase II conditions, all unsignalized intersections are anticipated to operate within the adopted LOS with the proposed improvements except the intersections of Malabar Road at Hurley Boulevard and Jupiter Boulevard at Americana Boulevard.
- Under Phase II conditions, the signalized intersections are anticipated to operate within the adopted LOS with v/c ratios less than 1.0 with the proposed improvements except the intersection of Malabar Road at Jupiter Boulevard.
- Under Phase II conditions, all study roadway segments are anticipated to operate within the adopted LOS with the exception of the segment of Malabar Road from SJHP to Bavarian Avenue.

Phase II Intersection and Roadway Segment Improvements

- It is recommended to signalize the intersection of Malabar Road and SJHP.
- Under Phase II conditions, it is recommended to add an exclusive westbound left-turn lane at the intersection of Malabar Road at Hurley Boulevard.
- Under Phase II conditions, it is recommended to add an exclusive southbound left-turn lane at the intersection of Jupiter Boulevard at Americana Boulevard.
- Under Phase II conditions, it is recommended to convert westbound through-right lane into a westbound through lane, add a second through lane, add an exclusive westbound right-turn lane, add a westbound right-turn overlap phase and add a second eastbound through lane.
- Under Phase II conditions, it is recommended to widen the roadway segment of Malabar Road from SJHP to Bavarian Avenue from two lanes to four lanes.

Based on the results of this study and the recommendations provided above, the project is recommended for approval.

Development of a PFS is recommended to establish the individual developer's proportionate fair share related only to the capacity encumbered due to the project traffic.

Appendices

APPENDIX A
Preliminary Site Plan

APPENDIX B

2017 Turning Movement Counts

DE TRAFFIC
<http://de-traffic.com>
 ST. JOHNS HERITAGE PKWY AT MALABAR RD
 BREVARD COUNTY, FLORIDA

File Name : 07 St. Johns
 Site Code : 0000007
 Start Date : 1/26/2017
 Page No : 1

Groups Printed- Automobiles - Commercial

Start Time	St. Johns Heritage Pkwy Southbound				Malabar Rd Westbound				N/A Northbound				Malabar Rd Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Factor	1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		
07:00 AM	1	0	9	10	0	20	4	24	0	0	0	0	3	11	0	14	48
07:15 AM	10	0	10	20	0	19	10	29	0	0	0	0	4	15	0	19	68
07:30 AM	11	0	8	19	0	24	9	33	0	0	0	0	1	9	0	10	62
07:45 AM	7	0	30	37	0	46	8	54	0	0	0	0	4	17	0	21	112
Total	29	0	57	86	0	109	31	140	0	0	0	0	12	52	0	64	290
08:00 AM	11	0	33	44	0	63	6	69	0	0	0	0	13	26	0	39	152
08:15 AM	9	0	82	91	0	119	12	131	0	0	0	0	32	63	0	95	317
08:30 AM	4	0	68	72	0	163	8	171	0	0	0	0	33	96	0	129	372
08:45 AM	6	0	52	58	0	115	6	121	0	0	0	0	26	76	0	102	281
Total	30	0	235	265	0	460	32	492	0	0	0	0	104	261	0	365	1122
04:00 PM	15	0	6	21	0	19	8	27	0	0	0	0	14	37	0	51	99
04:15 PM	15	0	10	25	0	18	13	31	0	0	0	0	14	32	0	46	102
04:30 PM	7	0	3	10	0	9	9	18	0	0	0	0	8	18	0	26	54
04:45 PM	13	0	16	29	0	19	5	24	0	0	0	0	10	14	0	24	77
Total	50	0	35	85	0	65	35	100	0	0	0	0	46	101	0	147	332
05:00 PM	13	0	7	20	0	19	6	25	0	0	0	0	13	25	0	38	83
05:15 PM	18	0	12	30	0	20	8	28	0	0	0	0	19	36	0	55	113
05:30 PM	27	0	14	41	0	18	14	32	0	0	0	0	19	20	0	39	112
05:45 PM	16	0	11	27	0	17	13	30	0	0	0	0	13	13	0	26	83
Total	74	0	44	118	0	74	41	115	0	0	0	0	64	94	0	158	391
Grand Total	183	0	371	554	0	708	139	847	0	0	0	0	226	508	0	734	2135
Apprch %	33.0	0.0	67.0		0.0	83.6	16.4		0.0	0.0	0.0		30.8	69.2	0.0		
Total %	8.6	0.0	17.4	25.9	0.0	33.2	6.5	39.7	0.0	0.0	0.0	0.0	10.6	23.8	0.0	34.4	

DE TRAFFIC
<http://de-traffic.com>
 ST. JOHNS HERITAGE PKWY AT MALABAR RD
 BREVARD COUNTY, FLORIDA

File Name : 07 St. Johns
 Site Code : 00000007
 Start Date : 1/26/2017
 Page No : 2

Start Time	St. Johns Heritage Pkwy Southbound				Malabar Rd Westbound				N/A Northbound				Malabar Rd Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour From 07:00 AM to 11:45 AM - Peak 1 of 1																	
Intersection	08:00 AM																
Volume	30	0	235	265	0	460	32	492	0	0	0	0	104	261	0	365	1122
Percent	11.3	0.0	88.7		0.0	93.5	6.5		0.0	0.0	0.0		28.5	71.5	0.0		
08:30 Volume	4	0	68	72	0	163	8	171	0	0	0	0	33	96	0	129	372
Peak Factor																	0.754
High Int.	08:15 AM				08:30 AM				6:45:00 AM				08:30 AM				
Volume	9	0	82	91	0	163	8	171	0	0	0	0	33	96	0	129	
Peak Factor	0.728				0.719								0.707				
Peak Hour From 12:00 PM to 05:45 PM - Peak 1 of 1																	
Intersection	05:00 PM																
Volume	74	0	44	118	0	74	41	115	0	0	0	0	64	94	0	158	391
Percent	62.7	0.0	37.3		0.0	64.3	35.7		0.0	0.0	0.0		40.5	59.5	0.0		
05:15 Volume	18	0	12	30	0	20	8	28	0	0	0	0	19	36	0	55	113
Peak Factor																	0.865
High Int.	05:30 PM				05:30 PM								05:15 PM				
Volume	27	0	14	41	0	18	14	32	0	0	0	0	19	36	0	55	
Peak Factor	0.720				0.898								0.718				

DE TRAFFIC
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 ST. JOHNS HERITAGE PKWY AT MALABAR RD
 BREVARD COUNTY, FLORIDA

File Name : 07 St. Johns
 Site Code : 00000007
 Start Date : 1/26/2017
 Page No : 3

Groups Printed- Commercial

Start Time	St. Johns Heritage Pkwy Southbound				Malabar Rd Westbound				N/A Northbound				Malabar Rd Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Factor	1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		
07:00 AM	0	0	2	2	0	4	0	4	0	0	0	0	0	2	0	2	8
07:15 AM	2	0	2	4	0	2	0	2	0	0	0	0	0	3	0	3	9
07:30 AM	0	0	2	2	0	1	0	1	0	0	0	0	0	2	0	2	5
07:45 AM	1	0	3	4	0	2	0	2	0	0	0	0	0	4	0	4	10
Total	3	0	9	12	0	9	0	9	0	0	0	0	0	11	0	11	32
08:00 AM	2	0	2	4	0	4	0	4	0	0	0	0	0	5	0	5	13
08:15 AM	1	0	2	3	0	3	0	3	0	0	0	0	0	3	0	3	9
08:30 AM	1	0	0	1	0	2	0	2	0	0	0	0	0	2	0	2	5
08:45 AM	0	0	1	1	0	4	0	4	0	0	0	0	0	4	0	4	9
Total	4	0	5	9	0	13	0	13	0	0	0	0	0	14	0	14	36
04:00 PM	1	0	0	1	0	2	0	2	0	0	0	0	1	4	0	5	8
04:15 PM	1	0	1	2	0	4	1	5	0	0	0	0	2	2	0	4	11
04:30 PM	0	0	0	0	0	2	1	3	0	0	0	0	1	2	0	3	6
04:45 PM	0	0	0	0	0	4	0	4	0	0	0	0	1	3	0	4	8
Total	2	0	1	3	0	12	2	14	0	0	0	0	5	11	0	16	33
05:00 PM	0	0	2	2	0	5	0	5	0	0	0	0	0	2	0	2	9
05:15 PM	1	0	0	1	0	2	0	2	0	0	0	0	0	4	0	4	7
05:30 PM	0	0	1	1	0	2	0	2	0	0	0	0	1	1	0	2	5
05:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2	3
Total	1	0	3	4	0	10	0	10	0	0	0	0	1	9	0	10	24
Grand Total	10	0	18	28	0	44	2	46	0	0	0	0	6	45	0	51	125
Apprch %	35.7	0.0	64.3		0.0	95.7	4.3		0.0	0.0	0.0		11.8	88.2	0.0		
Total %	8.0	0.0	14.4	22.4	0.0	35.2	1.6	36.8	0.0	0.0	0.0	0.0	4.8	36.0	0.0	40.8	

DE TRAFFIC
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 ST. JOHNS HERITAGE PKWY AT MALABAR RD
 BREVARD COUNTY, FLORIDA

File Name : 07 St. Johns
 Site Code : 00000007
 Start Date : 1/26/2017
 Page No : 4

Groups Printed- Peds

	St. Johns Heritage Pkwy Southbound				Malabar Rd Westbound				N/A Northbound				Malabar Rd Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Factor	1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0		
Total %																	

DE TRAFFIC
<http://de-traffic.com>
 WISTERIA AVE AT MALABAR RD
 BREVARD COUNTY, FLORIDA

File Name : 06 Wisteria Ave
 Site Code : 00000006
 Start Date : 1/25/2017
 Page No : 1

Groups Printed- Automobiles - Commercial

Start Time	Wisteria Ave Southbound				Malabar Rd Westbound				N/A Northbound				Malabar Rd Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Factor	1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		
07:00 AM	6	0	1	7	0	20	1	21	0	0	0	0	1	33	0	34	62
07:15 AM	8	0	3	11	0	26	0	26	0	0	0	0	2	48	0	50	87
07:30 AM	9	0	1	10	0	30	2	32	0	0	0	0	2	53	0	55	97
07:45 AM	4	0	2	6	0	51	2	53	0	0	0	0	0	51	0	51	110
Total	27	0	7	34	0	127	5	132	0	0	0	0	5	185	0	190	356
08:00 AM	8	0	1	9	0	63	8	71	0	0	0	0	3	46	0	49	129
08:15 AM	7	0	5	12	0	124	3	127	0	0	0	0	3	49	0	52	191
08:30 AM	4	0	5	9	0	170	3	173	0	0	0	0	4	102	0	106	288
08:45 AM	9	0	0	9	0	44	6	50	0	0	0	0	2	70	0	72	131
Total	28	0	11	39	0	401	20	421	0	0	0	0	12	267	0	279	739
04:00 PM	5	0	2	7	0	39	5	44	0	0	0	0	1	51	0	52	103
04:15 PM	3	0	3	6	0	36	10	46	0	0	0	0	3	41	0	44	96
04:30 PM	3	0	2	5	0	39	5	44	0	0	0	0	2	40	0	42	91
04:45 PM	2	0	1	3	0	36	11	47	0	0	0	0	2	29	0	31	81
Total	13	0	8	21	0	150	31	181	0	0	0	0	8	161	0	169	371
05:00 PM	3	0	2	5	0	44	13	57	0	0	0	0	4	48	0	52	114
05:15 PM	8	0	2	10	0	51	9	60	0	0	0	0	3	49	0	52	122
05:30 PM	9	0	0	9	0	65	9	74	0	0	0	0	3	47	0	50	133
05:45 PM	0	0	0	0	0	45	10	55	0	0	0	0	3	37	0	40	95
Total	20	0	4	24	0	205	41	246	0	0	0	0	13	181	0	194	464
Grand Total	88	0	30	118	0	883	97	980	0	0	0	0	38	794	0	832	1930
Apprch %	74.6	0.0	25.4		0.0	90.1	9.9		0.0	0.0	0.0		4.6	95.4	0.0		
Total %	4.6	0.0	1.6	6.1	0.0	45.8	5.0	50.8	0.0	0.0	0.0	0.0	2.0	41.1	0.0	43.1	

DE TRAFFIC
<http://de-traffic.com>
 WISTERIA AVE AT MALABAR RD
 BREVARD COUNTY, FLORIDA

File Name : 06 Wisteria Ave
 Site Code : 00000006
 Start Date : 1/25/2017
 Page No : 2

Start Time	Wisteria Ave Southbound				Malabar Rd Westbound				N/A Northbound				Malabar Rd Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour From 07:00 AM to 11:45 AM - Peak 1 of 1																	
Intersection	08:00 AM																
Volume	28	0	11	39	0	401	20	421	0	0	0	0	12	267	0	279	739
Percent	71.8	0.0	28.2		0.0	95.2	4.8		0.0	0.0	0.0		4.3	95.7	0.0		
08:30 Volume	4	0	5	9	0	170	3	173	0	0	0	0	4	102	0	106	288
Peak Factor																	0.641
High Int.	08:15 AM				08:30 AM				6:45:00 AM				08:30 AM				
Volume	7	0	5	12	0	170	3	173	0	0	0	0	4	102	0	106	
Peak Factor	0.813				0.608								0.658				
Peak Hour From 12:00 PM to 05:45 PM - Peak 1 of 1																	
Intersection	05:00 PM																
Volume	20	0	4	24	0	205	41	246	0	0	0	0	13	181	0	194	464
Percent	83.3	0.0	16.7		0.0	83.3	16.7		0.0	0.0	0.0		6.7	93.3	0.0		
05:30 Volume	9	0	0	9	0	65	9	74	0	0	0	0	3	47	0	50	133
Peak Factor																	0.872
High Int.	05:15 PM				05:30 PM								05:00 PM				
Volume	8	0	2	10	0	65	9	74	0	0	0	0	4	48	0	52	
Peak Factor	0.600				0.831								0.933				

DE TRAFFIC
<http://de-traffic.com>
WISTERIA AVE AT MALABAR RD
BREVARD COUNTY, FLORIDA

File Name : 06 Wisteria Ave
Site Code : 00000006
Start Date : 1/25/2017
Page No : 3

Groups Printed- Commercial

Start Time Factor	Wisteria Ave Southbound				Malabar Rd Westbound				N/A Northbound				Malabar Rd Eastbound				Int. Total
	Left 1.0	Thru 1.0	Right 1.0	App. Total	Left 1.0	Thru 1.0	Right 1.0	App. Total	Left 1.0	Thru 1.0	Right 1.0	App. Total	Left 1.0	Thru 1.0	Right 1.0	App. Total	
07:00 AM	0	0	0	0	0	4	0	4	0	0	0	0	0	2	0	2	6
07:15 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	2	0	2	4
07:30 AM	0	0	0	0	0	2	0	2	0	0	0	0	1	2	0	3	5
07:45 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	3	0	3	5
Total	0	0	0	0	0	10	0	10	0	0	0	0	1	9	0	10	20
08:00 AM	1	0	0	1	0	4	1	5	0	0	0	0	1	2	0	3	9
08:15 AM	1	0	0	1	0	2	0	2	0	0	0	0	0	2	0	2	5
08:30 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
08:45 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	2	0	2	4
Total	2	0	0	2	0	9	1	10	0	0	0	0	1	7	0	8	20
04:00 PM	0	0	0	0	0	4	0	4	0	0	0	0	0	4	0	4	8
04:15 PM	0	0	1	1	0	2	0	2	0	0	0	0	0	2	0	2	5
04:30 PM	0	0	1	1	0	3	0	3	0	0	0	0	1	3	0	4	8
04:45 PM	0	0	1	1	0	2	0	2	0	0	0	0	0	2	0	2	5
Total	0	0	3	3	0	11	0	11	0	0	0	0	1	11	0	12	26
05:00 PM	1	0	0	1	0	4	1	5	0	0	0	0	1	5	0	6	12
05:15 PM	0	0	0	0	0	5	1	6	0	0	0	0	0	4	0	4	10
05:30 PM	1	0	0	1	0	2	1	3	0	0	0	0	0	2	0	2	6
05:45 PM	0	0	0	0	0	3	0	3	0	0	0	0	0	2	0	2	5
Total	2	0	0	2	0	14	3	17	0	0	0	0	1	13	0	14	33
Grand Total	4	0	3	7	0	44	4	48	0	0	0	0	4	40	0	44	99
Apprch %	57.1	0.0	42.9		0.0	91.7	8.3		0.0	0.0	0.0		9.1	90.9	0.0		
Total %	4.0	0.0	3.0	7.1	0.0	44.4	4.0	48.5	0.0	0.0	0.0	0.0	4.0	40.4	0.0	44.4	

DE TRAFFIC
<http://de-traffic.com>
 WISTERIA AVE AT MALABAR RD
 BREVARD COUNTY, FLORIDA

File Name : 06 Wisteria Ave
 Site Code : 00000006
 Start Date : 1/25/2017
 Page No : 4

Groups Printed- Peds

	Wisteria Ave Southbound				Malabar Rd Westbound				N/A Northbound				Malabar Rd Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Factor	1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0		
Total %																	

DE TRAFFIC
<http://de-traffic.com>
HURLEY BLVD AT MALABAR RD
BREVARD COUNTY, FLORIDA

File Name : 03 Hurley at Malabar
Site Code : 00000003
Start Date : 1/26/2017
Page No : 1

Groups Printed- Automobiles - Commercial

Start Time	N/A Southbound				Malabar Rd Westbound				Hurley Blvd Northbound				Malabar Rd Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Factor	1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		
07:00 AM	0	0	0	0	8	30	0	38	2	0	31	33	0	83	7	90	161
07:15 AM	0	0	0	0	21	40	0	61	3	0	32	35	0	94	12	106	202
07:30 AM	0	0	0	0	15	43	0	58	5	0	16	21	0	105	22	127	206
07:45 AM	0	0	0	0	21	61	0	82	8	0	16	24	0	84	10	94	200
Total	0	0	0	0	65	174	0	239	18	0	95	113	0	366	51	417	769
08:00 AM	0	0	0	0	15	104	0	119	18	0	22	40	0	81	3	84	243
08:15 AM	0	0	0	0	20	106	0	126	11	0	16	27	0	104	6	110	263
08:30 AM	0	0	0	0	13	129	0	142	6	0	19	25	0	118	5	123	290
08:45 AM	0	0	0	0	12	52	0	64	2	0	11	13	0	105	6	111	188
Total	0	0	0	0	60	391	0	451	37	0	68	105	0	408	20	428	984
04:00 PM	0	0	0	0	21	83	0	104	4	0	16	20	0	77	5	82	206
04:15 PM	0	0	0	0	16	80	0	96	4	0	15	19	0	71	2	73	188
04:30 PM	0	0	0	0	27	86	0	113	2	0	17	19	0	66	5	71	203
04:45 PM	0	0	0	0	25	71	0	96	4	0	17	21	0	75	1	76	193
Total	0	0	0	0	89	320	0	409	14	0	65	79	0	289	13	302	790
05:00 PM	0	0	0	0	31	79	0	110	3	0	25	28	0	53	5	58	196
05:15 PM	0	0	0	0	26	89	0	115	4	0	15	19	0	85	9	94	228
05:30 PM	0	0	0	0	23	79	0	102	4	0	22	26	0	65	7	72	200
05:45 PM	0	0	0	0	21	77	0	98	4	0	16	20	0	56	4	60	178
Total	0	0	0	0	101	324	0	425	15	0	78	93	0	259	25	284	802
Grand Total	0	0	0	0	315	1209	0	1524	84	0	306	390	0	1322	109	1431	3345
Apprch %	0.0	0.0	0.0		20.7	79.3	0.0		21.5	0.0	78.5		0.0	92.4	7.6		
Total %	0.0	0.0	0.0	0.0	9.4	36.1	0.0	45.6	2.5	0.0	9.1	11.7	0.0	39.5	3.3	42.8	

DE TRAFFIC
<http://de-traffic.com>
HURLEY BLVD AT MALABAR RD
BREVARD COUNTY, FLORIDA

File Name : 03 Hurley at Malabar
Site Code : 00000003
Start Date : 1/26/2017
Page No : 2

Start Time	N/A Southbound				Malabar Rd Westbound				Hurley Blvd Northbound				Malabar Rd Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour From 07:00 AM to 11:45 AM - Peak 1 of 1																	
Intersection	07:45 AM																
Volume	0	0	0	0	69	400	0	469	43	0	73	116	0	387	24	411	996
Percent	0.0	0.0	0.0		14.7	85.3	0.0		37.1	0.0	62.9		0.0	94.2	5.8		
08:30 Volume	0	0	0	0	13	129	0	142	6	0	19	25	0	118	5	123	290
Peak Factor																	0.859
High Int.	6:45:00 AM				08:30 AM				08:00 AM				08:30 AM				
Volume	0	0	0	0	13	129	0	142	18	0	22	40	0	118	5	123	
Peak Factor					0.826				0.725				0.835				
Peak Hour From 12:00 PM to 05:45 PM - Peak 1 of 1																	
Intersection	04:30 PM																
Volume	0	0	0	0	109	325	0	434	13	0	74	87	0	279	20	299	820
Percent	0.0	0.0	0.0		25.1	74.9	0.0		14.9	0.0	85.1		0.0	93.3	6.7		
05:15 Volume	0	0	0	0	26	89	0	115	4	0	15	19	0	85	9	94	228
Peak Factor																	0.899
High Int.					05:15 PM				05:00 PM				05:15 PM				
Volume	0	0	0	0	26	89	0	115	3	0	25	28	0	85	9	94	
Peak Factor					0.943				0.777				0.795				

DE TRAFFIC
<http://de-traffic.com>
HURLEY BLVD AT MALABAR RD
BREVARD COUNTY, FLORIDA

File Name : 03 Hurley at Malabar
Site Code : 00000003
Start Date : 1/26/2017
Page No : 3

Groups Printed- Commercial

Start Time	N/A Southbound				Malabar Rd Westbound				Hurley Blvd Northbound				Malabar Rd Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Factor	1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		
07:00 AM	0	0	0	0	0	4	0	4	0	0	0	0	0	2	0	2	6
07:15 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	1	1	2	4
07:30 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	2	0	2	4
07:45 AM	0	0	0	0	1	4	0	5	0	0	0	0	0	3	1	4	9
Total	0	0	0	0	1	12	0	13	0	0	0	0	0	8	2	10	23
08:00 AM	0	0	0	0	1	5	0	6	0	0	0	0	0	3	0	3	9
08:15 AM	0	0	0	0	0	5	0	5	0	0	0	0	0	2	1	3	8
08:30 AM	0	0	0	0	2	2	0	4	0	0	0	0	0	3	0	3	7
08:45 AM	0	0	0	0	1	3	0	4	0	0	0	0	0	2	1	3	7
Total	0	0	0	0	4	15	0	19	0	0	0	0	0	10	2	12	31
04:00 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	4	0	4	6
04:15 PM	0	0	0	0	1	4	0	5	0	0	0	0	0	2	1	3	8
04:30 PM	0	0	0	0	1	2	0	3	0	0	0	0	0	2	0	2	5
04:45 PM	0	0	0	0	0	4	0	4	0	0	0	0	0	3	1	4	8
Total	0	0	0	0	2	12	0	14	0	0	0	0	0	11	2	13	27
05:00 PM	0	0	0	0	1	5	0	6	0	0	0	0	0	2	0	2	8
05:15 PM	0	0	0	0	0	4	0	4	0	0	0	0	0	4	2	6	10
05:30 PM	0	0	0	0	0	3	0	3	0	0	0	0	0	2	1	3	6
05:45 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	2	0	2	4
Total	0	0	0	0	1	14	0	15	0	0	0	0	0	10	3	13	28
Grand Total	0	0	0	0	8	53	0	61	0	0	0	0	0	39	9	48	109
Apprch %	0.0	0.0	0.0		13.1	86.9	0.0		0.0	0.0	0.0		0.0	81.3	18.8		
Total %	0.0	0.0	0.0	0.0	7.3	48.6	0.0	56.0	0.0	0.0	0.0	0.0	0.0	35.8	8.3	44.0	

DE TRAFFIC
<http://de-traffic.com>
HURLEY BLVD AT MALABAR RD
BREVARD COUNTY, FLORIDA

File Name : 03 Hurley at Malabar
Site Code : 00000003
Start Date : 1/26/2017
Page No : 4

Groups Printed- Peds

Start Time	N/A Southbound					Malabar Rd Westbound					Hurley Blvd Northbound					Malabar Rd Eastbound					Int. Total	
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total		
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0			
07:45 AM	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	1
05:00 PM	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1	1		2
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1		1
Total	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	2	2		3
Grand Total	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	2	2		4
Apprch %	0.0	0.0	0.0	0.0		0.0	0.0	0.0	100.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0	100.0			
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.0	50.0		

DE TRAFFIC
<http://de-traffic.com>
 JUPITER BLVD AT MALABAR RD
 BREVARD COUNTY, FLORIDA

File Name : 08 Jupiter at Malabar
 Site Code : 00000008
 Start Date : 1/26/2017
 Page No : 1

Groups Printed- Automobiles - Commercial

Start Time	Jupiter Blvd Southbound				Malabar Rd Westbound				Jupiter Blvd Northbound				Malabar Rd Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Factor	1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		
07:00 AM	47	24	7	78	12	34	4	50	5	32	16	53	16	83	13	112	293
07:15 AM	68	48	5	121	19	48	12	79	13	25	8	46	17	106	17	140	386
07:30 AM	77	63	7	147	20	52	18	90	9	34	16	59	16	93	23	132	428
07:45 AM	55	46	19	120	29	47	29	105	23	54	16	93	19	103	14	136	454
Total	247	181	38	466	80	181	63	324	50	145	56	251	68	385	67	520	1561
08:00 AM	56	51	12	119	8	82	22	112	27	53	19	99	11	80	11	102	432
08:15 AM	66	19	22	107	5	82	13	100	46	28	16	90	13	114	18	145	442
08:30 AM	55	13	15	83	11	80	11	102	34	44	12	90	15	115	12	142	417
08:45 AM	43	15	17	75	11	42	13	66	25	27	14	66	17	100	14	131	338
Total	220	98	66	384	35	286	59	380	132	152	61	345	56	409	55	520	1629
04:00 PM	48	37	21	106	15	65	43	123	29	36	18	83	16	49	20	85	397
04:15 PM	26	26	19	71	9	57	51	117	32	30	8	70	13	55	13	81	339
04:30 PM	45	30	12	87	10	84	57	151	31	33	16	80	20	47	22	89	407
04:45 PM	41	30	19	90	10	58	58	126	25	35	11	71	19	64	9	92	379
Total	160	123	71	354	44	264	209	517	117	134	53	304	68	215	64	347	1522
05:00 PM	36	41	20	97	13	85	72	170	23	33	2	58	22	44	21	87	412
05:15 PM	60	42	17	119	13	81	71	165	31	40	11	82	19	53	29	101	467
05:30 PM	42	52	13	107	11	67	58	136	29	42	12	83	11	50	20	81	407
05:45 PM	54	42	14	110	14	58	51	123	32	24	11	67	13	52	12	77	377
Total	192	177	64	433	51	291	252	594	115	139	36	290	65	199	82	346	1663
Grand Total	819	579	239	1637	210	1022	583	1815	414	570	206	1190	257	1208	268	1733	6375
Apprch %	50.0	35.4	14.6		11.6	56.3	32.1		34.8	47.9	17.3		14.8	69.7	15.5		
Total %	12.8	9.1	3.7	25.7	3.3	16.0	9.1	28.5	6.5	8.9	3.2	18.7	4.0	18.9	4.2	27.2	

DE TRAFFIC
<http://de-traffic.com>
JUPITER BLVD AT MALABAR RD
BREVARD COUNTY, FLORIDA

File Name : 08 Jupiter at Malabar
 Site Code : 00000008
 Start Date : 1/26/2017
 Page No : 2

Start Time	Jupiter Blvd Southbound				Malabar Rd Westbound				Jupiter Blvd Northbound				Malabar Rd Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour From 07:00 AM to 11:45 AM - Peak 1 of 1																	
Intersection	07:30 AM																
Volume	254	179	60	493	62	263	82	407	105	169	67	341	59	390	66	515	1756
Percent	51.5	36.3	12.2		15.2	64.6	20.1		30.8	49.6	19.6		11.5	75.7	12.8		
07:45 Volume	55	46	19	120	29	47	29	105	23	54	16	93	19	103	14	136	454
Peak Factor																	0.967
High Int.	07:30 AM				08:00 AM				08:00 AM				08:15 AM				
Volume	77	63	7	147	8	82	22	112	27	53	19	99	13	114	18	145	
Peak Factor	0.838								0.861				0.888				
Peak Hour From 12:00 PM to 05:45 PM - Peak 1 of 1																	
Intersection	04:30 PM																
Volume	182	143	68	393	46	308	258	612	110	141	40	291	80	208	81	369	1665
Percent	46.3	36.4	17.3		7.5	50.3	42.2		37.8	48.5	13.7		21.7	56.4	22.0		
05:15 Volume	60	42	17	119	13	81	71	165	31	40	11	82	19	53	29	101	467
Peak Factor																	0.891
High Int.	05:15 PM				05:00 PM				05:15 PM				05:15 PM				
Volume	60	42	17	119	13	85	72	170	31	40	11	82	19	53	29	101	
Peak Factor	0.826				0.900				0.887				0.913				

DE TRAFFIC
<http://de-traffic.com>
 JUPITER BLVD AT MALABAR RD
 BREVARD COUNTY, FLORIDA

File Name : 08 Jupiter at Malabar
 Site Code : 00000008
 Start Date : 1/26/2017
 Page No : 3

Groups Printed- Commercial

Start Time Factor	Jupiter Blvd Southbound				Malabar Rd Westbound				Jupiter Blvd Northbound				Malabar Rd Eastbound				Int. Total
	Left 1.0	Thru 1.0	Right 1.0	App. Total	Left 1.0	Thru 1.0	Right 1.0	App. Total	Left 1.0	Thru 1.0	Right 1.0	App. Total	Left 1.0	Thru 1.0	Right 1.0	App. Total	
07:00 AM	3	1	0	4	0	5	0	5	1	3	0	4	0	2	1	3	16
07:15 AM	1	0	0	1	0	2	0	2	3	1	1	5	1	5	0	6	14
07:30 AM	0	1	0	1	1	1	0	2	1	2	0	3	1	4	3	8	14
07:45 AM	2	2	0	4	1	4	0	5	2	4	1	7	4	6	1	11	27
Total	6	4	0	10	2	12	0	14	7	10	2	19	6	17	5	28	71
08:00 AM	2	1	1	4	0	1	0	1	3	3	1	7	0	2	0	2	14
08:15 AM	1	1	6	8	1	6	0	7	5	2	0	7	0	4	1	5	27
08:30 AM	1	1	0	2	0	2	0	2	2	2	1	5	0	2	1	3	12
08:45 AM	1	2	1	4	1	1	0	2	1	3	1	5	1	1	1	3	14
Total	5	5	8	18	2	10	0	12	11	10	3	24	1	9	3	13	67
04:00 PM	0	0	2	2	0	2	0	2	2	3	1	6	0	2	1	3	13
04:15 PM	0	0	4	4	0	1	3	4	4	3	0	7	0	2	0	2	17
04:30 PM	1	1	1	3	1	5	3	9	2	3	0	5	1	4	3	8	25
04:45 PM	1	3	4	8	1	2	1	4	3	2	3	8	0	1	0	1	21
Total	2	4	11	17	2	10	7	19	11	11	4	26	1	9	4	14	76
05:00 PM	2	1	1	4	0	4	1	5	0	0	0	0	0	1	4	5	14
05:15 PM	1	0	1	2	1	5	3	9	1	1	1	3	0	1	1	2	16
05:30 PM	1	0	2	3	0	4	1	5	0	1	1	2	0	1	1	2	12
05:45 PM	2	0	1	3	1	2	0	3	1	0	1	2	0	1	1	2	10
Total	6	1	5	12	2	15	5	22	2	2	3	7	0	4	7	11	52
Grand Total	19	14	24	57	8	47	12	67	31	33	12	76	8	39	19	66	266
Apprch %	33.3	24.6	42.1		11.9	70.1	17.9		40.8	43.4	15.8		12.1	59.1	28.8		
Total %	7.1	5.3	9.0	21.4	3.0	17.7	4.5	25.2	11.7	12.4	4.5	28.6	3.0	14.7	7.1	24.8	

DE TRAFFIC
<http://de-traffic.com>
 JUPITER BLVD AT MALABAR RD
 BREVARD COUNTY, FLORIDA

File Name : 08 Jupiter at Malabar
 Site Code : 00000008
 Start Date : 1/26/2017
 Page No : 4

Groups Printed- Peds

Start Time	Jupiter Blvd Southbound					Malabar Rd Westbound					Jupiter Blvd Northbound					Malabar Rd Eastbound					Int. Total	
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total		
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0			
07:15 AM	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	3
07:30 AM	0	0	0	2	2	0	0	0	1	1	0	0	0	1	1	0	0	0	0	0	0	4
Total	0	0	0	3	3	0	0	0	1	1	0	0	0	1	1	0	0	0	0	2	2	7
08:15 AM	0	0	0	0	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0	0	4
Total	0	0	0	0	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0	0	4
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	3	
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	
04:30 PM	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	3	
04:45 PM	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	2	
Total	0	0	0	2	2	0	0	0	2	2	0	0	0	0	0	0	0	0	5	5	9	
05:15 PM	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1	
Total	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1	
Grand Total	0	0	0	5	5	0	0	0	8	8	0	0	0	1	1	0	0	0	7	7	21	
Apprch %	0.0	0.0	0.0	100.0		0.0	0.0	0.0	100.0		0.0	0.0	0.0	100.0		0.0	0.0	0.0	100.0			
Total %	0.0	0.0	0.0	23.8	23.8	0.0	0.0	0.0	38.1	38.1	0.0	0.0	0.0	4.8	4.8	0.0	0.0	0.0	33.3	33.3		

DE TRAFFIC
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 GARVEY RD AT MALABAR RD
 BREVARD COUNTY, FLORIDA

File Name : 11 Garvey at Malabar
 Site Code : 00000003
 Start Date : 1/26/2017
 Page No : 1

Groups Printed- Automobiles - Commercial

Start Time	N/A Southbound				Malabar Rd Westbound				Garvey Rd Northbound				Malabar Rd Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Factor	1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		
07:00 AM	0	0	0	0	4	55	0	59	2	0	9	11	0	136	10	146	216
07:15 AM	0	0	0	0	6	83	0	89	2	0	11	13	0	156	9	165	267
07:30 AM	0	0	0	0	6	81	0	87	3	0	12	15	0	179	9	188	290
07:45 AM	0	0	0	0	9	107	0	116	2	0	10	12	0	184	9	193	321
Total	0	0	0	0	25	326	0	351	9	0	42	51	0	655	37	692	1094
08:00 AM	0	0	0	0	8	119	0	127	2	0	11	13	0	156	13	169	309
08:15 AM	0	0	0	0	8	106	0	114	2	0	14	16	0	178	9	187	317
08:30 AM	0	0	0	0	9	119	0	128	4	0	15	19	0	185	10	195	342
08:45 AM	0	0	0	0	8	93	0	101	5	0	15	20	0	165	9	174	295
Total	0	0	0	0	33	437	0	470	13	0	55	68	0	684	41	725	1263
04:00 PM	0	0	0	0	12	118	0	130	4	0	11	15	0	105	6	111	256
04:15 PM	0	0	0	0	11	109	0	120	2	0	15	17	0	100	2	102	239
04:30 PM	0	0	0	0	16	154	0	170	2	0	16	18	0	113	5	118	306
04:45 PM	0	0	0	0	14	136	0	150	1	0	11	12	0	109	1	110	272
Total	0	0	0	0	53	517	0	570	9	0	53	62	0	427	14	441	1073
05:00 PM	0	0	0	0	12	155	0	167	1	0	14	15	0	92	7	99	281
05:15 PM	0	0	0	0	15	136	0	151	4	0	10	14	0	116	8	124	289
05:30 PM	0	0	0	0	20	119	0	139	2	0	10	12	0	107	7	114	265
05:45 PM	0	0	0	0	11	131	0	142	2	0	9	11	0	108	4	112	265
Total	0	0	0	0	58	541	0	599	9	0	43	52	0	423	26	449	1100
Grand Total	0	0	0	0	169	1821	0	1990	40	0	193	233	0	2189	118	2307	4530
Apprch %	0.0	0.0	0.0		8.5	91.5	0.0		17.2	0.0	82.8		0.0	94.9	5.1		
Total %	0.0	0.0	0.0	0.0	3.7	40.2	0.0	43.9	0.9	0.0	4.3	5.1	0.0	48.3	2.6	50.9	

DE TRAFFIC
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 GARVEY RD AT MALABAR RD
 BREVARD COUNTY, FLORIDA

File Name : 11 Garvey at Malabar
 Site Code : 00000003
 Start Date : 1/26/2017
 Page No : 2

Start Time	N/A Southbound				Malabar Rd Westbound				Garvey Rd Northbound				Malabar Rd Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour From 07:00 AM to 11:45 AM - Peak 1 of 1																	
Intersection	07:45 AM																
Volume	0	0	0	0	34	451	0	485	10	0	50	60	0	703	41	744	1289
Percent	0.0	0.0	0.0		7.0	93.0	0.0		16.7	0.0	83.3		0.0	94.5	5.5		
08:30 Volume	0	0	0	0	9	119	0	128	4	0	15	19	0	185	10	195	342
Peak Factor																	0.942
High Int.	6:45:00 AM				08:30 AM				08:30 AM				08:30 AM				
Volume	0	0	0	0	9	119	0	128	4	0	15	19	0	185	10	195	
Peak Factor					0.947				0.789				0.954				
Peak Hour From 12:00 PM to 05:45 PM - Peak 1 of 1																	
Intersection	04:30 PM																
Volume	0	0	0	0	57	581	0	638	8	0	51	59	0	430	21	451	1148
Percent	0.0	0.0	0.0		8.9	91.1	0.0		13.6	0.0	86.4		0.0	95.3	4.7		
04:30 Volume	0	0	0	0	16	154	0	170	2	0	16	18	0	113	5	118	306
Peak Factor																	0.938
High Int.					04:30 PM				04:30 PM				05:15 PM				
Volume	0	0	0	0	16	154	0	170	2	0	16	18	0	116	8	124	
Peak Factor					0.938				0.819				0.909				

DE TRAFFIC
<http://de-traffic.com>
 GARVEY RD AT MALABAR RD
 BREVARD COUNTY, FLORIDA

File Name : 11 Garvey at Malabar
 Site Code : 00000003
 Start Date : 1/26/2017
 Page No : 3

Groups Printed- Commercial

Start Time Factor	N/A Southbound				Malabar Rd Westbound				Garvey Rd Northbound				Malabar Rd Eastbound				Int. Total
	Left 1.0	Thru 1.0	Right 1.0	App. Total	Left 1.0	Thru 1.0	Right 1.0	App. Total	Left 1.0	Thru 1.0	Right 1.0	App. Total	Left 1.0	Thru 1.0	Right 1.0	App. Total	
07:00 AM	0	0	0	0	0	4	0	4	0	0	0	0	0	2	1	3	7
07:15 AM	0	0	0	0	1	2	0	3	0	0	0	0	0	4	1	5	8
07:30 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	4	0	4	6
07:45 AM	0	0	0	0	0	4	0	4	0	0	0	0	0	3	1	4	8
Total	0	0	0	0	1	12	0	13	0	0	0	0	0	13	3	16	29
08:00 AM	0	0	0	0	0	5	0	5	0	0	0	0	0	2	2	4	9
08:15 AM	0	0	0	0	1	5	0	6	0	0	0	0	0	2	1	3	9
08:30 AM	0	0	0	0	1	5	0	6	0	0	0	0	0	4	1	5	11
08:45 AM	0	0	0	0	1	4	0	5	0	0	0	0	0	2	1	3	8
Total	0	0	0	0	3	19	0	22	0	0	0	0	0	10	5	15	37
04:00 PM	0	0	0	0	1	3	0	4	0	0	0	0	0	4	1	5	9
04:15 PM	0	0	0	0	1	3	0	4	0	0	0	0	0	2	1	3	7
04:30 PM	0	0	0	0	1	2	0	3	0	0	0	0	0	2	0	2	5
04:45 PM	0	0	0	0	1	2	0	3	0	0	0	0	0	3	1	4	7
Total	0	0	0	0	4	10	0	14	0	0	0	0	0	11	3	14	28
05:00 PM	0	0	0	0	1	3	0	4	0	0	0	0	0	3	2	5	9
05:15 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	2	1	3	5
05:30 PM	0	0	0	0	1	2	0	3	0	0	0	0	0	4	1	5	8
05:45 PM	0	0	0	0	0	4	0	4	0	0	0	0	0	2	0	2	6
Total	0	0	0	0	2	11	0	13	0	0	0	0	0	11	4	15	28
Grand Total	0	0	0	0	10	52	0	62	0	0	0	0	0	45	15	60	122
Apprch %	0.0	0.0	0.0		16.1	83.9	0.0		0.0	0.0	0.0		0.0	75.0	25.0		
Total %	0.0	0.0	0.0	0.0	8.2	42.6	0.0	50.8	0.0	0.0	0.0	0.0	0.0	36.9	12.3	49.2	

DE TRAFFIC
<http://de-traffic.com>
 GARVEY RD AT MALABAR RD
 BREVARD COUNTY, FLORIDA

File Name : 11 Garvey at Malabar
 Site Code : 00000003
 Start Date : 1/26/2017
 Page No : 4

Groups Printed- Peds

Start Time	N/A Southbound					Malabar Rd Westbound					Garvey Rd Northbound					Malabar Rd Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
08:15 AM	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
08:45 AM	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	2	2	4
04:30 PM	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1	1	2
Total	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1	1	2
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
05:15 PM	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1	1	2
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
Total	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	3	3	4
Grand Total	0	0	0	0	0	0	0	0	4	4	0	0	0	0	0	0	0	0	6	6	10
Apprch %	0.0	0.0	0.0	0.0		0.0	0.0	0.0	100.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0	100.0		
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	40.0	40.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	60.0	

DE TRAFFIC
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MINTON RD AT MALABAR RD
BREVARD COUNTY, FLORIDA

File Name : 12 Minton at Malabar
Site Code : 00000012
Start Date : 1/25/2017
Page No : 1

Groups Printed- Automobiles - Commercial

Start Time	Minton Rd Southbound				Malabar Rd Westbound				Minton Rd Northbound				Malabar Rd Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Factor	1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		
07:00 AM	15	52	11	78	19	49	15	83	10	142	41	193	34	100	11	145	499
07:15 AM	19	73	15	107	24	53	18	95	9	136	35	180	41	124	16	181	563
07:30 AM	21	88	14	123	19	54	18	91	8	175	41	224	52	116	16	184	622
07:45 AM	20	79	11	110	19	56	12	87	12	144	53	209	54	99	19	172	578
Total	75	292	51	418	81	212	63	356	39	597	170	806	181	439	62	682	2262
08:00 AM	23	83	16	122	20	57	13	90	16	136	43	195	51	85	19	155	562
08:15 AM	35	82	20	137	24	45	14	83	16	141	41	198	57	119	18	194	612
08:30 AM	41	76	22	139	22	58	19	99	11	134	16	161	50	115	16	181	580
08:45 AM	34	85	17	136	19	46	12	77	14	153	24	191	38	107	15	160	564
Total	133	326	75	534	85	206	58	349	57	564	124	745	196	426	68	690	2318
04:00 PM	19	125	41	185	42	56	20	118	16	46	11	73	19	95	12	126	502
04:15 PM	25	154	52	231	53	48	22	123	13	64	16	93	22	78	16	116	563
04:30 PM	26	185	42	253	43	85	20	148	16	82	20	118	20	80	18	118	637
04:45 PM	25	175	52	252	53	80	22	155	14	79	20	113	25	87	20	132	652
Total	95	639	187	921	191	269	84	544	59	271	67	397	86	340	66	492	2354
05:00 PM	27	144	54	225	35	83	20	138	19	82	22	123	43	81	22	146	632
05:15 PM	34	136	64	234	42	80	43	165	20	81	18	119	34	86	19	139	657
05:30 PM	42	125	52	219	35	87	30	152	14	69	21	104	42	94	20	156	631
05:45 PM	35	134	42	211	24	82	34	140	11	58	16	85	31	80	15	126	562
Total	138	539	212	889	136	332	127	595	64	290	77	431	150	341	76	567	2482
Grand Total	441	1796	525	2762	493	1019	332	1844	219	1722	438	2379	613	1546	272	2431	9416
Apprch %	16.0	65.0	19.0		26.7	55.3	18.0		9.2	72.4	18.4		25.2	63.6	11.2		
Total %	4.7	19.1	5.6	29.3	5.2	10.8	3.5	19.6	2.3	18.3	4.7	25.3	6.5	16.4	2.9	25.8	

DE TRAFFIC
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MINTON RD AT MALABAR RD
BREVARD COUNTY, FLORIDA

File Name : 12 Minton at Malabar
Site Code : 00000012
Start Date : 1/25/2017
Page No : 2

Start Time	Minton Rd Southbound				Malabar Rd Westbound				Minton Rd Northbound				Malabar Rd Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour From 07:00 AM to 11:45 AM - Peak 1 of 1																	
Intersection	07:30 AM																
Volume	99	332	61	492	82	212	57	351	52	596	178	826	214	419	72	705	2374
Percent	20.1	67.5	12.4		23.4	60.4	16.2		6.3	72.2	21.5		30.4	59.4	10.2		
07:30 Volume	21	88	14	123	19	54	18	91	8	175	41	224	52	116	16	184	622
Peak Factor																	0.954
High Int.	08:15 AM				07:30 AM				07:30 AM				08:15 AM				
Volume	35	82	20	137	19	54	18	91	8	175	41	224	57	119	18	194	
Peak Factor	0.898								0.964				0.922				0.909
Peak Hour From 12:00 PM to 05:45 PM - Peak 1 of 1																	
Intersection	04:30 PM																
Volume	112	640	212	964	173	328	105	606	69	324	80	473	122	334	79	535	2578
Percent	11.6	66.4	22.0		28.5	54.1	17.3		14.6	68.5	16.9		22.8	62.4	14.8		
05:15 Volume	34	136	64	234	42	80	43	165	20	81	18	119	34	86	19	139	657
Peak Factor																	0.981
High Int.	04:30 PM				05:15 PM				05:00 PM				05:00 PM				
Volume	26	185	42	253	42	80	43	165	19	82	22	123	43	81	22	146	
Peak Factor	0.953								0.918				0.961				0.916

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MINTON RD AT MALABAR RD
BREVARD COUNTY, FLORIDA

File Name : 12 Minton at Malabar
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Page No : 3

Groups Printed- Commercial

Start Time Factor	Minton Rd Southbound				Malabar Rd Westbound				Minton Rd Northbound				Malabar Rd Eastbound				Int. Total
	Left 1.0	Thru 1.0	Right 1.0	App. Total	Left 1.0	Thru 1.0	Right 1.0	App. Total	Left 1.0	Thru 1.0	Right 1.0	App. Total	Left 1.0	Thru 1.0	Right 1.0	App. Total	
07:00 AM	0	1	0	1	0	4	0	4	0	1	0	1	0	4	0	4	10
07:15 AM	0	2	0	2	0	2	0	2	0	2	0	2	0	5	1	6	12
07:30 AM	0	0	1	1	0	2	0	2	0	0	0	0	0	2	0	2	5
07:45 AM	1	1	0	2	1	4	1	6	1	2	1	4	1	5	1	7	19
Total	1	4	1	6	1	12	1	14	1	5	1	7	1	16	2	19	46
08:00 AM	0	0	1	1	1	5	0	6	1	1	1	3	0	4	1	5	15
08:15 AM	0	1	1	2	1	2	1	4	0	0	0	0	0	2	1	3	9
08:30 AM	0	0	1	1	0	2	1	3	0	2	0	2	1	2	0	3	9
08:45 AM	0	1	0	1	0	2	0	2	1	2	0	3	0	4	2	6	12
Total	0	2	3	5	2	11	2	15	2	5	1	8	1	12	4	17	45
04:00 PM	0	1	0	1	0	4	1	5	1	1	0	2	0	4	0	4	12
04:15 PM	1	2	0	3	1	2	1	4	2	1	1	4	1	2	1	4	15
04:30 PM	0	1	0	1	1	1	1	3	1	1	1	3	1	2	0	3	10
04:45 PM	1	0	0	1	1	2	1	4	0	1	1	2	1	2	1	4	11
Total	2	4	0	6	3	9	4	16	4	4	3	11	3	10	2	15	48
05:00 PM	1	2	1	4	0	2	1	3	1	1	1	3	2	3	1	6	16
05:15 PM	0	1	1	2	0	4	2	6	1	2	0	3	0	2	1	3	14
05:30 PM	0	1	1	2	0	2	1	3	1	1	0	2	1	3	1	5	12
05:45 PM	0	2	0	2	0	1	0	1	0	0	0	0	0	4	2	6	9
Total	1	6	3	10	0	9	4	13	3	4	1	8	3	12	5	20	51
Grand Total	4	16	7	27	6	41	11	58	10	18	6	34	8	50	13	71	190
Apprch %	14.8	59.3	25.9		10.3	70.7	19.0		29.4	52.9	17.6		11.3	70.4	18.3		
Total %	2.1	8.4	3.7	14.2	3.2	21.6	5.8	30.5	5.3	9.5	3.2	17.9	4.2	26.3	6.8	37.4	

DE TRAFFIC
<http://de-traffic.com>
MINTON RD AT MALABAR RD
BREVARD COUNTY, FLORIDA

File Name : 12 Minton at Malabar
Site Code : 00000012
Start Date : 1/25/2017
Page No : 4

Groups Printed- Peds

Start Time	Minton Rd Southbound					Malabar Rd Westbound					Minton Rd Northbound					Malabar Rd Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
07:15 AM	0	0	0	1	1	0	0	0	0	0	0	0	0	1	1	0	0	0	1	1	
07:30 AM	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	
07:45 AM	0	0	0	1	1	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	
Total	0	0	0	2	2	0	0	0	1	1	0	0	0	2	2	0	0	0	1	1	
08:00 AM	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1	1	
Total	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1	1	
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	1	1	
04:45 PM	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	
Total	0	0	0	0	0	0	0	0	1	1	0	0	0	1	1	0	0	0	3	3	
05:00 PM	0	0	0	1	1	0	0	0	0	0	0	0	0	1	1	0	0	0	1	1	
05:15 PM	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1	1	
05:30 PM	0	0	0	1	1	0	0	0	2	2	0	0	0	1	1	0	0	0	0	0	
Total	0	0	0	2	2	0	0	0	3	3	0	0	0	2	2	0	0	0	2	2	
Grand Total	0	0	0	4	4	0	0	0	6	6	0	0	0	5	5	0	0	0	7	7	22
Apprch %	0.0	0.0	0.0	100.0		0.0	0.0	0.0	100.0		0.0	0.0	0.0	100.0		0.0	0.0	0.0	100.0		
Total %	0.0	0.0	0.0	18.2	18.2	0.0	0.0	0.0	27.3	27.3	0.0	0.0	0.0	22.7	22.7	0.0	0.0	0.0	31.8	31.8	



EB Approach



SB Approach



WB Approach



John Heritage Pkwy
At Malabar Rd

Brevard County

www.de-traffic.com

299 McGregor Rd. DeLand FL. 32720

Project
Number: L17-006

Sheet
Number: 1



SB Approach



EB Approach



WB Approach



Wisteria Rd
At Malabar Rd

Brevard County

www.de-traffic.com

299 McGregor Rd. DeLand FL. 32720

Project
Number: L17-006

Sheet
Number: 2



NB Approach



EB Approach



WB Approach



Hurley Blvd
At Malabar Rd

Brevard County

www.de-traffic.com

299 McGregor Rd. DeLand FL. 32720

Project
Number: L17-006

Sheet
Number: 3



NB Approach



SB Approach



EB Approach



WB Approach



Jupiter Blvd
At Malabar Rd

Brevard County

www.de-traffic.com

299 McGregor Rd. DeLand FL. 32720

Project
Number: L17-006

Sheet
Number: 4



NB Approach



EB Approach



WB Approach



Garvey Rd
At Malabar Rd

Brevard County

www.de-traffic.com

299 McGregor Rd. DeLand FL. 32720

Project
Number: L17-006

Sheet
Number: 5



NB Approach



SB Approach



EB Approach



WB Approach



Minton Rd
At Malabar Rd

Brevard County

www.de-traffic.com

299 McGregor Rd. DeLand FL. 32720

Project
Number: L17-006

Sheet
Number: 6

DE TRAFFIC
VOLUME SUMMARY
Thu 1/26/2017

Machine #: Site 1
Site ID: Site 1
Description: Malabar Rd west of Bending Branch Ln

File: H.prn
Street Name: Malabar Rd
County: Brevard

TIME	1 EAST	2 WEST	Total
01:00	17	21	38
02:00	21	7	28
03:00	4	5	9
04:00	6	14	20
05:00	3	6	9
06:00	30	52	82
07:00	94	62	156
08:00	205	144	349
09:00	298	398	696
10:00	139	120	259
11:00	109	107	216
12:00	151	110	261
13:00	101	79	180
14:00	120	132	252
15:00	140	150	290
16:00	318	190	508
17:00	196	183	379
18:00	206	162	368
19:00	117	116	233
20:00	70	61	131
21:00	52	44	96
22:00	46	40	86
23:00	32	23	55
24:00	22	19	41
DAY TOTAL	2497	2245	4742
PERCENTS	52.7%	47.3%	100%
AM Times	08:15	08:00	
AM Peaks	298	418	
PM Times	15:45	15:15	
PM Peaks	347	190	

DE TRAFFIC
VOLUME SUMMARY
Thu 1/26/2017

Machine #: Site 1
Site ID: Site 1
Description: Malabar Rd west of Bending Branch Ln

File: H.prn
Street Name: Malabar Rd
County: Brevard

TIME	1 EAST	2 WEST	Total
00:15	4	5	9
00:30	7	6	13
00:45	3	6	9
01:00	3	4	7
Hour Total	17	21	38
01:15	4	4	8
01:30	5	0	5
01:45	10	2	12
02:00	2	1	3
Hour Total	21	7	28
02:15	0	1	1
02:30	1	2	3
02:45	1	2	3
03:00	2	0	2
Hour Total	4	5	9
03:15	5	1	6
03:30	0	10	10
03:45	1	1	2
04:00	0	2	2
Hour Total	6	14	20
04:15	0	3	3
04:30	1	1	2
04:45	1	1	2
05:00	1	1	2
Hour Total	3	6	9
05:15	2	13	15
05:30	1	11	12
05:45	11	15	26
06:00	16	13	29
Hour Total	30	52	82
06:15	15	15	30
06:30	11	11	22
06:45	26	14	40
07:00	42	22	64
Hour Total	94	62	156
07:15	34	19	53
07:30	51	35	86
07:45	69	29	98
08:00	51	61	112
Hour Total	205	144	349
08:15	46	79	125
08:30	75	141	216
08:45	105	137	242

DE TRAFFIC
VOLUME SUMMARY
Thu 1/26/2017

Machine #: Site 1
Site ID: Site 1
Description: Malabar Rd west of Bending Branch Ln

File: H.prn
Street Name: Malabar Rd
County: Brevard

TIME	1 EAST	2 WEST	Total
09:00	72	41	113
Hour Total	298	398	696
09:15	41	25	66
09:30	27	41	68
09:45	43	25	68
10:00	28	29	57
Hour Total	139	120	259
10:15	29	22	51
10:30	31	26	57
10:45	27	28	55
11:00	22	31	53
Hour Total	109	107	216
11:15	28	34	62
11:30	41	28	69
11:45	41	29	70
12:00	41	19	60
Hour Total	151	110	261
12:15	37	18	55
12:30	23	21	44
12:45	19	19	38
13:00	22	21	43
Hour Total	101	79	180
13:15	27	26	53
13:30	26	31	57
13:45	26	34	60
14:00	41	41	82
Hour Total	120	132	252
14:15	31	34	65
14:30	31	41	72
14:45	41	34	75
15:00	37	41	78
Hour Total	140	150	290
15:15	41	57	98
15:30	34	41	75
15:45	119	41	160
16:00	124	51	175
Hour Total	318	190	508
16:15	61	47	108
16:30	43	48	91
16:45	51	42	93
17:00	41	46	87
Hour Total	196	183	379

DE TRAFFIC
VOLUME SUMMARY
Thu 1/26/2017

Machine #: Site 1
Site ID: Site 1
Description: Malabar Rd west of Bending Branch Ln

File: H.prn
Street Name: Malabar Rd
County: Brevard

TIME	1 EAST	2 WEST	Total
17:15	49	38	87
17:30	63	41	104
17:45	52	41	93
18:00	42	42	84
Hour Total	206	162	368
18:15	32	32	64
18:30	29	26	55
18:45	32	32	64
19:00	24	26	50
Hour Total	117	116	233
19:15	19	16	35
19:30	21	18	39
19:45	19	11	30
20:00	11	16	27
Hour Total	70	61	131
20:15	15	13	28
20:30	14	9	23
20:45	10	13	23
21:00	13	9	22
Hour Total	52	44	96
21:15	6	8	14
21:30	13	10	23
21:45	17	13	30
22:00	10	9	19
Hour Total	46	40	86
22:15	6	8	14
22:30	14	9	23
22:45	4	4	8
23:00	8	2	10
Hour Total	32	23	55
23:15	5	2	7
23:30	11	9	20
23:45	4	5	9
24:00	2	3	5
Hour Total	22	19	41
DAY TOTAL	2497	2245	4742
PERCENTS	52.7%	47.3%	100%
AM Times	08:15	08:00	
AM Peaks	298	418	
PM Times	15:45	15:15	
PM Peaks	347	190	

DE TRAFFIC
<http://de-traffic.com>
 BENDING BRANCH LN AT MALABAR RD
 BREVARD COUNTY, FLORIDA

File Name : 09 Bending Branch at Malabar
 Site Code : 00000009
 Start Date : 1/26/2017
 Page No : 1

Groups Printed- Automobiles - Commercial

Start Time	Bending Branch Ln Southbound				Malabar Rd Westbound				Bending Branch Ln Northbound				Malabar Rd Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Factor	1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		
07:00 AM	28	0	1	29	4	20	4	28	1	1	22	24	1	49	0	50	131
07:15 AM	38	0	4	42	9	31	5	45	0	0	20	20	2	54	4	60	167
07:30 AM	42	0	0	42	5	28	7	40	0	0	24	24	2	68	0	70	176
07:45 AM	17	0	1	18	5	55	13	73	1	0	29	30	5	44	1	50	171
Total	125	0	6	131	23	134	29	186	2	1	95	98	10	215	5	230	645
08:00 AM	20	0	2	22	10	80	15	105	1	1	20	22	7	40	2	49	198
08:15 AM	23	0	9	32	7	122	6	135	7	0	19	26	2	67	7	76	269
08:30 AM	22	0	6	28	8	126	9	143	6	0	13	19	5	97	2	104	294
08:45 AM	27	0	0	27	6	38	13	57	3	0	15	18	2	66	3	71	173
Total	92	0	17	109	31	366	43	440	17	1	67	85	16	270	14	300	934
09:00 AM	21	0	1	22	8	20	8	36	1	0	10	11	0	32	1	33	102
09:15 AM	17	0	1	18	4	32	21	57	0	0	10	10	1	23	1	25	110
09:30 AM	23	0	1	24	7	17	12	36	0	0	7	7	1	38	3	42	109
09:45 AM	19	0	0	19	3	27	11	41	0	0	5	5	0	32	1	33	98
Total	80	0	3	83	22	96	52	170	1	0	32	33	2	125	6	133	419
10:00 AM	17	0	0	17	8	19	10	37	1	0	8	9	0	26	1	27	90
10:15 AM	13	0	1	14	4	26	10	40	0	0	7	7	0	28	0	28	89
10:30 AM	12	0	0	12	10	28	11	49	0	0	9	9	2	33	1	36	106
10:45 AM	16	0	1	17	3	23	10	36	1	0	6	7	1	24	1	26	86
Total	58	0	2	60	25	96	41	162	2	0	30	32	3	111	3	117	371
11:00 AM	21	0	1	22	2	35	15	52	0	0	6	6	0	28	0	28	108
11:15 AM	11	0	0	11	6	24	8	38	0	0	4	4	0	40	2	42	95
11:30 AM	20	0	0	20	5	28	11	44	1	0	8	9	0	52	5	57	130
11:45 AM	13	0	1	14	3	12	5	20	1	0	3	4	0	36	1	37	75
Total	65	0	2	67	16	99	39	154	2	0	21	23	0	156	8	164	408
12:00 PM	11	0	0	11	4	12	11	27	1	0	4	5	0	44	2	46	89
12:15 PM	15	0	1	16	6	16	14	36	0	0	3	3	0	18	2	20	75
12:30 PM	17	0	1	18	6	21	13	40	0	0	4	4	1	20	2	23	85
12:45 PM	13	0	1	14	2	17	11	30	0	0	2	2	1	16	2	19	65
Total	56	0	3	59	18	66	49	133	1	0	13	14	2	98	8	108	314
01:00 PM	16	0	1	17	6	26	14	46	0	0	7	7	0	24	2	26	96
01:15 PM	22	1	1	24	7	28	16	51	0	1	4	5	1	29	1	31	111
01:30 PM	17	0	0	17	12	34	14	60	1	0	10	11	0	25	1	26	114
01:45 PM	10	0	0	10	9	30	12	51	0	1	7	8	1	43	1	45	114
Total	65	1	2	68	34	118	56	208	1	2	28	31	2	121	5	128	435

DE TRAFFIC
<http://de-traffic.com>
 BENDING BRANCH LN AT MALABAR RD
 BREVARD COUNTY, FLORIDA

File Name : 09 Bending Branch at Malabar
 Site Code : 00000009
 Start Date : 1/26/2017
 Page No : 2

Groups Printed- Automobiles - Commercial

Start Time	Bending Branch Ln Southbound				Malabar Rd Westbound				Bending Branch Ln Northbound				Malabar Rd Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Factor	1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		
02:00 PM	11	0	0	11	11	36	22	69	0	1	6	7	0	27	0	27	114
02:15 PM	11	0	0	11	6	23	10	39	1	0	8	9	0	28	1	29	88
02:30 PM	8	0	0	8	6	27	16	49	2	0	7	9	0	31	2	33	99
02:45 PM	21	0	1	22	9	30	16	55	0	0	5	5	3	34	0	37	119
Total	51	0	1	52	32	116	64	212	3	1	26	30	3	120	3	126	420
03:00 PM	16	0	4	20	16	50	24	90	2	0	5	7	1	31	3	35	152
03:15 PM	15	1	3	19	10	52	16	78	1	0	11	12	3	37	1	41	150
03:30 PM	13	0	0	13	15	45	23	83	1	0	7	8	6	118	6	130	234
03:45 PM	18	0	3	21	10	48	26	84	2	0	5	7	10	106	1	117	229
Total	62	1	10	73	51	195	89	335	6	0	28	34	20	292	11	323	765
04:00 PM	15	0	0	15	16	44	21	81	0	0	5	5	2	54	1	57	158
04:15 PM	13	0	1	14	13	45	34	92	1	0	9	10	2	45	0	47	163
04:30 PM	25	0	2	27	23	40	28	91	0	0	8	8	1	42	0	43	169
04:45 PM	19	0	4	23	24	43	32	99	1	0	5	6	1	37	2	40	168
Total	72	0	7	79	76	172	115	363	2	0	27	29	6	178	3	187	658
05:00 PM	17	0	3	20	24	34	31	89	0	0	8	8	5	43	3	51	168
05:15 PM	18	0	4	22	21	41	29	91	1	0	4	5	4	55	1	60	178
05:30 PM	11	0	5	16	34	32	32	98	0	0	6	6	5	45	1	51	171
05:45 PM	13	0	2	15	27	30	24	81	1	0	6	7	6	36	3	45	148
Total	59	0	14	73	106	137	116	359	2	0	24	26	20	179	8	207	665
06:00 PM	11	0	4	15	21	23	24	68	3	0	6	9	9	26	0	35	127
06:15 PM	9	0	5	14	19	32	19	70	3	0	8	11	5	26	2	33	128
06:30 PM	10	0	4	14	12	22	32	66	1	0	9	10	6	29	1	36	126
06:45 PM	10	0	2	12	19	19	22	60	1	0	6	7	2	25	1	28	107
Total	40	0	15	55	71	96	97	264	8	0	29	37	22	106	4	132	488
Grand Total	825	2	82	909	505	1691	790	2986	47	5	420	472	106	1971	78	2155	6522
Apprch %	90.8	0.2	9.0		16.9	56.6	26.5		10.0	1.1	89.0		4.9	91.5	3.6		
Total %	12.6	0.0	1.3	13.9	7.7	25.9	12.1	45.8	0.7	0.1	6.4	7.2	1.6	30.2	1.2	33.0	

DE TRAFFIC
<http://de-traffic.com>
BENDING BRANCH LN AT MALABAR RD
BREVARD COUNTY, FLORIDA

File Name : 09 Bending Branch at Malabar
 Site Code : 00000009
 Start Date : 1/26/2017
 Page No : 3

Start Time	Bending Branch Ln Southbound				Malabar Rd Westbound				Bending Branch Ln Northbound				Malabar Rd Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour From 07:00 AM to 09:45 AM - Peak 1 of 1																	
Intersection	08:00 AM																
Volume	92	0	17	109	31	366	43	440	17	1	67	85	16	270	14	300	934
Percent	84.4	0.0	15.6		7.0	83.2	9.8		20.0	1.2	78.8		5.3	90.0	4.7		
08:30 Volume	22	0	6	28	8	126	9	143	6	0	13	19	5	97	2	104	294
Peak Factor																	0.794
High Int.	08:15 AM				08:30 AM				08:15 AM				08:30 AM				
Volume	23	0	9	32	8	126	9	143	7	0	19	26	5	97	2	104	
Peak Factor	0.852				0.769				0.817				0.721				
Peak Hour From 10:00 AM to 01:45 PM - Peak 1 of 1																	
Intersection	01:00 PM																
Volume	65	1	2	68	34	118	56	208	1	2	28	31	2	121	5	128	435
Percent	95.6	1.5	2.9		16.3	56.7	26.9		3.2	6.5	90.3		1.6	94.5	3.9		
01:45 Volume	10	0	0	10	9	30	12	51	0	1	7	8	1	43	1	45	114
Peak Factor																	0.954
High Int.	01:15 PM				01:30 PM				01:30 PM				01:45 PM				
Volume	22	1	1	24	12	34	14	60	1	0	10	11	1	43	1	45	
Peak Factor	0.708				0.867				0.705				0.711				
Peak Hour From 02:00 PM to 06:45 PM - Peak 1 of 1																	
Intersection	03:30 PM																
Volume	59	0	4	63	54	182	104	340	4	0	26	30	20	323	8	351	784
Percent	93.7	0.0	6.3		15.9	53.5	30.6		13.3	0.0	86.7		5.7	92.0	2.3		
03:30 Volume	13	0	0	13	15	45	23	83	1	0	7	8	6	118	6	130	234
Peak Factor																	0.838
High Int.	03:45 PM				04:15 PM				04:15 PM				03:30 PM				
Volume	18	0	3	21	13	45	34	92	1	0	9	10	6	118	6	130	
Peak Factor	0.750				0.924				0.750				0.675				

DE TRAFFIC
<http://de-traffic.com>
 BENDING BRANCH LN AT MALABAR RD
 BREVARD COUNTY, FLORIDA

File Name : 09 Bending Branch at Malabar
 Site Code : 00000009
 Start Date : 1/26/2017
 Page No : 4

Groups Printed- Commercial

Start Time Factor	Bending Branch Ln Southbound				Malabar Rd Westbound				Bending Branch Ln Northbound				Malabar Rd Eastbound				Int. Total
	Left 1.0	Thru 1.0	Right 1.0	App. Total	Left 1.0	Thru 1.0	Right 1.0	App. Total	Left 1.0	Thru 1.0	Right 1.0	App. Total	Left 1.0	Thru 1.0	Right 1.0	App. Total	
07:00 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2	3
07:15 AM	1	0	1	2	0	1	0	1	0	0	1	1	0	2	1	3	7
07:30 AM	0	0	0	0	1	0	0	1	0	0	0	0	0	2	0	2	3
07:45 AM	1	0	1	2	0	2	0	2	0	0	1	1	1	2	1	4	9
Total	2	0	2	4	1	4	0	5	0	0	2	2	1	8	2	11	22
08:00 AM	0	0	1	1	1	1	0	2	0	0	1	1	0	4	1	5	9
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
08:30 AM	1	0	0	1	0	2	0	2	0	0	0	0	0	1	0	1	4
08:45 AM	0	0	0	0	0	1	0	1	1	0	1	2	0	2	0	2	5
Total	1	0	1	2	1	4	0	5	1	0	2	3	0	9	1	10	20
09:00 AM	1	0	0	1	0	0	0	0	0	0	0	0	0	1	0	1	2
09:15 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	2	0	2	4
09:30 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
09:45 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	2	0	2	4
Total	1	0	0	1	0	5	0	5	0	0	0	0	0	5	0	5	11
10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
10:15 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
10:30 AM	0	0	0	0	1	3	0	4	0	0	0	0	0	2	1	3	7
10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	3	3
Total	0	0	0	0	1	4	0	5	0	0	0	0	0	5	2	7	12
11:00 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1	3
11:15 AM	0	0	0	0	0	3	0	3	0	0	0	0	0	0	0	0	3
11:30 AM	1	0	0	1	0	2	0	2	0	0	0	0	0	2	2	4	7
11:45 AM	0	0	1	1	0	2	0	2	0	0	0	0	0	1	0	1	4
Total	1	0	1	2	0	9	0	9	0	0	0	0	0	4	2	6	17
12:00 PM	0	0	0	0	0	1	0	1	1	0	0	1	0	2	0	2	4
12:15 PM	0	0	0	0	1	0	0	1	0	0	1	1	0	2	0	2	4
12:30 PM	1	0	0	1	0	2	0	2	0	0	0	0	0	2	0	2	5
12:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
Total	1	0	0	1	1	4	0	5	1	0	1	2	0	6	0	6	14
01:00 PM	0	0	0	0	1	2	0	3	0	0	0	0	0	2	0	2	5
01:15 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	3	0	3	4
01:30 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	2	0	2	4
01:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2	3
Total	0	0	0	0	1	5	0	6	0	1	0	1	0	9	0	9	16

DE TRAFFIC
<http://de-traffic.com>
 BENDING BRANCH LN AT MALABAR RD
 BREVARD COUNTY, FLORIDA

File Name : 09 Bending Branch at Malabar
 Site Code : 00000009
 Start Date : 1/26/2017
 Page No : 5

Groups Printed- Commercial

Start Time Factor	Bending Branch Ln Southbound				Malabar Rd Westbound				Bending Branch Ln Northbound				Malabar Rd Eastbound				Int. Total
	Left 1.0	Thru 1.0	Right 1.0	App. Total	Left 1.0	Thru 1.0	Right 1.0	App. Total	Left 1.0	Thru 1.0	Right 1.0	App. Total	Left 1.0	Thru 1.0	Right 1.0	App. Total	
02:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
02:15 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	2	1	3	4
02:30 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
02:45 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	2	0	2	3
Total	0	0	0	0	0	2	0	2	0	0	1	1	0	6	1	7	10
03:00 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2	3
03:15 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	3	0	3	5
03:30 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2	3
03:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
Total	0	0	0	0	0	4	0	4	0	0	0	0	0	9	0	9	13
04:00 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
04:15 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
04:45 PM	0	0	0	0	0	1	0	1	0	0	1	1	0	2	1	3	5
Total	0	0	0	0	0	3	0	3	0	0	1	1	0	6	1	7	11
05:00 PM	1	0	1	2	0	0	0	0	0	0	0	0	0	2	1	3	5
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	3
05:30 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	2	0	2	3
05:45 PM	0	0	0	0	1	1	0	2	0	0	1	1	0	1	1	2	5
Total	1	0	1	2	1	1	0	2	0	0	2	2	0	8	2	10	16
06:00 PM	1	0	1	2	0	0	0	0	1	0	0	1	0	2	0	2	5
06:15 PM	0	0	0	0	1	1	0	2	1	0	0	1	1	2	1	4	7
06:30 PM	1	0	0	1	1	1	0	2	0	0	1	1	1	3	0	4	8
06:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	3	3
Total	2	0	1	3	2	2	0	4	2	0	1	3	2	9	2	13	23
Grand Total	9	0	6	15	8	47	0	55	4	1	10	15	3	84	13	100	185
Apprch %	60.0	0.0	40.0		14.5	85.5	0.0		26.7	6.7	66.7		3.0	84.0	13.0		
Total %	4.9	0.0	3.2	8.1	4.3	25.4	0.0	29.7	2.2	0.5	5.4	8.1	1.6	45.4	7.0	54.1	

DE TRAFFIC
<http://de-traffic.com>
 BENDING BRANCH LN AT MALABAR RD
 BREVARD COUNTY, FLORIDA

File Name : 09 Bending Branch at Malabar
 Site Code : 00000009
 Start Date : 1/26/2017
 Page No : 6

Groups Printed- Peds

Start Time	Bending Branch Ln Southbound					Malabar Rd Westbound					Bending Branch Ln Northbound					Malabar Rd Eastbound					Int. Total	
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total		
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0			
07:30 AM	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	0	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	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1
12:15 PM	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	1
05:45 PM	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	1
06:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1
06:15 PM	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	1
06:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1
Total	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	2	2	2	3
Grand Total	0	0	0	0	0	0	0	0	4	4	0	0	0	0	0	0	0	0	3	3	3	7
Apprch %	0.0	0.0	0.0	0.0		0.0	0.0	0.0	100.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0	100.0			
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	57.1	57.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	42.9	42.9		



NB Approach



SB Approach



EB Approach



WB Approach



Jupiter Blvd
At Malabar Rd

Brevard County

www.de-traffic.com

299 McGregor Rd. DeLand FL. 32720

Project
Number: L17-006

Sheet
Number: 4



NB Approach



SB Approach



EB Approach



WB Approach



Minton Rd
At Malabar Rd

Brevard County

www.de-traffic.com

299 McGregor Rd. DeLand FL. 32720

Project
Number: L17-006

Sheet
Number: 6



NB Approach



SB Approach



EB Approach



WB Approach



Bending Branch Ln
At Malabar Rd

Brevard County

www.de-traffic.com

299 McGregor Rd. DeLand FL. 32720

Project
Number: L17-007

Sheet
Number: 1

APPENDIX C

2018 Turning Movement Counts

DE TRAFFIC

http:de-traffic.com

St. Johns Heritage Pkwy at Malabar Rd
Brevard County, FL

File Name : sjh at malabar
Site Code : 00000001
Start Date : 8/16/2018
Page No : 1

Groups Printed- Automobiles - Commercial

Start Time	St. Johns Heritage Pkwy Southbound				Malabar Rd Westbound				N/A Northbound				Malabar Rd Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Factor	1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		
07:00 AM	11	0	5	16	0	8	110	118	0	0	0	0	5	9	0	14	148
07:15 AM	14	0	10	24	0	21	115	136	0	0	0	0	2	8	0	10	170
07:30 AM	9	0	15	24	0	21	106	127	0	0	0	0	3	6	0	9	160
07:45 AM	20	0	22	42	0	35	81	116	0	0	0	0	7	8	0	15	173
Total	54	0	52	106	0	85	412	497	0	0	0	0	17	31	0	48	651
08:00 AM	21	0	31	52	0	67	72	139	0	0	0	0	17	28	0	45	236
08:15 AM	22	0	76	98	0	117	44	161	0	0	0	0	34	68	0	102	361
08:30 AM	22	0	52	74	0	128	47	175	0	0	0	0	54	104	0	158	407
08:45 AM	17	0	8	25	0	12	28	40	0	0	0	0	9	25	0	34	99
Total	82	0	167	249	0	324	191	515	0	0	0	0	114	225	0	339	1103
09:00 AM	18	0	4	22	0	6	28	34	0	0	0	0	2	10	0	12	68
09:15 AM	11	0	16	27	0	7	30	37	0	0	0	0	5	6	0	11	75
09:30 AM	14	0	6	20	0	13	24	37	0	0	0	0	5	12	0	17	74
09:45 AM	12	0	6	18	0	9	25	34	0	0	0	0	4	3	0	7	59
Total	55	0	32	87	0	35	107	142	0	0	0	0	16	31	0	47	276
10:00 AM	8	0	2	10	0	8	15	23	0	0	0	0	4	6	0	10	43
10:15 AM	13	0	8	21	0	10	22	32	0	0	0	0	4	13	0	17	70
10:30 AM	12	0	1	13	0	5	19	24	0	0	0	0	2	9	0	11	48
10:45 AM	9	0	5	14	0	10	19	29	0	0	0	0	1	3	0	4	47
Total	42	0	16	58	0	33	75	108	0	0	0	0	11	31	0	42	208
11:00 AM	16	0	7	23	0	33	19	52	0	0	0	0	7	13	0	20	95

DE TRAFFIC

http:de-traffic.com

St. Johns Heritage Pkwy at Malabar Rd
Brevard County, FL

File Name : sjh at malabar
Site Code : 00000001
Start Date : 8/16/2018
Page No : 2

Groups Printed- Automobiles - Commercial

Start Time	St. Johns Heritage Pkwy Southbound				Malabar Rd Westbound				N/A Northbound				Malabar Rd Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Factor	1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		
11:15 AM	23	0	9	32	0	8	14	22	0	0	0	0	4	12	0	16	70
11:30 AM	12	0	3	15	0	9	24	33	0	0	0	0	3	8	0	11	59
11:45 AM	13	0	4	17	0	10	16	26	0	0	0	0	3	2	0	5	48
Total	64	0	23	87	0	60	73	133	0	0	0	0	17	35	0	52	272
12:00 PM	18	0	1	19	0	6	19	25	0	0	0	0	2	5	0	7	51
12:15 PM	18	0	0	18	0	7	20	27	0	0	0	0	2	5	0	7	52
12:30 PM	22	0	5	27	0	9	17	26	0	0	0	0	5	4	0	9	62
12:45 PM	20	0	3	23	0	6	18	24	0	0	0	0	4	2	0	6	53
Total	78	0	9	87	0	28	74	102	0	0	0	0	13	16	0	29	218
01:00 PM	17	0	2	19	0	1	20	21	0	0	0	0	2	1	0	3	43
01:15 PM	24	0	6	30	0	8	13	21	0	0	0	0	2	1	0	3	54
01:30 PM	24	0	4	28	0	9	18	27	0	0	0	0	4	8	0	12	67
01:45 PM	31	0	6	37	0	7	16	23	0	0	0	0	10	7	0	17	77
Total	96	0	18	114	0	25	67	92	0	0	0	0	18	17	0	35	241
02:00 PM	20	0	1	21	0	7	21	28	0	0	0	0	8	20	0	28	77
02:15 PM	28	0	1	29	0	7	17	24	0	0	0	0	3	11	0	14	67
02:30 PM	17	0	4	21	0	10	20	30	0	0	0	0	3	8	0	11	62
02:45 PM	32	0	10	42	0	9	20	29	0	0	0	0	3	8	0	11	82
Total	97	0	16	113	0	33	78	111	0	0	0	0	17	47	0	64	288
03:00 PM	28	0	18	46	0	38	16	54	0	0	0	0	11	7	0	18	118
03:15 PM	33	0	29	62	0	61	17	78	0	0	0	0	5	13	0	18	158
03:30 PM	35	0	17	52	0	26	30	56	0	0	0	0	70	141	0	211	319
03:45 PM	66	0	10	76	0	12	31	43	0	0	0	0	67	105	0	172	291
Total	162	0	74	236	0	137	94	231	0	0	0	0	153	266	0	419	886

DE TRAFFIC

http:de-traffic.com
 St. Johns Heritage Pkwy at Malabar Rd
 Brevard County, FL

File Name : sjh at malabar
 Site Code : 00000001
 Start Date : 8/16/2018
 Page No : 3

Groups Printed- Automobiles - Commercial

Start Time	St. Johns Heritage Pkwy Southbound				Malabar Rd Westbound				N/A Northbound				Malabar Rd Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Factor	1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		
04:00 PM	73	0	5	78	0	8	33	41	0	0	0	0	23	18	0	41	160
04:15 PM	90	0	9	99	0	16	22	38	0	0	0	0	10	18	0	28	165
04:30 PM	64	0	6	70	0	6	21	27	0	0	0	0	11	16	0	27	124
04:45 PM	87	0	16	103	0	19	17	36	0	0	0	0	11	22	0	33	172
Total	314	0	36	350	0	49	93	142	0	0	0	0	55	74	0	129	621
05:00 PM	66	0	12	78	0	15	10	25	0	0	0	0	10	19	0	29	132
05:15 PM	46	0	9	55	0	17	9	26	0	0	0	0	10	19	0	29	110
05:30 PM	55	0	12	67	0	20	8	28	0	0	0	0	8	24	0	32	127
05:45 PM	43	0	15	58	0	13	7	20	0	0	0	0	12	19	0	31	109
Total	210	0	48	258	0	65	34	99	0	0	0	0	40	81	0	121	478
06:00 PM	43	0	15	58	0	15	12	27	0	0	0	0	10	19	0	29	114
06:15 PM	36	0	12	48	0	17	8	25	0	0	0	0	9	12	0	21	94
06:30 PM	42	0	10	52	0	13	7	20	0	0	0	0	9	13	0	22	94
06:45 PM	25	0	8	33	0	11	9	20	0	0	0	0	7	9	0	16	69
Total	146	0	45	191	0	56	36	92	0	0	0	0	35	53	0	88	371
Grand Total	1400	0	536	1936	0	930	1334	2264	0	0	0	0	506	907	0	1413	5613
Apprch %	72.3	0	27.7		0	41.1	58.9		0	0	0		35.8	64.2	0		
Total %	24.9	0	9.5	34.5	0	16.6	23.8	40.3	0	0	0	0	9	16.2	0	25.2	
Automobiles	1340	0	486	1826	0	845	1286	2131	0	0	0	0	462	839	0	1301	5258
% Automobiles	95.7	0	90.7	94.3	0	90.9	96.4	94.1	0	0	0	0	91.3	92.5	0	92.1	93.7
Commercial	60	0	50	110	0	85	48	133	0	0	0	0	44	68	0	112	355
% Commercial	4.3	0	9.3	5.7	0	9.1	3.6	5.9	0	0	0	0	8.7	7.5	0	7.9	6.3

DE TRAFFIC

http:de-traffic.com
 St. Johns Heritage Pkwy at Malabar Rd
 Brevard County, FL

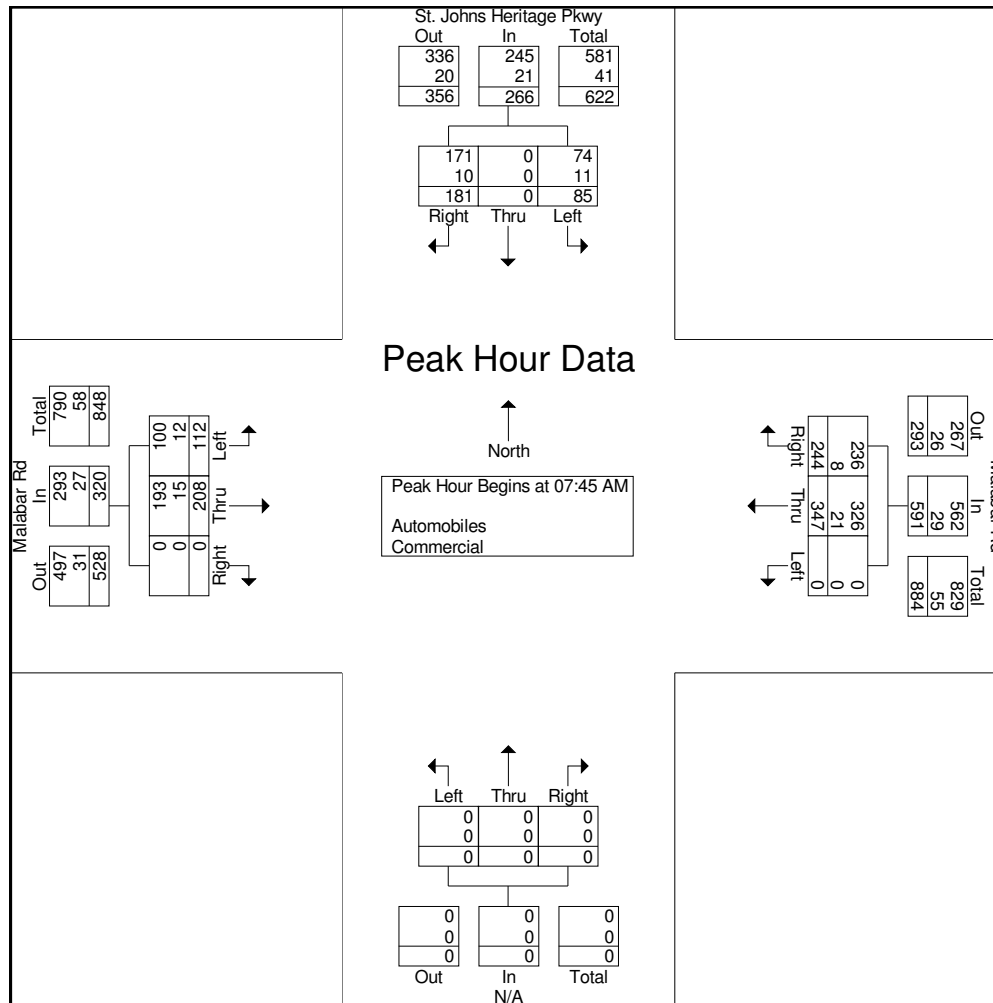
File Name : sjh at malabar
 Site Code : 00000001
 Start Date : 8/16/2018
 Page No : 4

Start Time	St. Johns Heritage Pkwy Southbound				Malabar Rd Westbound				N/A Northbound				Malabar Rd Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	20	0	22	42	0	35	81	116	0	0	0	0	7	8	0	15	173
08:00 AM	21	0	31	52	0	67	72	139	0	0	0	0	17	28	0	45	236
08:15 AM	22	0	76	98	0	117	44	161	0	0	0	0	34	68	0	102	361
08:30 AM	22	0	52	74	0	128	47	175	0	0	0	0	54	104	0	158	407
Total Volume	85	0	181	266	0	347	244	591	0	0	0	0	112	208	0	320	1177
% App. Total	32	0	68		0	58.7	41.3		0	0	0		35	65	0		
PHF	.966	.000	.595	.679	.000	.678	.753	.844	.000	.000	.000	.000	.519	.500	.000	.506	.723
Automobiles	74	0	171	245	0	326	236	562	0	0	0	0	100	193	0	293	1100
% Automobiles	87.1	0	94.5	92.1	0	93.9	96.7	95.1	0	0	0	0	89.3	92.8	0	91.6	93.5
Commercial	11	0	10	21	0	21	8	29	0	0	0	0	12	15	0	27	77
% Commercial	12.9	0	5.5	7.9	0	6.1	3.3	4.9	0	0	0	0	10.7	7.2	0	8.4	6.5

DE TRAFFIC

http:de-traffic.com
 St. Johns Heritage Pkwy at Malabar Rd
 Brevard County, FL

File Name : sjh at malabar
 Site Code : 00000001
 Start Date : 8/16/2018
 Page No : 5



DE TRAFFIC

http:de-traffic.com
 St. Johns Heritage Pkwy at Malabar Rd
 Brevard County, FL

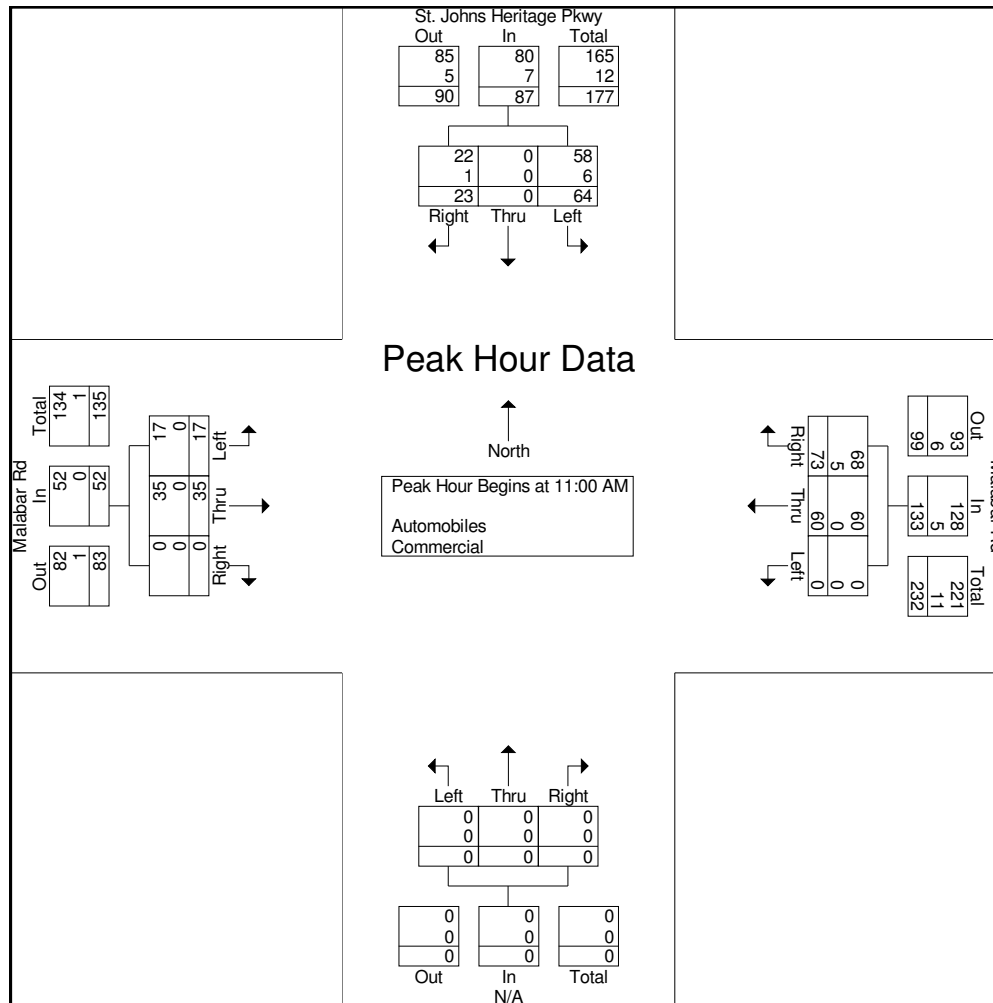
File Name : sjh at malabar
 Site Code : 00000001
 Start Date : 8/16/2018
 Page No : 6

Start Time	St. Johns Heritage Pkwy Southbound				Malabar Rd Westbound				N/A Northbound				Malabar Rd Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 10:00 AM to 01:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 11:00 AM																	
11:00 AM	16	0	7	23	0	33	19	52	0	0	0	0	7	13	0	20	95
11:15 AM	23	0	9	32	0	8	14	22	0	0	0	0	4	12	0	16	70
11:30 AM	12	0	3	15	0	9	24	33	0	0	0	0	3	8	0	11	59
11:45 AM	13	0	4	17	0	10	16	26	0	0	0	0	3	2	0	5	48
Total Volume	64	0	23	87	0	60	73	133	0	0	0	0	17	35	0	52	272
% App. Total	73.6	0	26.4		0	45.1	54.9		0	0	0		32.7	67.3	0		
PHF	.696	.000	.639	.680	.000	.455	.760	.639	.000	.000	.000	.000	.607	.673	.000	.650	.716
Automobiles	58	0	22	80	0	60	68	128	0	0	0	0	17	35	0	52	260
% Automobiles	90.6	0	95.7	92.0	0	100	93.2	96.2	0	0	0	0	100	100	0	100	95.6
Commercial	6	0	1	7	0	0	5	5	0	0	0	0	0	0	0	0	12
% Commercial	9.4	0	4.3	8.0	0	0	6.8	3.8	0	0	0	0	0	0	0	0	4.4

DE TRAFFIC

http:de-traffic.com
 St. Johns Heritage Pkwy at Malabar Rd
 Brevard County, FL

File Name : sjh at malabar
 Site Code : 00000001
 Start Date : 8/16/2018
 Page No : 7



DE TRAFFIC

http:de-traffic.com
 St. Johns Heritage Pkwy at Malabar Rd
 Brevard County, FL

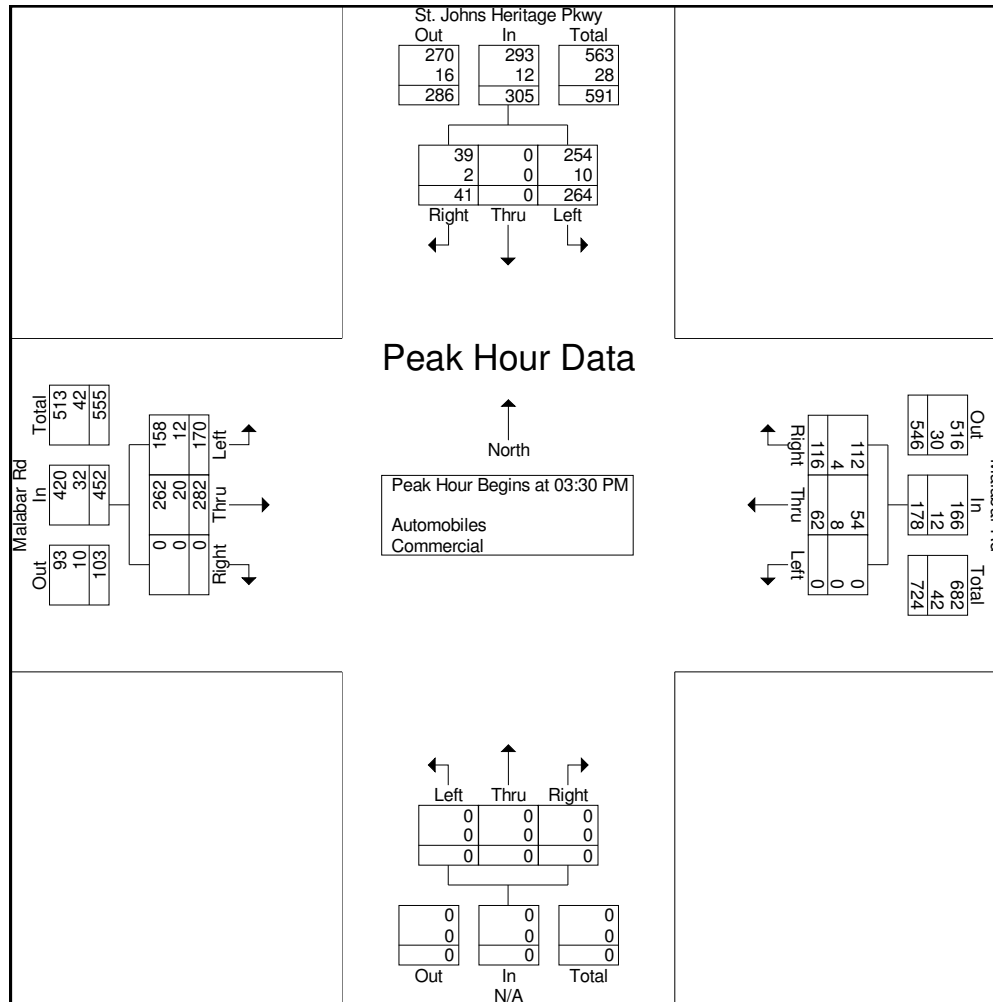
File Name : sjh at malabar
 Site Code : 00000001
 Start Date : 8/16/2018
 Page No : 8

Start Time	St. Johns Heritage Pkwy Southbound				Malabar Rd Westbound				N/A Northbound				Malabar Rd Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 02:00 PM to 06:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 03:30 PM																	
03:30 PM	35	0	17	52	0	26	30	56	0	0	0	0	70	141	0	211	319
03:45 PM	66	0	10	76	0	12	31	43	0	0	0	0	67	105	0	172	291
04:00 PM	73	0	5	78	0	8	33	41	0	0	0	0	23	18	0	41	160
04:15 PM	90	0	9	99	0	16	22	38	0	0	0	0	10	18	0	28	165
Total Volume	264	0	41	305	0	62	116	178	0	0	0	0	170	282	0	452	935
% App. Total	86.6	0	13.4		0	34.8	65.2		0	0	0		37.6	62.4	0		
PHF	.733	.000	.603	.770	.000	.596	.879	.795	.000	.000	.000	.000	.607	.500	.000	.536	.733
Automobiles	254	0	39	293	0	54	112	166	0	0	0	0	158	262	0	420	879
% Automobiles	96.2	0	95.1	96.1	0	87.1	96.6	93.3	0	0	0	0	92.9	92.9	0	92.9	94.0
Commercial	10	0	2	12	0	8	4	12	0	0	0	0	12	20	0	32	56
% Commercial	3.8	0	4.9	3.9	0	12.9	3.4	6.7	0	0	0	0	7.1	7.1	0	7.1	6.0

DE TRAFFIC

http:de-traffic.com
 St. Johns Heritage Pkwy at Malabar Rd
 Brevard County, FL

File Name : sjh at malabar
 Site Code : 00000001
 Start Date : 8/16/2018
 Page No : 9



DE TRAFFIC

http:de-traffic.com
Wisteria Ave at Malabar Rd
Brevard County, FL

File Name : Wisteria at Malabar
Site Code : 00000002
Start Date : 8/16/2018
Page No : 1

Groups Printed- Automobiles - Commercial

Start Time	Wisteria Ave Southbound				Malabar Rd Westbound				N/A Northbound				Malabar Rd Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Factor	1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		
07:00 AM	5	0	1	6	0	111	0	111	0	0	0	0	5	20	0	25	142
07:15 AM	5	0	5	10	0	124	1	125	0	0	0	0	1	29	0	30	165
07:30 AM	2	0	5	7	0	105	2	107	0	0	0	0	3	14	0	17	131
07:45 AM	5	0	5	10	0	117	2	119	0	0	0	0	3	30	0	33	162
Total	17	0	16	33	0	457	5	462	0	0	0	0	12	93	0	105	600
08:00 AM	7	0	6	13	0	148	2	150	0	0	0	0	4	50	0	54	217
08:15 AM	5	0	2	7	0	159	3	162	0	0	0	0	5	80	0	85	254
08:30 AM	8	0	3	11	0	172	5	177	0	0	0	0	1	125	0	126	314
08:45 AM	4	0	4	8	0	42	2	44	0	0	0	0	1	43	0	44	96
Total	24	0	15	39	0	521	12	533	0	0	0	0	11	298	0	309	881
09:00 AM	6	0	4	10	0	40	2	42	0	0	0	0	5	35	0	40	92
09:15 AM	8	0	2	10	0	45	3	48	0	0	0	0	4	17	0	21	79
09:30 AM	5	0	3	8	0	26	2	28	0	0	0	0	1	25	0	26	62
09:45 AM	8	0	1	9	0	30	3	33	0	0	0	0	1	18	0	19	61
Total	27	0	10	37	0	141	10	151	0	0	0	0	11	95	0	106	294
10:00 AM	4	0	5	9	0	39	1	40	0	0	0	0	5	16	0	21	70
10:15 AM	8	0	2	10	0	28	0	28	0	0	0	0	4	20	0	24	62
10:30 AM	4	0	2	6	0	26	1	27	0	0	0	0	1	25	0	26	59
10:45 AM	7	0	8	15	0	34	0	34	0	0	0	0	1	18	0	19	68
Total	23	0	17	40	0	127	2	129	0	0	0	0	11	79	0	90	259
11:00 AM	8	0	2	10	0	29	2	31	0	0	0	0	1	20	0	21	62

DE TRAFFIC

http:de-traffic.com
 Wisteria Ave at Malabar Rd
 Brevard County, FL

File Name : Wisteria at Malabar
 Site Code : 00000002
 Start Date : 8/16/2018
 Page No : 2

Groups Printed- Automobiles - Commercial

Start Time	Wisteria Ave Southbound				Malabar Rd Westbound				N/A Northbound				Malabar Rd Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Factor	1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		
11:15 AM	5	0	2	7	0	47	1	48	0	0	0	0	5	25	0	30	85
11:30 AM	4	0	8	12	0	34	1	35	0	0	0	0	2	35	0	37	84
11:45 AM	9	0	4	13	0	34	4	38	0	0	0	0	1	21	0	22	73
Total	26	0	16	42	0	144	8	152	0	0	0	0	9	101	0	110	304
12:00 PM	4	0	6	10	0	26	1	27	0	0	0	0	1	19	0	20	57
12:15 PM	5	0	8	13	0	27	1	28	0	0	0	0	2	22	0	24	65
12:30 PM	6	0	4	10	0	26	3	29	0	0	0	0	5	27	0	32	71
12:45 PM	5	0	1	6	0	24	2	26	0	0	0	0	1	30	0	31	63
Total	20	0	19	39	0	103	7	110	0	0	0	0	9	98	0	107	256
01:00 PM	8	0	1	9	0	26	1	27	0	0	0	0	2	27	0	29	65
01:15 PM	4	0	2	6	0	22	2	24	0	0	0	0	3	20	0	23	53
01:30 PM	6	0	1	7	0	26	3	29	0	0	0	0	2	23	0	25	61
01:45 PM	5	0	0	5	0	27	3	30	0	0	0	0	2	36	0	38	73
Total	23	0	4	27	0	101	9	110	0	0	0	0	9	106	0	115	252
02:00 PM	4	0	0	4	0	27	1	28	0	0	0	0	3	30	0	33	65
02:15 PM	4	0	2	6	0	29	1	30	0	0	0	0	2	36	0	38	74
02:30 PM	9	0	4	13	0	35	2	37	0	0	0	0	1	43	0	44	94
02:45 PM	4	0	1	5	0	34	3	37	0	0	0	0	5	35	0	40	82
Total	21	0	7	28	0	125	7	132	0	0	0	0	11	144	0	155	315
03:00 PM	5	0	2	7	0	37	2	39	0	0	0	0	1	31	0	32	78
03:15 PM	4	0	2	6	0	39	1	40	0	0	0	0	1	34	0	35	81
03:30 PM	6	0	3	9	0	66	3	69	0	0	0	0	2	58	0	60	138
03:45 PM	4	0	3	7	0	47	2	49	0	0	0	0	1	37	0	38	94
Total	19	0	10	29	0	189	8	197	0	0	0	0	5	160	0	165	391

DE TRAFFIC

http:de-traffic.com
Wisteria Ave at Malabar Rd
Brevard County, FL

File Name : Wisteria at Malabar
Site Code : 00000002
Start Date : 8/16/2018
Page No : 3

Groups Printed- Automobiles - Commercial

Start Time	Wisteria Ave Southbound				Malabar Rd Westbound				N/A Northbound				Malabar Rd Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Factor	1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		
04:00 PM	9	0	2	11	0	47	2	49	0	0	0	0	4	155	0	159	219
04:15 PM	4	0	4	8	0	39	1	40	0	0	0	0	1	168	0	169	217
04:30 PM	6	0	1	7	0	36	2	38	0	0	0	0	1	98	0	99	144
04:45 PM	6	0	2	8	0	37	1	38	0	0	0	0	2	116	0	118	164
Total	25	0	9	34	0	159	6	165	0	0	0	0	8	537	0	545	744
05:00 PM	7	0	1	8	0	35	1	36	0	0	0	0	3	99	0	102	146
05:15 PM	4	0	7	11	0	31	5	36	0	0	0	0	5	116	0	121	168
05:30 PM	5	0	2	7	0	28	3	31	0	0	0	0	1	84	0	85	123
05:45 PM	4	0	1	5	0	28	3	31	0	0	0	0	1	77	0	78	114
Total	20	0	11	31	0	122	12	134	0	0	0	0	10	376	0	386	551
06:00 PM	6	0	2	8	0	32	1	33	0	0	0	0	3	81	0	84	125
06:15 PM	6	0	1	7	0	20	1	21	0	0	0	0	1	76	0	77	105
06:30 PM	4	0	3	7	0	25	1	26	0	0	0	0	1	64	0	65	98
06:45 PM	4	0	1	5	0	18	2	20	0	0	0	0	2	35	0	37	62
Total	20	0	7	27	0	95	5	100	0	0	0	0	7	256	0	263	390
Grand Total	265	0	141	406	0	2284	91	2375	0	0	0	0	113	2343	0	2456	5237
Apprch %	65.3	0	34.7		0	96.2	3.8		0	0	0		4.6	95.4	0		
Total %	5.1	0	2.7	7.8	0	43.6	1.7	45.4	0	0	0	0	2.2	44.7	0	46.9	
Automobiles	249	0	130	379	0	2155	79	2234	0	0	0	0	101	2251	0	2352	4965
% Automobiles	94	0	92.2	93.3	0	94.4	86.8	94.1	0	0	0	0	89.4	96.1	0	95.8	94.8
Commercial	16	0	11	27	0	129	12	141	0	0	0	0	12	92	0	104	272
% Commercial	6	0	7.8	6.7	0	5.6	13.2	5.9	0	0	0	0	10.6	3.9	0	4.2	5.2

DE TRAFFIC

http:de-traffic.com
 Wisteria Ave at Malabar Rd
 Brevard County, FL

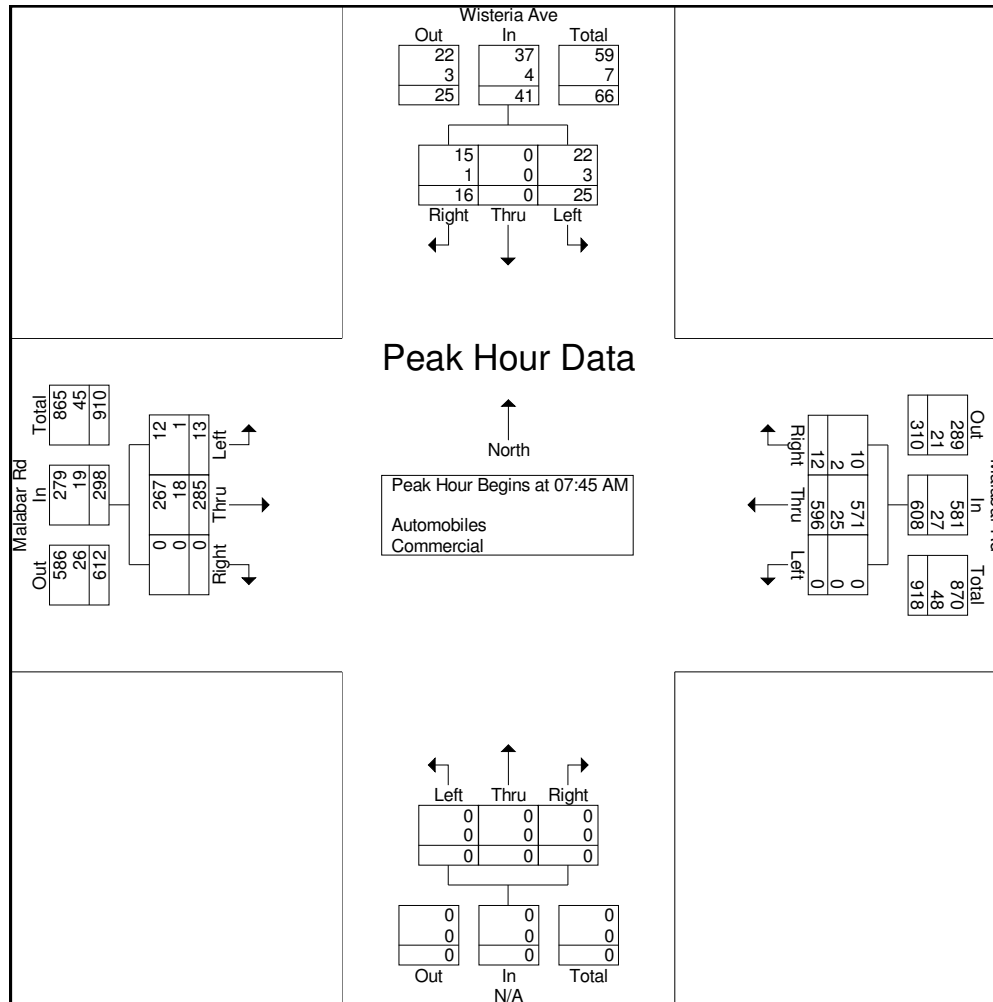
File Name : Wisteria at Malabar
 Site Code : 00000002
 Start Date : 8/16/2018
 Page No : 4

Start Time	Wisteria Ave Southbound				Malabar Rd Westbound				N/A Northbound				Malabar Rd Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	5	0	5	10	0	117	2	119	0	0	0	0	3	30	0	33	162
08:00 AM	7	0	6	13	0	148	2	150	0	0	0	0	4	50	0	54	217
08:15 AM	5	0	2	7	0	159	3	162	0	0	0	0	5	80	0	85	254
08:30 AM	8	0	3	11	0	172	5	177	0	0	0	0	1	125	0	126	314
Total Volume	25	0	16	41	0	596	12	608	0	0	0	0	13	285	0	298	947
% App. Total	61	0	39		0	98	2		0	0	0		4.4	95.6	0		
PHF	.781	.000	.667	.788	.000	.866	.600	.859	.000	.000	.000	.000	.650	.570	.000	.591	.754
Automobiles	22	0	15	37	0	571	10	581	0	0	0	0	12	267	0	279	897
% Automobiles	88.0	0	93.8	90.2	0	95.8	83.3	95.6	0	0	0	0	92.3	93.7	0	93.6	94.7
Commercial	3	0	1	4	0	25	2	27	0	0	0	0	1	18	0	19	50
% Commercial	12.0	0	6.3	9.8	0	4.2	16.7	4.4	0	0	0	0	7.7	6.3	0	6.4	5.3

DE TRAFFIC

http:de-traffic.com
 Wisteria Ave at Malabar Rd
 Brevard County, FL

File Name : Wisteria at Malabar
 Site Code : 00000002
 Start Date : 8/16/2018
 Page No : 5



DE TRAFFIC

http:de-traffic.com
 Wisteria Ave at Malabar Rd
 Brevard County, FL

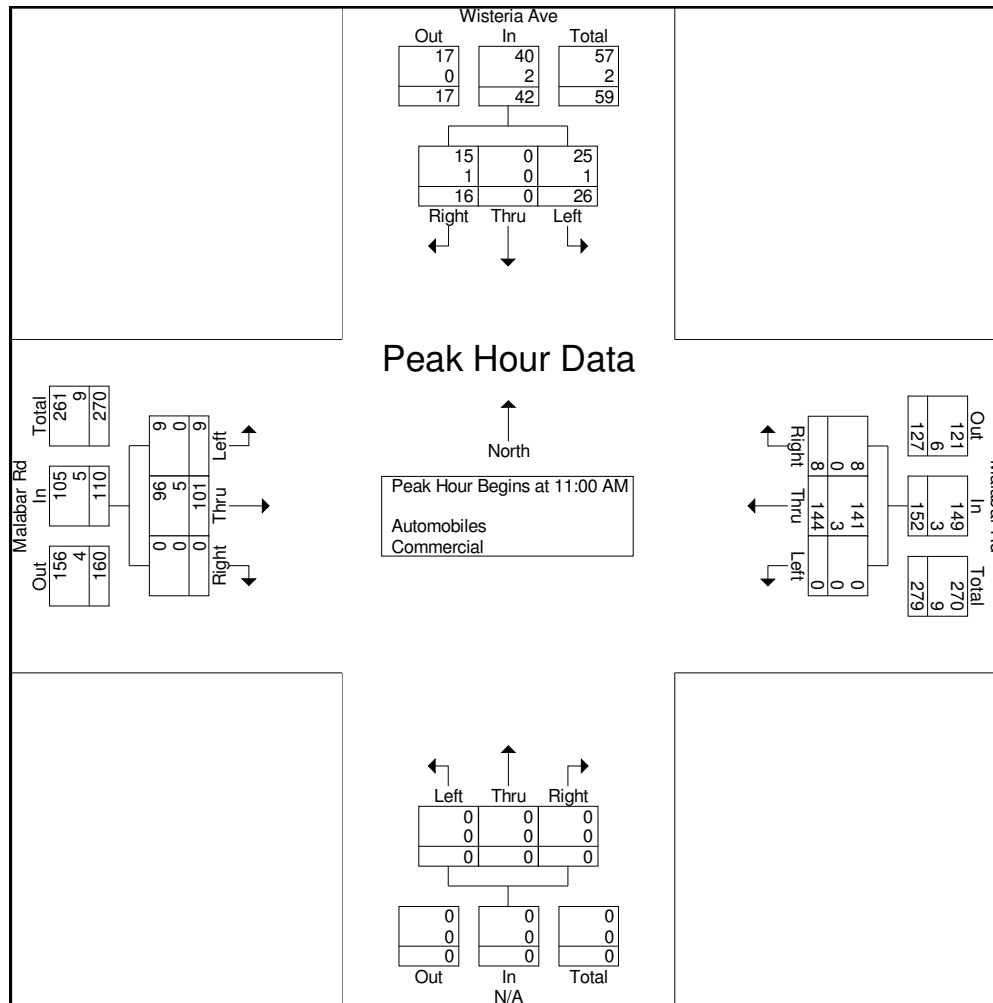
File Name : Wisteria at Malabar
 Site Code : 00000002
 Start Date : 8/16/2018
 Page No : 6

Start Time	Wisteria Ave Southbound				Malabar Rd Westbound				N/A Northbound				Malabar Rd Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 10:00 AM to 01:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 11:00 AM																	
11:00 AM	8	0	2	10	0	29	2	31	0	0	0	0	1	20	0	21	62
11:15 AM	5	0	2	7	0	47	1	48	0	0	0	0	5	25	0	30	85
11:30 AM	4	0	8	12	0	34	1	35	0	0	0	0	2	35	0	37	84
11:45 AM	9	0	4	13	0	34	4	38	0	0	0	0	1	21	0	22	73
Total Volume	26	0	16	42	0	144	8	152	0	0	0	0	9	101	0	110	304
% App. Total	61.9	0	38.1		0	94.7	5.3		0	0	0		8.2	91.8	0		
PHF	.722	.000	.500	.808	.000	.766	.500	.792	.000	.000	.000	.000	.450	.721	.000	.743	.894
Automobiles	25	0	15	40	0	141	8	149	0	0	0	0	9	96	0	105	294
% Automobiles	96.2	0	93.8	95.2	0	97.9	100	98.0	0	0	0	0	100	95.0	0	95.5	96.7
Commercial	1	0	1	2	0	3	0	3	0	0	0	0	0	5	0	5	10
% Commercial	3.8	0	6.3	4.8	0	2.1	0	2.0	0	0	0	0	0	5.0	0	4.5	3.3

DE TRAFFIC

http:de-traffic.com
 Wisteria Ave at Malabar Rd
 Brevard County, FL

File Name : Wisteria at Malabar
 Site Code : 00000002
 Start Date : 8/16/2018
 Page No : 7



DE TRAFFIC

http:de-traffic.com
 Wisteria Ave at Malabar Rd
 Brevard County, FL

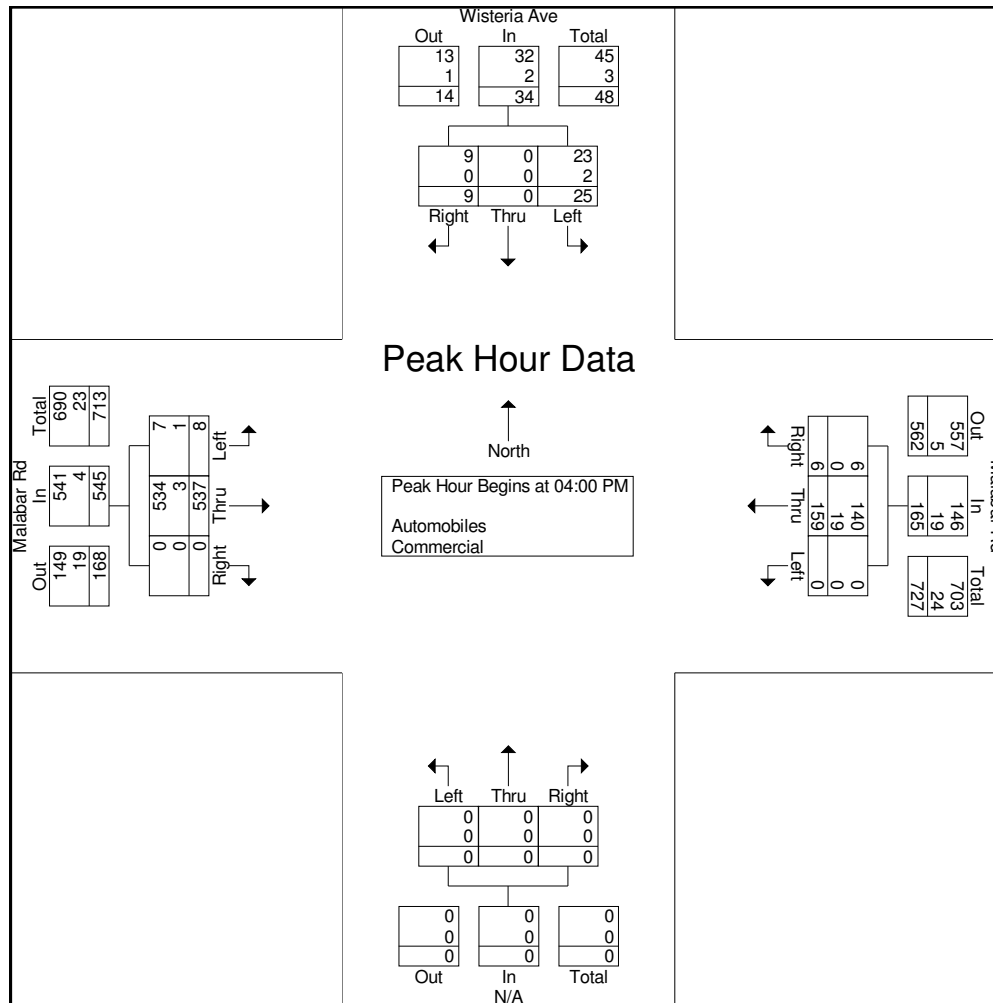
File Name : Wisteria at Malabar
 Site Code : 00000002
 Start Date : 8/16/2018
 Page No : 8

Start Time	Wisteria Ave Southbound				Malabar Rd Westbound				N/A Northbound				Malabar Rd Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 02:00 PM to 06:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	9	0	2	11	0	47	2	49	0	0	0	0	4	155	0	159	219
04:15 PM	4	0	4	8	0	39	1	40	0	0	0	0	1	168	0	169	217
04:30 PM	6	0	1	7	0	36	2	38	0	0	0	0	1	98	0	99	144
04:45 PM	6	0	2	8	0	37	1	38	0	0	0	0	2	116	0	118	164
Total Volume	25	0	9	34	0	159	6	165	0	0	0	0	8	537	0	545	744
% App. Total	73.5	0	26.5		0	96.4	3.6		0	0	0		1.5	98.5	0		
PHF	.694	.000	.563	.773	.000	.846	.750	.842	.000	.000	.000	.000	.500	.799	.000	.806	.849
Automobiles	23	0	9	32	0	140	6	146	0	0	0	0	7	534	0	541	719
% Automobiles	92.0	0	100	94.1	0	88.1	100	88.5	0	0	0	0	87.5	99.4	0	99.3	96.6
Commercial	2	0	0	2	0	19	0	19	0	0	0	0	1	3	0	4	25
% Commercial	8.0	0	0	5.9	0	11.9	0	11.5	0	0	0	0	12.5	0.6	0	0.7	3.4

DE TRAFFIC

http:de-traffic.com
 Wisteria Ave at Malabar Rd
 Brevard County, FL

File Name : Wisteria at Malabar
 Site Code : 00000002
 Start Date : 8/16/2018
 Page No : 9






EB Approach



SB Approach



WB Approach

	St. Johns Heritage Pkwy At Malabar Rd		Brevard County	
	www.de-traffic.com		Project Number: L18-052	Sheet Number: 1
	299 McGregor Rd. DeLand FL 32720			




SB Approach



EB Approach



WB Approach

	Wisteria Ave At Malabar Rd		Brevard County	
	www.de-traffic.com		Project Number: L18-052	Sheet Number: 1
	299 McGregor Rd. DeLand FL. 32720			

Machine #: SB
Site ID: 01
Location: St. Johns Heritage Pkwy SB to Malabar Rd

File: SJH Pkwy SB.prn
Street Name: St. Johns Heritage
County: Brevard

TIME	1 SOUTH	Total
01:00	4	4
02:00	4	4
03:00	0	0
04:00	3	3
05:00	12	12
06:00	24	24
07:00	34	34
08:00	104	104
09:00	232	232
10:00	72	72
11:00	54	54
12:00	80	80
13:00	90	90
14:00	110	110
15:00	111	111
16:00	214	214
17:00	327	327
18:00	268	268
19:00	208	208
20:00	109	109
21:00	82	82
22:00	66	66
23:00	44	44
24:00	18	18
DAY TOTAL	2270	2270
PERCENTS	100.0	100
AM Times	08:00	
AM Peaks	253	
PM Times	16:30	
PM Peaks	330	

Machine #: SB
Site ID: 01
Location: St. Johns Heritage Pkwy SB to Malabar Rd

File: SJH Pkwy SB.prn
Street Name: St. Johns Heritage
County: Brevard

TIME	1 SOUTH	Total
00:15	2	2
00:30	2	2
00:45	0	0
01:00	0	0
Hour Total	4	4
01:15	1	1
01:30	2	2
01:45	1	1
02:00	0	0
Hour Total	4	4
02:15	0	0
02:30	0	0
02:45	0	0
03:00	0	0
Hour Total	0	0
03:15	0	0
03:30	0	0
03:45	1	1
04:00	2	2
Hour Total	3	3
04:15	3	3
04:30	2	2
04:45	2	2
05:00	5	5
Hour Total	12	12
05:15	4	4
05:30	4	4
05:45	8	8
06:00	8	8
Hour Total	24	24
06:15	7	7
06:30	7	7
06:45	9	9
07:00	11	11
Hour Total	34	34
07:15	17	17
07:30	25	25
07:45	19	19
08:00	43	43
Hour Total	104	104

Machine #: SB
Site ID: 01
Location: St. Johns Heritage Pkwy SB to Malabar Rd

File: SJH Pkwy SB.prn
Street Name: St. Johns Heritage
County: Brevard

TIME	1 SOUTH	Total
08:15	52	52
08:30	82	82
08:45	76	76
09:00	22	22
Hour Total	232	232
09:15	19	19
09:30	18	18
09:45	17	17
10:00	18	18
Hour Total	72	72
10:15	9	9
10:30	16	16
10:45	15	15
11:00	14	14
Hour Total	54	54
11:15	19	19
11:30	27	27
11:45	16	16
12:00	18	18
Hour Total	80	80
12:15	19	19
12:30	21	21
12:45	24	24
13:00	26	26
Hour Total	90	90
13:15	23	23
13:30	27	27
13:45	29	29
14:00	31	31
Hour Total	110	110
14:15	22	22
14:30	26	26
14:45	24	24
15:00	39	39
Hour Total	111	111
15:15	41	41
15:30	55	55
15:45	49	49
16:00	69	69
Hour Total	214	214

Machine #: SB
Site ID: 01
Location: St. Johns Heritage Pkwy SB to Malabar Rd

File: SJH Pkwy SB.prn
Street Name: St. Johns Heritage
County: Brevard

TIME	1 SOUTH	Total
16:15	73	73
16:30	91	91
16:45	72	72
17:00	91	91
Hour Total	327	327
17:15	76	76
17:30	62	62
17:45	67	67
18:00	63	63
Hour Total	268	268
18:15	57	57
18:30	49	49
18:45	56	56
19:00	46	46
Hour Total	208	208
19:15	35	35
19:30	24	24
19:45	26	26
20:00	24	24
Hour Total	109	109
20:15	19	19
20:30	24	24
20:45	21	21
21:00	18	18
Hour Total	82	82
21:15	19	19
21:30	21	21
21:45	17	17
22:00	9	9
Hour Total	66	66
22:15	8	8
22:30	11	11
22:45	16	16
23:00	9	9
Hour Total	44	44
23:15	4	4
23:30	5	5
23:45	5	5
24:00	4	4
Hour Total	18	18

Machine #: SB
Site ID: 01
Location: St. Johns Heritage Pkwy SB to Malabar Rd

File: SJH Pkwy SB.prn
Street Name: St. Johns Heritage
County: Brevard

TIME	1 SOUTH	Total
DAY TOTAL	2270	2270
PERCENTS	100.0	100
AM Times	08:00	
AM Peaks	253	
PM Times	16:30	
PM Peaks	330	

Machine #: EB
Site ID: EB
Location: Malabar Rd EB west of SJH Pkwy

File: Malabar EB to SJH Pkwy.prn
Street Name: Malabar Rd
County: Brevard

TIME	1 EAST	Total
01:00	1	1
02:00	0	0
03:00	0	0
04:00	6	6
05:00	6	6
06:00	7	7
07:00	11	11
08:00	32	32
09:00	306	306
10:00	47	47
11:00	53	53
12:00	44	44
13:00	29	29
14:00	38	38
15:00	50	50
16:00	398	398
17:00	132	132
18:00	111	111
19:00	82	82
20:00	52	52
21:00	48	48
22:00	29	29
23:00	7	7
24:00	0	0
DAY TOTAL	1489	1489
PERCENTS	100.0	100
AM Times	08:15	
AM Peaks	306	
PM Times	15:45	
PM Peaks	432	

Machine #: EB
Site ID: EB
Location: Malabar Rd EB west of SJH Pkwy

File: Malabar EB to SJH Pkwy.prn
Street Name: Malabar Rd
County: Brevard

TIME	1 EAST	Total
00:15	0	0
00:30	0	0
00:45	0	0
01:00	1	1
Hour Total	1	1
01:15	0	0
01:30	0	0
01:45	0	0
02:00	0	0
Hour Total	0	0
02:15	0	0
02:30	0	0
02:45	0	0
03:00	0	0
Hour Total	0	0
03:15	0	0
03:30	0	0
03:45	4	4
04:00	2	2
Hour Total	6	6
04:15	1	1
04:30	0	0
04:45	3	3
05:00	2	2
Hour Total	6	6
05:15	1	1
05:30	3	3
05:45	2	2
06:00	1	1
Hour Total	7	7
06:15	2	2
06:30	3	3
06:45	2	2
07:00	4	4
Hour Total	11	11
07:15	4	4
07:30	9	9
07:45	9	9
08:00	10	10
Hour Total	32	32

Machine #: EB
Site ID: EB
Location: Malabar Rd EB west of SJH Pkwy

File: Malabar EB to SJH Pkwy.prn
Street Name: Malabar Rd
County: Brevard

TIME	1 EAST	Total
08:15	38	38
08:30	96	96
08:45	143	143
09:00	29	29
Hour Total	306	306
09:15	11	11
09:30	17	17
09:45	8	8
10:00	11	11
Hour Total	47	47
10:15	19	19
10:30	10	10
10:45	6	6
11:00	18	18
Hour Total	53	53
11:15	16	16
11:30	17	17
11:45	5	5
12:00	6	6
Hour Total	44	44
12:15	8	8
12:30	7	7
12:45	8	8
13:00	6	6
Hour Total	29	29
13:15	7	7
13:30	8	8
13:45	11	11
14:00	12	12
Hour Total	38	38
14:15	17	17
14:30	14	14
14:45	10	10
15:00	9	9
Hour Total	50	50
15:15	17	17
15:30	18	18
15:45	187	187
16:00	176	176
Hour Total	398	398

Machine #: EB
Site ID: EB
Location: Malabar Rd EB west of SJH Pkwy

File: Malabar EB to SJH Pkwy.prn
Street Name: Malabar Rd
County: Brevard

TIME	1 EAST	Total
16:15	43	43
16:30	26	26
16:45	34	34
17:00	29	29
Hour Total	132	132
17:15	34	34
17:30	25	25
17:45	24	24
18:00	28	28
Hour Total	111	111
18:15	24	24
18:30	19	19
18:45	21	21
19:00	18	18
Hour Total	82	82
19:15	11	11
19:30	6	6
19:45	17	17
20:00	18	18
Hour Total	52	52
20:15	19	19
20:30	11	11
20:45	10	10
21:00	8	8
Hour Total	48	48
21:15	9	9
21:30	8	8
21:45	7	7
22:00	5	5
Hour Total	29	29
22:15	4	4
22:30	0	0
22:45	2	2
23:00	1	1
Hour Total	7	7
23:15	0	0
23:30	0	0
23:45	0	0
24:00	0	0
Hour Total	0	0

Machine #: EB
Site ID: EB
Location: Malabar Rd EB west of SJH Pkwy

File: Malabar EB to SJH Pkwy.prn
Street Name: Malabar Rd
County: Brevard

TIME	1 EAST	Total
DAY TOTAL	1489	1489
PERCENTS	100.0	100
AM Times	08:15	
AM Peaks	306	
PM Times	15:45	
PM Peaks	432	

Machine #: WB
Site ID: WB
Location: Malabar Rd WB east of SJH Pkwy

File: Malabar WB to SJH Pkwy.prn
Street Name: Malabar Rd
County: Brevard

TIME	1 WEST	Total
01:00	1	1
02:00	11	11
03:00	17	17
04:00	24	24
05:00	51	51
06:00	140	140
07:00	295	295
08:00	469	469
09:00	475	475
10:00	129	129
11:00	110	110
12:00	128	128
13:00	107	107
14:00	98	98
15:00	107	107
16:00	150	150
17:00	157	157
18:00	103	103
19:00	84	84
20:00	54	54
21:00	34	34
22:00	24	24
23:00	23	23
24:00	17	17
DAY TOTAL	2808	2808
PERCENTS	100.0	100
AM Times	08:00	
AM Peaks	546	
PM Times	16:00	
PM Peaks	186	

Machine #: WB
Site ID: WB
Location: Malabar Rd WB east of SJH Pkwy

File: Malabar WB to SJH Pkwy.prn
Street Name: Malabar Rd
County: Brevard

TIME	1 WEST	Total
00:15	0	0
00:30	1	1
00:45	0	0
01:00	0	0
Hour Total	1	1
01:15	6	6
01:30	2	2
01:45	1	1
02:00	2	2
Hour Total	11	11
02:15	2	2
02:30	5	5
02:45	4	4
03:00	6	6
Hour Total	17	17
03:15	5	5
03:30	4	4
03:45	7	7
04:00	8	8
Hour Total	24	24
04:15	9	9
04:30	15	15
04:45	11	11
05:00	16	16
Hour Total	51	51
05:15	21	21
05:30	32	32
05:45	35	35
06:00	52	52
Hour Total	140	140
06:15	72	72
06:30	54	54
06:45	75	75
07:00	94	94
Hour Total	295	295
07:15	103	103
07:30	127	127
07:45	125	125
08:00	114	114
Hour Total	469	469

Machine #: WB
Site ID: WB
Location: Malabar Rd WB east of SJH Pkwy

File: Malabar WB to SJH Pkwy.prn
Street Name: Malabar Rd
County: Brevard

TIME	1 WEST	Total
08:15	127	127
08:30	148	148
08:45	157	157
09:00	43	43
Hour Total	475	475
09:15	35	35
09:30	34	34
09:45	26	26
10:00	34	34
Hour Total	129	129
10:15	21	21
10:30	32	32
10:45	26	26
11:00	31	31
Hour Total	110	110
11:15	49	49
11:30	21	21
11:45	33	33
12:00	25	25
Hour Total	128	128
12:15	26	26
12:30	27	27
12:45	28	28
13:00	26	26
Hour Total	107	107
13:15	21	21
13:30	24	24
13:45	26	26
14:00	27	27
Hour Total	98	98
14:15	26	26
14:30	31	31
14:45	24	24
15:00	26	26
Hour Total	107	107
15:15	28	28
15:30	27	27
15:45	34	34
16:00	61	61
Hour Total	150	150

Machine #: WB
 Site ID: WB
 Location: Malabar Rd WB east of SJH Pkwy

File: Malabar WB to SJH Pkwy.prn
 Street Name: Malabar Rd
 County: Brevard

TIME	1 WEST	Total
16:15	46	46
16:30	42	42
16:45	37	37
17:00	32	32
Hour Total	157	157
17:15	29	29
17:30	24	24
17:45	26	26
18:00	24	24
Hour Total	103	103
18:15	19	19
18:30	24	24
18:45	22	22
19:00	19	19
Hour Total	84	84
19:15	17	17
19:30	11	11
19:45	16	16
20:00	10	10
Hour Total	54	54
20:15	10	10
20:30	9	9
20:45	8	8
21:00	7	7
Hour Total	34	34
21:15	5	5
21:30	6	6
21:45	9	9
22:00	4	4
Hour Total	24	24
22:15	5	5
22:30	8	8
22:45	6	6
23:00	4	4
Hour Total	23	23
23:15	6	6
23:30	4	4
23:45	5	5
24:00	2	2
Hour Total	17	17

Machine #: WB
Site ID: WB
Location: Malabar Rd WB east of SJH Pkwy

File: Malabar WB to SJH Pkwy.prn
Street Name: Malabar Rd
County: Brevard

TIME	1 WEST	Total
DAY TOTAL	2808	2808
PERCENTS	100.0	100
AM Times	08:00	
AM Peaks	546	
PM Times	16:00	
PM Peaks	186	

Machine #: SB
Site ID: Wisteria
Location: Wisteria SB north of Malabar

File: Wisteria SB01.prn
Street Name: Wisteria SB
County: Brevard

TIME	1 SOUTH	Total
01:00	9	9
02:00	17	17
03:00	6	6
04:00	5	5
05:00	8	8
06:00	12	12
07:00	7	7
08:00	31	31
09:00	38	38
10:00	27	27
11:00	35	35
12:00	44	44
13:00	40	40
14:00	29	29
15:00	31	31
16:00	21	21
17:00	30	30
18:00	30	30
19:00	34	34
20:00	20	20
21:00	7	7
22:00	3	3
23:00	6	6
24:00	1	1
DAY TOTAL	491	491
PERCENTS	100.0	100
AM Times	11:15	
AM Peaks	44	
PM Times	12:15	
PM Peaks	40	

Machine #: SB
Site ID: Wisteria
Location: Wisteria SB north of Malabar

File: Wisteria SB01.prn
Street Name: Wisteria SB
County: Brevard

TIME	1 SOUTH	Total
00:15	2	2
00:30	1	1
00:45	2	2
01:00	4	4
Hour Total	9	9
01:15	5	5
01:30	6	6
01:45	4	4
02:00	2	2
Hour Total	17	17
02:15	1	1
02:30	2	2
02:45	1	1
03:00	2	2
Hour Total	6	6
03:15	1	1
03:30	2	2
03:45	0	0
04:00	2	2
Hour Total	5	5
04:15	3	3
04:30	2	2
04:45	1	1
05:00	2	2
Hour Total	8	8
05:15	4	4
05:30	5	5
05:45	2	2
06:00	1	1
Hour Total	12	12
06:15	2	2
06:30	3	3
06:45	2	2
07:00	0	0
Hour Total	7	7
07:15	6	6
07:30	11	11
07:45	6	6
08:00	8	8
Hour Total	31	31

Machine #: SB
 Site ID: Wisteria
 Location: Wisteria SB north of Malabar

File: Wisteria SB01.prn
 Street Name: Wisteria SB
 County: Brevard

TIME	1 SOUTH	Total
08:15	13	13
08:30	6	6
08:45	11	11
09:00	8	8
Hour Total	38	38
09:15	7	7
09:30	9	9
09:45	5	5
10:00	6	6
Hour Total	27	27
10:15	8	8
10:30	11	11
10:45	5	5
11:00	11	11
Hour Total	35	35
11:15	10	10
11:30	7	7
11:45	13	13
12:00	14	14
Hour Total	44	44
12:15	10	10
12:30	13	13
12:45	12	12
13:00	5	5
Hour Total	40	40
13:15	6	6
13:30	8	8
13:45	7	7
14:00	8	8
Hour Total	29	29
14:15	6	6
14:30	8	8
14:45	6	6
15:00	11	11
Hour Total	31	31
15:15	5	5
15:30	4	4
15:45	8	8
16:00	4	4
Hour Total	21	21

Machine #: SB
Site ID: Wisteria
Location: Wisteria SB north of Malabar

File: Wisteria SB01.prn
Street Name: Wisteria SB
County: Brevard

TIME	1 SOUTH	Total
16:15	6	6
16:30	7	7
16:45	8	8
17:00	9	9
Hour Total	30	30
17:15	9	9
17:30	6	6
17:45	7	7
18:00	8	8
Hour Total	30	30
18:15	9	9
18:30	10	10
18:45	8	8
19:00	7	7
Hour Total	34	34
19:15	5	5
19:30	6	6
19:45	4	4
20:00	5	5
Hour Total	20	20
20:15	4	4
20:30	2	2
20:45	1	1
21:00	0	0
Hour Total	7	7
21:15	1	1
21:30	2	2
21:45	0	0
22:00	0	0
Hour Total	3	3
22:15	1	1
22:30	2	2
22:45	1	1
23:00	2	2
Hour Total	6	6
23:15	0	0
23:30	0	0
23:45	0	0
24:00	1	1
Hour Total	1	1

Machine #: SB
Site ID: Wisteria
Location: Wisteria SB north of Malabar

File: Wisteria SB01.prn
Street Name: Wisteria SB
County: Brevard

TIME	1 SOUTH	Total
DAY TOTAL	491	491
PERCENTS	100.0	100
AM Times	11:15	
AM Peaks	44	
PM Times	12:15	
PM Peaks	40	

Machine #: EB
Site ID: EB
Location: Malabar EB west of Wisteria Rd

File: Malabar EB to Wisteria.prn
Street Name: Malabar EB
County: Brevard

TIME	1 EAST	Total
01:00	6	6
02:00	3	3
03:00	3	3
04:00	12	12
05:00	28	28
06:00	42	42
07:00	38	38
08:00	85	85
09:00	273	273
10:00	113	113
11:00	102	102
12:00	107	107
13:00	110	110
14:00	116	116
15:00	156	156
16:00	147	147
17:00	539	539
18:00	393	393
19:00	259	259
20:00	93	93
21:00	78	78
22:00	34	34
23:00	27	27
24:00	20	20
DAY TOTAL	2784	2784
PERCENTS	100.0	100
AM Times	08:15	
AM Peaks	273	
PM Times	16:15	
PM Peaks	539	

Machine #: EB
Site ID: EB
Location: Malabar EB west of Wisteria Rd

File: Malabar EB to Wisteria.prn
Street Name: Malabar EB
County: Brevard

TIME	1 EAST	Total
00:15	3	3
00:30	1	1
00:45	1	1
01:00	1	1
Hour Total	6	6
01:15	0	0
01:30	2	2
01:45	0	0
02:00	1	1
Hour Total	3	3
02:15	0	0
02:30	2	2
02:45	1	1
03:00	0	0
Hour Total	3	3
03:15	2	2
03:30	2	2
03:45	4	4
04:00	4	4
Hour Total	12	12
04:15	5	5
04:30	6	6
04:45	8	8
05:00	9	9
Hour Total	28	28
05:15	10	10
05:30	13	13
05:45	11	11
06:00	8	8
Hour Total	42	42
06:15	8	8
06:30	9	9
06:45	10	10
07:00	11	11
Hour Total	38	38
07:15	19	19
07:30	22	22
07:45	18	18
08:00	26	26
Hour Total	85	85

Machine #: EB
Site ID: EB
Location: Malabar EB west of Wisteria Rd

File: Malabar EB to Wisteria.prn
Street Name: Malabar EB
County: Brevard

TIME	1 EAST	Total
08:15	43	43
08:30	79	79
08:45	109	109
09:00	42	42
Hour Total	273	273
09:15	37	37
09:30	26	26
09:45	24	24
10:00	26	26
Hour Total	113	113
10:15	32	32
10:30	24	24
10:45	28	28
11:00	18	18
Hour Total	102	102
11:15	22	22
11:30	29	29
11:45	34	34
12:00	22	22
Hour Total	107	107
12:15	21	21
12:30	28	28
12:45	32	32
13:00	29	29
Hour Total	110	110
13:15	27	27
13:30	29	29
13:45	27	27
14:00	33	33
Hour Total	116	116
14:15	38	38
14:30	41	41
14:45	36	36
15:00	41	41
Hour Total	156	156
15:15	32	32
15:30	35	35
15:45	43	43
16:00	37	37
Hour Total	147	147

Machine #: EB
Site ID: EB
Location: Malabar EB west of Wisteria Rd

File: Malabar EB to Wisteria.prn
Street Name: Malabar EB
County: Brevard

TIME	1 EAST	Total
16:15	157	157
16:30	163	163
16:45	101	101
17:00	118	118
Hour Total	539	539
17:15	109	109
17:30	114	114
17:45	94	94
18:00	76	76
Hour Total	393	393
18:15	81	81
18:30	76	76
18:45	65	65
19:00	37	37
Hour Total	259	259
19:15	24	24
19:30	26	26
19:45	24	24
20:00	19	19
Hour Total	93	93
20:15	24	24
20:30	19	19
20:45	17	17
21:00	18	18
Hour Total	78	78
21:15	10	10
21:30	9	9
21:45	8	8
22:00	7	7
Hour Total	34	34
22:15	8	8
22:30	8	8
22:45	6	6
23:00	5	5
Hour Total	27	27
23:15	4	4
23:30	5	5
23:45	5	5
24:00	6	6
Hour Total	20	20

Machine #: EB
Site ID: EB
Location: Malabar EB west of Wisteria Rd

File: Malabar EB to Wisteria.prn
Street Name: Malabar EB
County: Brevard

TIME	1 EAST	Total
DAY TOTAL	2784	2784
PERCENTS	100.0	100
AM Times	08:15	
AM Peaks	273	
PM Times	16:15	
PM Peaks	539	

Machine #: WB
Site ID: WB
Location: Malabar WB east of Wisteria Rd

File: Malabar WB to Wisteria.prn
Street Name: Malabar WB
County: Brevard

TIME	1 WEST	Total
01:00	6	6
02:00	7	7
03:00	17	17
04:00	11	11
05:00	61	61
06:00	93	93
07:00	234	234
08:00	461	461
09:00	504	504
10:00	139	139
11:00	126	126
12:00	138	138
13:00	119	119
14:00	114	114
15:00	112	112
16:00	171	171
17:00	123	123
18:00	108	108
19:00	112	112
20:00	89	89
21:00	46	46
22:00	32	32
23:00	16	16
24:00	6	6
DAY TOTAL	2845	2845
PERCENTS	100.0	100
AM Times	08:00	
AM Peaks	578	
PM Times	15:30	
PM Peaks	178	

Machine #: WB
Site ID: WB
Location: Malabar WB east of Wisteria Rd

File: Malabar WB to Wisteria.prn
Street Name: Malabar WB
County: Brevard

TIME	1 WEST	Total
00:15	1	1
00:30	0	0
00:45	2	2
01:00	3	3
Hour Total	6	6
01:15	2	2
01:30	0	0
01:45	1	1
02:00	4	4
Hour Total	7	7
02:15	2	2
02:30	4	4
02:45	5	5
03:00	6	6
Hour Total	17	17
03:15	4	4
03:30	5	5
03:45	2	2
04:00	0	0
Hour Total	11	11
04:15	10	10
04:30	14	14
04:45	19	19
05:00	18	18
Hour Total	61	61
05:15	19	19
05:30	24	24
05:45	24	24
06:00	26	26
Hour Total	93	93
06:15	52	52
06:30	42	42
06:45	65	65
07:00	75	75
Hour Total	234	234
07:15	113	113
07:30	125	125
07:45	106	106
08:00	117	117
Hour Total	461	461

Machine #: WB
Site ID: WB
Location: Malabar WB east of Wisteria Rd

File: Malabar WB to Wisteria.prn
Street Name: Malabar WB
County: Brevard

TIME	1 WEST	Total
08:15	143	143
08:30	151	151
08:45	167	167
09:00	43	43
Hour Total	504	504
09:15	42	42
09:30	37	37
09:45	29	29
10:00	31	31
Hour Total	139	139
10:15	41	41
10:30	35	35
10:45	26	26
11:00	24	24
Hour Total	126	126
11:15	34	34
11:30	28	28
11:45	41	41
12:00	35	35
Hour Total	138	138
12:15	29	29
12:30	34	34
12:45	29	29
13:00	27	27
Hour Total	119	119
13:15	29	29
13:30	33	33
13:45	24	24
14:00	28	28
Hour Total	114	114
14:15	29	29
14:30	27	27
14:45	27	27
15:00	29	29
Hour Total	112	112
15:15	27	27
15:30	57	57
15:45	41	41
16:00	46	46
Hour Total	171	171

Machine #: WB
 Site ID: WB
 Location: Malabar WB east of Wisteria Rd

File: Malabar WB to Wisteria.prn
 Street Name: Malabar WB
 County: Brevard

TIME	1 WEST	Total
16:15	34	34
16:30	26	26
16:45	34	34
17:00	29	29
Hour Total	123	123
17:15	27	27
17:30	26	26
17:45	31	31
18:00	24	24
Hour Total	108	108
18:15	29	29
18:30	24	24
18:45	35	35
19:00	24	24
Hour Total	112	112
19:15	28	28
19:30	24	24
19:45	18	18
20:00	19	19
Hour Total	89	89
20:15	14	14
20:30	11	11
20:45	13	13
21:00	8	8
Hour Total	46	46
21:15	9	9
21:30	8	8
21:45	7	7
22:00	8	8
Hour Total	32	32
22:15	7	7
22:30	7	7
22:45	1	1
23:00	1	1
Hour Total	16	16
23:15	0	0
23:30	1	1
23:45	2	2
24:00	3	3
Hour Total	6	6

Machine #: WB
Site ID: WB
Location: Malabar WB east of Wisteria Rd

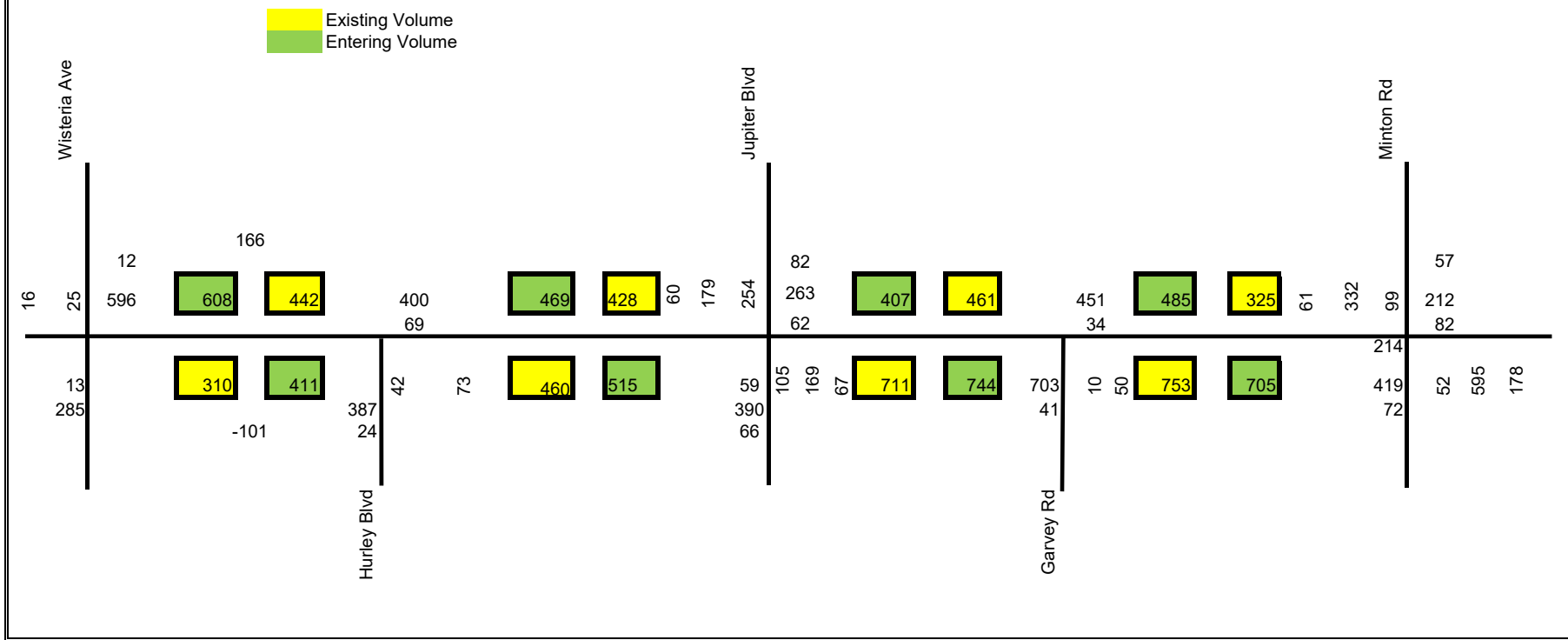
File: Malabar WB to Wisteria.prn
Street Name: Malabar WB
County: Brevard

TIME	1 WEST	Total
DAY TOTAL	2845	2845
PERCENTS	100.0	100
AM Times	08:00	
AM Peaks	578	
PM Times	15:30	
PM Peaks	178	

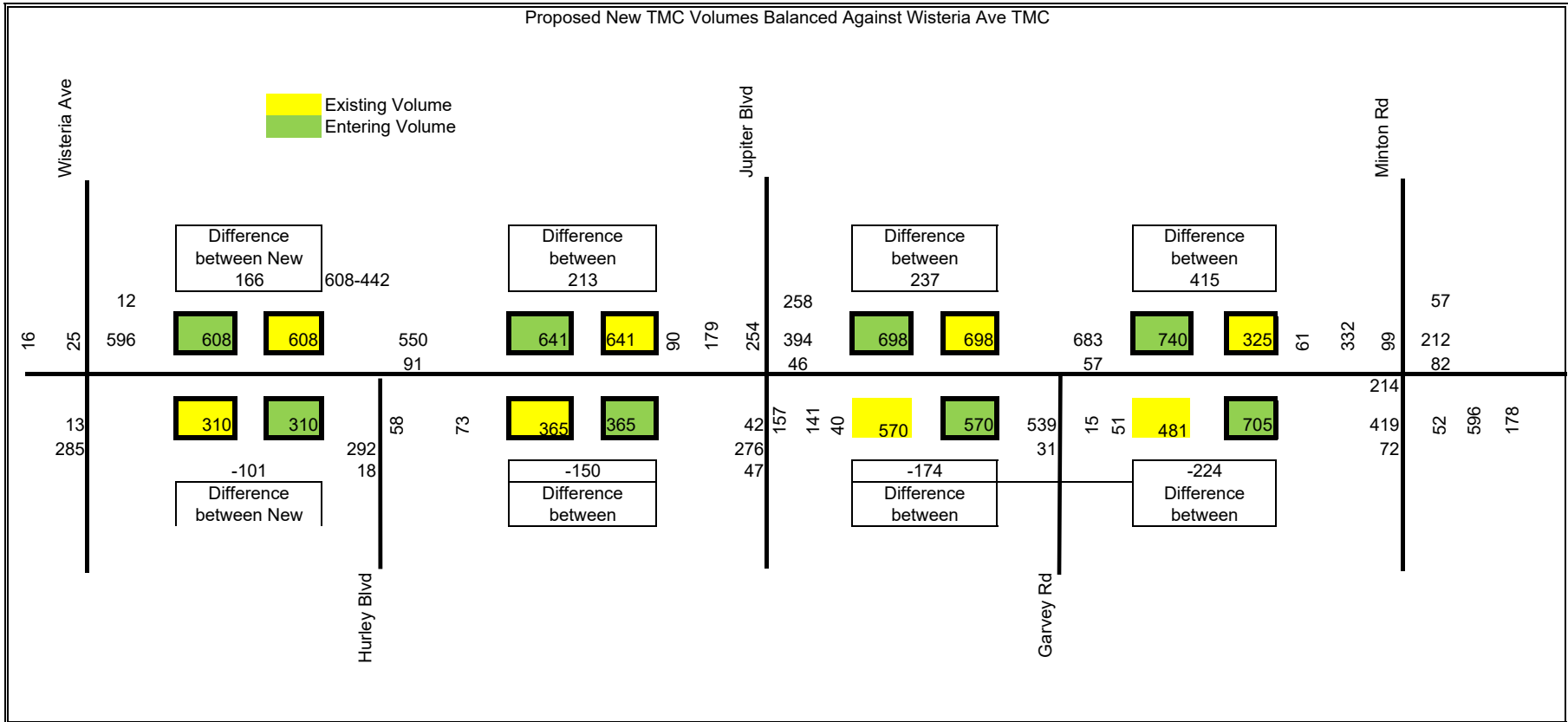
APPENDIX D

Turning Movement Count Justification Tables

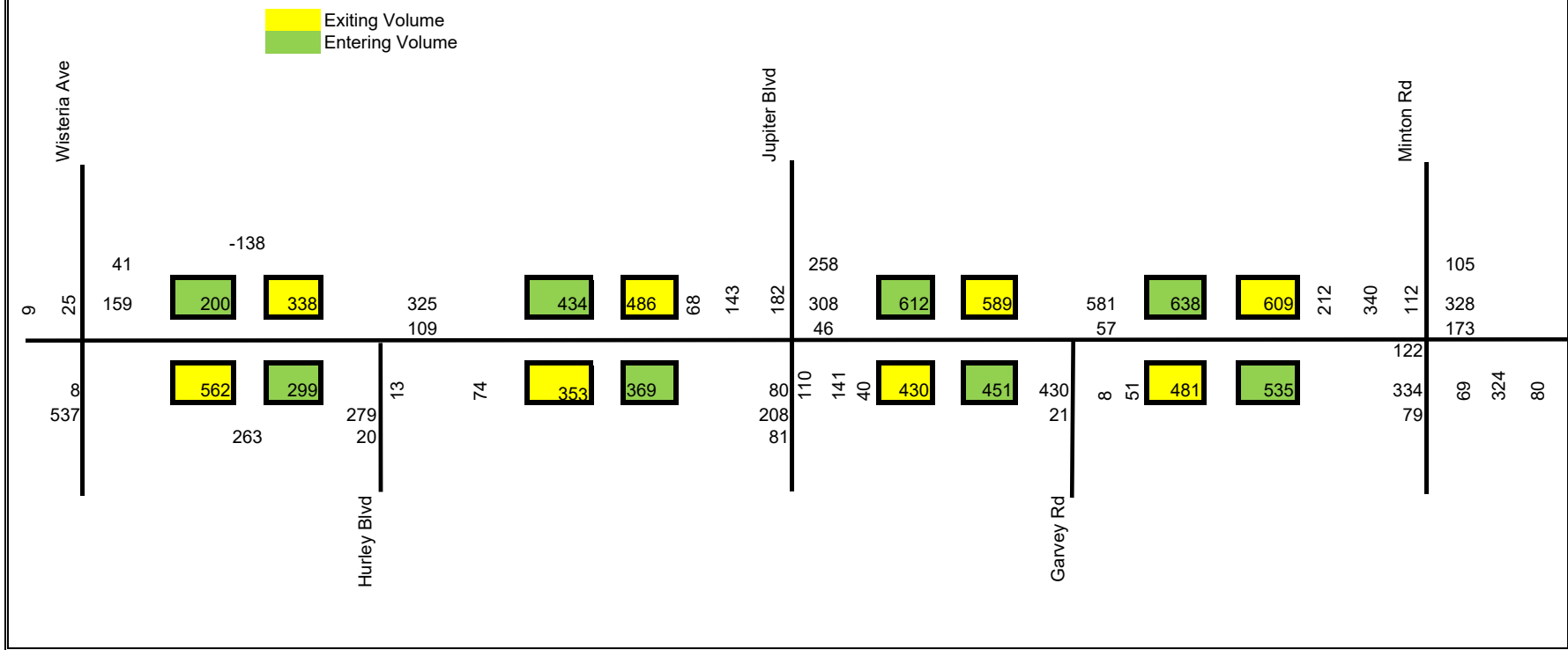
Existing TMC Volumes with New Wisteria Ave Volumes



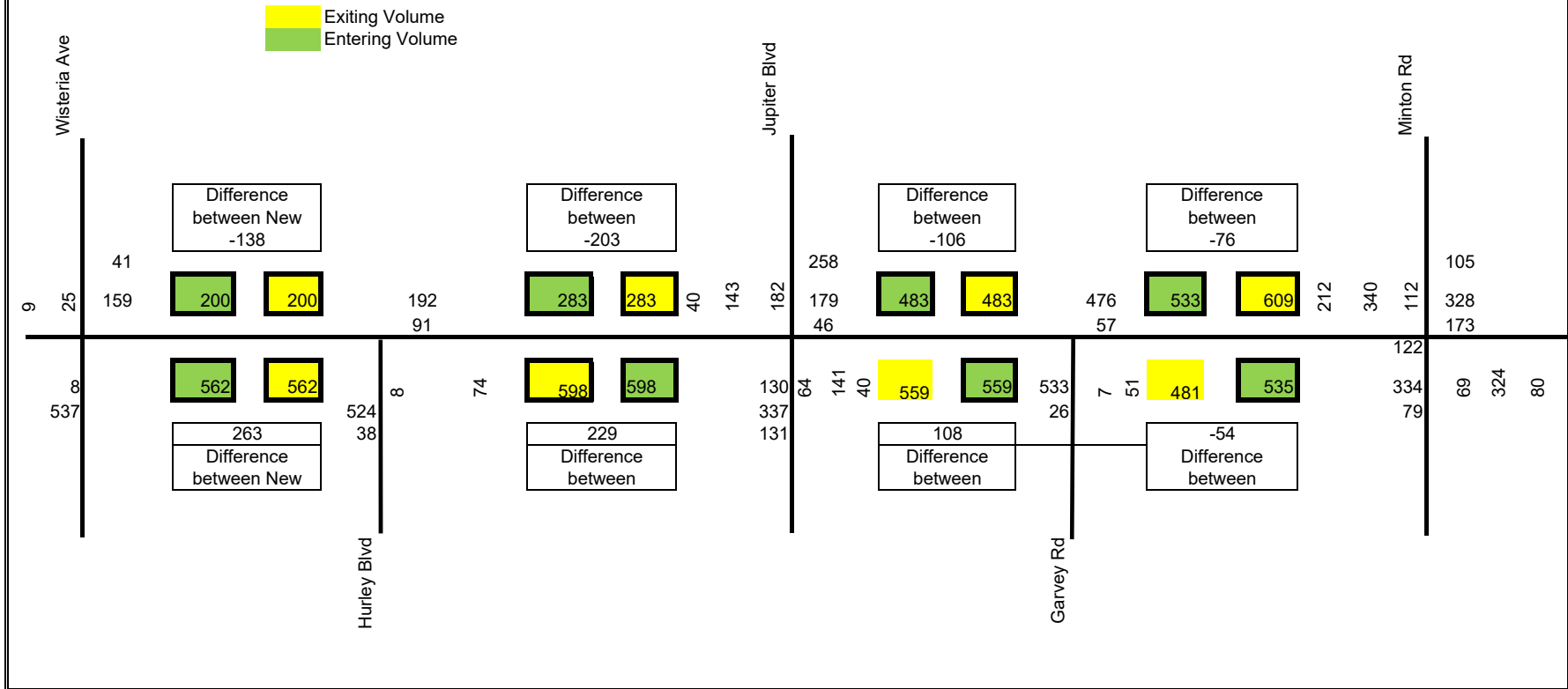
Proposed New TMC Volumes Balanced Against Wisteria Ave TMC



Existing TMC Volumes with New Wisteria Ave Volumes



Proposed New TMC Volumes Balanced Against Wisteria Ave TMC



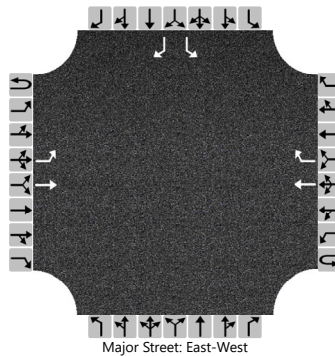
APPENDIX E

Unsignalized Intersections HCS Worksheets – Existing Conditions

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	SD			Intersection	SJHP at Malabar Rd		
Agency/Co.	LTG			Jurisdiction	Brevard County		
Date Performed	09/18/2018			East/West Street	Malabar Road		
Analysis Year	2018			North/South Street	St. John Heritage Parkway		
Time Analyzed	Existing A.M. Peak-Hour			Peak Hour Factor	0.75		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	4247.06 Chaparral Residential Development						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6								
Priority																
Number of Lanes	0	1	1	0	0	0	1	1	0	0	0		1	0	1	
Configuration		L	T				T	R						L		R
Volume (veh/h)		112	208				347	244						85		181
Percent Heavy Vehicles (%)		10												13		6
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized					No								No			
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1													7.1		6.2
Critical Headway (sec)		4.20													6.53		6.26
Base Follow-Up Headway (sec)		2.2													3.5		3.3
Follow-Up Headway (sec)		2.22													3.62		3.32

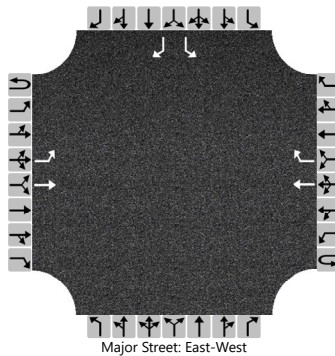
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		149													113		241
Capacity, c (veh/h)		816													199		596
v/c Ratio		0.18													0.57		0.40
95% Queue Length, Q ₉₅ (veh)		0.7													3.1		2.0
Control Delay (s/veh)		10.4													44.6		15.1
Level of Service (LOS)		B													E		C
Approach Delay (s/veh)	3.6												24.5				
Approach LOS													C				

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	SD			Intersection	SJHP at Malabar Rd		
Agency/Co.	LTG			Jurisdiction	Brevard County		
Date Performed	09/18/2018			East/West Street	Malabar Road		
Analysis Year	2018			North/South Street	St. John Heritage Parkway		
Time Analyzed	Existing P.M. Peak-Hour			Peak Hour Factor	0.75		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	4247.06 Chaparral Residential Development						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	1	1	0	0	0	1	1	0	0	0		1	0	1	
Configuration		L	T				T	R						L		R
Volume (veh/h)		170	282				62	116						264		41
Percent Heavy Vehicles (%)		7												4		5
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized					No								No			
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.17												6.44		6.25
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.22												3.52		3.36

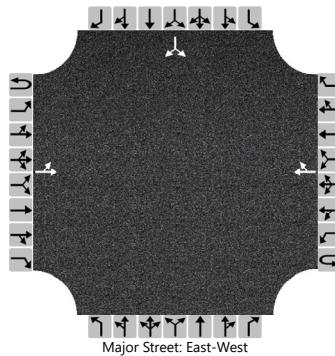
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		227												352		55
Capacity, c (veh/h)		1324												251		964
v/c Ratio		0.17												1.40		0.06
95% Queue Length, Q ₉₅ (veh)		0.6												19.4		0.2
Control Delay (s/veh)		8.3												241.8		9.0
Level of Service (LOS)		A												F		A
Approach Delay (s/veh)	3.1												210.5			
Approach LOS													F			

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	SD	Intersection	Malabar Rd at Wisteria Av				
Agency/Co.	LTG	Jurisdiction	Brevard County				
Date Performed	09/18/2018	East/West Street	Malabar Road				
Analysis Year	2018	North/South Street	Project Driveway/Wisteria				
Time Analyzed	Existing A.M. Peak-Hour	Peak Hour Factor	0.75				
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25				
Project Description	4247.06 Chaparral Residential Development						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6								
Priority																
Number of Lanes	0	0	1	0	0	0	1	0	0	0	0	0	0	1	0	0
Configuration		LT						TR							LR	
Volume (veh/h)		13	285				596	12						25		16
Percent Heavy Vehicles (%)		8												12		6
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1													7.1		6.2
Critical Headway (sec)		4.18													6.52		6.26
Base Follow-Up Headway (sec)		2.2													3.5		3.3
Follow-Up Headway (sec)		2.23													3.54		3.34

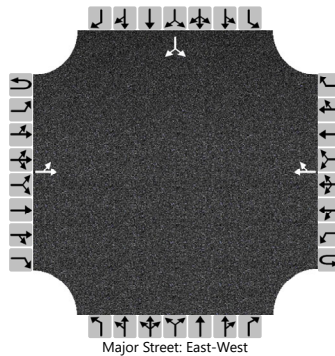
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		17														55	
Capacity, c (veh/h)		801														233	
v/c Ratio		0.02														0.23	
95% Queue Length, Q ₉₅ (veh)		0.1														0.9	
Control Delay (s/veh)		9.6														25.1	
Level of Service (LOS)		A														D	
Approach Delay (s/veh)	0.7												25.1				
Approach LOS													D				

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	SD	Intersection	Malabar Rd at Wisteria Av				
Agency/Co.	LTG	Jurisdiction	Brevard County				
Date Performed	09/18/2018	East/West Street	Malabar Road				
Analysis Year	2018	North/South Street	Project Driveway/Wisteria				
Time Analyzed	Existing P.M. Peak-Hour	Peak Hour Factor	0.85				
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25				
Project Description	4247.06 Chaparral Residential Development						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume (veh/h)		8	537				159	41						25		9
Percent Heavy Vehicles (%)		13												8		2
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.23												6.48		6.22
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.23												3.57		3.37

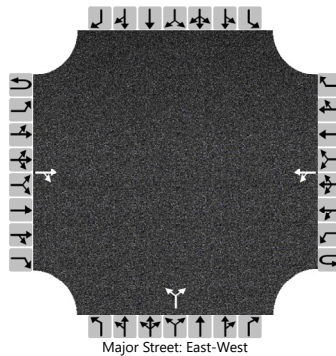
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		9														40	
Capacity, c (veh/h)		1316														376	
v/c Ratio		0.01														0.11	
95% Queue Length, Q ₉₅ (veh)		0.0														0.4	
Control Delay (s/veh)		7.8														15.7	
Level of Service (LOS)		A														C	
Approach Delay (s/veh)		0.2												15.7			
Approach LOS														C			

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	SD			Intersection	Malabar Rd at Hurley Blvd		
Agency/Co.	LTG			Jurisdiction	City of Palm Bay		
Date Performed	09/18/2018			East/West Street	Malabar Road		
Analysis Year	2018			North/South Street	Hurley Boulevard		
Time Analyzed	Existing A.M. Peak-Hour			Peak Hour Factor	0.86		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	4247.06 Chaparral Residential Development						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			292	18		91	550			58		73				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)									0							
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1					7.1		6.2			
Critical Headway (sec)						4.13					6.43		6.23			
Base Follow-Up Headway (sec)						2.2					3.5		3.3			
Follow-Up Headway (sec)						2.24					3.52		3.32			

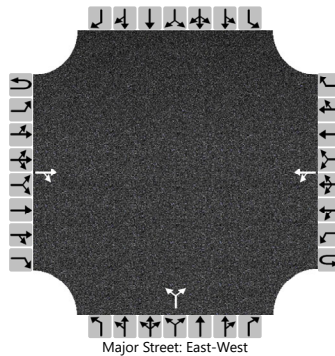
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						106						152				
Capacity, c (veh/h)						1186						300				
v/c Ratio						0.09						0.51				
95% Queue Length, Q ₉₅ (veh)						0.3						2.7				
Control Delay (s/veh)						8.3						28.7				
Level of Service (LOS)						A						D				
Approach Delay (s/veh)					2.2				28.7							
Approach LOS									D							

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	SD			Intersection	Malabar Rd at Hurley Blvd		
Agency/Co.	LTG			Jurisdiction	City of Palm Bay		
Date Performed	09/18/2018			East/West Street	Malabar Road		
Analysis Year	2018			North/South Street	Hurley Boulevard		
Time Analyzed	Existing P.M. Peak-Hour			Peak Hour Factor	0.90		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	4247.06 Chaparral Residential Development						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			524	38		91	192			8		74				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)									0							
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1					7.1		6.2			
Critical Headway (sec)						4.13					6.43		6.23			
Base Follow-Up Headway (sec)						2.2					3.5		3.3			
Follow-Up Headway (sec)						2.24					3.52		3.32			

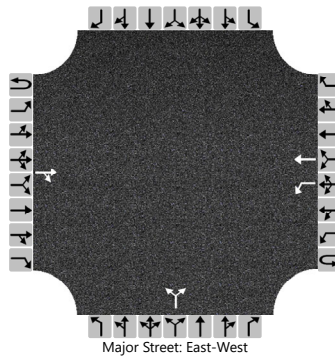
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						101					91					
Capacity, c (veh/h)						947					447					
v/c Ratio						0.11					0.20					
95% Queue Length, Q ₉₅ (veh)						0.4					0.8					
Control Delay (s/veh)						9.3					15.1					
Level of Service (LOS)						A					C					
Approach Delay (s/veh)					3.7				15.1							
Approach LOS									C							

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	SD			Intersection	Malabar Rd at Garvey Rd		
Agency/Co.	LTG			Jurisdiction	City of Palm Bay		
Date Performed	09/18/2018			East/West Street	Malabar Road		
Analysis Year	2018			North/South Street	Garvey Road		
Time Analyzed	Existing A.M. Peak-Hour			Peak Hour Factor	0.94		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	4247.06 Chaparral Residential Development						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	1	1	0		0	1	0		0	0	0
Configuration				TR		L	T				LR					
Volume (veh/h)			539	31		57	683			15		51				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1					7.1		6.2			
Critical Headway (sec)						4.13					6.43		6.23			
Base Follow-Up Headway (sec)						2.2					3.5		3.3			
Follow-Up Headway (sec)						2.25					3.52		3.32			

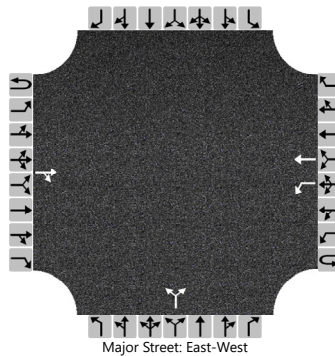
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						61						70				
Capacity, c (veh/h)						959						314				
v/c Ratio						0.06						0.22				
95% Queue Length, Q ₉₅ (veh)						0.2						0.8				
Control Delay (s/veh)						9.0						19.7				
Level of Service (LOS)						A						C				
Approach Delay (s/veh)								0.7					19.7			
Approach LOS													C			

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	SD			Intersection	Malabar Rd at Garvey Rd		
Agency/Co.	LTG			Jurisdiction	City of Palm Bay		
Date Performed	09/18/2018			East/West Street	Malabar Road		
Analysis Year	2018			North/South Street	Garvey Road		
Time Analyzed	Existing P.M. Peak-Hour			Peak Hour Factor	0.94		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	4247.06 Chaparral Residential Development						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	1	1	0		0	1	0		0	0	0
Configuration				TR		L	T				LR					
Volume (veh/h)			533	26		57	476			7		51				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)									0							
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1					7.1		6.2			
Critical Headway (sec)						4.13					6.43		6.23			
Base Follow-Up Headway (sec)						2.2					3.5		3.3			
Follow-Up Headway (sec)						2.24					3.52		3.32			

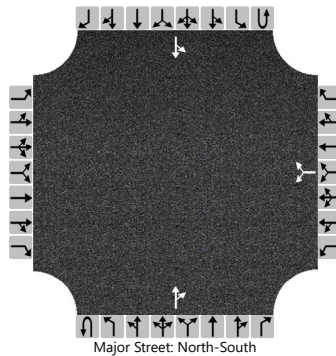
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						61					62					
Capacity, c (veh/h)						972					425					
v/c Ratio						0.06					0.15					
95% Queue Length, Q ₉₅ (veh)						0.2					0.5					
Control Delay (s/veh)						9.0					14.9					
Level of Service (LOS)						A					B					
Approach Delay (s/veh)					1.0				14.9							
Approach LOS									B							

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	SD			Intersection	Jupiter Blvd at Americana		
Agency/Co.	LTG			Jurisdiction	City of Palm Bay		
Date Performed	10/11/2018			East/West Street	Jupiter Boulevard		
Analysis Year	2018			North/South Street	Americana Boulevard		
Time Analyzed	Existing A.M. Peak-Hour			Peak Hour Factor	0.92		
Intersection Orientation	North-South			Analysis Time Period (hrs)	0.25		
Project Description	4247.06 Chaparral Residential Development						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	1	0	0	0	1	0
Configuration							LR					TR		LT		
Volume (veh/h)						30		58			313	56		134	412	
Percent Heavy Vehicles (%)						7		7						2		
Proportion Time Blocked																
Percent Grade (%)						0										
Right Turn Channelized																
Median Type Storage						Undivided										

Critical and Follow-up Headways

Base Critical Headway (sec)						7.1		6.2							4.1		
Critical Headway (sec)						6.47		6.27							4.12		
Base Follow-Up Headway (sec)						3.5		3.3							2.2		
Follow-Up Headway (sec)						3.56		3.36							2.22		

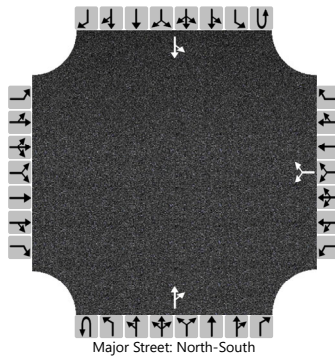
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						96									146		
Capacity, c (veh/h)						357									1157		
v/c Ratio						0.27									0.13		
95% Queue Length, Q ₉₅ (veh)						1.1									0.4		
Control Delay (s/veh)						18.7									8.6		
Level of Service (LOS)						C									A		
Approach Delay (s/veh)						18.7								3.2			
Approach LOS						C											

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	SD	Intersection	Jupiter Blvd at Americana
Agency/Co.	LTG	Jurisdiction	City of Palm Bay
Date Performed	10/11/2018	East/West Street	Jupiter Boulevard
Analysis Year	2018	North/South Street	Americana Boulevard
Time Analyzed	Existing P.M. Peak-Hour	Peak Hour Factor	0.94
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	4247.06 Chaparral Residential Development		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	1	0	0	0	1	0
Configuration							LR					TR		LT		
Volume (veh/h)						58		74			453	30		64	442	
Percent Heavy Vehicles (%)						4		4						2		
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						7.1		6.2							4.1		
Critical Headway (sec)						6.44		6.24							4.12		
Base Follow-Up Headway (sec)						3.5		3.3							2.2		
Follow-Up Headway (sec)						3.54		3.34							2.22		

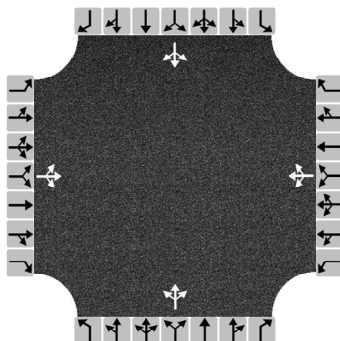
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						140									68		
Capacity, c (veh/h)						326									1051		
v/c Ratio						0.43									0.06		
95% Queue Length, Q ₉₅ (veh)						2.1									0.2		
Control Delay (s/veh)						24.2									8.7		
Level of Service (LOS)						C									A		
Approach Delay (s/veh)					24.2								1.8				
Approach LOS					C												

HCS7 All-Way Stop Control Report

General Information		Site Information	
Analyst	SD	Intersection	Jupiter Blvd at Garvey Rd
Agency/Co.	LTG	Jurisdiction	City of Palm Bay
Date Performed	10/11/2018	East/West Street	Jupiter Boulevard
Analysis Year	2018	North/South Street	Garvey Road
Analysis Time Period (hrs)	0.25	Peak Hour Factor	0.83
Time Analyzed	Existing A.M. Peak-Hour		
Project Description	4247.06 Chaparral Residential Development		

Lanes



Vehicle Volume and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
Movement												
Volume	19	317	16	17	242	21	19	38	77	47	19	22
% Thrus in Shared Lane												
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	424			337			161			106		
Percent Heavy Vehicles	4			8			2			3		

Departure Headway and Service Time

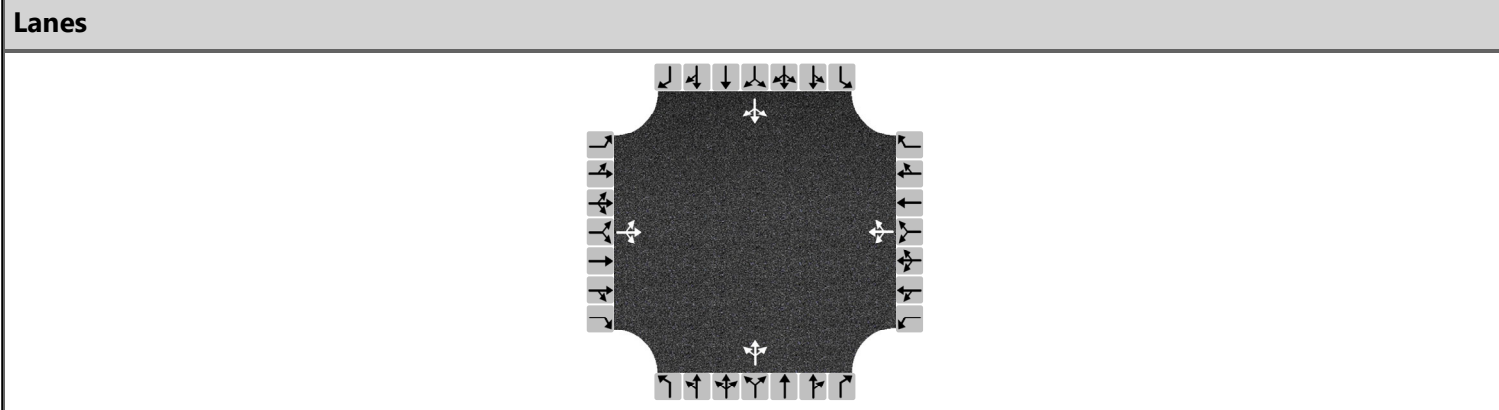
Initial Departure Headway, hd (s)	3.20			3.20			3.20			3.20		
Initial Degree of Utilization, x	0.377			0.300			0.144			0.094		
Final Departure Headway, hd (s)	5.33			5.50			5.90			6.33		
Final Degree of Utilization, x	0.628			0.516			0.265			0.186		
Move-Up Time, m (s)	2.0			2.0			2.0			2.0		
Service Time, ts (s)	3.33			3.50			3.90			4.33		

Capacity, Delay and Level of Service

Flow Rate, v (veh/h)	424			337			161			106		
Capacity	675			654			610			569		
95% Queue Length, Q ₉₅ (veh)	4.4			3.0			1.1			0.7		
Control Delay (s/veh)	16.9			14.2			11.0			10.8		
Level of Service, LOS	C			B			B			B		
Approach Delay (s/veh)	16.9			14.2			11.0			10.8		
Approach LOS	C			B			B			B		
Intersection Delay, s/veh LOS	14.5						B					

HCS7 All-Way Stop Control Report

General Information		Site Information	
Analyst	SD	Intersection	Jupiter Blvd at Garvey Rd
Agency/Co.	LTG	Jurisdiction	City of Palm Bay
Date Performed	10/11/2018	East/West Street	Jupiter Boulevard
Analysis Year	2018	North/South Street	Garvey Road
Analysis Time Period (hrs)	0.25	Peak Hour Factor	0.87
Time Analyzed	Existing P.M. Peak-Hour		
Project Description	4247.06 Chaparral Residential Development		



Vehicle Volume and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
Movement												
Volume	9	199	13	75	208	17	14	23	53	21	56	12
% Thrus in Shared Lane												
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	254			345			103			102		
Percent Heavy Vehicles	6			3			2			3		

Departure Headway and Service Time

Initial Departure Headway, hd (s)	3.20			3.20			3.20			3.20		
Initial Degree of Utilization, x	0.226			0.307			0.092			0.091		
Final Departure Headway, hd (s)	5.00			4.88			5.28			5.58		
Final Degree of Utilization, x	0.353			0.468			0.152			0.158		
Move-Up Time, m (s)	2.0			2.0			2.0			2.0		
Service Time, ts (s)	3.00			2.88			3.28			3.58		

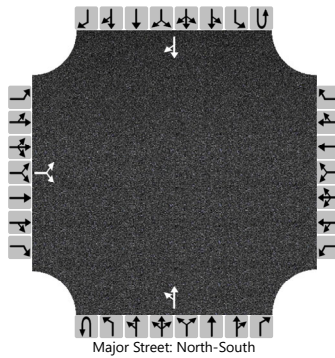
Capacity, Delay and Level of Service

Flow Rate, v (veh/h)	254			345			103			102		
Capacity	720			737			682			646		
95% Queue Length, Q ₉₅ (veh)	1.6			2.5			0.5			0.6		
Control Delay (s/veh)	10.7			12.1			9.2			9.6		
Level of Service, LOS	B			B			A			A		
Approach Delay (s/veh)	10.7			12.1			9.2			9.6		
Approach LOS	B			B			A			A		
Intersection Delay, s/veh LOS	11.0						B					

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	SD			Intersection	Garvey Rd at Harper Blvd		
Agency/Co.	LTG			Jurisdiction	City of Palm Bay		
Date Performed	10/11/2018			East/West Street	Garvey Road		
Analysis Year	2018			North/South Street	Harper Boulevard		
Time Analyzed	Existing A.M. Peak-Hour			Peak Hour Factor	0.85		
Intersection Orientation	North-South			Analysis Time Period (hrs)	0.25		
Project Description	4247.06 Chaparral Residential Development						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	0	1	0	0	0	1	0
Configuration			LR							LT						TR
Volume (veh/h)		83		15						49	21				12	29
Percent Heavy Vehicles (%)		2		2						10						
Proportion Time Blocked																
Percent Grade (%)	0															
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2						4.1						
Critical Headway (sec)		6.42		6.22						4.20						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.52		3.32						2.24						

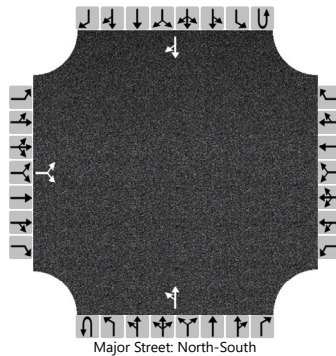
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			115							58						
Capacity, c (veh/h)			818							1542						
v/c Ratio			0.14							0.04						
95% Queue Length, Q ₉₅ (veh)			0.5							0.1						
Control Delay (s/veh)			10.1							7.4						
Level of Service (LOS)			B							A						
Approach Delay (s/veh)	10.1								5.3							
Approach LOS	B															

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	SD			Intersection	Garvey Rd at Harper Blvd		
Agency/Co.	LTG			Jurisdiction	City of Palm Bay		
Date Performed	10/11/2018			East/West Street	Garvey Road		
Analysis Year	2018			North/South Street	Harper Boulevard		
Time Analyzed	Existing P.M. Peak-Hour			Peak Hour Factor	0.84		
Intersection Orientation	North-South			Analysis Time Period (hrs)	0.25		
Project Description	4247.06 Chaparral Residential Development						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	0	1	0	0	0	1	0
Configuration			LR							LT						TR
Volume (veh/h)		59		16						24	8				29	117
Percent Heavy Vehicles (%)		7		7						16						
Proportion Time Blocked																
Percent Grade (%)	0															
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2						4.1						
Critical Headway (sec)		6.47		6.27						4.26						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.56		3.36						2.34						

Delay, Queue Length, and Level of Service

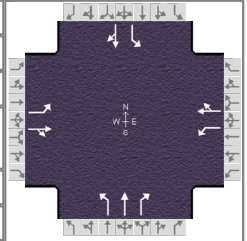
Flow Rate, v (veh/h)			89							29						
Capacity, c (veh/h)			818							1325						
v/c Ratio			0.11							0.02						
95% Queue Length, Q ₉₅ (veh)			0.4							0.1						
Control Delay (s/veh)			9.9							7.8						
Level of Service (LOS)			A							A						
Approach Delay (s/veh)	9.9								5.9							
Approach LOS	A															

APPENDIX F

Signalized Intersections HCS Worksheets – Existing Conditions

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information		
Agency	LTG			Duration, h	0.25	
Analyst	SD	Analysis Date	Sep 18, 2018		Area Type	CBD
Jurisdiction	City of Palm Bay		Time Period	Existing A.M. Pk-Hr	PHF	0.95
Urban Street	Malabar Road		Analysis Year	2018	Analysis Period	1 > 7:00
Intersection	Malabar Rd at Jupiter Blvd		File Name	4 Malabar Rd at Jupiter Blvd - Existing AM PK.xus		
Project Description	4247.06 Chaparral Residential Development					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	42	276	47	46	394	258	157	141	40	254	179	90

Signal Information														
Cycle, s	127.9	Reference Phase	2											
Offset, s	0	Reference Point	End											
Uncoordinated	Yes	Simult. Gap E/W	On	Green	4.8	18.2	34.4	13.5	1.5	18.5				
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	4.0	5.0	4.0	4.0	0.0	5.0				
				Red	3.0	3.0	3.0	3.0	0.0	3.0				

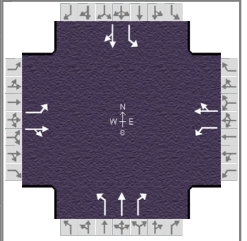
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6	3	8	7	4
Case Number	1.2	4.0	1.3	4.0	1.1	3.0	1.1	4.0
Phase Duration, s	11.8	37.9	41.4	67.6	20.5	26.5	22.0	28.0
Change Period, (Y+R _c), s	7.0	8.0	8.0	8.0	7.0	8.0	7.0	8.0
Max Allow Headway (MAH), s	4.0	5.0	5.0	5.0	4.1	5.1	4.1	5.1
Queue Clearance Time (g _s), s	4.9	27.9	2.0	55.7	13.1	12.7	17.0	22.0
Green Extension Time (g _e), s	0.1	2.0	5.1	3.8	0.5	1.9	0.0	0.0
Phase Call Probability	0.79	1.00	0.82	1.00	1.00	1.00	1.00	1.00
Max Out Probability	0.00	0.00	0.02	0.20	0.00	0.11	1.00	1.00

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (v), veh/h	44	340		48	686		165	148	9	267	283	
Adjusted Saturation Flow Rate (s), veh/h/ln	1590	1627		1590	1559		1590	1670	1415	1590	1575	
Queue Service Time (g _s), s	2.9	25.9		0.0	53.7		11.1	10.7	0.7	15.0	20.0	
Cycle Queue Clearance Time (g _c), s	2.9	25.9		0.0	53.7		11.1	10.7	0.7	15.0	20.0	
Green Ratio (g/C)	0.20	0.23		0.39	0.47		0.25	0.14	0.14	0.26	0.16	
Capacity (c), veh/h	115	381		487	727		225	242	205	311	246	
Volume-to-Capacity Ratio (X)	0.383	0.893		0.099	0.945		0.735	0.613	0.046	0.860	1.150	
Back of Queue (Q), ft/ln (95 th percentile)	55.5	428.2		51.2	776		208.3	210.6	12.3	168	579	
Back of Queue (Q), veh/ln (95 th percentile)	2.2	16.7		2.0	30.3		8.1	8.2	0.5	6.6	22.6	
Queue Storage Ratio (RQ) (95 th percentile)	0.37	0.00		0.23	0.00		1.19	0.00	0.05	0.55	0.00	
Uniform Delay (d ₁), s/veh	44.2	47.4		34.6	32.6		41.4	51.3	19.3	44.8	54.0	
Incremental Delay (d ₂), s/veh	2.1	10.0		0.1	17.9		4.6	3.5	0.1	20.8	103.9	
Initial Queue Delay (d ₃), s/veh	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Control Delay (d), s/veh	46.3	57.5		34.7	50.5		46.0	54.9	19.4	65.6	157.9	
Level of Service (LOS)	D	E		C	D		D	D	B	E	F	
Approach Delay, s/veh / LOS	56.2	E		49.5	D		49.3	D		113.1	F	
Intersection Delay, s/veh / LOS	68.3						E					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.17	B	1.91	B	1.95	B	1.95	B
Bicycle LOS Score / LOS	1.12	A	1.70	B	1.02	A	1.40	A

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information		
Agency	LTG			Duration, h	0.25	
Analyst	SD	Analysis Date	Sep 18, 2018		Area Type	Other
Jurisdiction	City of Palm Bay		Time Period	Existing P.M. Pk-Hr	PHF	0.89
Urban Street	Malabar Road		Analysis Year	2018	Analysis Period	1 > 7:00
Intersection	Malabar Rd at Jupiter Blvd		File Name	4 Malabar Rd at Jupiter Blvd - Existing P.M..xus		
Project Description	4247.06 Chaparral Residential Development					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	130	337	131	46	179	258	64	141	40	182	143	40

Signal Information													
Cycle, s	112.3	Reference Phase	2										
Offset, s	0	Reference Point	End	Green	9.3	21.5	8.5	5.6	0.6	12.7			
Uncoordinated	Yes	Simult. Gap E/W	On	Yellow	4.0	5.0	4.0	4.0	4.0	5.0			
Force Mode	Fixed	Simult. Gap N/S	On	Red	3.0	3.0	3.0	3.0	3.0	3.0			

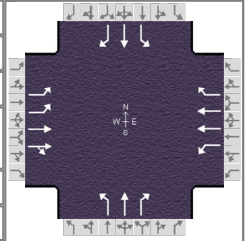
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6	3	8	7	4
Case Number	1.2	4.0	1.3	4.0	1.1	3.0	1.1	4.0
Phase Duration, s	16.3	45.8	15.5	45.1	12.6	20.7	20.2	28.3
Change Period, (Y+R _c), s	7.0	8.0	8.0	8.0	7.0	8.0	7.0	8.0
Max Allow Headway (MAH), s	4.0	5.0	5.0	5.0	4.1	5.1	4.1	5.1
Queue Clearance Time (g _s), s	9.1	34.3	2.0	33.5	6.1	11.4	13.1	15.9
Green Extension Time (g _e), s	0.3	3.5	3.4	3.5	0.2	1.3	0.1	0.8
Phase Call Probability	0.99	1.00	0.80	1.00	0.89	1.00	1.00	1.00
Max Out Probability	0.00	0.00	0.00	0.00	0.00	0.05	1.00	1.00

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (v), veh/h	146	526		52	491		72	158	19	204	206	
Adjusted Saturation Flow Rate (s), veh/h/ln	1781	1738		1711	1664		1739	1841	1485	1767	1568	
Queue Service Time (g _s), s	7.1	32.3		0.0	31.5		4.1	9.4	1.3	11.1	13.9	
Cycle Queue Clearance Time (g _c), s	7.1	32.3		0.0	31.5		4.1	9.4	1.3	11.1	13.9	
Green Ratio (g/C)	0.29	0.34		0.24	0.33		0.16	0.11	0.11	0.25	0.18	
Capacity (c), veh/h	212	586		206	550		196	209	168	308	284	
Volume-to-Capacity Ratio (X)	0.690	0.897		0.250	0.893		0.367	0.759	0.114	0.665	0.725	
Back of Queue (Q), ft/ln (95 th percentile)	145.2	526.4		64.5	493.9		83.6	213.5	23.9	222.5	262.8	
Back of Queue (Q), veh/ln (95 th percentile)	5.7	20.2		2.4	19.1		3.2	8.3	0.9	8.7	10.0	
Queue Storage Ratio (RQ) (95 th percentile)	0.97	0.00		0.29	0.00		0.48	0.00	0.10	0.73	0.00	
Uniform Delay (d ₁), s/veh	33.1	35.4		47.9	35.7		41.4	48.3	22.1	36.6	43.4	
Incremental Delay (d ₂), s/veh	4.0	7.1		0.6	7.3		1.1	7.8	0.4	4.4	9.6	
Initial Queue Delay (d ₃), s/veh	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Control Delay (d), s/veh	37.1	42.5		48.6	43.1		42.5	56.2	22.5	40.9	53.0	
Level of Service (LOS)	D	D		D	D		D	E	C	D	D	
Approach Delay, s/veh / LOS	41.3		D	43.6		D	49.7		D	47.0		D
Intersection Delay, s/veh / LOS	44.3						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.18	B	1.93	B	1.95	B	1.94	B
Bicycle LOS Score / LOS	1.60	B	1.38	A	0.90	A	1.16	A

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information		
Agency	LTG			Duration, h	0.25	
Analyst	SD	Analysis Date	Sep 18, 2018		Area Type	Other
Jurisdiction	City of Palm Bay	Time Period	Existing A.M. Peak-Hour		PHF	0.95
Urban Street	Minton Road	Analysis Year	2018		Analysis Period	1 > 7:00
Intersection	Malabar Rd. at Minton Rd.	File Name	6 Malabar Rd at Minton - Existing AM PK.xus			
Project Description	4247.06 Chaparral Residential Development					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	122	334	79	173	328	105	52	596	178	112	340	212

Signal Information													
Cycle, s	112.1	Reference Phase	2										
Offset, s	0	Reference Point	End										
Uncoordinated	Yes	Simult. Gap E/W	On	Green	3.5	3.2	42.3	6.4	7.5	18.3			
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	4.0	0.0	4.0	4.0	0.0	5.0			
				Red	4.0	0.0	3.0	4.0	0.0	3.0			

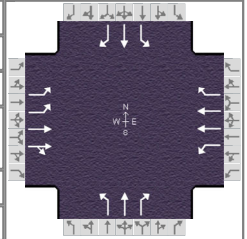
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8	5	2	1	6
Case Number	2.0	4.0	2.0	3.0	1.1	3.0	1.1	3.0
Phase Duration, s	14.4	26.3	21.8	33.8	11.5	49.3	14.7	52.5
Change Period, (Y+R _c), s	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
Max Allow Headway (MAH), s	4.1	4.1	4.1	4.1	4.1	4.1	4.0	4.1
Queue Clearance Time (g _s), s	6.1	15.1	13.3	11.4	4.2	38.3	6.6	18.2
Green Extension Time (g _e), s	0.3	3.2	0.5	3.4	0.1	2.9	0.2	5.0
Phase Call Probability	0.98	1.00	1.00	1.00	0.82	1.00	0.97	1.00
Max Out Probability	0.00	0.02	0.00	0.00	0.00	0.20	0.00	0.15

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	128	223	212	182	345	58	55	627	144	118	358	166
Adjusted Saturation Flow Rate (s), veh/h/ln	1716	1856	1733	1767	1766	1572	1767	1856	1572	1767	1856	1572
Queue Service Time (g _s), s	4.1	12.8	13.1	11.3	9.4	3.3	2.2	36.3	7.2	4.6	16.2	8.0
Cycle Queue Clearance Time (g _c), s	4.1	12.8	13.1	11.3	9.4	3.3	2.2	36.3	7.2	4.6	16.2	8.0
Green Ratio (g/C)	0.06	0.16	0.16	0.12	0.23	0.23	0.40	0.37	0.37	0.43	0.40	0.40
Capacity (c), veh/h	195	303	283	219	814	362	359	684	579	206	736	624
Volume-to-Capacity Ratio (X)	0.658	0.734	0.749	0.833	0.424	0.160	0.153	0.918	0.249	0.573	0.486	0.267
Back of Queue (Q), ft/ln (95 th percentile)	85.6	259.9	250	236.1	186.1	58.8	41.5	638.8	123.1	89.6	285.7	132.3
Back of Queue (Q), veh/ln (95 th percentile)	3.3	10.2	9.8	9.2	7.3	2.3	1.6	25.0	4.8	3.5	11.2	5.2
Queue Storage Ratio (RQ) (95 th percentile)	0.39	0.00	0.00	0.61	0.00	0.16	0.33	0.00	0.67	0.54	0.00	0.66
Uniform Delay (d ₁), s/veh	51.9	44.7	44.8	48.1	36.9	34.6	21.9	33.9	24.7	26.5	25.3	22.9
Incremental Delay (d ₂), s/veh	3.8	3.4	4.0	8.0	0.4	0.2	0.2	11.9	0.2	2.5	0.5	0.2
Initial Queue Delay (d ₃), 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
Control Delay (d), s/veh	55.7	48.1	48.7	56.1	37.2	34.8	22.1	45.8	24.9	29.0	25.8	23.1
Level of Service (LOS)	E	D	D	E	D	C	C	D	C	C	C	C
Approach Delay, s/veh / LOS	50.1	D		42.9	D		40.6	D		25.7	C	
Intersection Delay, s/veh / LOS	39.5						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.19	B	2.37	B	2.50	C	2.43	B
Bicycle LOS Score / LOS	0.95	A	0.97	A	1.85	B	1.55	B

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information		
Agency	LTG			Duration, h	0.25	
Analyst	SD	Analysis Date	Sep 18, 2018		Area Type	Other
Jurisdiction	City of Palm Bay		Time Period	Existing P.M. Pk-Hr	PHF	0.95
Urban Street	Minton Road		Analysis Year	2018	Analysis Period	1 > 7:00
Intersection	Malabar Rd. at Minton Rd.	File Name	6 Malabar Rd at Minton - NB Existing P.M. PK.xus			
Project Description	4247.06 Chaparral Residential Development					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	122	334	79	173	328	105	69	324	80	112	640	212

Signal Information													
Cycle, s	102.1	Reference Phase	2										
Offset, s	0	Reference Point	End										
Uncoordinated	Yes	Simult. Gap E/W	On	Green	4.3	2.2	33.8	5.9	6.8	17.0			
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	4.0	0.0	4.0	4.0	0.0	5.0			
				Red	4.0	0.0	3.0	4.0	0.0	4.0			

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8	5	2	1	6
Case Number	2.0	4.0	2.0	3.0	1.1	3.0	1.1	3.0
Phase Duration, s	13.9	26.0	20.7	32.9	12.3	40.8	14.4	43.0
Change Period, (Y+R _c), s	8.0	9.0	8.0	9.0	8.0	7.0	8.0	7.0
Max Allow Headway (MAH), s	4.1	4.1	4.1	4.1	4.1	4.0	4.0	4.0
Queue Clearance Time (g _s), s	5.7	13.9	12.3	10.5	4.7	17.4	6.4	38.0
Green Extension Time (g _e), s	0.4	3.2	0.6	3.4	0.1	5.2	0.2	0.0
Phase Call Probability	0.97	1.00	0.99	1.00	0.87	1.00	0.96	1.00
Max Out Probability	0.00	0.01	0.00	0.00	0.00	0.01	0.00	1.00

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	128	223	212	182	345	52	73	341	0	118	674	191
Adjusted Saturation Flow Rate (s), veh/h/ln	1716	1856	1733	1767	1766	1572	1767	1856	1572	1767	1856	1572
Queue Service Time (g _s), s	3.7	11.6	11.9	10.3	8.5	2.7	2.7	15.4	0.0	4.4	36.0	9.1
Cycle Queue Clearance Time (g _c), s	3.7	11.6	11.9	10.3	8.5	2.7	2.7	15.4	0.0	4.4	36.0	9.1
Green Ratio (g/C)	0.06	0.17	0.17	0.12	0.23	0.23	0.37	0.33	0.33	0.39	0.35	0.35
Capacity (c), veh/h	200	310	290	221	826	368	144	615	521	368	654	555
Volume-to-Capacity Ratio (X)	0.643	0.718	0.733	0.825	0.418	0.140	0.503	0.555	0.000	0.320	1.029	0.344
Back of Queue (Q), ft/ln (95 th percentile)	77	237.7	228.8	217.3	166	46.5	56	282.1	0	81.3	799	150.4
Back of Queue (Q), veh/ln (95 th percentile)	3.0	9.3	9.0	8.5	6.5	1.8	2.2	11.0	0.0	3.2	31.2	5.9
Queue Storage Ratio (RQ) (95 th percentile)	0.35	0.00	0.00	0.56	0.00	0.13	0.45	0.00	0.00	0.49	0.00	0.75
Uniform Delay (d ₁), s/veh	47.0	40.2	40.4	43.6	33.2	31.0	26.5	28.0	0.0	21.4	33.0	24.3
Incremental Delay (d ₂), s/veh	3.4	3.1	3.6	7.6	0.3	0.2	2.7	0.8	0.0	0.5	42.9	0.4
Initial Queue Delay (d ₃), 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
Control Delay (d), s/veh	50.5	43.4	43.9	51.1	33.5	31.2	29.2	28.7	0.0	21.9	76.0	24.7
Level of Service (LOS)	D	D	D	D	C	C	C	C		C	F	C
Approach Delay, s/veh / LOS	45.2	D		38.9	D		28.8	C			59.5	E
Intersection Delay, s/veh / LOS	46.6						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.25	B	2.34	B	2.52	C	2.43	B
Bicycle LOS Score / LOS	0.95	A	0.97	A	1.17	A	2.11	B

APPENDIX G

Signal Timings



INTERSECTION NAME: MALABAR / JUPITER
 PROGRAMMED BY: _____
 CONTROLLER SERIAL # 0906-011-0519
 INTERSECTION TELEPHONE (IF DIRECT DIAL): _____
 SECTION: _____

INSTALLATION DATE: 8/14/13
 PROGRAM DATE: _____
 SECURITY CODE: _____
 ADDRESS: _____

INTERVAL	PHASE (ON/OFF)							
	1	2	3	4	5	6	7	8
MEMORY								
EXT RECALL		X				X		
MAX RECALL								
PED RECALL								
CNA I								
CNA II								
FL WALK								
SOFT RECALL								
WALK REST								
COND PED								
FWTPCL								

INTERVAL	PHASE TIMINGS							
	1	2	3	4	5	6	7	8
MIN GREEN	6	10	6	10	6	10	6	10
PASSAGE	3	4	3	4	3	4	3	4
YELLOW	4	5	4	5	4	5	4	5
RED	3	3	3	3	3	3	3	3
MAX I	30	20	30	20	20	20	15	25
MAX II								
WALK	10	EXCLUSIVE PED						
PED CLEAR	18	EXCLUSIVE PED						
S/A								
TBR								
TTR								
MIN GAP								
MAX VI								
MAX EXT								
AUTO MAX								
AMR								

PHASES USED								
	1	2	3	4	5	6	7	8
ON/OFF	X	X	X	X	X	X	X	X
SEQUENCE	1 = SEQ, 2 = DUAL RNG, 3-7 = SPEC, 8 = LEAD/LAG							
LEAD/LAG CODES (ONLY USED IF "8" WAS ENTERED FOR SEQUENCE)								
PAIRS	1 AND 2		3 AND 4		5 AND 6		7 AND 8	
CODE								
LEAD/LAG CODES - 1 = NO REV, 2 = ALWAYS REV, 3 = REV BY C/S/O OR CLOCK/INPUT								

INITIALIZE/FLASH				
	INITIALIZE	ENTER FLASH	EXT FLASH	INTERVAL CODES: 1 = RED 2 = YELLOW 3 = GREEN
RING 1 PHASE	B			
RING 2 PHASE				
INTERVAL				
POWER UP/RESTART TIMINGS				
MINIMUM FLASH	(0-127 SECONDS)			
1 ST ALL RED AFTER FLASH	(0-127 SECONDS)			

City of Palm Bay Signal Timing Sheet

INTERSECTION NAME: Malabar and Minton
PROGRAMMED BY: _____
CONTROLLER SERIAL #: _____

INSTALLATION/INSPECTION DATE: _____
PROGRAM DATE: _____
SECURITY CODE: _____

INTERVAL	PHASE (ON/OFF)							
	1	2	3	4	5	6	7	8
MEMORY								
EXT RECALL		ON				ON		
MAX RECALL								
PED RECALL								
CAN I								
CAN II								
FL WALK								
SOFT RECALL								
WALK REST								
COND PED								
FWTPCL								

INTERVAL	PHASE TIMINGS							
	1	2	3	4	5	6	7	8
Min Green	4.0	15.0	4.0	5.0	4.0	15.0	4.0	5.0
PASSAGE	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
YELLOW	4.0	4.0	4.0	5.0	4.0	4.0	4.0	5.0
RED	4.0	3.0	4.0	4.0	4.0	3.0	4.0	4.0
MAX I	20.0	54.0	32.0	35.0	20.0	36.0	20.0	47.0
MAX II	25.0	60.0	25.0	30.0	25.0	60.0	25.0	30.0
WALK		7.0		7.0		7.0		7.0
PED CLEAR		28.0		28.0		28.0		28.0
S/A								
TBK								
TTR								
MIN GAP								
MAX VI								
MAX EXT								
AUTO MAX								
AMR								

PHASES USED								
	1	2	3	4	5	6	7	8
ON/OFF	ON	ON	ON	ON	ON	ON	ON	ON
SEQUENCE	2		1=SEG,2=DUAL RING,3-7=SPEC, 8=LEAD/LAG					
LEAD/LAG CODES (ONLY USED IF "8" WAS ENTERED FOR SQUENCE)								
PAIRS	1 AND 2		3 AND 4		5 AND 6		7 AND 8	

INITIALIZE/FLASH				
	INITIALIZE	ENTER FLASH	EXIT FLASH	INTERVAL CODES 1=RED 2=YELLOW 3=GREEN
RING 1 PHASE	2	4	2	
RING 2 PHASE	6	8	6	
INTERVAL	3	1	3	
POWER UP/RESTART TIMINGS				
MINIMUM FLASH	0	(0-9 OR 127 SEC)		
1ST ALL RED AFTER FLASH	0	(0-9 OR 127 SEC)		

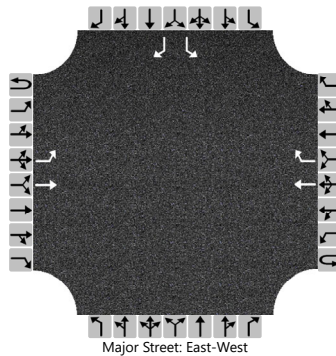
APPENDIX H

Unsignalized Intersections HCS Worksheets –Phase I Build-Out Conditions

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	SD			Intersection	SJHP at Malabar Rd		
Agency/Co.	LTG			Jurisdiction	Brevard County		
Date Performed	09/18/2018			East/West Street	Malabar Road		
Analysis Year	2020			North/South Street	St. John Heritage Parkway		
Time Analyzed	PH1 A.M. Pk-Hr			Peak Hour Factor	0.75		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	4247.06 Chaparral Residential Development						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6								
Priority																
Number of Lanes	0	1	1	0	0	0	1	1	0	0	0		1	0	1	
Configuration		L	T				T	R						L		R
Volume (veh/h)		116	217				363	329						113		188
Percent Heavy Vehicles (%)		10												13		6
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized					No								No			
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1													7.1		6.2
Critical Headway (sec)		4.20													6.53		6.26
Base Follow-Up Headway (sec)		2.2													3.5		3.3
Follow-Up Headway (sec)		2.22													3.62		3.32

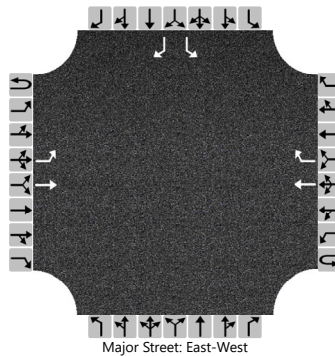
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		155													151		251
Capacity, c (veh/h)		725													180		579
v/c Ratio		0.21													0.84		0.43
95% Queue Length, Q ₉₅ (veh)		0.8													5.9		2.2
Control Delay (s/veh)		11.3													82.4		15.9
Level of Service (LOS)		B													F		C
Approach Delay (s/veh)	3.9												40.8				
Approach LOS													E				

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	SD			Intersection	SJHP at Malabar Rd		
Agency/Co.	LTG			Jurisdiction	Brevard County		
Date Performed	09/18/2018			East/West Street	Malabar Road		
Analysis Year	2020			North/South Street	St. John Heritage Parkway		
Time Analyzed	PH1 P.M. Pk-Hr			Peak Hour Factor	0.75		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	4247.06 Chaparral Residential Development						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	1	1	0	0	0	1	1		0	0	0		1	0	1
Configuration		L	T				T	R						L		R
Volume (veh/h)		177	295				65	170						359		43
Percent Heavy Vehicles (%)		7												4		5
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized					No								No			
Median Type Storage	Undivided															

Critical and Follow-up Headways

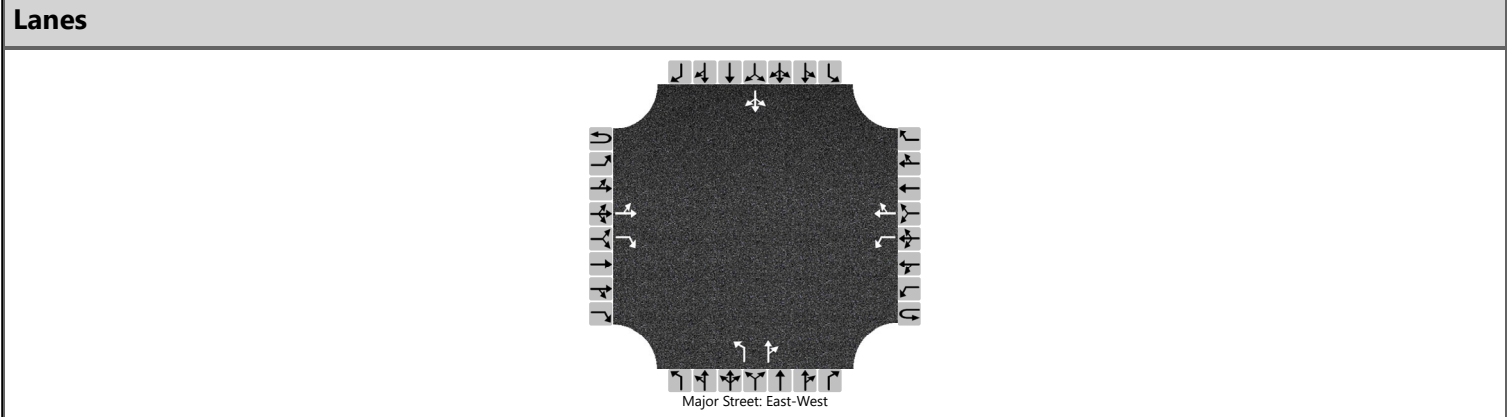
Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.17												6.44		6.25
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.22												3.52		3.36

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		236												479		57
Capacity, c (veh/h)		1241												232		960
v/c Ratio		0.19												2.07		0.06
95% Queue Length, Q ₉₅ (veh)		0.7												35.9		0.2
Control Delay (s/veh)		8.6												528.3		9.0
Level of Service (LOS)		A												F		A
Approach Delay (s/veh)		3.2												472.8		
Approach LOS														F		

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	SD			Intersection	Malabar Rd at Wisteria Av		
Agency/Co.	LTG			Jurisdiction	Brevard County		
Date Performed	09/18/2018			East/West Street	Malabar Road		
Analysis Year	2020			North/South Street	Project Driveway/Wisteria		
Time Analyzed	PH1 A.M. Pk-Hr			Peak Hour Factor	0.75		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	4247.06 Chaparral Residential Development						



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	1	0	1	1	0		1	1	0		0	1	0
Configuration		LT		R		L		TR		L		TR			LTR	
Volume (veh/h)		14	296	26		24	620	12		77	0	73		26	0	17
Percent Heavy Vehicles (%)		8				4				2	2	2		12	3	6
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized	No															
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.18				4.14				7.12	6.52	6.22		7.22	6.53	6.26
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.23				2.22				3.52	4.02	3.32		3.54	4.03	3.34

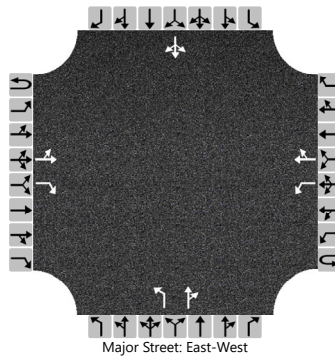
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		19				32				103		97			57		
Capacity, c (veh/h)		779				1127				116		654			131		
v/c Ratio		0.02				0.03				0.89		0.15			0.44		
95% Queue Length, Q ₉₅ (veh)		0.1				0.1				5.4		0.5			1.9		
Control Delay (s/veh)		9.7				8.3				125.0		11.5			52.3		
Level of Service (LOS)		A				A				F		B			F		
Approach Delay (s/veh)		0.7				0.3				69.7				52.3			
Approach LOS										F				F			

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	SD			Intersection	Malabar Rd at Wisteria Av		
Agency/Co.	LTG			Jurisdiction	Brevard County		
Date Performed	09/18/2018			East/West Street	Malabar Road		
Analysis Year	2020			North/South Street	Project Driveway/Wisteria		
Time Analyzed	PH1 P.M. Pk-Hr			Peak Hour Factor	0.85		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	4247.06 Chaparral Residential Development						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	1	0	1	1	0		1	1	0		0	1	0
Configuration		LT		R		L		TR		L		TR			LTR	
Volume (veh/h)		8	558	87		82	165	43		51	0	48		26	0	9
Percent Heavy Vehicles (%)		13				12				3	3	3		8	3	2
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized	No															
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.23				4.22				7.13	6.53	6.23		7.18	6.53	6.22
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.23				2.22				3.52	4.02	3.32		3.57	4.03	3.37

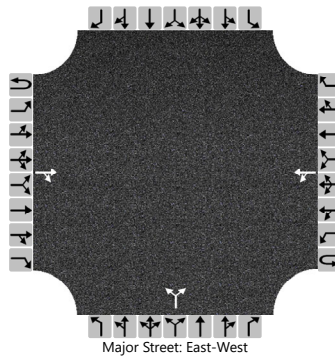
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		9				96				60		56				41	
Capacity, c (veh/h)		1305				834				170		464				168	
v/c Ratio		0.01				0.12				0.35		0.12				0.25	
95% Queue Length, Q ₉₅ (veh)		0.0				0.4				1.5		0.4				0.9	
Control Delay (s/veh)		7.8				9.9				37.2		13.8				33.3	
Level of Service (LOS)		A				A				E		B				D	
Approach Delay (s/veh)		0.2				2.8				25.9				33.3			
Approach LOS										D				D			

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	SD			Intersection	Malabar Rd at Hurley Blvd		
Agency/Co.	LTG			Jurisdiction	City of Palm Bay		
Date Performed	09/18/2018			East/West Street	Malabar Road		
Analysis Year	2020			North/South Street	Hurley Boulevard		
Time Analyzed	PH1 A.M. Pk-Hr			Peak Hour Factor	0.86		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	4247.06 Chaparral Residential Development						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			371	23		95	594			61		76				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)									0							
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1					7.1		6.2			
Critical Headway (sec)						4.13					6.43		6.23			
Base Follow-Up Headway (sec)						2.2					3.5		3.3			
Follow-Up Headway (sec)						2.24					3.52		3.32			

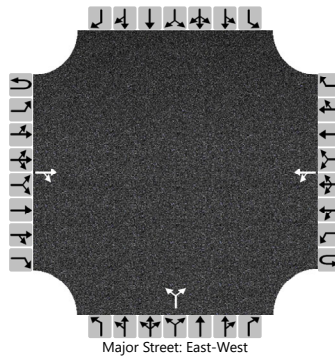
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						110					159					
Capacity, c (veh/h)						1092					240					
v/c Ratio						0.10					0.66					
95% Queue Length, Q ₉₅ (veh)						0.3					4.2					
Control Delay (s/veh)						8.7					45.2					
Level of Service (LOS)						A					E					
Approach Delay (s/veh)					2.4				45.2							
Approach LOS									E							

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	SD			Intersection	Malabar Rd at Hurley Blvd		
Agency/Co.	LTG			Jurisdiction	City of Palm Bay		
Date Performed	09/18/2018			East/West Street	Malabar Road		
Analysis Year	2020			North/South Street	Hurley Boulevard		
Time Analyzed	PH1 P.M. Pk-Hr			Peak Hour Factor	0.90		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	4247.06 Chaparral Residential Development						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			589	43		95	275			12		77				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)									0							
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1					7.1		6.2			
Critical Headway (sec)						4.13					6.43		6.23			
Base Follow-Up Headway (sec)						2.2					3.5		3.3			
Follow-Up Headway (sec)						2.24					3.52		3.32			

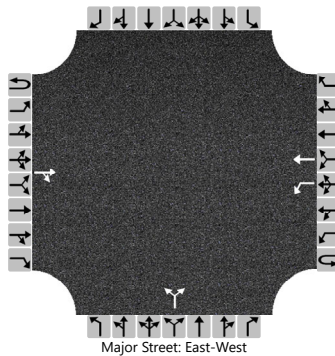
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						106						99				
Capacity, c (veh/h)						886						372				
v/c Ratio						0.12						0.27				
95% Queue Length, Q ₉₅ (veh)						0.4						1.1				
Control Delay (s/veh)						9.6						18.1				
Level of Service (LOS)						A						C				
Approach Delay (s/veh)					3.5				18.1							
Approach LOS									C							

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	SD			Intersection	Malabar Rd at Garvey Rd		
Agency/Co.	LTG			Jurisdiction	Brevard County		
Date Performed	09/18/2018			East/West Street	Malabar Road		
Analysis Year	2020			North/South Street	Garvey Road		
Time Analyzed	PH1 A.M. Pk-Hr			Peak Hour Factor	0.94		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	4247.06 Chaparral Residential Development						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	1	1	0		0	1	0		0	0	0
Configuration				TR		L	T				LR					
Volume (veh/h)			596	32		59	722			16		53				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1					7.1		6.2			
Critical Headway (sec)						4.13					6.43		6.23			
Base Follow-Up Headway (sec)						2.2					3.5		3.3			
Follow-Up Headway (sec)						2.25					3.52		3.32			

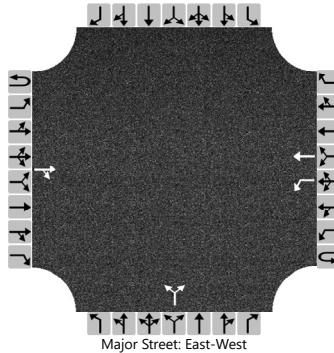
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)					63						73					
Capacity, c (veh/h)					909						276					
v/c Ratio					0.07						0.27					
95% Queue Length, Q ₉₅ (veh)					0.2						1.0					
Control Delay (s/veh)					9.3						22.7					
Level of Service (LOS)					A						C					
Approach Delay (s/veh)						0.7					22.7					
Approach LOS											C					

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	SD			Intersection	Malabar Rd at Garvey Rd		
Agency/Co.	LTG			Jurisdiction	City of Palm Bay		
Date Performed	09/18/2018			East/West Street	Malabar Road		
Analysis Year	2020			North/South Street	Garvey Road		
Time Analyzed	PH1 P.M. Pk-Hr			Peak Hour Factor	0.94		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	4247.06 Chaparral Residential Development						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	1	1	0		0	1	0		0	0	0
Configuration				TR		L	T				LR					
Volume (veh/h)			577	27		59	534			7		53				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)									0							
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1					7.1		6.2			
Critical Headway (sec)						4.13					6.43		6.23			
Base Follow-Up Headway (sec)						2.2					3.5		3.3			
Follow-Up Headway (sec)						2.24					3.52		3.32			

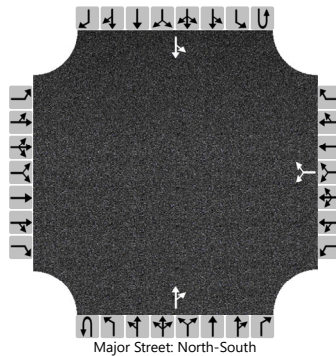
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)					63						64					
Capacity, c (veh/h)					933						390					
v/c Ratio					0.07						0.16					
95% Queue Length, Q ₉₅ (veh)					0.2						0.6					
Control Delay (s/veh)					9.1						16.0					
Level of Service (LOS)					A						C					
Approach Delay (s/veh)					0.9				16.0							
Approach LOS									C							

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	SD			Intersection	Jupiter Blvd at Americana		
Agency/Co.	LTG			Jurisdiction	City of Palm Bay		
Date Performed	10/11/2018			East/West Street	Jupiter Boulevard		
Analysis Year	2020			North/South Street	Americana Boulevard		
Time Analyzed	Phase 1 A.M. Peak-Hour			Peak Hour Factor	0.92		
Intersection Orientation	North-South			Analysis Time Period (hrs)	0.25		
Project Description	4247.06 Chaparral Residential Development						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	1	0	0	0	1	0
Configuration							LR					TR		LT		
Volume (veh/h)						32		60			336	61		139	432	
Percent Heavy Vehicles (%)						7		7						2		
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						7.1		6.2							4.1		
Critical Headway (sec)						6.47		6.27							4.12		
Base Follow-Up Headway (sec)						3.5		3.3							2.2		
Follow-Up Headway (sec)						3.56		3.36							2.22		

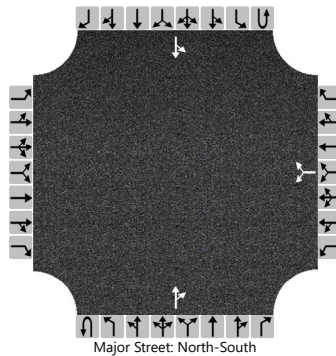
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						100									151		
Capacity, c (veh/h)						327									1127		
v/c Ratio						0.31									0.13		
95% Queue Length, Q ₉₅ (veh)						1.3									0.5		
Control Delay (s/veh)						20.8									8.7		
Level of Service (LOS)						C									A		
Approach Delay (s/veh)					20.8								3.3				
Approach LOS					C												

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	SD			Intersection	Jupiter Blvd at Americana		
Agency/Co.	LTG			Jurisdiction	City of Palm Bay		
Date Performed	10/11/2018			East/West Street	Jupiter Boulevard		
Analysis Year	2020			North/South Street	Americana Boulevard		
Time Analyzed	Phase 1 P.M. Peak-Hour			Peak Hour Factor	0.94		
Intersection Orientation	North-South			Analysis Time Period (hrs)	0.25		
Project Description	4247.06 Chaparral Residential Development						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	1	0	0	0	1	0
Configuration							LR					TR		LT		
Volume (veh/h)						64		77			479	33		67	472	
Percent Heavy Vehicles (%)						4		4						2		
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						7.1		6.2							4.1		
Critical Headway (sec)						6.44		6.24							4.12		
Base Follow-Up Headway (sec)						3.5		3.3							2.2		
Follow-Up Headway (sec)						3.54		3.34							2.22		

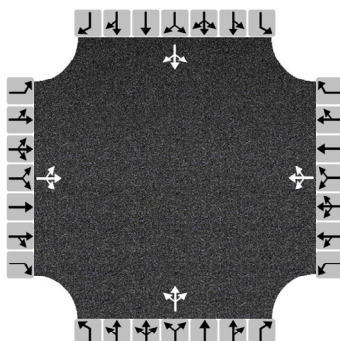
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						150									71		
Capacity, c (veh/h)						295									1024		
v/c Ratio						0.51									0.07		
95% Queue Length, Q ₉₅ (veh)						2.7									0.2		
Control Delay (s/veh)						29.1									8.8		
Level of Service (LOS)						D									A		
Approach Delay (s/veh)					29.1								1.8				
Approach LOS					D												

HCS7 All-Way Stop Control Report

General Information		Site Information	
Analyst	SD	Intersection	Jupiter Blvd at Garvey Rd
Agency/Co.	LTG	Jurisdiction	City of Palm Bay
Date Performed	10/11/2018	East/West Street	Jupiter Boulevard
Analysis Year	2020	North/South Street	Garvey Road
Analysis Time Period (hrs)	0.25	Peak Hour Factor	0.83
Time Analyzed	Phase 1 A.M. Peak-Hour		
Project Description	4247.06 Chaparral Residential Development		

Lanes



Vehicle Volume and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
Movement												
Volume	20	336	22	18	253	22	21	39	79	49	20	23
% Thrus in Shared Lane												
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	455			353			167			111		
Percent Heavy Vehicles	4			8			2			3		

Departure Headway and Service Time

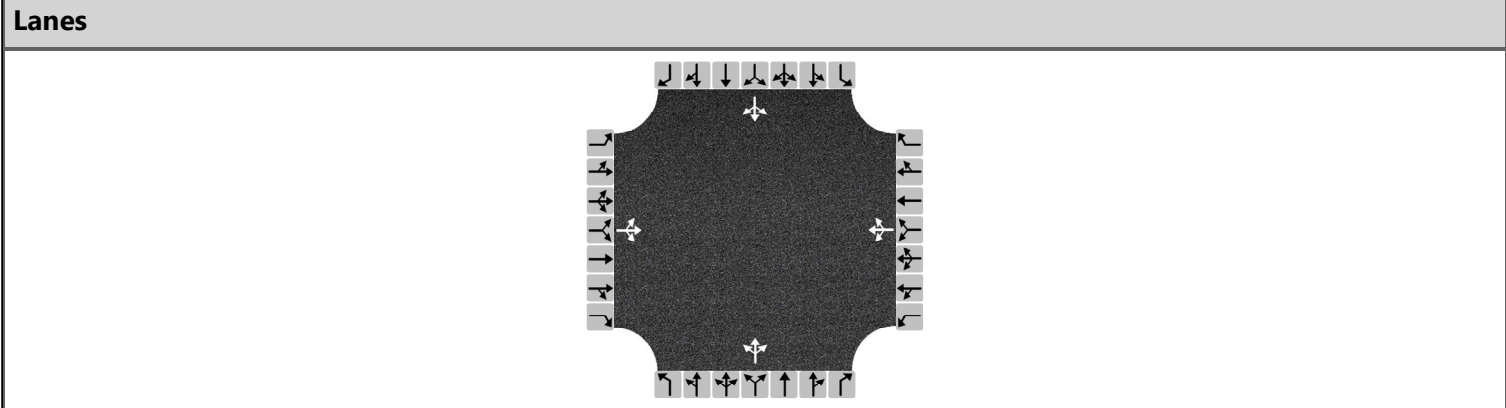
Initial Departure Headway, hd (s)	3.20			3.20			3.20			3.20		
Initial Degree of Utilization, x	0.405			0.314			0.149			0.099		
Final Departure Headway, hd (s)	5.43			5.64			6.09			6.53		
Final Degree of Utilization, x	0.687			0.553			0.283			0.201		
Move-Up Time, m (s)	2.0			2.0			2.0			2.0		
Service Time, ts (s)	3.43			3.64			4.09			4.53		

Capacity, Delay and Level of Service

Flow Rate, v (veh/h)	455			353			167			111		
Capacity	663			639			591			552		
95% Queue Length, Q ₉₅ (veh)	5.4			3.4			1.2			0.7		
Control Delay (s/veh)	19.5			15.4			11.5			11.2		
Level of Service, LOS	C			C			B			B		
Approach Delay (s/veh)	19.5			15.4			11.5			11.2		
Approach LOS	C			C			B			B		
Intersection Delay, s/veh LOS	16.1						C					

HCS7 All-Way Stop Control Report

General Information		Site Information	
Analyst	SD	Intersection	Jupiter Blvd at Garvey Rd
Agency/Co.	LTG	Jurisdiction	City of Palm Bay
Date Performed	10/11/2018	East/West Street	Jupiter Boulevard
Analysis Year	2020	North/South Street	Garvey Road
Analysis Time Period (hrs)	0.25	Peak Hour Factor	0.87
Time Analyzed	Phase 1 P.M. Peak-Hour		
Project Description	4247.06 Chaparral Residential Development		



Vehicle Volume and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
Movement												
Volume	10	211	17	78	223	18	20	24	55	22	58	13
% Thrus in Shared Lane												
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	274			367			114			107		
Percent Heavy Vehicles	6			3			2			3		

Departure Headway and Service Time

Initial Departure Headway, hd (s)	3.20			3.20			3.20			3.20		
Initial Degree of Utilization, x	0.243			0.326			0.101			0.095		
Final Departure Headway, hd (s)	5.13			5.00			5.49			5.77		
Final Degree of Utilization, x	0.389			0.509			0.173			0.171		
Move-Up Time, m (s)	2.0			2.0			2.0			2.0		
Service Time, ts (s)	3.13			3.00			3.49			3.77		

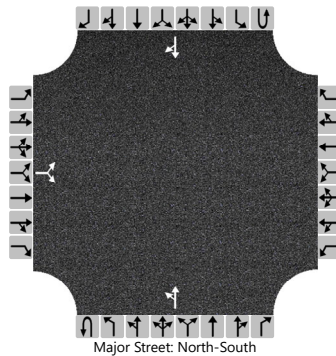
Capacity, Delay and Level of Service

Flow Rate, v (veh/h)	274			367			114			107		
Capacity	702			720			656			624		
95% Queue Length, Q ₉₅ (veh)	1.9			2.9			0.6			0.6		
Control Delay (s/veh)	11.4			13.1			9.6			10.0		
Level of Service, LOS	B			B			A			A		
Approach Delay (s/veh)	11.4			13.1			9.6			10.0		
Approach LOS	B			B			A			A		
Intersection Delay, s/veh LOS	11.7						B					

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	SD			Intersection	Garvey Rd at Harper Blvd		
Agency/Co.	LTG			Jurisdiction	City of Palm Bay		
Date Performed	10/11/2018			East/West Street	Garvey Road		
Analysis Year	2020			North/South Street	Harper Boulevard		
Time Analyzed	Phase 1 A.M. Peak-Hour			Peak Hour Factor	0.85		
Intersection Orientation	North-South			Analysis Time Period (hrs)	0.25		
Project Description	4247.06 Chaparral Residential Development						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	0	1	0	0	0	1	0
Configuration			LR							LT						TR
Volume (veh/h)		86		16						52	22				16	30
Percent Heavy Vehicles (%)		2		2						10						
Proportion Time Blocked																
Percent Grade (%)	0															
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2						4.1						
Critical Headway (sec)		6.42		6.22						4.20						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.52		3.32						2.24						

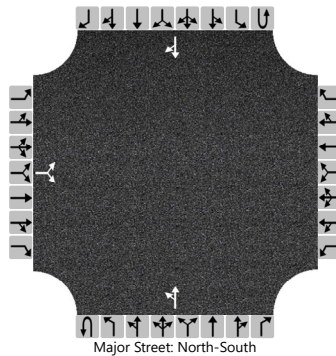
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			120							61						
Capacity, c (veh/h)			804							1534						
v/c Ratio			0.15							0.04						
95% Queue Length, Q ₉₅ (veh)			0.5							0.1						
Control Delay (s/veh)			10.3							7.4						
Level of Service (LOS)			B							A						
Approach Delay (s/veh)	10.3								5.3							
Approach LOS	B															

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	SD			Intersection	Garvey Rd at Harper Blvd		
Agency/Co.	LTG			Jurisdiction	City of Palm Bay		
Date Performed	10/11/2018			East/West Street	Garvey Road		
Analysis Year	2020			North/South Street	Harper Boulevard		
Time Analyzed	Phase 1 P.M. Peak-Hour			Peak Hour Factor	0.84		
Intersection Orientation	North-South			Analysis Time Period (hrs)	0.25		
Project Description	4247.06 Chaparral Residential Development						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	0	1	0	0	0	1	0
Configuration			LR							LT						TR
Volume (veh/h)		61		17						25	13				33	122
Percent Heavy Vehicles (%)		7		7						16						
Proportion Time Blocked																
Percent Grade (%)	0															
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2						4.1						
Critical Headway (sec)		6.47		6.27						4.26						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.56		3.36						2.34						

Delay, Queue Length, and Level of Service

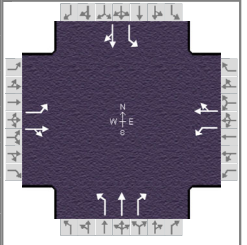
Flow Rate, v (veh/h)			93							30						
Capacity, c (veh/h)			803							1312						
v/c Ratio			0.12							0.02						
95% Queue Length, Q ₉₅ (veh)			0.4							0.1						
Control Delay (s/veh)			10.1							7.8						
Level of Service (LOS)			B							A						
Approach Delay (s/veh)	10.1								5.2							
Approach LOS	B															

APPENDIX I

Signalized Intersections HCS Worksheets – Phase I Build-Out Conditions

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information			
Agency	LTG			Duration, h	0.25		
Analyst	SD	Analysis Date	Sep 18, 2018		Area Type	CBD	
Jurisdiction	City of Palm Bay		Time Period	Ph1 A.M. Pk-Hr		PHF	0.95
Urban Street	Malabar Road		Analysis Year	2020		Analysis Period	1 > 7:00
Intersection	Malabar Rd at Jupiter Blvd		File Name	4 Malabar Rd at Jupiter Blvd - Ph1 Build-Out AM...			
Project Description	4247.06 Chaparral Residential Development						



Demand Information	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Approach Movement												
Demand (v), veh/h	59	324	60	48	422	268	167	147	42	264	186	99

Signal Information				Signal Phases									
Cycle, s	137.1	Reference Phase	2										
Offset, s	0	Reference Point	End	Green	5.8	24.7	34.5	15.0	0.1	20.0			
Uncoordinated	Yes	Simult. Gap E/W	On	Yellow	4.0	5.0	4.0	4.0	0.0	5.0			
Force Mode	Fixed	Simult. Gap N/S	On	Red	3.0	3.0	3.0	3.0	0.0	3.0			

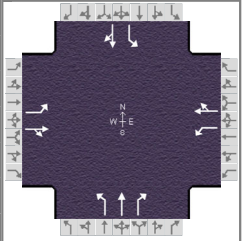
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6	3	8	7	4
Case Number	1.2	4.0	1.3	4.0	1.1	3.0	1.1	4.0
Phase Duration, s	12.8	45.5	41.5	74.2	22.1	28.1	22.0	28.0
Change Period, (Y+R _c), s	7.0	8.0	8.0	8.0	7.0	8.0	7.0	8.0
Max Allow Headway (MAH), s	4.0	5.0	5.0	5.0	4.1	5.1	4.1	5.1
Queue Clearance Time (g _s), s	6.3	35.0	2.0	63.7	14.7	13.9	17.0	22.0
Green Extension Time (g _e), s	0.1	2.4	5.5	2.4	0.5	2.0	0.0	0.0
Phase Call Probability	0.91	1.00	0.85	1.00	1.00	1.00	1.00	1.00
Max Out Probability	0.00	0.00	0.03	0.82	0.00	0.18	1.00	1.00

Movement Group Results	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (v), veh/h	62	404		51	726		176	155	12	278	300	
Adjusted Saturation Flow Rate (s), veh/h/ln	1590	1624		1590	1561		1590	1670	1415	1590	1572	
Queue Service Time (g _s), s	4.3	33.0		0.0	61.7		12.7	11.9	1.0	15.0	20.0	
Cycle Queue Clearance Time (g _c), s	4.3	33.0		0.0	61.7		12.7	11.9	1.0	15.0	20.0	
Green Ratio (g/C)	0.24	0.27		0.41	0.48		0.26	0.15	0.15	0.26	0.15	
Capacity (c), veh/h	119	444		457	754		228	245	208	276	229	
Volume-to-Capacity Ratio (X)	0.520	0.910		0.111	0.964		0.770	0.630	0.056	1.006	1.309	
Back of Queue (Q), ft/ln (95 th percentile)	81.2	522.2		59.3	902.2		233	231.7	16.2	299.2	730.5	
Back of Queue (Q), veh/ln (95 th percentile)	3.2	20.4		2.3	35.2		9.1	9.1	0.6	11.7	28.5	
Queue Storage Ratio (RQ) (95 th percentile)	0.54	0.00		0.26	0.00		1.33	0.00	0.07	0.98	0.00	
Uniform Delay (d ₁), s/veh	44.2	48.2		38.8	34.3		44.1	55.0	18.0	50.7	58.6	
Incremental Delay (d ₂), s/veh	3.5	10.1		0.1	23.1		5.4	3.9	0.2	55.6	166.8	
Initial Queue Delay (d ₃), s/veh	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Control Delay (d), s/veh	47.6	58.3		38.9	57.4		49.5	58.9	18.2	106.3	225.4	
Level of Service (LOS)	D	E		D	E		D	E	B	F	F	
Approach Delay, s/veh / LOS	56.9	E		56.2	E		52.7	D		168.1	F	
Intersection Delay, s/veh / LOS	85.7						F					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.18	B	1.91	B	1.95	B	1.95	B
Bicycle LOS Score / LOS	1.26	A	1.77	B	1.05	A	1.44	A

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information			
Agency	LTG			Duration, h	0.25		
Analyst	SD	Analysis Date	Sep 18, 2018	Area Type	Other		
Jurisdiction	City of Palm Bay	Time Period	Ph1 P.M. Pk-Hr	PHF	0.95		
Urban Street	Malabar Road	Analysis Year	2020	Analysis Period	1 > 7:00		
Intersection	Malabar Rd at Jupiter Blvd	File Name	4 Malabar Rd at Jupiter Blvd - PH1 P.M..xus				
Project Description	4247.06 Chaparral Residential Development						



Demand Information	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Approach Movement												
Demand (v), veh/h	145	374	143	48	227	268	79	147	42	189	149	59

Signal Information													
Cycle, s	116.3	Reference Phase	2										
Offset, s	0	Reference Point	End	Green	10.0	22.8	10.1	6.5	6.8	13.2			
Uncoordinated	Yes	Simult. Gap E/W	On	Yellow	4.0	5.0	4.0	4.0	0.0	5.0			
Force Mode	Fixed	Simult. Gap N/S	On	Red	3.0	3.0	3.0	3.0	0.0	3.0			

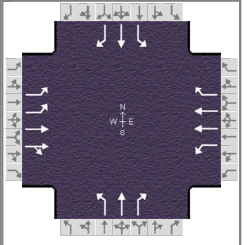
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6	3	8	7	4
Case Number	1.2	4.0	1.3	4.0	1.1	3.0	1.1	4.0
Phase Duration, s	17.0	47.7	17.1	47.8	13.5	21.2	20.3	27.9
Change Period, (Y+R _c), s	7.0	8.0	8.0	8.0	7.0	8.0	7.0	8.0
Max Allow Headway (MAH), s	4.0	5.0	5.0	5.0	4.1	5.1	4.1	5.1
Queue Clearance Time (g _s), s	9.7	36.1	2.0	36.1	6.8	11.4	13.2	17.4
Green Extension Time (g _e), s	0.3	3.6	3.6	3.7	0.2	1.8	0.1	0.5
Phase Call Probability	0.99	1.00	0.80	1.00	0.93	1.00	1.00	1.00
Max Out Probability	0.01	0.00	0.00	0.00	0.00	0.06	1.00	1.00

Movement Group Results	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Approach Movement												
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (v), veh/h	153	544		51	521		83	155	20	199	219	
Adjusted Saturation Flow Rate (s), veh/h/ln	1767	1768		1767	1691		1767	1856	1572	1767	1589	
Queue Service Time (g _s), s	7.7	34.1		0.0	34.1		4.8	9.4	1.3	11.2	15.4	
Cycle Queue Clearance Time (g _c), s	7.7	34.1		0.0	34.1		4.8	9.4	1.3	11.2	15.4	
Green Ratio (g/C)	0.30	0.34		0.26	0.34		0.17	0.11	0.11	0.24	0.17	
Capacity (c), veh/h	213	605		227	580		186	210	178	304	272	
Volume-to-Capacity Ratio (X)	0.716	0.900		0.222	0.899		0.447	0.736	0.112	0.655	0.804	
Back of Queue (Q), ft/ln (95 th percentile)	158.6	551.6		62.5	532.2		99.4	211.9	24.6	224.7	297.3	
Back of Queue (Q), veh/ln (95 th percentile)	6.2	21.5		2.4	20.8		3.9	8.3	1.0	8.8	11.6	
Queue Storage Ratio (RQ) (95 th percentile)	1.06	0.00		0.28	0.00		0.57	0.00	0.10	0.74	0.00	
Uniform Delay (d ₁), s/veh	33.9	36.4		48.4	36.3		42.6	49.9	21.3	38.2	46.3	
Incremental Delay (d ₂), s/veh	4.4	7.5		0.5	7.7		1.7	6.9	0.4	4.2	16.5	
Initial Queue Delay (d ₃), s/veh	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Control Delay (d), s/veh	38.4	43.9		48.9	44.0		44.3	56.9	21.7	42.4	62.8	
Level of Service (LOS)	D	D		D	D		D	E	C	D	E	
Approach Delay, s/veh / LOS	42.7		D	44.4		D	50.1		D	53.1		D
Intersection Delay, s/veh / LOS	46.4						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.18	B	1.93	B	1.95	B	1.95	B
Bicycle LOS Score / LOS	1.64	B	1.43	A	0.91	A	1.18	A

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	LTG			Duration, h	0.25
Analyst	ARO	Analysis Date	Feb 14, 2019	Area Type	Other
Jurisdiction	City of Palm Bay	Time Period	Ph1 A.M. Pk-Hr	PHF	0.95
Urban Street	Minton Road	Analysis Year	2020	Analysis Period	1 > 7:00
Intersection	Malabar Rd. at Minton Rd.	File Name	6 Malabar Rd at Minton - Ph1 AM.xus		
Project Description	4247.06 Chaparral Residential Development				



Demand Information	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Approach Movement												
Demand (v), veh/h	228	463	75	85	229	59	54	620	185	103	345	65

Signal Information													
Cycle, s	107.1	Reference Phase	2										
Offset, s	0	Reference Point	End										
Uncoordinated	Yes	Simult. Gap E/W	On	Green	3.4	2.5	42.1	7.1	2.9	18.1			
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	4.0	0.0	4.0	4.0	0.0	5.0			
				Red	4.0	0.0	3.0	4.0	0.0	3.0			

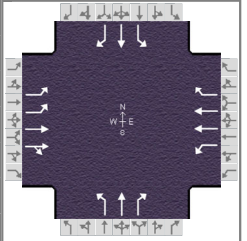
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8	5	2	1	6
Case Number	2.0	4.0	2.0	3.0	1.1	3.0	1.1	3.0
Phase Duration, s	18.0	29.0	15.1	26.1	11.4	49.1	13.9	51.6
Change Period, (Y+R _c), s	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
Max Allow Headway (MAH), s	4.1	4.1	4.1	4.1	4.1	4.0	4.0	4.0
Queue Clearance Time (g _s), s	9.3	18.1	7.3	8.5	4.1	37.9	5.9	17.5
Green Extension Time (g _e), s	0.7	2.9	0.2	3.2	0.1	3.0	0.2	4.6
Phase Call Probability	1.00	1.00	0.93	1.00	0.82	1.00	0.96	1.00
Max Out Probability	0.01	0.03	0.00	0.00	0.00	0.15	0.00	0.10

Movement Group Results	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	240	289	277	89	241	9	57	653	152	108	363	12
Adjusted Saturation Flow Rate (s), veh/h/ln	1716	1856	1765	1767	1766	1572	1767	1856	1572	1767	1856	1572
Queue Service Time (g _s), s	7.3	15.9	16.1	5.3	6.5	0.5	2.1	35.9	7.1	3.9	15.5	0.5
Cycle Queue Clearance Time (g _c), s	7.3	15.9	16.1	5.3	6.5	0.5	2.1	35.9	7.1	3.9	15.5	0.5
Green Ratio (g/C)	0.09	0.20	0.20	0.07	0.17	0.17	0.42	0.38	0.38	0.44	0.41	0.41
Capacity (c), veh/h	321	365	347	117	598	266	372	712	603	203	755	640
Volume-to-Capacity Ratio (X)	0.747	0.792	0.799	0.763	0.403	0.036	0.153	0.917	0.251	0.534	0.481	0.018
Back of Queue (Q), ft/ln (95 th percentile)	149.4	308.1	296.8	122.1	130.8	9.7	39.6	627.1	119.5	75.5	272.3	7.7
Back of Queue (Q), veh/ln (95 th percentile)	5.8	12.0	11.7	4.8	5.1	0.4	1.5	24.5	4.7	2.9	10.6	0.3
Queue Storage Ratio (RQ) (95 th percentile)	0.68	0.00	0.00	0.32	0.00	0.03	0.32	0.00	0.65	0.46	0.00	0.04
Uniform Delay (d ₁), s/veh	47.4	41.0	41.1	49.3	39.7	37.3	20.0	31.5	22.6	25.0	23.5	19.0
Incremental Delay (d ₂), s/veh	3.5	3.9	4.3	9.8	0.4	0.1	0.2	11.3	0.2	2.2	0.5	0.0
Initial Queue Delay (d ₃), 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
Control Delay (d), s/veh	50.9	44.9	45.4	59.1	40.2	37.3	20.2	42.8	22.8	27.1	24.0	19.0
Level of Service (LOS)	D	D	D	E	D	D	C	D	C	C	C	B
Approach Delay, s/veh / LOS	46.9		D	45.1		D	37.8		D	24.5		C
Intersection Delay, s/veh / LOS	39.1						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.19	B	2.38	B	2.50	C	2.43	B
Bicycle LOS Score / LOS	1.15	A	0.77	A	1.91	B	1.28	A

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information			
Agency	LTG			Duration, h	0.25		
Analyst	SD	Analysis Date	Sep 18, 2018		Area Type	Other	
Jurisdiction	City of Palm Bay		Time Period	Ph1 P.M. Pk-Hr		PHF	0.95
Urban Street	Minton Road		Analysis Year	2020		Analysis Period	1 > 7:00
Intersection	Malabar Rd. at Minton Rd.		File Name	6 Malabar Rd at Minton - PH1 Build-Out P.M. PK....			
Project Description	4247.06 Chaparral Residential Development						



Demand Information	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Approach Movement												
Demand (v), veh/h	130	365	82	180	371	109	72	337	83	116	666	226

Signal Information				Signal Timing (s)									Signal Phases											
Cycle, s	104.7	Reference Phase	2	Green	4.6	2.3	33.7	6.3	7.1	18.6	Yellow	4.0	0.0	4.0	4.0	0.0	5.0	Red	4.0	0.0	3.0	4.0	0.0	4.0
Offset, s	0	Reference Point	End										1 2 3 4											
Uncoordinated	Yes	Simult. Gap E/W	On										5 6 7 8											
Force Mode	Fixed	Simult. Gap N/S	On																					

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8	5	2	1	6
Case Number	2.0	4.0	2.0	3.0	1.1	3.0	1.1	3.0
Phase Duration, s	14.3	27.6	21.5	34.7	12.6	40.7	14.8	43.0
Change Period, (Y+R _c), s	8.0	9.0	8.0	9.0	8.0	7.0	8.0	7.0
Max Allow Headway (MAH), s	4.1	4.1	4.1	4.1	4.1	4.0	4.0	4.0
Queue Clearance Time (g _s), s	6.1	15.1	13.0	11.8	5.0	18.8	6.8	38.0
Green Extension Time (g _e), s	0.4	3.5	0.6	3.8	0.2	5.5	0.3	0.0
Phase Call Probability	0.98	1.00	1.00	1.00	0.89	1.00	0.97	1.00
Max Out Probability	0.00	0.02	0.00	0.00	0.00	0.01	0.00	1.00

Movement Group Results	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Approach Movement												
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	137	241	230	189	391	56	76	355	3	122	701	205
Adjusted Saturation Flow Rate (s), veh/h/ln	1716	1856	1738	1767	1766	1572	1767	1856	1572	1767	1856	1572
Queue Service Time (g _s), s	4.1	12.8	13.1	11.0	9.8	2.9	3.0	16.8	0.1	4.8	36.0	10.3
Cycle Queue Clearance Time (g _c), s	4.1	12.8	13.1	11.0	9.8	2.9	3.0	16.8	0.1	4.8	36.0	10.3
Green Ratio (g/C)	0.06	0.18	0.18	0.13	0.25	0.25	0.37	0.32	0.32	0.39	0.34	0.34
Capacity (c), veh/h	208	330	309	228	869	387	146	598	507	349	638	541
Volume-to-Capacity Ratio (X)	0.657	0.730	0.742	0.832	0.449	0.144	0.519	0.593	0.006	0.350	1.099	0.380
Back of Queue (Q), ft/ln (95 th percentile)	84.2	257.8	247.6	228.9	192.5	50.9	61.1	304.9	2.4	88.6	959.6	171.7
Back of Queue (Q), veh/ln (95 th percentile)	3.3	10.1	9.7	8.9	7.5	2.0	2.4	11.9	0.1	3.5	37.5	6.7
Queue Storage Ratio (RQ) (95 th percentile)	0.38	0.00	0.00	0.59	0.00	0.14	0.49	0.00	0.01	0.54	0.00	0.86
Uniform Delay (d ₁), s/veh	48.1	40.7	40.8	44.5	33.4	30.8	27.4	29.7	24.1	22.6	34.3	25.9
Incremental Delay (d ₂), s/veh	3.5	3.1	3.5	7.7	0.4	0.2	2.8	0.9	0.0	0.6	65.6	0.4
Initial Queue Delay (d ₃), 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
Control Delay (d), s/veh	51.6	43.8	44.3	52.2	33.8	31.0	30.3	30.7	24.1	23.2	100.0	26.4
Level of Service (LOS)	D	D	D	D	C	C	C	C	C	C	F	C
Approach Delay, s/veh / LOS	45.7		D	39.0		D	30.5		C	76.2		E
Intersection Delay, s/veh / LOS	53.3						D					

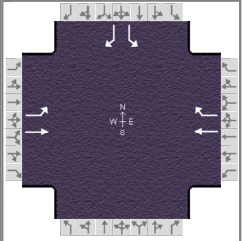
Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.25	B	2.34	B	2.52	C	2.44	B
Bicycle LOS Score / LOS	0.99	A	1.01	A	1.20	A	2.18	B

APPENDIX J

Unsignalized Intersections HCS Worksheets – Phase I Improved Conditions

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information			
Agency	LTG			Duration, h	0.25		
Analyst	ARO		Analysis Date	Jan 16, 2019		Area Type	Other
Jurisdiction	Brevard		Time Period	PH1 Build-Out A.M. Pk-Hr		PHF	0.75
Urban Street	Malabar Rd		Analysis Year	2020		Analysis Period	1 > 7:00
Intersection	Malabar Rd at SJHP		File Name	1 SJHP at Malabar Rd Dr - Ph1 Improved AM Pk....			
Project Description	4247.06 Chaparral Residential Development						



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	116	217			363	329				113		188

Signal Information				Signal Phases								
Cycle, s	40.2	Reference Phase	2									
Offset, s	0	Reference Point	End									
Uncoordinated	Yes	Simult. Gap E/W	On									
Force Mode	Fixed	Simult. Gap N/S	On									
Green	5.0	14.4	8.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	4.0	4.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

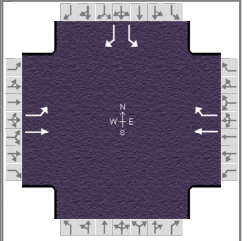
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2		6				4
Case Number	1.0	4.0		7.3				9.0
Phase Duration, s	9.0	27.3		18.4				12.9
Change Period, (Y+R _c), s	4.0	4.0		4.0				4.0
Max Allow Headway (MAH), s	3.1	3.2		3.2				3.3
Queue Clearance Time (g _s), s	3.9	5.0		11.7				8.1
Green Extension Time (g _e), s	0.2	2.6		2.6				0.8
Phase Call Probability	0.82	1.00		1.00				0.99
Max Out Probability	0.00	0.00		0.00				0.00

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2			6	16				7		14
Adjusted Flow Rate (v), veh/h	155	289			484	439				151		251
Adjusted Saturation Flow Rate (s), veh/h/ln	1725	1900			1900	1610				1626		1535
Queue Service Time (g _s), s	1.9	3.0			8.9	9.7				3.2		6.1
Cycle Queue Clearance Time (g _c), s	1.9	3.0			8.9	9.7				3.2		6.1
Green Ratio (g/C)	0.53	0.58			0.36	0.36				0.22		0.22
Capacity (c), veh/h	514	1103			680	577				360		340
Volume-to-Capacity Ratio (X)	0.301	0.262			0.711	0.761				0.419		0.738
Back of Queue (Q), ft/ln (50 th percentile)	9.8	14			68.7	64.1				26.6		46.7
Back of Queue (Q), veh/ln (50 th percentile)	0.4	0.6			2.7	2.6				1.0		1.8
Queue Storage Ratio (RQ) (50 th percentile)	0.03	0.00			0.00	0.26				0.08		0.14
Uniform Delay (d ₁), s/veh	6.6	4.2			11.2	11.4				13.5		14.6
Incremental Delay (d ₂), s/veh	0.1	0.0			0.5	0.8				0.3		1.2
Initial Queue Delay (d ₃), s/veh	0.0	0.0			0.0	0.0				0.0		0.0
Control Delay (d), s/veh	6.7	4.2			11.7	12.2				13.8		15.8
Level of Service (LOS)	A	A			B	B				B		B
Approach Delay, s/veh / LOS	5.1	A		11.9	B		0.0			15.0		B
Intersection Delay, s/veh / LOS	10.9						B					

Multimodal Results	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	0.65	A		1.88	B		1.93	B		1.93	B	
Bicycle LOS Score / LOS	1.22	A		2.01	B							F

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information			
Agency	LTG			Duration, h	0.25		
Analyst	ARO			Analysis Date	Jan 16, 2019		
Jurisdiction	Brevard			Time Period	PH1 Build-Out P.M. Pk-Hr		
Urban Street	Malabar Rd			Analysis Year	2020		
Intersection	Malabar Rd at SJHP			File Name	1 SJHP at Malabar Rd Dr - Ph1 Improved PM Pk...		
Project Description	4247.06 Chaparral Residential Development						



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	177	295			65	170				359		43

Signal Information													
Cycle, s	39.0	Reference Phase	2										
Offset, s	0	Reference Point	End										
Uncoordinated	Yes	Simult. Gap E/W	On	Green	5.6	8.5	12.9	0.0	0.0	0.0			
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	4.0	4.0	4.0	0.0	0.0	0.0			
				Red	0.0	0.0	0.0	0.0	0.0	0.0			

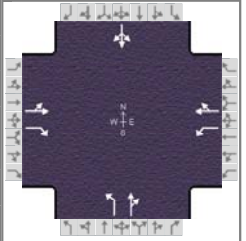
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2		6				4
Case Number	1.0	4.0		7.3				9.0
Phase Duration, s	9.6	22.1		12.5				16.9
Change Period, (Y+R _c), s	4.0	4.0		4.0				4.0
Max Allow Headway (MAH), s	3.1	3.1		3.1				3.1
Queue Clearance Time (g _s), s	5.7	7.5		7.0				11.8
Green Extension Time (g _e), s	0.4	1.4		1.4				1.0
Phase Call Probability	0.92	1.00		1.00				1.00
Max Out Probability	0.00	0.00		0.00				0.00

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2			6	16				7		14
Adjusted Flow Rate (v), veh/h	236	393			87	227				479		57
Adjusted Saturation Flow Rate (s), veh/h/ln	1711	1900			1900	1610				1753		1547
Queue Service Time (g _s), s	3.7	5.5			1.5	5.0				9.8		1.0
Cycle Queue Clearance Time (g _c), s	3.7	5.5			1.5	5.0				9.8		1.0
Green Ratio (g/C)	0.41	0.46			0.22	0.22				0.33		0.33
Capacity (c), veh/h	661	882			413	350				582		514
Volume-to-Capacity Ratio (X)	0.357	0.446			0.210	0.648				0.822		0.112
Back of Queue (Q), ft/ln (50 th percentile)	24	34.7			12.5	37.3				75.4		6.5
Back of Queue (Q), veh/ln (50 th percentile)	0.9	1.4			0.5	1.5				2.9		0.3
Queue Storage Ratio (RQ) (50 th percentile)	0.07	0.00			0.00	0.15				0.23		0.02
Uniform Delay (d ₁), s/veh	8.0	7.1			12.6	14.0				12.0		9.1
Incremental Delay (d ₂), s/veh	0.1	0.1			0.1	0.8				1.1		0.0
Initial Queue Delay (d ₃), s/veh	0.0	0.0			0.0	0.0				0.0		0.0
Control Delay (d), s/veh	8.1	7.2			12.7	14.7				13.2		9.1
Level of Service (LOS)	A	A			B	B				B		A
Approach Delay, s/veh / LOS	7.6	A		14.2	B		0.0			12.7		B
Intersection Delay, s/veh / LOS	10.8						B					

Multimodal Results	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	0.67	A		1.90	B		1.93	B		1.93		B
Bicycle LOS Score / LOS	1.53	B		1.00	A							F

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information		
Agency	LTG			Duration, h	0.25	
Analyst	SD	Analysis Date	Sep 18, 2018		Area Type	Other
Jurisdiction	Brevard County	Time Period	PH1 AM Pk-Hr Improved		PHF	0.95
Urban Street	Malabar Road	Analysis Year	2020		Analysis Period	1 > 7:00
Intersection	Malabar Rd. at Wisteria...	File Name	2 Malabar Rd at Wisteria Ave - Improved AM PK.xus			
Project Description	4247.06 Chaparral Residential Development					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	14	296	26	24	620	12	77	0	73	26	0	17

Signal Information												
Cycle, s	61.7	Reference Phase	2									
Offset, s	0	Reference Point	End									
Uncoordinated	Yes	Simult. Gap E/W	On	Green	2.1	20.0	4.4	11.2	0.0	0.0		
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	4.0	4.0	4.0	4.0	0.0	0.0		
				Red	2.0	2.0	2.0	2.0	0.0	0.0		

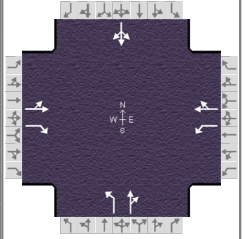
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		2	1	6		8		4
Case Number		7.3	1.0	4.0		10.0		12.0
Phase Duration, s		26.0	8.1	34.1		17.2		10.4
Change Period, (Y+R _c), s		6.0	6.0	6.0		8.0		6.0
Max Allow Headway (MAH), s		5.0	4.0	5.0		5.2		5.1
Queue Clearance Time (g _s), s		10.8	2.5	20.7		4.5		3.1
Green Extension Time (g _e), s		4.3	0.0	7.4		0.3		0.0
Phase Call Probability		1.00	0.35	1.00		0.92		0.44
Max Out Probability		0.53	1.00	0.00		0.86		0.15

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (v), veh/h	326	8	25	665	81	68	34					
Adjusted Saturation Flow Rate (s), veh/h/ln	1827	1449	1781	1864	1781	1585	1741					
Queue Service Time (g _s), s	0.0	0.2	0.5	18.7	2.5	2.4	1.1					
Cycle Queue Clearance Time (g _c), s	8.8	0.2	0.5	18.7	2.5	2.4	1.1					
Green Ratio (g/C)	0.32	0.32	0.39	0.46	0.15	0.15	0.07					
Capacity (c), veh/h	653	469	371	849	266	237	124					
Volume-to-Capacity Ratio (X)	0.500	0.018	0.068	0.784	0.304	0.289	0.272					
Back of Queue (Q), ft/ln (95 th percentile)	152.1	3.2	8.4	271.8	47.6	40.4	22.3					
Back of Queue (Q), veh/ln (95 th percentile)	6.0	0.1	0.3	10.7	1.9	1.6	0.9					
Queue Storage Ratio (RQ) (95 th percentile)	0.00	0.01	0.04	0.00	0.00	0.00	0.00					
Uniform Delay (d ₁), s/veh	17.1	14.2	12.6	14.2	23.4	23.3	27.2					
Incremental Delay (d ₂), s/veh	0.8	0.0	0.1	2.3	0.9	0.9	1.7					
Initial Queue Delay (d ₃), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0					
Control Delay (d), s/veh	17.9	14.2	12.7	16.6	24.3	24.3	28.8					
Level of Service (LOS)	B	B	B	B	C	C	C					
Approach Delay, s/veh / LOS	17.8	B	16.4	B	24.3	C	28.8	C				
Intersection Delay, s/veh / LOS	18.1						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	1.92	B	1.68	B	1.94	B	1.94	B
Bicycle LOS Score / LOS	1.04	A	1.63	B	0.73	A	0.54	A

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	LTG			Duration, h	0.25
Analyst	SD	Analysis Date	Sep 18, 2018	Area Type	Other
Jurisdiction	Brevard County	Time Period	Improved PM Pk-Hr	PHF	0.95
Urban Street	Malabar Road	Analysis Year	2020	Analysis Period	1 > 7:00
Intersection	Malabar Rd. at Wisteria...	File Name	2 Malabar Rd at Wisteria Ave - Improved PM PK....		
Project Description	4247.06 Chaparral Residential Development				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	8	558	87	82	165	43	51	0	48	26	0	9

Signal Information																		
Cycle, s	98.9	Reference Phase	2															
Offset, s	0	Reference Point	End															
Uncoordinated	Yes	Simult. Gap E/W	On	Green	36.3	5.7	5.9	10.0	0.0	0.0	1		2		3		4	
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	5.0	4.0	5.0	5.0	0.0	0.0	5		6		7		8	
				Red	3.0	3.0	3.0	3.0	0.0	0.0								

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		2	1	6		8		4
Case Number		7.3	1.0	4.0		10.0		12.0
Phase Duration, s		44.3	12.7	56.9		18.0		13.9
Change Period, (Y+R _c), s		8.0	8.0	8.0		8.0		8.0
Max Allow Headway (MAH), s		5.0	4.7	4.7		5.2		5.1
Queue Clearance Time (g _s), s		31.7	2.0	8.5		4.8		4.0
Green Extension Time (g _e), s		4.6	0.3	1.3		0.1		0.0
Phase Call Probability		1.00	0.91	1.00		1.00		0.59
Max Out Probability		0.00	0.01	0.00		0.97		0.37

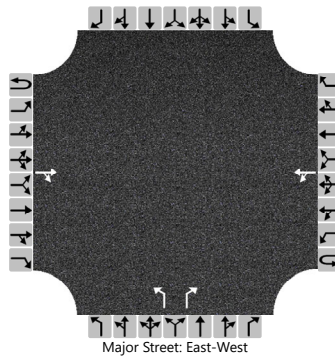
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (v), veh/h	596	74	86	208	54	18	33					
Adjusted Saturation Flow Rate (s), veh/h/ln	1851	1610	1767	1801	1767	1572	1559					
Queue Service Time (g _s), s	5.0	3.0	0.0	6.5	2.8	1.0	2.0					
Cycle Queue Clearance Time (g _c), s	29.7	3.0	0.0	6.5	2.8	1.0	2.0					
Green Ratio (g/C)	0.37	0.37	0.39	0.50	0.10	0.10	0.06					
Capacity (c), veh/h	716	591	195	892	179	159	93					
Volume-to-Capacity Ratio (X)	0.832	0.125	0.443	0.234	0.300	0.113	0.349					
Back of Queue (Q), ft/ln (95 th percentile)	479.6	47.8	94	114.2	58.1	18.9	38.3					
Back of Queue (Q), veh/ln (95 th percentile)	18.7	1.9	3.7	4.5	2.3	0.7	1.5					
Queue Storage Ratio (RQ) (95 th percentile)	0.00	0.20	0.32	0.00	0.00	0.00	0.00					
Uniform Delay (d ₁), s/veh	29.2	6.9	43.8	14.3	41.2	40.4	44.6					
Incremental Delay (d ₂), s/veh	3.6	0.1	1.6	0.2	1.3	0.4	3.1					
Initial Queue Delay (d ₃), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0					
Control Delay (d), s/veh	32.8	7.0	45.4	14.4	42.5	40.9	47.8					
Level of Service (LOS)	C	A	D	B	D	D	D					
Approach Delay, s/veh / LOS	30.0	C	23.5	C	42.1	D	47.8	D				
Intersection Delay, s/veh / LOS	29.6						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	1.99	B	1.68	B	1.98	B	1.97	B
Bicycle LOS Score / LOS	1.59	B	0.97	A	0.61	A	0.54	A

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	ARO			Intersection	Malabar Rd at Hurley Blvd		
Agency/Co.	LTG			Jurisdiction	City of Palm Bay		
Date Performed	2/13/2019			East/West Street	Malabar Road		
Analysis Year	2020			North/South Street	Hurley Boulevard		
Time Analyzed	PH1 A.M. Pk-Hr Improved			Peak Hour Factor	0.95		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	4247.06 Chaparral Residential Development						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		1	0	1		0	0	0
Configuration				TR		LT				L		R				
Volume (veh/h)			371	23		95	594			61		76				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)									0							
Right Turn Channelized									No							
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1					7.1		6.2			
Critical Headway (sec)						4.13					6.43		6.23			
Base Follow-Up Headway (sec)						2.2					3.5		3.3			
Follow-Up Headway (sec)						2.24					3.52		3.32			

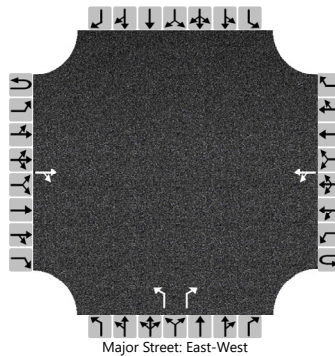
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						100					64		80			
Capacity, c (veh/h)						1133					179		647			
v/c Ratio						0.09					0.36		0.12			
95% Queue Length, Q ₉₅ (veh)						0.3					1.5		0.4			
Control Delay (s/veh)						8.5					36.0		11.4			
Level of Service (LOS)						A					E		B			
Approach Delay (s/veh)					2.2				22.3							
Approach LOS									C							

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	ARO			Intersection	Malabar Rd at Hurley Blvd		
Agency/Co.	LTG			Jurisdiction	City of Palm Bay		
Date Performed	02/14/2014			East/West Street	Malabar Road		
Analysis Year	2020			North/South Street	Hurley Boulevard		
Time Analyzed	PH1 P.M. Pk-Hr Improved			Peak Hour Factor	0.95		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	4247.06 Chaparral Residential Development						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		1	0	1		0	0	0
Configuration				TR		LT				L		R				
Volume (veh/h)			589	43		95	275			12		77				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)									0							
Right Turn Channelized									No							
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1					7.1		6.2			
Critical Headway (sec)						4.13					6.43		6.23			
Base Follow-Up Headway (sec)						2.2					3.5		3.3			
Follow-Up Headway (sec)						2.24					3.52		3.32			

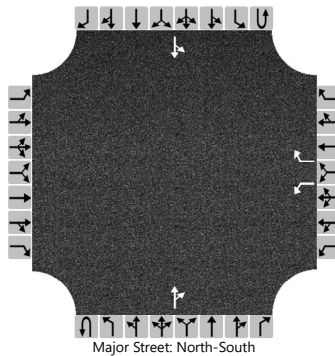
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						100					13		81			
Capacity, c (veh/h)						915					199		473			
v/c Ratio						0.11					0.06		0.17			
95% Queue Length, Q ₉₅ (veh)						0.4					0.2		0.6			
Control Delay (s/veh)						9.4					24.3		14.2			
Level of Service (LOS)						A					C		B			
Approach Delay (s/veh)					3.3				15.5							
Approach LOS									C							

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	SD			Intersection	Jupiter Blvd at Americana		
Agency/Co.	LTG			Jurisdiction	City of Palm Bay		
Date Performed	10/11/2018			East/West Street	Jupiter Boulevard		
Analysis Year	2020			North/South Street	Americana Boulevard		
Time Analyzed	Phase 1 A.M. Peak-Hour			Peak Hour Factor	0.92		
Intersection Orientation	North-South			Analysis Time Period (hrs)	0.25		
Project Description	4247.06 Chaparral Residential Development						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		1	0	1	0	0	1	0	0	0	1	0
Configuration						L		R				TR		LT		
Volume (veh/h)						32		60			336	61		139	432	
Percent Heavy Vehicles (%)						7		7						2		
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized					No											
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						7.1		6.2							4.1		
Critical Headway (sec)						6.47		6.27							4.12		
Base Follow-Up Headway (sec)						3.5		3.3							2.2		
Follow-Up Headway (sec)						3.56		3.36							2.22		

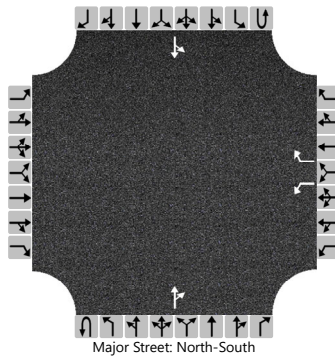
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						35		65							151		
Capacity, c (veh/h)						180		641							1127		
v/c Ratio						0.19		0.10							0.13		
95% Queue Length, Q ₉₅ (veh)						0.7		0.3							0.5		
Control Delay (s/veh)						29.7		11.3							8.7		
Level of Service (LOS)						D		B							A		
Approach Delay (s/veh)					17.7								3.3				
Approach LOS					C												

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	ARO			Intersection	Jupiter Blvd at Americana		
Agency/Co.	LTG			Jurisdiction	City of Palm Bay		
Date Performed	2/13/2019			East/West Street	Jupiter Boulevard		
Analysis Year	2020			North/South Street	Americana Boulevard		
Time Analyzed	Phase 1 P.M. Peak-Hour			Peak Hour Factor	0.94		
Intersection Orientation	North-South			Analysis Time Period (hrs)	0.25		
Project Description	4247.06 Chaparral Residential Development						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		1	0	1	0	0	1	0	0	0	1	0
Configuration						L		R				TR		LT		
Volume (veh/h)						64		77			479	33		67	472	
Percent Heavy Vehicles (%)						4		4						2		
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized					No											
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						7.1		6.2							4.1		
Critical Headway (sec)						6.44		6.24							4.12		
Base Follow-Up Headway (sec)						3.5		3.3							2.2		
Follow-Up Headway (sec)						3.54		3.34							2.22		

Delay, Queue Length, and Level of Service

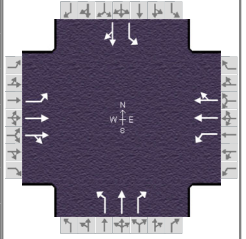
Flow Rate, v (veh/h)					68		82								71		
Capacity, c (veh/h)					196		547								1024		
v/c Ratio					0.35		0.15								0.07		
95% Queue Length, Q ₉₅ (veh)					1.5		0.5								0.2		
Control Delay (s/veh)					32.9		12.7								8.8		
Level of Service (LOS)					D		B								A		
Approach Delay (s/veh)					21.9								1.8				
Approach LOS					C												

APPENDIX K

Signalized Intersections HCS Worksheets – Phase I Improved Conditions

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information		
Agency	LTG			Duration, h	0.25	
Analyst	SD	Analysis Date	Sep 18, 2018		Area Type	Other
Jurisdiction	City of Palm Bay		Time Period	Improved A.M. Pk-Hr	PHF	0.95
Urban Street	Malabar Road		Analysis Year	2020	Analysis Period	1 > 7:00
Intersection	Malabar Rd at Jupiter Blvd		File Name	4 Malabar Rd at Jupiter Blvd - Improved AM PK.xus		
Project Description	4247.06 Chaparral Residential Development					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	59	324	60	48	422	268	167	147	42	264	186	99

Signal Information														
Cycle, s	79.2	Reference Phase	2											
Offset, s	0	Reference Point	End											
Uncoordinated	Yes	Simult. Gap E/W	On	Green	4.0	10.0	5.5	6.0	6.7	10.0	Diagram 1		Diagram 2	
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	4.0	5.0	4.0	4.0	0.0	5.0	Diagram 3		Diagram 4	
				Red	3.0	3.0	3.0	3.0	0.0	3.0	Diagram 5		Diagram 6	

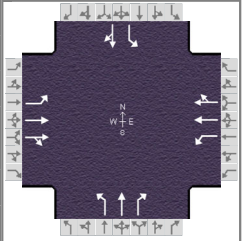
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6	3	8	7	4
Case Number	1.3	4.0	1.2	4.0	1.1	3.0	1.1	4.0
Phase Duration, s	12.5	30.5	11.0	29.1	13.0	18.0	19.7	24.7
Change Period, (Y+R _c), s	8.0	8.0	7.0	8.0	7.0	8.0	7.0	8.0
Max Allow Headway (MAH), s	4.9	4.9	4.0	5.1	4.1	5.1	4.1	5.1
Queue Clearance Time (g _s), s	2.0	9.2	3.9	17.5	8.0	8.3	12.2	15.0
Green Extension Time (g _e), s	0.9	2.1	0.0	3.6	0.0	0.7	0.5	1.0
Phase Call Probability	0.75	1.00	0.67	1.00	0.98	1.00	1.00	1.00
Max Out Probability	1.00	0.02	1.00	0.21	1.00	1.00	0.37	1.00

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (v), veh/h	62	206	198	51	387	339	176	155	12	278	300	
Adjusted Saturation Flow Rate (s), veh/h/ln	1767	1856	1755	1767	1856	1614	1767	1856	1572	1767	1746	
Queue Service Time (g _s), s	0.0	7.1	7.2	1.9	15.3	15.5	6.0	6.3	0.5	10.2	13.0	
Cycle Queue Clearance Time (g _c), s	0.0	7.1	7.2	1.9	15.3	15.5	6.0	6.3	0.5	10.2	13.0	
Green Ratio (g/C)	0.16	0.28	0.28	0.20	0.27	0.27	0.20	0.13	0.13	0.31	0.21	
Capacity (c), veh/h	223	527	499	215	493	429	248	234	199	431	368	
Volume-to-Capacity Ratio (X)	0.278	0.390	0.398	0.235	0.784	0.791	0.709	0.661	0.058	0.645	0.816	
Back of Queue (Q), ft/ln (95 th percentile)	51.1	134.4	127.3	34.9	282.3	251.9	158.2	144.6	9.1	189.7	265.1	
Back of Queue (Q), veh/ln (95 th percentile)	2.0	5.3	5.1	1.4	11.0	10.1	6.2	5.6	0.4	7.4	10.4	
Queue Storage Ratio (RQ) (95 th percentile)	0.34	0.00	0.00	0.16	0.00	0.00	0.90	0.00	0.04	0.62	0.00	
Uniform Delay (d ₁), s/veh	34.3	22.8	22.9	26.5	27.0	27.0	29.6	33.0	30.5	23.1	29.8	
Incremental Delay (d ₂), s/veh	0.7	0.7	0.7	0.6	4.5	5.4	9.0	6.4	0.2	1.7	11.5	
Initial Queue Delay (d ₃), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Control Delay (d), s/veh	35.0	23.5	23.6	27.0	31.5	32.4	38.6	39.4	30.6	24.7	41.3	
Level of Service (LOS)	C	C	C	C	C	C	D	D	C	C	D	
Approach Delay, s/veh / LOS	25.1	C		31.6	C		38.7	D		33.4	C	
Intersection Delay, s/veh / LOS	31.8						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.15	B	1.94	B	2.29	B	2.29	B
Bicycle LOS Score / LOS	0.87	A	1.13	A	1.05	A	1.44	A

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information			
Agency	LTG			Duration, h	0.25		
Analyst	SD	Analysis Date	Sep 18, 2018	Area Type	Other		
Jurisdiction	City of Palm Bay	Time Period	Improved P.M. Pk-Hr	PHF	0.95		
Urban Street	Malabar Road	Analysis Year	2020	Analysis Period	1 > 7:00		
Intersection	Malabar Rd at Jupiter Blvd	File Name	4 Malabar Rd at Jupiter Blvd -Improved P.M. PK.xus				
Project Description	4247.06 Chaparral Residential Development						



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	145	374	143	48	227	268	79	147	42	189	149	59

Signal Information														
Cycle, s	87.2	Reference Phase	2											
Offset, s	0	Reference Point	End											
Uncoordinated	Yes	Simult. Gap E/W	On	Green	4.3	8.9	6.9	5.2	0.8	14.2				
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	4.0	5.0	4.0	4.0	0.0	5.0				
				Red	3.0	3.0	3.0	3.0	0.0	3.0				

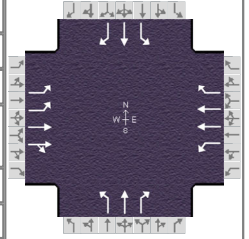
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6	3	8	7	4
Case Number	1.3	4.0	1.2	4.0	1.1	3.0	1.1	4.0
Phase Duration, s	13.9	30.7	11.3	28.1	12.2	22.2	13.0	23.0
Change Period, (Y+R _c), s	8.0	8.0	7.0	8.0	7.0	8.0	7.0	8.0
Max Allow Headway (MAH), s	4.8	4.8	4.0	5.1	4.1	5.1	4.1	5.1
Queue Clearance Time (g _s), s	3.2	13.9	4.1	16.7	5.4	8.7	8.0	13.6
Green Extension Time (g _e), s	1.3	3.1	0.0	3.3	0.3	0.1	0.0	1.3
Phase Call Probability	0.98	1.00	0.71	1.00	0.87	1.00	0.99	1.00
Max Out Probability	1.00	0.13	1.00	0.00	0.00	1.00	1.00	0.00

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (v), veh/h	153	283	261	51	239	282	83	155	19	199	219	
Adjusted Saturation Flow Rate (s), veh/h/ln	1767	1856	1681	1767	1856	1572	1767	1856	1572	1767	1589	
Queue Service Time (g _s), s	1.2	11.6	11.9	2.1	9.9	14.7	3.4	6.7	0.9	6.0	11.6	
Cycle Queue Clearance Time (g _c), s	1.2	11.6	11.9	2.1	9.9	14.7	3.4	6.7	0.9	6.0	11.6	
Green Ratio (g/C)	0.15	0.26	0.26	0.17	0.23	0.23	0.22	0.16	0.16	0.23	0.17	
Capacity (c), veh/h	238	484	439	169	430	364	212	304	258	313	274	
Volume-to-Capacity Ratio (X)	0.640	0.584	0.595	0.299	0.556	0.775	0.391	0.509	0.074	0.635	0.798	
Back of Queue (Q), ft/ln (95 th percentile)	148.4	222.7	205.6	41.6	198.5	240.6	66.3	141.5	15.7	60.2	215.5	
Back of Queue (Q), veh/ln (95 th percentile)	5.8	8.7	8.2	1.6	7.8	9.6	2.6	5.5	0.6	2.4	8.4	
Queue Storage Ratio (RQ) (95 th percentile)	0.99	0.00	0.00	0.18	0.00	0.00	0.38	0.00	0.07	0.20	0.00	
Uniform Delay (d ₁), s/veh	37.7	28.2	28.3	31.4	29.6	31.5	28.6	33.4	31.0	31.2	34.7	
Incremental Delay (d ₂), s/veh	4.5	1.6	1.8	1.0	1.6	5.0	1.2	2.0	0.2	4.2	7.4	
Initial Queue Delay (d ₃), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Control Delay (d), s/veh	42.2	29.8	30.1	32.4	31.2	36.5	29.8	35.3	31.1	35.4	42.1	
Level of Service (LOS)	D	C	C	C	C	D	C	D	C	D	D	
Approach Delay, s/veh / LOS	32.6	C		33.9	C		33.2	C		38.9	D	
Intersection Delay, s/veh / LOS	34.4						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.15	B	1.94	B	2.29	B	2.29	B
Bicycle LOS Score / LOS	1.06	A	0.96	A	0.91	A	1.18	A

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information			
Agency	LTG			Duration, h	0.25		
Analyst	SD	Analysis Date	Sep 18, 2018	Area Type	Other		
Jurisdiction	City of Palm Bay	Time Period	Ph1 Improved A.M. Pk-Hr	PHF	0.95		
Urban Street	Minton Road	Analysis Year	2020	Analysis Period	1 > 7:00		
Intersection	Malabar Rd. at Minton Rd.	File Name	6 Malabar Rd at Minton Rd - Ph1 Improved AM P...				
Project Description	4247.06 Chaparral Residential Development						



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	228	463	75	85	229	59	54	620	185	103	345	65

Signal Information													
Cycle, s	100.0	Reference Phase	2										
Offset, s	0	Reference Point	End										
Uncoordinated	Yes	Simult. Gap E/W	On	Green	3.2	0.8	39.6	6.5	2.8	16.2			
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	4.0	0.0	4.0	4.0	0.0	5.0			
				Red	4.0	0.0	3.0	4.0	0.0	3.0			

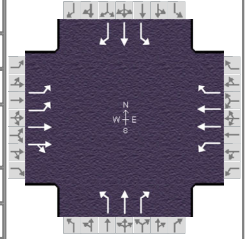
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8	5	2	1	6
Case Number	2.0	4.0	2.0	3.0	1.1	3.0	1.1	3.0
Phase Duration, s	17.2	27.0	14.5	24.2	11.2	46.6	12.0	47.4
Change Period, (Y+R _c), s	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
Max Allow Headway (MAH), s	4.1	4.1	4.1	4.1	4.1	4.0	4.0	4.0
Queue Clearance Time (g _s), s	8.8	17.1	7.0	8.1	3.9	35.4	5.8	16.8
Green Extension Time (g _e), s	0.4	1.9	0.1	0.0	0.0	3.2	0.0	0.0
Phase Call Probability	1.00	1.00	0.92	1.00	0.79	1.00	0.95	1.00
Max Out Probability	0.48	0.10	1.00	1.00	1.00	0.10	1.00	1.00

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	240	289	277	89	241	9	57	653	152	108	363	12
Adjusted Saturation Flow Rate (s), veh/h/ln	1716	1856	1765	1767	1766	1572	1767	1856	1572	1767	1856	1572
Queue Service Time (g _s), s	6.8	15.0	15.1	5.0	6.1	0.5	1.9	33.4	6.6	3.8	14.8	0.5
Cycle Queue Clearance Time (g _c), s	6.8	15.0	15.1	5.0	6.1	0.5	1.9	33.4	6.6	3.8	14.8	0.5
Green Ratio (g/C)	0.09	0.19	0.19	0.06	0.16	0.16	0.42	0.39	0.39	0.43	0.39	0.39
Capacity (c), veh/h	317	352	335	114	573	255	357	716	606	183	731	619
Volume-to-Capacity Ratio (X)	0.757	0.820	0.827	0.782	0.421	0.037	0.159	0.912	0.250	0.592	0.497	0.019
Back of Queue (Q), ft/ln (95 th percentile)	139	295.9	286.3	116.3	122.1	9	36.3	575.8	109.5	77.6	260.1	7.2
Back of Queue (Q), veh/ln (95 th percentile)	5.4	11.6	11.3	4.5	4.8	0.4	1.4	22.5	4.3	3.0	10.2	0.3
Queue Storage Ratio (RQ) (95 th percentile)	0.63	0.00	0.00	0.30	0.00	0.02	0.29	0.00	0.59	0.47	0.00	0.04
Uniform Delay (d ₁), s/veh	44.3	38.9	39.0	46.1	37.7	35.3	18.9	29.1	20.9	24.0	22.9	18.5
Incremental Delay (d ₂), s/veh	3.7	5.4	6.1	11.5	0.5	0.1	0.2	9.5	0.2	5.0	0.5	0.0
Initial Queue Delay (d ₃), 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
Control Delay (d), s/veh	48.0	44.3	45.0	57.6	38.2	35.4	19.1	38.7	21.1	29.0	23.4	18.5
Level of Service (LOS)	D	D	D	E	D	D	B	D	C	C	C	B
Approach Delay, s/veh / LOS	45.6	D		43.2	D		34.3	C		24.5	C	
Intersection Delay, s/veh / LOS	37.3						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.19	B	2.38	B	2.50	B	2.43	B
Bicycle LOS Score / LOS	1.15	A	0.77	A	1.91	B	1.28	A

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information		
Agency	LTG			Duration, h	0.25	
Analyst	SD	Analysis Date	Sep 18, 2018		Area Type	Other
Jurisdiction	City of Palm Bay		Time Period	Ph1 Improved P.M. Pk-Hr	PHF	0.95
Urban Street	Minton Road		Analysis Year	2020	Analysis Period	1 > 7:00
Intersection	Malabar Rd. at Minton Rd.	File Name	6 Malabar Rd at Minton - Ph1 Improved P.M. PK.xus			
Project Description	4247.06 Chaparral Residential Development					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	130	365	82	180	371	109	72	337	83	116	666	226

Signal Information													
Cycle, s	118.3	Reference Phase	2										
Offset, s	0	Reference Point	End										
Uncoordinated	Yes	Simult. Gap E/W	On	Green	4.0	48.6	6.7	0.2	18.8	0.0			
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	4.0	4.0	4.0	4.0	5.0	0.0			
				Red	4.0	3.0	4.0	4.0	4.0	0.0			

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8	5	2	1	6
Case Number	2.0	4.0	2.0	3.0	1.1	3.0	1.1	3.0
Phase Duration, s	14.7	27.8	22.9	36.0	12.0	55.6	12.0	55.6
Change Period, (Y+R _c), s	8.0	9.0	8.0	9.0	8.0	7.0	8.0	7.0
Max Allow Headway (MAH), s	4.1	4.1	4.1	4.1	4.1	4.0	4.0	4.0
Queue Clearance Time (g _s), s	6.6	17.2	14.4	13.4	4.9	18.5	6.0	44.4
Green Extension Time (g _e), s	0.1	1.6	0.4	0.0	0.0	0.0	0.0	4.1
Phase Call Probability	0.99	1.00	1.00	1.00	0.92	1.00	0.98	1.00
Max Out Probability	1.00	0.10	0.01	1.00	1.00	1.00	1.00	0.00

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	137	241	230	189	391	56	76	355	3	122	701	205
Adjusted Saturation Flow Rate (s), veh/h/ln	1716	1856	1738	1767	1766	1572	1767	1856	1572	1767	1856	1572
Queue Service Time (g _s), s	4.6	14.9	15.2	12.4	11.4	3.4	2.9	16.5	0.1	4.0	42.4	10.5
Cycle Queue Clearance Time (g _c), s	4.6	14.9	15.2	12.4	11.4	3.4	2.9	16.5	0.1	4.0	42.4	10.5
Green Ratio (g/C)	0.06	0.16	0.16	0.13	0.23	0.23	0.45	0.41	0.41	0.45	0.41	0.41
Capacity (c), veh/h	194	296	277	223	808	360	147	763	646	381	763	646
Volume-to-Capacity Ratio (X)	0.705	0.815	0.829	0.851	0.483	0.155	0.514	0.465	0.005	0.321	0.919	0.318
Back of Queue (Q), ft/ln (95 th percentile)	98.6	298.8	287.9	257.4	219.9	60.2	60.9	298.2	2.4	91.1	667.6	174.4
Back of Queue (Q), veh/ln (95 th percentile)	3.8	11.7	11.3	10.1	8.6	2.4	2.4	11.6	0.1	3.6	26.1	6.8
Queue Storage Ratio (RQ) (95 th percentile)	0.45	0.00	0.00	0.67	0.00	0.16	0.49	0.00	0.01	0.55	0.00	0.87
Uniform Delay (d ₁), s/veh	54.9	48.1	48.3	50.7	39.6	36.5	28.3	25.4	20.6	23.4	33.1	23.7
Incremental Delay (d ₂), s/veh	5.5	5.4	6.5	9.3	0.4	0.2	3.0	0.4	0.0	0.5	5.2	0.3
Initial Queue Delay (d ₃), 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
Control Delay (d), s/veh	60.4	53.6	54.8	60.0	40.1	36.7	31.4	25.9	20.6	23.9	38.3	23.9
Level of Service (LOS)	E	D	D	E	D	D	C	C	C	C	D	C
Approach Delay, s/veh / LOS	55.6	E		45.7	D		26.8	C		33.7	C	
Intersection Delay, s/veh / LOS	40.3						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.25	B	2.34	B	2.51	C	2.43	B
Bicycle LOS Score / LOS	0.99	A	1.01	A	1.20	A	2.18	B

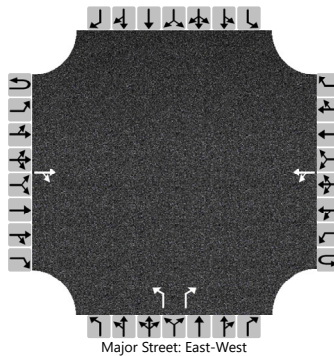
APPENDIX L

Unsignalized Intersections HCS Worksheets –Phase II Build-Out Conditions

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	ARO	Intersection	Malabar Rd at Hurley Blvd				
Agency/Co.	LTG	Jurisdiction	City of Palm Bay				
Date Performed	2/12/2019	East/West Street	Malabar Road				
Analysis Year	2024	North/South Street	Hurley Boulevard				
Time Analyzed	PH2 Build-Out A.M. Pk-Hr	Peak Hour Factor	0.95				
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25				
Project Description	4247.06 Chaparral Residential Development						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6	7	8	9		10	11	12	
Priority																
Number of Lanes	0	0	1	0	0	0	1	0	1	0	1		0	0	0	
Configuration				TR		LT				L		R				
Volume (veh/h)			511	31		102	677			68		82				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)									0							
Right Turn Channelized									No							
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.24				3.52		3.32				

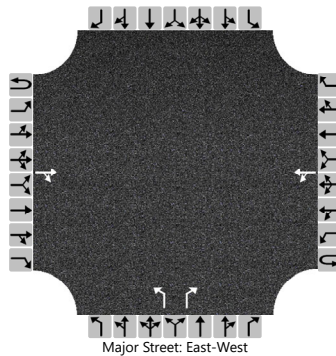
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						107				72		86				
Capacity, c (veh/h)						992				122		531				
v/c Ratio						0.11				0.58		0.16				
95% Queue Length, Q ₉₅ (veh)						0.4				2.9		0.6				
Control Delay (s/veh)						9.1				69.3		13.1				
Level of Service (LOS)						A				F		B				
Approach Delay (s/veh)					2.6				38.6							
Approach LOS									E							

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	ARO	Intersection	Malabar Rd at Hurley Blvd				
Agency/Co.	LTG	Jurisdiction	Brevard County				
Date Performed	2/12/2019	East/West Street	Malabar Road				
Analysis Year	2024	North/South Street	Hurley Boulevard				
Time Analyzed	PH2 Build-Out P.M. Pk-Hr	Peak Hour Factor	0.90				
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25				
Project Description	4247.06 Chaparral Residential Development						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6	7	8	9		10	11	12	
Priority																
Number of Lanes	0	0	1	0	0	0	1	0	1	0	1		0	0	0	
Configuration				TR		LT				L		R				
Volume (veh/h)			707	50		102	420			21		83				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)									0							
Right Turn Channelized									No							
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.24				3.52		3.32				

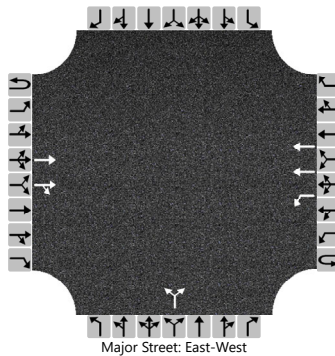
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						113				23		92				
Capacity, c (veh/h)						786				113		377				
v/c Ratio						0.14				0.21		0.24				
95% Queue Length, Q ₉₅ (veh)						0.5				0.7		0.9				
Control Delay (s/veh)						10.3				44.8		17.6				
Level of Service (LOS)						B				E		C				
Approach Delay (s/veh)					3.6				23.1							
Approach LOS									C							

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	SD			Intersection	Malabar Rd at Garvey Rd		
Agency/Co.	LTG			Jurisdiction	Brevard County		
Date Performed	09/18/2018			East/West Street	Malabar Road		
Analysis Year	2024			North/South Street	Garvey Road		
Time Analyzed	PH2 Build-Out A.M. Pk-Hr			Peak Hour Factor	0.95		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	4247.06 Chaparral Residential Development						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	2	0	0	1	2	0		0	1	0		0	0	0
Configuration			T	TR		L	T				LR					
Volume (veh/h)			700	35	0	64	797			17		57				
Percent Heavy Vehicles (%)					3	3				3		3				
Proportion Time Blocked																
Percent Grade (%)									0							
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1					7.5		6.9			
Critical Headway (sec)						4.16					6.86		6.96			
Base Follow-Up Headway (sec)						2.2					3.5		3.3			
Follow-Up Headway (sec)						2.25					3.52		3.32			

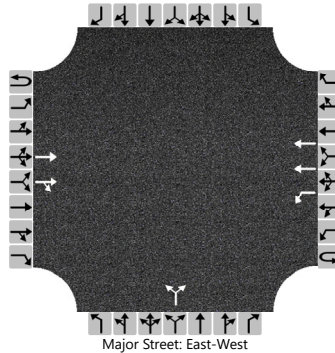
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)					67						78					
Capacity, c (veh/h)					825						341					
v/c Ratio					0.08						0.23					
95% Queue Length, Q ₉₅ (veh)					0.3						0.9					
Control Delay (s/veh)					9.7						18.7					
Level of Service (LOS)					A						C					
Approach Delay (s/veh)					0.7				18.7							
Approach LOS									C							

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	SD			Intersection	Malabar Rd at Garvey Rd		
Agency/Co.	LTG			Jurisdiction	Brevard County		
Date Performed	09/18/2018			East/West Street	Malabar Road		
Analysis Year	2024			North/South Street	Garvey Road		
Time Analyzed	PH2 Build-Out P.M. Pk-Hr			Peak Hour Factor	0.95		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	4247.06 Chaparral Residential Development						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	2	0	0	1	2	0		0	1	0		0	0	0
Configuration			T	TR		L	T				LR					
Volume (veh/h)			660	29	0	64	640			8		57				
Percent Heavy Vehicles (%)					3	3				3		3				
Proportion Time Blocked																
Percent Grade (%)									0							
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1					7.5		6.9			
Critical Headway (sec)						4.16					6.86		6.96			
Base Follow-Up Headway (sec)						2.2					3.5		3.3			
Follow-Up Headway (sec)						2.24					3.52		3.32			

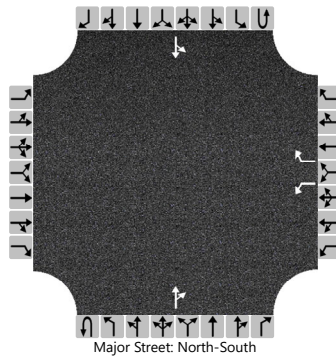
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)					67						68					
Capacity, c (veh/h)					864						471					
v/c Ratio					0.08						0.15					
95% Queue Length, Q ₉₅ (veh)					0.3						0.5					
Control Delay (s/veh)					9.5						13.9					
Level of Service (LOS)					A						B					
Approach Delay (s/veh)					0.9				13.9							
Approach LOS									B							

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	ARO	Intersection	Jupiter Blvd at Americana				
Agency/Co.	LTG	Jurisdiction	City of Palm Bay				
Date Performed	02/14/2019	East/West Street	Jupiter Boulevard				
Analysis Year	2024	North/South Street	Americana Boulevard				
Time Analyzed	Phase 2 A.M. Peak-Hour	Peak Hour Factor	0.92				
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25				
Project Description	4247.06 Chaparral Residential Development						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement																
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		1	0	1		0	1	0		0	1	0
Configuration						L		R				TR		LT		
Volume (veh/h)						36		65			382	72		149	471	
Percent Heavy Vehicles (%)						7		7						2		
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized					No											
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						7.1		6.2						4.1		
Critical Headway (sec)						6.47		6.27						4.12		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.56		3.36						2.22		

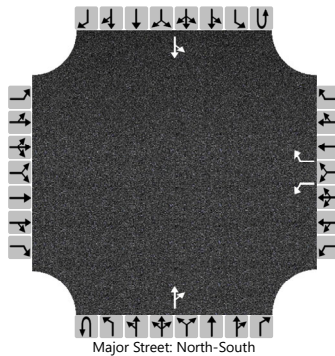
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						39		71						162		
Capacity, c (veh/h)						149		596						1069		
v/c Ratio						0.26		0.12						0.15		
95% Queue Length, Q ₉₅ (veh)						1.0		0.4						0.5		
Control Delay (s/veh)						37.4		11.9						9.0		
Level of Service (LOS)						E		B						A		
Approach Delay (s/veh)					21.0								3.6			
Approach LOS					C											

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	ARO			Intersection	Jupiter Blvd at Americana		
Agency/Co.	LTG			Jurisdiction	City of Palm Bay		
Date Performed	02/14/2019			East/West Street	Jupiter Boulevard		
Analysis Year	2024			North/South Street	Americana Boulevard		
Time Analyzed	Phase 2 P.M. Peak-Hour			Peak Hour Factor	0.95		
Intersection Orientation	North-South			Analysis Time Period (hrs)	0.25		
Project Description	4247.06 Chaparral Residential Development						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		1	0	1	0	0	1	0	0	0	1	0
Configuration						L		R				TR		LT		
Volume (veh/h)						75		83			527	39		72	529	
Percent Heavy Vehicles (%)						4		4						2		
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized					No											
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						7.1		6.2							4.1		
Critical Headway (sec)						6.44		6.24							4.12		
Base Follow-Up Headway (sec)						3.5		3.3							2.2		
Follow-Up Headway (sec)						3.54		3.34							2.22		

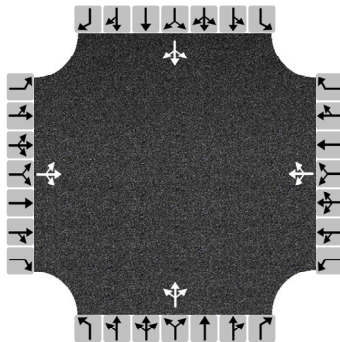
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						79		87							76		
Capacity, c (veh/h)						166		513							980		
v/c Ratio						0.47		0.17							0.08		
95% Queue Length, Q ₉₅ (veh)						2.2		0.6							0.3		
Control Delay (s/veh)						44.8		13.4							9.0		
Level of Service (LOS)						E		B							A		
Approach Delay (s/veh)					28.4								2.0				
Approach LOS					D												

HCS7 All-Way Stop Control Report

General Information		Site Information	
Analyst	SD	Intersection	Jupiter Blvd at Garvey Rd
Agency/Co.	LTG	Jurisdiction	City of Palm Bay
Date Performed	10/11/2018	East/West Street	Jupiter Boulevard
Analysis Year	2024	North/South Street	Garvey Road
Analysis Time Period (hrs)	0.25	Peak Hour Factor	0.83
Time Analyzed	Phase 2 A.M. Peak-Hour		
Project Description	4247.06 Chaparral Residential Development		

Lanes



Vehicle Volume and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
Movement												
Volume	22	372	31	19	276	24	25	42	86	52	22	25
% Thrus in Shared Lane												
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	512			384			184			119		
Percent Heavy Vehicles	4			8			2			3		

Departure Headway and Service Time

Initial Departure Headway, hd (s)	3.20			3.20			3.20			3.20		
Initial Degree of Utilization, x	0.455			0.342			0.164			0.106		
Final Departure Headway, hd (s)	5.71			5.98			6.54			7.03		
Final Degree of Utilization, x	0.812			0.638			0.335			0.233		
Move-Up Time, m (s)	2.0			2.0			2.0			2.0		
Service Time, ts (s)	3.71			3.98			4.54			5.03		

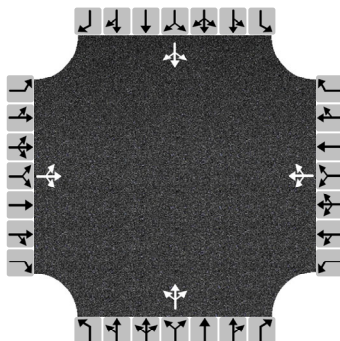
Capacity, Delay and Level of Service

Flow Rate, v (veh/h)	512			384			184			119		
Capacity	631			602			550			512		
95% Queue Length, Q ₉₅ (veh)	8.3			4.5			1.5			0.9		
Control Delay (s/veh)	28.7			18.9			12.8			12.1		
Level of Service, LOS	D			C			B			B		
Approach Delay (s/veh)	28.7			18.9			12.8			12.1		
Approach LOS	D			C			B			B		
Intersection Delay, s/veh LOS	21.5						C					

HCS7 All-Way Stop Control Report

General Information		Site Information	
Analyst	SD	Intersection	Jupiter Blvd at Garvey Rd
Agency/Co.	LTG	Jurisdiction	City of Palm Bay
Date Performed	10/11/2018	East/West Street	Jupiter Boulevard
Analysis Year	2024	North/South Street	Garvey Road
Analysis Time Period (hrs)	0.25	Peak Hour Factor	0.87
Time Analyzed	Phase 2 P.M. Peak-Hour		
Project Description	4247.06 Chaparral Residential Development		

Lanes



Vehicle Volume and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
Movement												
Volume	10	233	23	84	253	19	29	26	59	24	63	14
% Thrus in Shared Lane												
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	306			409			131			116		
Percent Heavy Vehicles	6			3			2			3		

Departure Headway and Service Time

Initial Departure Headway, hd (s)	3.20			3.20			3.20			3.20		
Initial Degree of Utilization, x	0.272			0.364			0.116			0.103		
Final Departure Headway, hd (s)	5.33			5.19			5.80			6.07		
Final Degree of Utilization, x	0.452			0.590			0.211			0.196		
Move-Up Time, m (s)	2.0			2.0			2.0			2.0		
Service Time, ts (s)	3.33			3.19			3.80			4.07		

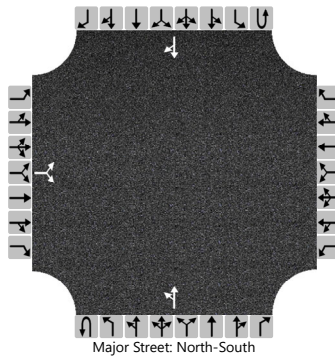
Capacity, Delay and Level of Service

Flow Rate, v (veh/h)	306			409			131			116		
Capacity	676			693			620			593		
95% Queue Length, Q ₉₅ (veh)	2.4			3.9			0.8			0.7		
Control Delay (s/veh)	12.7			15.4			10.3			10.5		
Level of Service, LOS	B			C			B			B		
Approach Delay (s/veh)	12.7			15.4			10.3			10.5		
Approach LOS	B			C			B			B		
Intersection Delay, s/veh LOS	13.2						B					

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	SD			Intersection	Garvey Rd at Harper Blvd		
Agency/Co.	LTG			Jurisdiction	City of Palm Bay		
Date Performed	10/11/2018			East/West Street	Garvey Road		
Analysis Year	2024			North/South Street	Harper Boulevard		
Time Analyzed	Phase 2 A.M. Peak-Hour			Peak Hour Factor	0.85		
Intersection Orientation	North-South			Analysis Time Period (hrs)	0.25		
Project Description	4247.06 Chaparral Residential Development						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	0	1	0	0	0	1	0
Configuration			LR							LT						TR
Volume (veh/h)		92		17						58	24				25	33
Percent Heavy Vehicles (%)		2		2						10						
Proportion Time Blocked																
Percent Grade (%)	0															
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2						4.1						
Critical Headway (sec)		6.42		6.22						4.20						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.52		3.32						2.24						

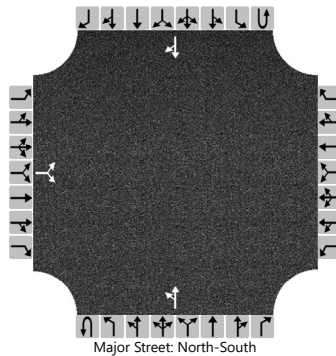
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			128							68						
Capacity, c (veh/h)			772							1516						
v/c Ratio			0.17							0.05						
95% Queue Length, Q ₉₅ (veh)			0.6							0.1						
Control Delay (s/veh)			10.6							7.5						
Level of Service (LOS)			B							A						
Approach Delay (s/veh)	10.6								5.4							
Approach LOS	B															

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	SD			Intersection	Garvey Rd at Harper Blvd		
Agency/Co.	LTG			Jurisdiction	City of Palm Bay		
Date Performed	10/11/2018			East/West Street	Garvey Road		
Analysis Year	2024			North/South Street	Harper Boulevard		
Time Analyzed	Phase 2 P.M. Peak-Hour			Peak Hour Factor	0.84		
Intersection Orientation	North-South			Analysis Time Period (hrs)	0.25		
Project Description	4247.06 Chaparral Residential Development						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	0	1	0	0	0	1	0
Configuration			LR							LT						TR
Volume (veh/h)		66		18						28	22				40	135
Percent Heavy Vehicles (%)		7		7						16						
Proportion Time Blocked																
Percent Grade (%)	0															
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2						4.1						
Critical Headway (sec)		6.47		6.27						4.26						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.56		3.36						2.34						

Delay, Queue Length, and Level of Service

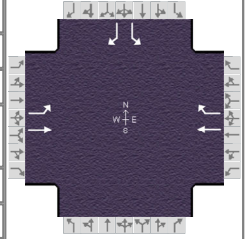
Flow Rate, v (veh/h)			100							33						
Capacity, c (veh/h)			768							1286						
v/c Ratio			0.13							0.03						
95% Queue Length, Q ₉₅ (veh)			0.4							0.1						
Control Delay (s/veh)			10.4							7.9						
Level of Service (LOS)			B							A						
Approach Delay (s/veh)	10.4								4.5							
Approach LOS	B															

APPENDIX M

Signalized Intersections HCS Worksheets – Phase II Build-Out Conditions

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	LTG			Duration, h	0.25
Analyst	SD	Analysis Date	Mar 31, 2017	Area Type	Other
Jurisdiction	City of Palm Bay	Time Period	Ph2 Improved A.M. Pk-Hr	PHF	0.92
Urban Street	SJHP	Analysis Year	2024	Analysis Period	1 > 7:00
Intersection	Malabar Rd. at SJHP	File Name	1 Malabar Rd at SJHP - Ph2 Improved AM Pk-Hr....		
Project Description	4247.02 Chaparral Residential Development				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	125	235			479	394				163		203

Signal Information																		
Cycle, s	28.2	Reference Phase	2															
Offset, s	0	Reference Point	End															
Uncoordinated	Yes	Simult. Gap E/W	On	Green	10.5	5.7	0.0	0.0	0.0	0.0	1		2		3		4	
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	4.0	4.0	0.0	0.0	0.0	0.0	5		6		7		8	
				Red	2.0	2.0	0.0	0.0	0.0	0.0	5		6		7		8	

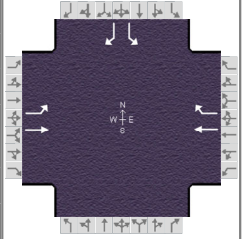
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		6		2				8
Case Number		6.0		7.0				9.0
Phase Duration, s		16.5		16.5				11.7
Change Period, ($Y+R_c$), s		6.0		6.0				6.0
Max Allow Headway (MAH), s		3.3		3.3				3.3
Queue Clearance Time (g_s), s		12.5		8.9				5.7
Green Extension Time (g_e), s		0.0		1.5				0.2
Phase Call Probability		1.00		1.00				0.96
Max Out Probability		1.00		0.32				1.00

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6			2	12				3		18
Adjusted Flow Rate (v), veh/h	136	255			521	340				177		221
Adjusted Saturation Flow Rate (s), veh/h/ln	874	1856			1856	1572				1767		1572
Queue Service Time (g_s), s	3.5	2.8			6.9	4.9				2.5		3.7
Cycle Queue Clearance Time (g_c), s	10.5	2.8			6.9	4.9				2.5		3.7
Green Ratio (g/C)	0.37	0.37			0.37	0.37				0.20		0.20
Capacity (c), veh/h	365	689			689	584				359		320
Volume-to-Capacity Ratio (X)	0.372	0.371			0.756	0.583				0.493		0.690
Back of Queue (Q), ft/ln (95 th percentile)	28.7	25.9			66.3	39.2				30.1		41.1
Back of Queue (Q), veh/ln (95 th percentile)	1.1	1.0			2.6	1.5				1.2		1.6
Queue Storage Ratio (RQ) (95 th percentile)	0.00	0.00			0.00	0.00				0.00		0.00
Uniform Delay (d_1), s/veh	12.7	6.5			7.8	7.1				9.9		10.4
Incremental Delay (d_2), s/veh	0.2	0.1			0.6	0.3				0.4		1.0
Initial Queue Delay (d_3), s/veh	0.0	0.0			0.0	0.0				0.0		0.0
Control Delay (d), s/veh	12.9	6.6			8.4	7.5				10.3		11.4
Level of Service (LOS)	B	A			A	A				B		B
Approach Delay, s/veh / LOS	8.8	A		8.0	A		0.0			10.9		B
Intersection Delay, s/veh / LOS	8.9						A					

Multimodal Results	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	0.67	A		1.87	B		2.03	B		1.92	B	
Bicycle LOS Score / LOS	1.13	A		1.91	B							F

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	LTG			Duration, h	0.25
Analyst	SD	Analysis Date	Mar 31, 2017	Area Type	Other
Jurisdiction	City of Palm Bay	Time Period	Ph2 Improved P.M. Pk-Hr	PHF	0.95
Urban Street	SJHP	Analysis Year	2024	Analysis Period	1 > 7:00
Intersection	Malabar Rd. at SJHP	File Name	1 Malabar Rd at SJHP - Ph2 Improved PM Pk-Hr....		
Project Description	4247.02 Chaparral Residential Development				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	190	321			72	264				525		46

Signal Information												
Cycle, s	32.7	Reference Phase	2									
Offset, s	0	Reference Point	End									
Uncoordinated	Yes	Simult. Gap E/W	On	Green	8.3	12.4	0.0	0.0	0.0	0.0		
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	4.0	4.0	0.0	0.0	0.0	0.0		
				Red	2.0	2.0	0.0	0.0	0.0	0.0		

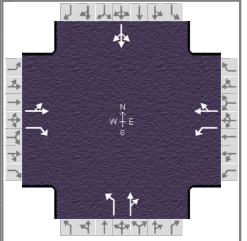
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		6		2				8
Case Number		6.0		7.0				9.0
Phase Duration, s		14.3		14.3				18.4
Change Period, (Y+R _c), s		6.0		6.0				6.0
Max Allow Headway (MAH), s		3.1		3.1				3.1
Queue Clearance Time (g _s), s		7.6		3.0				11.2
Green Extension Time (g _e), s		0.7		0.5				1.2
Phase Call Probability		1.00		1.00				1.00
Max Out Probability		0.18		1.00				0.00

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6			2	12				3		18
Adjusted Flow Rate (v), veh/h	200	338			76	2				553		48
Adjusted Saturation Flow Rate (s), veh/h/ln	1313	1856			1856	1572				1767		1572
Queue Service Time (g _s), s	4.6	5.4			1.0	0.0				9.2		0.6
Cycle Queue Clearance Time (g _c), s	5.6	5.4			1.0	0.0				9.2		0.6
Green Ratio (g/C)	0.25	0.25			0.25	0.25				0.38		0.38
Capacity (c), veh/h	511	470			470	398				670		596
Volume-to-Capacity Ratio (X)	0.391	0.719			0.161	0.005				0.825		0.081
Back of Queue (Q), ft/ln (95 th percentile)	44.2	74.3			13.6	0.4				102		5.9
Back of Queue (Q), veh/ln (95 th percentile)	1.7	2.9			0.5	0.0				4.0		0.2
Queue Storage Ratio (RQ) (95 th percentile)	0.00	0.00			0.00	0.00				0.00		0.00
Uniform Delay (d ₁), s/veh	11.7	11.1			9.5	9.1				9.2		6.5
Incremental Delay (d ₂), s/veh	0.2	0.8			0.1	0.0				1.0		0.0
Initial Queue Delay (d ₃), s/veh	0.0	0.0			0.0	0.0				0.0		0.0
Control Delay (d), s/veh	11.9	11.9			9.5	9.1				10.2		6.5
Level of Service (LOS)	B	B			A	A				B		A
Approach Delay, s/veh / LOS	11.9	B		9.5	A		0.0			9.9		A
Intersection Delay, s/veh / LOS	10.7						B					

Multimodal Results	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	0.69	A		1.89	B		2.29	B		1.93	B	
Bicycle LOS Score / LOS	1.38	A		0.62	A							F

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information			
Agency	LTG			Duration, h	0.25		
Analyst	SD	Analysis Date	Sep 18, 2018	Area Type	Other		
Jurisdiction	City of Palm Bay	Time Period	PH2 Build-Out AM Pk-Hr	PHF	0.75		
Urban Street	Malabar Road	Analysis Year	2024	Analysis Period	1 > 7:00		
Intersection	Malabar Rd. at Wisteria...	File Name	2 Malabar Rd at Wisteria Ave - Ph2 Build-Out AM...				
Project Description	4247.06 Chaparral Residential Development						



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	15	319	70	66	668	13	211	0	201	28	0	18

Signal Information												
Cycle, s	128.8	Reference Phase	2									
Offset, s	0	Reference Point	End									
Uncoordinated	Yes	Simult. Gap E/W	On	Green	5.7	58.8	8.1	25.2	0.0	0.0		
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	4.0	5.0	5.0	5.0	0.0	0.0		
				Red	3.0	3.0	3.0	3.0	0.0	0.0		

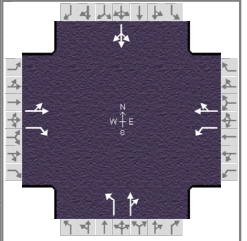
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		2	1	6		8		4
Case Number		7.3	1.0	4.0		10.0		12.0
Phase Duration, s		66.8	12.7	79.5		33.2		16.1
Change Period, (Y+R _c), s		8.0	7.0	8.0		8.0		8.0
Max Allow Headway (MAH), s		5.0	4.0	5.0		5.2		5.1
Queue Clearance Time (g _s), s		49.9	5.3	57.3		22.3		5.4
Green Extension Time (g _e), s		7.9	0.0	14.1		2.8		0.0
Phase Call Probability		1.00	0.96	1.00		1.00		0.81
Max Out Probability		0.58	1.00	0.02		0.10		1.00

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (v), veh/h	445	69	88	908	281	257	47					
Adjusted Saturation Flow Rate (s), veh/h/ln	1335	1449	1767	1849	1767	1572	1724					
Queue Service Time (g _s), s	5.4	3.5	3.3	55.3	19.7	20.3	3.4					
Cycle Queue Clearance Time (g _c), s	47.9	3.5	3.3	55.3	19.7	20.3	3.4					
Green Ratio (g/C)	0.46	0.46	0.52	0.56	0.20	0.20	0.06					
Capacity (c), veh/h	639	662	216	1027	345	307	109					
Volume-to-Capacity Ratio (X)	0.697	0.105	0.407	0.884	0.815	0.837	0.429					
Back of Queue (Q), ft/ln (95 th percentile)	384	52.8	61.9	795.4	368.5	350.6	72					
Back of Queue (Q), veh/ln (95 th percentile)	15.0	2.1	2.4	31.1	14.4	13.7	2.8					
Queue Storage Ratio (RQ) (95 th percentile)	0.00	0.22	0.27	0.00	0.00	0.00	0.00					
Uniform Delay (d ₁), s/veh	26.3	20.0	26.5	25.0	49.7	49.9	58.2					
Incremental Delay (d ₂), s/veh	3.1	0.1	1.2	3.9	8.0	10.7	3.8					
Initial Queue Delay (d ₃), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0					
Control Delay (d), s/veh	29.4	20.1	27.7	28.9	57.7	60.6	62.0					
Level of Service (LOS)		C	C	C	C		E	E			E	
Approach Delay, s/veh / LOS	28.1	C	28.8	C	59.1	E	62.0	E				
Intersection Delay, s/veh / LOS	37.2						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	1.93	B	1.69	B	1.97	B	1.97	B
Bicycle LOS Score / LOS	1.34	A	2.13	B	1.38	A	0.56	A

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information			
Agency	LTG			Duration, h	0.25		
Analyst	SD	Analysis Date	Sep 18, 2018	Area Type	Other		
Jurisdiction	City of Palm Bay	Time Period	PH2 Build-Out PM Pk-Hr	PHF	0.95		
Urban Street	Malabar Road	Analysis Year	2024	Analysis Period	1 > 7:00		
Intersection	Malabar Rd. at Wisteria...	File Name	2 Malabar Rd at Wisteria Ave - Ph2 Build-Out PM...				
Project Description	4247.06 Chaparral Residential Development						



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	9	601	236	224	178	46	139	0	131	28	0	10

Signal Information																		
Cycle, s	109.7	Reference Phase	2															
Offset, s	0	Reference Point	End															
Uncoordinated	Yes	Simult. Gap E/W	On	Green	10.8	43.2	6.0	9.7	0.0	0.0	1		2		3		4	
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	4.0	5.0	4.0	5.0	0.0	0.0	5		6		7		8	
				Red	3.0	3.0	3.0	3.0	0.0	0.0								

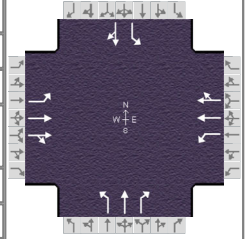
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		2	1	6	3	8		4
Case Number		7.3	1.0	4.0	1.0	4.0		8.3
Phase Duration, s		51.2	17.8	69.1	13.0	30.6		17.7
Change Period, (Y+R _c), s		8.0	7.0	8.0	7.0	8.0		8.0
Max Allow Headway (MAH), s		5.0	4.0	5.0	4.1	5.3		5.3
Queue Clearance Time (g _s), s		37.3	10.3	9.0	8.0	8.2		4.6
Green Extension Time (g _e), s		6.1	0.6	0.6	0.0	0.1		0.1
Phase Call Probability		1.00	1.00	1.00	0.99	1.00		0.99
Max Out Probability		0.01	0.01	1.00	1.00	1.00		0.98

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (v), veh/h	642	176	236	225	146	105				36		
Adjusted Saturation Flow Rate (s), veh/h/ln	1850	1610	1767	1801	1767	1572				1343		
Queue Service Time (g _s), s	7.2	8.1	8.3	7.0	6.0	6.2				2.2		
Cycle Queue Clearance Time (g _c), s	35.3	8.1	8.3	7.0	6.0	6.2				2.6		
Green Ratio (g/C)	0.39	0.39	0.51	0.56	0.16	0.21				0.09		
Capacity (c), veh/h	762	634	294	1002	252	325				178		
Volume-to-Capacity Ratio (X)	0.843	0.277	0.803	0.225	0.580	0.324				0.201		
Back of Queue (Q), ft/ln (95 th percentile)	559.4	134.8	162.9	120	50.4	112.8				43.1		
Back of Queue (Q), veh/ln (95 th percentile)	21.9	5.4	6.4	4.7	2.0	4.4				1.7		
Queue Storage Ratio (RQ) (95 th percentile)	0.00	0.56	0.56	0.00	0.00	0.00				0.00		
Uniform Delay (d ₁), s/veh	30.8	22.6	23.6	12.3	43.5	37.0				46.7		
Incremental Delay (d ₂), s/veh	3.7	0.3	5.6	0.2	3.3	0.8				0.8		
Initial Queue Delay (d ₃), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0		
Control Delay (d), s/veh	34.5	22.9	29.2	12.5	46.8	37.8				47.5		
Level of Service (LOS)		C	C	C	B		D	D			D	
Approach Delay, s/veh / LOS	32.0	C	21.0	C	43.0	D	47.5	D				
Intersection Delay, s/veh / LOS	30.9						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	1.96	B	1.67	B	1.95	B	2.05	B
Bicycle LOS Score / LOS	1.84	B	1.25	A	0.90	A	0.55	A

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	LTG			Duration, h	0.25
Analyst	SD	Analysis Date	Sep 18, 2018	Area Type	Other
Jurisdiction	City of Palm Bay	Time Period	Ph2 Build-Out A.M. Pk-Hr	PHF	0.95
Urban Street	Malabar Road	Analysis Year	2024	Analysis Period	1 > 7:00
Intersection	Malabar Rd at Jupiter Blvd	File Name	4 Malabar Rd at Jupiter Blvd - Ph2 Build-Out AM...		
Project Description	4247.06 Chaparral Residential Development				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	88	410	83	52	474	289	186	158	45	284	200	114

Signal Information				Signal Phases												
Cycle, s	83.3	Reference Phase	2													
Offset, s	0	Reference Point	End	Green	5.3	3.7	12.8	6.0	1.0	17.4						
Uncoordinated	Yes	Simult. Gap E/W	On	Yellow	4.0	5.0	4.0	4.0	0.0	5.0						
Force Mode	Fixed	Simult. Gap N/S	On	Red	3.0	3.0	3.0	3.0	0.0	3.0						

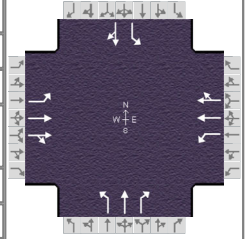
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6	3	8	7	4
Case Number	1.2	4.0	1.3	4.0	1.1	3.0	1.1	4.0
Phase Duration, s	12.3	24.0	19.8	31.5	13.0	25.4	14.0	26.4
Change Period, (Y+R _c), s	7.0	8.0	8.0	8.0	7.0	8.0	7.0	8.0
Max Allow Headway (MAH), s	4.0	5.0	5.0	5.0	4.1	5.1	4.1	5.1
Queue Clearance Time (g _s), s	6.0	13.4	2.0	20.0	8.0	8.5	9.0	17.2
Green Extension Time (g _e), s	0.0	2.6	1.8	3.5	0.0	0.5	0.0	1.3
Phase Call Probability	0.88	1.00	0.72	1.00	0.99	1.00	1.00	1.00
Max Out Probability	1.00	0.04	1.00	0.39	1.00	1.00	1.00	0.37

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (v), veh/h	93	266	253	55	428	375	196	166	15	299	331	
Adjusted Saturation Flow Rate (s), veh/h/ln	1767	1856	1747	1767	1856	1619	1767	1856	1415	1767	1742	
Queue Service Time (g _s), s	4.0	11.2	11.4	0.0	17.9	18.0	6.0	6.5	0.7	7.0	15.2	
Cycle Queue Clearance Time (g _c), s	4.0	11.2	11.4	0.0	17.9	18.0	6.0	6.5	0.7	7.0	15.2	
Green Ratio (g/C)	0.13	0.19	0.19	0.16	0.28	0.28	0.28	0.21	0.21	0.29	0.22	
Capacity (c), veh/h	199	356	335	356	524	458	230	389	297	394	386	
Volume-to-Capacity Ratio (X)	0.466	0.746	0.755	0.154	0.816	0.820	0.853	0.428	0.050	0.758	0.857	
Back of Queue (Q), ft/ln (95 th percentile)	78.5	226.6	214.8	42	331.1	295	119.3	133	10.7	137.9	295.4	
Back of Queue (Q), veh/ln (95 th percentile)	3.1	8.9	8.6	1.6	12.9	11.8	4.7	5.2	0.4	5.4	11.5	
Queue Storage Ratio (RQ) (95 th percentile)	0.52	0.00	0.00	0.19	0.00	0.00	0.68	0.00	0.04	0.45	0.00	
Uniform Delay (d ₁), s/veh	33.3	31.7	31.8	30.4	27.9	27.9	28.3	28.6	5.8	28.3	31.1	
Incremental Delay (d ₂), s/veh	1.7	4.4	4.9	0.2	6.7	7.8	25.2	1.1	0.1	8.3	10.9	
Initial Queue Delay (d ₃), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Control Delay (d), s/veh	35.0	36.1	36.7	30.6	34.6	35.7	53.5	29.6	5.9	36.6	42.0	
Level of Service (LOS)	D	D	D	C	C	D	D	C	A	D	D	
Approach Delay, s/veh / LOS	36.2	D		34.8	C		41.1	D		39.4	D	
Intersection Delay, s/veh / LOS	37.3						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.17	B	1.92	B	2.29	B	2.29	B
Bicycle LOS Score / LOS	0.99	A	1.20	A	1.11	A	1.53	B

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information			
Agency	LTG			Duration, h	0.25		
Analyst	SD	Analysis Date	Sep 18, 2018	Area Type	Other		
Jurisdiction	City of Palm Bay	Time Period	Ph2 Build-Out P.M. Pk-Hr	PHF	0.95		
Urban Street	Malabar Road	Analysis Year	2024	Analysis Period	1 > 7:00		
Intersection	Malabar Rd at Jupiter Blvd	File Name	4 Malabar Rd at Jupiter Blvd -PH2 Build-Out P.M....				
Project Description	4247.06 Chaparral Residential Development						



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	173	443	166	52	312	289	105	158	45	204	160	91

Signal Information													
Cycle, s	91.3	Reference Phase	2										
Offset, s	0	Reference Point	End										
Uncoordinated	Yes	Simult. Gap E/W	On	Green	7.0	7.5	6.0	6.0	17.8	0.0			
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	4.0	5.0	4.0	4.0	5.0	0.0			
				Red	3.0	3.0	3.0	3.0	3.0	0.0			

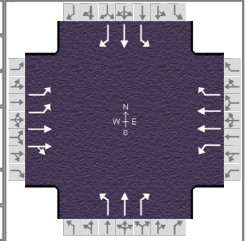
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6	3	8	7	4
Case Number	1.2	4.0	1.3	4.0	1.1	3.0	1.1	4.0
Phase Duration, s	14.0	29.5	13.0	28.5	13.0	25.8	13.0	25.8
Change Period, (Y+R _c), s	7.0	8.0	8.0	8.0	7.0	8.0	7.0	8.0
Max Allow Headway (MAH), s	4.0	5.0	5.0	5.0	4.1	5.1	4.1	5.1
Queue Clearance Time (g _s), s	9.0	17.6	2.0	19.0	6.5	9.2	8.0	16.9
Green Extension Time (g _e), s	0.0	3.9	1.5	1.5	0.0	0.2	0.0	0.9
Phase Call Probability	0.99	1.00	0.75	1.00	0.94	1.00	1.00	1.00
Max Out Probability	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.41

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (v), veh/h	182	334	307	55	328	304	111	166	23	215	264	
Adjusted Saturation Flow Rate (s), veh/h/ln	1767	1856	1683	1767	1856	1572	1767	1856	1572	1767	1568	
Queue Service Time (g _s), s	7.0	15.4	15.6	0.0	15.2	17.0	4.5	7.2	1.1	6.0	14.9	
Cycle Queue Clearance Time (g _c), s	7.0	15.4	15.6	0.0	15.2	17.0	4.5	7.2	1.1	6.0	14.9	
Green Ratio (g/C)	0.18	0.24	0.24	0.11	0.22	0.22	0.26	0.20	0.20	0.26	0.20	
Capacity (c), veh/h	214	436	396	209	416	352	207	362	307	309	306	
Volume-to-Capacity Ratio (X)	0.849	0.767	0.775	0.262	0.790	0.863	0.535	0.459	0.075	0.695	0.863	
Back of Queue (Q), ft/ln (95 th percentile)	96.4	288.7	265.4	53.2	305	308.2	91.7	151.6	19.1	97.5	277.5	
Back of Queue (Q), veh/ln (95 th percentile)	3.8	11.3	10.6	2.1	11.9	12.3	3.6	5.9	0.7	3.8	10.8	
Queue Storage Ratio (RQ) (95 th percentile)	0.64	0.00	0.00	0.24	0.00	0.00	0.52	0.00	0.08	0.32	0.00	
Uniform Delay (d ₁), s/veh	36.0	32.6	32.7	39.6	33.4	34.1	28.3	32.5	5.3	32.1	35.5	
Incremental Delay (d ₂), s/veh	26.1	4.0	4.6	0.7	8.8	17.1	2.7	1.3	0.1	6.6	14.1	
Initial Queue Delay (d ₃), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Control Delay (d), s/veh	62.1	36.6	37.3	40.2	42.1	51.2	31.0	33.8	5.5	38.7	49.6	
Level of Service (LOS)	E	D	D	D	D	D	C	C	A	D	D	
Approach Delay, s/veh / LOS	42.5	D		46.0	D		30.5	C		44.8	D	
Intersection Delay, s/veh / LOS	42.5						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.17	B	1.93	B	2.29	B	2.29	B
Bicycle LOS Score / LOS	1.17	A	1.05	A	0.98	A	1.28	A

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information			
Agency	LTG			Duration, h	0.25		
Analyst	ARO	Analysis Date	Feb 14, 2019	Area Type	Other		
Jurisdiction	City of Palm Bay	Time Period	Ph2 Build-Out A.M. Pk-Hr	PHF	0.95		
Urban Street	Minton Road	Analysis Year	2024	Analysis Period	1 > 7:00		
Intersection	Malabar Rd. at Minton Rd.	File Name	6 Malabar Rd at Minton -Ph2 AM PK.xus				
Project Description	4247.06 Chaparral Residential Development						



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	254	543	81	92	261	64	85	668	199	111	372	73

Signal Information													
Cycle, s	121.0	Reference Phase	2										
Offset, s	0	Reference Point	End										
Uncoordinated	Yes	Simult. Gap E/W	On	Green	4.0	1.0	50.8	8.5	2.9	22.8			
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	4.0	0.0	4.0	4.0	0.0	5.0			
				Red	4.0	0.0	3.0	4.0	0.0	3.0			

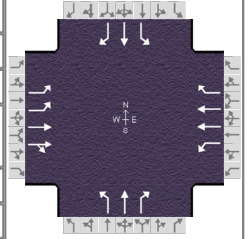
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8	5	2	1	6
Case Number	2.0	4.0	2.0	3.0	1.1	3.0	1.1	3.0
Phase Duration, s	19.4	33.7	16.5	30.8	12.0	57.8	13.0	58.8
Change Period, (Y+R _c), s	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
Max Allow Headway (MAH), s	4.1	4.1	4.1	4.1	4.1	4.0	4.0	4.0
Queue Clearance Time (g _s), s	11.3	23.2	8.5	10.3	5.6	45.5	6.7	20.8
Green Extension Time (g _e), s	0.1	2.4	0.3	0.0	0.0	4.1	0.0	0.0
Phase Call Probability	1.00	1.00	0.96	1.00	0.95	1.00	0.98	1.00
Max Out Probability	1.00	0.05	0.00	1.00	1.00	0.00	1.00	1.00

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	267	335	322	97	275	15	89	703	166	117	392	20
Adjusted Saturation Flow Rate (s), veh/h/ln	1716	1856	1771	1767	1766	1572	1767	1856	1572	1767	1856	1572
Queue Service Time (g _s), s	9.3	21.1	21.2	6.5	8.3	0.9	3.6	43.5	8.4	4.7	18.8	0.9
Cycle Queue Clearance Time (g _c), s	9.3	21.1	21.2	6.5	8.3	0.9	3.6	43.5	8.4	4.7	18.8	0.9
Green Ratio (g/C)	0.09	0.21	0.21	0.07	0.19	0.19	0.45	0.41	0.41	0.45	0.42	0.42
Capacity (c), veh/h	324	395	377	124	667	297	363	764	648	171	779	660
Volume-to-Capacity Ratio (X)	0.826	0.849	0.853	0.779	0.412	0.050	0.246	0.920	0.257	0.682	0.502	0.030
Back of Queue (Q), ft/ln (95 th percentile)	209.2	398	383.5	149	168.1	16.8	69.2	700.3	144.9	108.6	324.9	15.1
Back of Queue (Q), veh/ln (95 th percentile)	8.2	15.5	15.1	5.8	6.6	0.7	2.7	27.4	5.7	4.2	12.7	0.6
Queue Storage Ratio (RQ) (95 th percentile)	0.95	0.00	0.00	0.39	0.00	0.05	0.55	0.00	0.78	0.66	0.00	0.08
Uniform Delay (d ₁), s/veh	54.0	45.9	45.9	55.5	43.3	40.3	21.5	33.8	23.5	28.6	25.9	20.7
Incremental Delay (d ₂), s/veh	14.8	6.3	6.9	10.0	0.4	0.1	0.3	5.1	0.2	10.5	0.5	0.0
Initial Queue Delay (d ₃), 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
Control Delay (d), s/veh	68.8	52.2	52.8	65.5	43.7	40.4	21.8	38.9	23.7	39.2	26.4	20.7
Level of Service (LOS)	E	D	D	E	D	D	C	D	C	D	C	C
Approach Delay, s/veh / LOS	57.2	E		49.0	D		34.7	C		29.0	C	
Intersection Delay, s/veh / LOS	43.0						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.19	B	2.38	B	2.50	C	2.43	B
Bicycle LOS Score / LOS	1.25	A	0.81	A	2.07	B	1.36	A

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information			
Agency	LTG			Duration, h	0.25		
Analyst	SD	Analysis Date	Sep 18, 2018		Area Type	Other	
Jurisdiction	City of Palm Bay		Time Period	Ph2 Build-Out P.M. Pk-Hr		PHF	0.95
Urban Street	Minton Road		Analysis Year	2024		Analysis Period	1 > 7:00
Intersection	Malabar Rd. at Minton Rd.		File Name	6 Malabar Rd at Minton -PH2 Build-Out P.M. PK V...			
Project Description	4247.06 Chaparral Residential Development						



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	146	423	88	194	449	118	77	363	90	125	717	253

Signal Information													
Cycle, s	141.1	Reference Phase	2										
Offset, s	0	Reference Point	End										
Uncoordinated	Yes	Simult. Gap E/W	On	Green	4.0	61.6	8.4	2.3	24.8	0.0			
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	4.0	4.0	4.0	4.0	5.0	0.0			
				Red	4.0	3.0	4.0	4.0	4.0	0.0			

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8	5	2	1	6
Case Number	2.0	4.0	2.0	3.0	1.1	3.0	1.1	3.0
Phase Duration, s	16.4	33.8	26.7	44.1	12.0	68.6	12.0	68.6
Change Period, (Y+R _c), s	8.0	9.0	8.0	9.0	8.0	7.0	8.0	7.0
Max Allow Headway (MAH), s	4.1	4.1	4.1	4.1	4.1	4.0	4.0	4.0
Queue Clearance Time (g _s), s	8.2	22.6	18.0	18.4	5.6	22.7	6.0	56.6
Green Extension Time (g _e), s	0.1	2.1	0.6	0.0	0.0	0.0	0.0	4.7
Phase Call Probability	1.00	1.00	1.00	1.00	0.96	1.00	0.99	1.00
Max Out Probability	1.00	0.06	0.00	1.00	1.00	1.00	1.00	0.00

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	154	276	262	204	473	65	81	382	11	132	755	234
Adjusted Saturation Flow Rate (s), veh/h/ln	1716	1856	1745	1767	1766	1572	1767	1856	1572	1767	1856	1572
Queue Service Time (g _s), s	6.2	20.3	20.6	16.0	16.4	4.6	3.6	20.7	0.5	4.0	54.6	13.9
Cycle Queue Clearance Time (g _c), s	6.2	20.3	20.6	16.0	16.4	4.6	3.6	20.7	0.5	4.0	54.6	13.9
Green Ratio (g/C)	0.06	0.18	0.18	0.13	0.25	0.25	0.47	0.44	0.44	0.47	0.44	0.44
Capacity (c), veh/h	204	327	307	234	880	392	127	811	687	377	811	687
Volume-to-Capacity Ratio (X)	0.753	0.843	0.853	0.872	0.537	0.167	0.641	0.471	0.015	0.349	0.931	0.340
Back of Queue (Q), ft/ln (95 th percentile)	136.4	390.4	375.3	317.8	299.7	83.8	86.8	364.3	9.3	71.8	848.5	227.1
Back of Queue (Q), veh/ln (95 th percentile)	5.3	15.3	14.8	12.4	11.7	3.3	3.4	14.2	0.4	2.8	33.1	8.9
Queue Storage Ratio (RQ) (95 th percentile)	0.62	0.00	0.00	0.83	0.00	0.23	0.69	0.00	0.05	0.44	0.00	1.14
Uniform Delay (d ₁), s/veh	65.5	56.4	56.5	60.2	46.0	41.6	33.9	28.3	22.6	28.8	37.8	26.3
Incremental Delay (d ₂), s/veh	8.4	6.4	7.5	10.4	0.6	0.2	10.4	0.4	0.0	0.6	6.0	0.3
Initial Queue Delay (d ₃), 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
Control Delay (d), s/veh	73.9	62.8	64.0	70.6	46.7	41.8	44.3	28.7	22.6	29.4	43.8	26.6
Level of Service (LOS)	E	E	E	E	D	D	D	C	C	C	D	C
Approach Delay, s/veh / LOS	65.7	E		52.8	D		31.2	C		38.5	D	
Intersection Delay, s/veh / LOS	47.1						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.26	B	2.35	B	2.51	C	2.43	B
Bicycle LOS Score / LOS	1.06	A	1.10	A	1.27	A	2.34	B

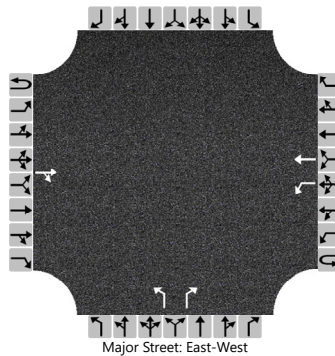
APPENDIX N

Unsignalized Intersections HCS Worksheets – Phase II Improved Conditions

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	SD			Intersection	Malabar Rd at Hurley Blvd		
Agency/Co.	LTG			Jurisdiction	City of Palm Bay		
Date Performed	09/18/2018			East/West Street	Malabar Road		
Analysis Year	2024			North/South Street	Hurley Boulevard		
Time Analyzed	PH2 Improved A.M. Pk-Hr			Peak Hour Factor	0.95		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	4247.06 Chaparral Residential Development						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	1	1	0		1	0	1		0	0	0
Configuration				TR		L	T			L		R				
Volume (veh/h)			511	31		102	677			68		82				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized										No						
Median Type Storage							Left Only									1

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.24				3.52		3.32				

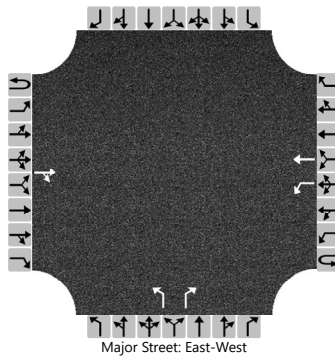
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)					107					72		86				
Capacity, c (veh/h)					992					247		531				
v/c Ratio					0.11					0.29		0.16				
95% Queue Length, Q ₉₅ (veh)					0.4					1.2		0.6				
Control Delay (s/veh)					9.1					25.4		13.1				
Level of Service (LOS)					A					D		B				
Approach Delay (s/veh)							1.2					18.7				
Approach LOS												C				

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	ARO			Intersection	Malabar Rd at Hurley Blvd		
Agency/Co.	LTG			Jurisdiction	Brevard County		
Date Performed	02/14/2019			East/West Street	Malabar Road		
Analysis Year	2024			North/South Street	Hurley Boulevard		
Time Analyzed	PH2 Improved P.M. Pk-Hr			Peak Hour Factor	0.90		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	4247.06 Chaparral Residential Development						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	1	1	0		1	0	1		0	0	0
Configuration				TR		L	T			L		R				
Volume (veh/h)			707	50		102	420			21		83				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)									0							
Right Turn Channelized									No							
Median Type Storage	Left Only								1							

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1					7.1		6.2			
Critical Headway (sec)						4.13					6.43		6.23			
Base Follow-Up Headway (sec)						2.2					3.5		3.3			
Follow-Up Headway (sec)						2.24					3.52		3.32			

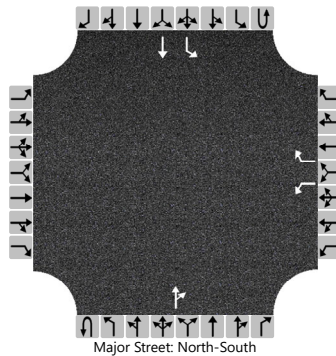
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						113					23		92			
Capacity, c (veh/h)						786					248		377			
v/c Ratio						0.14					0.09		0.24			
95% Queue Length, Q ₉₅ (veh)						0.5					0.3		0.9			
Control Delay (s/veh)						10.3					21.0		17.6			
Level of Service (LOS)						B					C		C			
Approach Delay (s/veh)					2.0				18.3							
Approach LOS									C							

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	ARO	Intersection	Jupiter Blvd at Americana				
Agency/Co.	LTG	Jurisdiction	City of Palm Bay				
Date Performed	02/14/2019	East/West Street	Jupiter Boulevard				
Analysis Year	2024	North/South Street	Americana Boulevard				
Time Analyzed	Phase 2 A.M. Peak-Hour	Peak Hour Factor	0.92				
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25				
Project Description	4247.06 Chaparral Residential Development						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement																
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		1	0	1		0	1	0		0	1	0
Configuration						L		R				TR		L	T	
Volume (veh/h)						36		65			382	72		149	471	
Percent Heavy Vehicles (%)						7		7						2		
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized					No											
Median Type Storage	Left Only								1							

Critical and Follow-up Headways

Base Critical Headway (sec)						7.1		6.2							4.1		
Critical Headway (sec)						6.47		6.27							4.12		
Base Follow-Up Headway (sec)						3.5		3.3							2.2		
Follow-Up Headway (sec)						3.56		3.36							2.22		

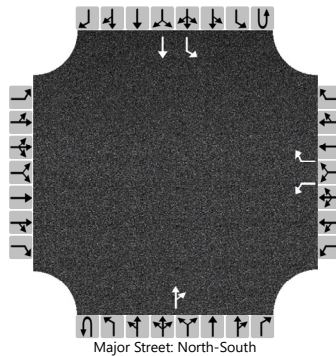
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						39		71							162		
Capacity, c (veh/h)						267		596							1069		
v/c Ratio						0.15		0.12							0.15		
95% Queue Length, Q ₉₅ (veh)						0.5		0.4							0.5		
Control Delay (s/veh)						20.8		11.9							9.0		
Level of Service (LOS)						C		B							A		
Approach Delay (s/veh)					15.0								2.2				
Approach LOS					C												

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	ARO	Intersection	Jupiter Blvd at Americana				
Agency/Co.	LTG	Jurisdiction	City of Palm Bay				
Date Performed	02/14/2019	East/West Street	Jupiter Boulevard				
Analysis Year	2024	North/South Street	Americana Boulevard				
Time Analyzed	PH 2 P.M. Pk-Hr Improved	Peak Hour Factor	0.94				
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25				
Project Description	4247.06 Chaparral Residential Development						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement																
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		1	0	1	0	0	1	0	0	1	1	0
Configuration						L		R				TR		L	T	
Volume (veh/h)						75		83			527	39		72	529	
Percent Heavy Vehicles (%)						4		4						2		
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized					No											
Median Type Storage	Left Only								1							

Critical and Follow-up Headways

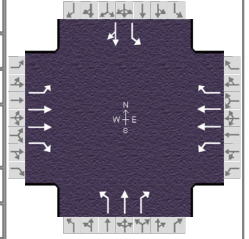
Base Critical Headway (sec)						7.1		6.2						4.1		
Critical Headway (sec)						6.44		6.24						4.12		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.54		3.34						2.22		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)					80		88						77			
Capacity, c (veh/h)					298		509						975			
v/c Ratio					0.27		0.17						0.08			
95% Queue Length, Q ₉₅ (veh)					1.1		0.6						0.3			
Control Delay (s/veh)					21.5		13.5						9.0			
Level of Service (LOS)					C		B						A			
Approach Delay (s/veh)					17.3								1.1			
Approach LOS					C											

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	LTG			Duration, h	0.25
Analyst	ARO	Analysis Date	Sep 18, 2018	Area Type	Other
Jurisdiction	City of Palm Bay	Time Period	Ph2 Build-Out A.M. Pk-Hr	PHF	0.95
Urban Street	Malabar Road	Analysis Year	2024	Analysis Period	1 > 7:00
Intersection	Malabar Rd at Jupiter Blvd	File Name	4 Malabar Rd at Jupiter Blvd - Ph2 AM PK - Impro...		
Project Description	4247.06 Chaparral Residential Development				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	88	410	83	52	474	289	186	158	45	284	200	114

Signal Information														
Cycle, s	79.7	Reference Phase	2											
Offset, s	0	Reference Point	End											
Uncoordinated	Yes	Simult. Gap E/W	On	Green	5.2	2.1	9.5	7.0	6.4	12.6				
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	4.0	5.0	4.0	4.0	0.0	5.0				
				Red	3.0	3.0	3.0	3.0	0.0	3.0				

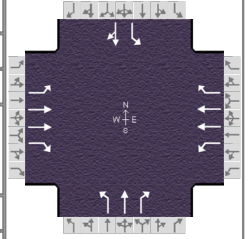
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6	3	8	7	4
Case Number	1.2	3.0	1.3	3.0	1.1	3.0	1.1	4.0
Phase Duration, s	12.2	22.3	16.5	26.6	14.0	20.6	20.4	26.9
Change Period, (Y+R _c), s	7.0	8.0	8.0	8.0	7.0	8.0	7.0	8.0
Max Allow Headway (MAH), s	4.0	5.0	5.0	5.0	4.1	5.1	4.1	5.1
Queue Clearance Time (g _s), s	5.9	11.1	2.0	13.1	9.0	8.6	12.7	16.2
Green Extension Time (g _e), s	0.0	3.2	1.9	5.4	0.0	1.7	0.7	2.7
Phase Call Probability	0.87	1.00	0.70	1.00	0.99	1.00	1.00	1.00
Max Out Probability	1.00	0.00	1.00	0.02	1.00	0.54	0.05	0.03

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (v), veh/h	93	432	87	55	499	304	196	166	15	299	331	
Adjusted Saturation Flow Rate (s), veh/h/ln	1767	1766	1610	1767	1766	1610	1767	1856	1415	1767	1742	
Queue Service Time (g _s), s	3.9	9.1	3.8	0.0	10.1	11.1	7.0	6.6	0.7	10.7	14.2	
Cycle Queue Clearance Time (g _c), s	3.9	9.1	3.8	0.0	10.1	11.1	7.0	6.6	0.7	10.7	14.2	
Green Ratio (g/C)	0.12	0.18	0.18	0.11	0.23	0.40	0.25	0.16	0.16	0.34	0.24	
Capacity (c), veh/h	206	635	289	279	822	645	281	293	223	477	414	
Volume-to-Capacity Ratio (X)	0.449	0.680	0.302	0.196	0.607	0.472	0.697	0.568	0.066	0.626	0.798	
Back of Queue (Q), ft/ln (95 th percentile)	75.9	172.9	61.2	42.1	184.9	170	163.9	140.1	11.1	193.8	259.7	
Back of Queue (Q), veh/ln (95 th percentile)	3.0	6.8	2.4	1.6	7.2	6.8	6.4	5.5	0.4	7.6	10.1	
Queue Storage Ratio (RQ) (95 th percentile)	0.51	0.00	0.00	0.19	0.00	0.00	0.94	0.00	0.05	0.64	0.00	
Uniform Delay (d ₁), s/veh	32.9	30.6	4.8	31.9	27.3	17.7	26.9	31.1	8.7	21.3	28.6	
Incremental Delay (d ₂), s/veh	1.5	1.8	0.8	0.3	1.0	0.8	7.3	2.5	0.2	1.4	5.0	
Initial Queue Delay (d ₃), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Control Delay (d), s/veh	34.4	32.4	5.7	32.2	28.4	18.4	34.2	33.5	8.9	22.6	33.6	
Level of Service (LOS)	C	C	A	C	C	B	C	C	A	C	C	
Approach Delay, s/veh / LOS	28.9	C		25.1	C		32.9	C		28.4	C	
Intersection Delay, s/veh / LOS	28.1						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.17	B	1.92	B	2.44	B	2.44	B
Bicycle LOS Score / LOS	0.99	A	1.20	A	1.11	A	1.53	B

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information		
Agency	LTG			Duration, h	0.25	
Analyst	ARO	Analysis Date	Feb 14, 2019		Area Type	Other
Jurisdiction	City of Palm Bay		Time Period	Ph2 Build-Out P.M. Pk-Hr Improved	PHF	0.95
Urban Street	Malabar Road	Analysis Year	2024	Analysis Period	1 > 7:00	
Intersection	Malabar Rd at Jupiter Blvd	File Name	4 Malabar Rd at Jupiter Blvd -PH2 P.M. PK - Impr...			
Project Description	4247.06 Chaparral Residential Development					



Demand Information	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Approach Movement												
Demand (v), veh/h	173	443	166	52	312	289	105	158	45	204	160	91

Signal Information													
Cycle, s	91.1	Reference Phase	2										
Offset, s	0	Reference Point	End										
Uncoordinated	Yes	Simult. Gap E/W	On	Green	8.0	2.2	9.5	6.0	1.0	17.4			
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	4.0	5.0	4.0	4.0	0.0	5.0			
				Red	3.0	3.0	3.0	3.0	0.0	3.0			

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6	3	8	7	4
Case Number	1.2	3.0	1.3	3.0	1.1	3.0	1.1	4.0
Phase Duration, s	15.0	25.2	16.5	26.7	13.0	25.4	14.0	26.4
Change Period, (Y+R _c), s	7.0	8.0	8.0	8.0	7.0	8.0	7.0	8.0
Max Allow Headway (MAH), s	4.0	5.0	5.0	5.0	4.1	5.1	4.1	5.1
Queue Clearance Time (g _s), s	10.0	13.2	2.0	17.2	6.5	9.3	9.0	16.7
Green Extension Time (g _e), s	0.0	4.0	2.3	1.4	0.0	0.2	0.0	1.6
Phase Call Probability	0.99	1.00	0.75	1.00	0.94	1.00	1.00	1.00
Max Out Probability	1.00	0.00	0.65	1.00	1.00	1.00	1.00	0.00

Movement Group Results	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Approach Movement												
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (v), veh/h	182	466	120	55	328	304	111	166	23	215	264	
Adjusted Saturation Flow Rate (s), veh/h/ln	1767	1766	1610	1767	1766	1610	1767	1856	1572	1767	1568	
Queue Service Time (g _s), s	8.0	11.2	6.0	0.0	7.4	15.2	4.5	7.3	1.1	7.0	14.7	
Cycle Queue Clearance Time (g _c), s	8.0	11.2	6.0	0.0	7.4	15.2	4.5	7.3	1.1	7.0	14.7	
Green Ratio (g/C)	0.13	0.19	0.19	0.10	0.21	0.28	0.26	0.19	0.19	0.27	0.20	
Capacity (c), veh/h	234	669	305	246	725	454	217	355	301	350	317	
Volume-to-Capacity Ratio (X)	0.778	0.697	0.394	0.223	0.453	0.670	0.509	0.469	0.077	0.613	0.833	
Back of Queue (Q), ft/ln (95 th percentile)	211.6	212.1	97.8	50.3	141	248.3	90.5	152.5	19.2	52	258.3	
Back of Queue (Q), veh/ln (95 th percentile)	8.3	8.3	3.9	2.0	5.5	9.9	3.5	6.0	0.8	2.0	10.1	
Queue Storage Ratio (RQ) (95 th percentile)	1.41	0.00	0.00	0.22	0.00	0.00	0.52	0.00	0.08	0.17	0.00	
Uniform Delay (d ₁), s/veh	38.5	34.5	4.6	37.5	31.7	29.0	28.3	32.8	6.4	29.8	34.9	
Incremental Delay (d ₂), s/veh	15.2	1.9	1.2	0.5	0.6	3.7	2.0	1.4	0.2	3.1	7.9	
Initial Queue Delay (d ₃), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Control Delay (d), s/veh	53.7	36.4	5.8	38.0	32.4	32.6	30.3	34.1	6.6	33.0	42.8	
Level of Service (LOS)	D	D	A	D	C	C	C	C	A	C	D	
Approach Delay, s/veh / LOS	35.7		D	32.9		C	30.6		C	38.4		D
Intersection Delay, s/veh / LOS	34.7						C					

Multimodal Results	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	2.17		B	1.93		B	2.45		B	2.52		C
Bicycle LOS Score / LOS	1.12		A	1.05		A	0.98		A	1.28		A

APPENDIX O

NCHRP 457 Reports

Figure 2 - 5. Guideline for determining the need for a major-road left-turn bay at a two-way stop-controlled intersection.

2-lane roadway (English)

INPUT

Variable	Value
85 th percentile speed, mph:	50
Percent of left-turns in advancing volume (V_A), %:	28%
Advancing volume (V_A), veh/h:	290
Opposing volume (V_O), veh/h:	645

OUTPUT

Variable	Value
Limiting advancing volume (V_A), veh/h:	165
Guidance for determining the need for a major-road left-turn bay:	
Left-turn treatment warranted.	

CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway, s:	5.0
Average time for left-turn vehicle to clear the advancing lane, s:	1.9

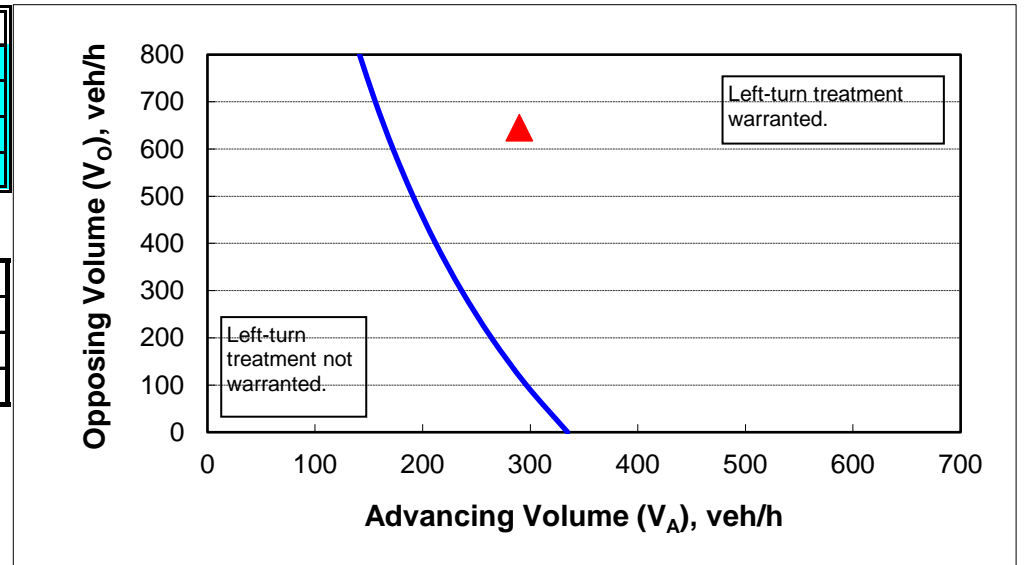


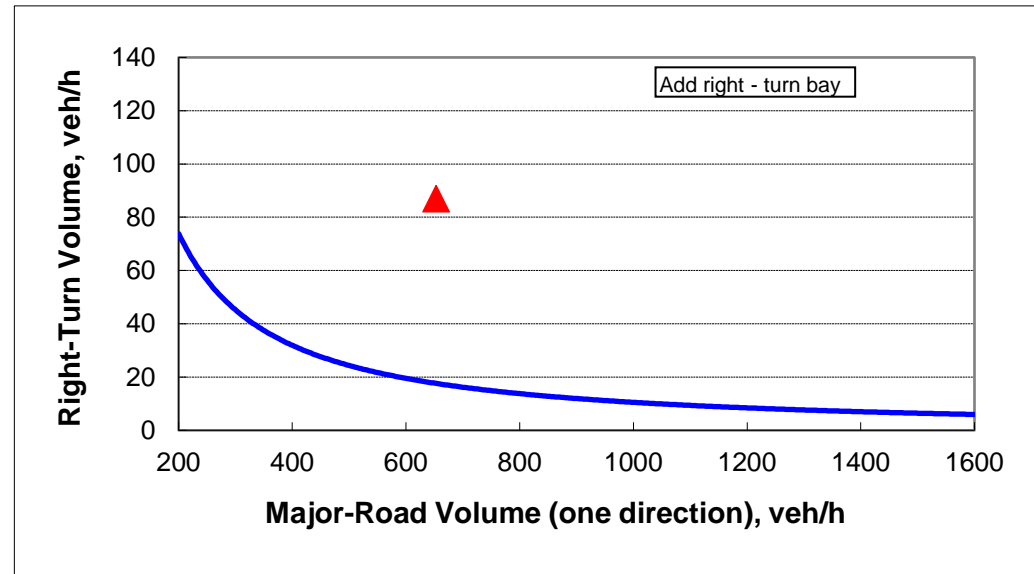
Figure 2 - 6. Guideline for determining the need for a major-road right-turn bay at a two-way stop-controlled intersection.

INPUT

Roadway geometry:	2-lane roadway
Variable	Value
Major-road speed, mph:	50
Major-road volume (one direction), veh/h:	653
Right-turn volume, veh/h:	87

OUTPUT

Variable	Value
Limiting right-turn volume, veh/h:	18
Guidance for determining the need for a major-road right-turn bay for a 2-lane roadway:	
Add right-turn bay.	



BRENTWOOD LAKES DEVELOPMENT PLANS

BRENTWOOD LAKES

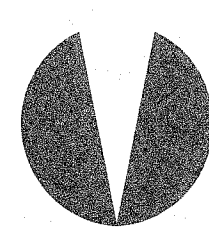
CITY OF PALM BAY, FLORIDA

PREPARED FOR:

D.R. HORTON, INC.

MAY 9, 2016

PREPARED BY:



CONSTRUCTION ENGINEERING GROUP
consulting engineers

2651 eau gallie blvd., suite a
melbourne, fl 32935

tel. 321.253.1221
fax. 321.253.3123
www.cegengineering.com
license #0008097

SITE DATA:

1. GENERAL STATEMENT:

CONSTRUCTION PLANS FOR THIS DEVELOPMENT WERE PREVIOUSLY APPROVED AND CLOSELY PARALLEL THE DESIGN IN THESE DRAWINGS. ONLY A FEW GRADING CHANGES THAT IMPROVE THE FUNCTION OF THE STORMWATER TREATMENT SYSTEMS AND PROVIDE ADDED SAFETY ARE PROPOSED WITH THESE REVISED DRAWINGS TO ADDRESS CODE CHANGES AND RECENT GEOTECHNICAL DATA. THE PREVIOUSLY CONSTRUCTED LARGE CENTRAL PONDS (POND A & POND B) EXPERIENCE PERIODIC LEVELS LOWER THAN THE DESIGN ELEVATION SO WE ARE PROPOSING TO FENCE THESE PONDS AND THE SMALL POND BY THE ENTRANCE (POND G) IS PROPOSED TO BE LINED AND KEPT AS AN AESTHETIC POND ONLY (NOT FOR STORMWATER TREATMENT)

THE PROPOSED STORMWATER TREATMENT SYSTEM FOR THESE PHASES SHALL BE TWO INTERCONNECTED WET DETENTION PONDS THAT TIE INTO THE EXISTING SYSTEM FOR THE CONSTRUCTED PHASES. THE STORMWATER TREATMENT SYSTEM, COLLECTION SYSTEM AND ROADS SHALL BE PRIVATELY MAINTAINED BUT HAVE BEEN DESIGNED TO MEET PUBLIC INFRASTRUCTURE REQUIREMENTS.

THE WATER AND SEWER SYSTEM SHALL BE PUBLIC. SITE ACCESS SHALL BE FROM THE PREVIOUSLY CONSTRUCTED GATED ENTRANCES OF THE EXISTING COMMUNITIES, WITH AN ACCESS POINT OF MALABAR ROAD.

2. CONTRACT INFORMATION:

DEVELOPER:
D.R. HORTON, INC.
1430 CULVER DRIVE, NE
PALM BAY, FL 32907
TEL: (321) 953-3105

SURVEYOR:
AAL LAND SURVEYING SERVICES, INC.
3970 MINTON ROAD
WEST MELBOURNE, FL 32904
TEL: (321) 768-8110

ENGINEER:
CONSTRUCTION ENGINEERING GROUP
JAKE T. WISE, P.E.
2651 W. EAU GALLIE BLVD., SUITE A
MELBOURNE, FLORIDA 32935
TEL: (321) 253-1221, EXT 1760
FAX: 253-3123
E-MAIL: JWISE@CEGENGINEERING.COM

GEOTECHNICAL ENGINEERS:
KSM ENGINEERING
P.O. BOX 78-1377
SEBASTIAN, FL 32978
TEL: (772) 589-0712
FAX: (772) 589-6469

3. SITE CHARACTERISTICS:

TOTAL OVERALL ACREAGE: 143.47
TOTAL PROJECT ACREAGE: 73.34
ZONING CLASSIFICATION: PUD
FUTURE LAND USE: SFR
DATUM: NAVD 88 (+1.4' FROM NGVD 29) SEE SURVEY SHEET 1

BUILDING SETBACKS

FRONT: 25 FT
SIDE: 7.5 FT
REAR: 25 FT
SIDE CORNER: 25 FT

PREVIOUSLY CONSTRUCTED PHASES:

	SE	ACRE	PERCENT
IMPERVIOUS (LOTS):	1,278,486	29.35	36%
IMPERVIOUS (ASPHALT / CONCRETE):	136,778	3.14	4%
TOTAL IMPERVIOUS:	1,415,264	32.49	40%
PONDS AT NWL:	486,130	11.16	14%
PERVIOUS:	1,625,659	37.32	46%
TOTAL GROSS AREA:	3,527,053	80.97	100%

PROPOSED PHASES:

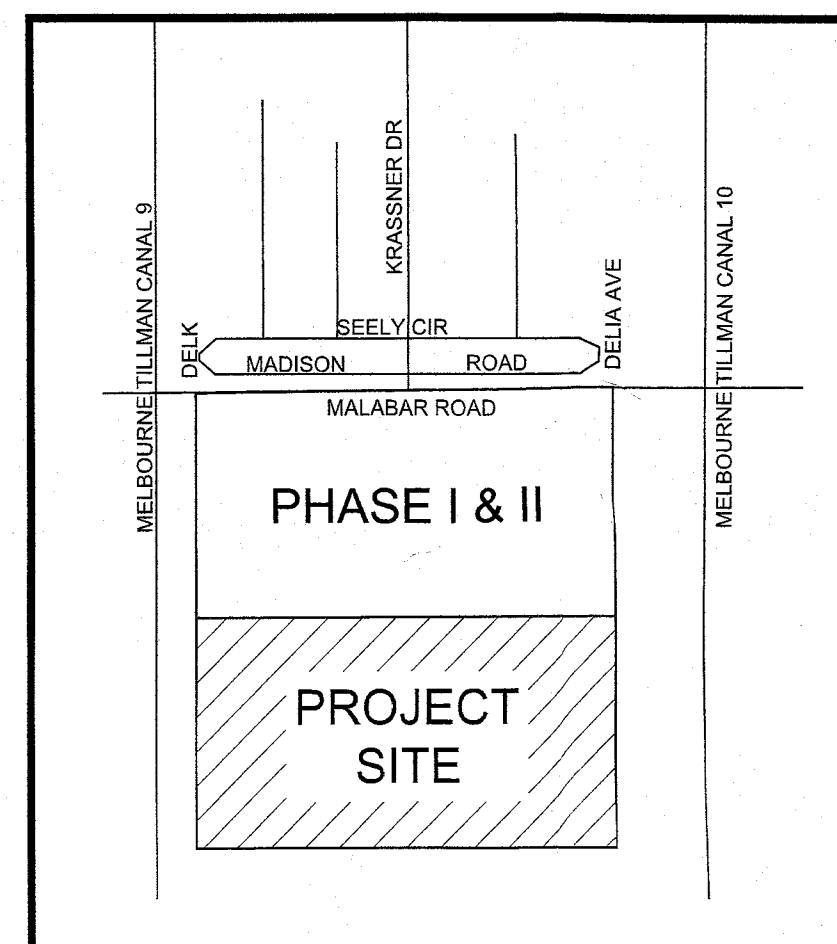
	SE	ACRE	PERCENT
IMPERVIOUS (LOTS):	1,235,797	28.37	45%
IMPERVIOUS (ASPHALT / CONCRETE):	167,706	3.85	6%
TOTAL IMPERVIOUS:	1,403,503	32.22	51%
PONDS AT NWL:	294,901	6.77	11%
PERVIOUS:	1,067,656	24.51	38%
TOTAL GROSS AREA:	2,766,060	63.50	100%

TOTAL OVERALL PROJECT AREA: 6,249,553 143.47

I HEREBY CERTIFY THAT THE DESIGN OF THE STORMWATER MANAGEMENT SYSTEM FOR THE PROJECT KNOWN AS BRENTWOOD LAKES SOUTH MEETS ALL OF THE REQUIREMENTS AND HAS BEEN DESIGNED SUBSTANTIALLY IN ACCORDANCE WITH THE REQUIREMENTS OF THE CITY OF PALM BAY'S ORDINANCE NO. 95-33 AND THE PUBLIC WORKS MANUAL.

4. REQUIRED PERMITS

- CITY OF PALM BAY
- BREVARD COUNTY SCHOOL CONCURRENCE
- FDEP NOI, WATER AND WASTE WATER
- SJRWMD PERMIT #5-009-96853
- FLORIDA FISH AND WILDLIFE COMMISSION
- MELBOURNE TILLMAN WATER CONTROL DISTRICT



LOCATION MAP
NTS

LEGAL DESCRIPTION:

DESCRIPTION:
A PARCEL OF LAND LYING IN A PORTION OF THE NORTHWEST 1/4 OF SECTION 3, TOWNSHIP 29 SOUTH, RANGE 36 EAST, BREVARD COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGIN AT THE SOUTHWEST CORNER OF BRENTWOOD LAKES PHASE II, ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 54, PAGE 54, OF THE PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA FOR THE FOLLOWING DESCRIBED PARCEL AND RUN ALONG THE SOUTH LINE OF SAID BRENTWOOD LAKES PHASE II, AND THE SOUTH LINE OF BRENTWOOD LAKES PHASE I, ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 54, PAGE 53, OF THE PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA FOR THE FOLLOWING FOUR (4) CALLS, SOUTH 90°00'00"E, A DISTANCE OF 1733.20 FEET; THENCE SOUTH 83°17'20" EAST, A DISTANCE OF 50.17 FEET; THENCE SOUTH 90°00'00" EAST, A DISTANCE OF 568.91 FEET; THENCE SOUTH 00°04'54" EAST ALONG THE WEST RIGHT OF WAY LINE OF A 110.00 FOOT WIDE FLORIDA POWER AND LIGHT RIGHT OF WAY AS RECORDED IN OFFICIAL RECORDS BOOK 675, PAGE 18, OF THE PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA, A DISTANCE OF 1348.22 FEET; THENCE SOUTH 89°39'56" WEST ALONG THE SOUTH LINE OF THE NORTHWEST 1/4 OF SAID SECTION 3 AND THE NORTH RIGHT OF WAY LINE OF MELBOURNE TILLMAN DRAINAGE DISTRICT CANAL NO. 9R, A DISTANCE OF 2352.10 FEET; THENCE NORTH 00°04'59" WEST ALONG THE EAST RIGHT OF WAY LINE OF MELBOURNE TILLMAN DRAINAGE DISTRICT CANAL NO. 9, A DISTANCE OF 1366.07 FEET TO THE POINT OF BEGINNING.

CONTAINING 73.34 ACRES MORE OR LESS.

CIVIL INDEX OF DRAWINGS:

G-1	COVER SHEET
G-2	STORMWATER POLLUTION PREVENTION PLAN
G-3	NORTH SUBDIVISION AND RIGHT-OF-WAY PLAN
C-1	EXISTING CONDITIONS AND DEMOLITION PLAN
C-2A THRU C-2B	SITE PLAN
C-4A THRU C-4B	PAVING AND GRADING PLAN
C-4C	CROSS SECTIONS
C-4D	PAVING AND GRADING DETAILS
C-15 THRU C-16	DETAILS

CIVIL LEGEND:

DESCRIPTION	NEW	WATER:
DEMOLITION		GATE VALVE
HANDICAP ACCESSIBLE RAMP WITH TRUNCATED DOMES		REDUCER
SANITARY SEWER LINE		FIRE HYDRANT
WATERLINE		BLOW-OFF
STORM DRAIN		MANHOLE
POND		SINGLE SERVICE
SILT FENCE/TURBIDITY BARRIER		DOUBLE SERVICE
RIGHT-OF-WAY		MANHOLE
SPOT ELEVATION		PLUG VALVE
SWALE OR FLOW DIRECTION		AIR RELEASE VALVE
CHAIN LINK FENCE WITH DOUBLE GATES		DOUBLE SERVICE
		STRUCTURE NUMBER
		FOOT TYPE 4 INLET
		MANHOLE
		INLET/OVERFLOW STRUCTURE
		TYPE OF LOT DRAINAGE

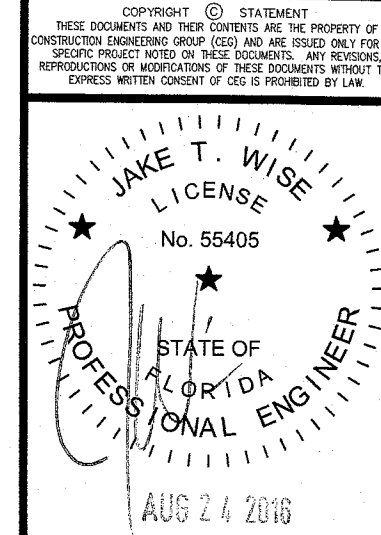
APPROVED FOR CONSTRUCTION
City Engineer
8/28/16
Date

REV#	DATE	REVISION
1	6/14/16	PALM BAY AND SJRWMD COMMENTS
2	7/07/16	SURMWD COMMENTS
3	7/25/16	CITY OF PALM BAY COMMENTS
4	8/10/16	CITY OF PALM BAY COMMENTS

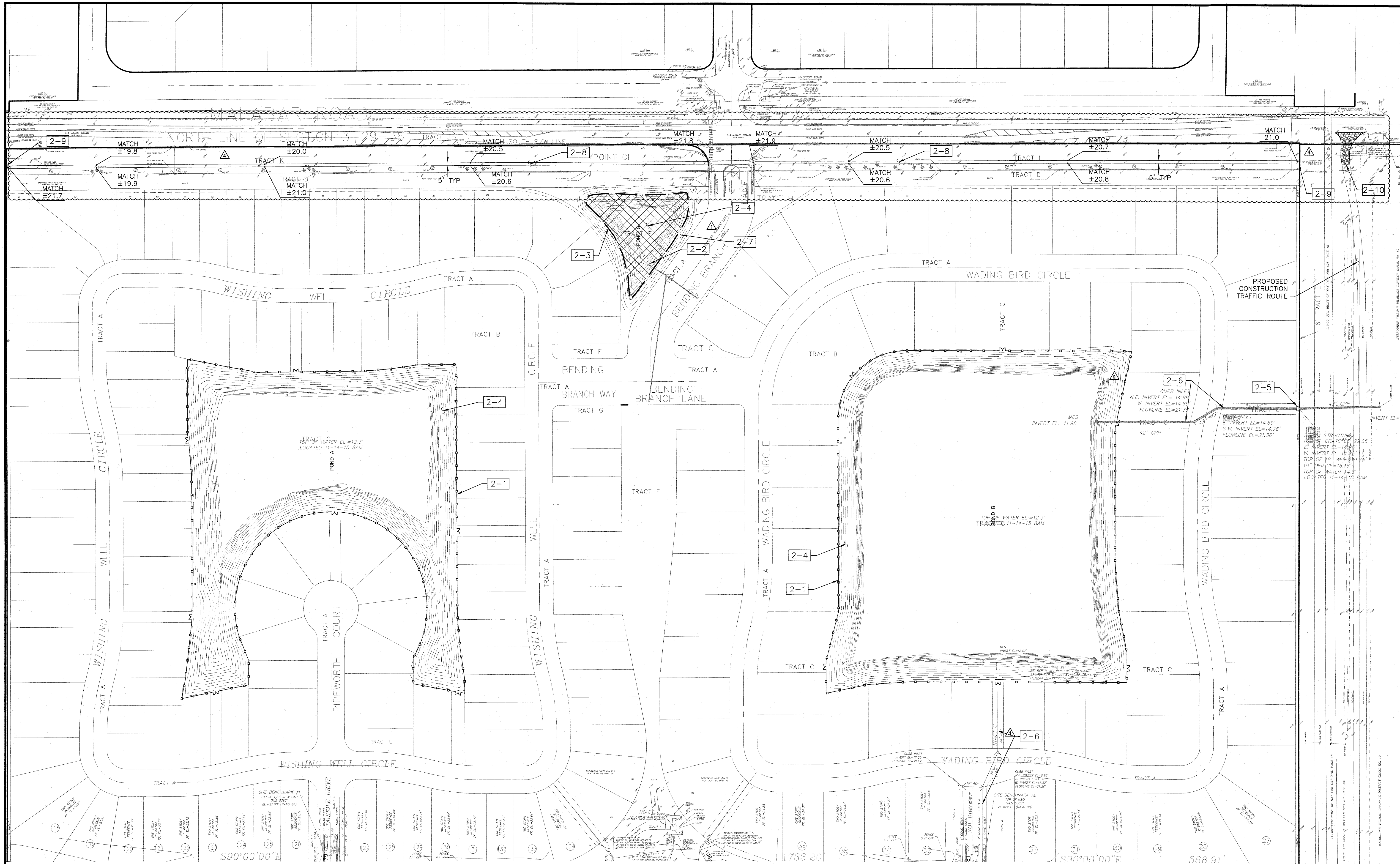
2651 eau gallie blvd., suite a
melbourne, fl 32935
tel. 321.253.1221
fax. 321.253.3123
www.cegengineering.com
license #0008097

CONSTRUCTION ENGINEERING GROUP
consulting engineers

BRENTWOOD LAKES SOUTH
D.R. HORTON
MALABAR ROAD PALM BAY, FLORIDA
DRAWING TITLE



DATE	4-26-16
SCALE	NTS
PROJ. NO.:	160163
DESIGNED BY:	JRT
DRAWN BY:	SMB
CHECKED BY:	JTW
DRAWING NO.	G-1



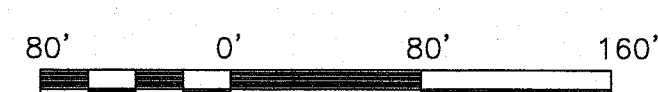
NORTH SUBDIVISION AND RIGHT-OF-WAY PLAN
 1"=80'

- NOTES:**
- 2-1. PROVIDE 4' VINYL COATED CHAIN LINK FENCE WITH DOUBLE LOCKABLE GATES AS SHOWN ON PLAN. SEE TYPICAL DETAIL.
 - 2-2. REMOVE EXISTING MITERED END SECTION AND PROVIDE FDOT TYPE "C" INLET WITH GRATE ELEVATION 19.00. TIE INTO EXISTING 18" RCP WITH WATERTIGHT JOINT AT EL. 15.50.
 - 2-3. PROVIDE HDPE OR PVC POND LINER BENEATH ENTIRE POND UP TO ELEVATION 19.0'. PER MANUFACTURER'S SPECIFICATIONS. SOD ALL DISTURBED AREAS AT EXISTING PONDS.
 - 2-4. REGRADE ALL AREAS OF WASHOUTS. SOD ALL DISTURBED AREAS.
 - 2-5. MODIFY CONTROL STRUCTURE. SEE TYPICAL DETAIL.
 - 2-6. CONTRACTOR SHALL CLEAN OUT EXISTING STORM PIPES.
 - 2-7. PROVIDE 2" WELL AND FLOAT CONTROLS AT POND. INCLUDE POWER TO SYSTEM.

- 2-8. PROVIDE 6" THICK CONCRETE SIDEWALK IN RIGHT-OF-WAY. TIE INTO EXISTING SIDEWALK BY ENTRANCE. CONSTRUCT SIDEWALK AT MAXIMUM 2% CROSS SLOPE, 5% LONGITUDINAL. MATCH EXISTING GRADE. SEE TYPICAL DETAIL.
- 2-9. PROVIDE 9"-BUTTON OBJECT MARKER AT SIDEWALK TERMINATION PER MUTCD 0M1-1.
- 2-10. PROVIDE SOIL TRACKING PREVENTION DEVICE. SEE TYPICAL DETAILS ON SHEET G-2.

Approved For Construction

AUG 26 2016
 City of Palm Bay

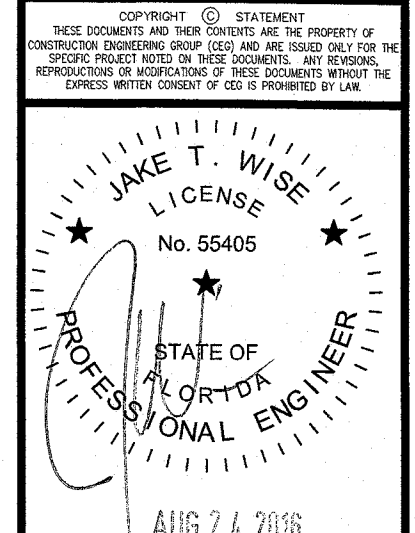


REV#	DATE	REVISION
1	6/14/15	PALM BAY AND SURVIV COMMENTS
3	7/25/16	CITY OF PALM BAY COMMENTS
4	8/10/16	CITY OF PALM BAY COMMENTS

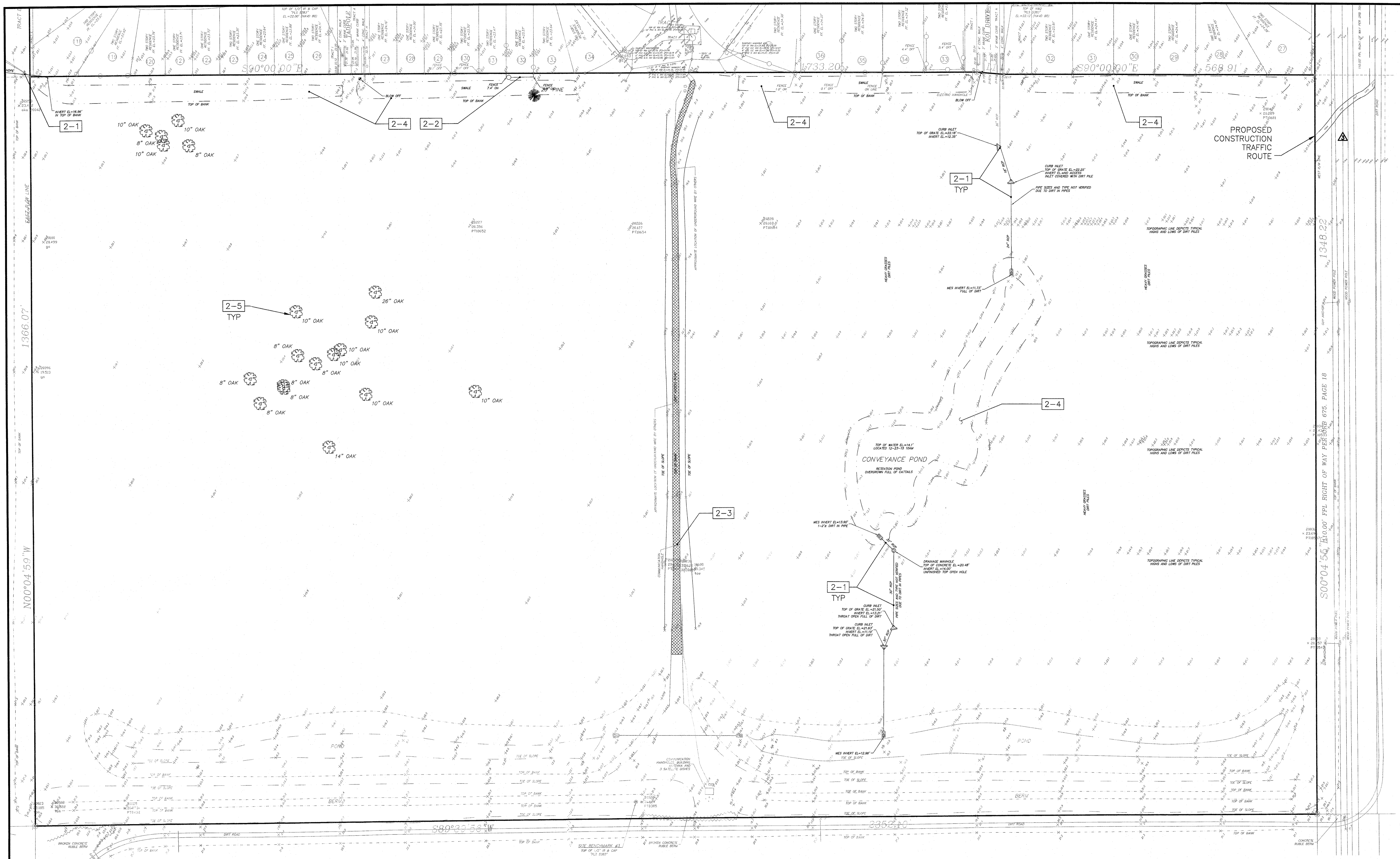
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 consulting engineers

BRENTWOOD LAKES SOUTH
 D.R. HORTON
 MALABAR ROAD PALM BAY, FLORIDA
 DRAWING TITLE
 NORTH SUBDIVISION AND RIGHT-OF-WAY PLAN



DATE	4-26-16
SCALE	1"=80'
PROJ. NO.:	160163
DESIGNED BY:	JRT
DRAWN BY:	SMB
CHECKED BY:	JTW
DRAWING NO.	G-3



BRENTWOOD LAKES PHASE 3&4
TREE REMOVAL TABLE

TYPE	SIZE (INCHES DBH)	QUANTITY	DBH. (OVER 18")
PINE	20	1	20
OAK	8	8	
OAK	10	9	
OAK	14	1	
OAK	26	1	26
TOTAL		20	46

EXISTING CONDITIONS AND DEMOLITION PLAN
1" = 120'

Approved For Construction

AUG 26 2016
City of Palm Bay

- NOTES:**
- 2-1. REMOVE EXISTING STORM PIPE AND INLETS.
 - 2-2. REMOVE EXISTING FENCE. COORDINATE WITH OWNER OF LOTS 132. SALVAGE FENCE PER OWNER'S DIRECTION.
 - 2-3. ADJUST COMMUNICATION MANHOLE TOP AS NEEDED FOR PROPOSED GRADE.
 - 2-4. REGRADE EXISTING PONDS/SWALES PER GRADING PLAN, SHEETS C4A-C4C.
 - 2-5. REMOVE EXISTING TREE AND ROOTS COMPLETELY.



REVISION	DATE	CITY OF PALM BAY COMMENTS
3	7/25/16	
4	8/10/16	

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BRENTWOOD LAKES SOUTH
D.R. HORTON
MALABAR ROAD PALM BAY, FLORIDA
DRAWING TITLE
EXISTING CONDITIONS AND DEMOLITION PLAN

JAKE T. WISE
LICENSE No. 55405
STATE OF FLORIDA
PROFESSIONAL ENGINEER
AUG 24 2016

DATE	4-26-16
SCALE	1"=80'
PROJ. NO.:	160163
DESIGNED BY:	JRT
DRAWN BY:	SMB
CHECKED BY:	JTW
DRAWING NO.:	C-1

N00°04'59"W

1366.07'

EAST R/W LINE

TRACT E

NOTES:

- 2-1. PROVIDE 5' WIDE CONCRETE SIDEWALK. SEE TYPICAL DETAIL. CONTRACTOR SHALL ONLY INSTALL COMMON AREA SIDEWALKS. THOSE IN FRONT OF LOTS SHALL BE CONSTRUCTED WITH VERTICAL WORK.
- 2-2. PROVIDE ASPHALTIC PAVEMENT. SEE TYPICAL DETAIL.
- 2-3. PROVIDE MIAMI CURB. SEE TYPICAL DETAIL.
- 2-4. PROVIDE "25 M.P.H. SPEED LIMIT" SIGN (MUTCD R2-1 24"X30").
- 2-5. PROVIDE HANDICAP ACCESSIBLE RAMP WITH TRUNCATED DOMES ON BOTH SIDES OF ROADWAY. SEE TYPICAL DETAIL.
- 2-6. PROVIDE "STOP" SIGN (MUTCD R1-1, 30"X30") WITH STREET NAME SIGN.
- 2-7. PROVIDE 24" WHITE THERMOPLASTIC STOP BAR PER FOOT INDEX NO. 17346.
- 2-8. PROVIDE WHITE THERMOPLASTIC PARALLEL CROSSWALK STRIPING PER FOOT INDEX NO. 17346.
- 2-9. PROVIDE 8' WIDE CONCRETE SIDEWALK IN FRONT OF CENTRAL MAIL PARKING. SEE TYPICAL DETAILS.
- 2-10. PROVIDE FDOT TYPE D' VERTICAL CURB. SEE TYPICAL DETAIL.

REV#	DATE	REVISION
1	6/14/16	PALM BAY AND SUBDIVISION COMMENTS

2651 you get it, you get it
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BRENTWOOD LAKES SOUTH
D.R. HORTON
MALABAR ROAD PALM BAY, FLORIDA
DRAWING TITLE
SUBDIVISION PLAN - WEST

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JAKE T. WISE
LICENSE
No. 55405
STATE OF FLORIDA
PROFESSIONAL ENGINEER
AUG 24 2016

DATE	4-26-16
SCALE	1"=60'
PROJ. NO.:	160163
DESIGNED BY:	JRT
DRAWN BY:	SMB
CHECKED BY:	JTW
DRAWING NO.	C-2A

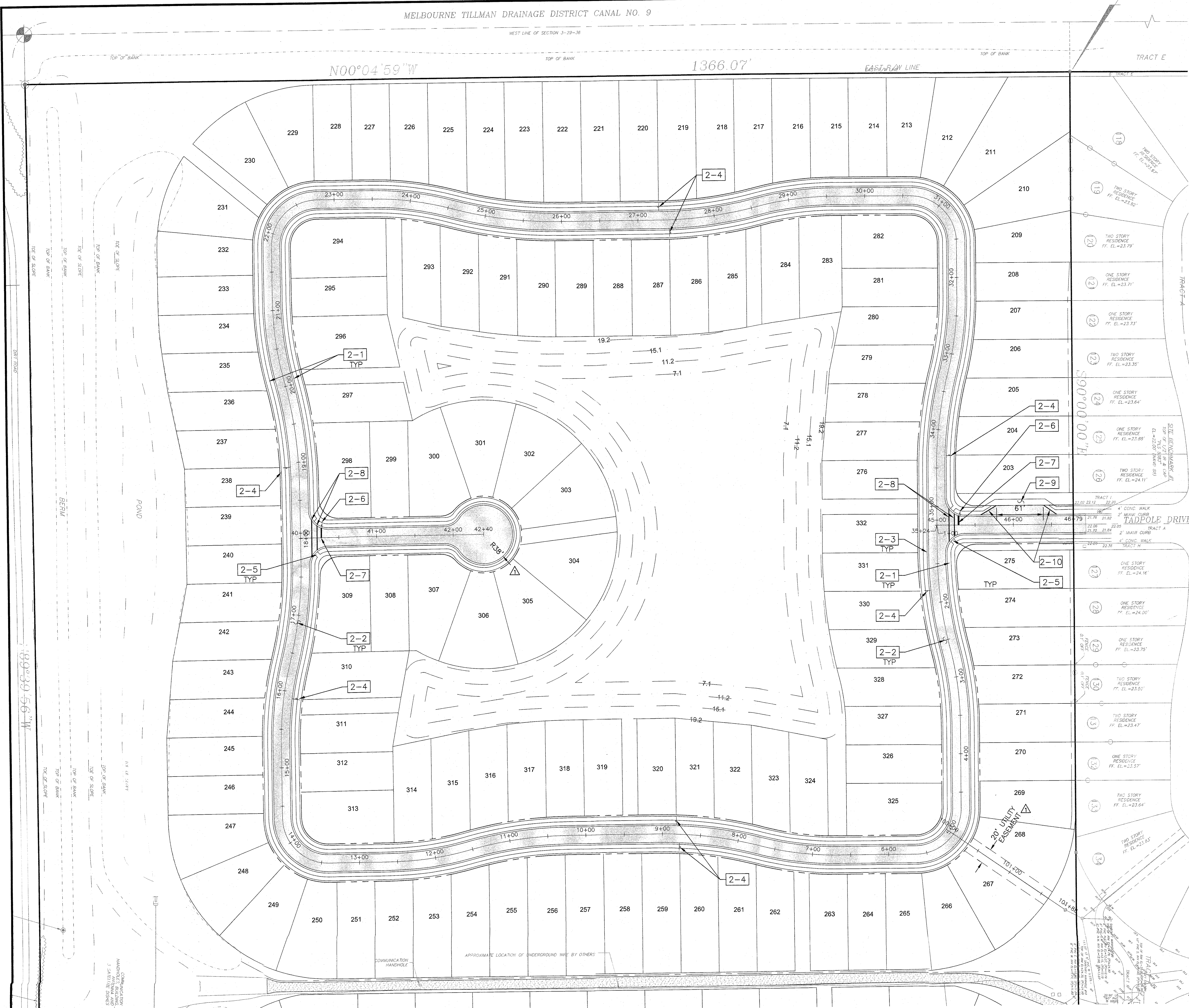
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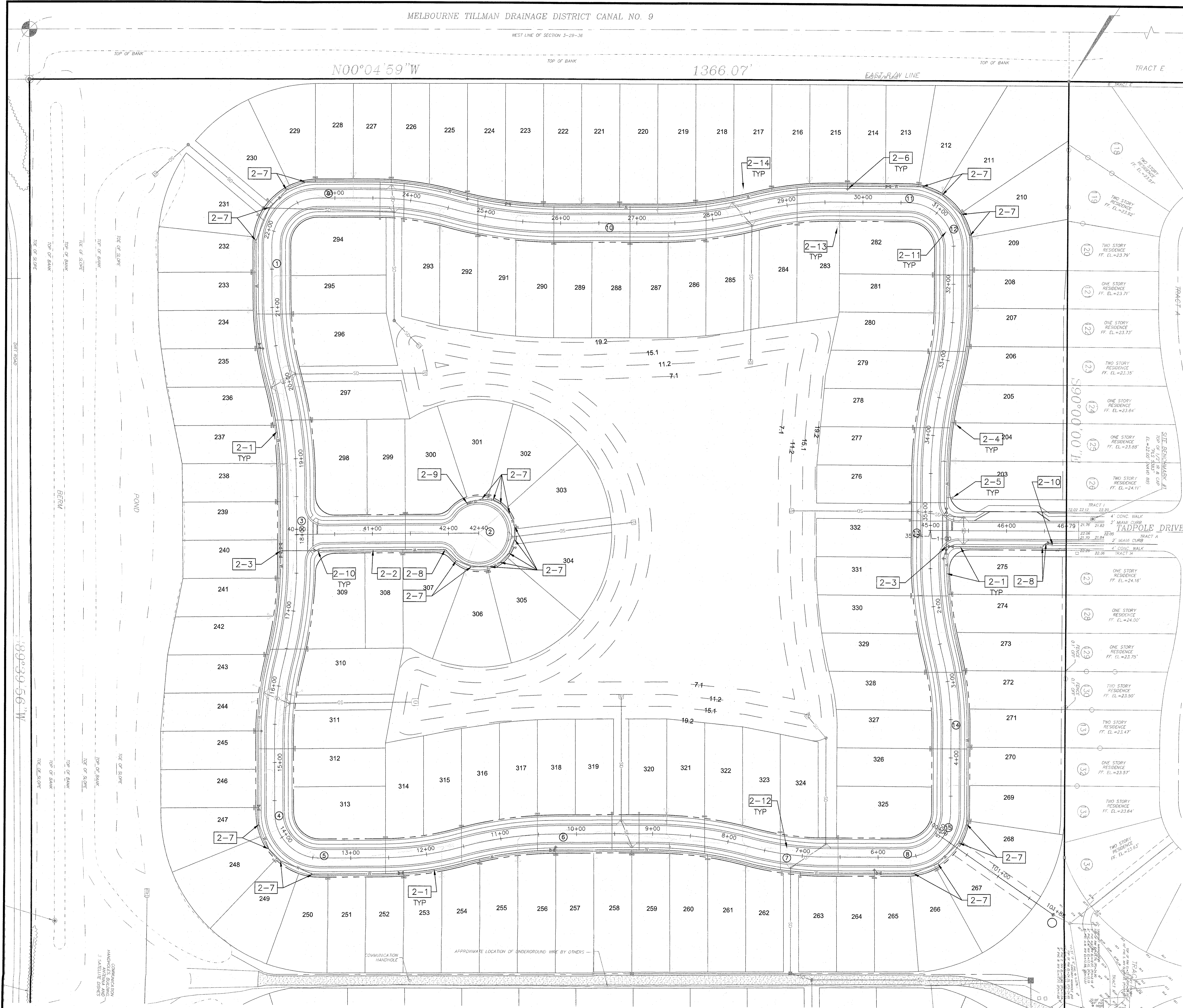
City of Palm Bay



SUBDIVISION PLAN - WEST
1"=60'



- NOTES:**
- 2-1. PROVIDE 8" PVC WATER LINE.
 - 2-2. PROVIDE 6" PVC WATER LINE.
 - 2-3. PROVIDE TEE.
 - 2-4. PROVIDE DOUBLE POTABLE WATER SERVICE. SEE TYPICAL DETAILS.
 - 2-5. PROVIDE SINGLE POTABLE WATER SERVICE. SEE TYPICAL DETAILS.
 - 2-6. PROVIDE FIRE HYDRANT ASSEMBLY TO INCLUDE FIRE HYDRANT, HYDRANT ELBOW, VALVE, 6" PVC WATER MAIN AND TEE PER CITY OF PALM BAY DETAILS.
 - 2-7. PROVIDE 22.5" BEND.
 - 2-8. PROVIDE 45° BEND.
 - 2-9. PROVIDE PERMANENT AUTOMATIC BLOW-OFF. SEE TYPICAL DETAIL.
 - 2-10. PROVIDE GATE VALVE. SEE TYPICAL DETAIL.
 - 2-11. PROVIDE 8" PVC SANITARY SEWER. SEE PLAN AND PROFILES FOR ADDITION SLOPE INFORMATION.
 - 2-12. PROVIDE SANITARY SEWER MANHOLE. SEE TYPICAL DETAILS.
 - 2-13. PROVIDE DOUBLE SANITARY SEWER LATERAL. SEE TYPICAL DETAILS.
 - 2-14. PROVIDE SINGLE SANITARY SEWER LATERAL. SEE TYPICAL DETAILS.



REVISION	DATE

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License #00807

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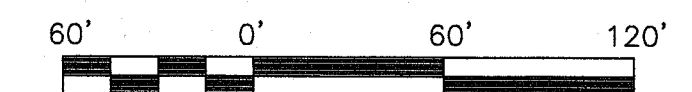
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D.R. HORTON
MALABAR ROAD PALM BAY, FLORIDA
DRAWING TITLE
UTILITY PLAN - WEST

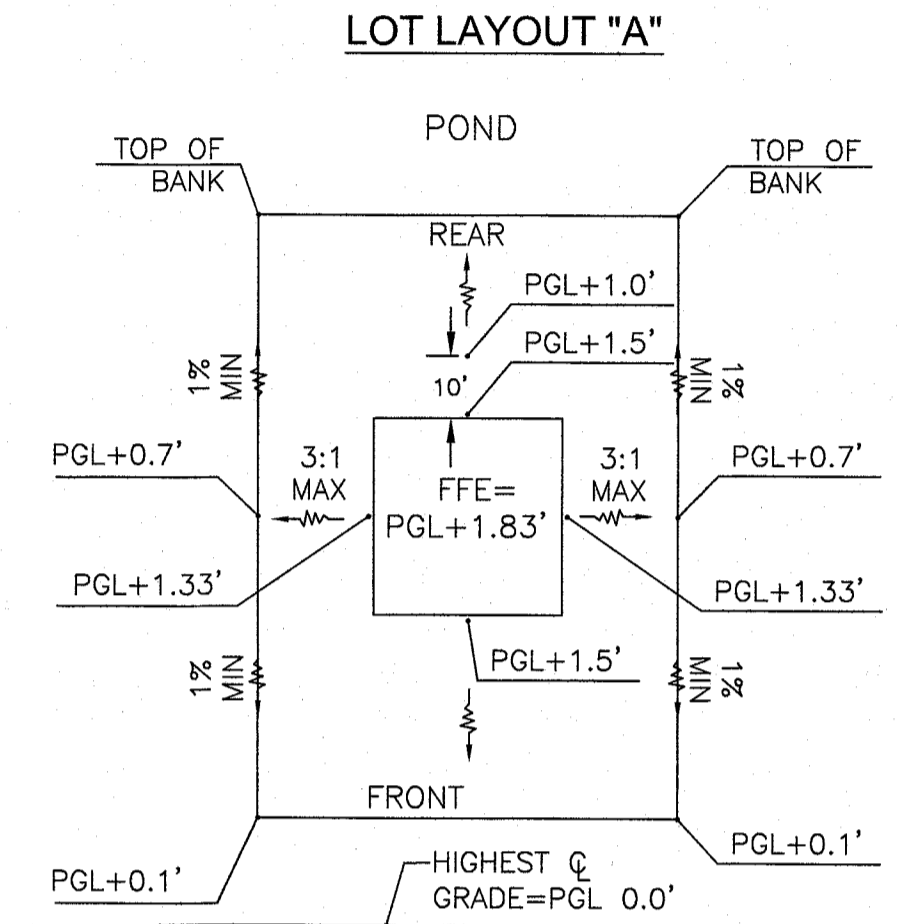
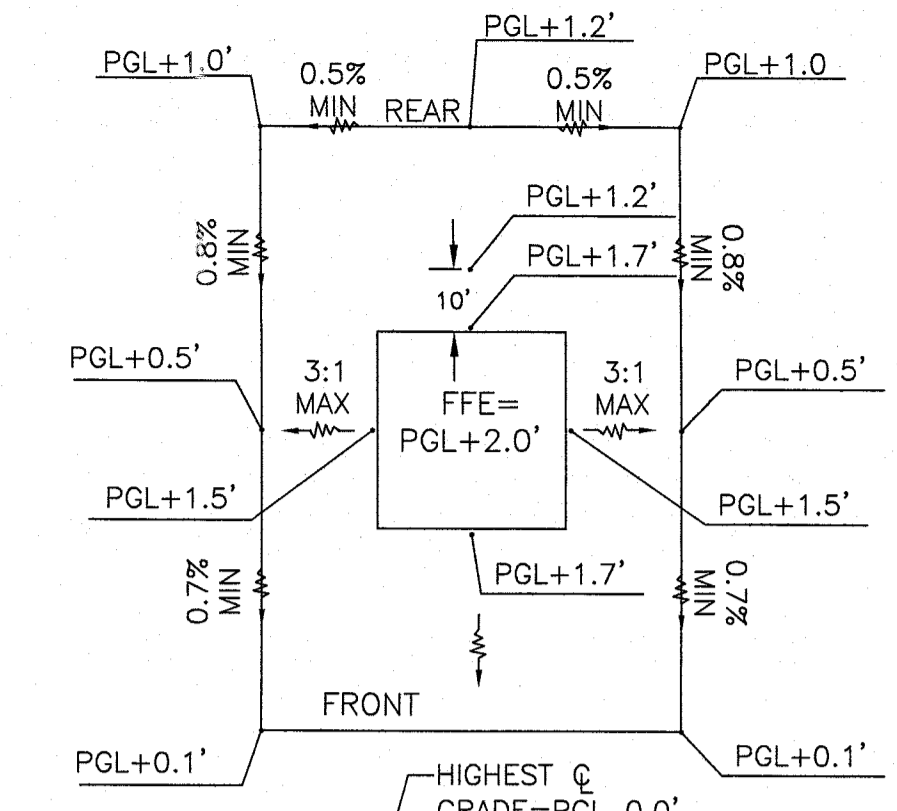
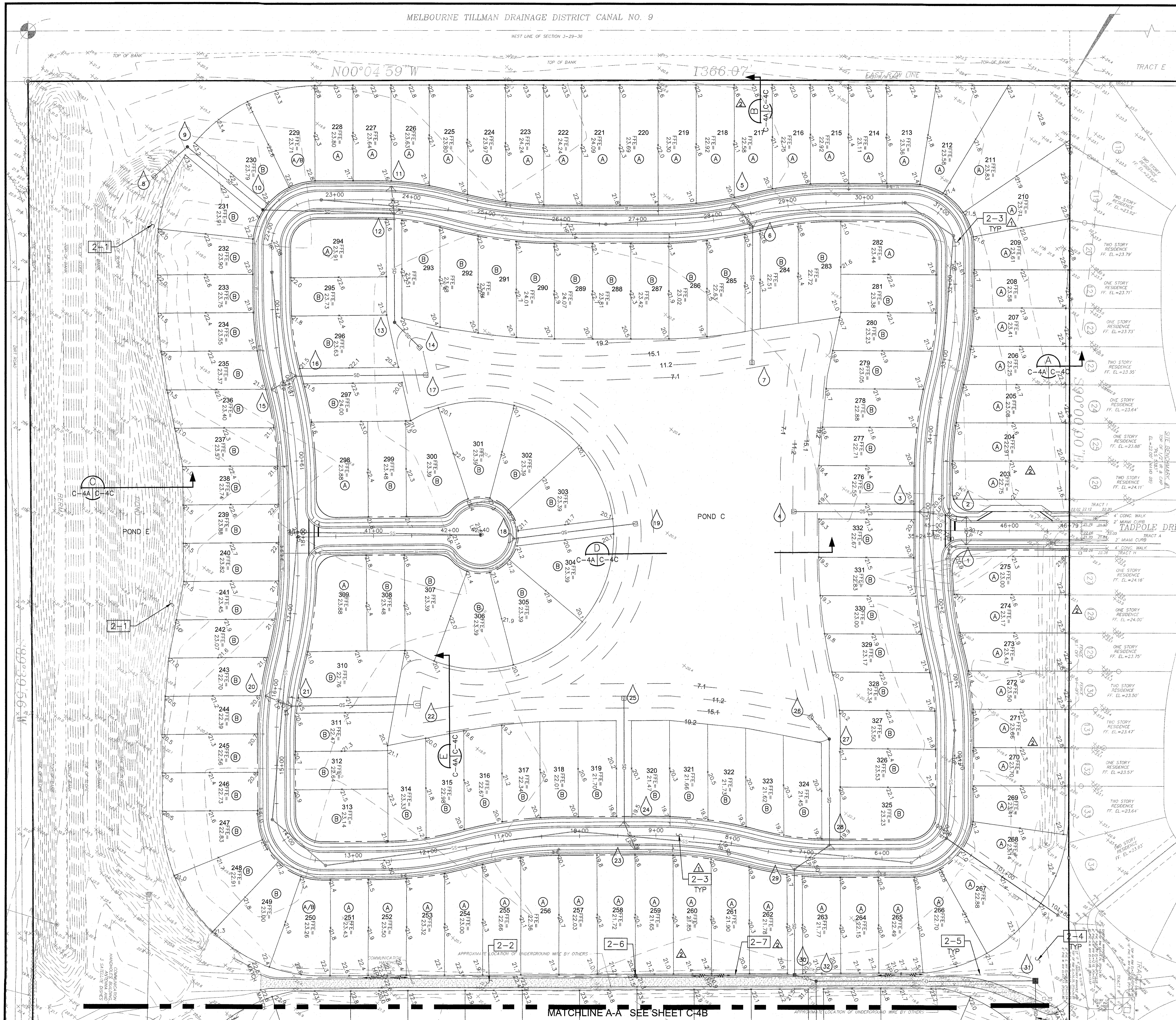
STATE OF FLORIDA
PROFESSIONAL ENGINEER
JAKE T. WISE
LICENSE No. 55405
AUG 24 2016

DATE	4-26-16
SCALE	1"=60'
PROJ. NO. :	160163
DESIGNED BY:	JRT
DRAWN BY:	SMB
CHECKED BY:	JTW
DRAWING NO.	C-3A

UTILITY PLAN - WEST
1"=60'

Approved For Construction
AUG 26 2016
City of Palm Bay





- NOTES:**
- EXCEPT AT DOORWAYS AND ATTACHED PATIOS, FINISHED GRADE ADJACENT TO HOUSE SHALL BE 6" BELOW FFE PER THIS DETAIL.
 - ALL LOT GRADING SHALL COMPLY WITH FLORIDA BUILDING CODE SECTION R401.3 DRAINAGE. GRADE SHALL FALL A MINIMUM OF 6" WITHIN THE FIRST 10'.
 - THIS DETAIL IS FOR GENERAL GRADING INFORMATION. SPOT ELEVATIONS IN CROSS SECTIONS SHALL DICTATE ON GRADING AND DRAINAGE SHEETS IF THEY VARY FROM THIS DETAIL.
 - ABOVE CALCULATIONS ARE BASED ON A TYPICAL 50'x125' LOT.
 - PROFILE GRADE LINE (PGL) OR CENTERLINE OF ROAD.

TYPICAL LOT LAYOUT DETAIL
NTS

- NOTES:**
- 2-1. REGRADE POND BANK AS NEEDED TO 4:1 MAX SLOPE TO ACHIEVE REAR LOT CORNER ELEVATIONS AS SHOWN ON PLAN.
 - 2-2. REGRADE STABILIZED DRIVE PER GRADES ON THIS SHEET. SEE TYPICAL SECTION ON C-4C.
 - 2-3. OVEREXCAVATE BENEATH ALL ROADS AND REMOVE HARDPAN AND UNSUITABLE MATERIAL.
 - 2-4. GRADE OPEN SPACE TO DRAIN TOWARD INLET/POND.
 - 2-5. PROVIDE GRASS SWALE WITH CONSTANT SLOPE BETWEEN SPOT ELEVATIONS.
 - 2-6. PROVIDE 15" INLINE NYLOPLAST YARD DRAIN. CONNECT TO ADS STORM DRAIN PIPE. TOP OF STRUCTURE AT 20.30', INVERT: 16.85'.
 - 2-7. PROVIDE ±209 LF OF 15" N-12 ADS WATERTIGHT JOINT STORM DRAIN PIPE AT 1% SLOPE.

Approved For Construction
AUG 26 2016
City of Palm Bay



REVISION	DATE	DESCRIPTION
1	6/14/16	PALM BAY AND SURVWD COMMENTS
2	7/01/16	SURVWD COMMENTS

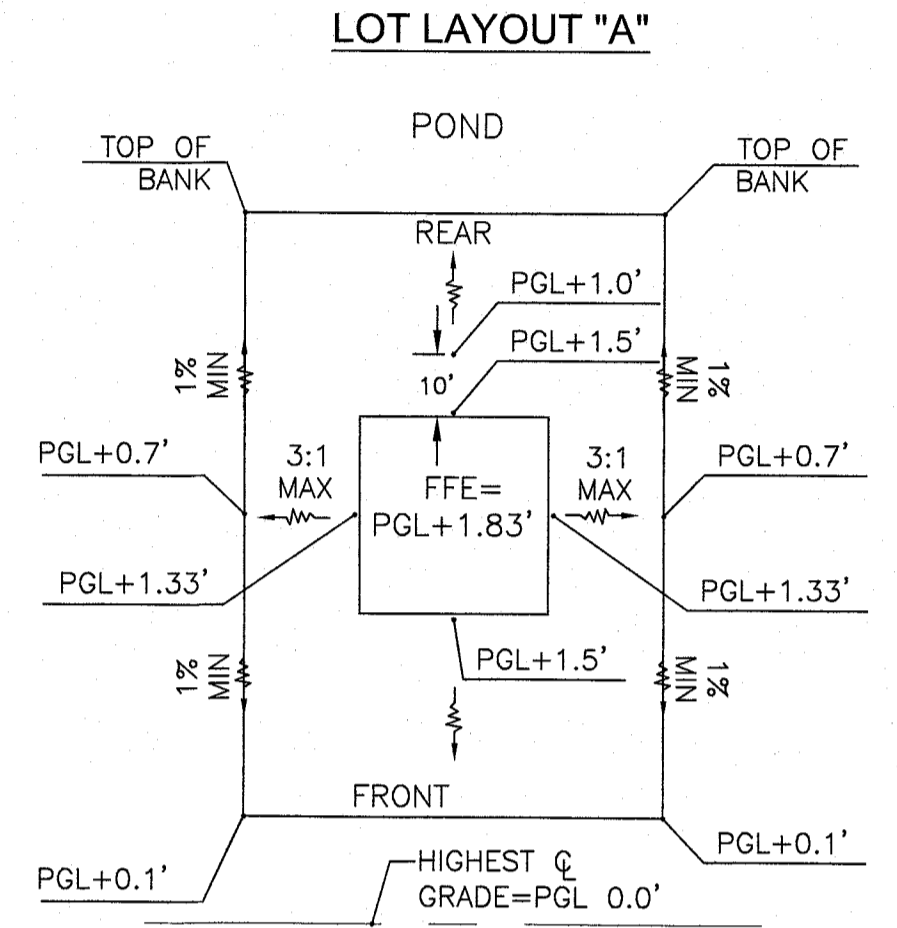
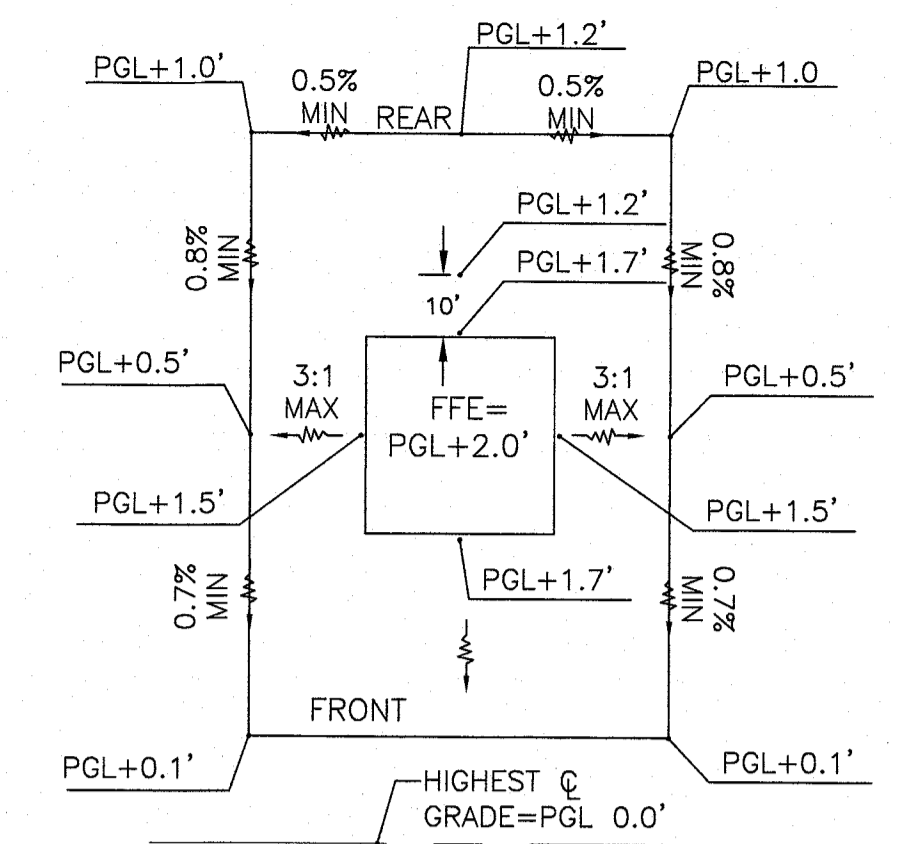
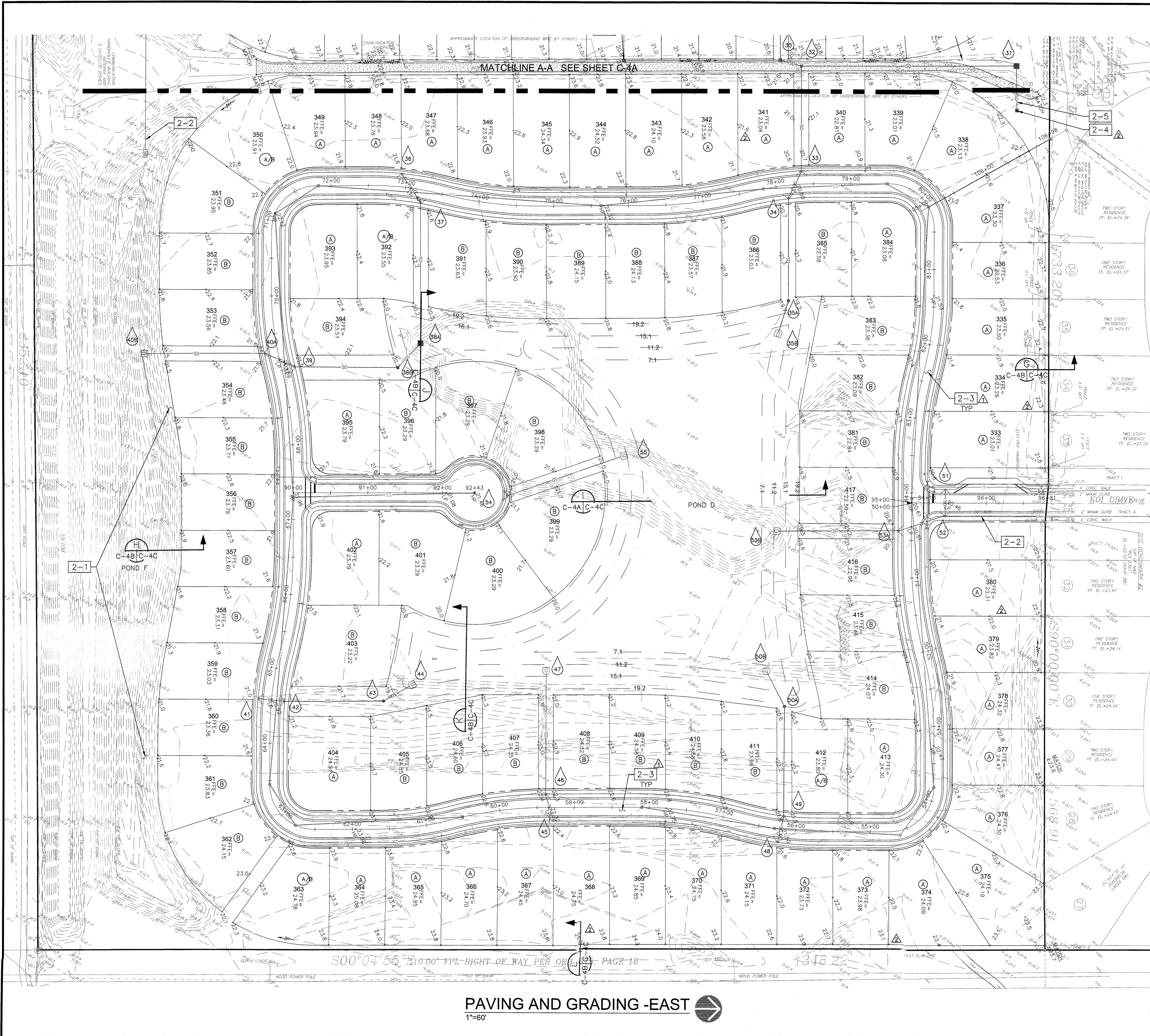
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BRENTWOOD LAKES SOUTH
D.R. HORTON
MALABAR ROAD PALM BAY, FLORIDA
DRAWING TITLE
PAVING AND GRADING - WEST

DATE: 4-26-16
SCALE: 1"=60'
PROJ. NO.: 160163
DESIGNED BY: JRT
DRAWN BY: SMB
CHECKED BY: JTW
DRAWING NO.: C-4A

STATE OF FLORIDA
PROFESSIONAL ENGINEER
LICENSE No. 55405
AUG 26 2016

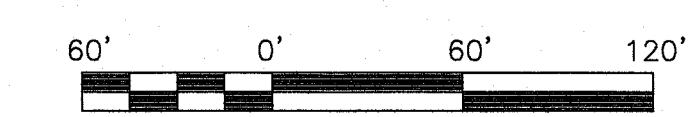


- NOTES:**
- EXCEPT AT DOORWAYS AND ATTACHED PATIOS, FINISHED GRADE ADJACENT TO HOUSE SHALL BE 6" BELOW FFE PER THIS DETAIL.
 - ALL LOT GRADING SHALL COMPLY WITH FLORIDA BUILDING CODE SECTION R401.3 DRAINAGE. GRADE SHALL FALL A MINIMUM OF 6" WITHIN THE FIRST 10'.
 - THIS DETAIL IS FOR GENERAL GRADING INFORMATION. SPOT ELEVATIONS IN CROSS SECTIONS SHALL DICTATE ON GRADING AND DRAINAGE SHEETS IF THEY VARY FROM THIS DETAIL.
 - ABOVE CALCULATIONS ARE BASED ON A TYPICAL 50'x125' LOT.
 - PROFILE GRADE LINE (PGL) OR CENTERLINE OF ROAD.

TYPICAL LOT LAYOUT DETAIL
NTS

- NOTES:**
- REGRADE POND BANK AS NEEDED TO 4:1 MAX SLOPE TO ACHIEVE REAR LOT CORNER ELEVATIONS AS SHOWN ON PLAN.
 - CONTRACTOR SHALL CLEAN OUT EXISTING STORM PIPE TO REMAIN.
 - OVEREXCAVATE BENEATH ALL ROADS AND REMOVE HARDPAN AND UNSUITABLE MATERIAL.
 - PROVIDE 15" IN-LINE NYLOPLAST YARD DRAIN. CONNECT TO ADS STORM DRAIN PIPE. TOP OF STRUCTURE AT 19.80', INVERT: 17.40'.
 - PROVIDE ±60 LF OF 15" N-12 ADS WATERTIGHT JOINT STORM DRAIN PIPE AT 1% SLOPE.

Approved For Construction
AUG 26 2016
City of Palm Bay



REV#	DATE	REVISION
1	6/14/16	PALM BAY AND SURVMD COMMENTS
2	7/07/16	SURVMD COMMENTS

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MALABAR ROAD PALM BAY, FLORIDA
DRAWING TITLE
PAVING AND GRADING - EAST

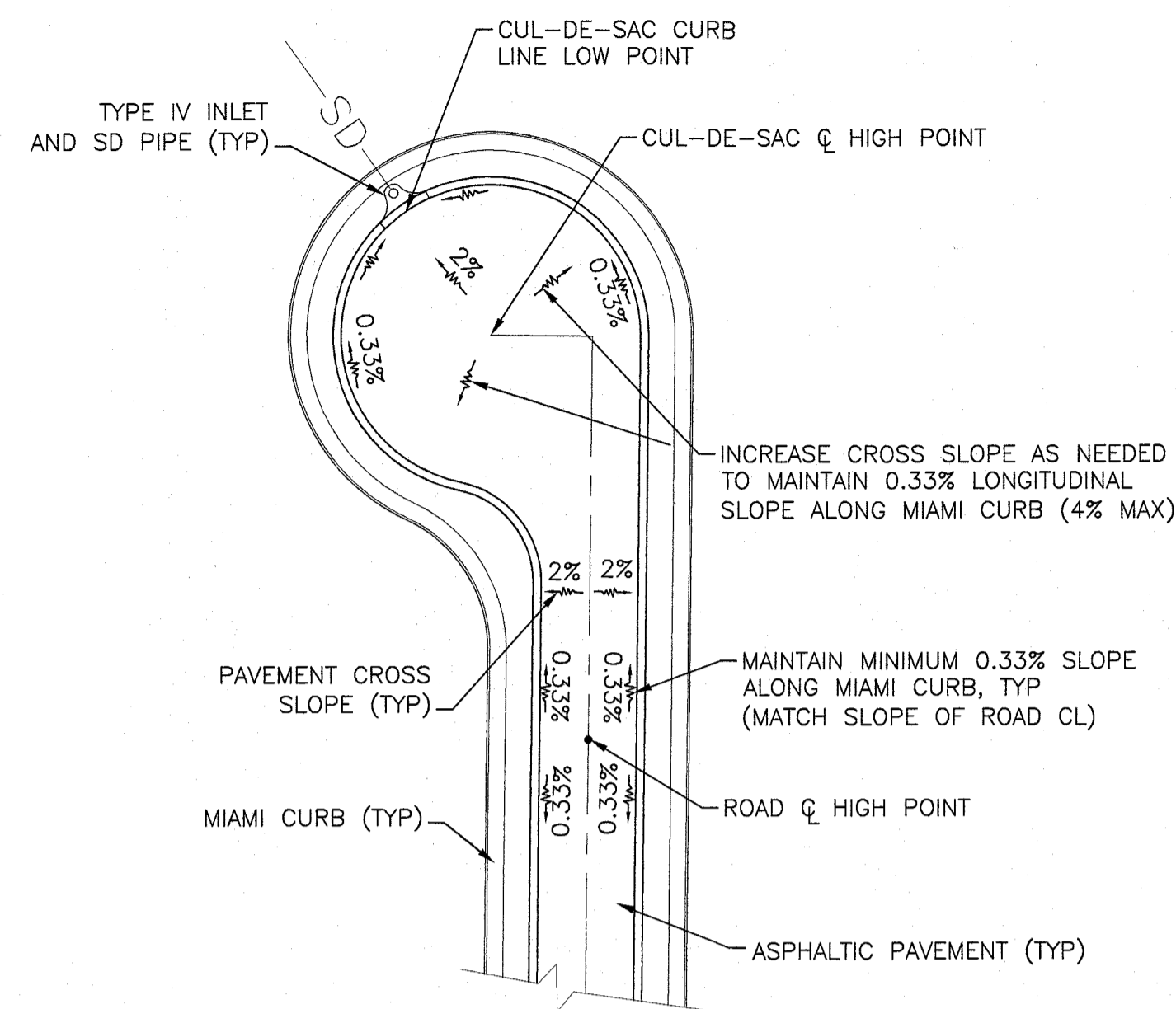
STATE OF FLORIDA
PROFESSIONAL ENGINEER
JAKE T. WISE
No. 55405
AUG 24 2016

DATE	4-26-16
SCALE	1"=60'
PROJ. NO. :	160163
DESIGNED BY:	JRT
DRAWN BY:	SMB
CHECKED BY:	JTW
DRAWING NO.	C-4B

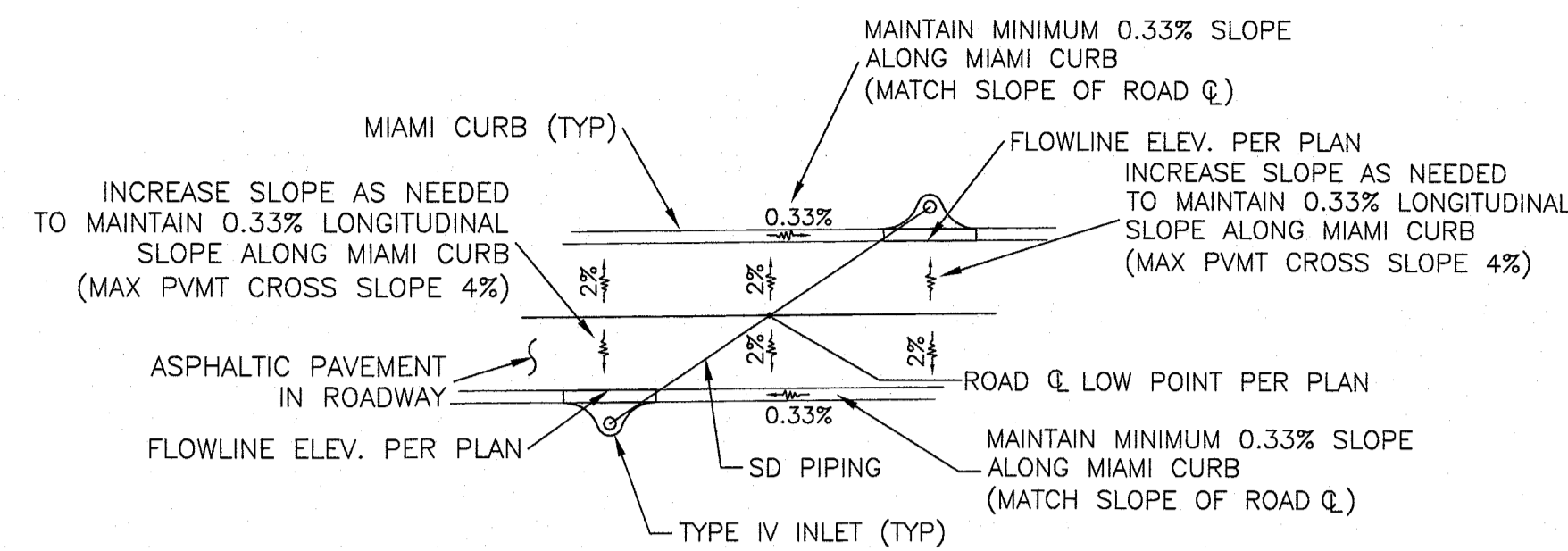
PAVING AND GRADING - EAST

1"=60'

S00°04'55" E10.00' FPL RIGHT OF WAY PER ORD PAGE 18



TYPICAL GRADING FOR CUL DE SAC WITH LOW POINT AT END DETAIL
NTS



TYPICAL GRADING FOR OFFSET INLETS DETAIL
NTS

STORM STRUCTURE TABLE								
NO.	TYPE	FDOT INDEX NO.	FLOWLINE ELEVATION	INVERT ELEVATION	DOWNSTREAM STRUCTURE NO.	PIPE SIZE	PIPE LENGTH	COMMENTS
1	4	210	19.90	17.00	2	18"	33'	-
2	4	210	19.90	16.75	3	24"	61'	-
3	4	210	20.30	*	4	24"	169'	*16.50N; 12.00S
4	MES	272	-	10.50	-	-	-	-
5	4	210	20.23	13.00	6	18"	38'	-
6	4	210	20.23	*	7	24"	182'	*12.50W; 11.00E
7	MES	272	-	10.00	-	-	-	-
8	MES	272	-	12.00	9	30"	61'	-
9	J-8	200 / 201	22.00	12.50	10	30"	129'	-
10	J-8	200 / 201	22.10	13.50	12	30"	172'	-
11	4	210	21.25	15.00	12	18"	34'	-
12	4	210	21.25	*	13	30"	143'	14.60W; 12.75S&E
13	J-8	200 / 201	20.00	12.00	14	30"	49'	-
14	MES	272	-	11.70	-	-	-	-
15	4	210	21.15	14.00	16	18"	34'	-
16	4	210	21.15	*	17	24"	175'	13.50S; 11.00N
17	MES	272	-	10.00	-	-	-	-
18	4	210	20.80	*	19	18"	164'	-
19	MES	272	-	10.50	-	-	-	-
20	4	210	20.20	13.00	21	18"	34'	-
21	4	210	20.20	*	22	24"	171'	12.50S; 11.00N
22	MES	272	-	10.00	-	-	-	-
23	4	210	19.20	15.75	24	18"	36'	-
24	4	210	19.20	*	25	24"	165'	15.25E; 11.00W
25	MES	272	-	10.00	-	-	-	-
26	MES	272	-	9.50	27	30"	40'	-
27	J-8	200 / 201	19.50	*	28	30"	139'	*14.00E; 10.50SW
28	4	210	19.20	14.75	29	30"	55'	-
29	4	210	19.20	14.75	30	30"	146'	-
30	D	232	20.30	14.75	32	30"	28'	-
31	C	232	19.80	16.80	32	18"	287'	-
32	J-8	200 / 201	21.00	14.75	33	30"	141'	-
33	4	210	20.25	14.75	34	30"	39'	-
34	4	210	20.25	14.75	35A	30"	137'	-
35A	J-8	200 / 201	20.30	*	35B	30"	44'	*14.00W; 10.75SE
35B	MES	272	-	10.00	-	-	-	-
36	4	210	21.10	18.00	37	24"	45'	-
37	4	210	21.10	17.50	38A	24"	188'	-
38A	D	232	15.90	12.35	38B	30"	44'	-
38B	J-8	200 / 201	20.20	11.45	39	30"	139'	-
39	4	210	21.10	11.25	40A	30"	42'	-
40A	4	210	21.10	10.75	40B	-	160'	-
40B	MES	272	-	10.50	-	-	-	-
41	4	210	20.70	14.00	42	18"	33'	-
42	4	210	20.70	13.50	43	24"	134'	-
43	J-8	200 / 201	20.00	13.00	44	24"	49'	-
44	MES	272	-	12.00	-	-	-	-
45	4	210	22.00	17.80	46	18"	35'	-
46	4	210	22.00	17.30	47	24"	170'	-
47	MES	272	-	15.50	-	-	-	-
48	4	210	21.28	17.50	49	18"	33'	-
49	4	210	21.28	17.00	50A	24"	147'	-
50A	J-8	200 / 201	19.50	*	50B	24"	51'	*16.50E; 11.00SW
50B	MES	272	-	10.00	-	-	-	-
51	4	210	20.24	15.50	52	18"	33'	-
52	4	210	20.24	14.60	53A	36"	65'	CONNECT TO EXISTING PIPE
53A	4	210	20.29	*	53B	36"	161'	14.60N; 12.00S
53B	MES	272	-	10.50	-	-	-	-
54	4	210	20.70	17.70	55	18"	170'	-
55	MES	272	-	16.00	-	-	-	-

- STORM DRAIN STRUCTURE NOTES:**
1. ALL STRUCTURES SHALL BE MINIMUM 6" DEEPER THAN LOWEST PIPE INVERT.
 2. ALL GRATES SHALL BE GALVANIZED STEEL WITH H-20 LOADING.
 3. FLOWLINE ELEVATION IS TOP OF ALL STRUCTURES AND MANHOLES.
 4. PROVIDE ADEQUATE BOX SIZE AT BASE OF TYPE 4 INLETS AND TYPE J-8 MANHOLES FOR PIPE SIZES PER THIS PLAN.
 5. ALL PIPING SHALL BE RCP. ADS N-12 PIPING IS AN ACCEPTABLE ALTERNATIVE ON-SITE WITH WATERTIGHT JOINTS IF MINIMUM 2' OF COVER IS PROVIDED UNLESS COMMENTS SPECIFY RCP.
 6. ALL PROPOSED ELEVATIONS ARE REFERENCED IN NAVD 88.

Approved For Construction
AUG 26 2016
City of Palm Bay

REVISION	DATE	BY	COMMENTS
1	6/14/16		PALM BAY AND SURVIMD COMMENTS
2	7/01/16		SURVIMD COMMENTS

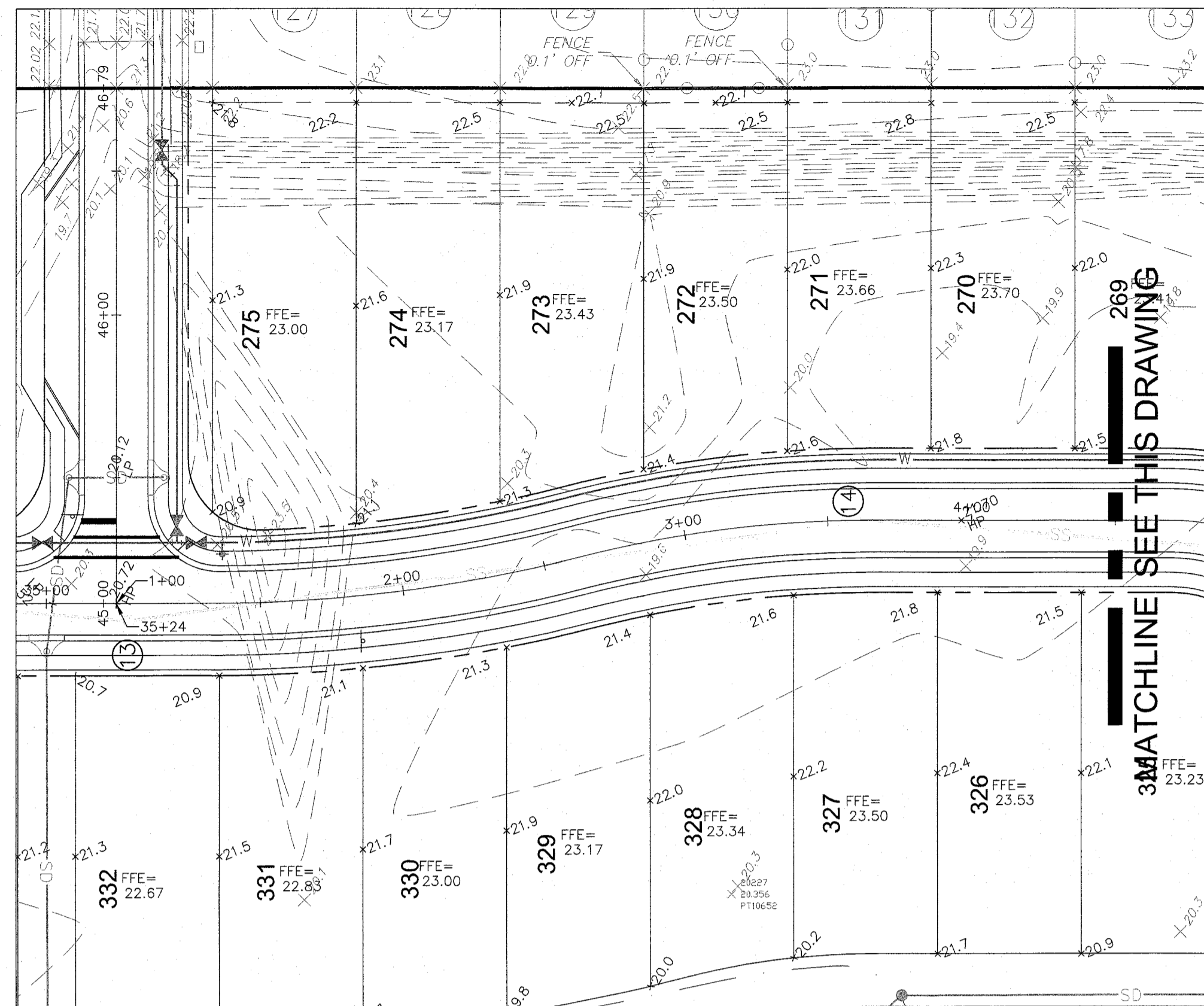
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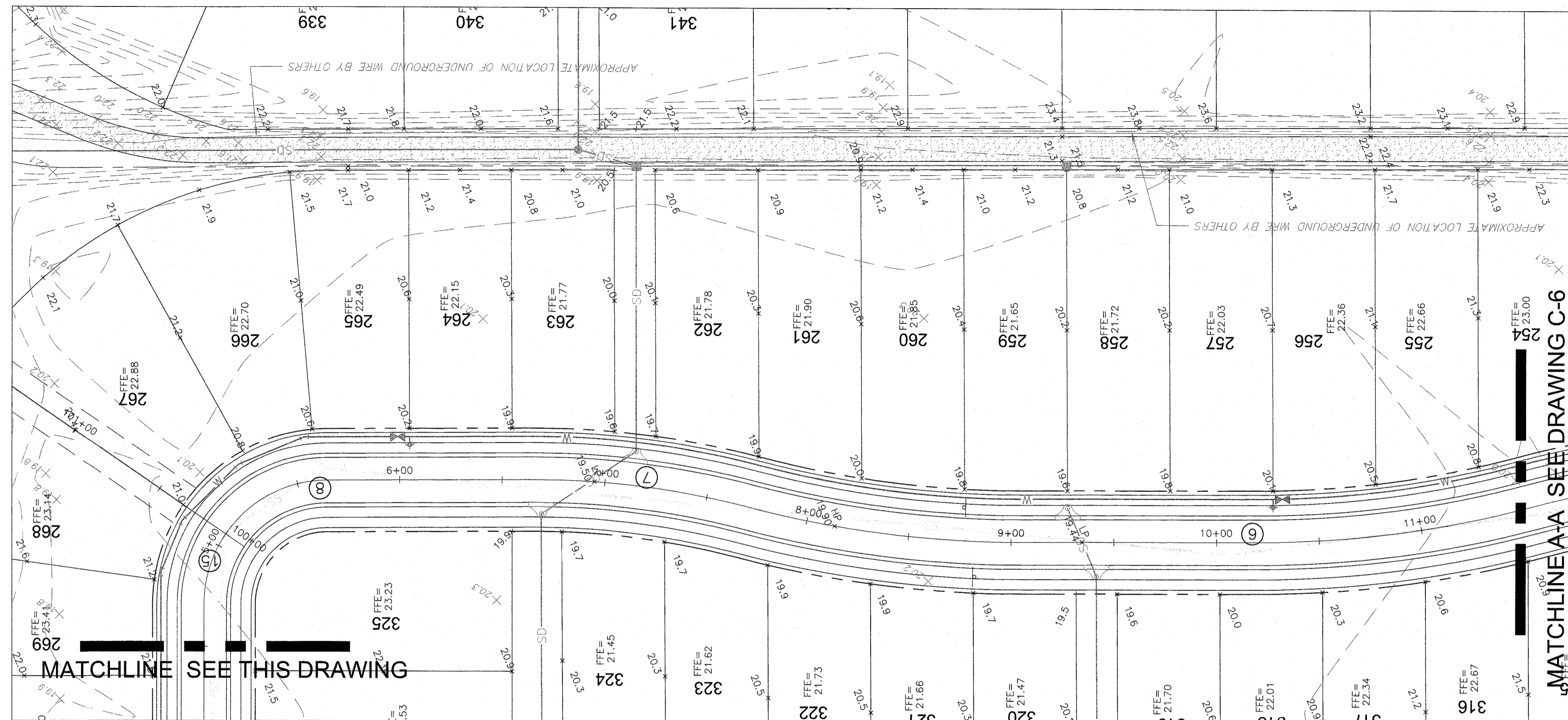
BRENTWOOD LAKES SOUTH
D.R. HORTON
MALABAR ROAD PALM BAY, FLORIDA
DRAWING TITLE
PAVING AND GRADING DETAILS

DATE: 4-26-16
SCALE: NTS
PROJ. NO.: 160163
DESIGNED BY: JRT
DRAWN BY: SMB
CHECKED BY: JTW
DRAWING NO. C-4D

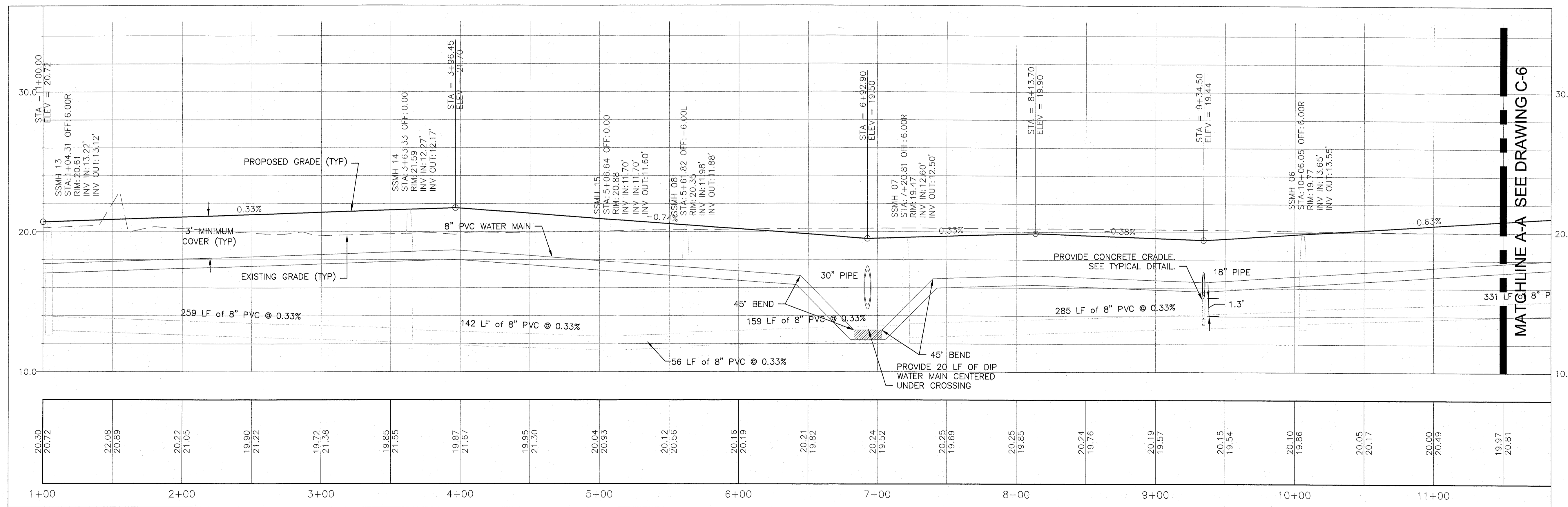
STATE OF FLORIDA
LICENSED PROFESSIONAL ENGINEER
No. 55405
AUG 24 2016



PLAN STA: 1+00 THRU 4+50
1"=40'



PLAN STA: 4+50 THRU 11+50
1"=40'

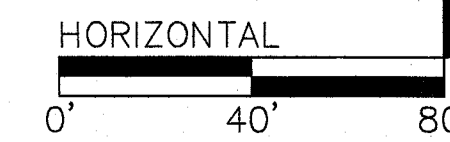


PROFILE STA: 1+00 THRU 11+50
1"=40'

Approved For Construction

AUG 26 2016

City of Palm Bay



REV#	DATE	REVISION

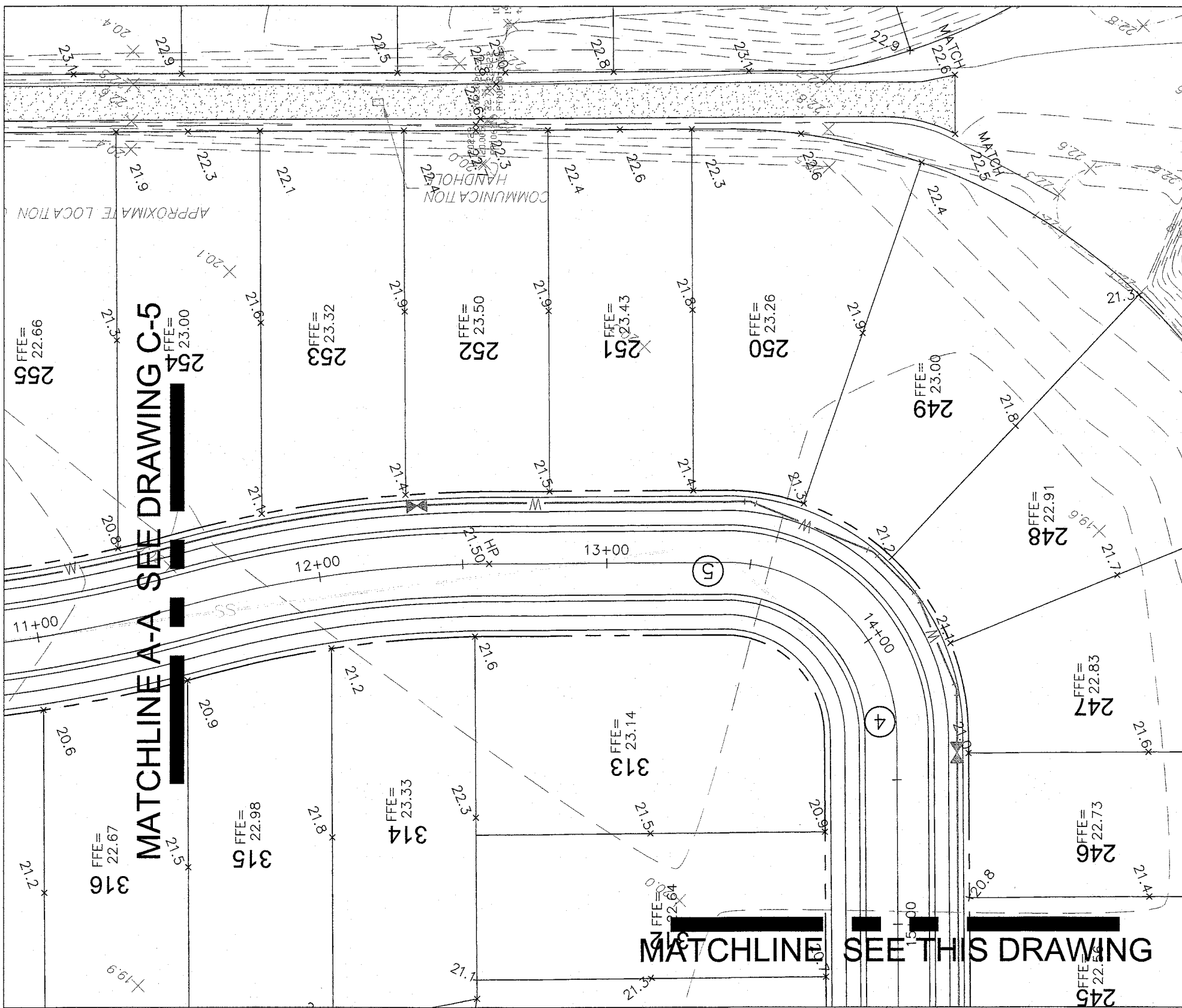
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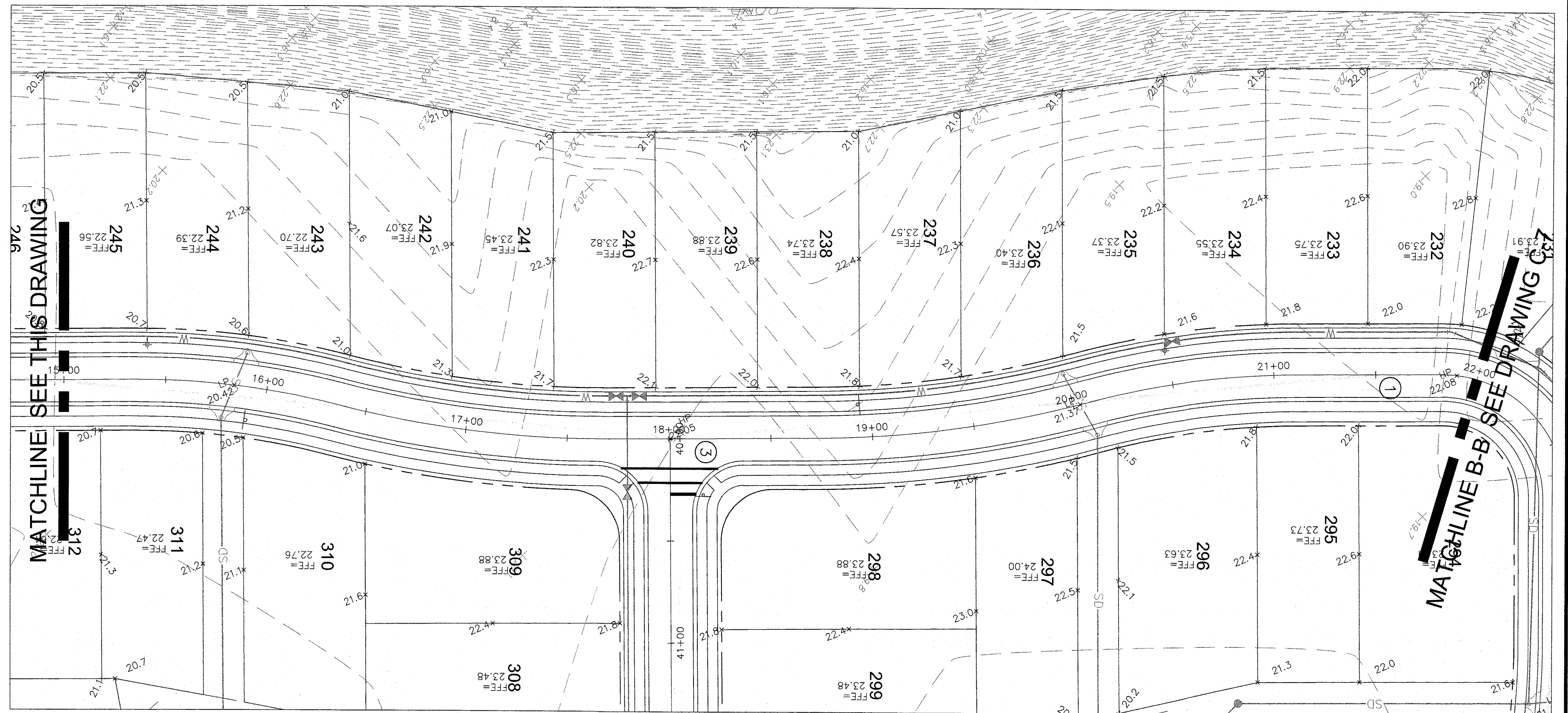
BRENTWOOD LAKES SOUTH
D.R. HORTON
MALABAR ROAD PALM BAY, FLORIDA
DRAWING TITLE
PLAN AND PROFILE STA: 1+00 THRU 11+50

PROFESSIONAL ENGINEER
STATE OF FLORIDA
JAKE T. WISE
LICENSE No. 55405
AUG 24 2016

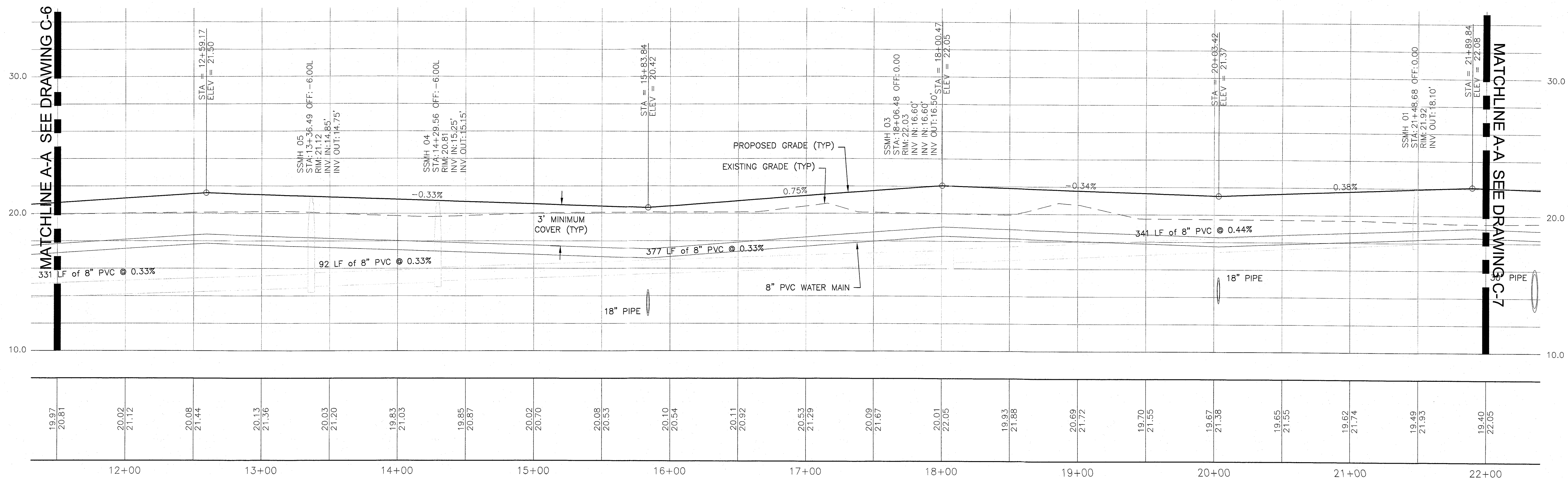
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PROJ. NO.:	160163
DESIGNED BY:	JRT
DRAWN BY:	SMB
CHECKED BY:	JTW
DRAWING NO.	C-5



PLAN STA: 11+50 THRU 15+00
1"=40'



PLAN STA: 15+00 THRU 22+00
1"=40'

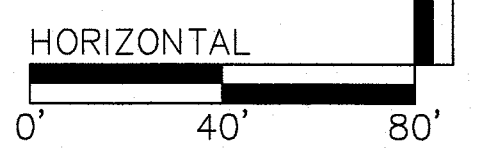


PROFILE STA: 11+50 THRU 22+00
HORIZONTAL: 1"=40' VERTICAL: 1"=4'

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AUG 26 2016

City of Palm Bay

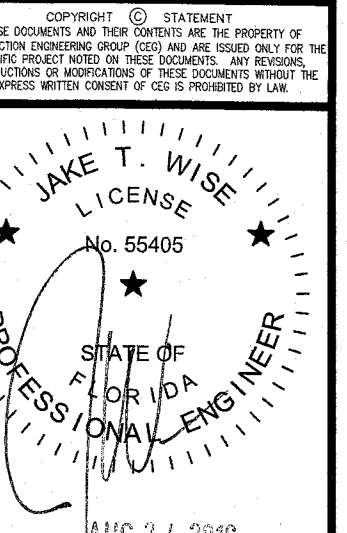


REV#	DATE	REVISION

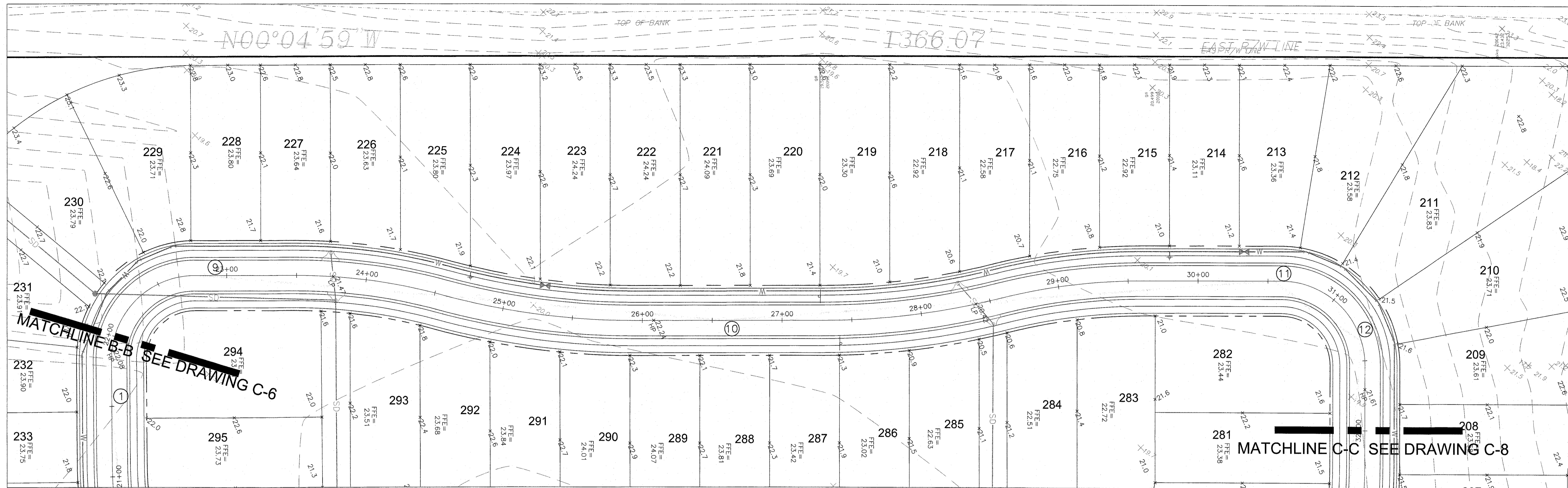
CONSTRUCTION ENGINEERING GROUP
consulting engineers

DR. HORTON
MALABAR ROAD PALM BAY, FLORIDA

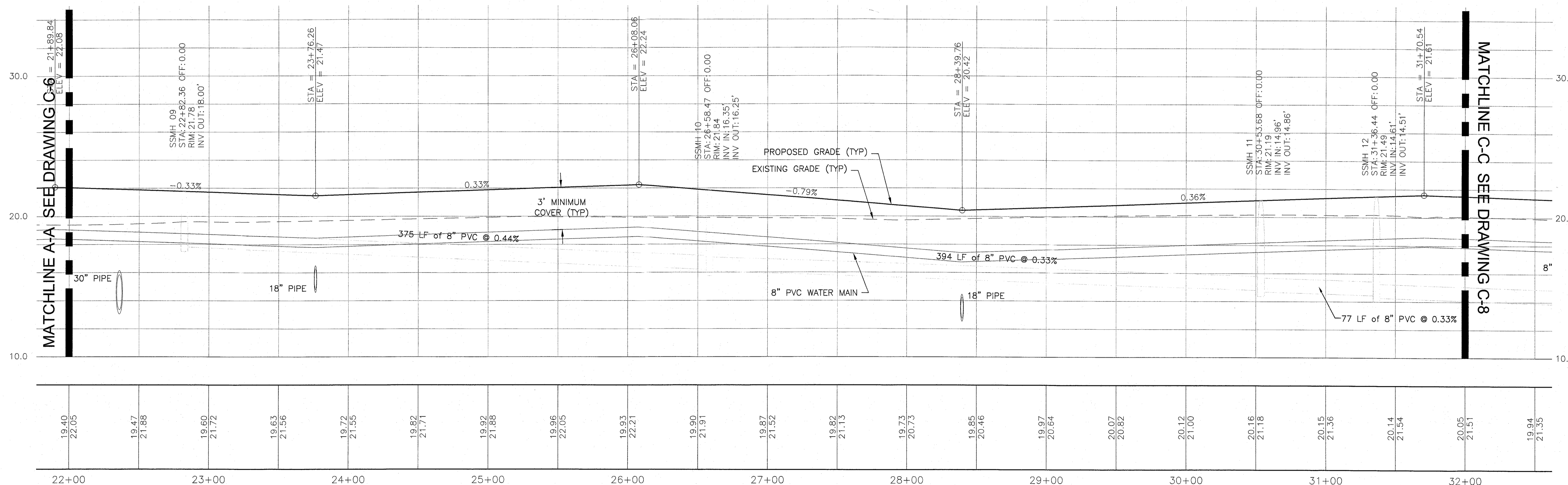
BRENTWOOD LAKES SOUTH
DRAWING TITLE
PLAN AND PROFILE STA: 11+50 THRU 22+00



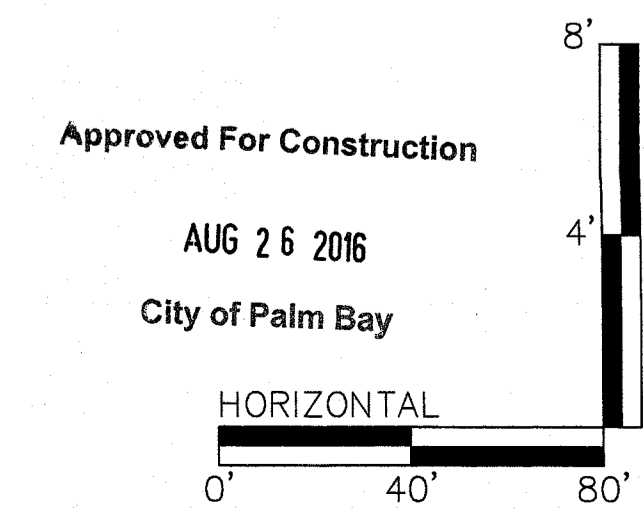
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DESIGNED BY:	JRT
DRAWN BY:	SMB
CHECKED BY:	JTW
DRAWING NO.	C-6



PLAN STA: 22+00 THRU 32+00
1"=40'



PROFILE STA: 22+00 THRU 32+00
1"=40'



REV#	DATE	REVISION

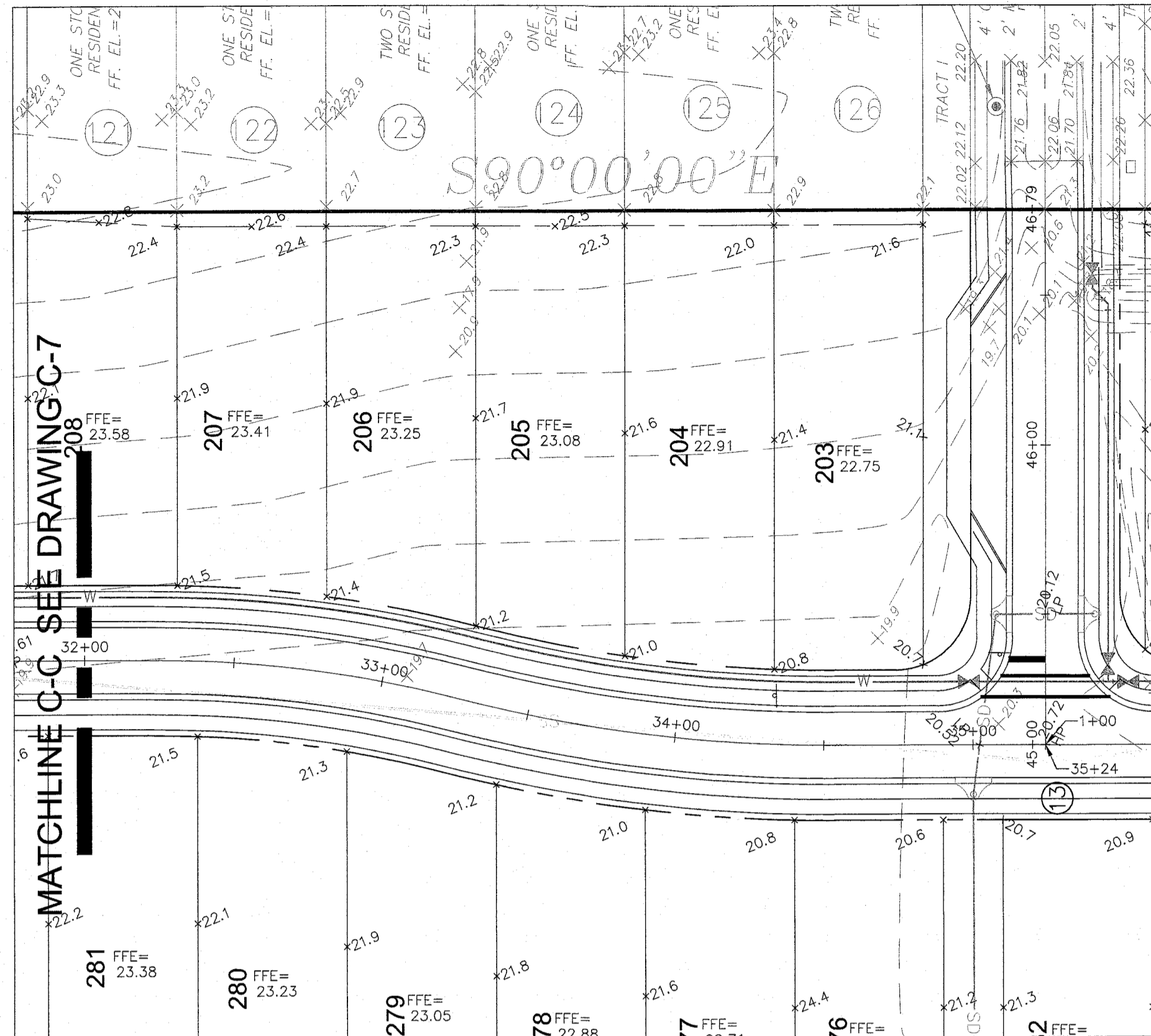
2651 East Grille Blvd., Suite C
Melbourne, FL 32935
Tel: 321.233.1211
Fax: 321.233.1212
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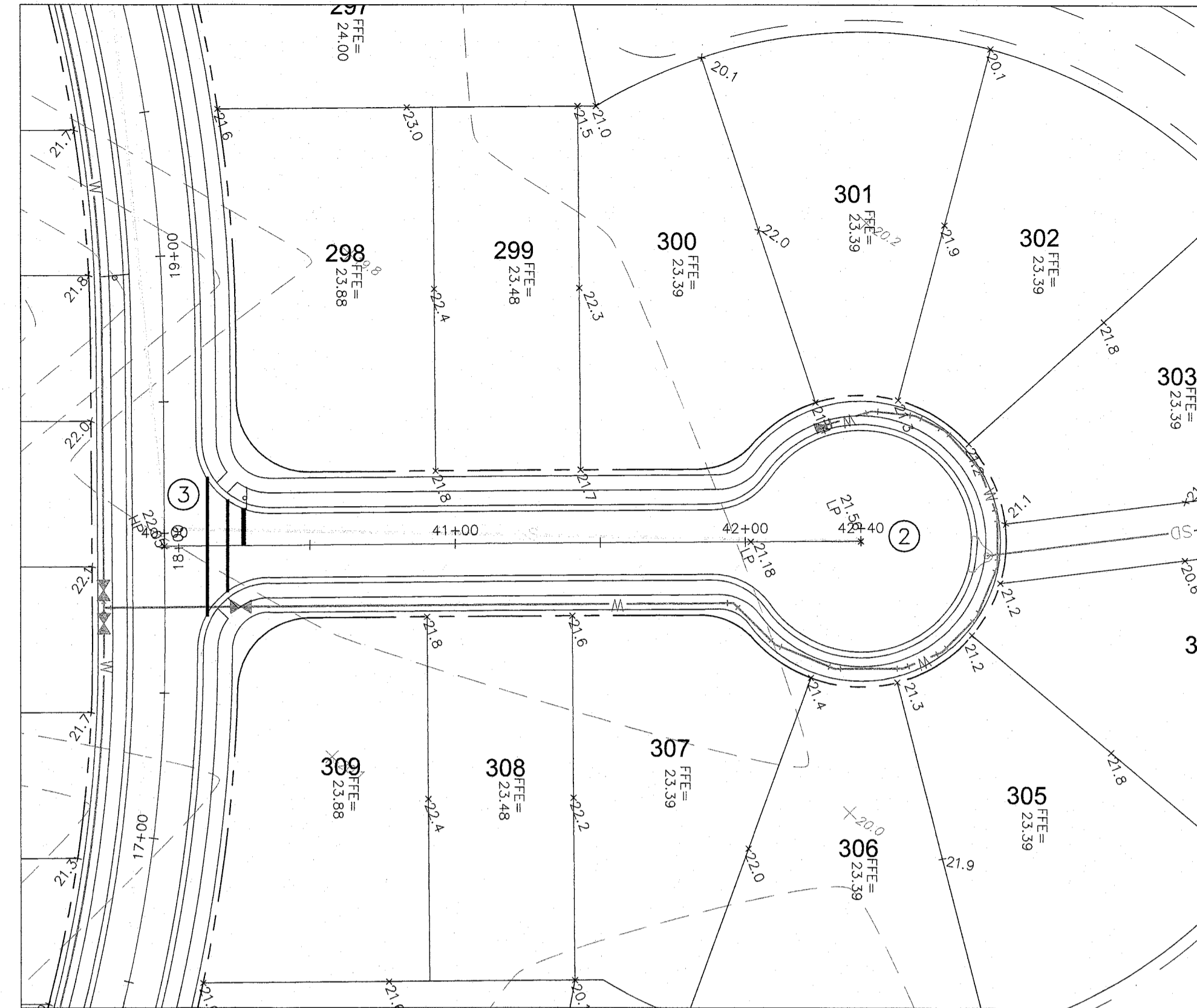
BRENTWOOD LAKES SOUTH
D.R. HORTON
MALABAR ROAD PALM BAY, FLORIDA
DRAWING TITLE
PLAN AND PROFILE STA: 22+00 THRU 32+00

JAKE T. WISE
LICENSE
No. 55405
STATE OF FLORIDA
PROFESSIONAL ENGINEER
AUG 24 2016

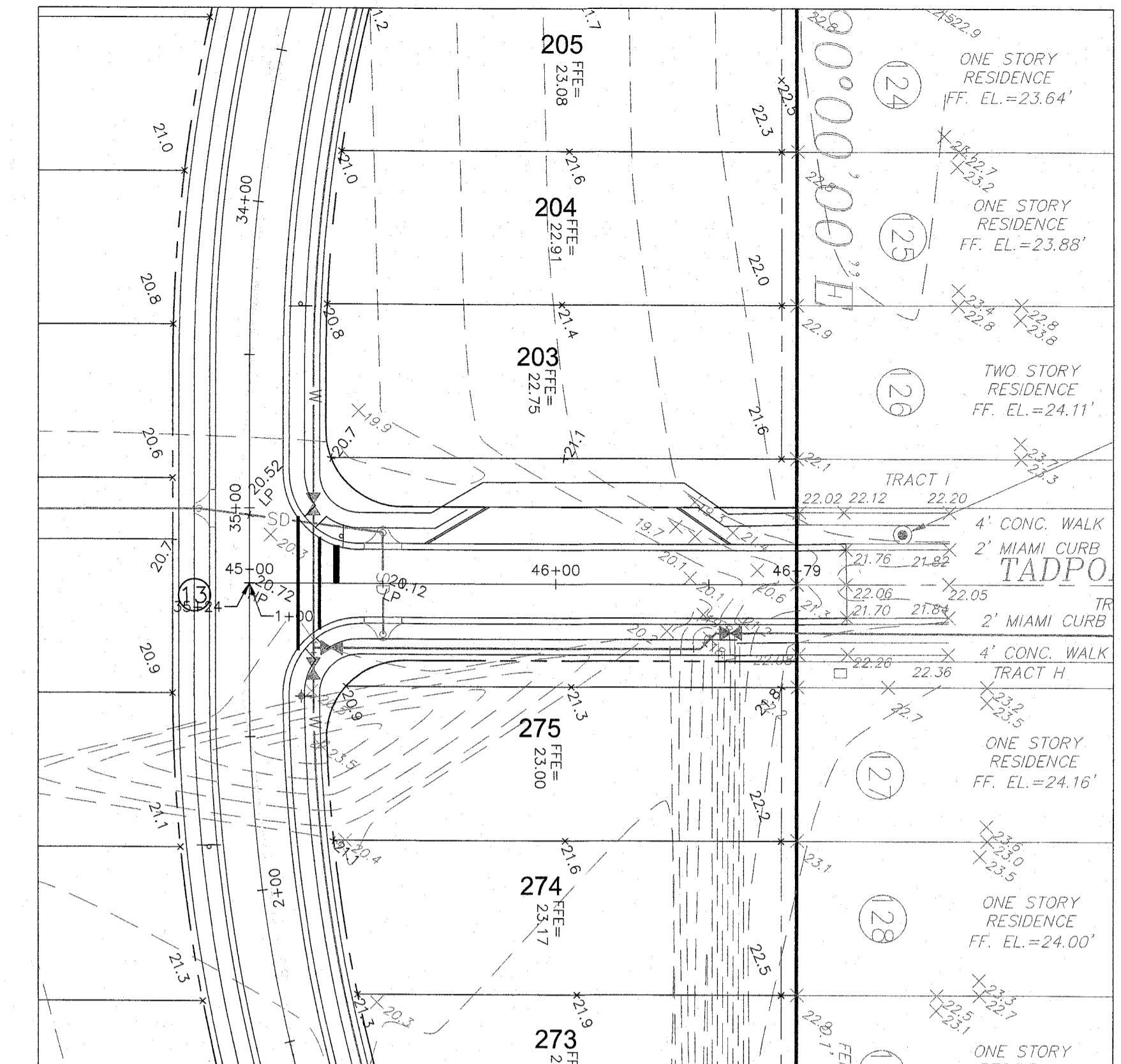
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DRAWING NO.	C-7



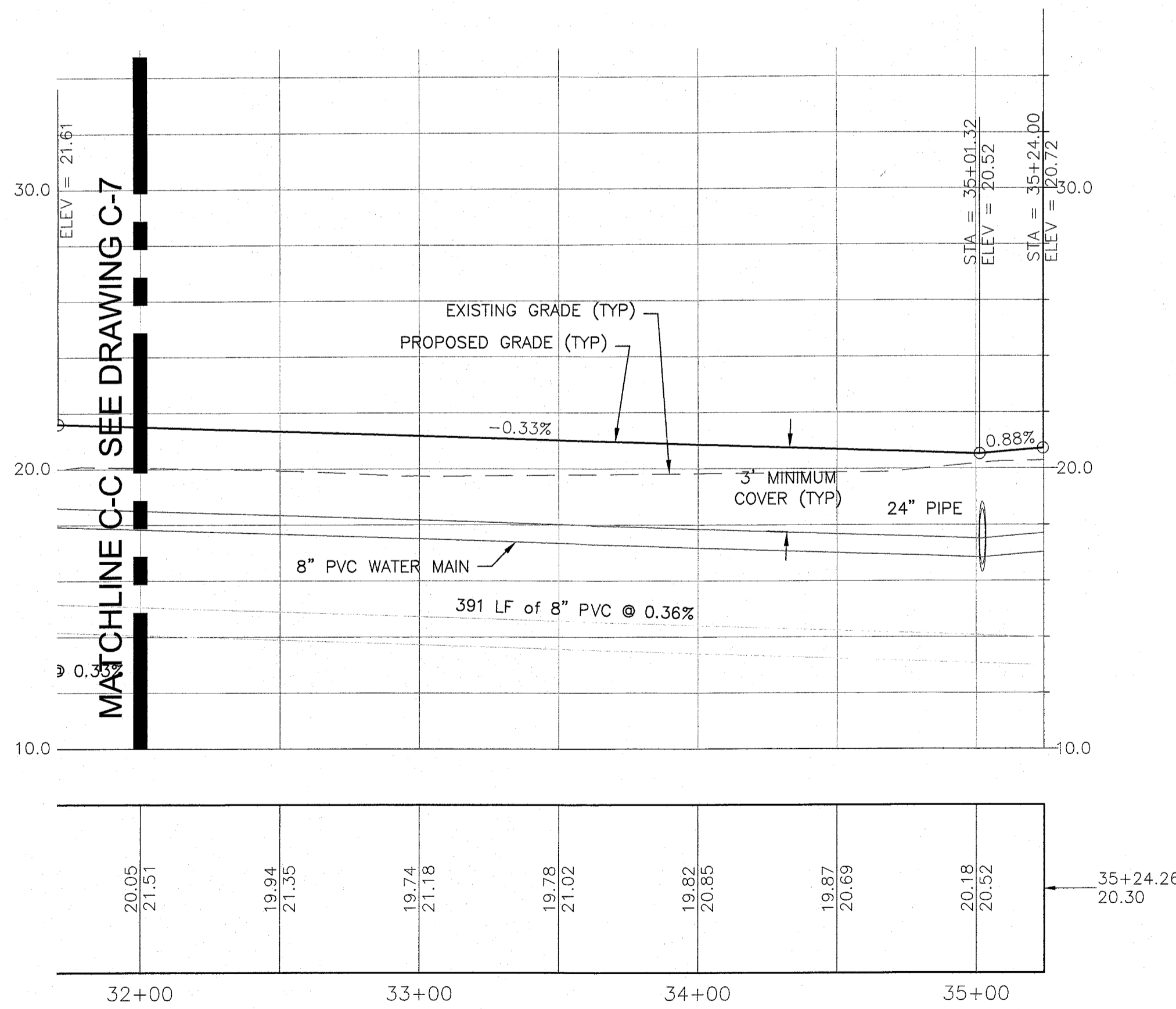
PLAN STA: 32+00 THRU 35+24.26
1"=40'



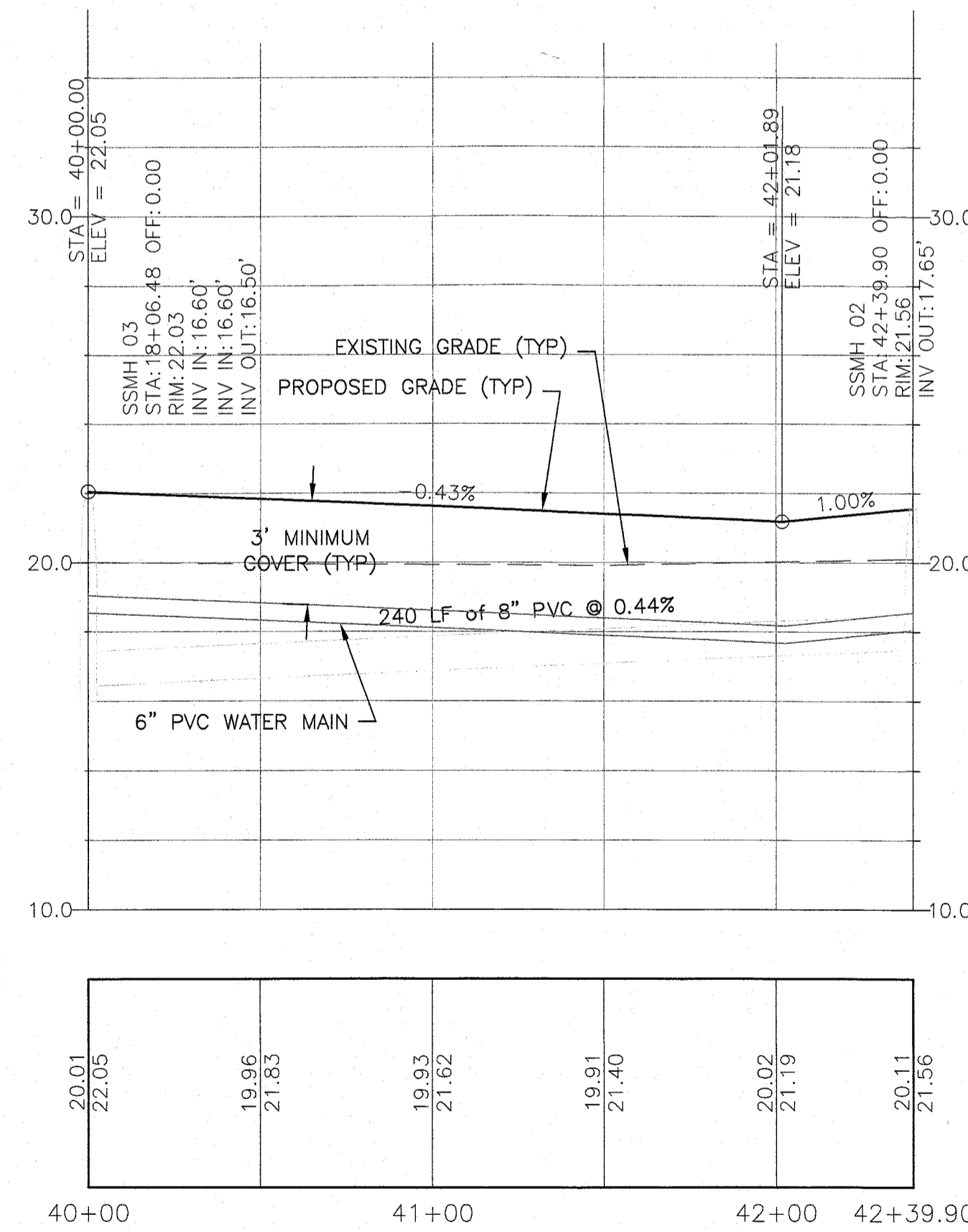
PLAN STA: 40+00 THRU 42+39.90
1"=40'



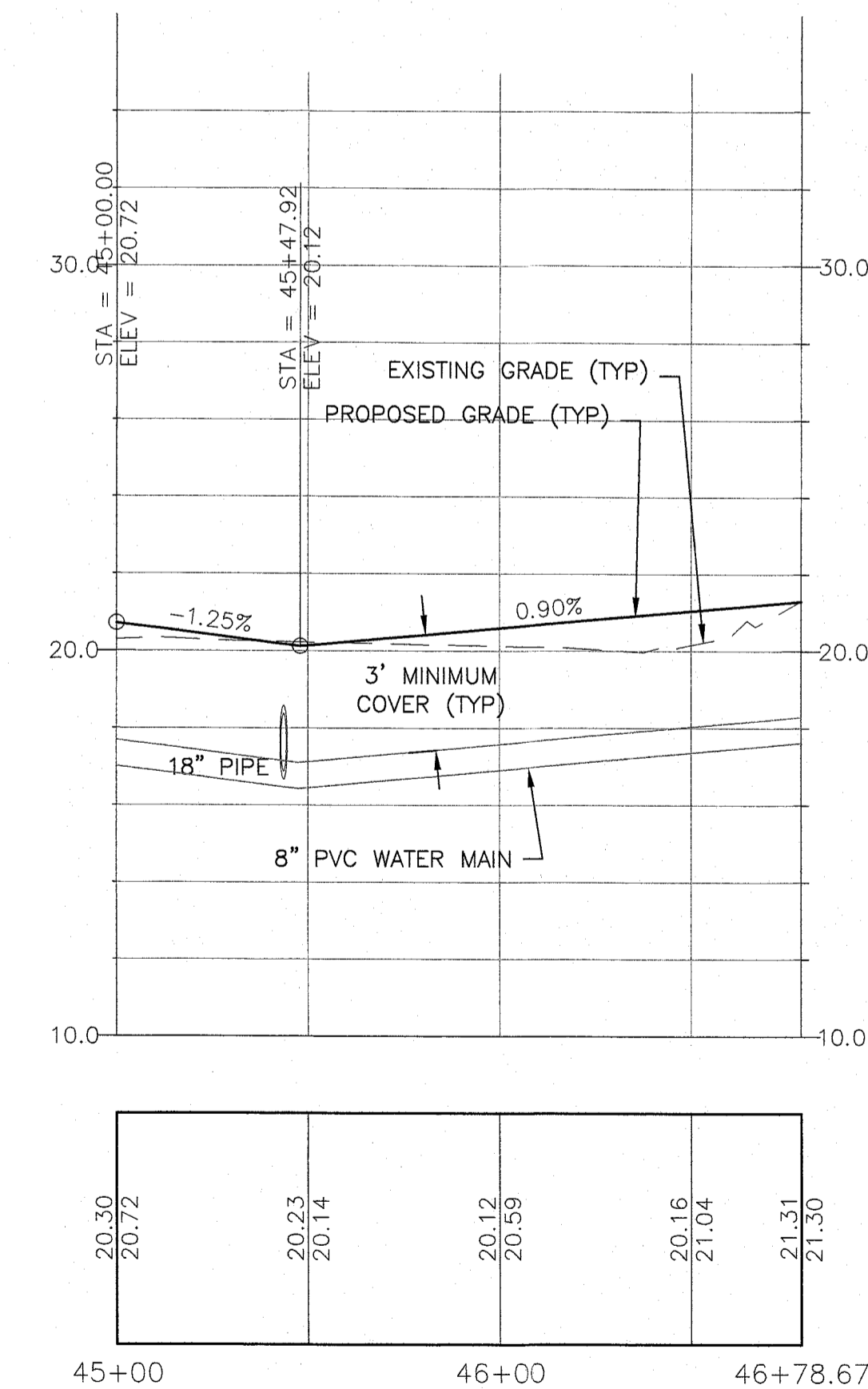
PLAN STA: 45+00 THRU 46+78.67
1"=40'



PROFILE STA: 32+00 THRU 35+24.26
1"=40'



PROFILE STA: 40+00 THRU 42+39.90

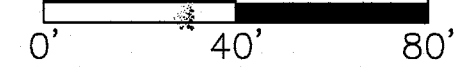
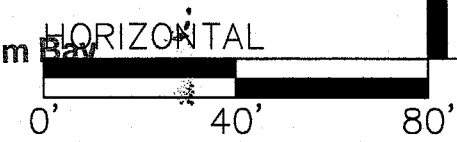


PROFILE STA: 45+00 THRU 46+78.67

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City of Palm Beach



REV#	DATE	REVISION

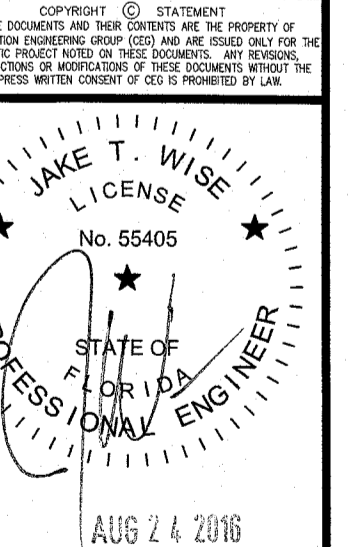
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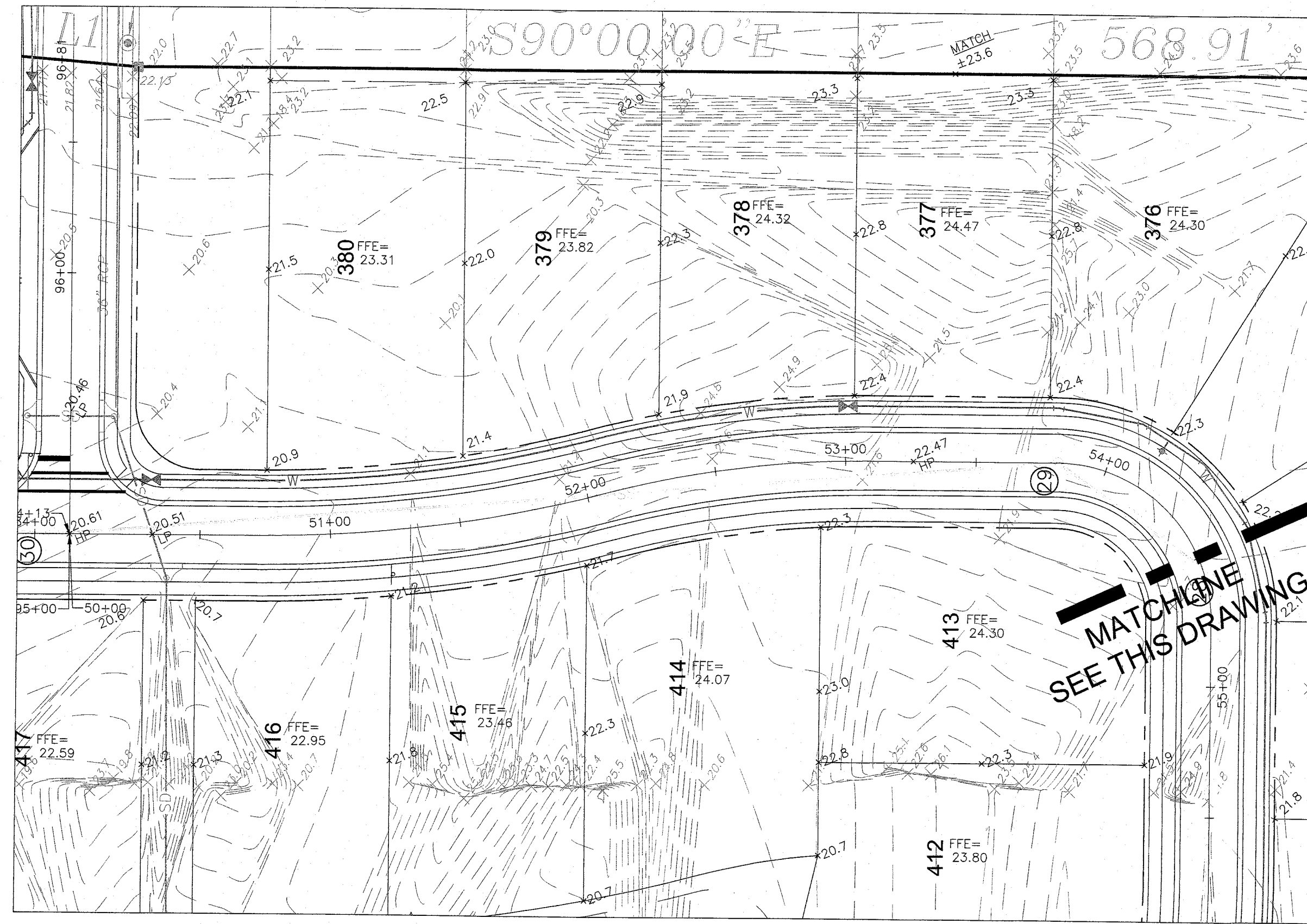
BRENTWOOD LAKES SOUTH

D.R. HORTON
MALABAR ROAD PALM BAY, FLORIDA

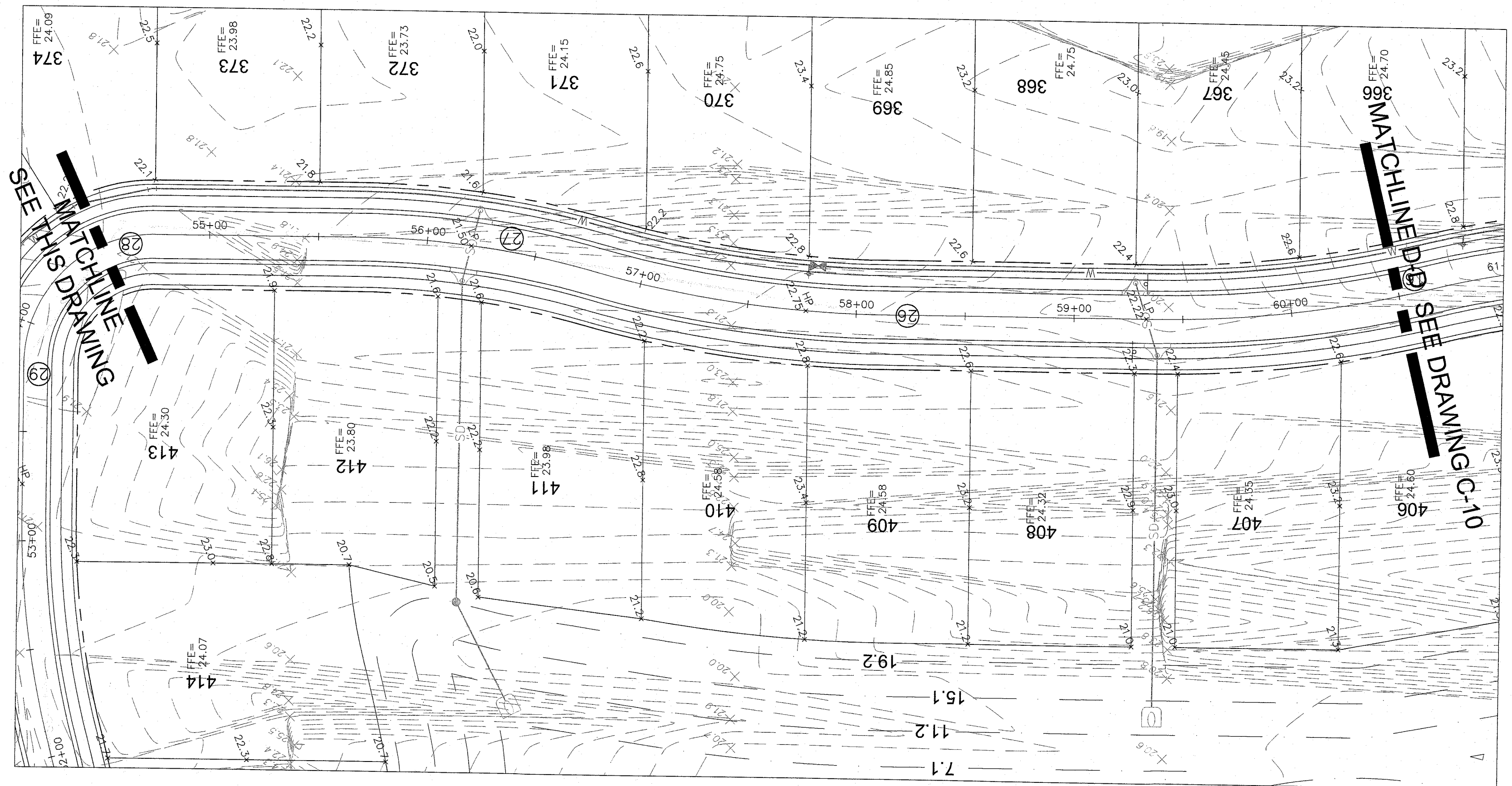
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PLAN AND PROFILE STA: 32+00 THRU 35+24.26;
40+00 THRU 42+39.90; 45+00 THRU 46+78.67



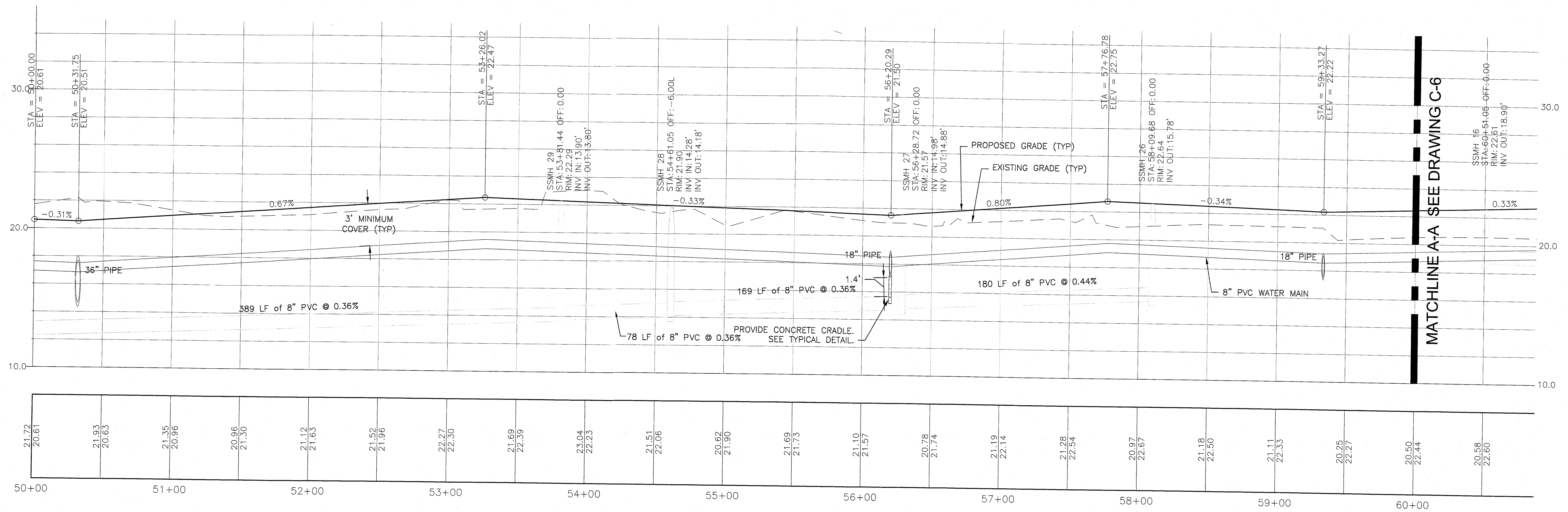
DATE	4-26-16
SCALE	1"=60'
PROJ. NO.:	160163
DESIGNED BY:	JRT
DRAWN BY:	SMB
CHECKED BY:	JTW
DRAWING NO.	C-8



PLAN STA: 50+00 THRU 54+50
1"=40'



PLAN STA: 54+50 THRU 60+50
1"=40'



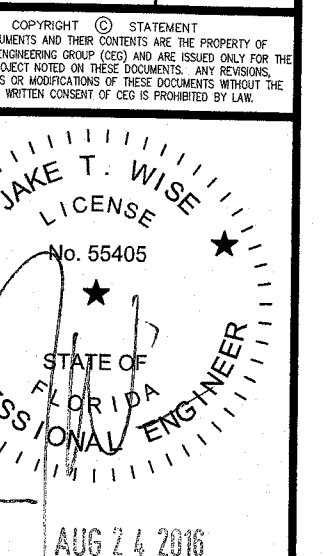
PROFILE STA: 50+00 THRU 60+50
HORIZONTAL: 1"=40' VERTICAL: 1"=4'

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AUG 26 2016
City of Palm Bay

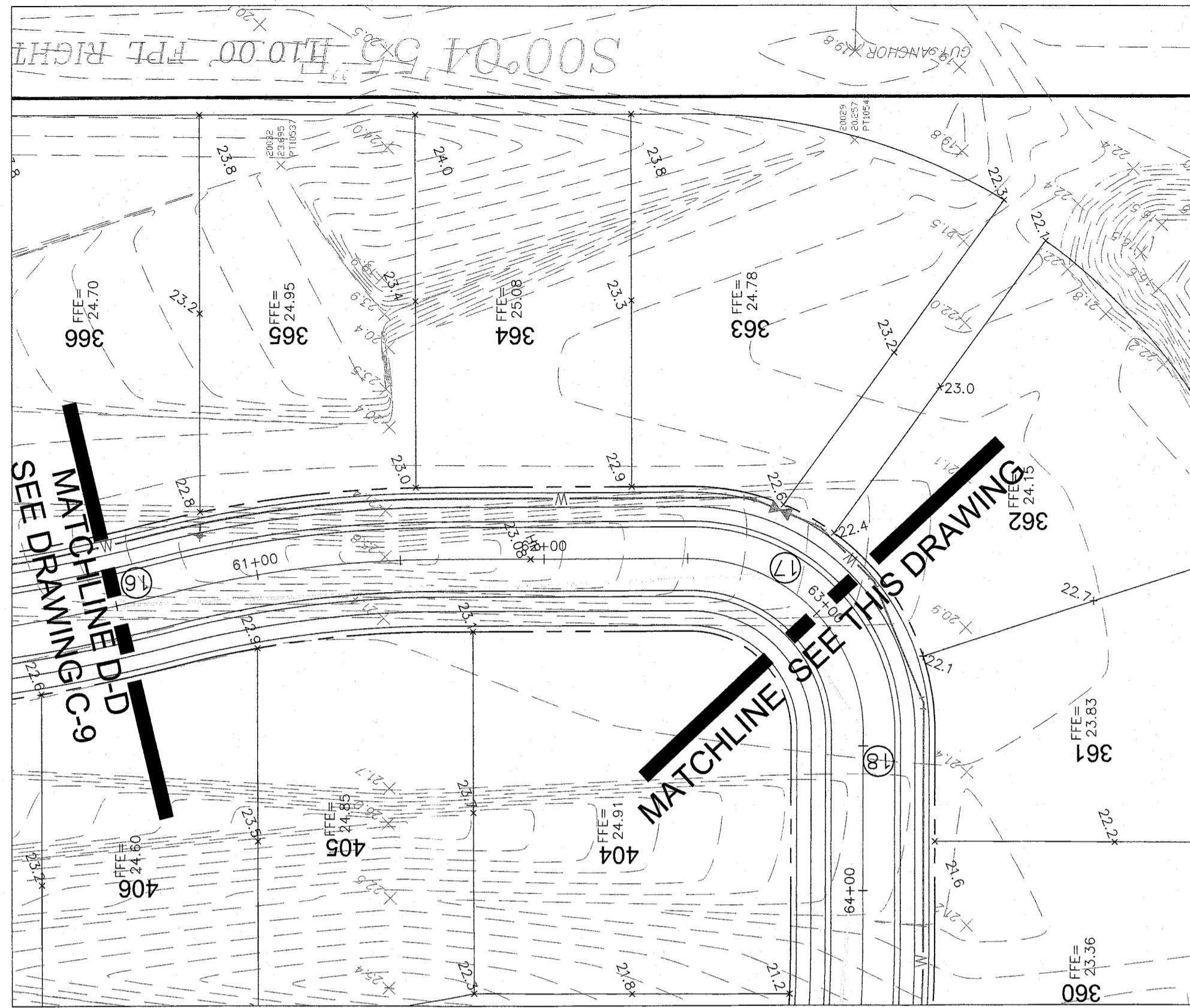
REV#	DATE	REVISION

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melbourne, fl 32955
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fax: 321.233.1123
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consulting engineers

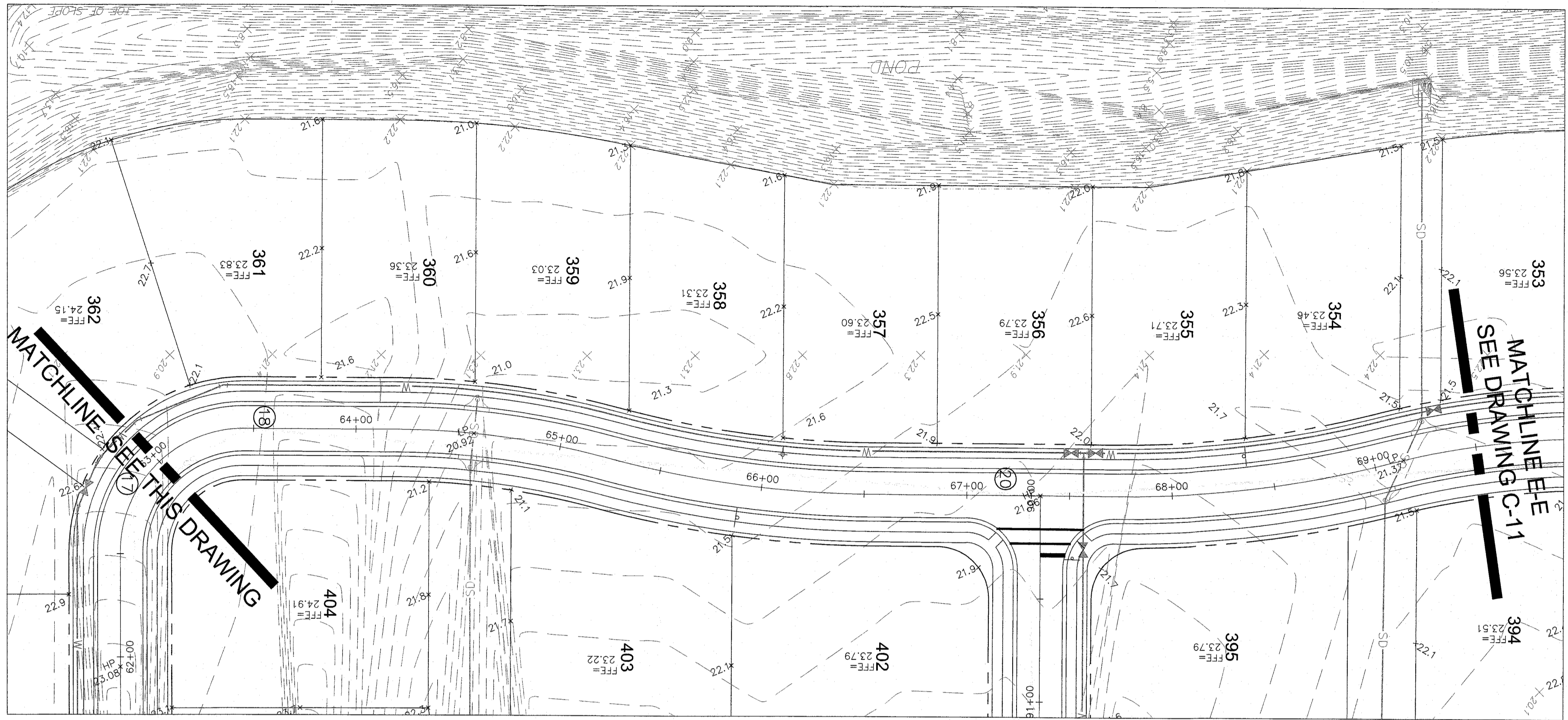
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D.R. HORTON
MALABAR ROAD PALM BAY, FLORIDA
DRAWING TITLE
PLAN AND PROFILE STA: 50+00 THRU 60+50



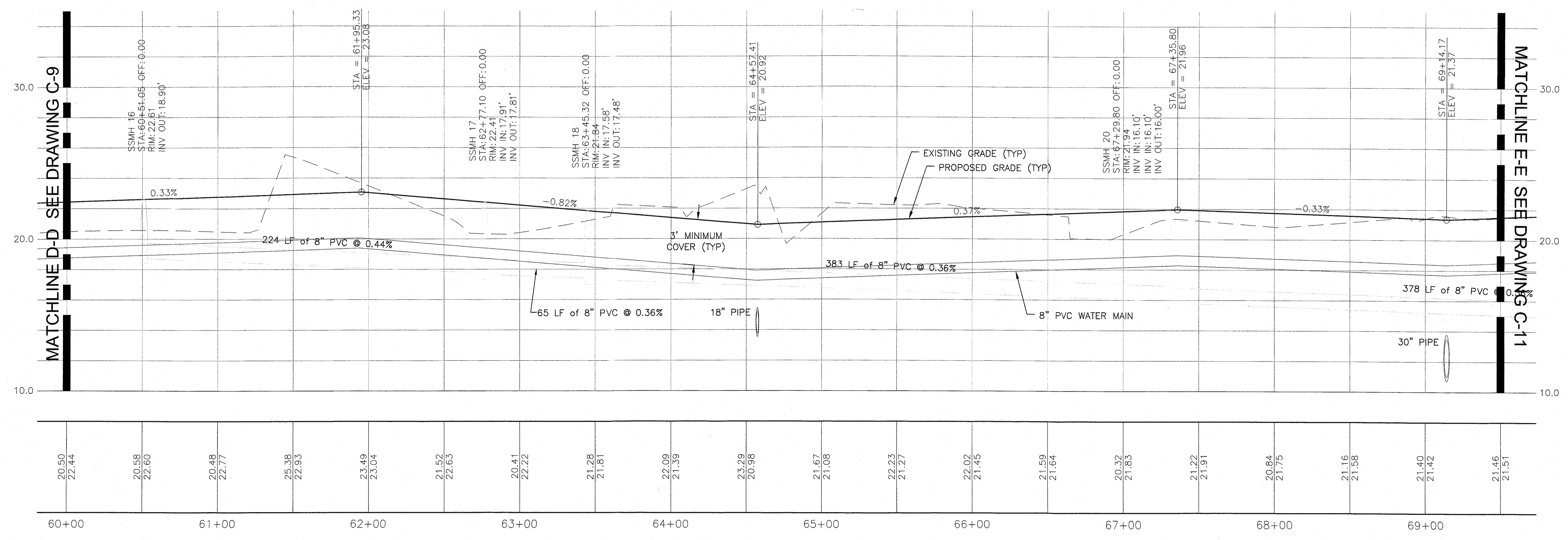
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SCALE	H: 1"=40'; V: 1"=4'
PROJ. NO.:	160163
DESIGNED BY:	JRT
DRAWN BY:	SMB
CHECKED BY:	JTW
DRAWING NO.:	C-9



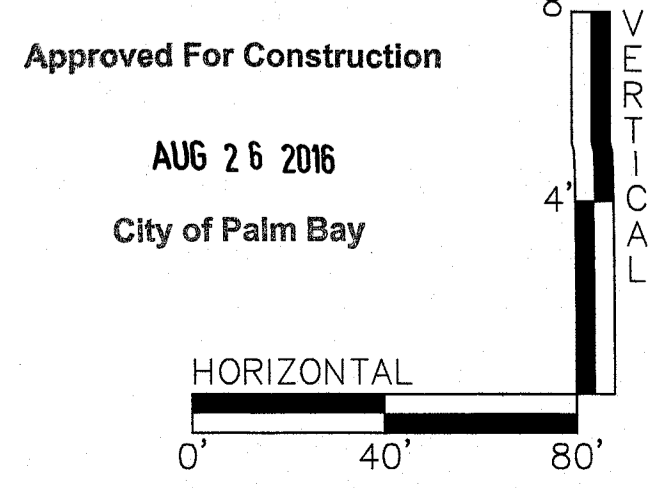
PLAN STA: 60+50 THRU 63+00
1"=40'



PLAN STA: 63+00 THRU 69+50
1"=40'

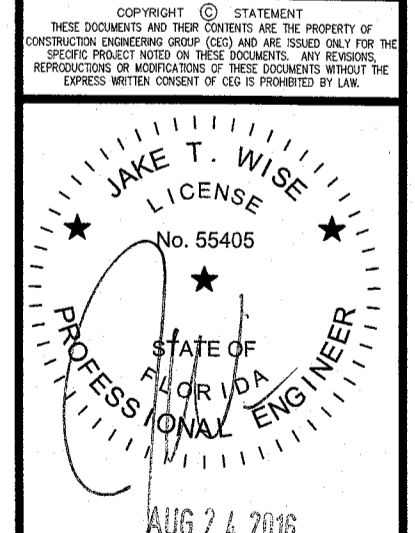


PROFILE STA: 60+50 THRU 69+50
HORIZONTAL: 1"=40' VERTICAL: 1"=4'

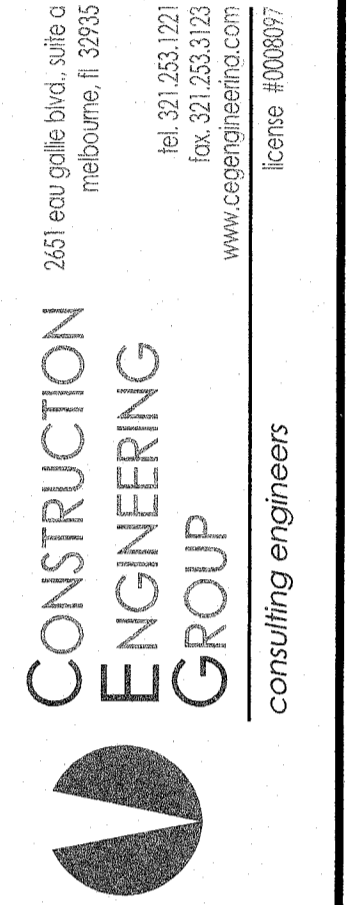


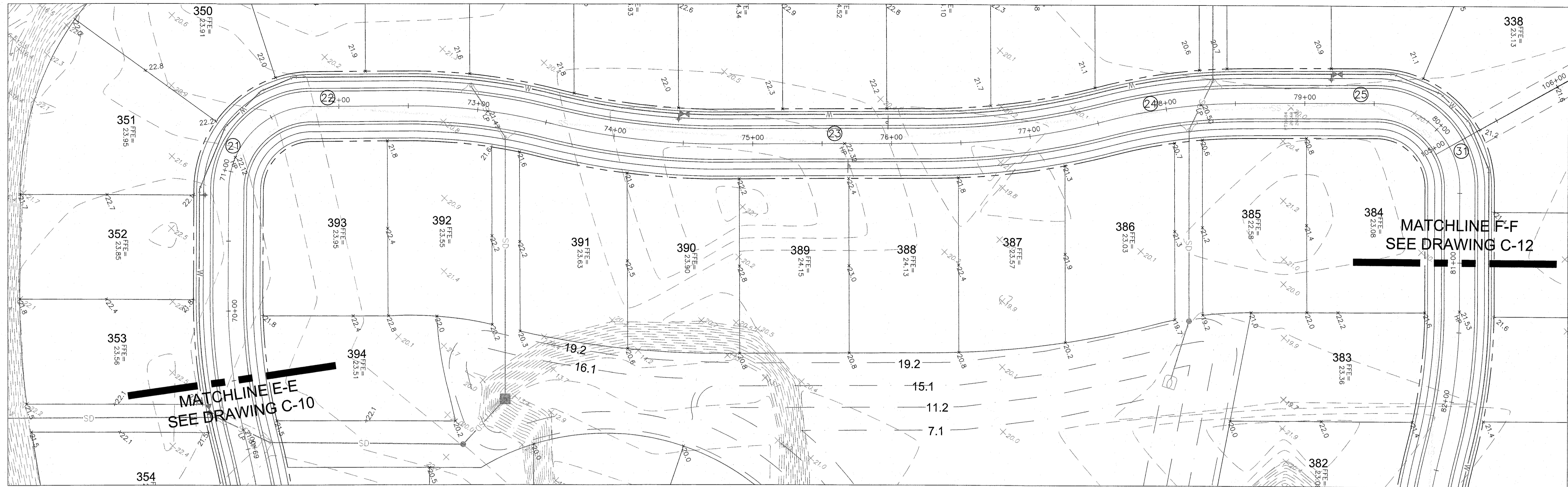
REV#	DATE	REVISION

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 DR. HORTON
 MALABAR ROAD PALM BAY, FLORIDA
 DRAWING TITLE
 PLAN AND PROFILE STA: 11+50 THRU 22+00

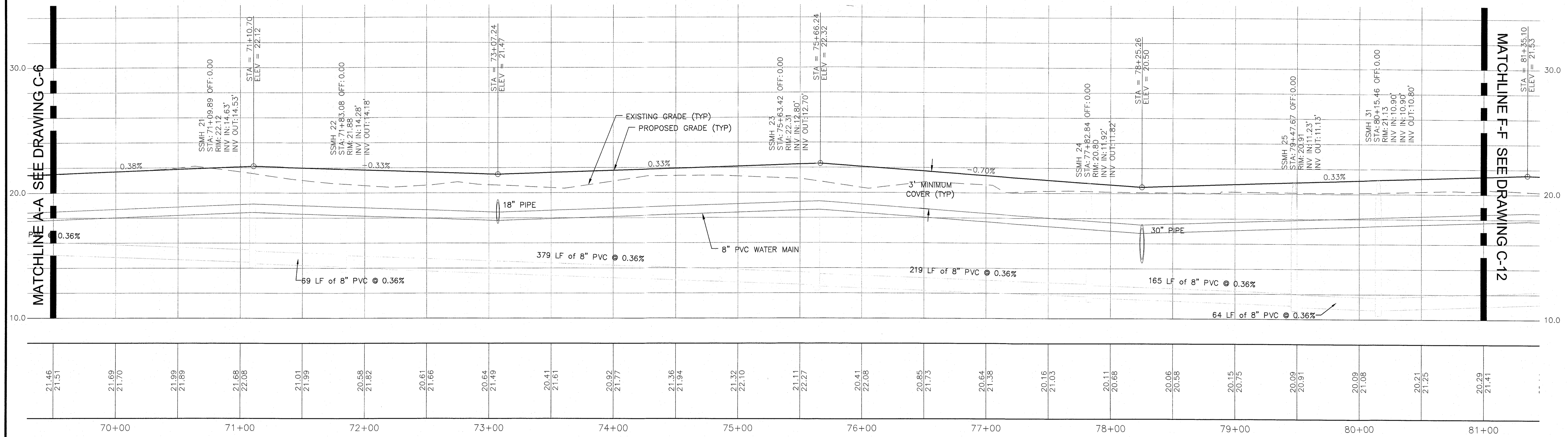


DATE	4-26-16
SCALE	H:1"=40'; V:1"=4'
PROJ. NO.:	160163
DESIGNED BY:	JRT
DRAWN BY:	SMB
CHECKED BY:	JTW
DRAWING NO.	C-10





PLAN STA: 69+50 THRU 81+00
1"=40'



PROFILE STA: 69+50 THRU 81+00
HORIZONTAL: 1"=40' VERTICAL: 1"=4'

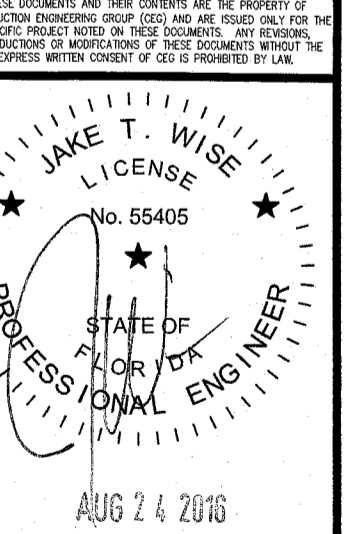
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City of Palm Bay

REV#	DATE	REVISION

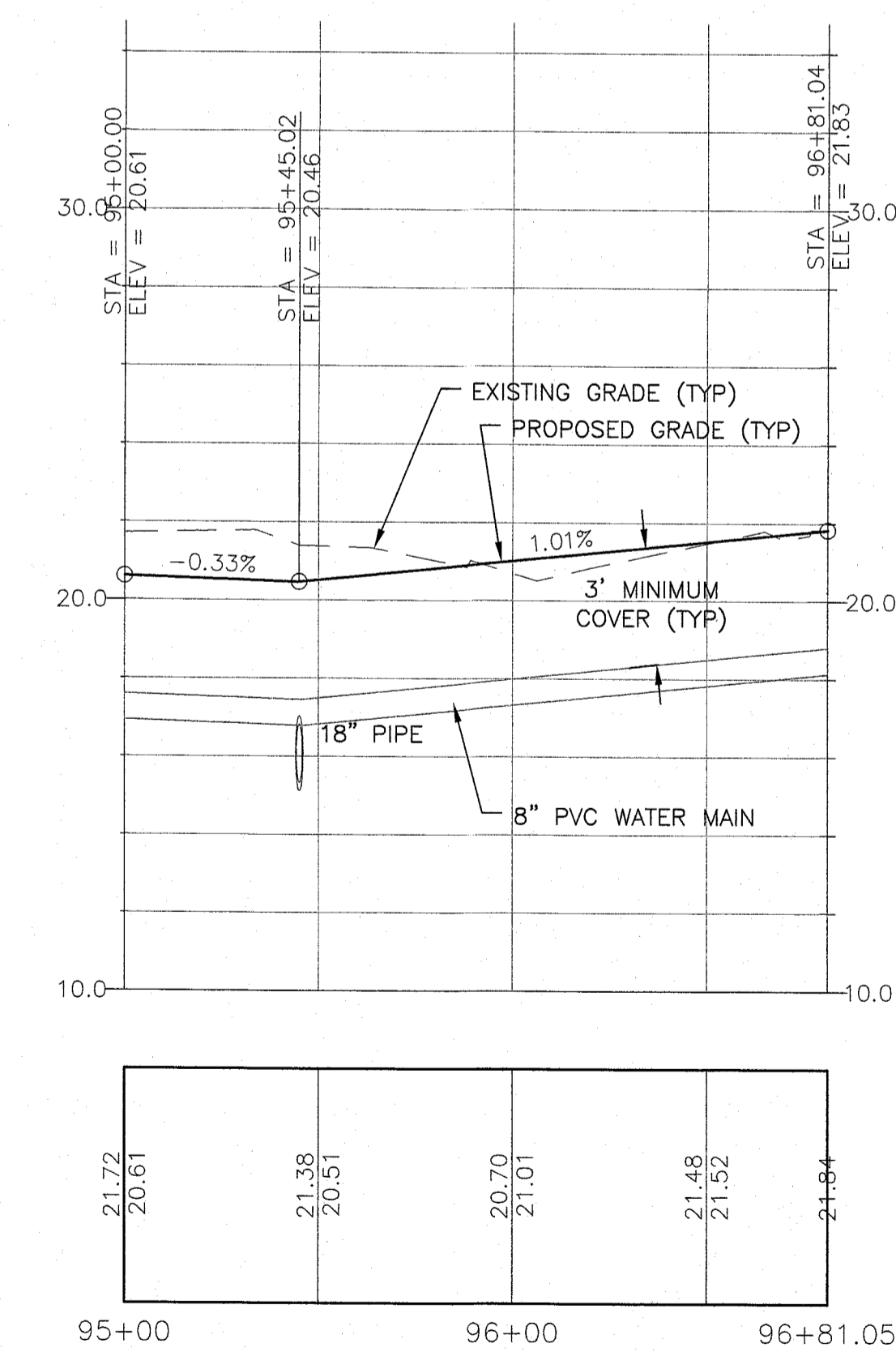
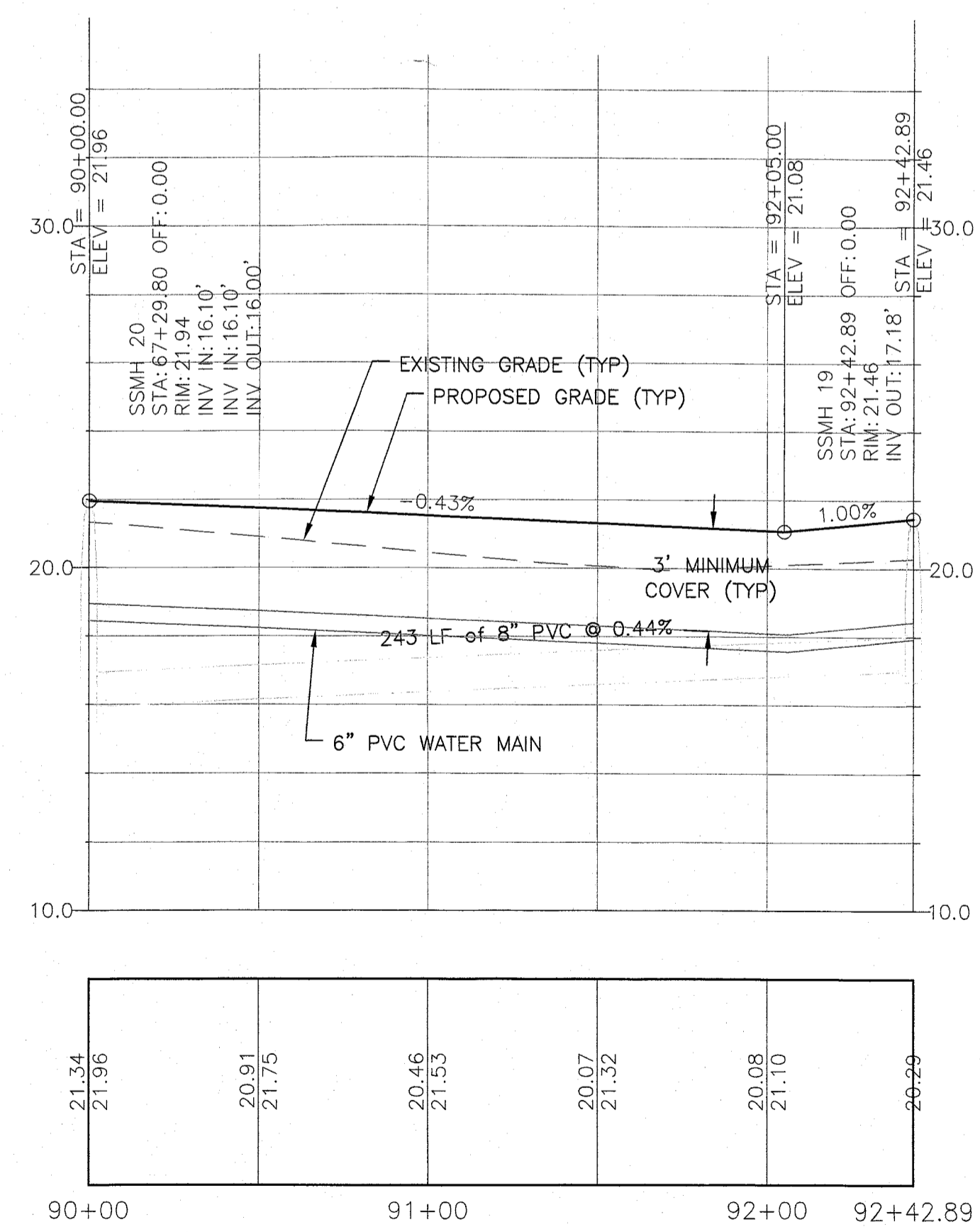
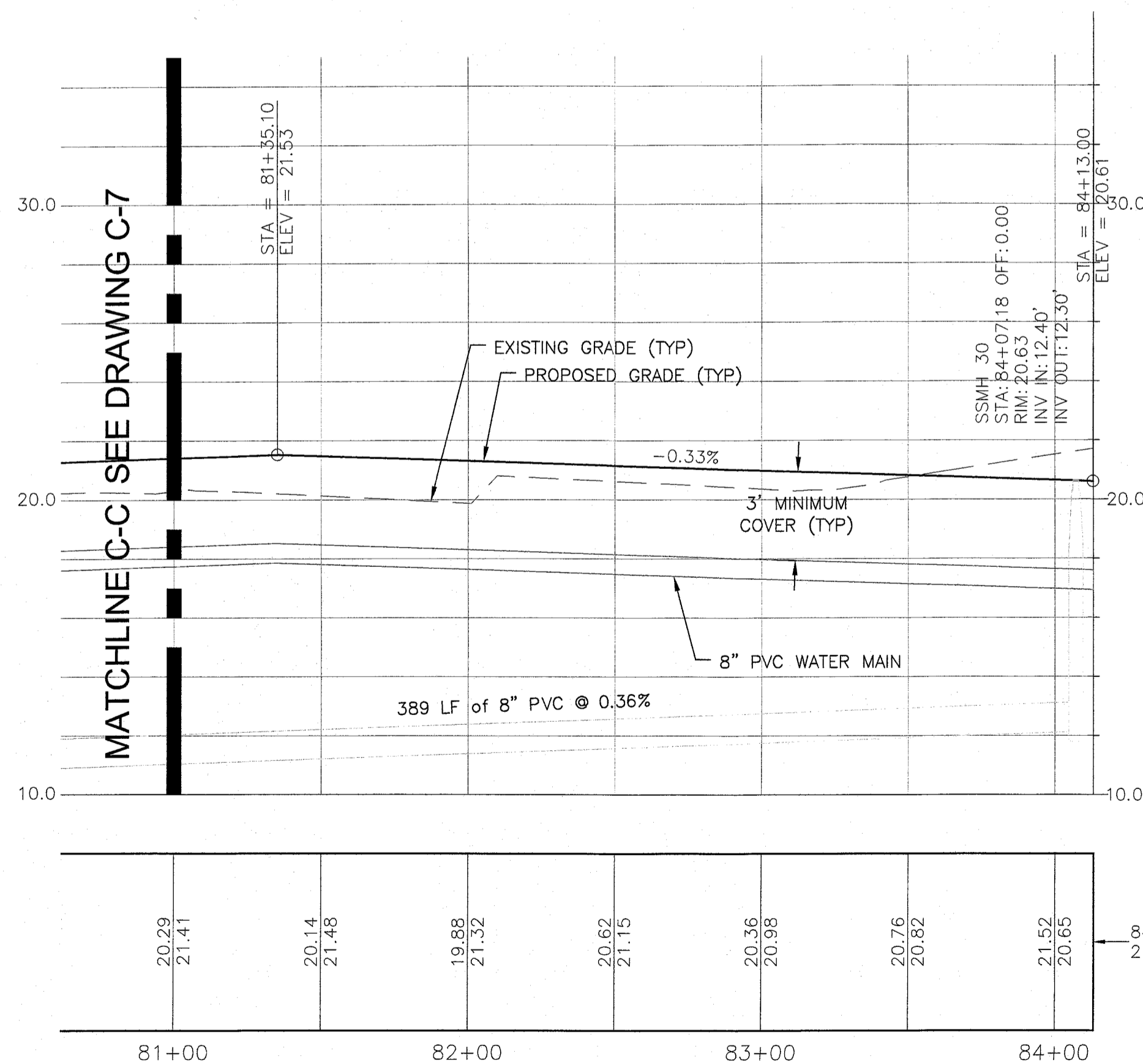
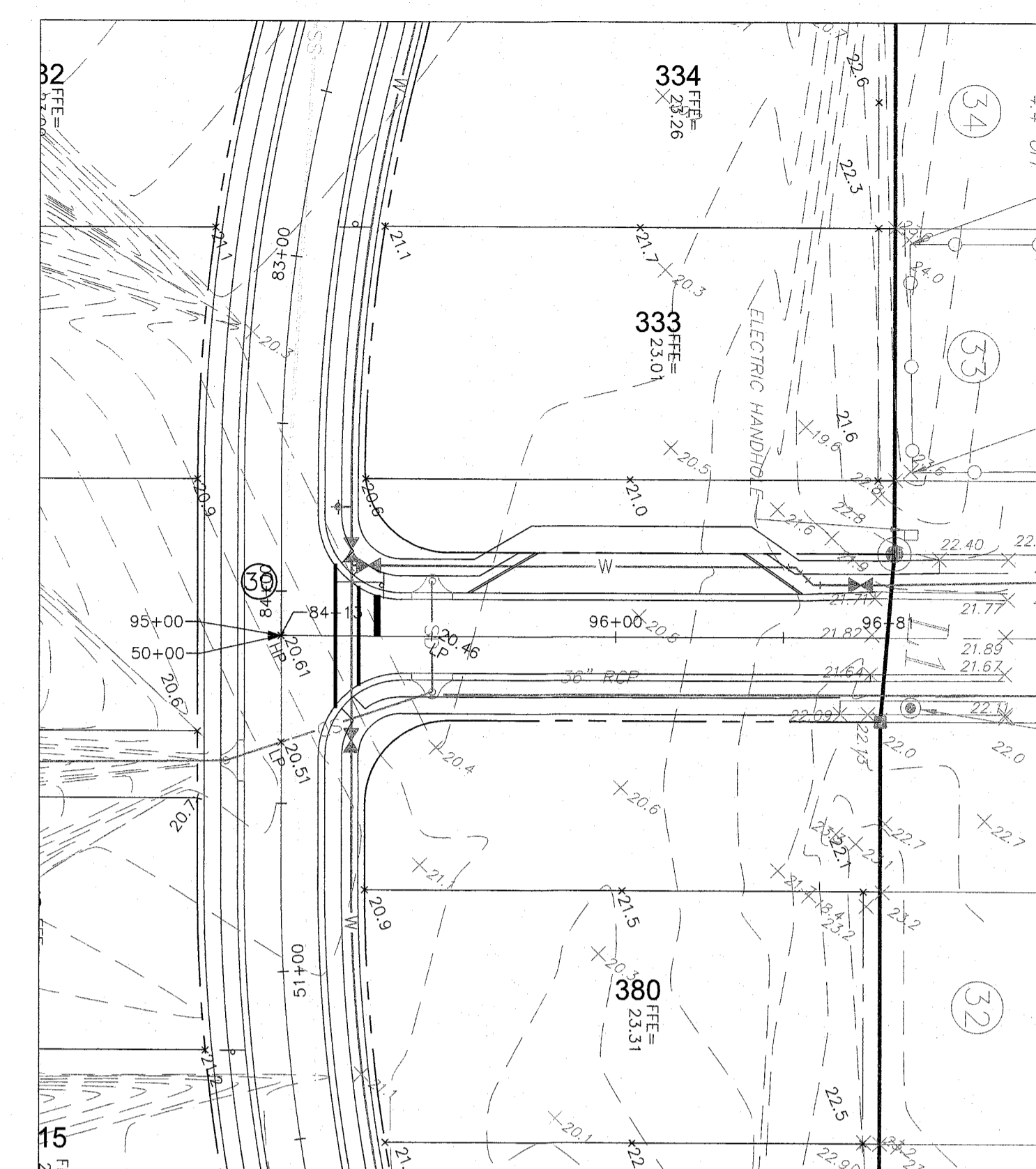
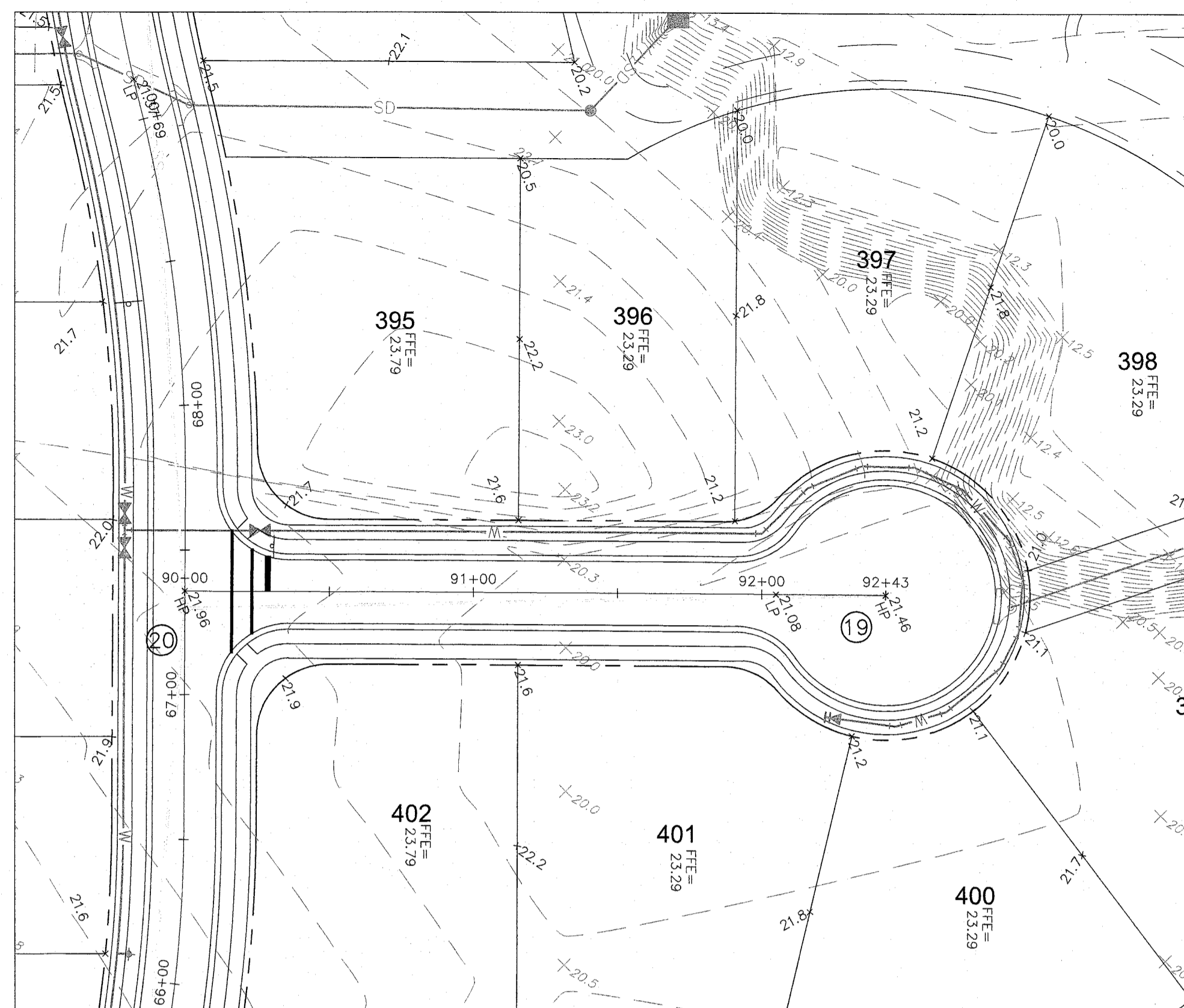
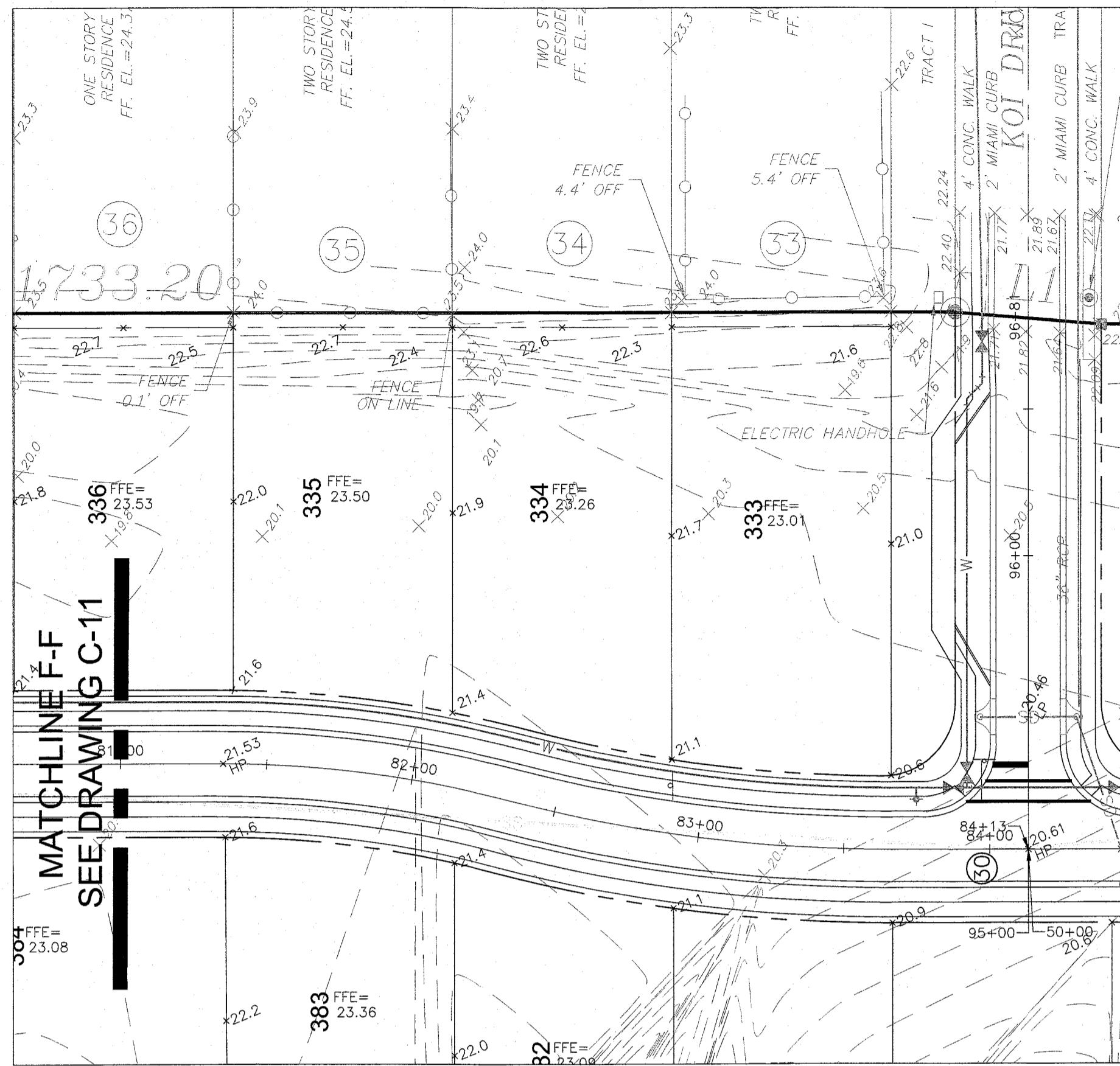
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MALABAR ROAD PALM BAY, FLORIDA
DRAWING TITLE
PLAN AND PROFILE STA: 69+50 THRU 81+00



DATE	4-26-16
SCALE	H: 1"=40'; V: 1"=4'
PROJ. NO.:	160163
DESIGNED BY:	JRT
DRAWN BY:	SMB
CHECKED BY:	JTW
DRAWING NO.	C-11



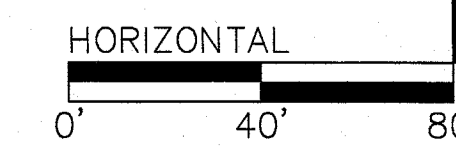
PROFILE STA: 81+00 THRU 84+13.13
HORIZONTAL: 1"=40' VERTICAL: 1"=4'

PROFILE STA: 90+00 THRU 92+42.89
HORIZONTAL: 1"=40' VERTICAL: 1"=4'

PROFILE STA: 95+00 THRU 96+81.05
HORIZONTAL: 1"=40' VERTICAL: 1"=4'

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City of Palm Bay



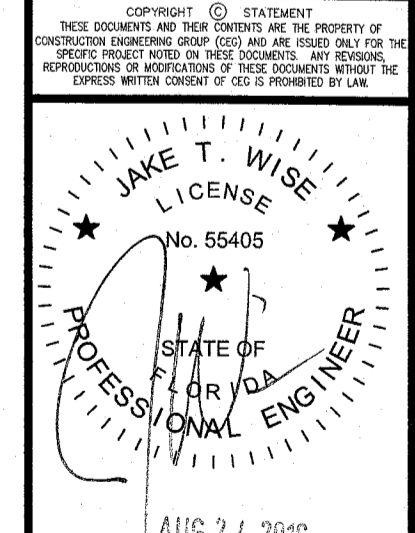
REV#	DATE	REVISION

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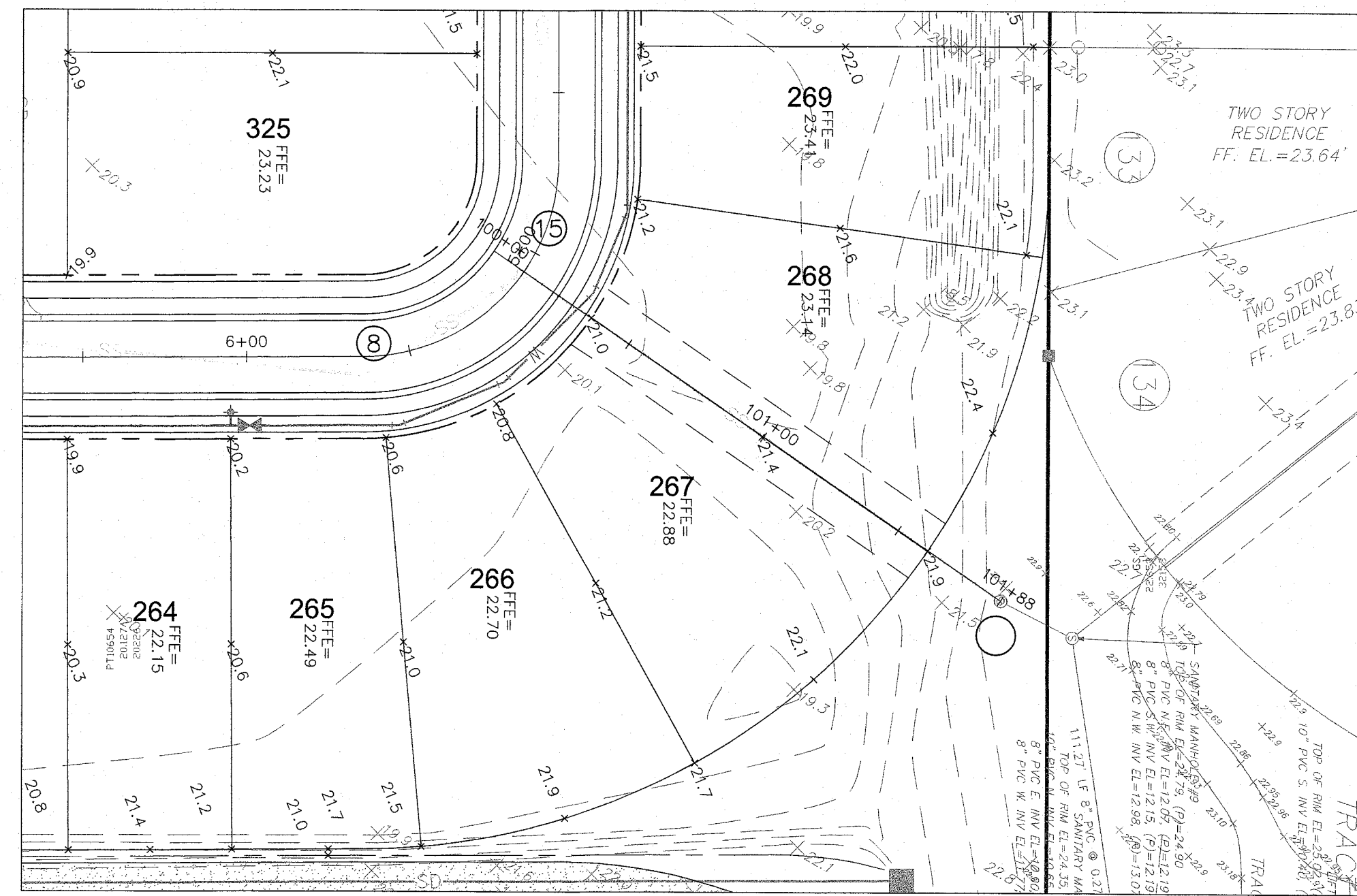
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BRENTWOOD LAKES SOUTH
D.R. HORTON
MALABAR ROAD PALM BAY, FLORIDA

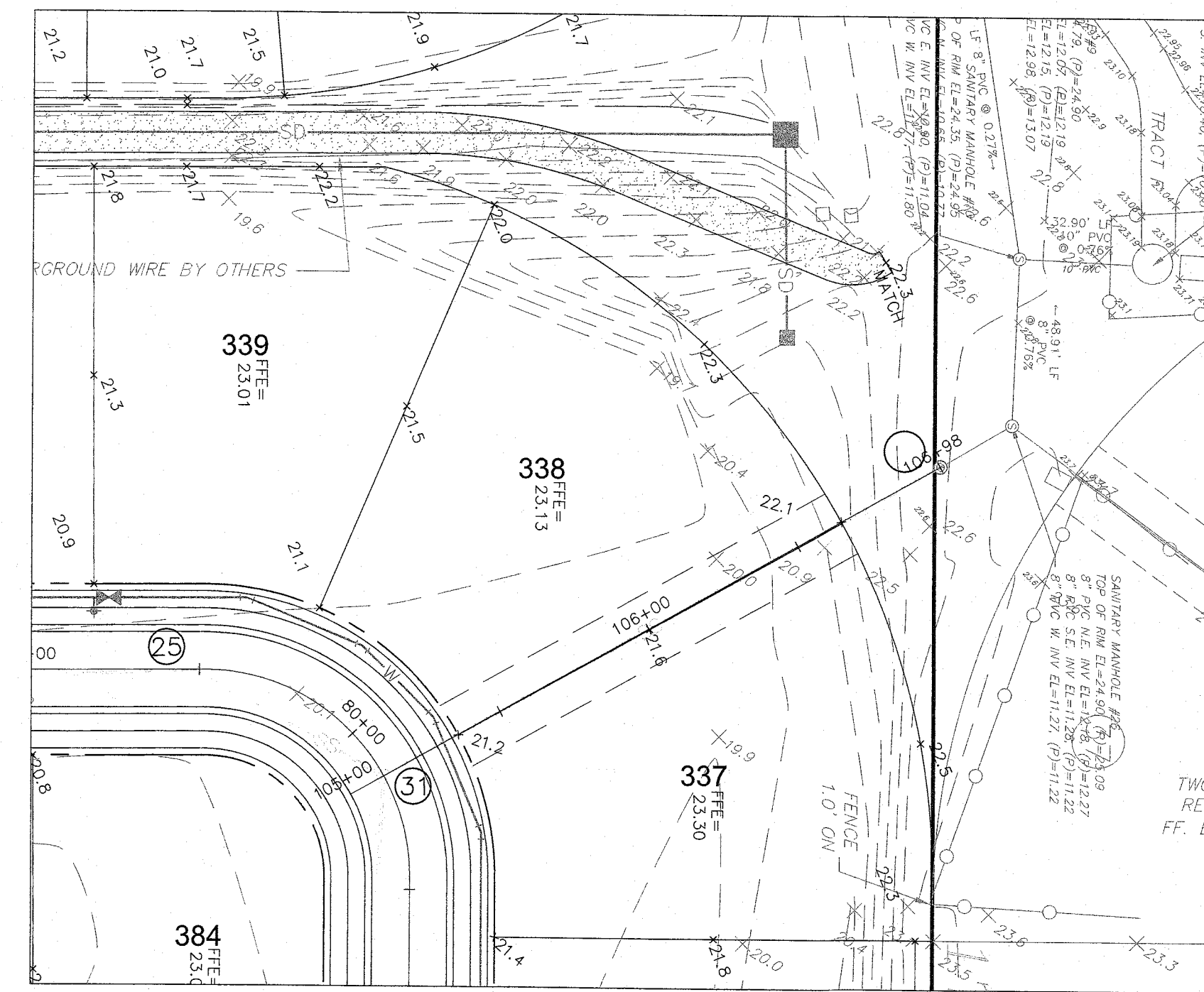
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PLAN AND PROFILE STA: 81+00 THRU 84+13.13;
90+00 THRU 92+42.89; 95+00 THRU 96+81.05



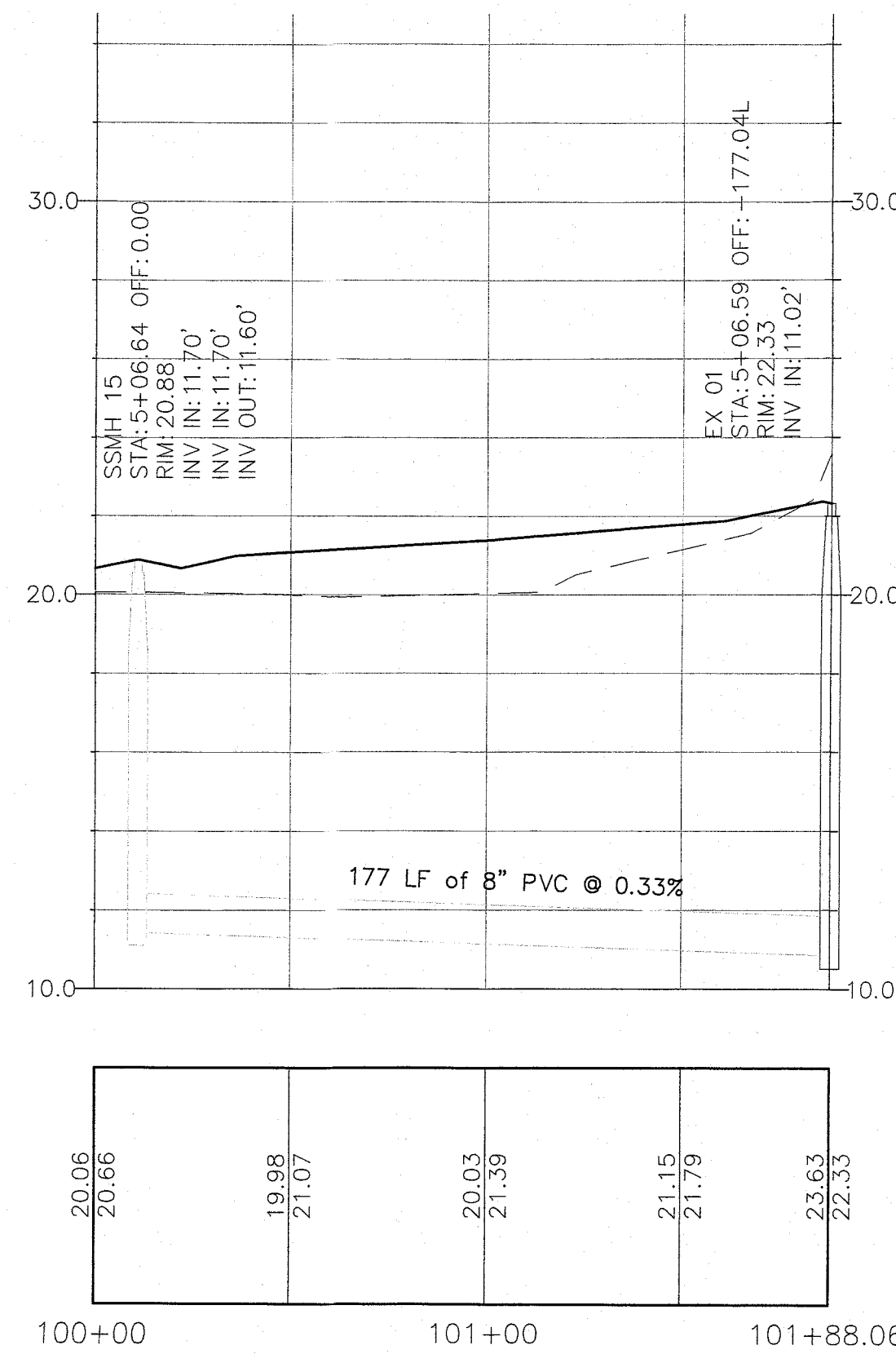
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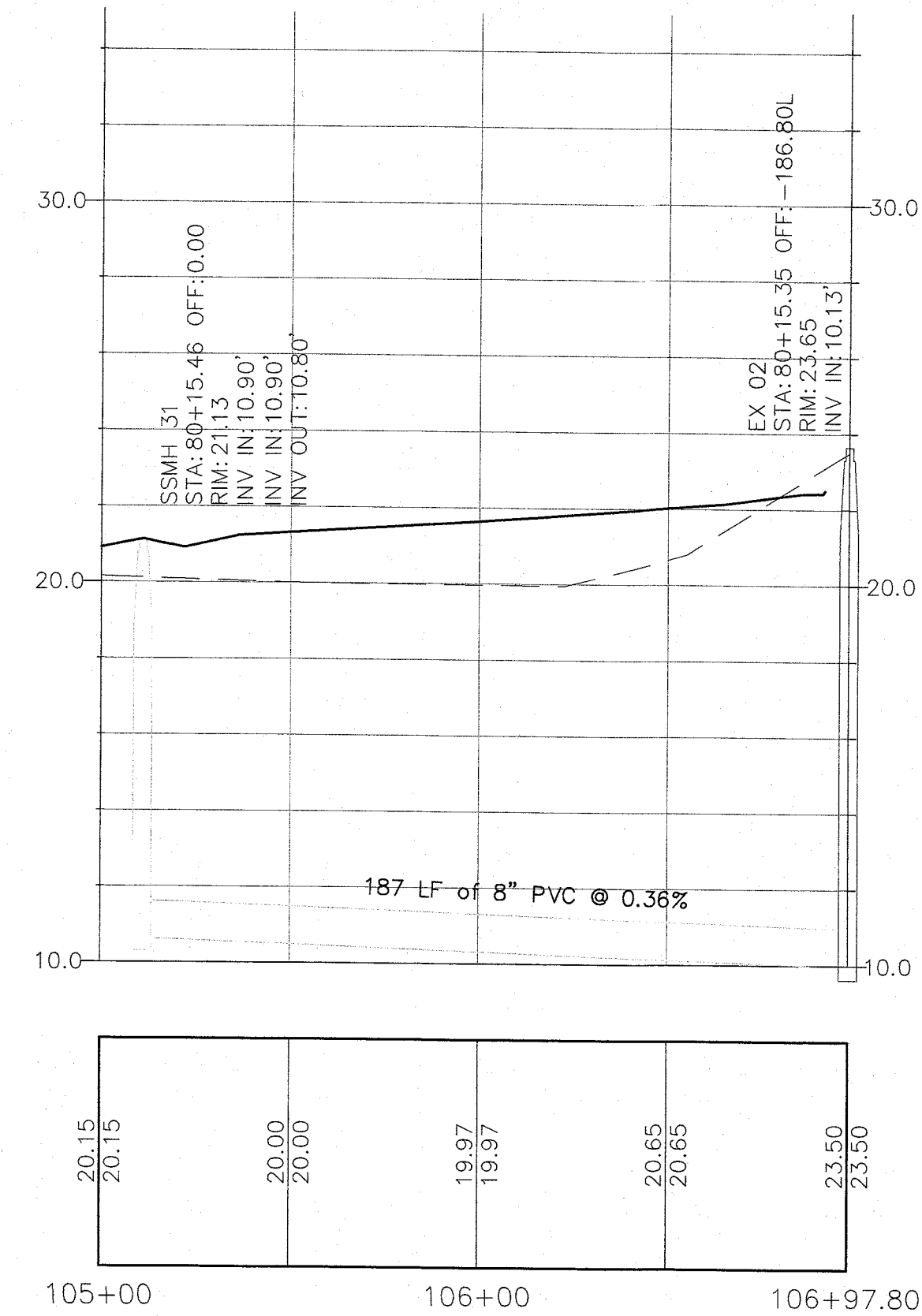
PLAN STA: 100+00 THRU 101+88.06
1"=40'



PLAN STA: 105+00 THRU 106+97.80
1"=40'



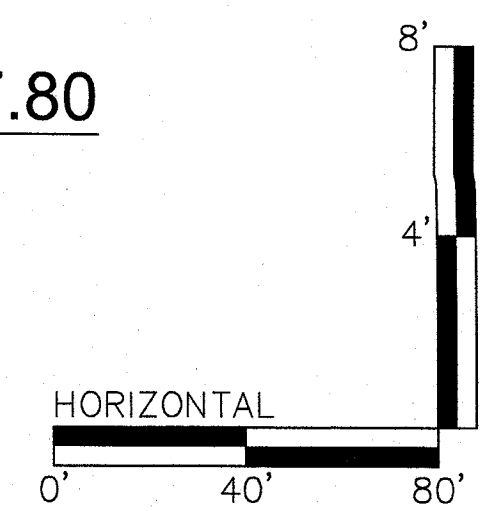
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HORIZONTAL: 1"=40' VERTICAL: 1"=4'



PROFILE STA: 105+00 THRU 106+97.80
HORIZONTAL: 1"=40' VERTICAL: 1"=4'

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AUG 26 2016
City of Palm Bay

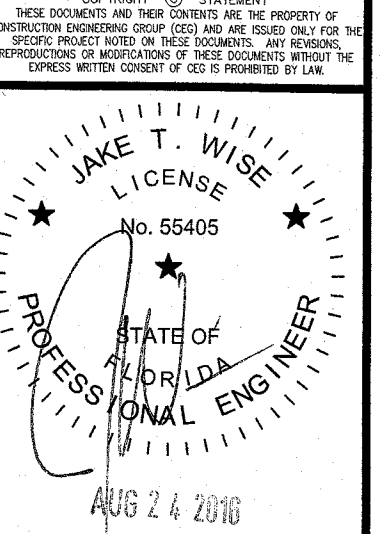


2651 eppu galle bld. suite 100
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tel. 321.233.1221
fax. 321.233.3123
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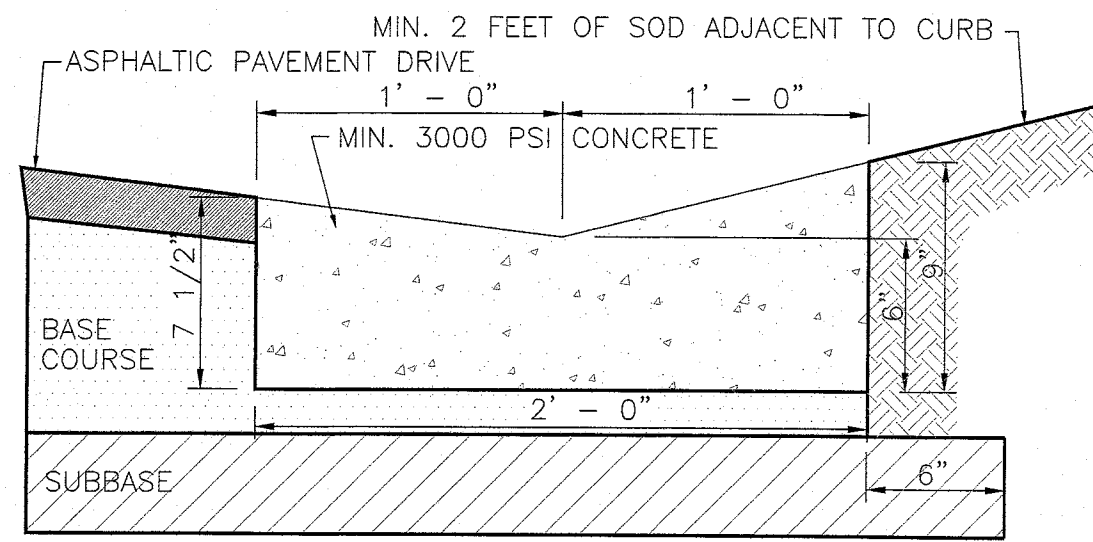
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REV#	DATE	REVISION

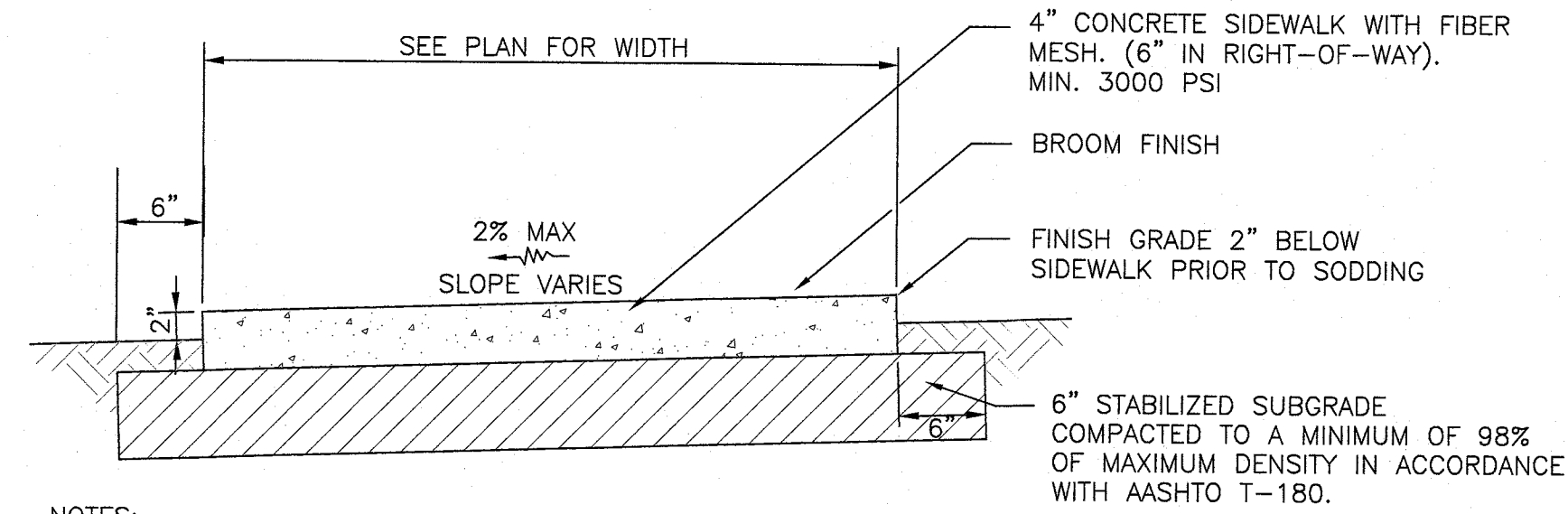
BRENTWOOD LAKES SOUTH
D.R. HORTON
MALABAR ROAD PALM BAY, FLORIDA
DRAWING TITLE
**PLAN AND PROFILE STA: 100+00 THRU 101+88.06
AND 105+00 THRU 106+97.80**



DATE	4-26-16
SCALE	H: 1"=40'; V: 1"=4'
PROJ. NO.:	160163
DESIGNED BY:	JRT
DRAWN BY:	SMB
CHECKED BY:	JTW
DRAWING NO.	C-13

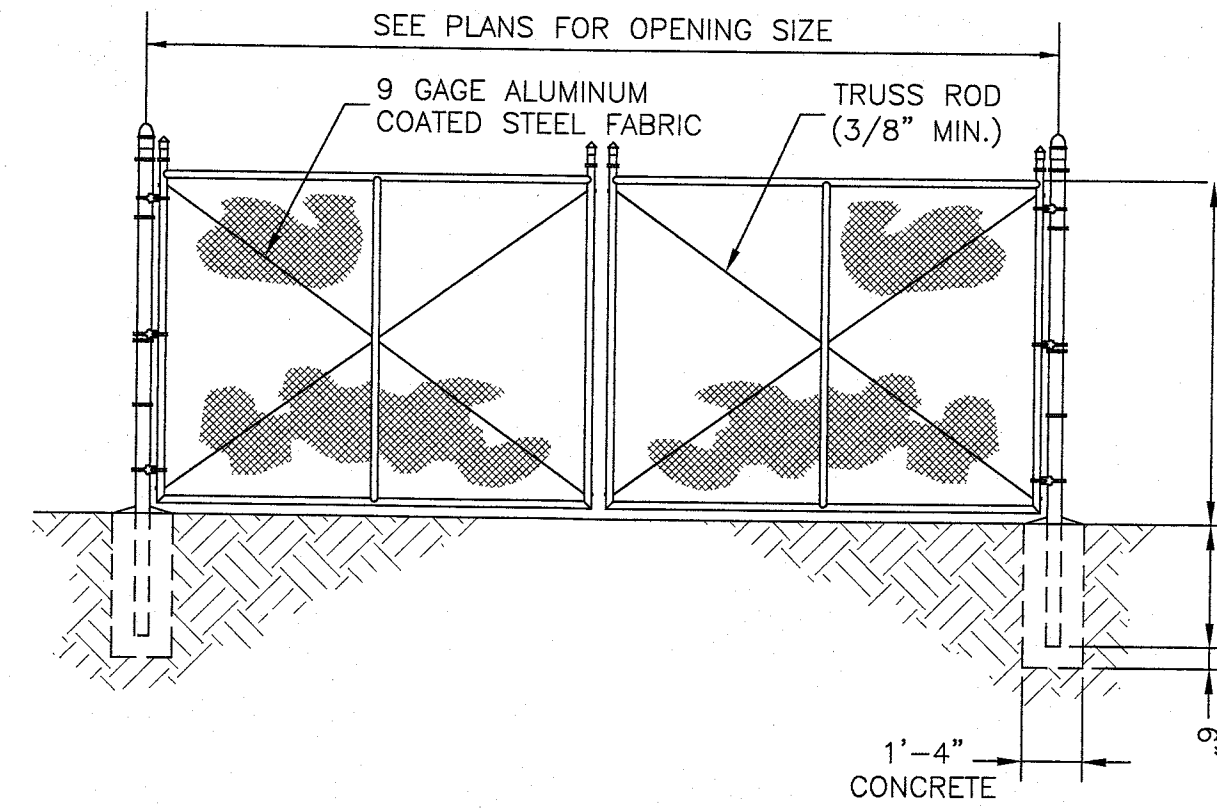


TYPICAL MIAMI CURB AND GUTTER DETAIL
NTS



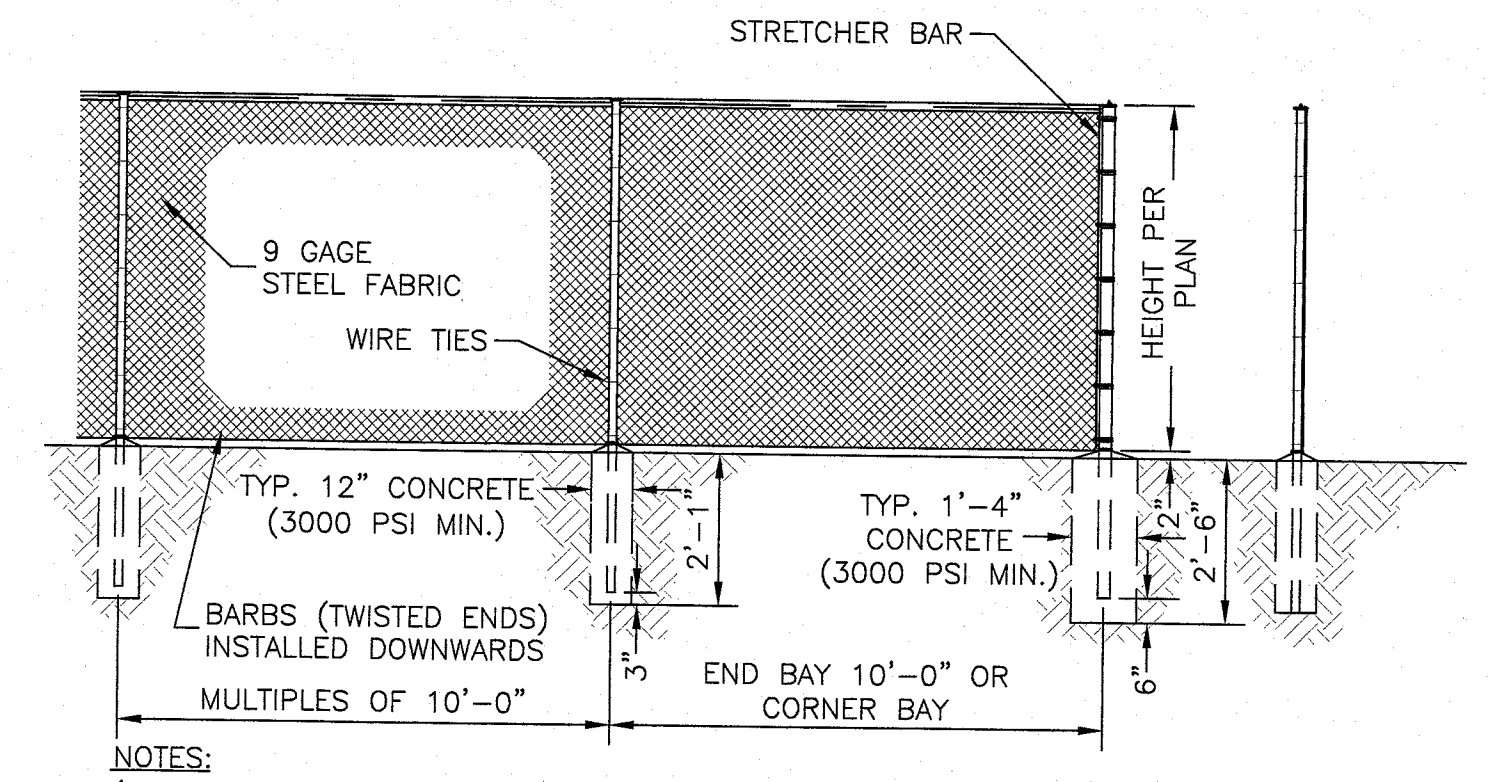
- NOTES:**
1. PROVIDE EXPANSION JOINTS AT CONNECTION POINTS OF OTHER IMPERVIOUS SURFACES INCLUDING BUT NOT LIMITED TO PAVEMENT, CURBS, OTHER SIDEWALKS, ETC.
 2. PROVIDE CONTRACTION JOINTS AT LOCATIONS PER FDOT INDEX NO. 310 FOR ENTIRE LENGTH OF SIDEWALK. CONSTRUCT JOINTS PER THIS INDEX AND FDOT REQUIREMENTS.
 3. CONSTRUCT 2" BUFFERS AT FRONT AND BACK OF SIDEWALK WITH MAXIMUM SLOPE OF 3/4" PER FOOT.
 4. CURE WITH A WHITE CURING COMPOUND PER FDOT STANDARD SPECIFICATION SECTION 925-2 APPLIED AT A RATE OF 1 GAL/200 S.F.

TYPICAL SIDEWALK DETAIL
NTS



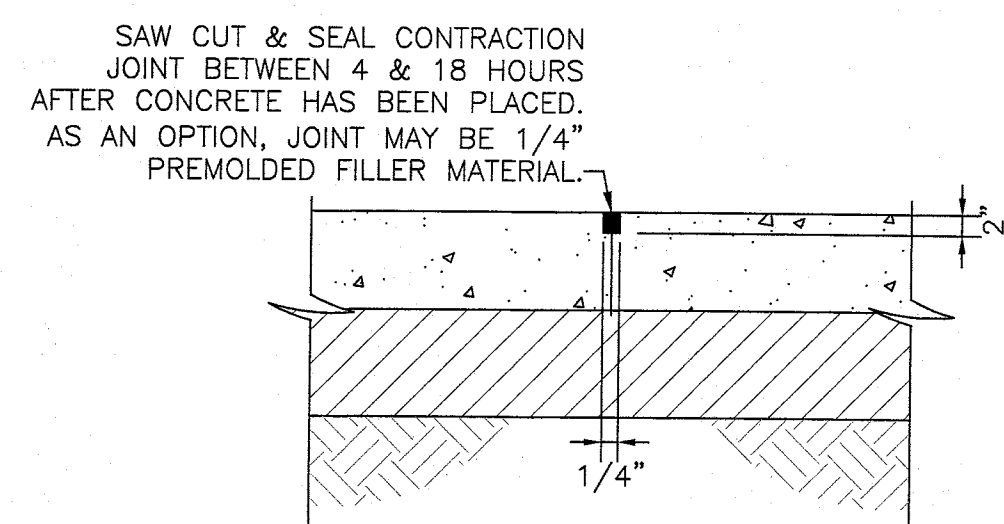
- NOTES:**
1. GATE TO BE SECURED OPEN WITH GATE STOP SET IN CONCRETE. ALL GATES TO BE PROVIDED WITH DROP BAR WITH PADLOCK AND HASP TO 1" SCHEDULE 40 IN 1'-6" X 12" CONCRETE FOOTING. GATE POSTS SHALL BE 4" OUTSIDE DIAMETER GSP SCHEDULE 40 AT GATE OPENING.
 2. FOLLOW MANUFACTURER'S INSTRUCTIONS FOR INSTALLATION.
 3. SEE FENCE DETAIL & SPECIFICATIONS FOR MORE INFORMATION.

TYPICAL CHAIN-LINK FENCE GATES DETAIL
NTS

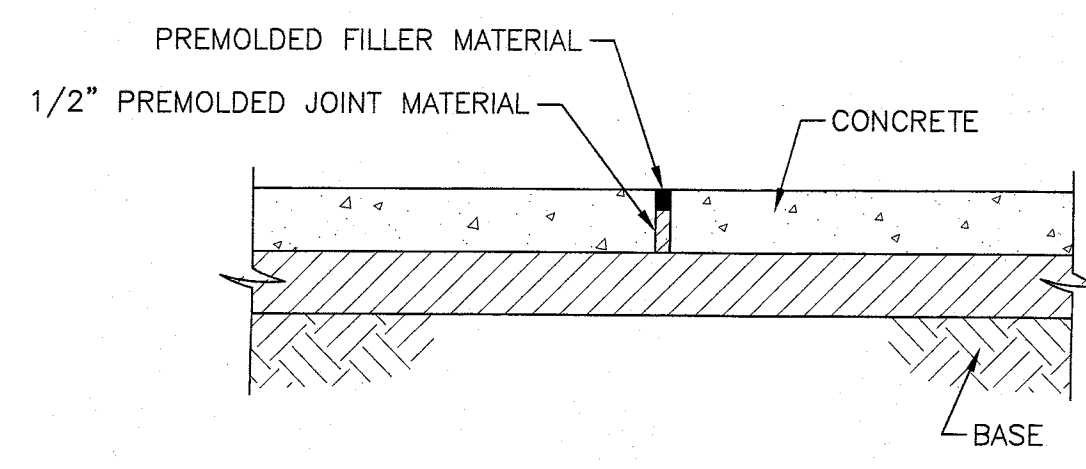


- NOTES:**
1. COATED STEEL WOVEN WIRE FABRIC TO BE STRETCHED TAUT WITH STRETCHER BARS & STRAPS AND FASTENED TOP & BOTTOM AND AT LINE POSTS WITH GALVANIZED PIG RING TIES.
 2. GATES SHALL BE PROVIDED WITH DROP BAR WITH PADLOCK AND HASP TO 1" SCHEDULE 40 IN 1'-6" X 12" CONCRETE FOOTING.
 3. CONSTRUCT PER MANUFACTURE RECOMMENDATIONS & SPECIFICATIONS.

TYPICAL CHAIN LINK FENCE DETAIL
NTS



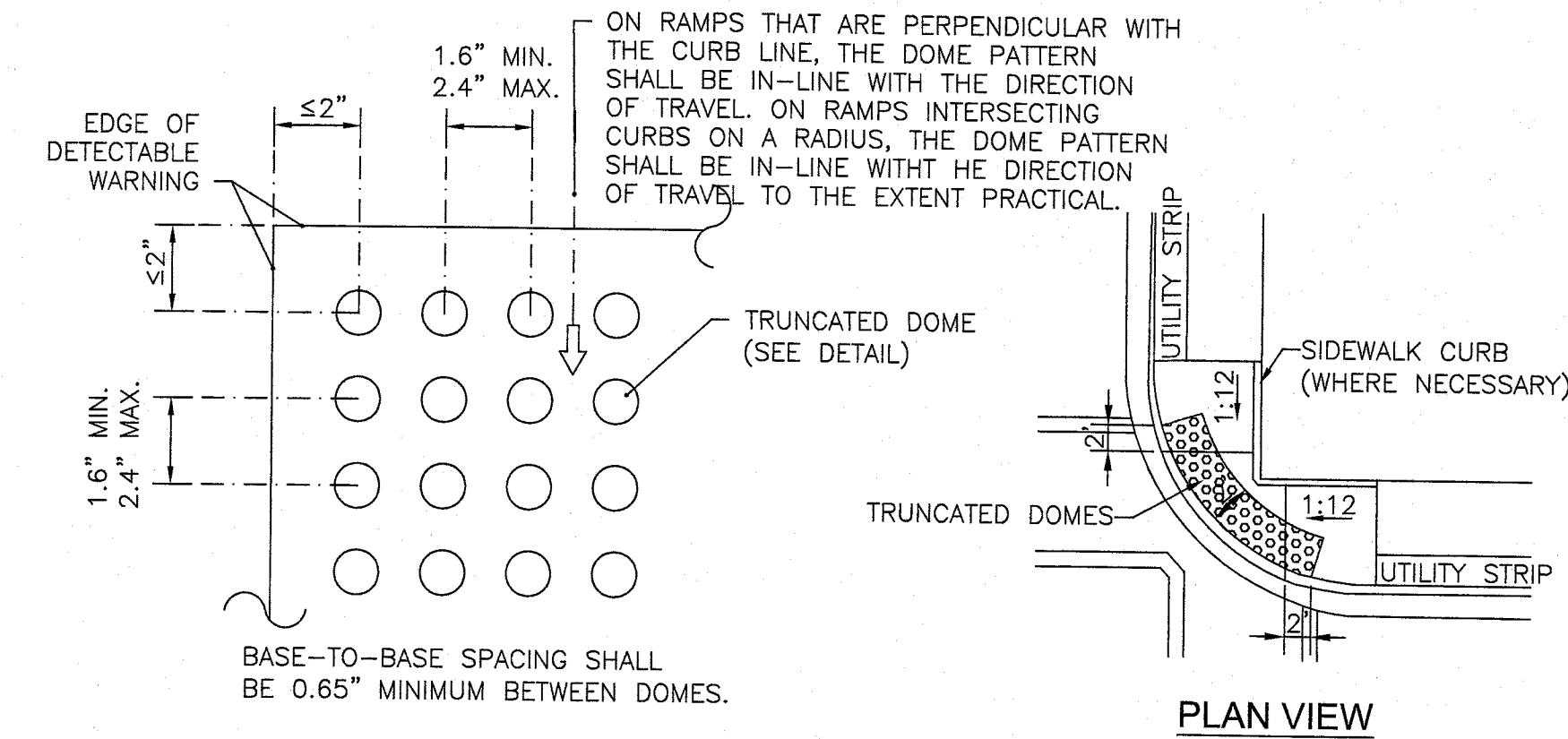
TYPICAL CONTRACTION JOINT (CJ) DETAIL
NTS



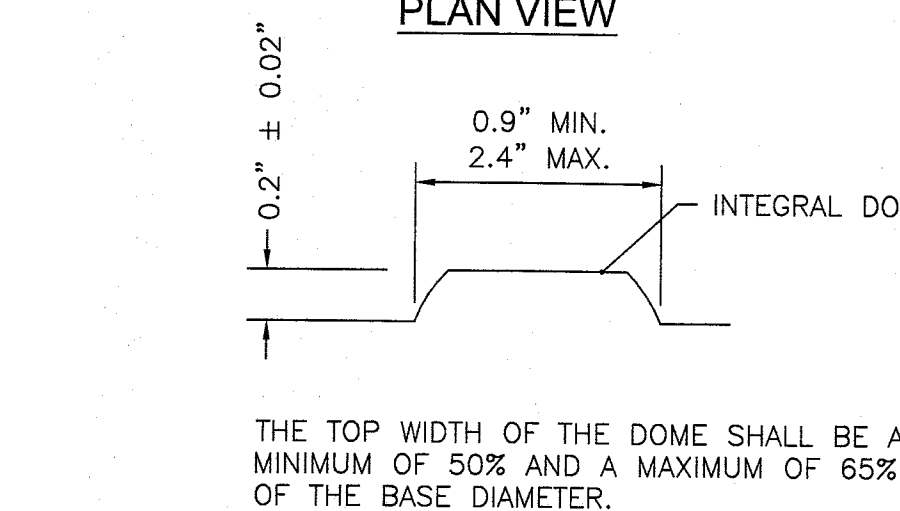
TYPICAL EXPANSION JOINT (EJ) DETAIL
NTS

GENERAL NOTES:

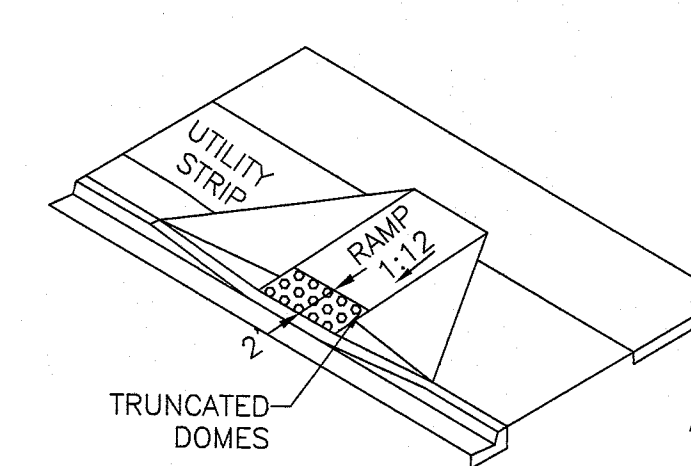
1. PUBLIC SIDEWALK CURB RAMPS SHALL BE CONSTRUCTED IN THE PUBLIC RIGHT OF WAY AT LOCATIONS THAT WILL PROVIDE CONTINUOUS UNOBSTRUCTED PEDESTRIAN CIRCULATION PATHS TO PEDESTRIAN AREAS, ELEMENTS AND FACILITIES IN THE PUBLIC RIGHT OF WAY AND TO ACCESSIBLE PEDESTRIAN ROUTES ON ADJACENT SITES. CURBED FACILITIES WITH SIDEWALKS AND THOSE WITHOUT SIDEWALKS ARE TO HAVE CURB RAMPS CONSTRUCTED AT ALL STREET INTERSECTIONS AND AT TURNOUTS THAT HAVE CURBED RETURNS. PARTIAL CURB RETURNS SHALL EXTEND TO THE LIMIT PRESCRIBED BY INDEX NO. 515 TO ACCOMMODATE CURB RAMPS. RAMPS CONSTRUCTED AT LOCATIONS WITHOUT SIDEWALKS SHALL HAVE A LANDING CONSTRUCTED AT THE TOP OF EACH RAMP, SEE SHEET 5.
2. THE LOCATION AND ORIENTATION OF CURB RAMPS SHALL BE AS SHOWN IN THE PLANS.
3. CURB RAMP RUNNING SLOPES AT UNRESTRAINED SITES SHALL NOT BE STEEPER THAN 1:12 AND ACROSS SLOPE SHALL BE 0.02 OR FLATTER. TRANSITION SLOPES SHALL NOT BE STEEPER THAN 1:12. WHEN ALTERING EXISTING PEDESTRIAN FACILITIES WHERE EXISTING SITE DEVELOPMENT PRECLUDES THE ACCOMMODATION OF A RAMP SLOPE OF 1:12, A RUNNING SLOPE BETWEEN 1:12 AND 1:10 IS PERMITTED FOR A RISE OF 6" MAXIMUM AND A RUNNING SLOPE OF BETWEEN 1:10 AND 1:8 IS PERMITTED FOR A RISE OF 3" MAXIMUM. WHERE COMPLIANCE WITH THE REQUIREMENTS FOR CROSS SLOPE CANNOT BE FULLY MET, THE MINIMUM FEASIBLE CROSS SLOPE SHALL BE PROVIDED. RAMP RUNNING SLOPE IS NOT REQUIRED TO EXCEED 8' IN LENGTH, EXCEPT AT SITES WHERE THE PLANS SPECIFY A GREATER LENGTH.
4. IF A CURB RAMP IS LOCATED WHERE PEDESTRIANS MUST WALK ACROSS THE RAMP, THEN THE WALK SHALL HAVE TRANSITION SLOPES TO THE RAMP; THE MAXIMUM SLOPE OF THE TRANSITIONS SHALL BE 1:12. RAMPS WITH CURB RETURNS MAY BE USED AT LOCATIONS WHERE OTHER IMPROVEMENTS PROVIDE GUIDANCE AWAY FROM THAT PORTION OF CURB PERPENDICULAR TO THE SIDEWALKS; IMPROVEMENTS FOR GUIDANCE ARE NOT REQUIRED AT CURB RAMPS FOR LINEAR PEDESTRIAN TRAFFIC.
5. CURB RAMP DETECTABLE WARNING SURFACES SHALL EXTEND THE FULL WIDTH OF THE RAMP AND 24" DEEP. DETECTABLE WARNING SURFACES SHALL BE CONSTRUCTED IN ACCORDANCE WITH SPECIFICATION 527. SEE SHEET 6 OF 6 FOR DETECTABLE WARNING LAYOUTS. TRANSITION SLOPES ARE NOT TO HAVE DETECTABLE WARNINGS.
6. WHERE A CURB RAMP IS CONSTRUCTED WITHIN EXISTING CURB, CURB AND GUTTER AND/OR SIDEWALK, THE EXISTING CURB OR CURB AND GUTTER SHALL BE REMOVED TO THE NEAREST JOINT BEYOND THE CURB TRANSITIONS OR TO THE EXTENT THAT NO REMAINING SECTION OF CURB OR CURB AND GUTTER IS LESS THAN 5' LONG. THE EXISTING SIDEWALK SHALL BE REMOVED TO THE NEAREST JOINT BEYOND THE TRANSITION SLOPE OR WALK AROUND OR TO THE EXTENT THAT NO REMAINING SECTION OF SIDEWALK IS LESS THAN 5' LONG. FOR DETAILS OF CONCRETE SIDEWALK SEE INDEX 310.
7. ALPHA-NUMERIC IDENTIFICATIONS ARE FOR REFERENCE (PLANS, PERMITS, ETC.)
8. PUBLIC CURB RAMPS ARE TO BE PAID FOR AS FOLLOWS: RAMPS, RECONSTRUCTED SIDEWALKS, WALK AROUND SIDEWALKS, SIDEWALK LANDINGS AND SIDEWALK CURBS ARE TO BE PAID FOR UNDER THE CONTRACT UNIT PRICE FOR SIDEWALK CONCRETE, (TYPE ---) THICK, SY. CURB TRANSITIONS AND RECONSTRUCTED CURBS ARE TO BE PAID FOR UNDER THE CONTRACT UNIT PRICE FOR THE PARENT CURB, I.E., CURB CONCRETE, (TYPE ---), LF OR CURB AND GUTTER CONCRETE, (TYPE ---), LF. WHEN A SEPARATE PAY ITEM FOR THE REMOVAL AND DISPOSAL OF EXISTING CURB, CURB AND GUTTER, AND/OR SIDEWALK IS NOT PROVIDED IN THE PLANS, THE COST OF REMOVAL AND DISPOSAL OF THESE FEATURES SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR NEW CURB, CURB AND GUTTER AND/OR SIDEWALK RESPECTIVELY.
9. ACCEPTANCE CRITERIA FOR DETECTABLE WARNINGS:
 - (A) THE RAMP DETECTABLE WARNING SURFACE SHALL BE COMPLETE AND UNIFORM IN COLOR (BRICK RED IN BREVARD COUNTY) AND TEXTURE.
 - (B) 90% OF THE INDIVIDUAL TRUNCATED DOMES MUST COMPLY WITH THE DESIGN CRITERIA.
 - (C) THERE MAY BE NO MORE THAN 4 NON-COMPLYING DOMES IN ANY ONE SQUARE FOOT OF SURFACE.
 - (D) NO TWO ADJACENT DOMES MAY BE NON-COMPLYING.
 - (E) SURFACE MAY NOT DEVIATE MORE THAN 0.10" FROM A TRUE PLANE.
10. ALL SIDEWALK SURFACES, RAMP SURFACES, AND LANDINGS WITH A CROSS SLOPE SHOWN IN THIS INDEX TO BE 0.02 MAXIMUM. ALL RAMP SURFACES AND RAMP TRANSITION SLOPES WITH A SLOPE SHOWN IN THIS INDEX TO BE 1:12 SHALL BE 1:12 MAXIMUM.



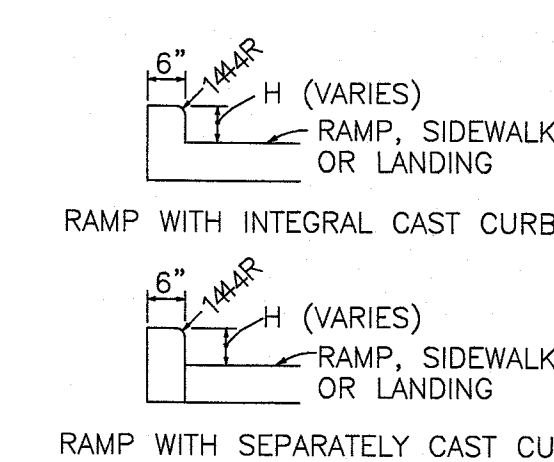
PLAN VIEW



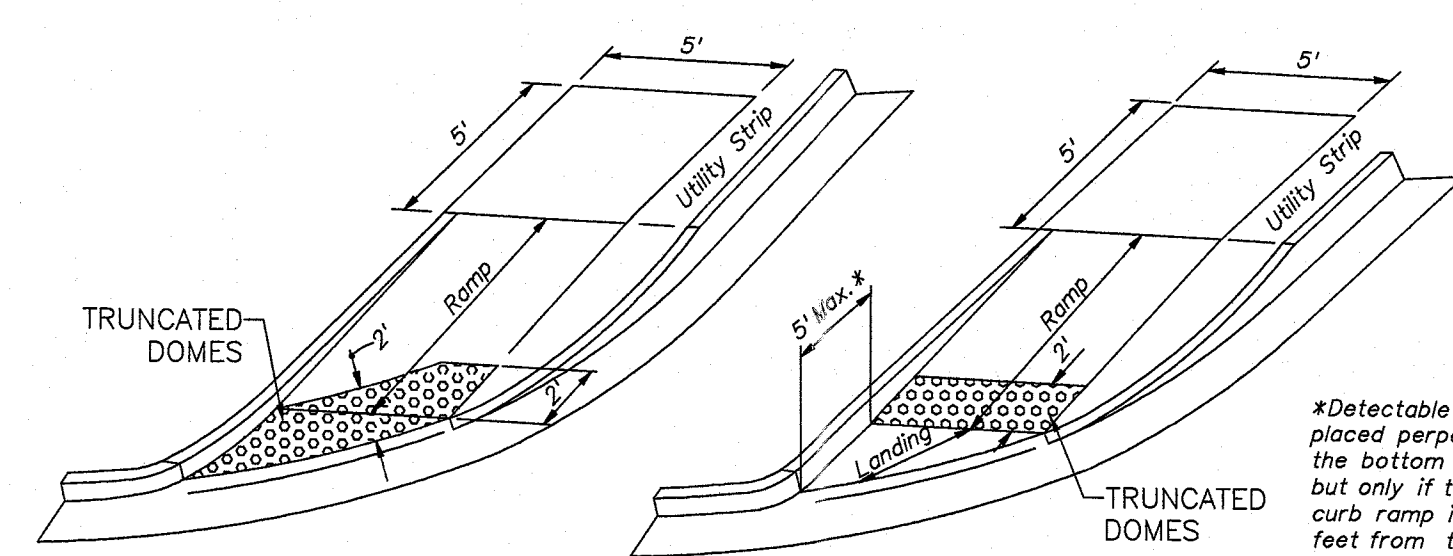
TRUNCATED DOME



PICTORIAL VIEW



RAMP CURB OPTIONS



PICTORIAL VIEW

PICTORIAL VIEW 'B'

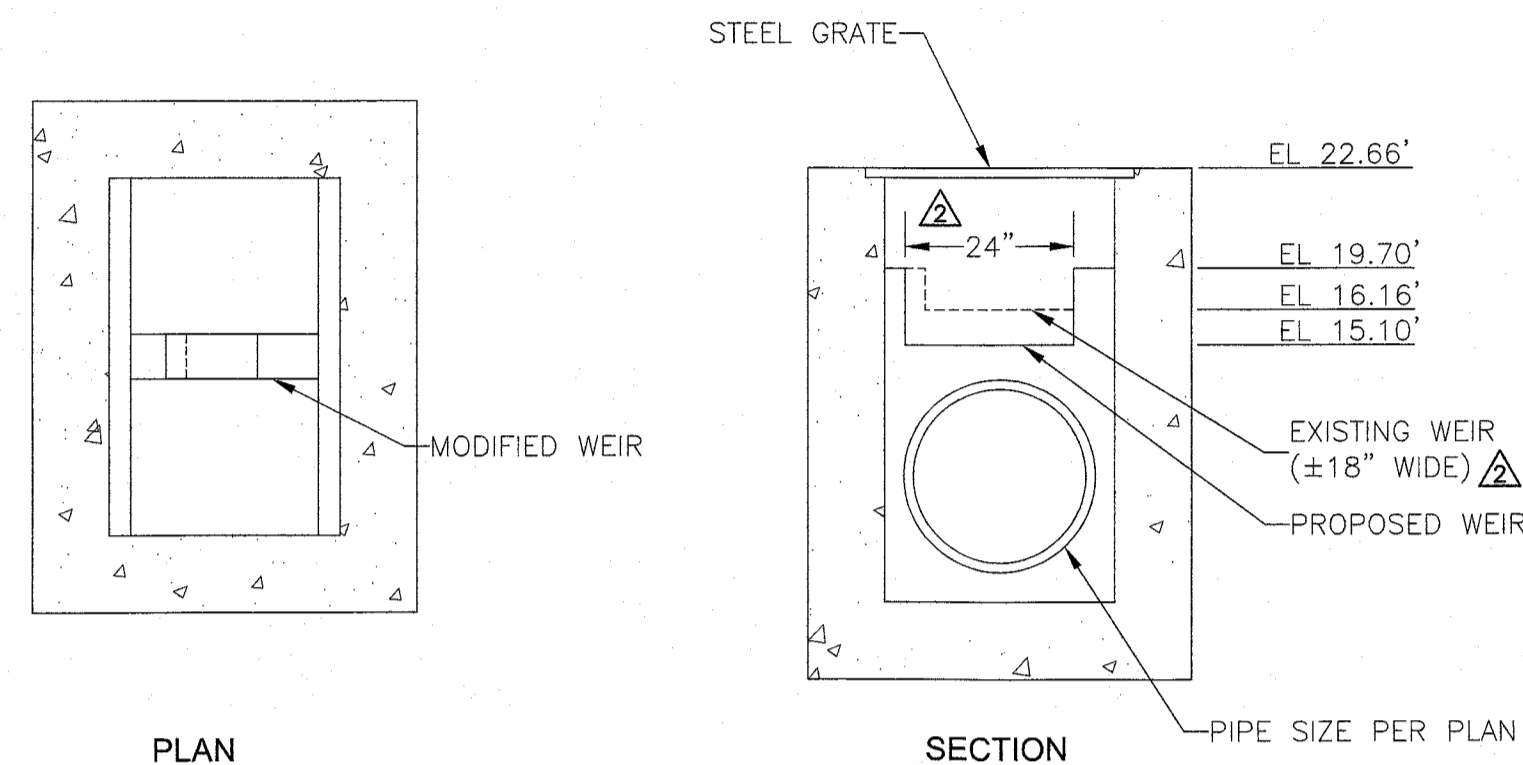
NOTE: SEE PICTORIAL VIEW 'C' ON INDEX NO. 304 SHEET 6 OF 6 FOR ANOTHER OPTION.

TYPICAL HANDICAP RAMP DETAIL
NTS

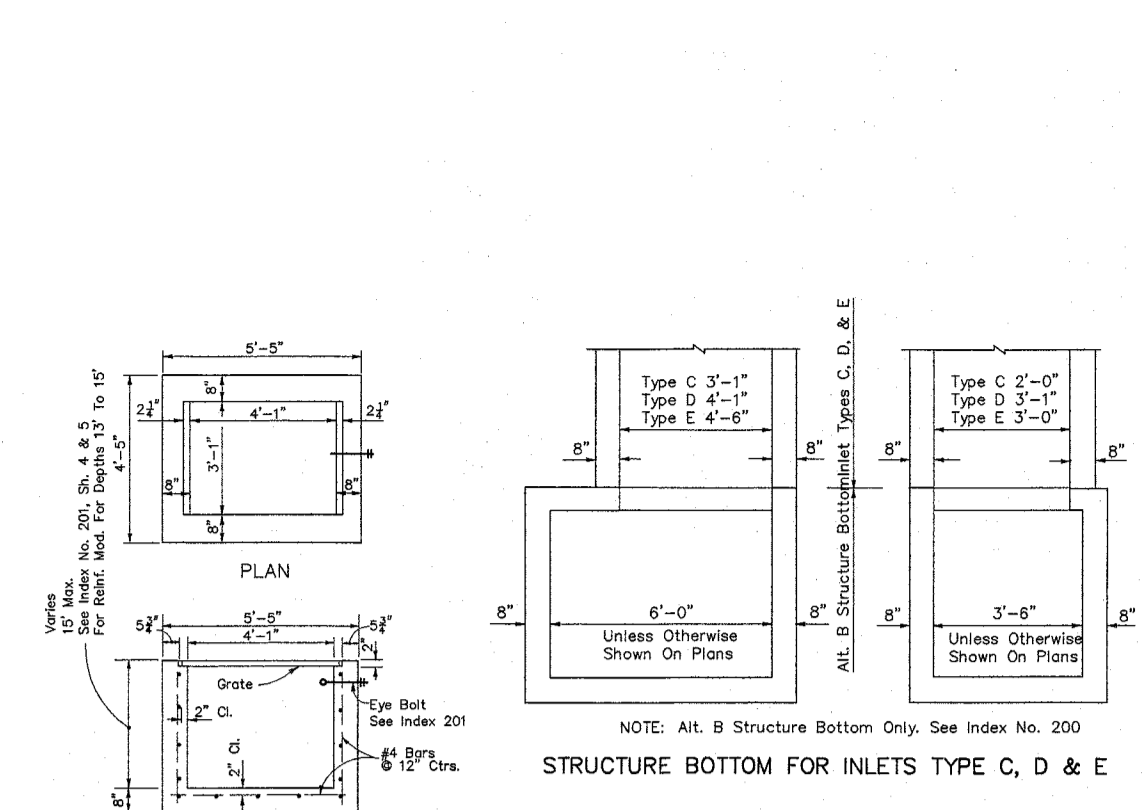
BRENTWOOD LAKES SOUTH
D.R. HORTON
MALABAR ROAD PALM BAY, FLORIDA
DRAWING TITLE
DETAILS

APPROVED FOR CONSTRUCTION
AUG 26 2016
City of Palm Bay

DATE: 4-26-16
SCALE: 1"=60'
PROJ. NO.: 160163
DESIGNED BY: JRT
DRAWN BY: SMB
CHECKED BY: JTW
DRAWING NO.



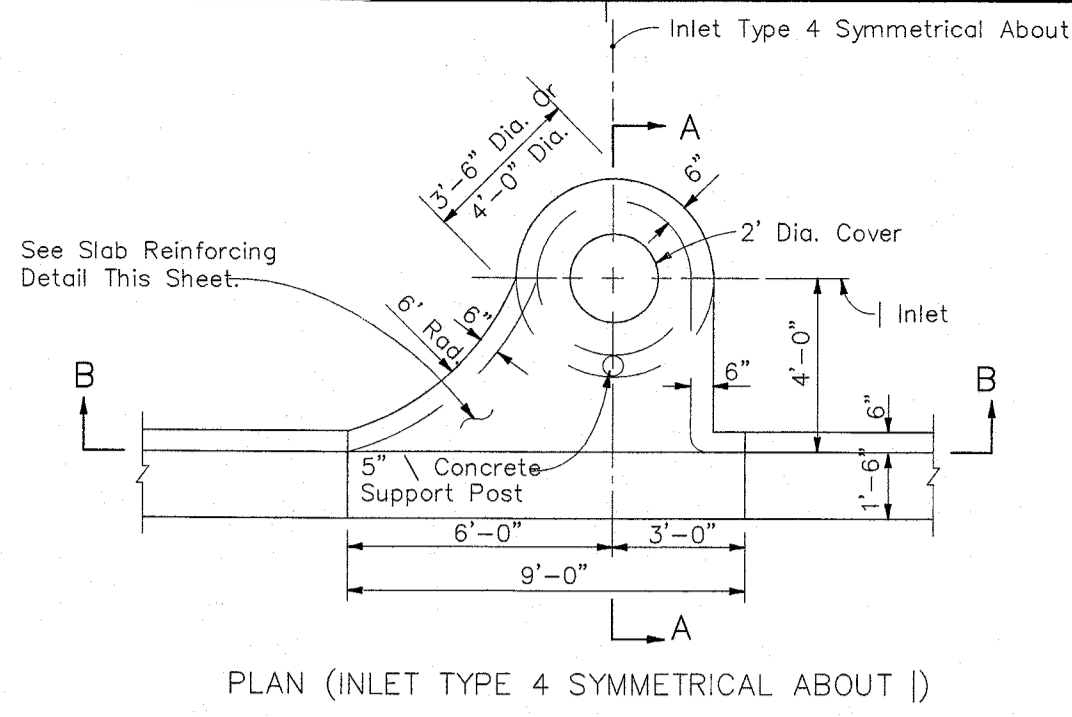
NOTE: DATUM IS NAVD 88
MODIFIED CONTROL STRUCTURE DETAIL



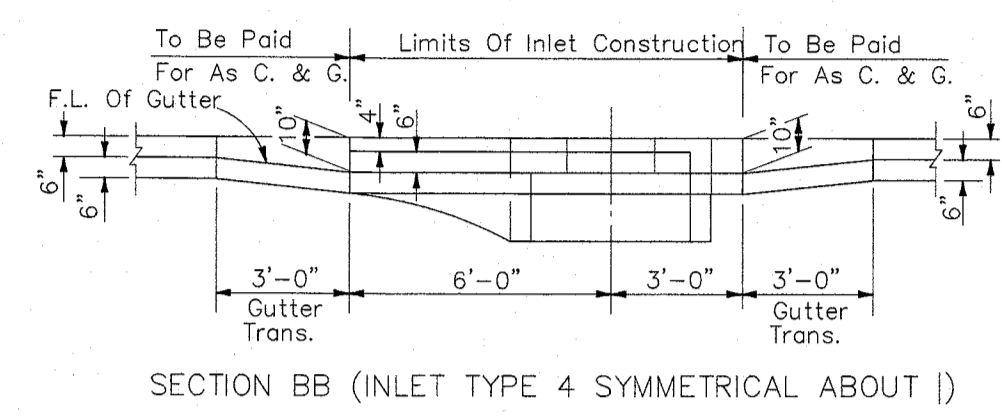
STRUCTURE BOTTOM FOR INLETS TYPE C, D & E

- GENERAL NOTES**
1. These inlets are suitable for bicycle and pedestrian areas and are to be used in ditches, medians and other areas subject to infrequent traffic loadings but are not to be placed in areas subject to heavy traffic loadings.
 2. Inlets subject to minimal traffic should be constructed without slots. Where ditches or stream beds are to be constructed with slots, slotted inlets located with roadway cross slopes and to be accessible to pedestrians shall have traversable slots. The traversable slot modification is not available to inlet Type H. Slots may be constructed at either or both ends or shown on plans.
 3. Steel grates are to be used on all inlets where bicycle traffic is anticipated. Steel grates are to be used on all inlets with traversable slots. Either cast iron or steel grates may be used on inlets without slots where bicycle traffic is not anticipated. Either cast iron or steel grates may be used on all inlets with non-traversable slots. Subject to the selection described above, when Alternative G grates is specified in the plans, either the steel grate, not slotted grates other than Alternative G, or the cast iron grate may be used, unless the plans stipulate the particular type.
 4. Recommended maximum pipe sizes shown are for concrete pipe. Pipe sizes larger than those recommended must be checked for fit.
 5. All exposed corners and edges of concrete are to be chamfered.
 6. Treatment to be used on inlets without slots and inlets with non-traversable slots only when called for in the plans, but required on all traversable slot inlets. Call to be included in contract unit price for inlets. Concrete areas on the interior only.
 7. Traversable slots constructed in existing inlets shall be paid for in inlet portion. One shall include the cost for slot supports, string and any required reinforcement grates.
 8. Soding to be used on all inlets not located in paved areas and paid for under contract unit price for Soding ST.
 9. For supplementary details see index No. 201.

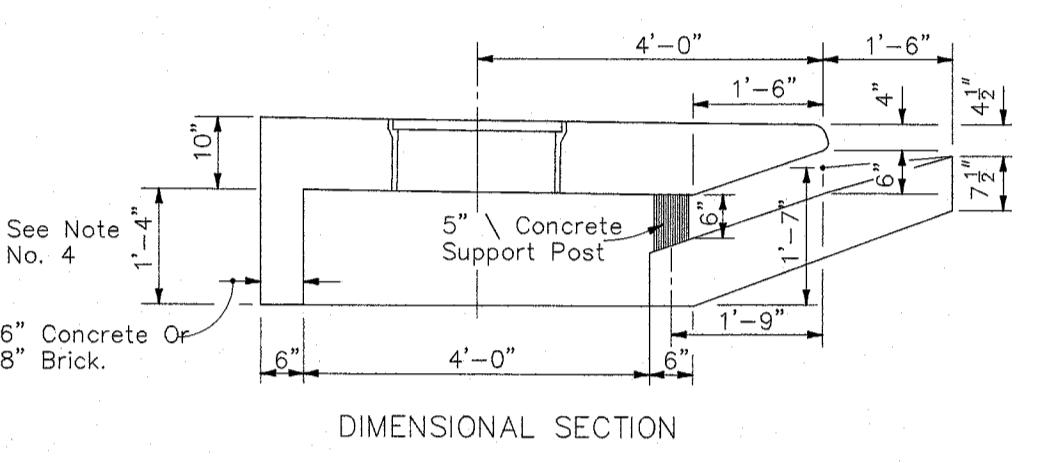
TYPICAL FDOT TYPE 'D' INLET DETAIL



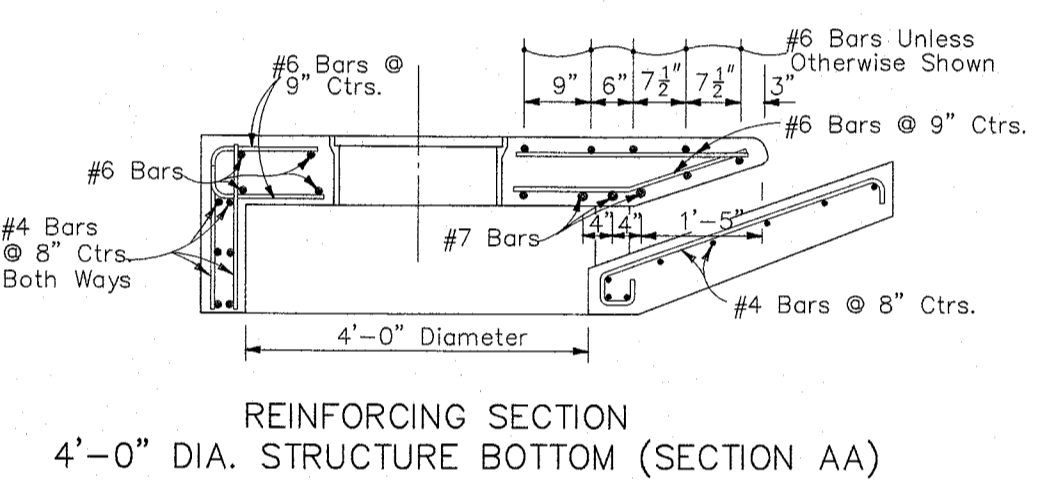
PLAN (INLET TYPE 4 SYMMETRICAL ABOUT I)



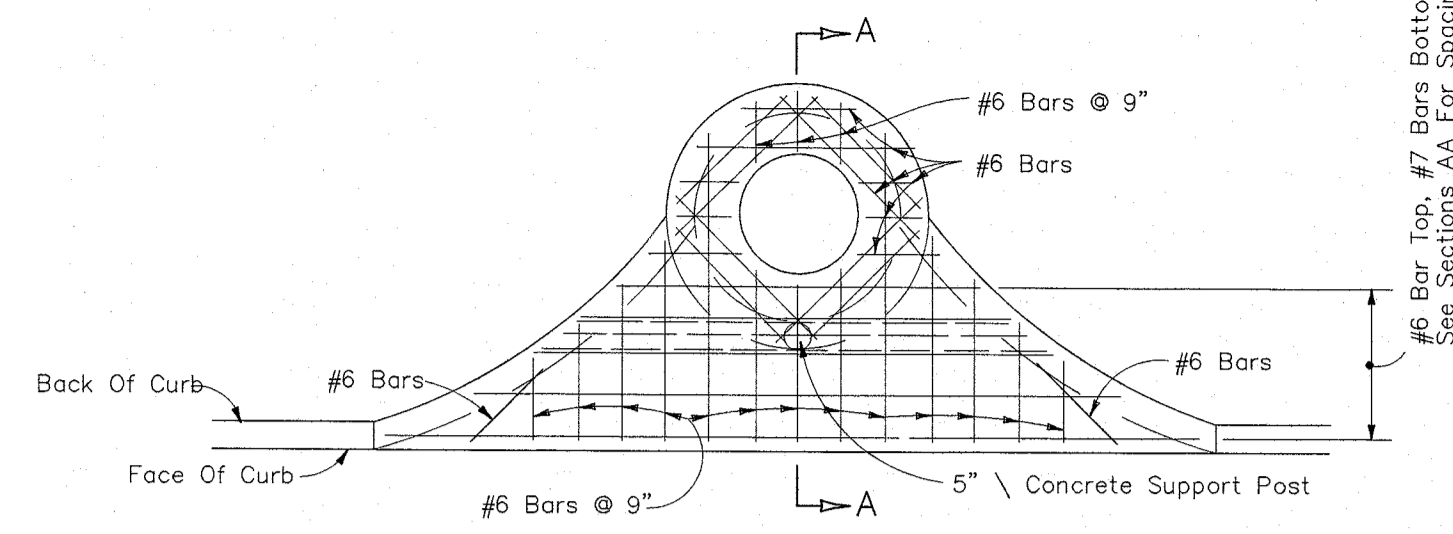
SECTION BB (INLET TYPE 4 SYMMETRICAL ABOUT I)



INLETS TYPES 3 AND 4

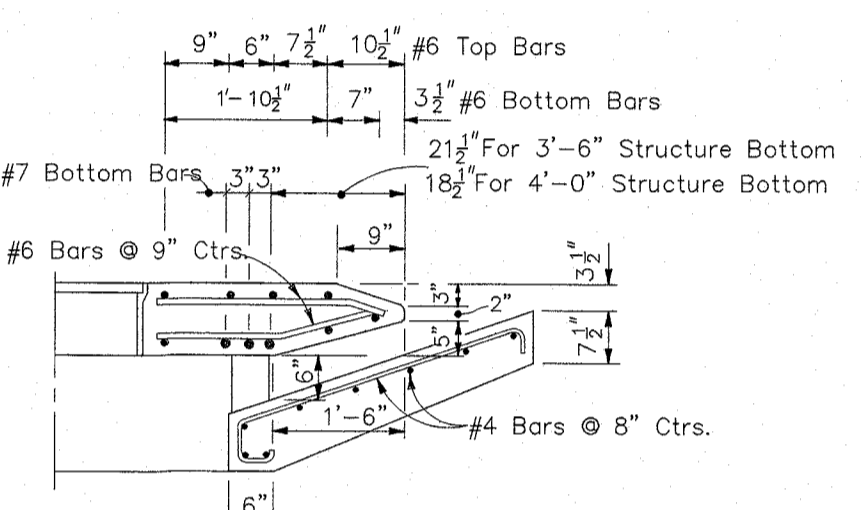


REINFORCING SECTION
 4'-0" DIA. STRUCTURE BOTTOM (SECTION AA)

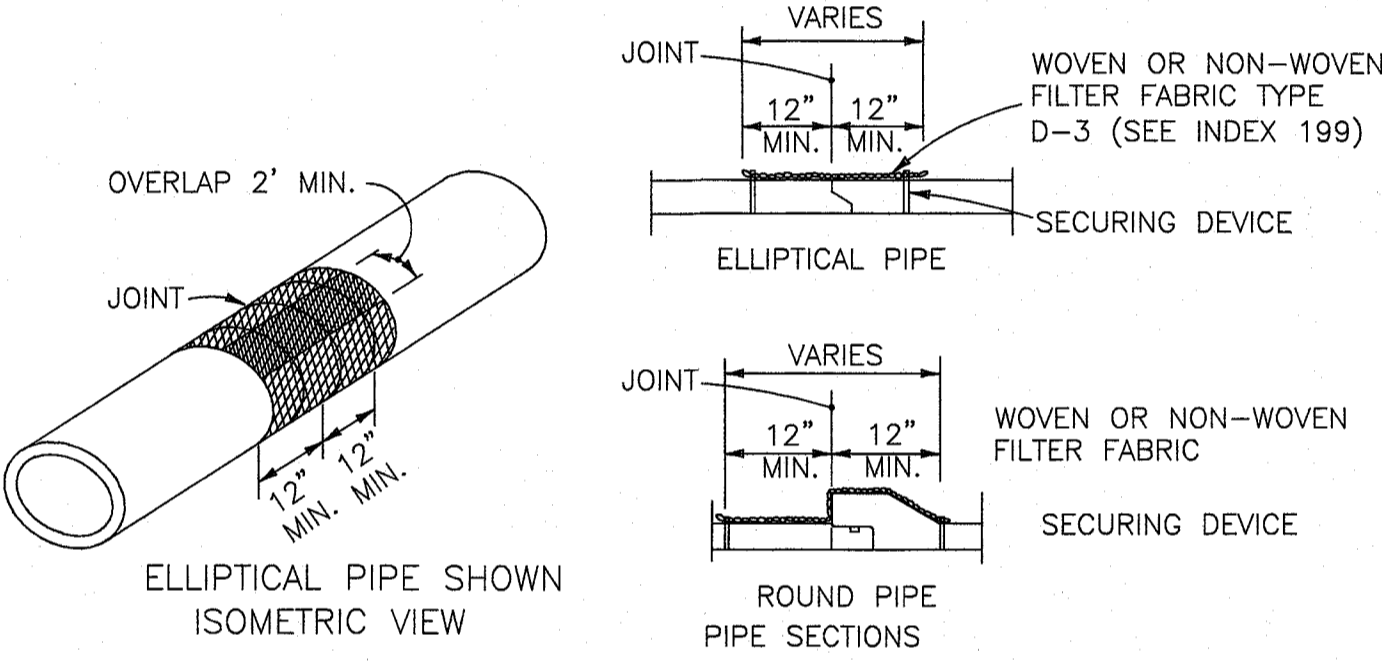


INLETS TYPES 2 AND 4
 SLAB REINFORCING

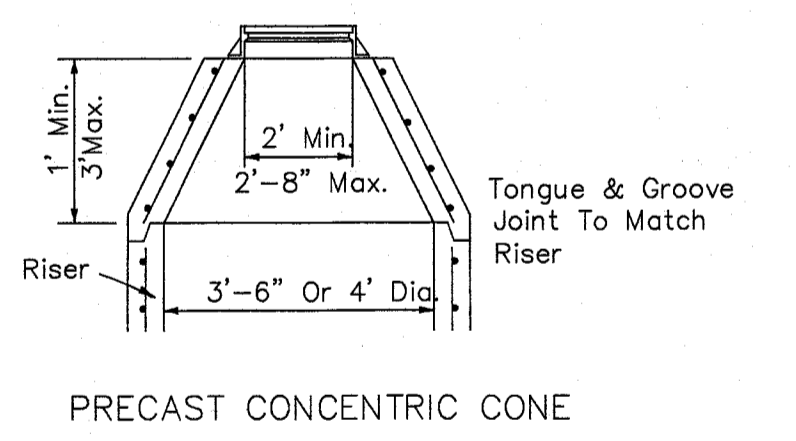
- GENERAL NOTES**
1. The finished grade and slope of the inlet tops are to conform with the finished cross slope and grade of the proposed sidewalk and/or border.
 2. When inlets are to be constructed on a curve, refer to the plans to determine the radius and, where necessary, modify the inlet details accordingly. Bend steel when necessary.
 3. All steel in inlet top shall have a minimum cover unless otherwise shown. Inlet tops shall be either cast-in-place or precast concrete.
 4. The rear wall portion of inlet tops Types 1, 2, 3 & 4 may be constructed with brick. Dowels to top slab required.
 5. For supplemental details see index No. 201.
 6. Only round concrete support post will be acceptable.
 7. These inlets are to be used with Curb and Gutter Types E and F. Locate outside of pedestrian crosswalk where practical.
 8. For structure bottoms see index No. 200.
 9. Inlet to be paid for under the contract unit price for Inlets (Curb) (Type), Each.



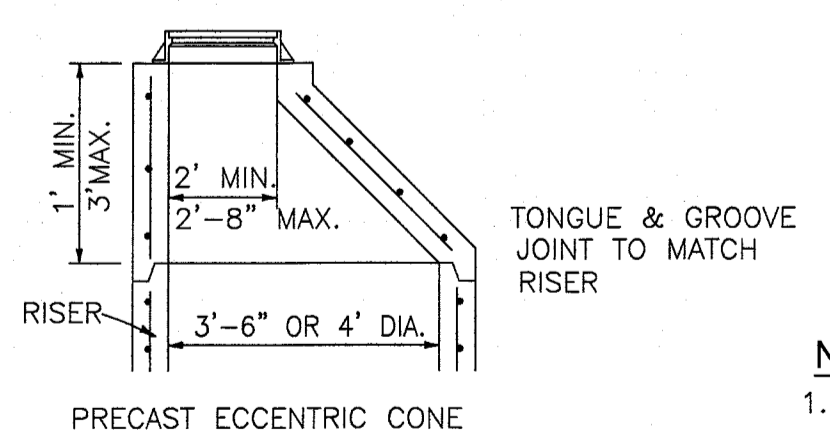
DIMENSION & REINFORCING HALF SECTION
 TYPES A & E CURB (HALF SECTION AA)
 (TYPE E GUTTER SHOWN)



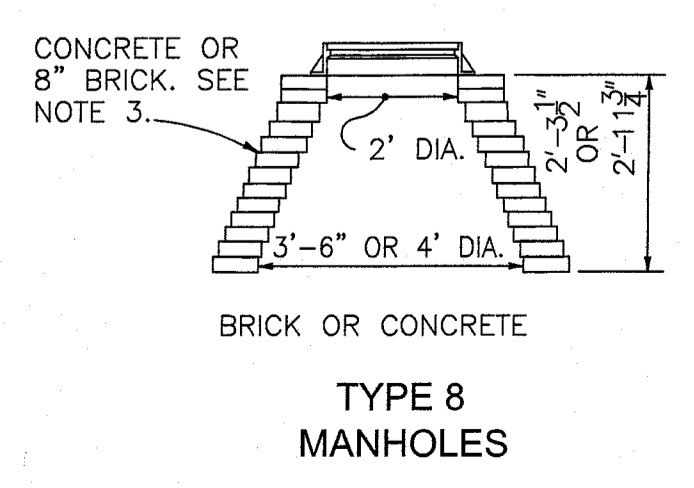
TYPICAL FILTER FABRIC JACKET DETAIL



PRECAST CONCENTRIC CONE



PRECAST ECCENTRIC CONE

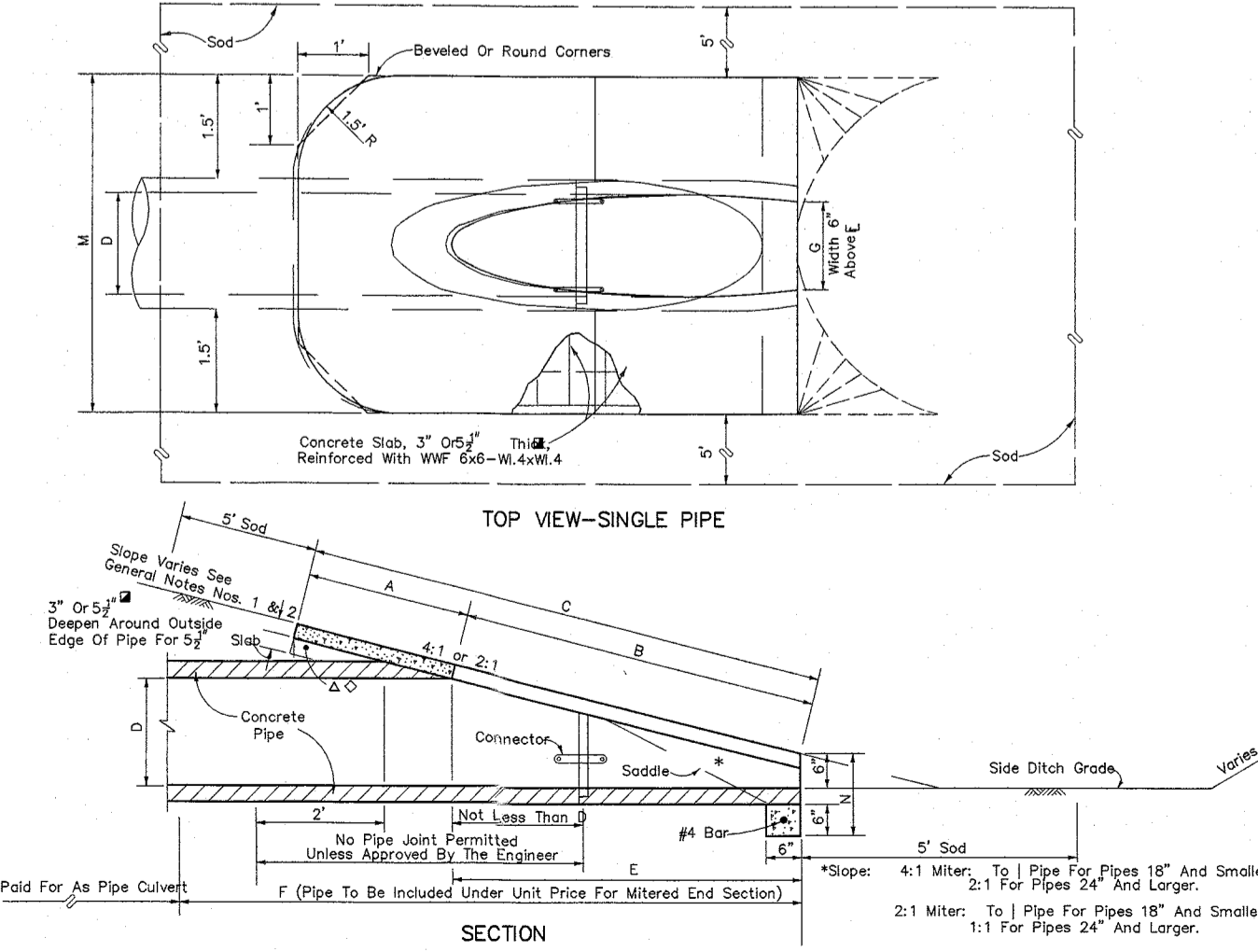


TYPE 8
 MANHOLES

TYPICAL J-8 MANHOLE DETAIL

- NOTES (TOPS)**
1. MANHOLE TOP TYPE 7 SLABS SHALL BE OF CLASS ~ CONCRETE. CONCRETE AS SPECIFIED IN ASTM C-478 MAY BE USED FOR PRECAST UNITS; SEE GENERAL NOTE NO. 3.
 2. MANHOLE TOP TYPE 7 SLABS MAY BE OF CAST-IN-PLACE OR PRECAST CONSTRUCTION. THE OPTIONAL KEY IS FOR PRECAST TOPS AND IN LIEU OF DOWELS, FRAME AND SLAB OPENINGS ARE TO BE OMITTED WHEN TOP IS USED OVER A JUNCTION BOX. FRAMES CAN BE ADJUSTED WITH FROM ONE TO SIX COURSES OF BRICK.
 3. MANHOLE TOP TYPE 8 MAY BE OF CAST-IN-PLACE OR PRECAST CONCRETE CONSTRUCTION OR BRICK CONSTRUCTION. FOR CONCRETE CONSTRUCTION, THE CONCRETE AND STEEL REINFORCEMENT SHALL BE THE SAME AS THE SUPPORTING WALL UNIT. AN ECCENTRIC CONE MAY BE USED.
 4. MANHOLE TOPS SHALL BE SECURED TO STRUCTURES BY OPTIONAL CONSTRUCTION JOINTS AS SHOWN ON SHEET 3 OF 6.

D	X	A	B	C	E	F	G	DIMENSIONS AND QUANTITIES				SODDING (SQ. YDS.)			
								Single	Double	Triple	Quad	Single	Double	Triple	Quad
12"	12"	12"	12"	12"	12"	12"	12"	1.20	2.40	3.60	4.80	1.20	2.40	3.60	4.80
18"	18"	18"	18"	18"	18"	18"	18"	1.80	3.60	5.40	7.20	1.80	3.60	5.40	7.20
24"	24"	24"	24"	24"	24"	24"	24"	2.40	4.80	7.20	9.60	2.40	4.80	7.20	9.60
30"	30"	30"	30"	30"	30"	30"	30"	3.00	6.00	9.00	12.00	3.00	6.00	9.00	12.00
36"	36"	36"	36"	36"	36"	36"	36"	3.60	7.20	10.80	14.40	3.60	7.20	10.80	14.40
42"	42"	42"	42"	42"	42"	42"	42"	4.20	8.40	12.60	16.80	4.20	8.40	12.60	16.80
48"	48"	48"	48"	48"	48"	48"	48"	4.80	9.60	14.40	19.20	4.80	9.60	14.40	19.20
54"	54"	54"	54"	54"	54"	54"	54"	5.40	10.80	16.20	21.60	5.40	10.80	16.20	21.60
60"	60"	60"	60"	60"	60"	60"	60"	6.00	12.00	18.00	24.00	6.00	12.00	18.00	24.00



TYPICAL FDOT MITERED END SECTION DETAIL

- GENERAL NOTES**
1. Mitered sections for pipe sizes 15", 18" and 24" round or equivalent pipe arch or elliptical pipe are permitted within the clear zone. When the slope intersection permits, the mitered end section may be located with the culvert opening as close as 8' beyond the outside edge of the shoulder.
 2. Slope and ditch transitions shall be used when the normal roadway slope must be flattened to place and section outside clear zone. See detail left.
 3. The reinforced concrete slab shall be constructed for all sizes of cross drain pipe and cast in place with Class ~ concrete. Slab shall be 2" thick unless 3" thickness called for in plans.
 4. Concrete pipe used in the assembly of mitered and sections shall be selective lengths to avoid excessive connections.
 5. Corrugated metal pipe galvanizing that is damaged during beveling and perforating for mitered end section shall be repaired.
 6. That portion of corrugated metal pipe in direct contact with the concrete slab shall be bituminous coated prior to placing of the concrete.
 7. Unless otherwise designated in the plans, concrete pipe mitered end sections may be used with any type of cross drain pipe; corrugated aluminum mitered end sections may be used with any type of cross drain pipe except ductum pipe, and, corrugated aluminum mitered end sections may be used with any type of cross drain pipe except steel pipe. When bituminous coated metal pipe is specified for cross drain pipe, mitered end sections shall be constructed with the pipe or concrete pipe.
 8. When the mitered end section pipe is dissimilar to the cross drain pipe, a concrete jacket shall be constructed in accordance with Standard Index 280.
 9. When selecting multiple cross drain pipes are spaced other than the dimensions shown in this detail, or have non-parallel axes, or have non-uniform sections, the mitered end sections will be constructed either separately as single pipe mitered end sections, or collectively as multiple pipe sections as directed by the Engineer; however, mitered end sections will be parallel for each based on each independent pipe end.
 10. The cost of all pipe(s), fasteners, reinforcing, connectors, anchors, concrete, sealants, jackets, and coupling bands shall be included in the cost for the mitered end section. Soding shall be paid for separately under the contract unit price of Soding, ST.
 11. Mitered end sections shall be paid for under the contract unit price for Mitered End Section (METS). Each, based on each independent pipe end. Mitered end sections use for detour/reinforcement units are to be paid for under the contract unit price for Mitered End Section (METS), Each.

Approved For Construction

AUG 2 6 2016
 City of Palm Bay

REVISION

REV#	DATE	DESCRIPTION
1	6/14/16	PALM BAY AND SURVIMD COMMENTS
2	7/01/16	SURVIMD COMMENTS

2651 Eau Gallie Blvd., Suite 100
 Melbourne, FL 32935
 Tel: 321.253.1212
 Fax: 321.253.3125
 www.cobainetna.com
 license #00087

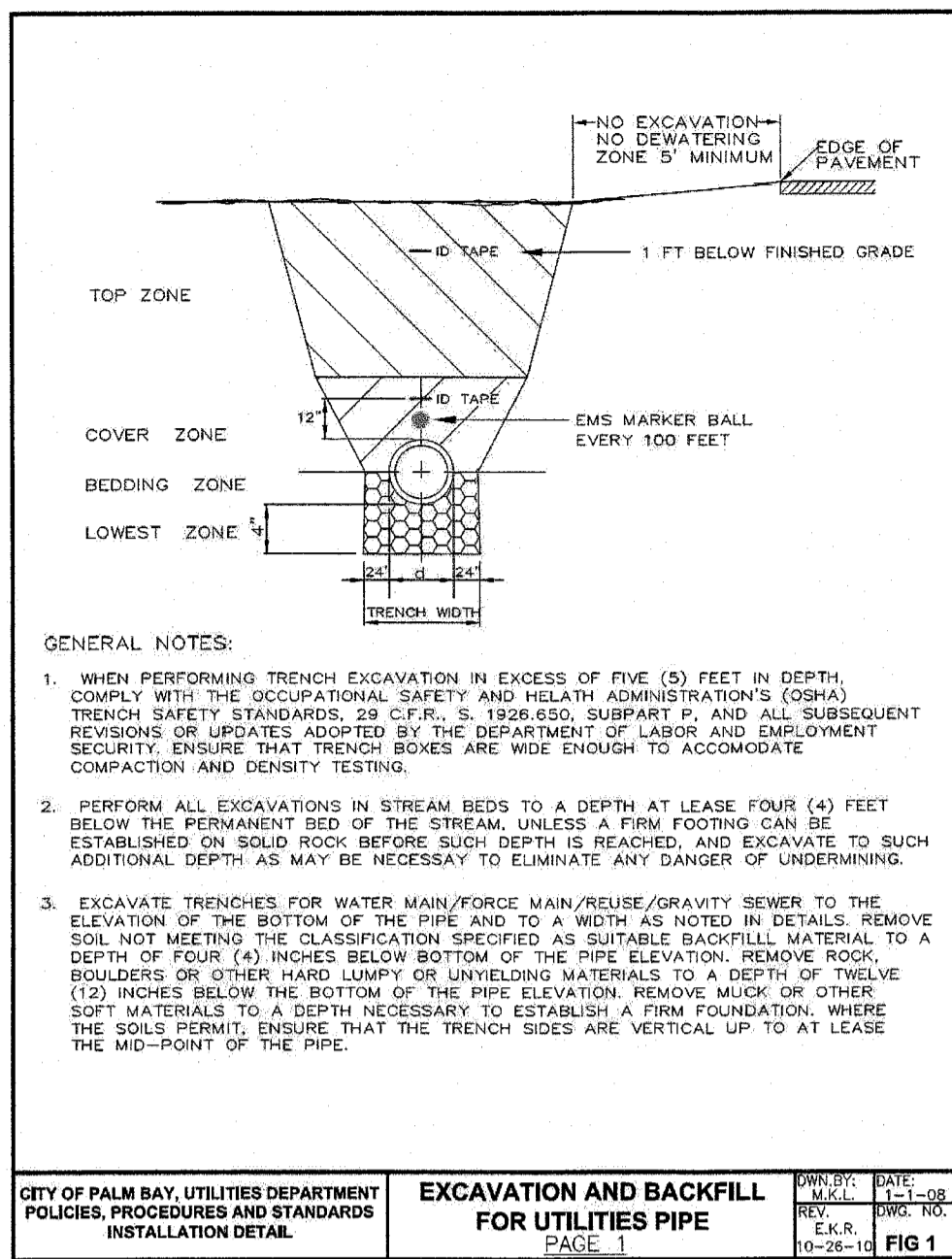
CONSTRUCTION ENGINEERING GROUP
 consulting engineers

BRENTWOOD LAKES SOUTH
 D.R. HORTON
 MALABAR ROAD PALM BAY, FLORIDA

DRAWING TITLE
DETAILS

PROFESSIONAL ENGINEER
 LICENSE NO. 55405
 AUG 2 4 2016

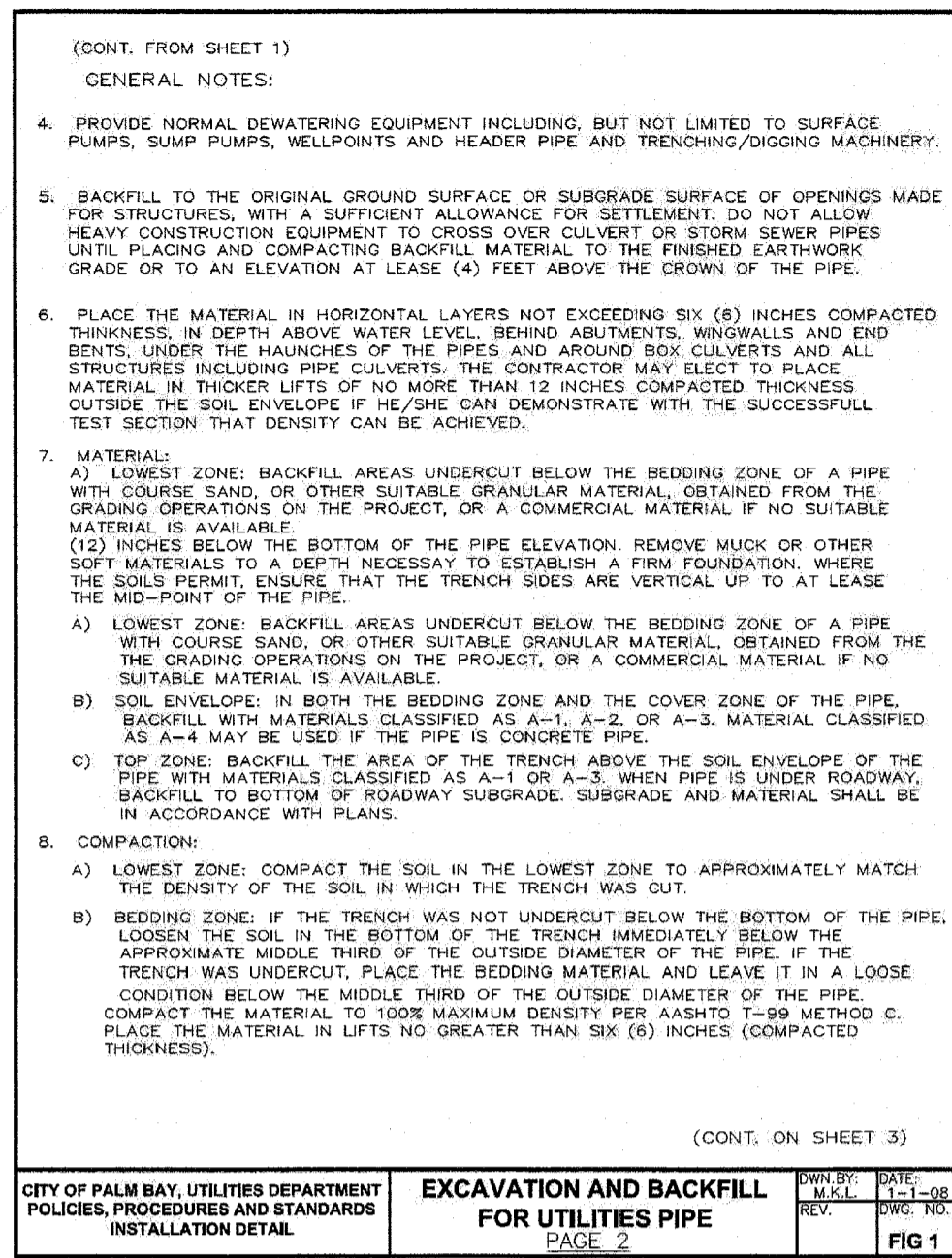
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 SCALE: 1"=60'
 PROJ. NO.: 160163
 DESIGNED BY: JRT
 DRAWN BY: SMB
 CHECKED BY: JTW
 DRAWING NO.: C-15



CITY OF PALM BAY, UTILITIES DEPARTMENT
POLICIES, PROCEDURES AND STANDARDS
INSTALLATION DETAIL

EXCAVATION AND BACKFILL FOR UTILITIES PIPE
PAGE 1

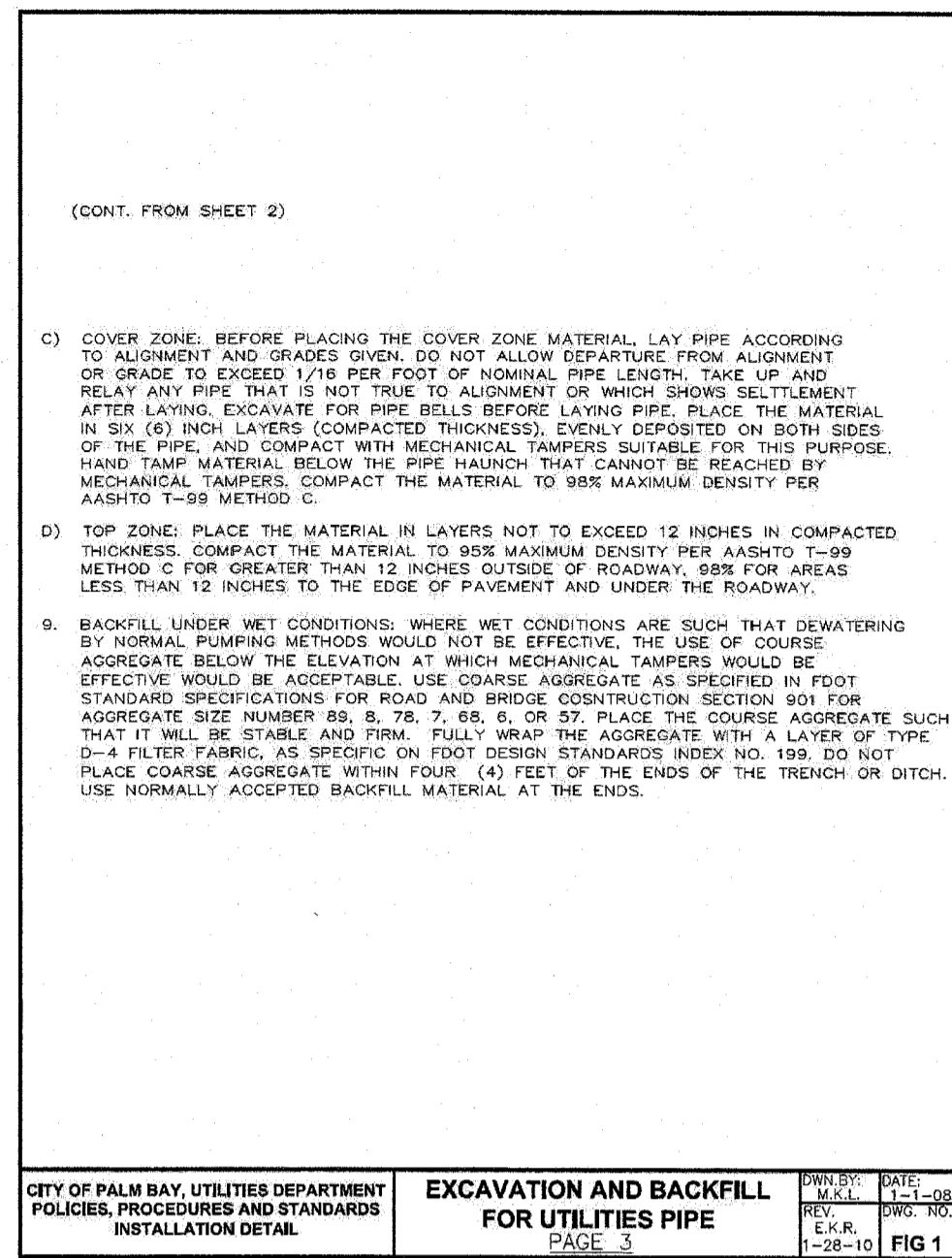
DATE: 11-11-08
REV. NO.: 10-28-11
FIG 11



CITY OF PALM BAY, UTILITIES DEPARTMENT
POLICIES, PROCEDURES AND STANDARDS
INSTALLATION DETAIL

EXCAVATION AND BACKFILL FOR UTILITIES PIPE
PAGE 2

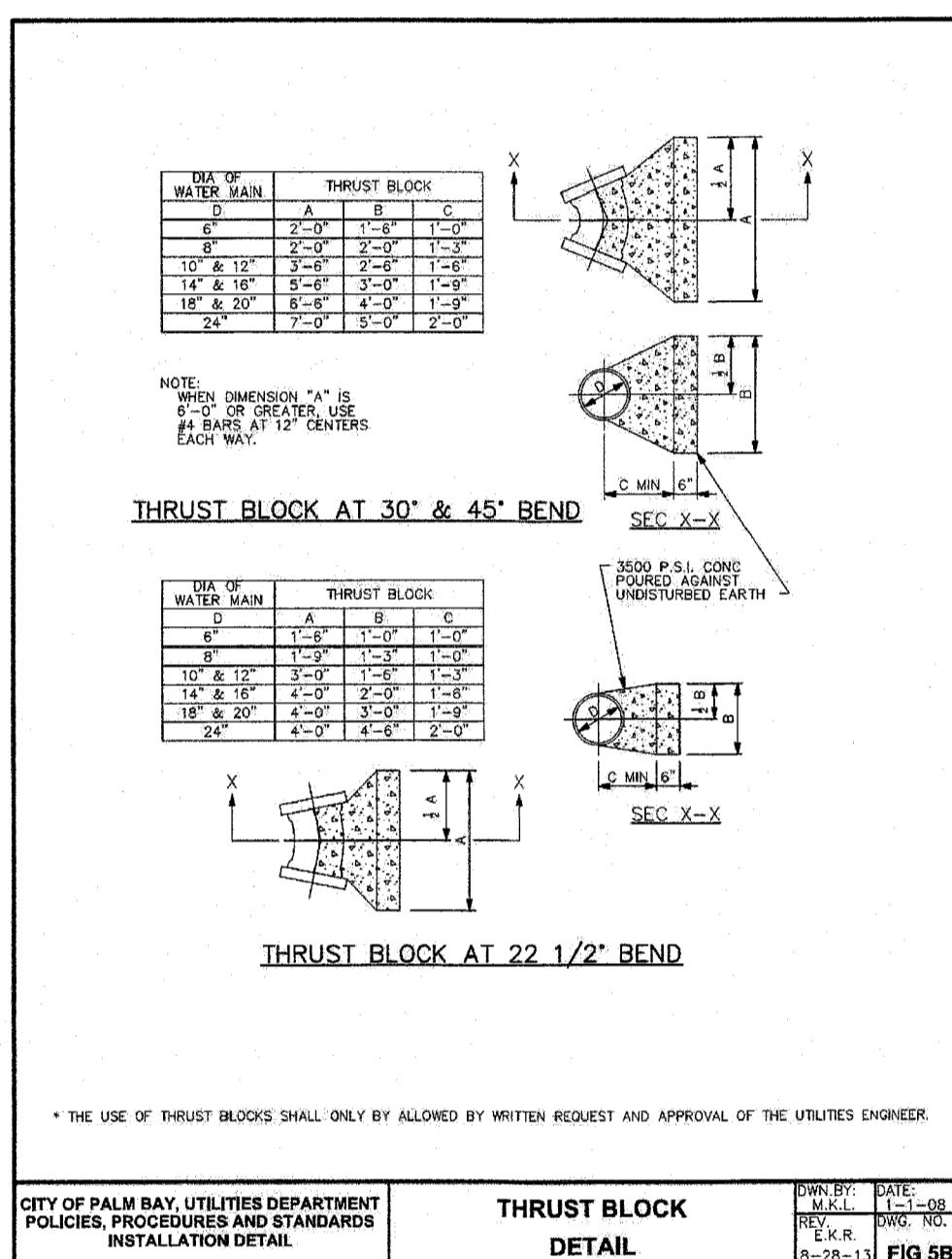
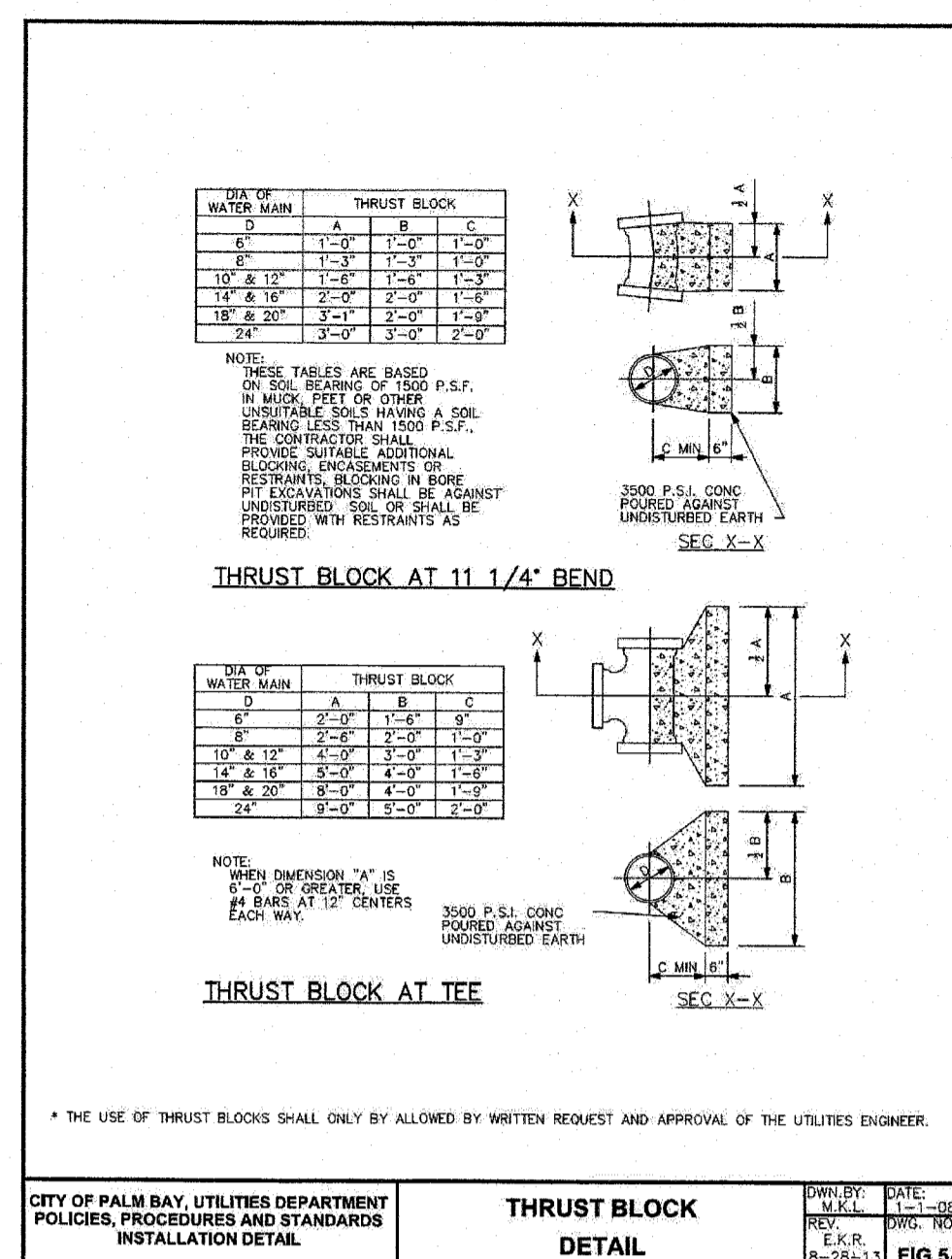
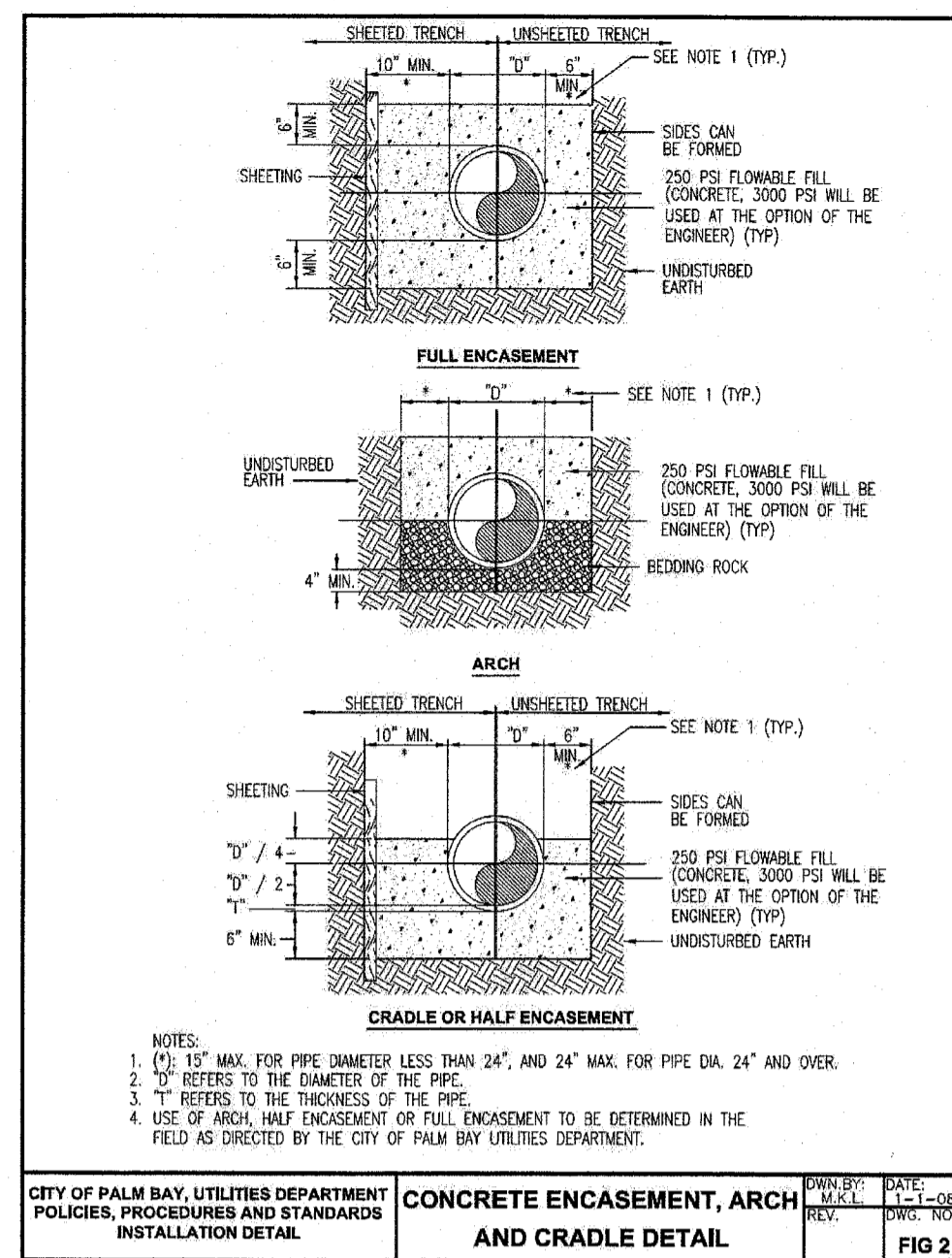
DATE: 11-11-08
REV. NO.: 10-28-11
FIG 11



CITY OF PALM BAY, UTILITIES DEPARTMENT
POLICIES, PROCEDURES AND STANDARDS
INSTALLATION DETAIL

EXCAVATION AND BACKFILL FOR UTILITIES PIPE
PAGE 3

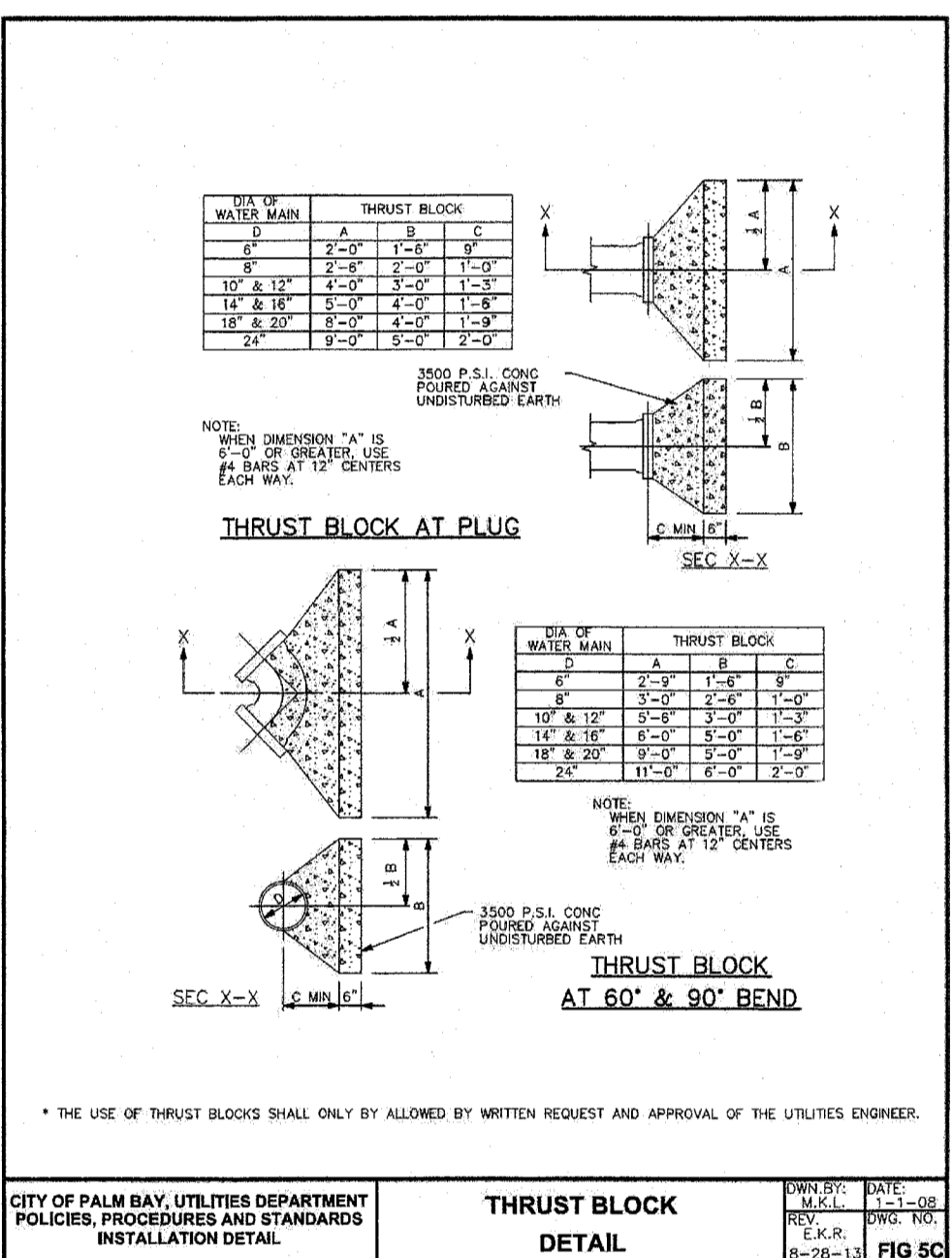
DATE: 11-11-08
REV. NO.: 10-28-11
FIG 11



CITY OF PALM BAY, UTILITIES DEPARTMENT
POLICIES, PROCEDURES AND STANDARDS
INSTALLATION DETAIL

THRUST BLOCK DETAIL

DATE: 11-11-08
REV. NO.: 10-28-11
FIG 14



CITY OF PALM BAY, UTILITIES DEPARTMENT
POLICIES, PROCEDURES AND STANDARDS
INSTALLATION DETAIL

THRUST BLOCK DETAIL

DATE: 11-11-08
REV. NO.: 10-28-11
FIG 14

THRUST RESTRAINTS FOR DUCTILE IRON PIPE
MINIMUM LENGTH (FT) TO BE RESTRAINED ON EACH SIDE OF FITTING(S)

FITTINGS	PIPE SIZE					
	4"	6"	8"	10"	12"	15"
90° BEND	43(24)	51(28)	72(37)	88(47)	110(57)	140(73)
45° BEND	18(20)	20(21)	23(24)	28(29)	34(35)	43(44)
22.5° BEND	8(11)	12(15)	16(19)	22(27)	28(34)	33(41)
TEE BRANCH	43(24)	51(28)	72(37)	88(47)	110(57)	140(73)
DEAD END	67(80)	85(100)	120(140)	149(172)	189(219)	227(263)

THRUST RESTRAINTS FOR PVC AND PE PIPE
MINIMUM LENGTH (FT) TO BE RESTRAINED ON EACH SIDE OF FITTING(S)

FITTINGS	PIPE SIZE					
	4"	6"	8"	10"	12"	15"
90° BEND	58	82	107	128	149	189
45° BEND	24	34	45	53	62	79
22.5° BEND	12	16	22	26	30	38
TEE BRANCH	58	82	107	128	149	189
DEAD END	90	128	166	201	235	298

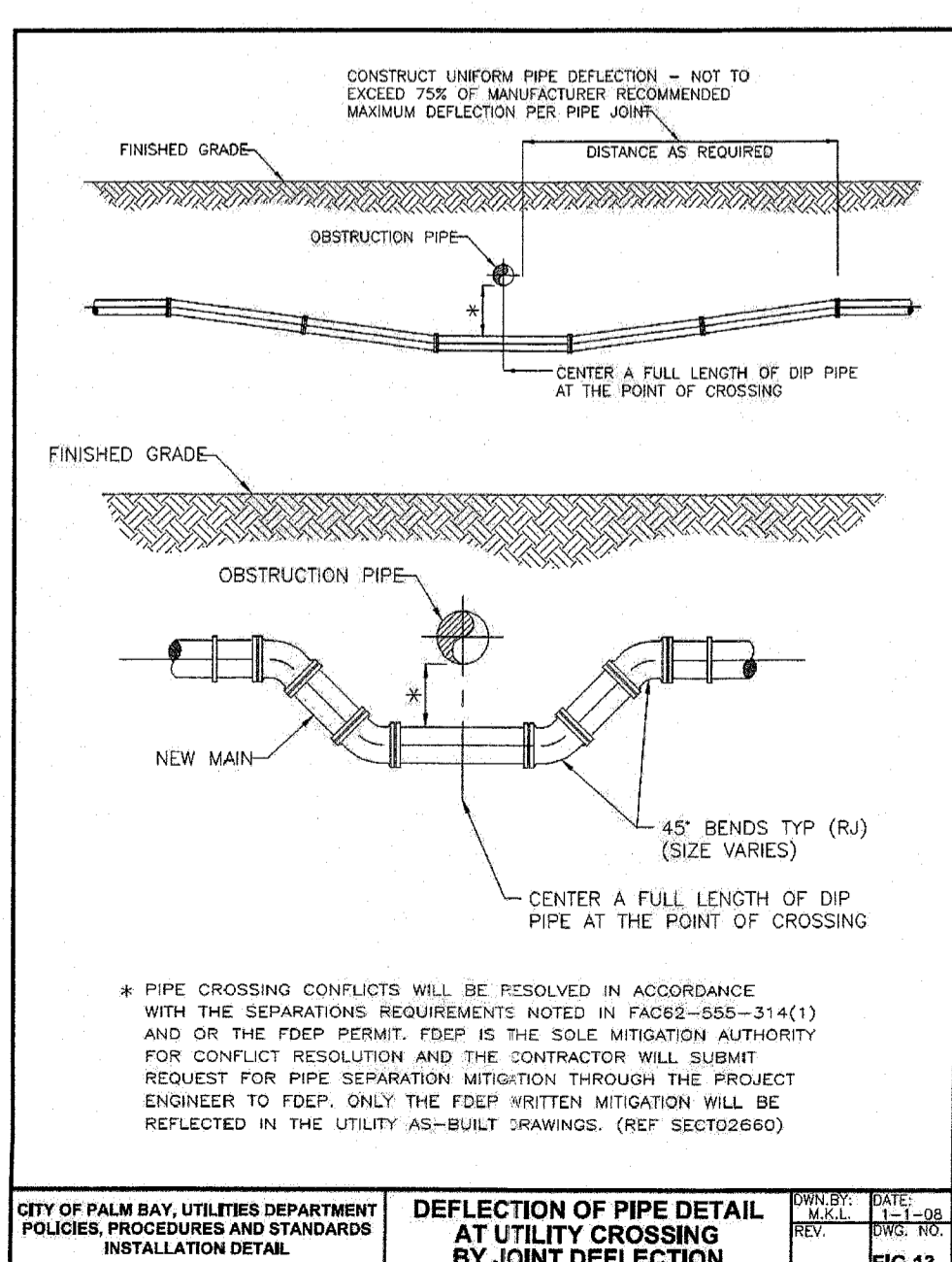
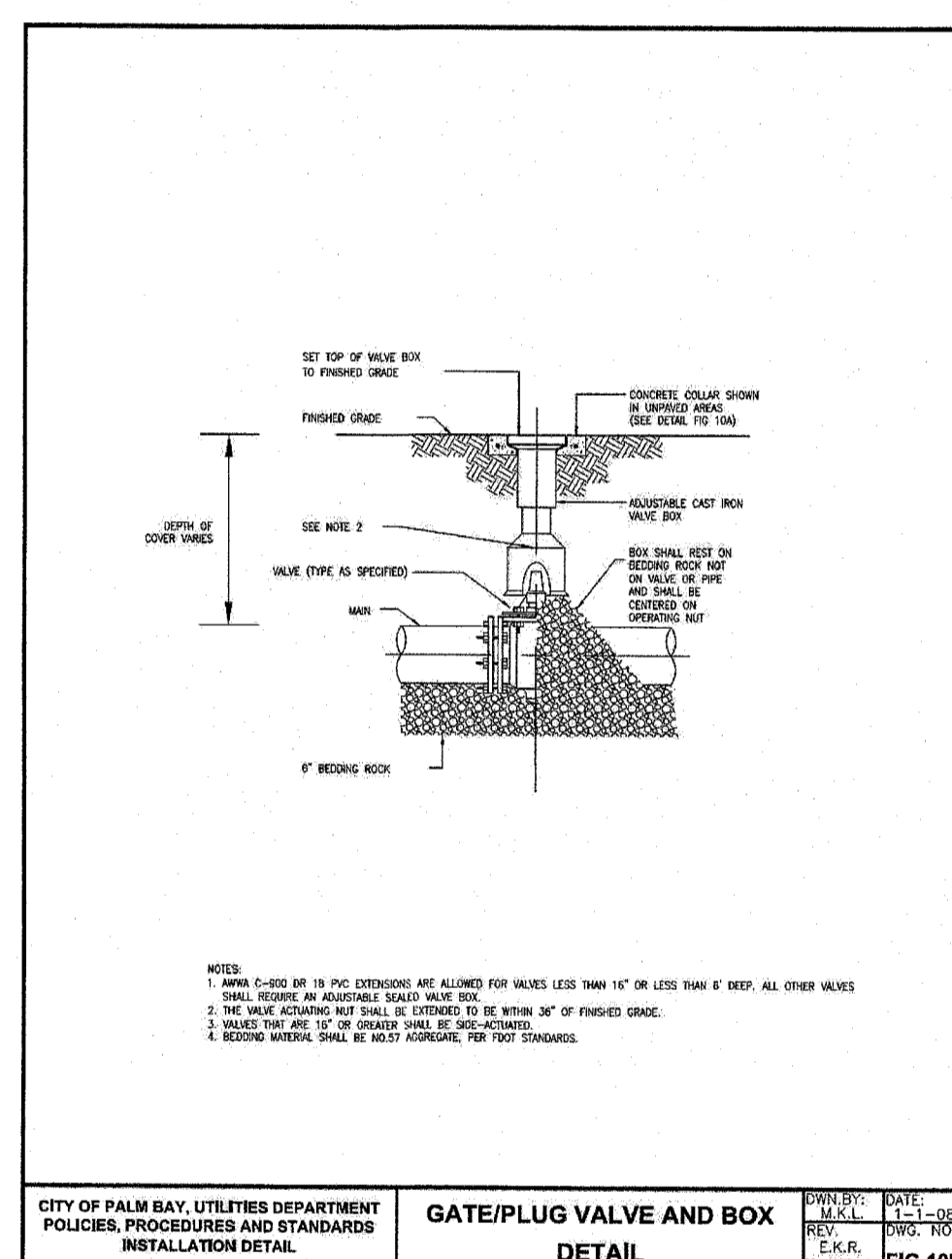
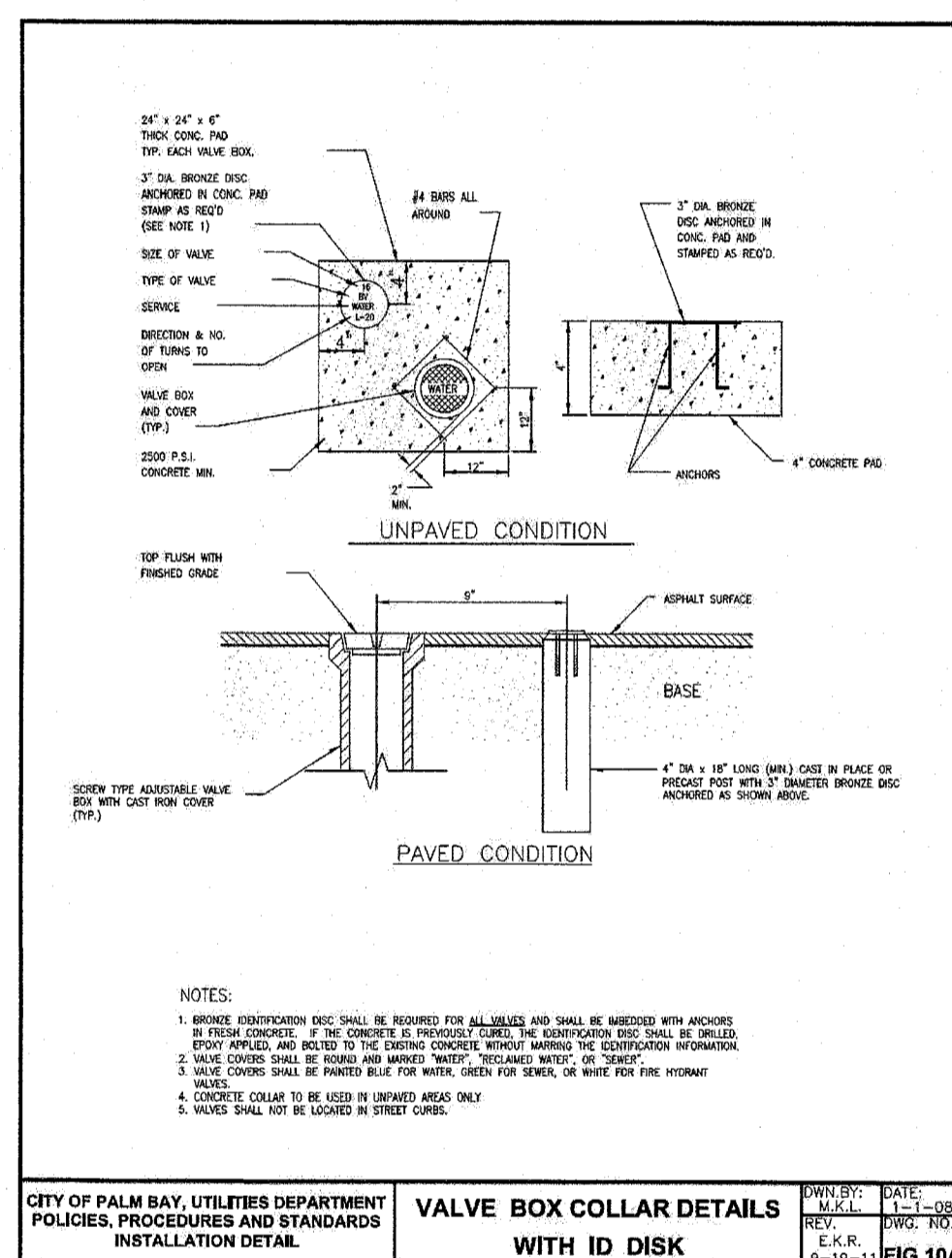
NOTES:

- FITTINGS SHALL BE RESTRAINED JOINTS UNLESS OTHERWISE INDICATED.
- INSTALL FULL LENGTH JOINTS WITH TOTAL LENGTH EQUAL TO OR GREATER THAN SHOWN IN THE TABLE.
- WHERE TWO OR MORE FITTINGS ARE TOGETHER, USE FITTING WHICH YIELDS GREATEST LENGTH OF RESTRAINED PIPE.
- IN LINE VALUES AND THROUGH RUNS OF TEES OUTSIDE LIMITS OF RESTRAINED JOINTS FROM OTHER FITTINGS NEED NOT BE RESTRAINED UNLESS OTHERWISE INDICATED.
- LENGTHS SHOWN IN THE TABLE WILL HAVE BEEN CALCULATED IN ACCORDANCE WITH THE PROCEDURE OUTLINED IN THRUST RESTRAINT DESIGN FOR DUCTILE IRON PIPE AS PUBLISHED BY CPMA, WITH THE FOLLOWING ASSUMPTIONS:
WORKING PRESSURE = 7.5 P.S.I.
SOIL DESIGNATION = 2000 P.S.F.
LIVING CONDITION = TYPE 2 SAFETY FACTOR 1.5
- FOR PIPE ENCASED IN POLYETHYLENE, INCREASE THE GIVEN VALUES BY A FACTOR OF 1.2. OR USE VALUES IN PARENTHESES.

CITY OF PALM BAY, UTILITIES DEPARTMENT
POLICIES, PROCEDURES AND STANDARDS
INSTALLATION DETAIL

RESTRAINED JOINT TABLE

DATE: 11-11-08
REV. NO.: 10-28-11
FIG 16



CITY OF PALM BAY, UTILITIES DEPARTMENT
POLICIES, PROCEDURES AND STANDARDS
INSTALLATION DETAIL

DEFLECTION OF PIPE DETAIL AT UTILITY CROSSING BY JOINT DEFLECTION

DATE: 11-11-08
REV. NO.: 10-28-11
FIG 13

LOCATION OF PUBLIC WATER SYSTEM MAINS IN ACCORDANCE WITH F.A.C. RULE 62-555.314

OTHER PIPE	HORIZONTAL SEPARATION	CROSSINGS (1)	JOINT SPACING @ CROSSINGS (FULL JOINT CENTERED)
STORM SEWER, STORMWATER FORCE MAIN, RECLAIMED WATER (2)	3 FT. MINIMUM	Water Main 12 INCHES IS THE MINIMUM, EXCEPT FOR STORM SEWER, THEN 8 INCHES IS THE MINIMUM AND 12 INCHES IS PREFERRED	ALTERNATE 3 FT. MINIMUM Water Main
VACUUM SANITARY SEWER	10 FT. PREFERRED 3 FT. MINIMUM	Water Main 12 INCHES PREFERRED 8 INCHES MINIMUM	ALTERNATE 3 FT. MINIMUM Water Main
GRAVITY OR PRESSURE SANITARY SEWER, SANITARY SEWER FORCE MAIN, RECLAIMED WATER (4)	10 FT. PREFERRED 6 FT. MINIMUM (3)	Water Main 12 INCHES IS THE MINIMUM, EXCEPT FOR GRAVITY SEWER, THEN 8 INCHES IS THE MINIMUM AND 12 INCHES IS PREFERRED	ALTERNATE 6 FT. MINIMUM Water Main
ON-SITE SEWAGE TREATMENT & DISPOSAL SYSTEM	10 FT. MINIMUM	-	-

- (1) WATER MAIN SHOULD CROSS ABOVE OTHER PIPE. WHEN WATER MAIN MUST BE BELOW OTHER PIPE, THE MINIMUM SEPARATION IS 12 INCHES.
- (2) RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 63-610, F.A.C.
- (3) 3 FEET FOR GRAVITY SANITARY SEWER WHERE THE BOTTOM OF THE WATER MAIN IS LAID AT LEAST 6 INCHES ABOVE THE TOP OF THE GRAVITY SANITARY SEWER.
- (4) RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.

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Melbourne, FL 32935
Tel: 321.253.1211
Fax: 321.653.3124
www.constructioneng.com
License #000697

REVISION
DATE
REV. NO.

DATE: 4-26-16
SCALE: 1"=60'
PROJ. NO.: 160163
DESIGNED BY: JRT
DRAWN BY: SMB
CHECKED BY: JTW
DRAWING NO.: C-16

STATE OF FLORIDA
LICENSED PROFESSIONAL ENGINEER
No. 55405
AUG 24 2016

DATE: 4-26-16
SCALE: 1"=60'
PROJ. NO.: 160163
DESIGNED BY: JRT
DRAWN BY: SMB
CHECKED BY: JTW
DRAWING NO.: C-16

APPROVED FOR CONSTRUCTION

GENERAL SPECIFICATION NOTES:

- 1. PROJECT REPRESENTATIVE REFERRED TO IN THE FOLLOWING SPECIFICATIONS INCLUDE OWNER OR DESIGNATED REPRESENTATIVE, ENGINEER OR MUNICIPALITY OF JURISDICTION FOR SPECIFIED WORK.
2. CONTRACTOR SHALL BECOME FAMILIAR WITH AND ADHERE TO ALL PROJECT SITE PERMITS AND THEIR CONDITIONS...

SITE CLEARING

- 1. PROTECTION OF EXISTING TREES AND VEGETATION: PROTECT EXISTING TREES AND OTHER VEGETATION INDICATED TO REMAIN IN PLACE AGAINST UNNECESSARY CUTTING, BREAKING OR SKINNING OF ROOTS, SKINNING OR BRUISING OF BARK, SMOTHERING OF TREES BY STOCKPILING CONSTRUCTION MATERIALS...
2. REMOVE ALL TREES, SHRUBS, GRASS, AND OTHER VEGETATION, IMPROVEMENTS, OR OBSTRUCTIONS, AS REQUIRED, TO PERMIT INSTALLATION OF NEW CONSTRUCTION...

EARTHWORK

- 1. SUBGRADE EXCAVATION, BACKFILL, AND PREPARATION SHALL BE DONE IN ACCORDANCE WITH THE GEOTECHNICAL ENGINEERING REPORT FOR THIS SITE AS IDENTIFIED ON DWG. C-1, UNLESS NOTED OTHERWISE IN THE CONTRACT DRAWINGS.
2. PROVIDE APPROVED BORROW SOIL MATERIALS FROM OFF-SITE WHEN SUFFICIENT APPROVED SOIL MATERIALS ARE NOT AVAILABLE FROM ON-SITE EXCAVATIONS...

- 21. UNIFORMLY MOISTEN OR AERATE SUBGRADE AND EACH SUBSEQUENT FILL OR BACKFILL LAYER BEFORE COMPACTION TO WITHIN 2 PERCENT OF OPTIMUM MOISTURE CONTENT.
22. REMOVE AND REPLACE, OR SCARIFY AND AIR-DRY SATISFACTORY SOIL MATERIAL THAT IS TOO WET TO COMPACT TO SPECIFIED DENSITY.
23. STOCKPILE SOIL SPREAD AND REMOVE WET SATISFACTORY SOIL MATERIAL.
24. PLACE BACKFILL AND FILL MATERIALS IN LAYERS NOT MORE THAN 8 INCHES IN LOOSE DEPTH FOR MATERIAL COMPACTED BY HEAVY COMPACTION EQUIPMENT...

STORM SEWER SYSTEM

- 1. EXCEPT AS OTHERWISE PROVIDED, ALL STORM SEWER MATERIALS SHALL COMPLY WITH THE APPLICABLE SECTIONS OF THE FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" CURRENT EDITION WHICH ARE HEREBY INCORPORATED INTO THESE SPECIFICATIONS BY REFERENCE...
2. FOR PIPES SMALLER THAN 12"; SELECTION OF MATERIALS SPECIFIED BELOW IS AT THE INSTALLER'S OPTION.
3. FOR PIPES 12" AND LARGER: REINFORCED CONCRETE PIPE(RCP); FDOT SECTION 941, ROUND OR ELIPTICAL PER DWG. PLANS, STANDARD CLASS II CONCRETE CULVERT PIPE TO EXCEED CLASS IV PIPE IS CALLED FOR.

TERMITE CONTROL

- 1. ENGAGE A LICENSED PROFESSIONAL PEST CONTROL OPERATOR FOR APPLICATION OF SOIL TREATMENT SOLUTION.
2. PROVIDE TERMITE TREATMENT SOLUTION UNTIL EXCAVATING, FILLING AND GRADING OPERATIONS ARE COMPLETED, EXCEPT AS OTHERWISE REQUIRED IN CONSTRUCTION OPERATIONS, TO ENSURE PENETRATION, DO NOT APPLY SOIL TREATMENT TO FROZEN OR EXCESSIVELY WET SOILS OR DURING INCLEMENT WEATHER CONDITIONS...
3. FURNISH WRITTEN WARRANTY CERTIFYING THAT APPLIED SOIL POISONING TREATMENT WILL PREVENT INFESTATION OF SUBTERRANEAN TERMITES AND THAT IF SUBTERRANEAN TERMITE ACTIVITY IS DISCOVERED DURING WARRANTY PERIOD, THE CONTRACTOR WILL RE-TREAT SOIL AND REPAIR OR REPLACE DAMAGE CAUSED BY TERMITE INFESTATION...

SEWAGE COLLECTION SYSTEM

- 1. ALL VERTICAL AND HORIZONTAL SPACING BETWEEN SEWAGE COLLECTION SYSTEMS AND WATER DISTRIBUTION SYSTEMS AND/OR STORM SEWER SYSTEMS ARE TO COMPLY WITH THE LATEST FDPD STANDARDS.
2. ADHERE TO MANUFACTURER'S RECOMMENDATIONS ON THE INSTALLATION OF PVC, CPEP, AND RCP STORM SEWERS.
3. INSTALL ALL SEWER FITTINGS SHALL BE INSTALLED IN ACCORDANCE WITH UNI-BELL, UNI-B-5.
4. PIPE PREPARATION AND HANDLING: INSPECT ALL PIPE AND FITTINGS PRIOR TO LOWERING INTO TRENCH TO ENSURE NOT CRACKED, BROKEN, OR OTHERWISE DEFECTIVE MATERIALS ARE BEING USED...

WATER DISTRIBUTION AND SERVICE PIPING

- 1. ALL VERTICAL AND HORIZONTAL SPACING BETWEEN WATER DISTRIBUTION SYSTEMS AND SEWAGE COLLECTION SYSTEMS AND/OR STORM SEWER SYSTEMS ARE TO COMPLY WITH THE LATEST FDPD STANDARDS.
2. MECHANICAL JOINT FITTINGS: MECHANICAL JOINT DUCTILE IRON FITTINGS SHALL CONFORM TO ANSI/AWWA C-110/A-21.10 AND ANSI/AWWA C-111/A-21.11 AND SHALL BE OF A CLASS AT LEAST EQUAL TO THAT OF THE ADJACENT PIPE, MORTAR LINING AND SEAL COAT FOR FITTINGS SHALL BE SAME THICKNESS SPECIFIED FOR PIPE.
3. WATER SERVICE PIPING: EXTEND WATER SERVICE PIPING OF SIZE AND IN LOCATIONS INDICATED TO WATER SERVICE ENTRANCE AT BUILDINGS. PROVIDE SLEEVE IN FOUNDATION WALL FOR WATER SERVICE ENTRY; MAKE ENTRY WATER TIGHT.
4. POLYVINYL CHLORIDE (PVC) PIPE AND FITTINGS: INSTALL IN ACCORDANCE WITH UNI-BELL HANDBOOK OF PVC PIPE.

ASPHALT CONCRETE PAVEMENT

- 1. REFERENCE TO STANDARD SPECIFICATIONS REFERS TO FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 2010.
2. ASPHALT CONCRETE PAVEMENT SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 330 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 2010.
3. THE JOB MIX FORMULA SHALL BE DETERMINED BY AND SHALL CONFORM TO REQUIREMENTS OF ASTM T-17.
4. APPLY PRIME AND TACK COATS WHEN AMBIENT TEMPERATURE IS ABOVE 50 DEG F (10 DEG C) AND WHEN TEMPERATURE HAS NOT BEEN BELOW 35 DEG F (1 DEG C) FOR 24 HOURS IMMEDIATELY PRIOR TO APPLICATION...

CONCRETE

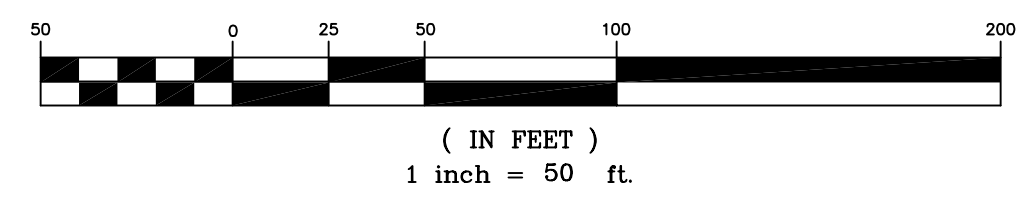
- 1. ALL CONCRETE STRENGTHS SHALL BE AS FOLLOWS WITH BROOM FINISH UNLESS IDENTIFIED OTHERWISE:
2. ALL REINFORCING STEEL SHALL BE DEFORMED BARS CONFORMING TO ASTM A615 GRADE 60 (FY=60 KSI).
3. ALL WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185 AND SHALL BE LAPPED ONE FULL MESH PANEL PLUS 2 IN. AT SIDES AND ENDS AND BE WIRED TOGETHER. FIBER MESH MAY BE SUBSTITUTED PER DIRECTION OF ENGINEER AT REQUEST OF CONTRACTOR.
4. CALCIUM CHLORIDE SHALL NOT BE USED IN ANY FORM.
5. ADDITION OF WATER TO CONCRETE AT THE JOB SITE SHALL BE PROHIBITED.

FDEP WATER SPECIFICATIONS

- 1. ALL PIPE, PIPE FITTINGS, PIPE JOINT PACKING AND JOINTING MATERIALS, VALVES, FIRE HYDRANTS, AND METERS INSTALLED UNDER THIS PROJECT SHALL CONFORM TO APPLICABLE AMERICAN WATER WORKS ASSOCIATION (AWWA) STANDARDS. [FAC 62-555.320(1)(B), RSWW 8.0, AND AWWA STANDARDS AS INCORPORATED INTO FAC 62-555.330; EXCEPTIONS ALLOWED UNDER FAC 62-555.320(1)(C).
2. HOT WATER SYSTEMS: EXCLUDING FIRE HYDRANTS, THAT WILL BE INSTALLED UNDER THIS PROJECT AND THAT WILL COME INTO CONTACT WITH DRINKING WATER WILL CONFORM TO NSF INTERNATIONAL STANDARD 61 AS ADOPTED IN RULE 62-555.330.
3. ALL TRENCHES AND CROSS-CONNECTION CONTROL, AWWA MANUAL M14, AS INCORPORATED INTO RULE 62-555.330, F.A.C. OR THE PUBLIC WATER UTILITY SYSTEM WILL OWN THIS PROJECT AFTER IT IS PLACED INTO OPERATION HAS A CROSS-CONNECTION CONTROL PROGRAM REQUIRING WATER CUSTOMERS TO INSTALL PROPER BACKFLOW PROTECTION AT THEIR PREMISES WHERE BACKFLOW CONNECTIONS ARE REQUIRED OR RECOMMENDED UNDER RULE 62-555.360, F.A.C. OR IN AWWA MANUAL M14. [FAC 62-555.360 AND AWWA MANUAL M14 AS INCORPORATED INTO FAC 62-555.330]
4. NEITHER STEAM CONDENSATE, COOLING WATER FROM ENGINE JACKETS, NOR WATER USED IN CONNECTION WITH HEAT EXCHANGERS WILL BE RETURNED TO THE WATER MAINS INCLUDED IN THIS PROJECT. [FAC 62-555.320(1)(B) AND RSWW 8.B.2]

REVISION, DATE, REVIEW, 2016 JUNE 06 10:55 AM, 16 JUN 2016 10:55 AM, BRENTWOOD LAKES SOUTH, DR. HORTON MALABAR ROAD, PALM BAY, FLORIDA, DRAWING TITLE, SPECIFICATIONS, DATE 4-26-16, SCALE NTS, PROJ. NO.: 160163, DESIGNED BY: JRT, DRAWN BY: SMB, CHECKED BY: JTW, DRAWING NO. C-18, APPROVED FOR CONSTRUCTION, AUG 26 2016, City of Palm Bay

GRAPHIC SCALE



BRENTWOOD LAKES P.U.D. PHASE III

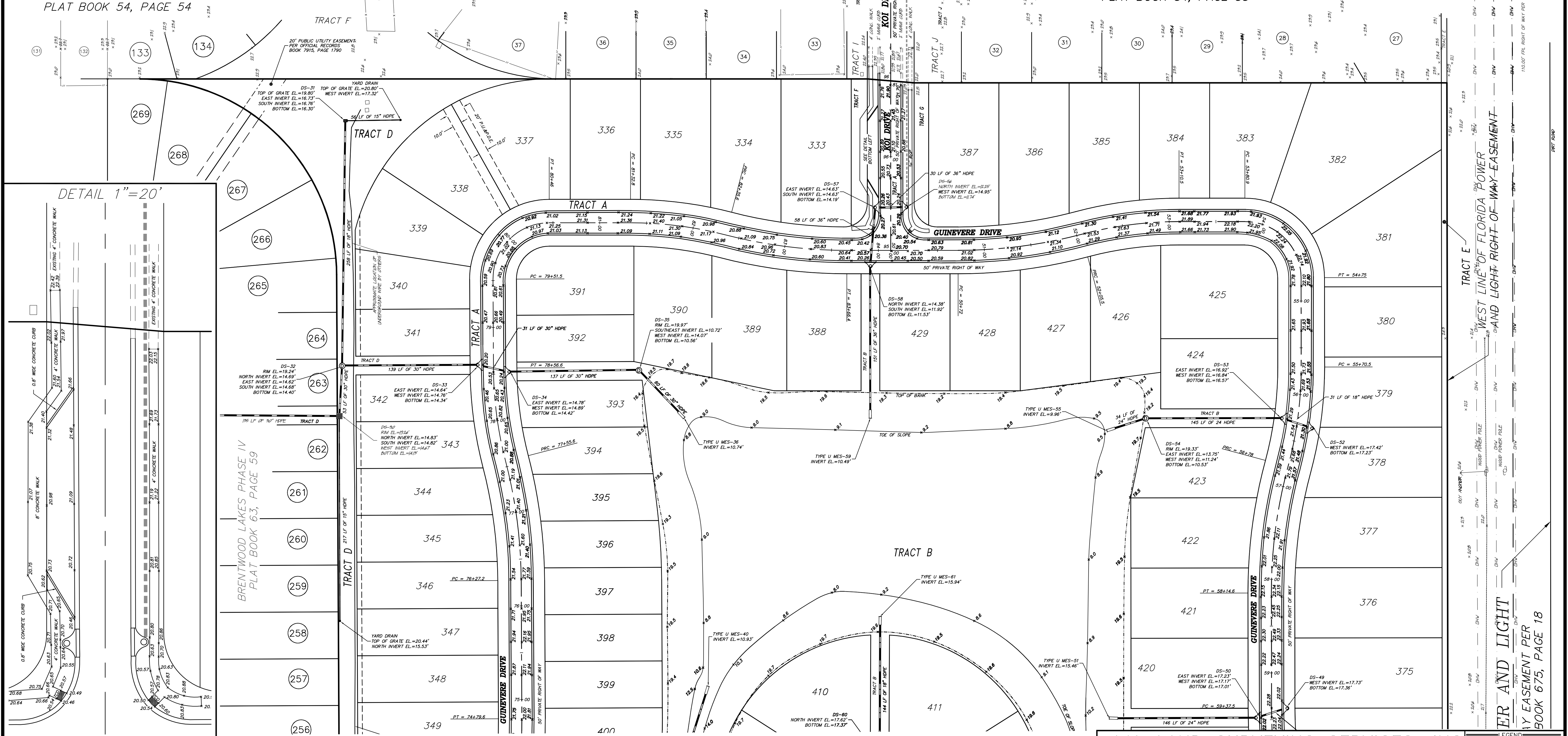
PAVING AND DRAINAGE AS-BUILT SURVEY

LYING IN SECTION 3, TOWNSHIP 29 SOUTH, RANGE 36 EAST, CITY OF PALM BAY, BREVARD COUNTY, FLORIDA

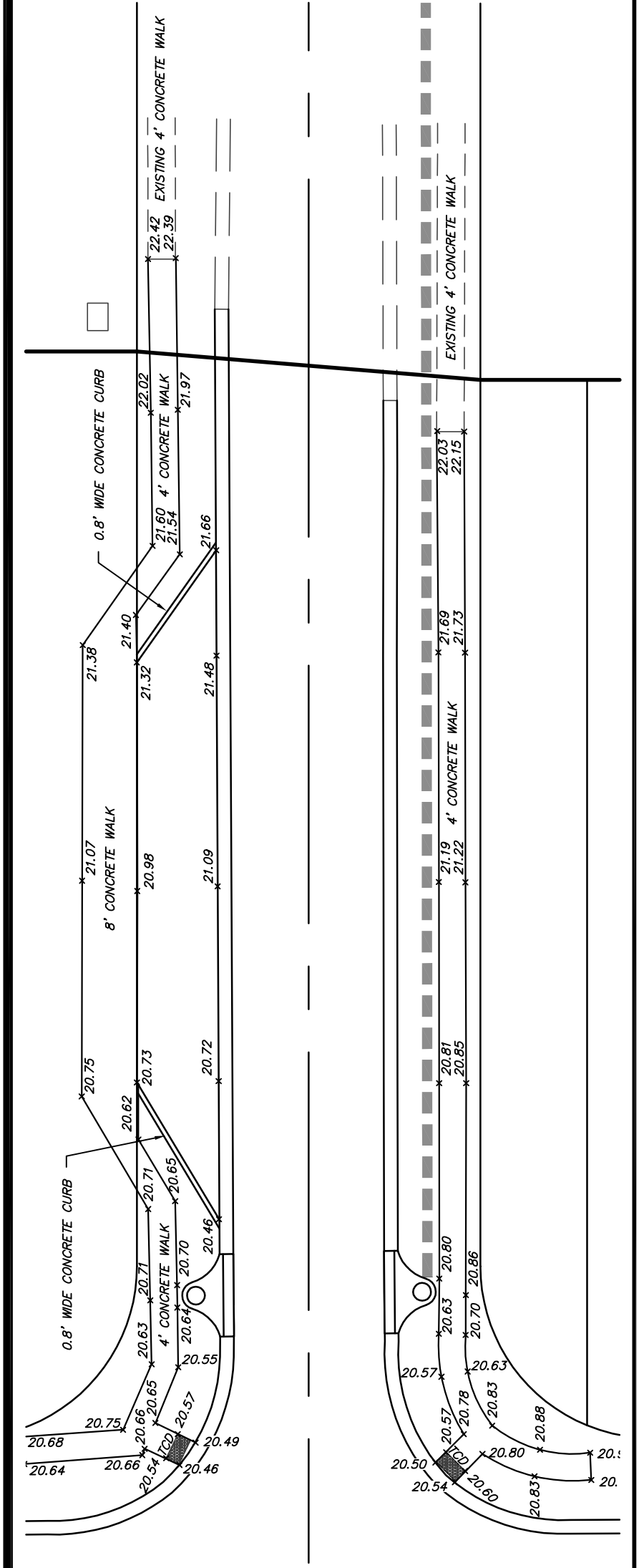
BRENTWOOD LAKES PHASE II
PLAT BOOK 54, PAGE 54

BRENTWOOD LAKES PHASE I
PLAT BOOK 54, PAGE 53

BRENTWOOD LAKES PHASE I
PLAT BOOK 54, PAGE 53



DETAIL 1"=20'



BRENTWOOD LAKES PHASE IV
PLAT BOOK 63, PAGE 59

WEST LINE OF FLORIDA POWER
AND LIGHT RIGHT-OF-WAY EASEMENT

PER AND LIGHT
EASEMENT PER
BOOK 675, PAGE 18

LEGEND:

STA - STATION	L - CURVE LENGTH	P - PUBLIC	○ - SINGLE REUSE SERVICE	W/ - WITH
R - RIGHT OF BASELINE	R - CURVE RADIUS	U - UTILITY	○ - DOUBLE REUSE SERVICE	(P) - PLAT
L - LEFT OF BASELINE	Δ - CURVE DELTA	D - DRAINAGE	○ - SINGLE WATER SERVICE	(M) - MEASURED
PC - POLYNOMIAL CURVE	(B.B.) - BEARING BASIS	F.I.R.M. - FLOOD INSURANCE RATE MAP	○ - DOUBLE WATER SERVICE	(O) - OCEAN
PC - POINT OF CURVATURE	F.I.R.M. - FLOOD INSURANCE RATE MAP	FF - FINISHED FLOOR	○ - SINGLE SEWER SERVICE	FND - FOUND
PT - POINT OF TANGENCY	WM - WATER METER	E - ELEVATION	○ - DOUBLE SEWER SERVICE	IR - IRON ROD
EL - ELEVATION	WV - WATER VALVE	⊙ - INDICATES DOUBLE THE LOCATION	○ - SINGLE SEWER SERVICE	IR - IRON PIPE
LF - LINEAR FEET	SV - SEWER GATE VALVE	⊙ - INDICATES MANHOLE NUMBER	○ - DOUBLE SEWER SERVICE	CEN - CENTERLINE
NA 83 - NORTH AMERICAN DATUM 1983	RED - REDUCER	⊙ - INDICATES SAMPLE LOCATION	○ - SINGLE SEWER SERVICE	N&D - NAIL AND DSK
NA 88 - NORTH AMERICAN DATUM 1988	FN - FIRE HYDRANT	⊙ - OPTICAL RECORDS BOOK	○ - DOUBLE SEWER SERVICE	F.I.R.M. - FLOOD INSURANCE RATE MAP
NA 29 - NORTH AMERICAN DATUM 1929	FDK - FIRE DEPARTMENT CONNECTION	○ - FOUND	○ - DOUBLE SEWER SERVICE	SS - STORM SEWER
PLS - PROFESSIONAL LAND SURVEYOR	SSM - SANITARY SEWER MANHOLE	○ - TO BE DETERMINED	○ - DOUBLE SEWER SERVICE	SS - STORM SEWER (UNLESS NOTED OTHERWISE)
PLS - PROFESSIONAL LAND SURVEYOR	STM - GREASE TRAP MANHOLE	○ - TO BE DETERMINED	○ - DOUBLE SEWER SERVICE	SS - STORM SEWER (UNLESS NOTED OTHERWISE)
PSM - PROFESSIONAL SURVEYOR AND MAPPER	SOM - STORM DRAIN MANHOLE	○ - TO BE DETERMINED	○ - DOUBLE SEWER SERVICE	SS - STORM SEWER (UNLESS NOTED OTHERWISE)
RCP - PERMANENT CONTROL POINT	MS - CONCRETE MITERED END	○ - TO BE DETERMINED	○ - DOUBLE SEWER SERVICE	SS - STORM SEWER (UNLESS NOTED OTHERWISE)
PRM - PERMANENT REFERENCE MONUMENT	BFP - BACK FLOW PREVENTER	○ - TO BE DETERMINED	○ - DOUBLE SEWER SERVICE	SS - STORM SEWER (UNLESS NOTED OTHERWISE)
SEC. - SECTION	DDC - DOUBLE DETECTOR CHECK VALVE	○ - TO BE DETERMINED	○ - DOUBLE SEWER SERVICE	SS - STORM SEWER (UNLESS NOTED OTHERWISE)
TWP - TOWNSHIP	DR - AIR RELEASE VALVE	○ - TO BE DETERMINED	○ - DOUBLE SEWER SERVICE	SS - STORM SEWER (UNLESS NOTED OTHERWISE)
RNC - RANGE	TRD - TRUNCATED DOME	○ - TO BE DETERMINED	○ - DOUBLE SEWER SERVICE	SS - STORM SEWER (UNLESS NOTED OTHERWISE)
(R) - RADIAL	CO - SANITARY SEWER CLEANOUT	○ - TO BE DETERMINED	○ - DOUBLE SEWER SERVICE	SS - STORM SEWER (UNLESS NOTED OTHERWISE)
(ND) - NON-RADIAL	BL - BOLLARD	○ - TO BE DETERMINED	○ - DOUBLE SEWER SERVICE	SS - STORM SEWER (UNLESS NOTED OTHERWISE)
C - CHORD DISTANCE	DO - PROPOSED LOT GRADE	○ - TO BE DETERMINED	○ - DOUBLE SEWER SERVICE	SS - STORM SEWER (UNLESS NOTED OTHERWISE)
CB - CHORD BEARING		○ - TO BE DETERMINED	○ - DOUBLE SEWER SERVICE	SS - STORM SEWER (UNLESS NOTED OTHERWISE)

NOTE:
SEE "BRENTWOOD LAKES P.U.D. PHASE III"
PLAT BOOK 67 PAGE 83 FOR BASELINE
GEOMETRY.

NOTE:
ALL MAINS SHOWN FALL WITHIN PUBLIC OR
EASEMENTS AND/OR PRIVATE
RIGHTS-OF-WAY

NOTE:
SOME AS-BUILT ITEMS SHOWN HEREON HAVE
BEEN TAKEN BY SITE CONTRACTOR.

**AS-BUILT SURVEY PREPARED FOR:
GUETTLER BROTHERS CONSTRUCTION LLC**

AAL LAND SURVEYING SERVICES, INC.

ACKNOWLEDGEMENT TO FIRM #1000000000
DATED MARCH 22, 2020. THE PROPERTY IS LOCATED WITHIN FLOOD ZONE X (HAZ 88)

AS BUILT SURVEY

SCALE: 1" = 50'

FIELD DATE: 01-06-2020

SECTION 03,
TOWNSHIP 29 SOUTH,
RANGE 36 EAST

PROJECT #1517-STORM AB

3970 MINTON ROAD, WEST MELBOURNE, FL 32904 L.B.#6623
PHONE: (321)768-8110 FAX: (321)952-9771 E-MAIL: frontdesk@aalsurvey.com

ANDREW W. POWISOR
P.L.S. No. 5393

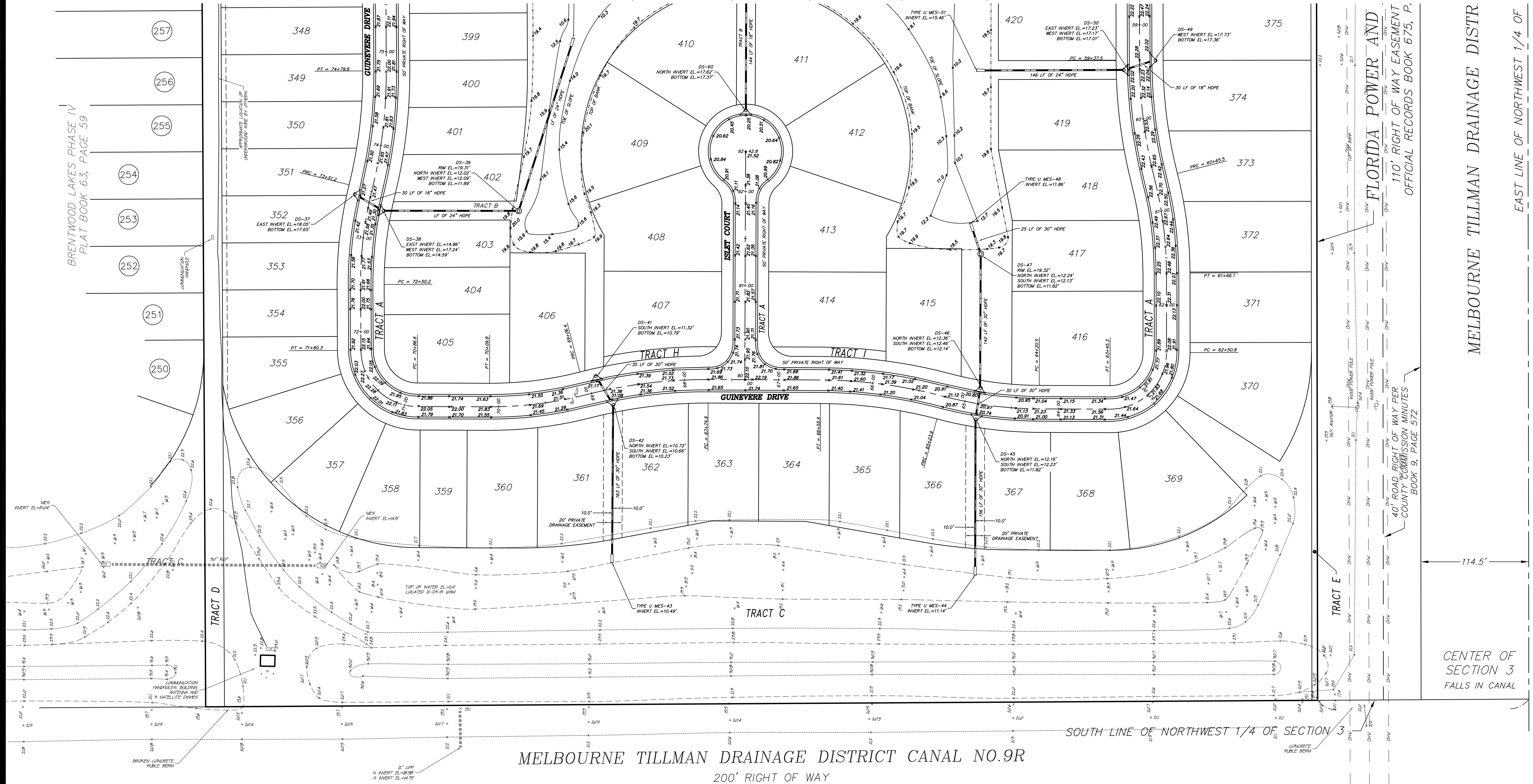
DANIEL D. GARNER
P.L.S. No. 6189

LEGEND (continued):
B.B. - BEARING BASIS
M&T - MEASURED AND TYPED
D.D. - DEED
I.R.P. - IRON ROD
M&T - MEASURED AND TYPED
P.M. - PERMANENT SURVEY MARKER
E.O. - EDGE OF WATER
T.M. - TEMPORARY SURVEY MARKER
L. - LINEAR
A.L. - ARC LENGTH
P.O.B. - POINT OF BEGINNING
P.C. - POINT OF CURVATURE
P.I. - POINT OF INTERSECTION
P.T. - POINT OF TANGENCY
R.C. - POINT OF REVERSE CURVE
S.B. - STRAIGHT BACK LINE
B.S.L. - BUILDING SETBACK LINE
P.U.E. - PUBLIC UTILITY EASEMENT
D.E. - DRAINAGE EASEMENT
E.P. - ELEVATION
D.E. - DRAINAGE EASEMENT
P.F. - FINISHED FLOOR
R.C.P. - REINFORCED CONCRETE PIPE
C.M.P. - CORRUGATED METAL PIPE
CEN - CENTERLINE
L.B. - LICENSED BUSINESS
P.L.S. - PROFESSIONAL LAND SURVEYOR

BRENTWOOD LAKES P.U.D. PHASE III

PAVING AND DRAINAGE AS-BUILT SURVEY

LYING IN SECTION 3, TOWNSHIP 29 SOUTH, RANGE 36 EAST, CITY OF PALM BAY, BREVARD COUNTY, FLORIDA



MELBOURNE TILLMAN DRAINAGE DISTRICT CANAL NO. 9R
200' RIGHT OF WAY

FLORIDA POWER AND
110' RIGHT OF WAY EASEMENT
OFFICIAL RECORDS BOOK 675, P.

MELBOURNE TILLMAN DRAINAGE DISTRICT

EAST LINE OF NORTHWEST 1/4 OF

CENTER OF SECTION 3
FALLS IN CANAL

LEGEND:	
STA - STATION	L - CURVE LENGTH
R - RIGHT OF BASELINE	R _c - CURVE RADIUS
L - LEFT OF BASELINE	D - CURVE DELTA
PC - POINT OF CURVATURE	(B.B.) - BEARING BASIS
PT - POINT OF TANGENCY	F.I.R.M. - FLOOD INSURANCE RATE MAP
EL - ELEVATION	WM - WATER METER
LF - LINEAR FEET	WV - WATER GATE VALVE
NAD 83 - NORTH AMERICAN DATUM 1983	SV - SEWER GATE VALVE
NAVD 88 - NORTH AMERICAN DATUM 1988	RED - REDUCER
NOVD 29 - NATIONAL GEODETIC	FN - FIRE HYDRANT
VERTICAL DATUM OF 1929	FD - FIRE DEPARTMENT CONNECTION
LB - LICENSED BUSINESS	SSM - SANITARY SEWER MANHOLE
PLS - PROFESSIONAL	GTW - GREASE TRAP MANHOLE
PSM - PROFESSIONAL SURVEYOR	SDM - STORM DRAIN MANHOLE
AND MAPPER	MES - CONCRETE MITERED END
PRM - PERMANENT REFERENCE MONUMENT	BFP - BACK FLOW PREVENTER
SEC. - SECTION	DDC - DOUBLE DETECTOR
TWP. - TOWNSHIP	CV - CHECK VALVE
RNC - RANGE	AR - AIR RELEASE VALVE
(R) - RADIAL	TRC - TRUNCATED DOME
(NR) - NON-RADIAL	SC - SANITARY SEWER CLEANOUT
C - CHORD DISTANCE	BL - BILLBOARD
CB - CHORD BEARING	DDG - PROPOSED LOT GRADE
	P - PUBLIC
	U - UTILITY
	D - DRAINAGE
	E - EASEMENT
	FF - FINISHED FLOOR
	EL - ELEVATION
	INDICATES DOUBLE TIE LOCATION
	INDICATES MANHOLE NUMBER
	INDICATES SAMPLE LOCATION
	OFFICIAL RECORDS BOOK
	PAGE
	FOUND
	TO BE DETERMINED
	TOP OF BANK
	TOP OF SLOPE
	REINFORCED CONCRETE PIPE
	ELLIPTICAL REINFORCED CONCRETE PIPE
	CORRUGATED PLASTIC PIPE
	CORRUGATED METAL PIPE
	CORRUGATED HIGH DENSITY POLYETHYLENE PIPE
	DUCTILE IRON PIPE
	WATER MAIN
	SEWER MAIN
	REUSE MAIN
	SANITARY SEWER CLEANOUT
	4" x 4" CONCRETE SET AS NOTED
	1/2" IRON MARKER
	SET OR FOUND AS NOTED
	WITH
	PLAT
	MEASURED
	FOUND
	IRON PIPE
	CENTERLINE
	RIGHT OF WAY
	MAIL AND DISK
	MAIL AND TIN TAB
	FLOOD INSURANCE RATE MAP
	WOOD FENCE
	PLASTIC FENCE
	METAL FENCE
	GUARD RAIL
	CONCRETE
	ASPH - ASPHALT
	P.O.L. - POINT ON LINE
	OWW - OVERHEAD WIRE
	CENTERLINE OF SWALE

NOTE: SEE "BRENTWOOD LAKES P.U.D. PHASE III" PLAT BOOK 67 PAGE B3 FOR BASELINE GEOMETRY.

NOTE: ALL MAINS SHOWN FALL WITHIN PUBLIC OR EASEMENTS AND/OR PRIVATE RIGHTS-OF-WAY

NOTE: SOME AS-BUILT ITEMS SHOWN HEREON HAVE BEEN TAKEN BY SITE CONTRACTOR

SEE SHEET 1 FOR SURVEYOR'S CERTIFICATION. NOT VALID WITHOUT SHEETS 1-2

SHEET 2 OF 2

JOB # 41517 - STORM AB
FIELD SURVEY DATE: 01-06-2020
REVISION:
REVISION:
REVISION:

AAL LAND SURVEYING SERVICES, INC.

3970 MINTON ROAD, WEST MELBOURNE, FL 32904
PHONE: (321)788-8110 FAX: (321)852-9771
E-MAIL: frontdesk@aalsurvey.com

LB. #6823

AVERY SPRINGS DEVELOPMENT PLANS

AVERY SPRINGS SUBDIVISION

PALM BAY, FLORIDA

DATE:

MARCH 21, 2017

PREPARED FOR:

TRIANGLE PALM BAY, LLC

SITE DATA:

1. GENERAL STATEMENT:

THIS PROPOSED COMMUNITY CONSISTS OF THE CONSTRUCTION OF A NEW GATED RESIDENTIAL SUBDIVISION PLANNED UNIT DEVELOPMENT (PUD) WITH FPL TRANSMISSION POWER LINES ANGLED THROUGH THE PROPERTY. THE PROJECT SITE IS LOCATED ON THE NORTH SIDE OF MALABAR ROAD IN PALM BAY, FLORIDA ADJACENT TO A MELBOURNE TILLMAN CANAL TO THE SOUTH. THE PROJECT WILL EXTEND THE CITY OF PALM BAY WATER AND SANITARY SEWER SERVICE THROUGHOUT AND INCLUDES PROVIDING PROPERTY AND STORMWATER TREATMENT FOR A REGIONAL CITY LIFT STATION. THE PROPOSED STORMWATER TREATMENT SYSTEM IS A SERIES OF INTERCONNECTED TREATMENT PONDS THAT ULTIMATELY DISCHARGES TO THE SOUTHEASTERN CORNER OF THE SITE. IN CASE OF AN EMERGENCY WHEN THE GATED DRIVEWAY IS NOT ACCESSIBLE, AN EMERGENCY AND FPL MAINTENANCE GATED ENTRANCE IS PROVIDED TO THE NORTH.

THE SUBDIVISION INCLUDES 140 LOTS THAT ARE A MINIMUM OF 120 FEET DEEP BY 50 FEET WIDE SINGLE FAMILY LOTS. THERE ARE 3.5 UNITS PER ACRE, FAR BELOW THE ALLOWABLE DENSITY PER THE SINGLE FAMILY RESIDENTIAL LAND USE. SITE AMENITIES INCLUDE SIDEWALKS THROUGHOUT, A GATED ENTRANCE WITH UPGRADED LANDSCAPING, LIGHTING AND SIGNAGE, A LOOPED WALKING EXERCISE TRAIL OVERLOOKING PONDS, AND A SITE AMENITIES/GROUP MAIL BOX TRACT INCLUDING PARKING AND ADDITIONAL RECREATIONAL ELEMENTS. THE NORTH AND WEST PROPERTY LINES AT A MINIMUM PROPOSE A 6 FOOT HIGH DECORATIVE OPAQUE FENCE. THE ROADS ARE PROPOSED TO BE BUILT TO CITY STANDARDS BUT MAINTAINED BY THE HOMEOWNER'S ASSOCIATION ELIMINATING THE BURDEN FROM THE CITY PUBLIC WORKS DEPARTMENT AND OVERALL CITY BUDGET.

2. CONTACT INFORMATION:

OWNER:

TRIANGLE PALM BAY, LLC
3970 MINTON ROAD
WEST MELBOURNE, FL 32904
TEL: (321)768-8110

CIVIL ENGINEER:

CONSTRUCTION ENGINEERING GROUP, LLC
JAKE T. WISE, P.E.
2651 EAU GALLIE BLVD, SUITE A
MELBOURNE, FL 32935
TEL: (321) 610-1760
E-MAIL: JWIS@CEENGINEERING.COM

SURVEYOR:

AAL LAND SURVEYING SERVICES, INC.
3970 MINTON ROAD
WEST MELBOURNE, FL 32904
TEL: (321) 768-8110

ADDRESS:

TOWNSHIP: 28
RANGE: 36
SECTION: 34, 35
TAX ACCOUNT NUMBER: 2812392
2815364

3. SITE CHARACTERISTICS:

TOTAL OVERALL ACREAGE: 40.47
ZONING CLASSIFICATION: PUD
FUTURE LAND USE: PUBLIC/SEMI PUBLIC
DATUM: NAVD 88, SEE SURVEY

BUILDING SETBACKS:

FRONT SETBACK: 25'
SIDE INTERIOR: 5'
REAR SETBACK: 25'
SIDE CORNER: 15'

REQUIRED LOT COVERAGES

MINIMUM LOT AREA: 6250 SF
MINIMUM LOT WIDTH: 50 FT
MINIMUM LOT DEPTH: 120 FT

PROPOSED PHASES:

	SF	ACRE	PERCENT
IMPERVIOUS (LOTS):	625,522	14.36	36%
IMPERVIOUS (ASPHALT / CONCRETE):	311,890	7.16	18%
TOTAL IMPERVIOUS:	937,412	21.52	54%
PONDS AT NWL:	220,414	5.06	13%
FPL EASEMENT:	158,558	3.64	9%
PERVIOUS:	446,489	10.25	25%
TOTAL GROSS AREA:	1,762,873	40.47	100%

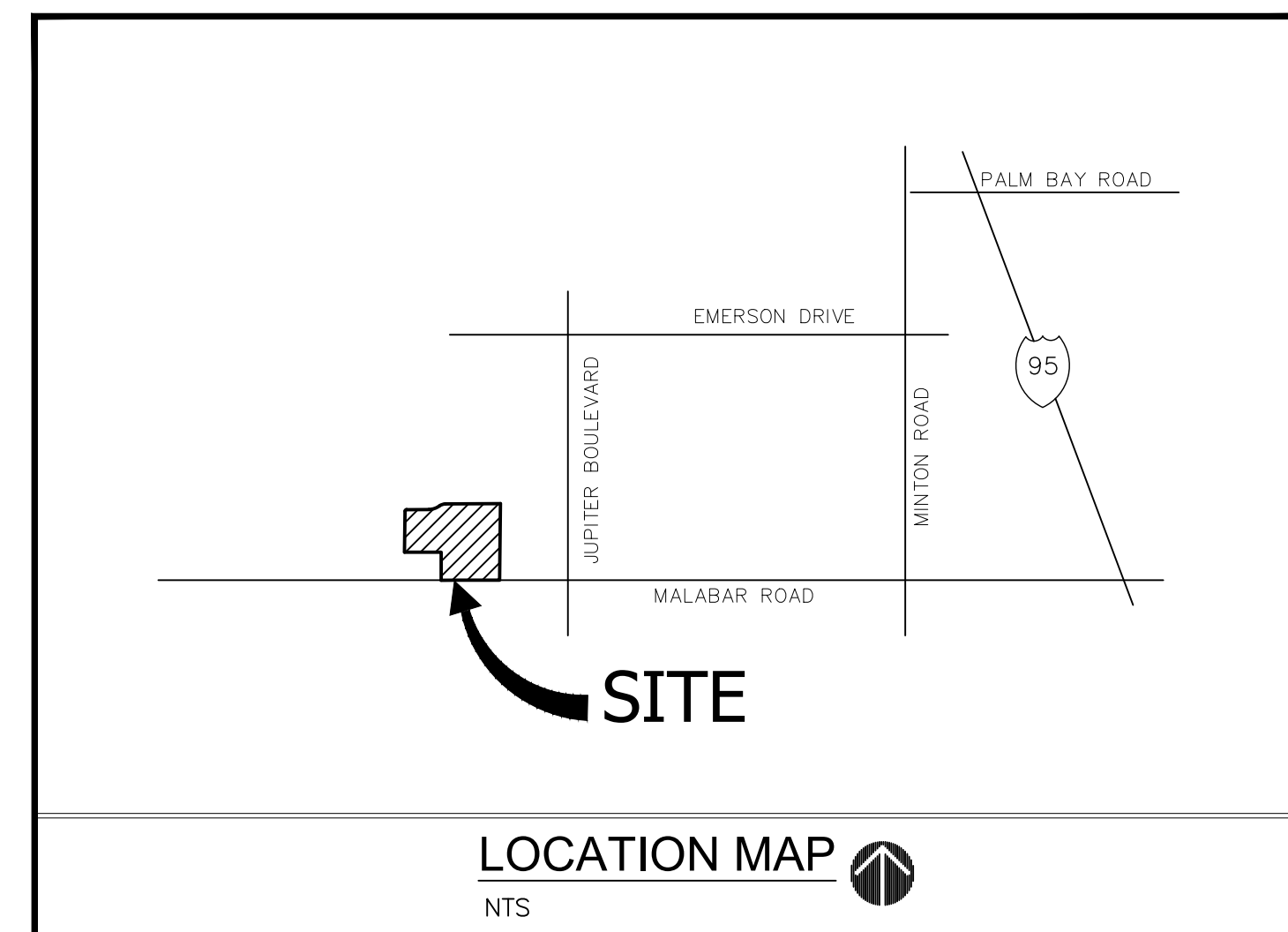
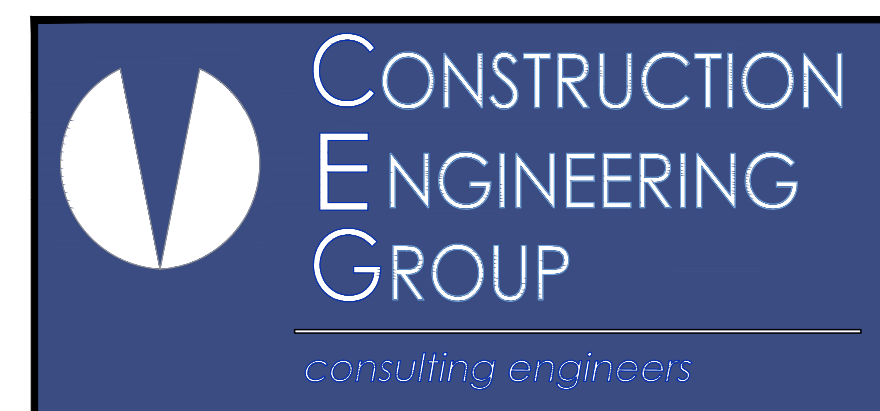
NOTE: THIS INCLUDES 80% IMPERVIOUS FOR 0.37 ACRE FUTURE CITY LIFT STATION SITE. ▲

I HEREBY CERTIFY THAT THE DESIGN OF THE STORMWATER MANAGEMENT SYSTEM FOR THE PROJECT KNOWN AS AVERY SPRINGS SUBDIVISION MEETS ALL OF THE REQUIREMENTS AND HAS BEEN DESIGNED SUBSTANTIALLY IN ACCORDANCE WITH THE REQUIREMENTS OF THE CITY OF PALM BAY'S ORDINANCE NO. 95-33 AND THE PUBLIC WORKS MANUAL.

4. REQUIRED PERMITS:

- MTWCD
- CITY OF PALM BAY
- FDEP NOI, WATER AND WASTE WATER
- SJRWMD ERP
- FLORIDA FISH AND WILDLIFE COMMISSION
- MELBOURNE TILLMAN WATER CONTROL DISTRICT

PREPARED BY:



LEGAL DESCRIPTION:

THAT PORTION OF SECTIONS 34 AND 35, TOWNSHIP 28 SOUTH, RANGE 36 EAST, LYING SOUTH OF BIARRITZ STREET, NORTH OF MELBOURNE TILLMAN DRAINAGE DISTRICT CANAL NO. 20, WEST OF TRACT E AND EAST OF TRACT D, ALL AS SHOWN WITHIN THE PLAT OF PORT MALABAR UNIT TWENTY SIX, AS RECORDED IN PLAT BOOK 16, PAGES 84-90 OF THE PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA, TOGETHER WITH AFORESAID TRACT D AND TRACT E, CONTAINING 40.47 ACRES MORE OR LESS

CIVIL INDEX OF DRAWINGS:

G-1	CIVIL COVER SHEET
G-2	STORMWATER POLLUTION PREVENTION PLAN (SWPPP)
G-3	OVERALL SUBDIVISION PLAN
C-1	EXISTING CONDITIONS AND DEMOLITION PLAN
C-2A THRU 2B	SUBDIVISION PLAN
C-2C	TURN LANE PLANS
C-3A THRU 3B	UTILITY PLAN
C-4A THRU 4C	GRADING AND DRAINAGE PLAN
C-5 THRU 10	PLAN AND PROFILE
C-11 THRU 17	DETAILS
C-18 THRU 19	SPECIFICATIONS SURVEY

CIVIL LEGEND:

DESCRIPTION	NEW
CONCRETE SIDEWALK/DRIVE	
DEMOLITION	
ON-SITE ASPHALTIC PAVEMENT	
▲ MALABAR ROAD RIGHT-OF-WAY ASPHALTIC PAVEMENT	
MALABAR ROAD RIGHT-OF-WAY SEAL COAT	
▲ MALABAR ROAD RIGHT-OF-WAY MILL AND RESURFACE	
STABILIZED EXERCISE TRAIL	
6' HIGH OPAQUE PVC FENCE	
SANITARY SEWER LINE	
WATERLINE	
STORM DRAIN	
POND/ SWALE CONTOUR	
SILT FENCE/TURBIDITY BARRIER	
RIGHT-OF-WAY	
SPOT ELEVATION	
SWALE OR FLOW DIRECTION	

REV#	DATE	REVISION
1	5/17/17	SURMWD AND CITY COMMENTS
2	7/17/17	SURMWD AND CITY COMMENTS
3	8/28/17	CITY COMMENTS
4	11/20/17	CITY COMMENTS
5	12/29/17	CITY COMMENTS
6	2/01/18	CITY COMMENTS
7	4/23/18	STORMWATER REVISIONS

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CONSTRUCTION ENGINEERING GROUP
consulting engineers

AVERY SPRINGS SUBDIVISION
TRIANGLE PALM BAY, LLC
MALABAR ROAD AND HILL CREST AVENUE PALM BAY, FLORIDA
DRAWING TITLE
CIVIL COVER SHEET

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SCALE	N.T.S.
PROJ. NO.:	160460
DESIGNED BY:	JRT
DRAWN BY:	SMB
CHECKED BY:	JTW
DRAWING NO.	G-1

CONTRACTOR RESPONSIBILITIES FOR NPDES (SWPPP)

- GENERAL NOTES
 - CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS HEREIN AND ALL WATER MANAGEMENT DISTRICT, FDEP, EPA, CORPS OF ENGINEERS, AND MUNICIPALITY/COUNTY WITH JURISDICTION REQUIREMENTS.
 - CONTRACTOR SHALL MAINTAIN A RECORD OF CONSTRUCTION WORK AND PROVIDE INSPECTION REPORTS WITH THE FOLLOWING DATA:
 - DATES WHEN SITE WORK BEGINS, EROSION CONTROL MEASURES ARE INSTALLED, GRADING WORK BEGINS, STORMWATER FACILITIES ARE CONSTRUCTED, AND FINAL STABILIZATION IS COMPLETE.
 - REPORT INSPECTOR'S NAME, QUALIFICATIONS, DAILY RAINFALL, ANY CHANGES NECESSARY TO SWPPP, AND DATES OF INSPECTIONS.
 - PICTURES OF ANY PROBLEM AREAS THAT OCCUR INCLUDING DATE AND TIME, AND PICTURES OF SAME AREA REPAIRED INCLUDING DATE AND TIME.
 - PRIOR TO FINAL PAYMENT, CONTRACTOR SHALL PROVIDE A COPY OF THE REPORT TO THE OWNER AND CIVIL ENGINEER CERTIFYING THE PROJECT. CONTRACTOR SHALL EXECUTE NPDES CERTIFICATION FORM AND PROVIDE COPIES TO OWNER AND ENGINEER.
- SITE DESCRIPTION
 - DESCRIPTION OF THE INTENDED SEQUENCE OF MAJOR ACTIVITIES WHICH DISTURB SOILS FOR MAJOR PORTIONS OF THE SITE.
 - FIRST, GRADE THE SITE INCLUDING THE STORMWATER TREATMENT SYSTEM. ALL EROSION CONTROL MEASURES INSTALLED AT THIS TIME (SOD ALL AREAS FINAL GRADED IMMEDIATELY). FINAL GRADING, PAVING, AND PLANTINGS ACROSS THE SITE WILL FINISH OUT THE PROJECT.
 - ESTIMATE OF THE TOTAL AREA OF THE SITE AND THE TOTAL AREA EXPECTED TO BE DISTURBED BY EXCAVATION, GRADING, OR OTHER ACTIVITIES.
 - THE ENTIRE 40.47 ACRES ARE EXPECTED TO BE DISTURBED BY GRADING, WITH THE EXCEPTION OF TREE PRESERVATION AREAS AS IDENTIFIED ON THE EXISTING SITE PLAN, AND THE FLORIDA POWER AND LIGHT EASEMENT.
 - AN ESTIMATE OF RUNOFF COEFFICIENT OF THE SITE BEFORE, DURING, AND AFTER CONSTRUCTION USING "C" FROM THE RATIONAL METHOD.
 - "C" CAN BE APPROXIMATED AS 0.15 (BEFORE) AND 0.60(AFTER), FROM TABLE 2.1 "TYPICAL "C" VALUES" OF THE EPA "STORM WATER MANAGEMENT FOR CONSTRUCTION ACTIVITIES."
 - THE EXISTING DATA DESCRIBING EXISTING CONDITIONS OF SOIL OR THE QUALITY OF ANY DISCHARGE FROM THE SITE.
 - EAU GALLIE SAND ACCORDING TO THE SOIL SURVEY MAP OF BREWARD.
 - OFF-SITE OVERFLOW RECEIVING BODY.
 - INDIAN RIVER.
- CONTROLS

THIS SECTION PROVIDES A DESCRIPTION OF APPROPRIATE CONTROLS AND MEASURES THAT WILL BE IMPLEMENTED AT THE CONSTRUCTION SITE.

 - EROSION AND SEDIMENT CONTROLS
 - STABILIZATION PRACTICES: EXCAVATED MATERIALS WILL BE STOCKPILED FOR USE AS A BACKFILL AND STABILIZING MATERIAL. UNSUITABLE MATERIALS WILL BE PROMPTLY REMOVED FROM THE SITE AND LEGALLY DISPOSED OF.
 - STRUCTURAL PRACTICES: THE CONTRACTOR SHALL INSTALL AND MAINTAIN WATER QUALITY CONTROL DEVICES AT ALL NEARBY STORMWATER MANAGEMENT PONDS, DITCHES, AND SWALES. INCLUDED IN THE PLANS ARE SILTATION FENCES AND TURBIDITY BARRIERS. CONTRACTOR SHALL INSTALL ADDITIONAL WATER QUALITY CONTROL MEASURES AS APPROPRIATE TO ASSURE ADEQUATE PROTECTION OF RECEIVING WATER BODIES.
 - STORMWATER MANAGEMENT

CONTRACTOR SHALL CONSTRUCT AND MAINTAIN STORMWATER TREATMENT SYSTEMS TO IMPROVE STORMWATER MANAGEMENT. THE CONTRACTOR SHALL CONTROL TURBID RUNOFF FROM THE PROJECT SITE BY USING TEMPORARY GRADING AND INSTALLING EROSION CONTROL MEASURES.
 - OTHER CONTROLS: ALL GUIDELINES AND REGULATIONS SET FORTH IN THE ST. JOHNS RIVER WATER MANAGEMENT DISTRICT AND FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION.
- MAINTENANCE
 - THE CONTRACTOR SHALL PROVIDE ROUTINE MAINTENANCE OF VEGETATION, PERMANENT AND TEMPORARY EROSION CONTROL MEASURES.
 - THE CONTRACTOR SHALL GRADE THE SITE TO THE ELEVATIONS INDICATED ON THE CONSTRUCTION PLANS AND SHALL RE-GRADE WASHOUTS WHERE THEY OCCUR AFTER EVERY RAINFALL UNTIL NEW LANDSCAPING IS ESTABLISHED.
 - ALL DRAINAGE STRUCTURES SHALL BE DE-SILTED AS REQUIRED DURING CONSTRUCTION AND AT THE END OF CONSTRUCTION TO PROVIDE POSITIVE DRAINAGE FLOWS AND MINIMIZE TRANSPORT OF SILT TO THE MASTER DRAINAGE SYSTEM AND RECEIVING WATER BODY.
 - ALL ACCUMULATIONS OF SILT GREATER THAN SIX INCHES SHALL BE REMOVED BY THE CONTRACTOR AND PROPERLY DISPOSED.
 - ALL TEMPORARY AND PERMANENT EROSION CONTROL DEVICES WILL BE INSPECTED BY THE CONTRACTOR ON A WEEKLY BASIS (MINIMUM). IN AREAS OF ONGOING CONSTRUCTION ACTIVITY, TURBIDITY AND EROSION CONTROL MEASURES WILL BE INSPECTED ON A DAILY BASIS. ADDITIONAL INSPECTIONS WILL BE CONDUCTED AFTER ALL SEVERE WEATHER. IF ANY DEFICIENCIES IN EROSION CONTROL ARE DISCOVERED, CORRECTIVE ACTIONS SHALL BE TAKEN IMMEDIATELY BY THE CONTRACTOR.

REVISION	DATE	BY	DESCRIPTION

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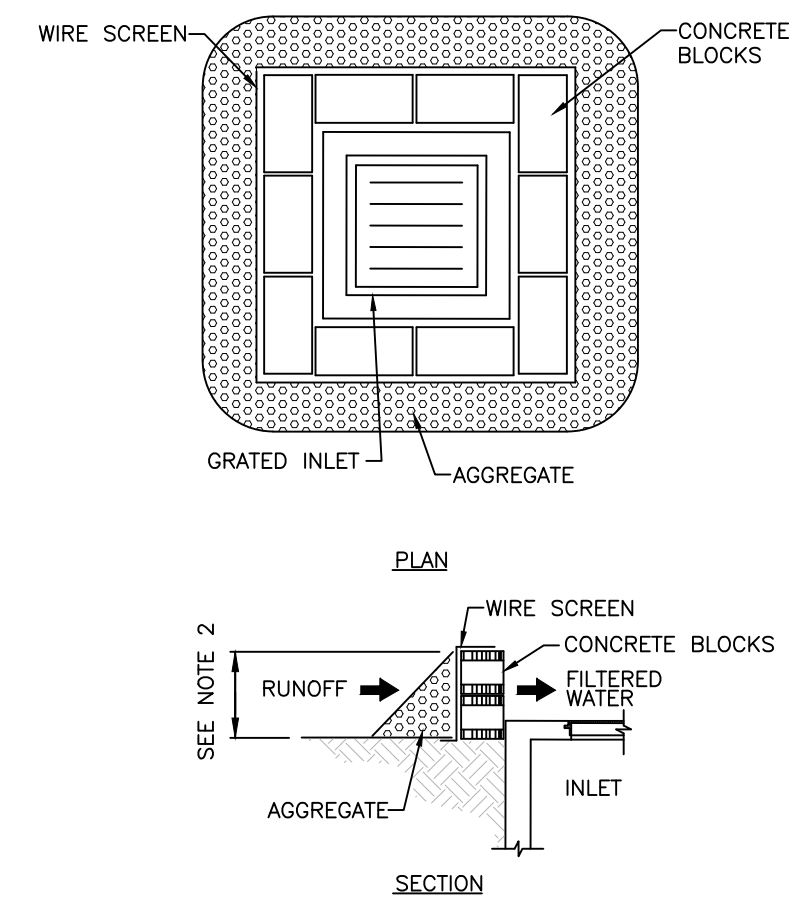
EROSION AND SEDIMENTATION CONTROL REQUIREMENTS

- THE LAND-DISTURBING ACTIVITY SHALL CONFORM TO EXISTING TOPOGRAPHY AND SOIL TYPE SO AS TO CREATE THE LOWEST PRACTICAL EROSION POTENTIAL.
- LAND-DISTURBING ACTIVITIES SHALL BE CONDUCTED IN A MANNER MINIMIZING EROSION.
- THE DISTURBED AREA AND THE DURATION OF EXPOSURE TO EROSION ELEMENTS SHALL BE KEPT TO A PRACTICABLE MINIMUM.
- EROSION CONTROL MUST BE STRICTLY MAINTAINED DURING CUT AND FILL OPERATIONS.
- DISTURBED SOIL SHALL BE STABILIZED AS QUICKLY AS PRACTICABLE.
- WHENEVER FEASIBLE, NATURAL VEGETATION SHALL BE RETAINED, PROTECTED AND SUPPLEMENTED.
- TEMPORARY VEGETATION OR MULCHING SHALL BE EMPLOYED TO PROTECT EXPOSED CRITICAL AREAS DURING DEVELOPMENT.
- PERMANENT VEGETATION AND STRUCTURAL EROSION CONTROL MEASURES SHALL BE INSTALLED AS SOON AS PRACTICABLE.
- ADEQUATE PROVISIONS MUST BE PROVIDED TO MINIMIZE DAMAGE FROM SURFACE WATER TO THE CUT FACE OF EXCAVATIONS OR THE SLOPING SURFACE OF FILLS.
- TO THE EXTENT NECESSARY, SEDIMENT IN RUNOFF WATER MUST BE TRAPPED BY THE USE OF DEBRIS BASINS, SEDIMENT BASINS, SILT TRAPS OR SIMILAR MEASURES UNTIL THE DISTURBED AREA IS STABILIZED.
- CUTS AND FILLS MUST BE CONSTRUCTED IN SUCH A MANNER THAT EROSION AND RUNOFF FROM THE SITE DOES NOT ENDANGER ADJOINING PROPERTY.
- FILLS MAY NOT ENCRoACH UPON NATURAL WATERCOURSES OR CONSTRUCTED CHANNELS IN A MANNER SO AS TO ADVERSELY AFFECT OTHER PROPERTY OWNERS WITHOUT ADEQUATE PROVISIONS FOR AN EQUIVALENT ALTERNATE SYSTEM WITH A POSITIVE OUTFALL.
- ALL R.O.W.'S, WATERWAYS, STREETS AND SIDEWALKS SHALL BE BUFFERED BY A TWENTY (20) FOOT WIDE STRIP OF GRASS OR OTHER SUITABLE MEANS. GRADING EQUIPMENT MUST CROSS FLOWING STREAMS BY MEANS OF BRIDGES OR CULVERTS EXCEPT WHEN SUCH METHODS ARE NOT FEASIBLE. BRIDGES IN ANY CASE, THAT SUCH CROSSINGS ARE KEPT TO A MINIMUM AND SEDIMENTATION CONTROL DEVICES ARE PROVIDED.

DEWATERING PLAN:

(ALL PONDS)
EXCAVATE AND GRADE FIRST HALF OF POND TO NWL DEWATER TO EXISTING ON-SITE SOUTH PONDS.
EXCAVATE AND GRADE THE OTHER HALF OF POND TO FINAL GRADE. DEWATER INTO FIRST HALF OF POND.
EXCAVATE AND GRADE THE FIRST HALF OF POND TO FINAL GRADE. DEWATER INTO OTHER HALF OF POND.

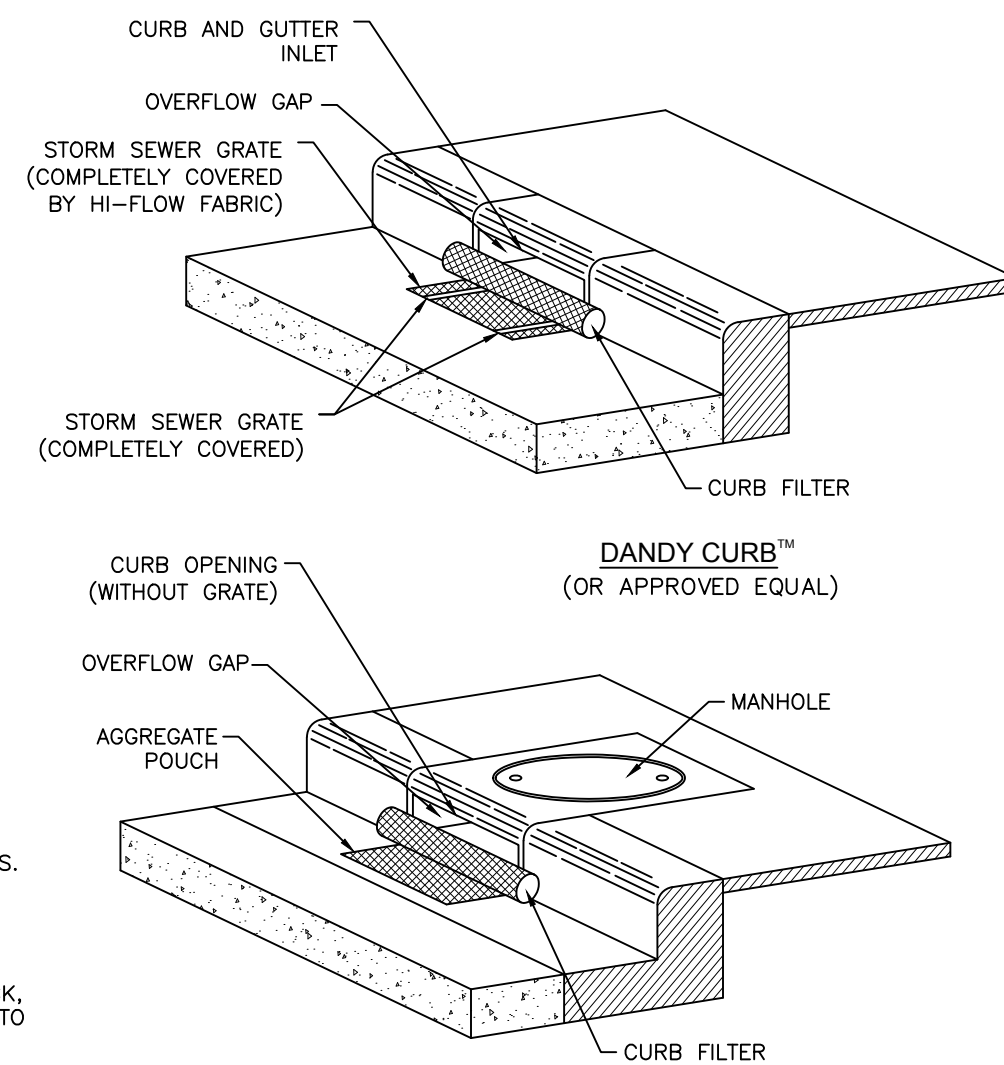
FINAL GRADE AND SOD ENTIRE BANKS OF PONDS PER SECTION CUTS IMMEDIATELY. STAKE SOD IN AREAS WHERE WASHOUTS MAY OCCUR. WATER SOD AS NEEDED TO MAINTAIN HEALTH OF SOD. INSTALL SILT FENCE AROUND PONDS AFTER SODDING.
CONSTRUCT OVERFLOW STRUCTURES AND ALL PIPING BETWEEN DETENTION PONDS UPON FINAL GRADING OR SOONER TO UTILIZE FOR DEWATERING. INSTALL SKIMMERS AND UTILIZE TURBIDITY BARRIERS AROUND PIPE ENDS TO PREVENT SILTATION OF PIPING/STRUCTURE. ALL OF THIS WORK TO BE COMPLETED PER SJRWMD AND CITY OF PALM BAY PERMIT CONDITIONS.
INSPECT AND REPAIR ANY HAZARDOUS, SILT FENCES AND TURBIDITY BARRIERS AFTER EACH RAIN EVENT DURING CONSTRUCTION.



- PLACE CONCRETE BLOCKS IN A SINGLE ROW AROUND PERIMETER OF INLET ON THEIR SIDES, WITH ENDS OF ADJACENT BLOCKS ABUTTING.
- HEIGHT OF BARRIER VARIES. USE STACKS OF 4-INCH, 8-INCH, OR 12" BLOCKS. MIN. HEIGHT OF BARRIER 12" AND MAX. HEIGHT OF 24"
- PLACE HARDWARE CLOTH/WIRE MESH W/ MAX. 1/2" OPENINGS OVER VERTICAL FACE OF CONCRETE BLOCKS.
- THE AGGREGATE SHALL BE ANY NON-ERODIBLE MATERIAL SUCH AS LOOSE ROCK, BROKEN CONCRETE THAT WILL SLOW THE FLOW OF THE WATER AND ALLOW IT TO FILTER THROUGH AND OVER THE MATERIAL BEFORE ENTERING THE INLET.

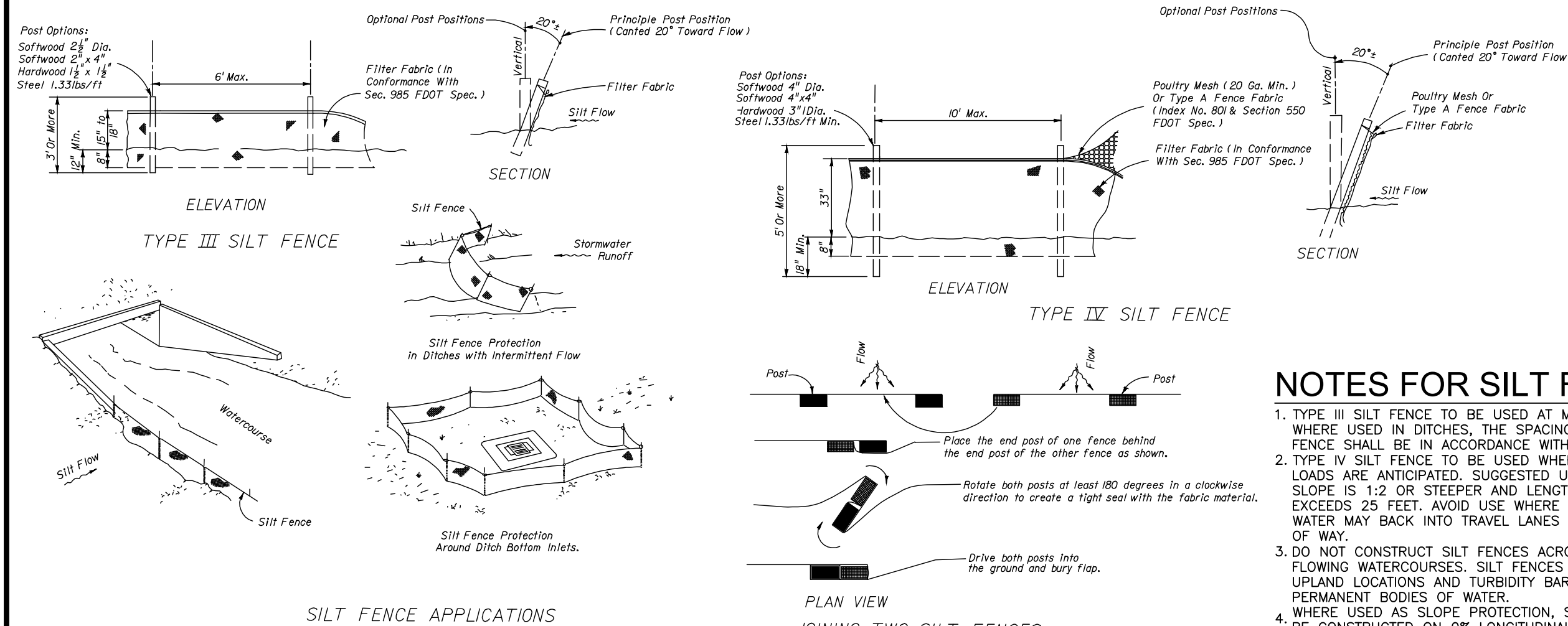
BLOCK AND AGGREGATE INLET SEDIMENT DEVICE

NTS



CURB INLET SEDIMENT CONTROL

NTS



TYPICAL FDOT SILT FENCE DETAIL

NTS

NOTES FOR SILT FENCES

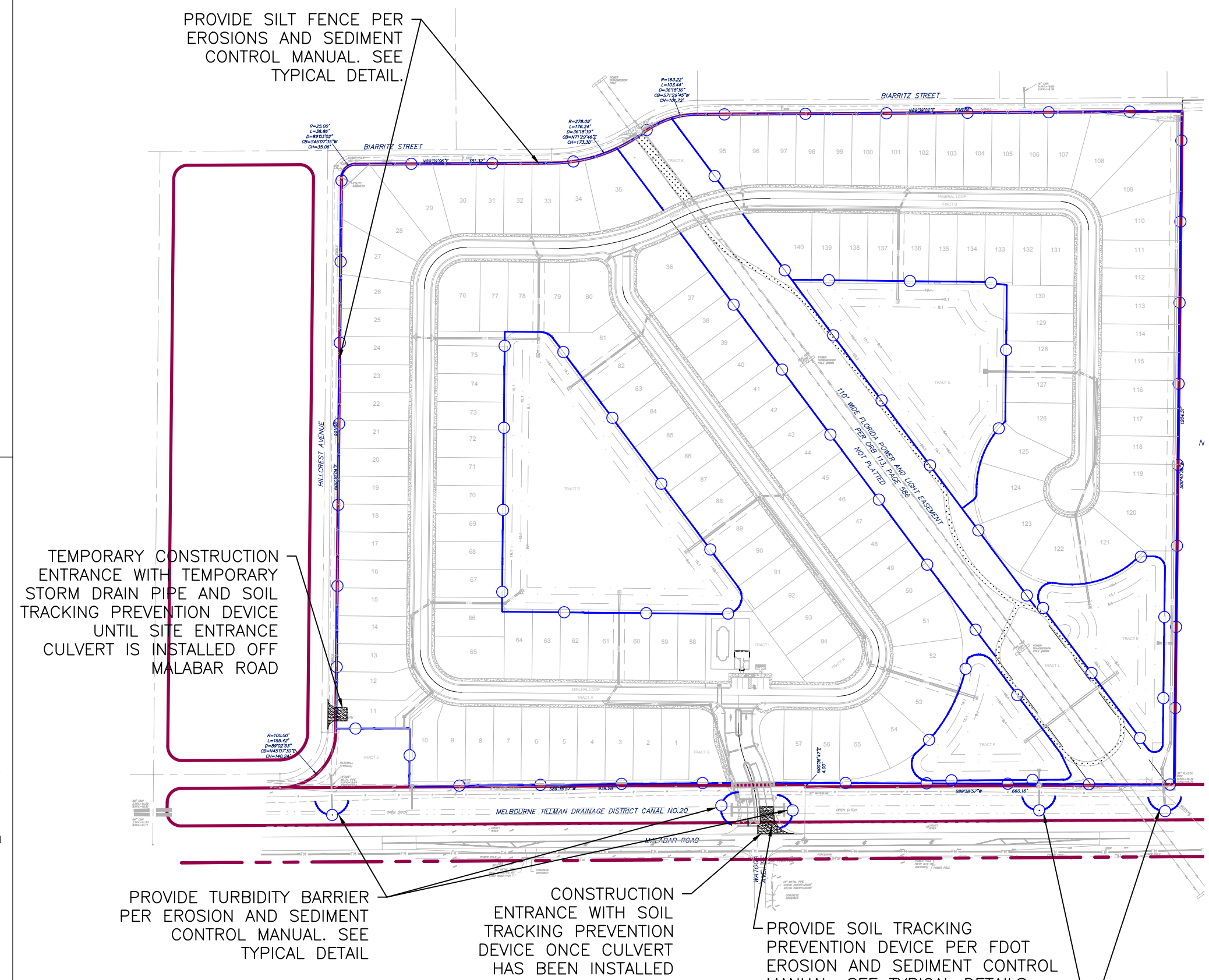
- TYPE III SILT FENCE TO BE USED AT MOST LOCATIONS, WHERE USED IN DITCHES, THE SPACING FOR TYPE III SILT FENCE SHALL BE IN ACCORDANCE WITH CHART 1, SHEET 1.
- TYPE IV SILT FENCE TO BE USED WHERE LARGE SEDIMENT LOADS ARE ANTICIPATED. SUGGESTED USE IS WHERE FILL SLOPE IS 1:2 OR STEEPER AND LENGTH OF SLOPE EXCEEDS 25 FEET. AVOID USE WHERE THE DETAINED WATER MAY BACK INTO TRAVEL LANES OR OFF THE RIGHT OF WAY.
- DO NOT CONSTRUCT SILT FENCES ACROSS PERMANENT FLOWING WATERCOURSES. SILT FENCES ARE TO BE AT UPLAND LOCATIONS AND TURBIDITY BARRIERS USED AT PERMANENT BODIES OF WATER.
- WHERE USED AS SLOPE PROTECTION, SILT FENCE IS TO BE CONSTRUCTED ON 0% LONGITUDINAL GRADE TO AVOID CHANNELIZING RUNOFF ALONG THE LENGTH OF THE FENCE.
- SILT FENCE TO BE PAID FOR UNDER THE CONTRACT UNIT PRICE FOR STAKED SILT FENCE, (LF).

DEWATERING SPECIFICATIONS:

- MAINTAIN ADEQUATE SUPERVISION AND CONTROL TO ENSURE THAT STABILITY OF EXCAVATED AND CONSTRUCTED SLOPES ARE NOT ADVERSELY AFFECTED BY WATER. EROSION IS CONTROLLED, AND FLOODING OF EXCAVATION OR DAMAGE TO STRUCTURES DOES NOT OCCUR.
- THE DEWATERING PLAN SHALL COMPLY WITH THE REQUIREMENTS OF THE ST. JOHNS WATER MANAGEMENT DISTRICT FOR CONSUMPTIVE USE OF GROUNDWATER. PERMITTING, IF REQUIRED, SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- PROVIDE AN ADEQUATE SYSTEM TO CONTROL GROUNDWATER IN ORDER TO PERMIT EXCAVATION, CONSTRUCTION OF STRUCTURES, AND PLACEMENT OF FILL MATERIALS UNDER DRY CONDITIONS. INSTALL SUFFICIENT DEWATERING EQUIPMENT TO DRAIN WATER-BEARING STRATA ABOVE AND BELOW BOTTOM OF STRUCTURE FOUNDATIONS, DRAINS, SEWERS, AND OTHER EXCAVATIONS.
- REDUCE HYDROSTATIC HEAD IN WATER-BEARING STRATA BELOW STRUCTURE FOUNDATIONS, DRAINS, SEWERS AND OTHER EXCAVATIONS TO EXTENT THAT WATER LEVEL AND PIEZOMETRIC WATER LEVELS IN CONSTRUCTION AREAS ARE BELOW PREVAILING EXCAVATION SURFACE.
- PRIOR TO EXCAVATION BELOW GROUNDWATER LEVEL, PLACE SYSTEM INTO OPERATION TO LOWER WATER LEVELS AS REQUIRED AND THEN OPERATE IT CONTINUOUSLY 24 HOURS A DAY, 7 DAYS A WEEK UNTIL DRAINS, SEWERS AND STRUCTURES HAVE BEEN CONSTRUCTED, INCLUDING PLACEMENT OF FILL MATERIALS, AND UNTIL DEWATERING IS NO LONGER REQUIRED.
- DISPOSE OF WATER REMOVED FROM EXCAVATIONS IN A MANNER TO AVOID ENDANGERING PUBLIC HEALTH, PROPERTY, AND PORTIONS OF WORK UNDER CONSTRUCTION OR COMPLETED. DISPOSE OF WATER IN A MANNER TO AVOID INCONVENIENCE TO OTHERS. PROVIDE SUMPS, SEDIMENTATION TANKS, AND OTHER FLOW CONTROL DEVICES AS REQUIRED BY GOVERNING AUTHORITIES.
- PROVIDE STANDBY EQUIPMENT ON SITE, INSTALLED AND AVAILABLE FOR IMMEDIATE OPERATION IF REQUIRED TO MAINTAIN DEWATERING ON A CONTINUOUS BASIS IN EVENT ANY PART OF SYSTEM BECOMES INADEQUATE OR FAILS. IF DEWATERING REQUIREMENTS ARE NOT SATISFIED DUE TO INADEQUACY OR FAILURE OF DEWATERING SYSTEM, PERFORM SUCH WORK AS MAY BE REQUIRED TO RESTORE DAMAGED STRUCTURES AND FOUNDATION SOILS AT NO ADDITIONAL EXPENSE.

NOTES:

- A SOIL TRACKING PREVENTION DEVICE (STPD) SHALL BE CONSTRUCTED AT LOCATIONS DESIGNATED BY THE ENGINEER FOR POINTS OF EGRESS FROM UNSTABILIZED AREAS OF THE PROJECT TO PUBLIC ROADS WHERE OFF-SITE TRACKING OF MUD COULD OCCUR. TRAFFIC FROM UNSTABILIZED AREAS OF THE CONSTRUCTION PROJECT SHALL BE DIRECTED THRU A STPD. BARRIERS, FLAGGING, OR OTHER POSITIVE MEANS SHALL BE USED AS REQUIRED TO LIMIT AND DIRECT VEHICULAR EGRESS ACROSS THE STPD.
- THE CONTRACTOR MAY PROPOSE AN ALTERNATIVE TECHNIQUE TO MINIMIZE OFF-SITE TRACKING OF SEDIMENT. THE ALTERNATIVE MUST BE REVIEWED AND APPROVED BY THE ENGINEER PRIOR TO ITS USE.
- ALL MATERIALS SPILLED, DROPPED, OR TRACKED ONTO THE PUBLIC ROADS (INCLUDING THE STPD AGGREGATE AND CONSTRUCTION MUD) SHALL BE REMOVED DAILY, OR MORE FREQUENTLY IF SO DIRECTED BY THE ENGINEER. AGGREGATES SHALL BE AS DESCRIBED IN SECTION 901 EXCLUDING 901-2.3. AGGREGATES SHALL BE FDOT SIZE #1. IF THIS SIZE IS NOT AVAILABLE, THE NEXT AVAILABLE SMALLER SIZE AGGREGATE MAY BE SUBSTITUTED WITH THE APPROVAL OF THE ENGINEER. SIZES OTHER THAN #1 SHALL BE UNSUITABLE.
- THE SEDIMENT PIT SHOULD PROVIDE A RETENTION VOLUME OF 3600 CUBIC FEET/ACRE OF SURFACE AREA DRAINING TO THE PIT. PIT VOLUMES WILL SATISFY THE REQUIREMENT:
15'x50'x100 FT 30'x50'x200 FT
AS AN OPTION TO THE SEDIMENT PIT, THE WIDTH OF THE SWALE BOTTOM CAN BE INCREASED TO OBTAIN THE VOLUME. WHEN THE SEDIMENT PIT OR SWALE VOLUME HAS BEEN REDUCED TO ONE-HALF, IT SHALL BE CLEANER WHEN SWALE IS USED. SYNTHETIC BALES OR SILT FENCE SHALL BE PLACED ALONG THE ENTIRE LENGTH DRAINING THE STPD SHALL HAVE A 0.02% MINIMUM AND A 1.0% MAXIMUM GRADE ALONG THE STPD AND TO THE SEDIMENT PIT.
- MITERED END SECTIONS ARE NOT REQUIRED WHEN THE SIDE DRAIN PIPES SATISFIES THE CLEAR ZONE REQUIREMENTS.
- THE STPD SHALL BE MAINTAINED IN A CONDITION THAT WILL ALLOW IT TO PERFORM ITS FUNCTION. TO PREVENT OFF-SITE TRACKING, THE STPD SHALL BE RINSED WHEN IN USE TO MOVE ACCUMULATED MUD DOWNWARD THROUGH THE STPD. ADDITIONAL STABILIZATION OF THE VEHICULAR ROUTE LEADING TO THE STPD SHALL BE REQUIRED TO REDUCE THE MUD TRACKED.
- A STPD SHALL BE PAID FOR UNDER THE CONTRACT UNIT PRICE FOR SOIL TRACKING PREVENTION DEVICE. EA UNIT PRICE SHALL CONSTITUTE FULL COMPENSATION FOR CONSTRUCTION, MAINTENANCE, REPLACEMENT OF MATERIALS, REMOVAL, AND RESTORATION OF THE AREA UTILIZED FOR THE STPD. INCLUDING BUT NOT LIMITED TO EXCAVATION, GRADING, TEMPORARY PIPE (INCLUDING MES WHEN REQUIRED), FILTER FABRIC, AGGREGATE, PAVED TURNOFF (INCLUDING ASPHALT AND BASE CONSTRUCTION), DITCH STABILIZATION, APPROACH ROUTE STABILIZATION, SEDIMENT REMOVAL AND DISPOSAL, WATER RINSING AND CLEANING OF STPD AND CLEANING OF PUBLIC ROADS, GRASSING AND SOD. SYNTHETIC BALE OR BALE TYPE BARRIER SHALL BE PAID FOR UNDER THE CONTRACT UNIT PRICE FOR SYNTHETIC BALES. SILT FENCE SHALL BE PAID FOR UNDER THE CONTRACT UNIT PRICE FOR STAKED SILT FENCE. PL
- THE NORMAL SIZE OF A STANDING STPD IS 15'x50' UNLESS OTHERWISE SHOWN IN THE PLANS. IF THE VOLUME OF ENTERING AND EXISTING VEHICLES WARRANT, A 30' WIDTH STPD MAY BE USED IF APPROVED BY THE ENGINEER. WHEN A DOUBLE WIDTH (30') STPD IS USED, THE PAY QUANTITY SHALL BE 2 FOR EACH LOCATION.



EROSION CONTROL PLAN

1"=200'

200' 0' 200' 400'

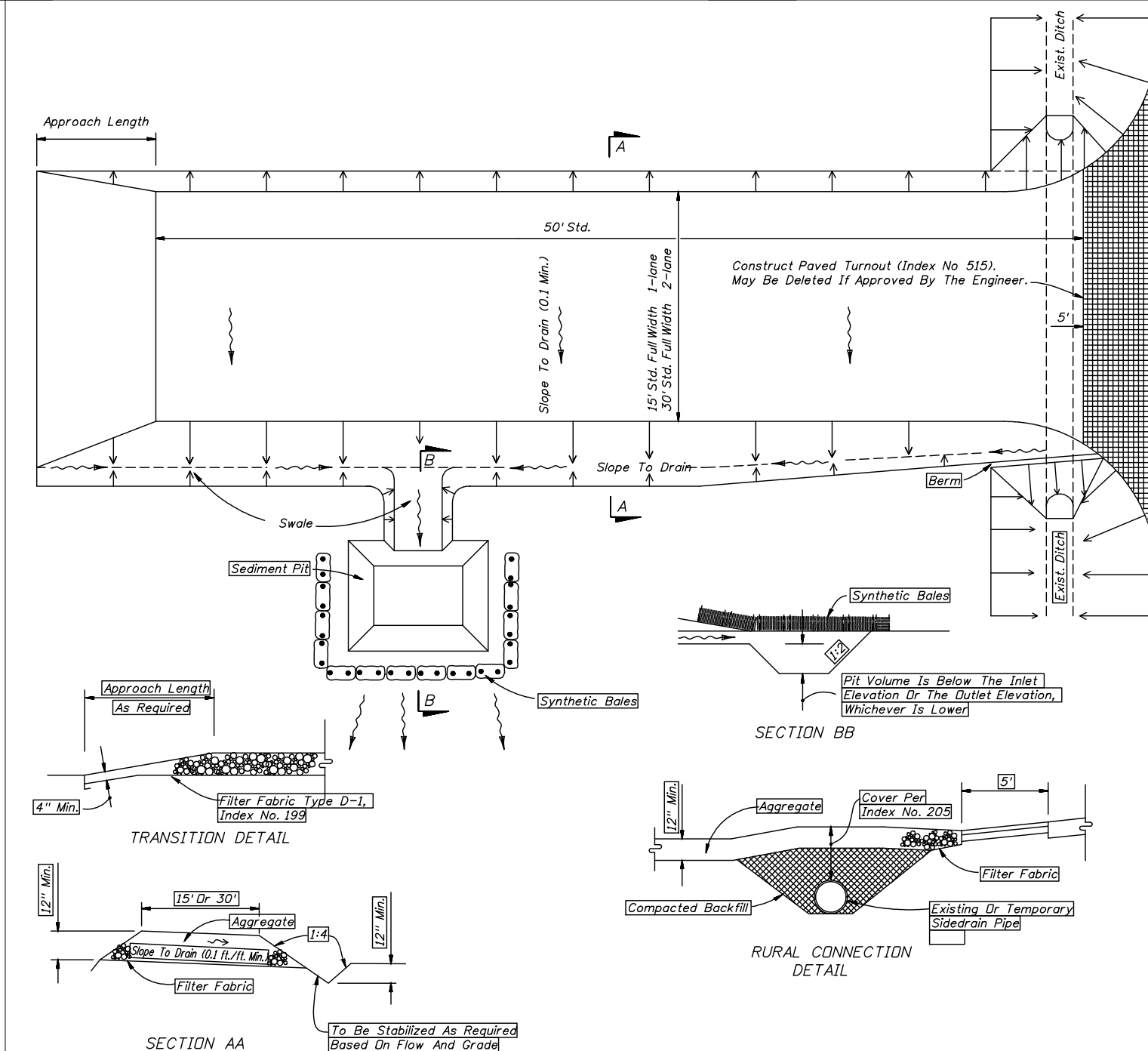
EVERY SPRINGS SUBDIVISION
TRIANGLE PALM BAY, LLC
MALABAR ROAD AND HILL CREST AVENUE PALM BAY, FLORIDA
DRAWING TITLE
STORMWATER POLLUTION PREVENTION PLAN (SWPPP)

DATE	3/21/17
SCALE	1"=200'
PROJ. NO.:	160460
DESIGNED BY:	JRT
DRAWN BY:	SMB
CHECKED BY:	JTW
DRAWING NO.	G-2

TYPICAL TURBIDITY BARRIERS DETAILS

NTS

- Turbidity barriers are to be used in all permanent bodies of water regardless of water depth.
 - Number and spacing of anchors dependent on current velocities.
 - Deployment of barrier around pile locations may vary to accommodate construction operations.
 - Navigation may require segmenting barrier during construction operations.
 - For additional information see Section 104 of the Standard Specifications.
- NOTE:
FDOT DETAILS ARE PROVIDED FOR REFERENCE INFO ONLY. SEE CORRESPONDING INDEX NUMBER IN FDOT LATEST EDITION OF THE ROADWAY AND TRAFFIC DESIGN STANDARDS MANUAL FOR ALL REQUIREMENTS.



SOIL TRACKING PREVENTION DEVICE

NTS

RECREATION/OPEN SPACE CALCULATIONS

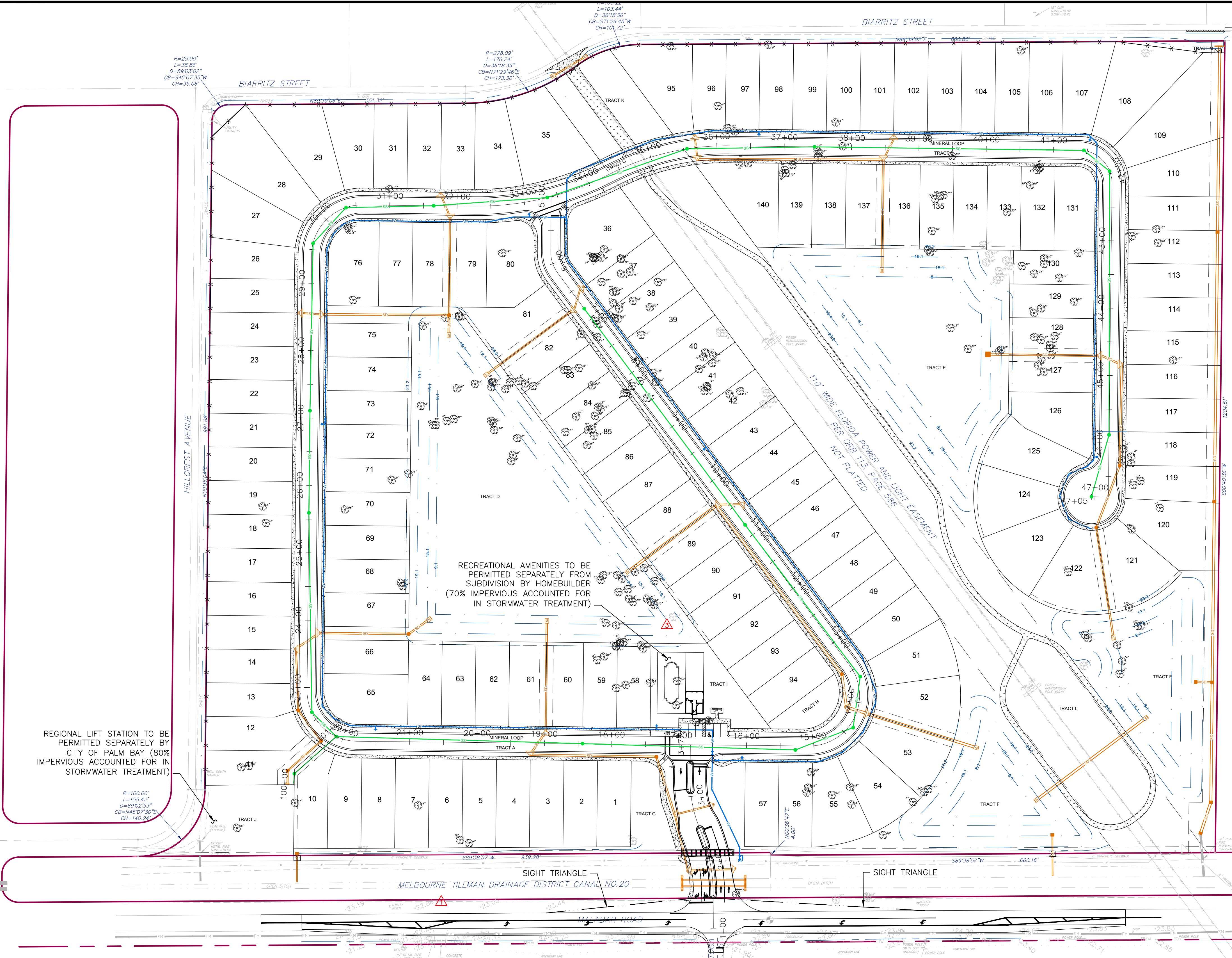
ACREAGES	
COMBINED ON SITE PONDS WITH VIEWING AREAS: (75% MAXIMUM CREDIT):	7.62 AC (5.72 AC)
PROVIDED RECREATION/OPEN SPACE	10.03 AC
MISCELLANEOUS REMAINING TRACTS	2.21 AC
ACREAGE OF SINGLE FAMILY LOTS	22.69 AC
PRIVATE RIGHT-OF-WAY	5.17 AC
TOTAL ACREAGE	40.10 AC

⚠ TRACT J NOT INCLUDED IN TOTAL ACREAGE

TRACT ACREAGE TABLE

TRACT	USE	AREA
A	PRIVATE ROAD RIGHT-OF-WAY	3.61 ACRES
B	PRIVATE ROAD RIGHT-OF-WAY	1.43 ACRES
C	PRIVATE ROAD RIGHT-OF-WAY	0.13 ACRES
D	PRIVATE RETENTION	3.04 ACRES
E	PRIVATE RETENTION	3.28 ACRES
F	PRIVATE RETENTION	1.26 ACRES
G	OPEN SPACE	0.29 ACRES
H	OPEN SPACE	0.10 ACRES
I	POSTAL KIOSK AND RECREATION	0.38 ACRES
J	LIFT STATION, PUBLIC UTILITIES AND DRAINAGE	0.37 ACRES
K	LANDSCAPING AND OPEN SPACE (FPL EASEMENT)	0.37 ACRES
L	LANDSCAPING AND OPEN SPACE (FPL EASEMENT)	3.17 ACRES
M	⚠ PUBLIC DRAINAGE	0.04 ACRES

NOT PLATTED



OVERALL SUBDIVISION PLAN
1"=80'

REV#	DATE	REVISION
1	5/17/17	SURV AND CITY COMMENTS
2	7/17/17	SURV AND CITY COMMENTS
3	10/09/17	CITY COMMENTS
6	6/06/18	CITY COMMENTS AND LOWERING SITE

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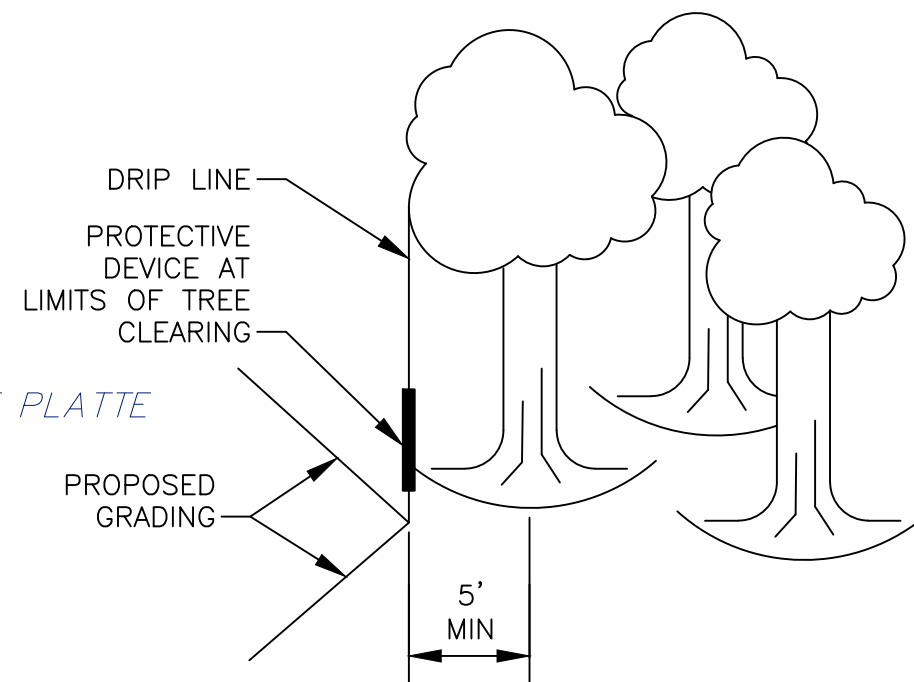
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EVERY SPRINGS SUBDIVISION
TRIANGLE PALM BAY, LLC
MALABAR ROAD AND HILL CREST AVENUE PALM BAY, FLORIDA
DRAWING TITLE
OVERALL SUBDIVISION PLAN

DATE	3/21/17
SCALE	1"=80'
PROJ. NO.:	160460
DESIGNED BY:	JRT
DRAWN BY:	SMB
CHECKED BY:	JTW
DRAWING NO.	



- NOTES:**
- 2-1. REMOVE EXISTING TREE AND ROOTS COMPLETELY.
 - 2-2. REMOVE EXISTING FENCING COMPLETELY.
 - 2-3. PRESERVE EXISTING TREES. SEE TYPICAL DETAIL. NO DISTURBANCES IN EASEMENT EXCEPT AS APPROVED BY FPL.
 - 2-4. REMOVE EXISTING SIDEWALK COMPLETELY TO NEAREST FULL JOINT.
 - 2-6. PIPE AND FILL EXISTING SWALE ALONG EAST SIDE OF PROPERTY PER GRADING AND DRAINAGE PLAN. MAINTAIN FLOW AT ALL TIMES. EXISTING OUTFALL PIPE SHALL REMAIN.
 - 2-7. PRESERVE EXISTING SWALE ALONG NORTH AND WEST SIDES OF PROPERTY. REGRADE TOP OF BANK COMPLETELY IMPACT 0.49 ACRE WETLAND. REPLACE SOILS IF NECESSARY PER GEOTECHNICAL REPORT RECOMMENDATIONS AND SPECIFICATIONS.
 - 2-9. REMOVE ANY TREES WITHIN THE SIGHT TRIANGLE. SOD ALL DISTURBED AREAS IN RIGHT-OF-WAY WITH BAHIA SOD.
 - 2-10. TEMPORARY SURFACE WATER IMPACTS OF 0.01 ACRES EACH.
 - 2-11. PERMANENT SURFACE WATER IMPACT OF 0.12 ACRES.
 - 2-12. SAWCUT EDGE OF EXISTING PAVEMENT TO PROVIDE SMOOTH STRAIGHT JOINT. MINIMUM 2' OFFSET FROM EDGE OF PAVEMENT. SEE TYPICAL DETAILS.
 - 2-13. REMOVE CONCRETE APRON, PIPE AND MITERED END SECTIONS.



TYPICAL TREE PROTECTION DETAIL
NTS

SURVEYOR'S LEGEND

- (P) - PLAT
- (M) - MEASURED
- (D) - DEED
- FND. - FOUND
- I.R. - IRON ROD
- I.P. - IRON PIPE
- C.M. - CONCRETE MONUMENT
- CL - CENTERLINE
- R/W - RIGHT OF WAY
- P - PUBLIC
- U - UTILITY
- D - DRAINAGE
- E - EASEMENT
- FF - FINISH FLOOR
- EL - ELEVATION
- Δ - DELTA
- R - RADIUS
- L - ARC LENGTH
- (B.B.) - BASIS OF BEARING
- (N.R.) - NON RADIAL
- N&D - NAIL AND DISK
- CONC. - CONCRETE
- ASPH. - ASPHALT
- P.O.L. - POINT ON LINE
- PRM - PERMANENT REFERENCE MARKER

SURVEYOR'S NOTES:

1. THIS SURVEY AND DRAWING HAVE BEEN PREPARED TO CONFORM WITH APPLICABLE STANDARDS OF PRACTICE AS SET FORTH BY THE FLORIDA BOARD OF PROFESSIONAL LAND SURVEYORS IN CHAPTER 5J-17, FLORIDA ADMINISTRATIVE CODE, PURSUANT TO SECTION 472.027, FLORIDA STATUTES.
2. THIS SURVEY IS FOR THE SOLE BENEFIT OF THE PARTIES NAMED HEREON AND FOR THE SPECIFIC PURPOSE NOTED, AND SHOULD NOT BE RELIED UPON BY ANY OTHER ENTITY, AND IS NOT TRANSFERABLE UNDER ANY CIRCUMSTANCES.
3. THIS SURVEY IS NOT VALID WITHOUT THE SIGNATURE AND THE ORIGINAL RAISED SEAL OF THE FLORIDA LICENSED SURVEYOR, AND REPRODUCTION OF THIS DRAWING WITHOUT WRITTEN PERMISSION OF THE SURVEYOR IS HEREBY FORBIDDEN.
4. NO OPINION OF TITLE OR OWNERSHIP IS HEREBY EXPRESSED OR IMPLIED BY THE SURVEYOR.
5. THIS SURVEY WAS PREPARED FROM INFORMATION FURNISHED TO THE SURVEYOR BY THE CLIENT, AND MAY BE SUBJECT TO EASEMENTS OR LIMITATIONS EITHER RECORDED OR IMPLIED.
6. BEARINGS ARE BASED ON ASSUMED DATUM AND ON THE LINE SHOWN AS BEING THE BASIS OF BEARINGS.
7. NO UNDERGROUND IMPROVEMENTS HAVE BEEN LOCATED UNLESS OTHERWISE SHOWN. ELEVATIONS, IF SHOWN, ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988, UNLESS OTHERWISE NOTED.



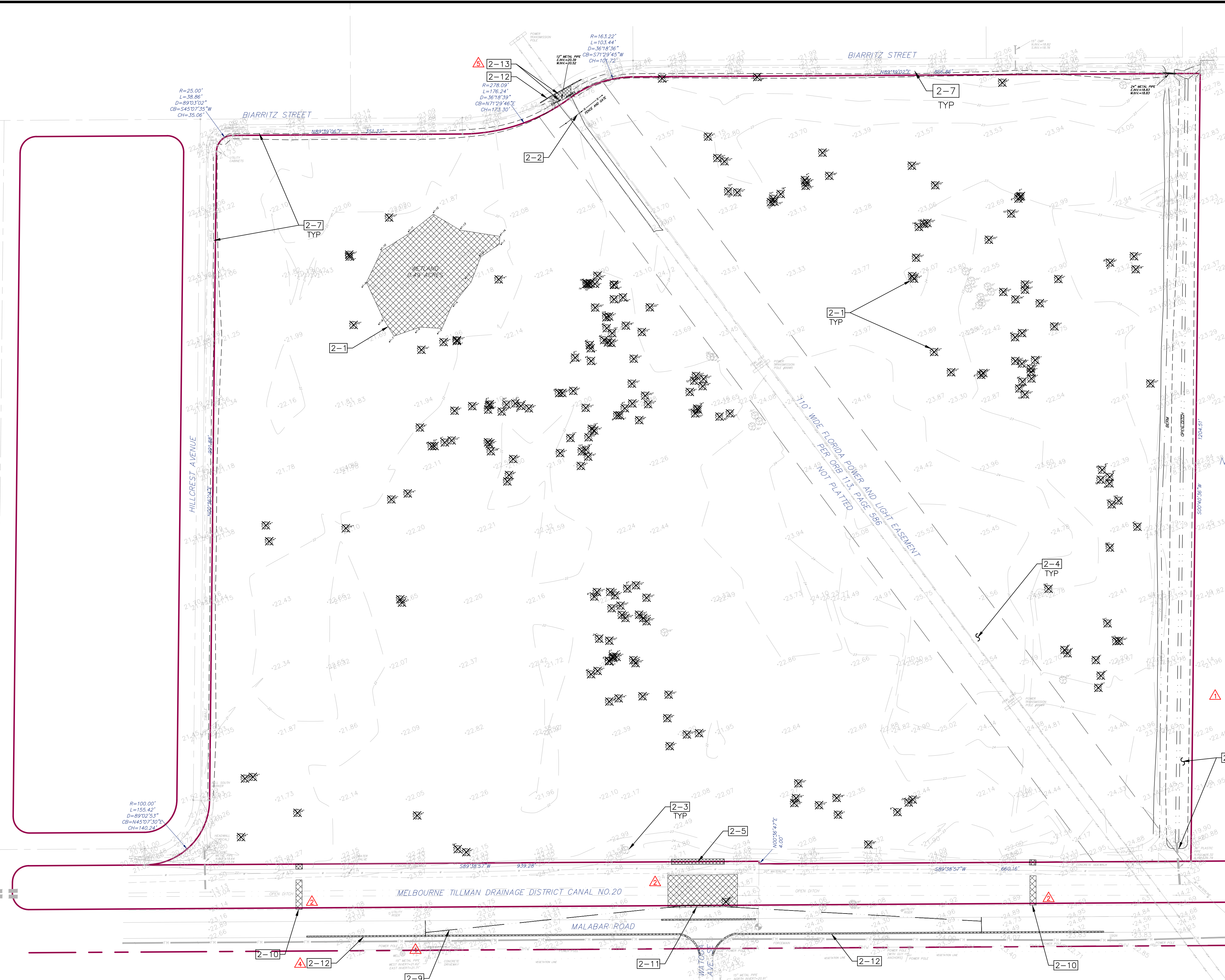
REV#	DATE	REVISION
1	5/17/17	SURV AND CITY COMMENTS
2	7/17/17	SURV AND CITY COMMENTS
4	11/20/17	CITY COMMENTS
5	12/29/17	CITY COMMENTS AND LOWERING SITE
6	6/06/18	CITY COMMENTS AND LOWERING SITE
8	9/24/18	SURV AND CITY COMMENTS

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AVERY SPRINGS SUBDIVISION
TRIANGLE PALM BAY, LLC
MALABAR ROAD AND HILL CREST AVENUE PALM BAY, FLORIDA
DRAWING TITLE
EXISTING CONDITIONS AND DEMOLITION PLAN

DATE	3/21/17
SCALE	1"=80'
PROJ. NO.:	160460
DESIGNED BY:	JRT
DRAWN BY:	SMB
CHECKED BY:	JTW
DRAWING NO.	C-1



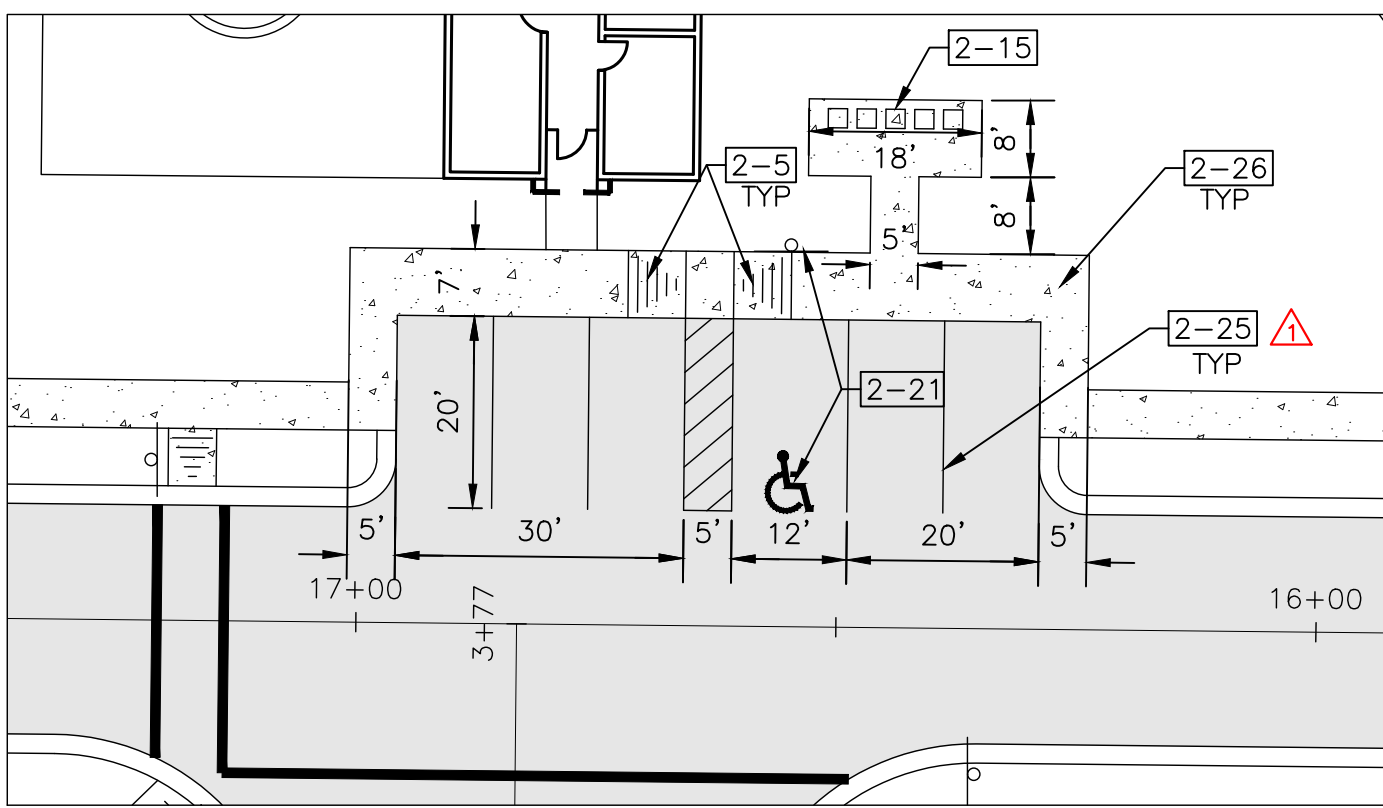
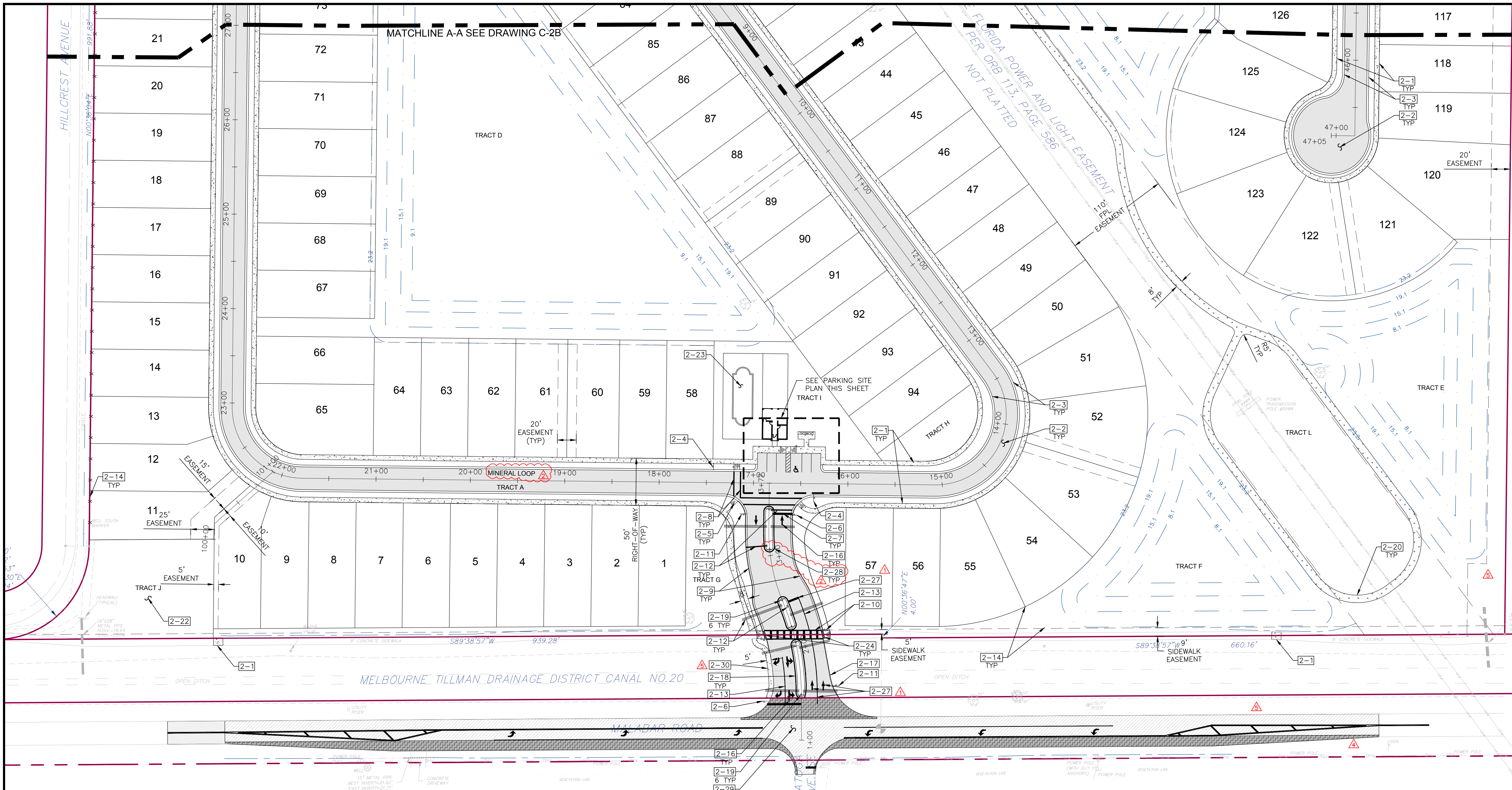
AVERY SPRINGS SUBDIVISION TREE REMOVAL TABLE

TYPE	SIZE (INCHES DBH)	QUANTITY	DBH (OVER 18")
OAK	18	10	180
OAK	20	5	100
OAK	22	1	22
OAK	24	4	96
OAK	28	1	28
OAK	30	2	60
OAK	42	1	42
		24	528

REPLACEMENT TREES SHALL BE 2" CALIPER AND MINIMUM OF 10' IN HEIGHT AND WILL BE PLANTED ON THE FIRST 24 LOTS PERMITTED. IN ADDITION TO THE FOUR TREES AND SHRUBS THAT ARE CODE MINIMUM REQUIRED.

EXISTING CONDITIONS AND DEMOLITION PLAN
1"=80'

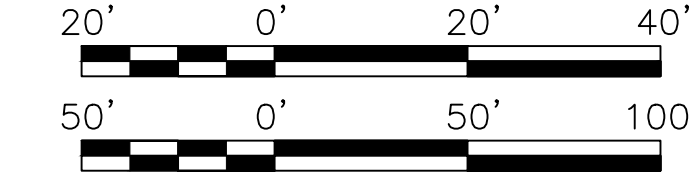




PARKING SITE PLAN
1"=20'

SUBDIVISION PLAN
1"=50'

- NOTES:**
- 2-1. PROVIDE CONCRETE SIDEWALK. SEE TYPICAL DETAIL. CONTRACTOR SHALL ONLY INSTALL COMMON AREA SIDEWALKS. THOSE IN FRONT OF LOTS SHALL BE CONSTRUCTED WITH INDIVIDUAL HOMES.
 - 2-2. PROVIDE ASPHALTIC PAVEMENT. SEE TYPICAL DETAIL.
 - 2-3. PROVIDE MIAMI CURB. SEE TYPICAL DETAIL.
 - 2-4. PROVIDE "25 M.P.H. SPEED LIMIT" SIGN PER MUTCD R2-1 24"x30".
 - 2-5. PROVIDE HANDICAP ACCESSIBLE RAMP. SEE TYPICAL DETAIL.
 - 2-6. PROVIDE "STOP" SIGN PER MUTCD R1-1, 30"x30" WITH STREET NAME SIGN.
 - 2-7. PROVIDE 24" WHITE THERMOPLASTIC STOP BAR PER FDOT INDEX NO. 17346.
 - 2-8. PROVIDE WHITE THERMOPLASTIC PARALLEL CROSSWALK STRIPING PER FDOT INDEX NO. 17346.
 - 2-9. PROVIDE FDOT TYPE "F" CURB ALONG ENTRANCE BOULEVARD. SOUTH TERMINUS SHALL BE AT SOUTH EDGE OF MTWCD RIGHT-OF-WAY. SEE TYPICAL DETAIL.
 - 2-10. PROVIDE THERMOPLASTIC MID-BLOCK CROSSWALK WITH SPECIAL EMPHASIS CROSSWALK MARKINGS PER FDOT INDEX NO. 17346. PROVIDE PEDESTRIAN CROSSING SIGN PER MUTCD W11-2 AND W16-7P.
 - 2-11. PROVIDE CROSSWALK AHEAD SIGN PER MUTCD W11-2 AND W16-7P.
 - 2-12. DEVELOPER SHALL PROVIDE UNDERGROUND INFRASTRUCTURE FOR A GATED ENTRANCE, PEDESTRIAN GATES, VISITOR CALL BOX AND CLICK TO ENTER WITH A KNOX KEY SWITCH OVERRIDER FOR EMERGENCY VEHICLES. CONTRACTOR SHALL DETERMINE INFRASTRUCTURE REQUIREMENTS INCLUDING CONDUITS, POWER, COMMUNICATION, ETC.
 - 2-13. PROVIDE 6" SINGLE WHITE THERMOPLASTIC LINE PER FDOT INDEX NO. 17346.
 - 2-14. PROVIDE 6' HIGH OPAQUE PVC, COLOR FENCE PER OWNER'S SPECIFICATIONS WITH DOUBLE LOCKABLE GATES AS SHOWN ON PLAN.
 - 2-15. PROVIDE COMMUNITY MAILBOX PER USPS AND DEVELOPER'S SPECIFICATIONS WITH HANDICAP ACCESSIBILITY. FINAL DIMENSIONS OF CONCRETE PAD FOR MAILBOXES SHALL BE PER MAILBOX CHOSEN BY DEVELOPER.
 - 2-16. PROVIDE WHITE THERMOPLASTIC DIRECTIONAL ARROWS PER FDOT INDEX NO. 17346.
 - 2-17. PROVIDE TYPE "D" CURB IN MALABAR ROAD RIGHT-OF-WAY. SEE TYPICAL DETAILS.
 - 2-18. PROVIDE TYPE "A" CURB AND GUTTER ON ALL MEDIANS UNLESS OTHERWISE NOTED. SEE TYPICAL DETAILS.
 - 2-19. PROVIDE "KEEP RIGHT" SIGN PER MUTCD R4-7, 24"x30" AT ENDS OF MEDIAN ISLANDS.
 - 2-20. PROVIDE STABILIZED PEDESTRIAN WALKWAY, WIDTH PER PLAN. SEE TYPICAL DETAILS.
 - 2-21. PROVIDE HANDICAP ACCESSIBLE PARKING SPACE AND SIGNAGE. SEE TYPICAL DETAILS.
 - 2-22. TRACT J DESIGNED AND PERMITTED BY THE CITY OF PALM BAY SEPARATELY.
 - 2-23. TRACT I DESIGNED AND PERMITTED BY THE HOME BUILDER SEPARATELY.
 - 2-24. PROVIDE BRICK RED TRUNCATED DOMES AT PUBLIC SIDEWALK IN MALABAR ROAD RIGHT-OF-WAY. SEE TYPICAL DETAILS.
 - 2-25. PROVIDE 4" WHITE PAINTED STRIPE.
 - 2-26. PROVIDE RAISED CONCRETE SIDEWALK. SEE TYPICAL DETAILS.
 - 2-27. IF NO GATE IS INSTALLED, NOTIFY ENGINEER AND A ONE-WAY ONE LANE DRIVE STRIPING PLAN WILL BE PROVIDED FOR THIS AREA.
 - 2-28. PROVIDE 6" SINGLE YELLOW THERMOPLASTIC SOLID LINE PER FDOT INDEX NO. 17346 AROUND ALL MEDIAN ISLANDS.
 - 2-29. SEE DRAWING C-2C FOR TURN LANE NOTES AND DIMENSIONS.
 - 2-30. 5' WIDE SIDEWALK WITHIN MTWCD RIGHT-OF-WAY NOT TO BE CONSTRUCTED AT THIS TIME.



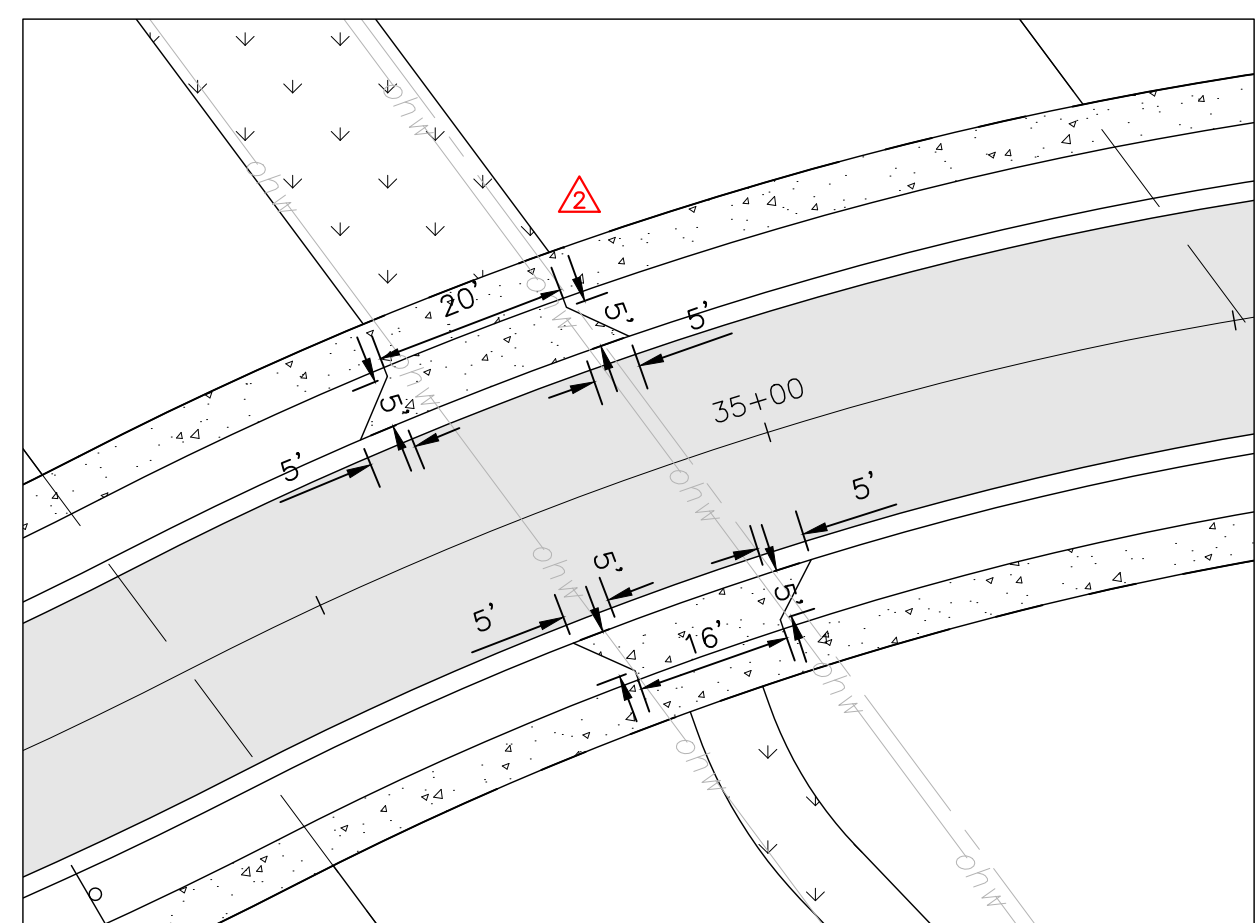
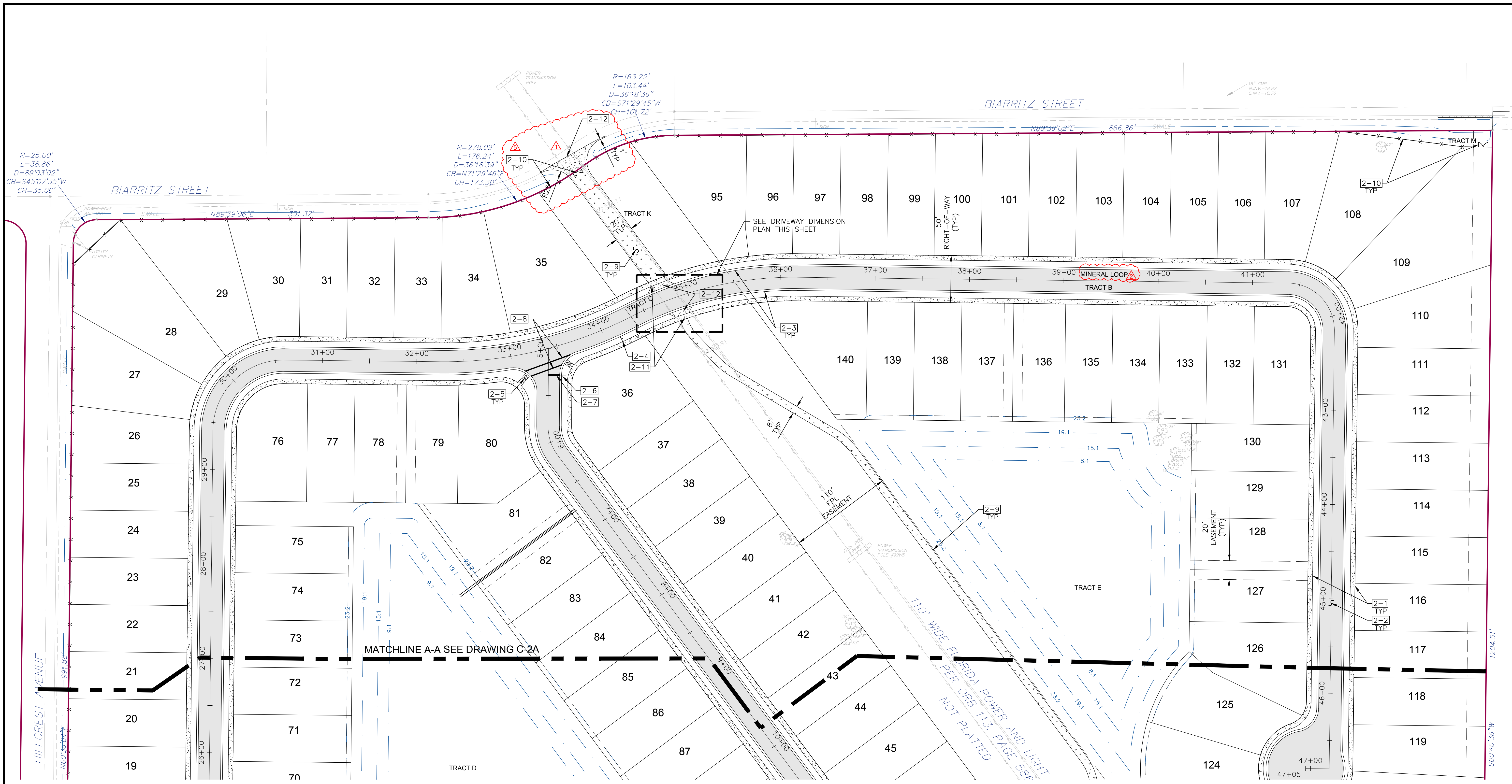
REV#	DATE	REVISION
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EVERY SPRINGS SUBDIVISION
TRIANGLE PALM BAY, LLC
MALABAR ROAD AND HILL CREST AVENUE PALM BAY, FLORIDA
DRAWING TITLE
SUBDIVISION PLAN

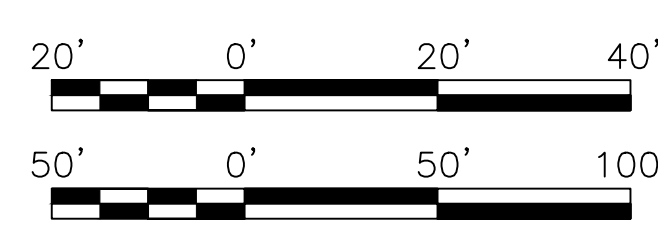
DATE	3/21/17
SCALE	PER PLAN
PROJ. NO.:	160460
DESIGNED BY:	JRT
DRAWN BY:	SMB
CHECKED BY:	JTW
DRAWING NO.	C-2A



SUBDIVISION PLAN

1"=50'

- NOTES:**
- 2-1. PROVIDE CONCRETE SIDEWALK. SEE TYPICAL DETAIL. CONTRACTOR SHALL ONLY INSTALL COMMON AREA SIDEWALKS. THOSE IN FRONT OF LOTS SHALL BE CONSTRUCTED WITH VERTICAL WORK.
 - 2-2. PROVIDE ASPHALTIC PAVEMENT. SEE TYPICAL DETAIL.
 - 2-3. PROVIDE MIAMI CURB. SEE TYPICAL DETAIL.
 - 2-4. PROVIDE "25 M.P.H. SPEED LIMIT" SIGN PER MUTCD R2-1 24"x30".
 - 2-5. PROVIDE HANDICAP ACCESSIBLE RAMP ON BOTH SIDES OF ROADWAY. SEE TYPICAL DETAIL.
 - 2-6. PROVIDE "STOP" SIGN PER MUTCD R1-1, 30"x30" WITH STREET NAME SIGN.
 - 2-7. PROVIDE 24" WHITE THERMOPLASTIC STOP BAR PER FDOT INDEX NO. 17346.
 - 2-8. PROVIDE WHITE THERMOPLASTIC PARALLEL CROSSWALK STRIPING PER FDOT INDEX NO. 17346.
 - 2-9. PROVIDE STABILIZED PEDESTRIAN WALKWAY, WIDTH PER PLAN. SEE TYPICAL DETAILS.
 - 2-10. PROVIDE 6' HIGH OPAQUE PVC, COLOR FENCE PER OWNER'S SPECIFICATIONS WITH DOUBLE LOCKABLE GATES AS SHOWN ON PLAN. LOCKABLE GATES MUST BE 16' WIDE OPENING.
 - 2-11. PROVIDE 6" THICK CONCRETE SIDEWALK ON BOTH SIDES AT FPL EASEMENT. SEE TYPICAL DETAILS.
 - 2-12. PROVIDE CONCRETE COMMERCIAL DRIVEWAY APRON WITH THICKENED EDGES ON ALL SIDES. SEE TYPICAL DETAILS.



REV	DATE	REVISION
1	5/17/17	SURV AND CITY COMMENTS
2	7/17/17	SURV AND CITY COMMENTS
5	12/29/17	CITY COMMENTS

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EVERY SPRINGS SUBDIVISION

TRIANGLE PALM BAY, LLC
MALABAR ROAD AND HILL CREST AVENUE PALM BAY, FLORIDA

SUBDIVISION PLAN

DRAWING TITLE

DATE: 3/21/17

SCALE: PER PLAN

PROJ. NO.: 160460

DESIGNED BY: JRT

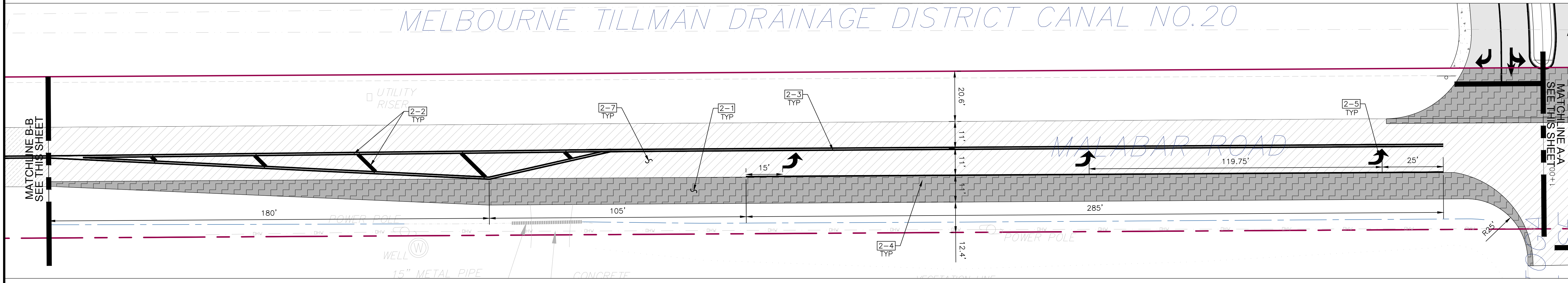
DRAWN BY: SMB

CHECKED BY: JTW

DRAWING NO.: C-2B

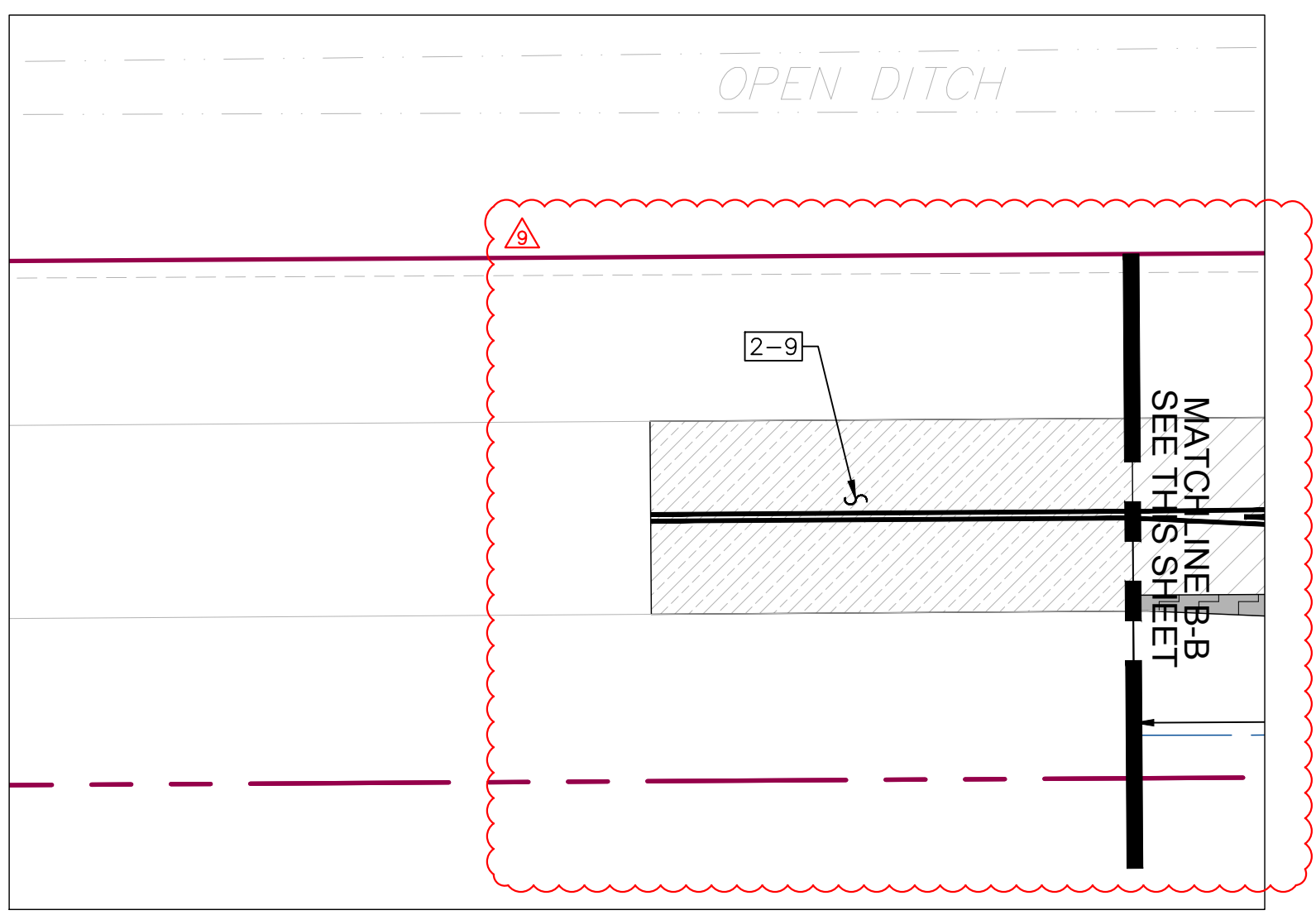
1"=20'

MELBOURNE TILLMAN DRAINAGE DISTRICT CANAL NO.20

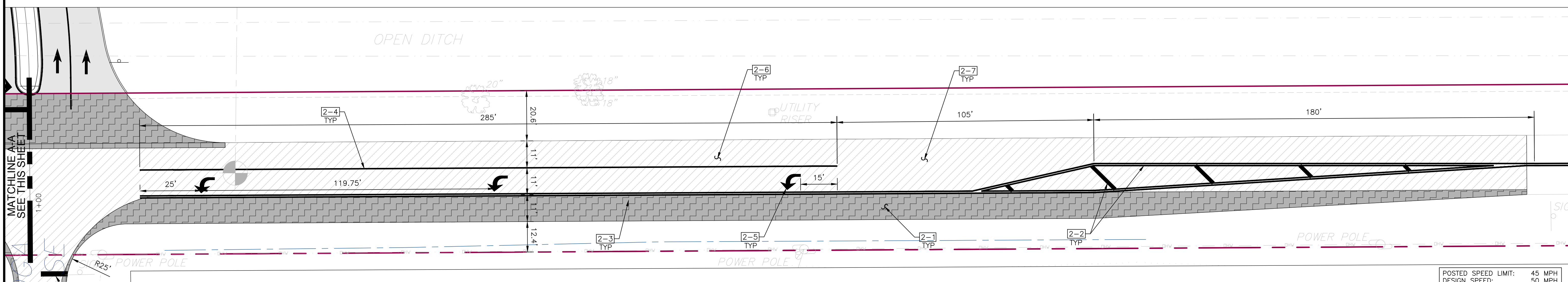


MALABAR ROAD - EAST BOUND LEFT TURN LANE PLAN
1"=20'

POSTED SPEED LIMIT: 45 MPH
DESIGN SPEED: 50 MPH



- NOTES:**
- 2-1. PROVIDE ASPHALTIC PAVEMENT IN MALABAR ROAD RIGHT-OF-WAY. SEE TYPICAL DETAILS.
 - 2-2. PROVIDE YELLOW THERMOPLASTIC 18" WIDE STRIPES AT 45' SPACED 30' O.C. WITH 6" DOUBLE YELLOW PERIMETER STRIPE AND REFLECTIVE PAVEMENT MARKERS PER FDOT INDEX NO. 17346.
 - 2-3. PROVIDE DOUBLE YELLOW THERMOPLASTIC 6" LANE STRIPE WITH REFLECTIVE PAVEMENT MARKERS PER FDOT INDEX NO. 17346.
 - 2-4. PROVIDE WHITE THERMOPLASTIC 6" LANE EDGE STRIPE PER FDOT INDEX NO. 17346.
 - 2-5. PROVIDE WHITE THERMOPLASTIC DIRECTIONAL ARROWS PER FDOT INDEX NO. 17346.
 - 2-6. CONTRACTOR SHALL PROVIDE AND RECEIVE APPROVAL FOR A MAINTENANCE OF TRAFFIC PLAN PRIOR TO COMMENCEMENT OF RIGHT-OF-WAY WORK.
 - 2-7. SEAL COAT EXISTING ASPHALT PAVEMENT THAT REMAINS TO LIMITS IDENTIFIED.
 - 2-8. PROVIDE WHITE THERMOPLASTIC 24" STOP BAR PER FDOT INDEX NO. 17346.
 - 2-9. MILL AND RESURFACE ±61 LF FROM WEST END OF NEW TURN LANE TO WEST EDGE OF CITY FORCE MAIN PATCH FOR THE WASTEWATER REPUMP FACILITY IN TRACT J. COORDINATE TIMING WITH PALM BAY UTILITY DEPARTMENT.



MALABAR ROAD - WEST BOUND LEFT TURN LANE PLAN
1"=20'

POSTED SPEED LIMIT: 45 MPH
DESIGN SPEED: 50 MPH

NEW SHEET
REVISED LANE WIDTH TO 11'
SHIFTED TURN LANES SOUTH



REV#	DATE	REVISION
4	11/20/17	CITY COMMENTS
5	12/29/17	CITY COMMENTS
8	9/24/18	SURV AND CITY COMMENTS
9	10/17/18	REPUMP FACILITY COORDINATION

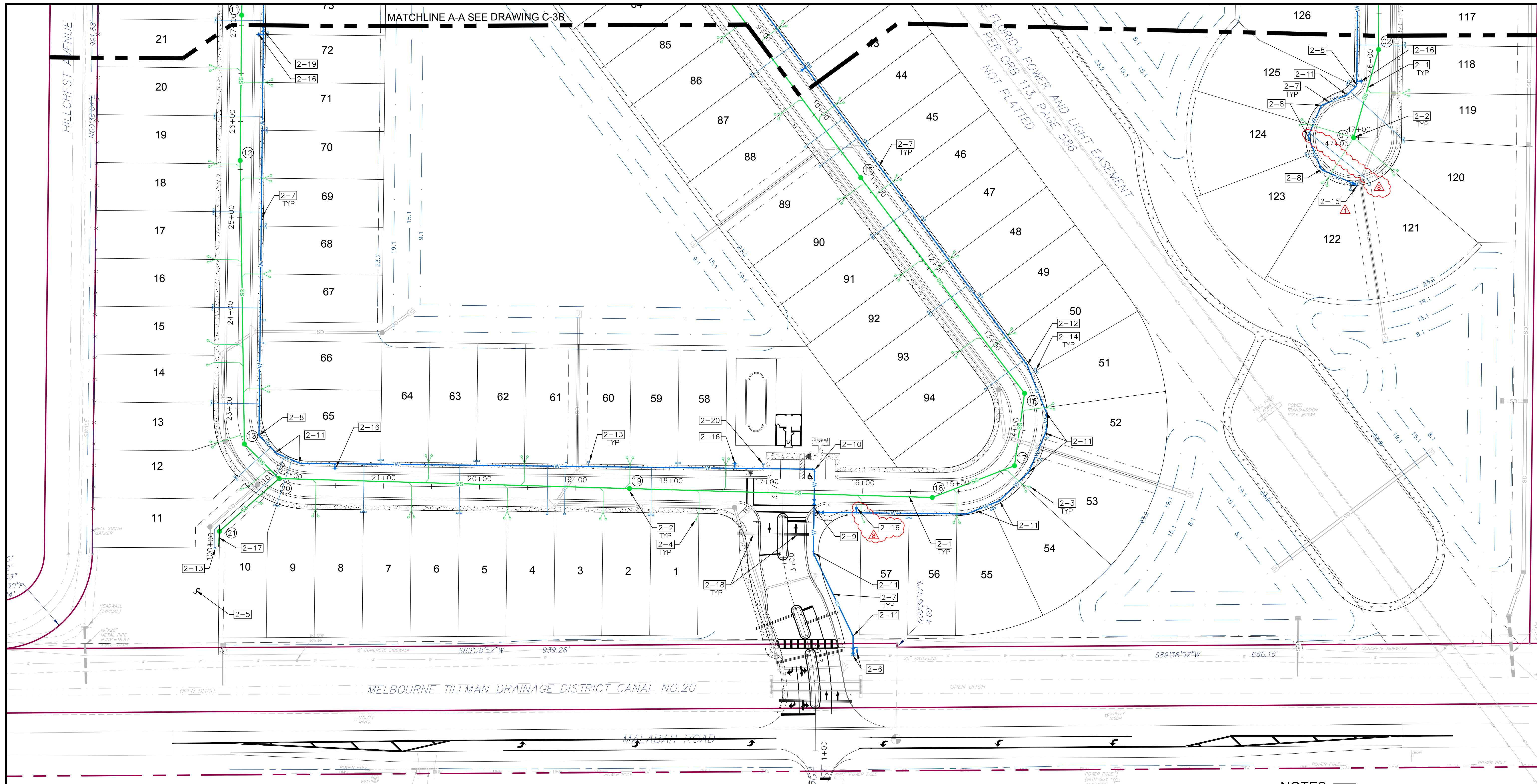
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EVERY SPRINGS SUBDIVISION
TRIANGLE PALM BAY, LLC
MALABAR ROAD AND HILL CREST AVENUE PALM BAY, FLORIDA
DRAWING TITLE
SUBDIVISION PLAN

DATE: 3/21/17
SCALE: 1"=20'
PROJ. NO.: 160460
DESIGNED BY: JRT
DRAWN BY: SMB
CHECKED BY: JTW
DRAWING NO. C-2C

STATEMENT OF WORK: STATEMENT OF WORK FOR THE DESIGN AND CONSTRUCTION OF THE EVERY SPRINGS SUBDIVISION. THE DESIGNER SHALL BE RESPONSIBLE FOR THE DESIGN AND CONSTRUCTION OF THE SUBDIVISION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONSTRUCTION OF THE SUBDIVISION. THE DESIGNER SHALL BE RESPONSIBLE FOR THE DESIGN AND CONSTRUCTION OF THE SUBDIVISION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONSTRUCTION OF THE SUBDIVISION.



MATCHLINE A-A SEE DRAWING C-3B

FLORIDA POWER AND LIGHT EASEMENT
PER ORB 113, PAGE 586
NOT PLATTED

MELBOURNE TILMAN DRAINAGE DISTRICT CANAL NO.20

MALABAR ROAD

UTILITY PLAN
1"=50'

- NOTES:**
- 2-1. PROVIDE 8" PVC SANITARY SEWER.
 - 2-2. PROVIDE SANITARY SEWER MANHOLE. SEE TYPICAL DETAILS.
 - 2-3. PROVIDE DOUBLE SANITARY SEWER LATERAL. SEE TYPICAL DETAILS.
 - 2-4. PROVIDE SINGLE SANITARY SEWER LATERAL. SEE TYPICAL DETAILS.
 - 2-5. REGIONAL LIFT STATION DESIGNED AND PERMITTED BY CITY OF PALM BAY SEPARATELY.
 - 2-6. PROVIDE 20"x8" TAPPING SLEEVE, 8" GATE VALVE AND TEMPORARY JUMPER. SEE TYPICAL DETAILS.
 - 2-7. PROVIDE 8" PVC WATER LINE.
 - 2-8. PROVIDE 45° BEND.
 - 2-9. PROVIDE 8"x8" TEE AND (2) 8" GATE VALVES. SEE TYPICAL DETAILS.
 - 2-10. PROVIDE 90° BEND.
 - 2-11. PROVIDE 22.5° BEND.
 - 2-12. PROVIDE 11.25° BEND.
 - 2-13. PROVIDE SINGLE POTABLE WATER SERVICE. SEE TYPICAL DETAILS.
 - 2-14. PROVIDE DOUBLE POTABLE WATER SERVICES. SEE TYPICAL DETAILS.
 - 2-15. PROVIDE 1" AUTOMATIC FLUSHING DEVICE. SEE TYPICAL DETAILS.
 - 2-16. PROVIDE FIRE HYDRANT ASSEMBLY. SEE TYPICAL DETAILS.
 - 2-17. PROVIDE 15 LF OF 8" PVC SANITARY SEWER AT 0.36% SLOPE AND GAP END OF SANITARY SEWER LINE FOR FUTURE EXTENSION AT PROPERTY LINE.
 - 2-18. PROVIDE THREE 4" PVC CONDUITS TO MEDIAN ISLANDS.
 - 2-19. PROVIDE 8" GATE VALVE. SEE TYPICAL DETAILS.
 - 2-20. PROVIDE 1" PVC WATERLINE STUB OUT FOR FUTURE AMENITY CENTER.



REV#	DATE	REVISION
1	5/17/17	SURV AND CITY COMMENTS
8	9/24/18	SURV AND CITY COMMENTS

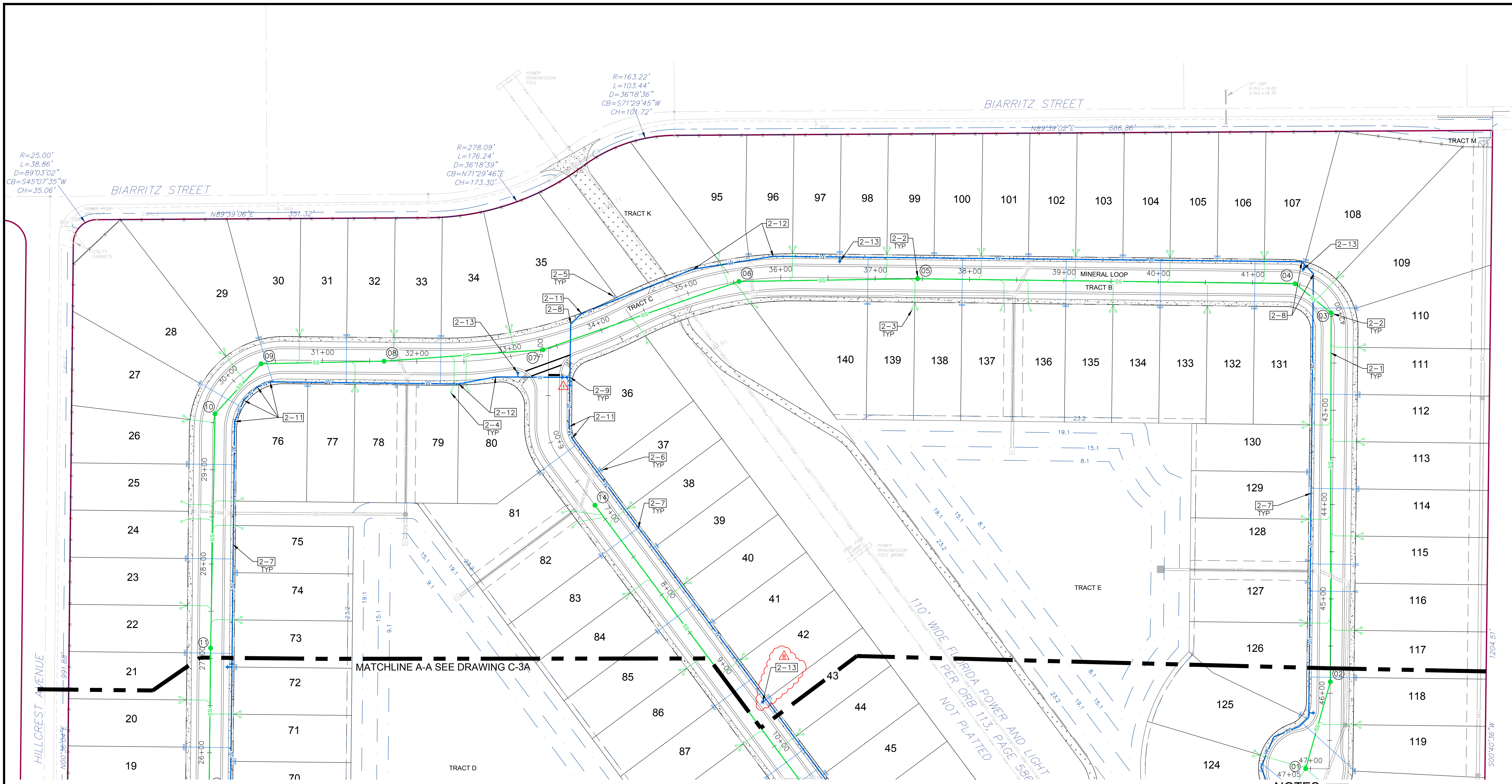
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AVERY SPRINGS SUBDIVISION
TRIANGLE PALM BAY, LLC
MALABAR ROAD AND HILL CREST AVENUE PALM BAY, FLORIDA
DRAWING TITLE
UTILITY PLAN

DATE	3/21/17
SCALE	1"=50'
PROJ. NO.:	160460
DESIGNED BY:	JRT
DRAWN BY:	SMB
CHECKED BY:	JTW
DRAWING NO.	

C-3A



UTILITY PLAN
1"=50'

- NOTES:**
- 2-1. PROVIDE 8" PVC SANITARY SEWER.
 - 2-2. PROVIDE SANITARY SEWER MANHOLE. SEE TYPICAL DETAILS.
 - 2-3. PROVIDE DOUBLE SANITARY SEWER LATERAL. SEE TYPICAL DETAILS.
 - 2-4. PROVIDE SINGLE SANITARY SEWER LATERAL. SEE TYPICAL DETAILS.
 - 2-5. PROVIDE SINGLE POTABLE WATER SERVICE. SEE TYPICAL DETAILS.
 - 2-6. PROVIDE DOUBLE POTABLE WATER SERVICES. SEE TYPICAL DETAILS.
 - 2-7. PROVIDE 8" PVC WATER LINE.
 - 2-8. PROVIDE 45° BEND.
 - 2-9. PROVIDE 8"x8" TEE AND (2) 8" GATE VALVES. SEE TYPICAL DETAILS.
 - 2-10. NOT USED.
 - 2-11. PROVIDE 22.5° BEND.
 - 2-12. PROVIDE 11.25° BEND.
 - 2-13. PROVIDE FIRE HYDRANT ASSEMBLY. SEE TYPICAL DETAILS.



REV#	DATE	REVISION
2	9/24/18	SURVMD AND CITY COMMENTS

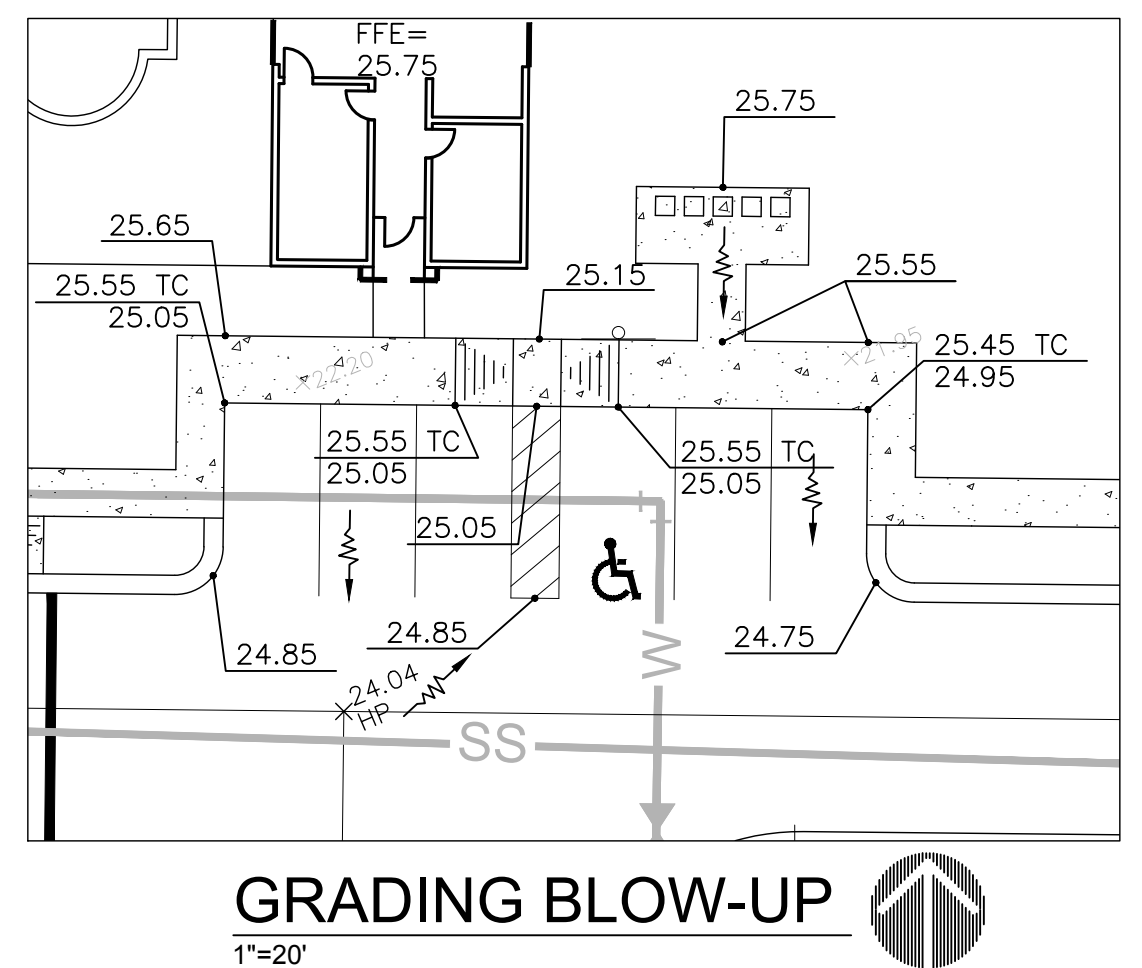
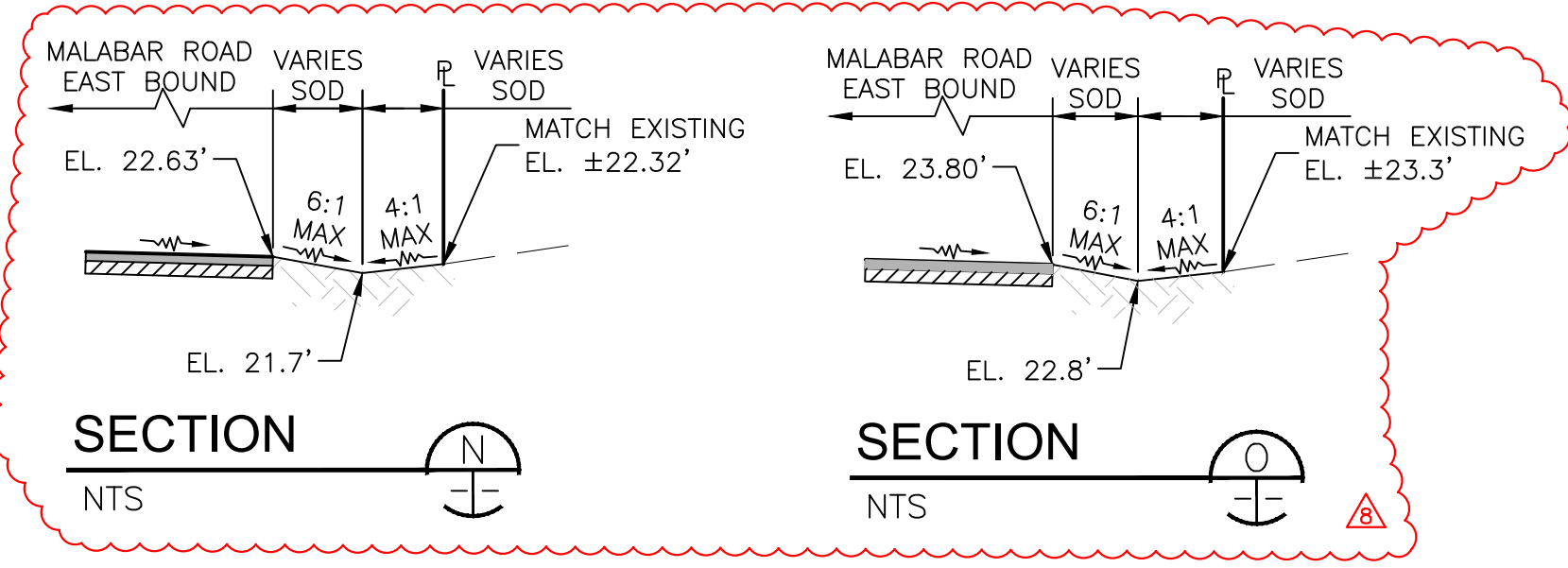
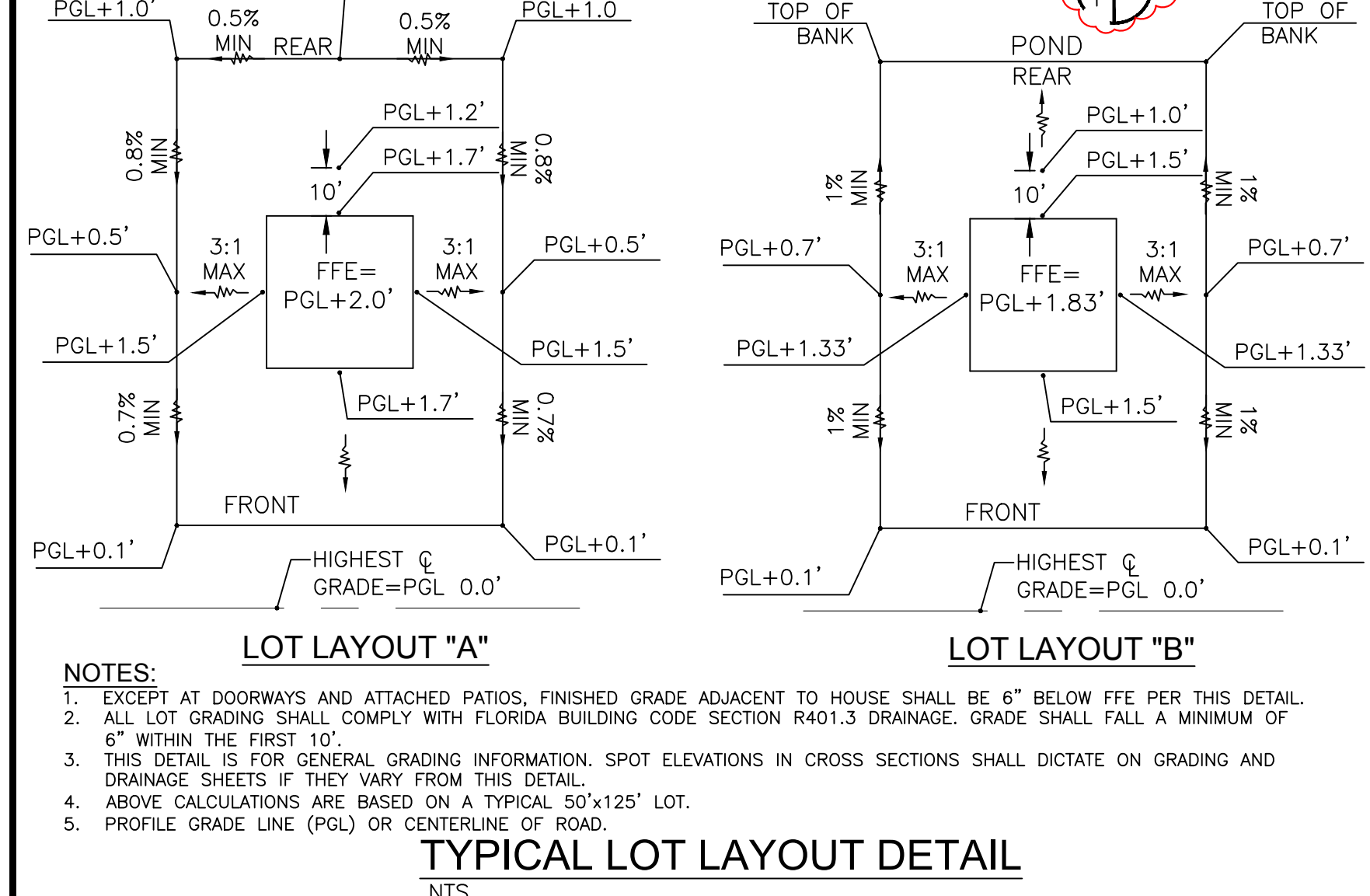
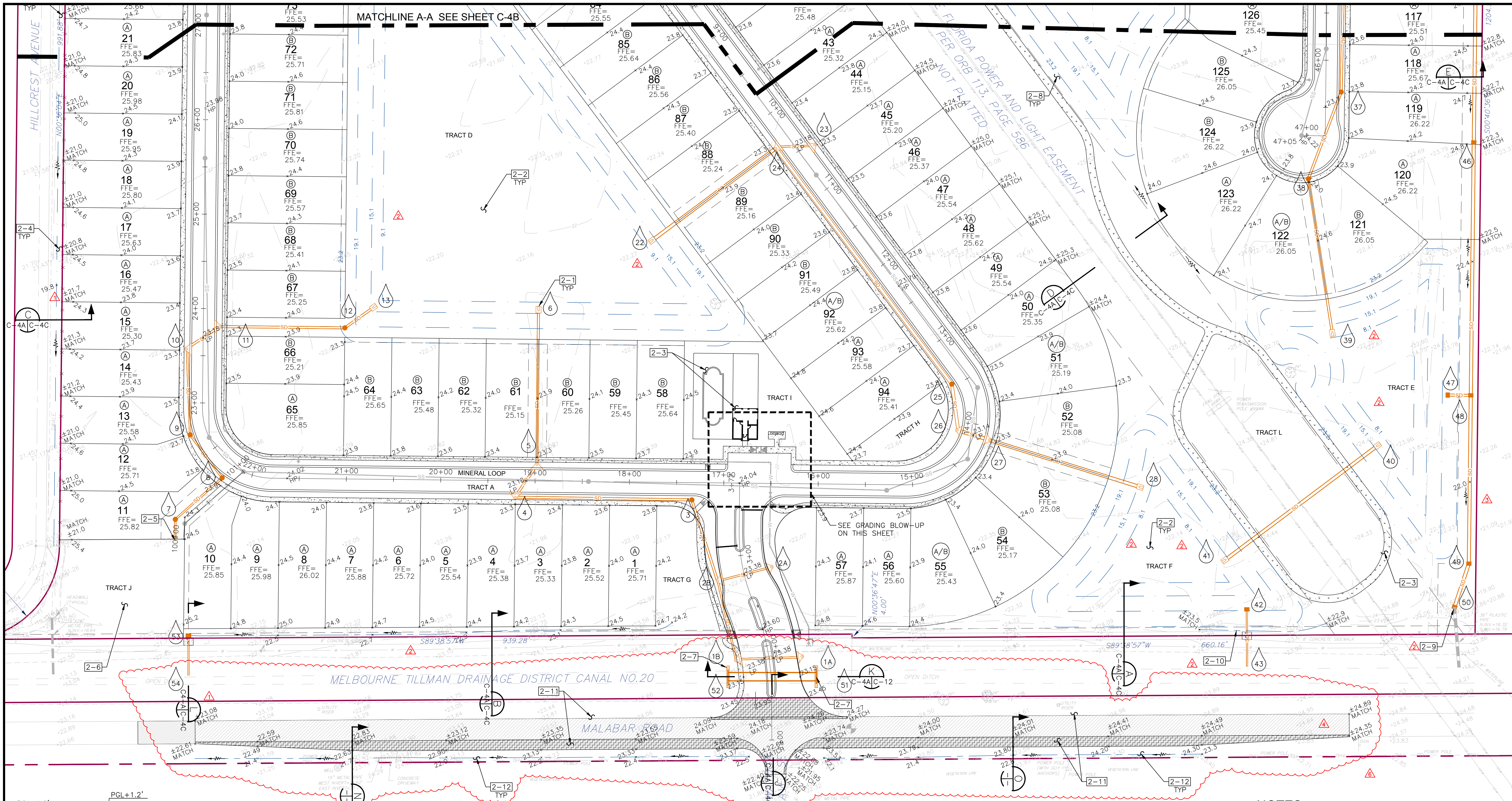
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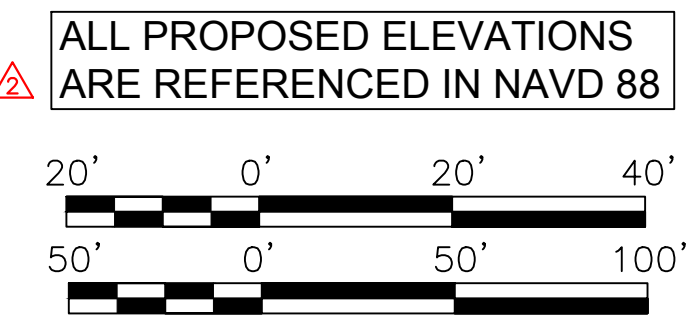
AVERY SPRINGS SUBDIVISION
TRIANGLE PALM BAY, LLC
MALABAR ROAD AND HILL CREST AVENUE PALM BAY, FLORIDA
DRAWING TITLE
UTILITY PLAN

DATE	3/21/17
SCALE	1"=50'
PROJ. NO.:	160460
DESIGNED BY:	JRT
DRAWN BY:	SMB
CHECKED BY:	JTW
DRAWING NO.	

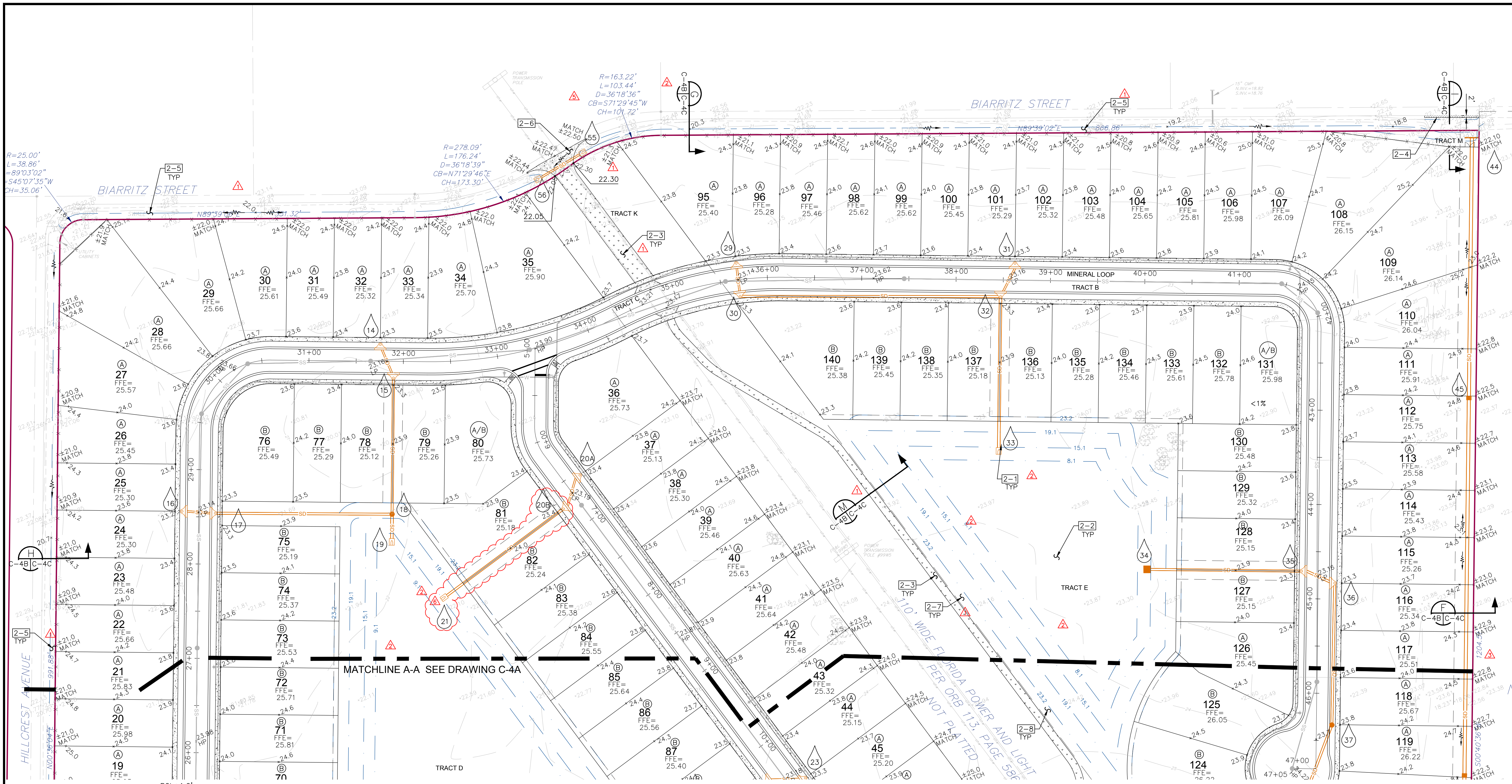
C-3B

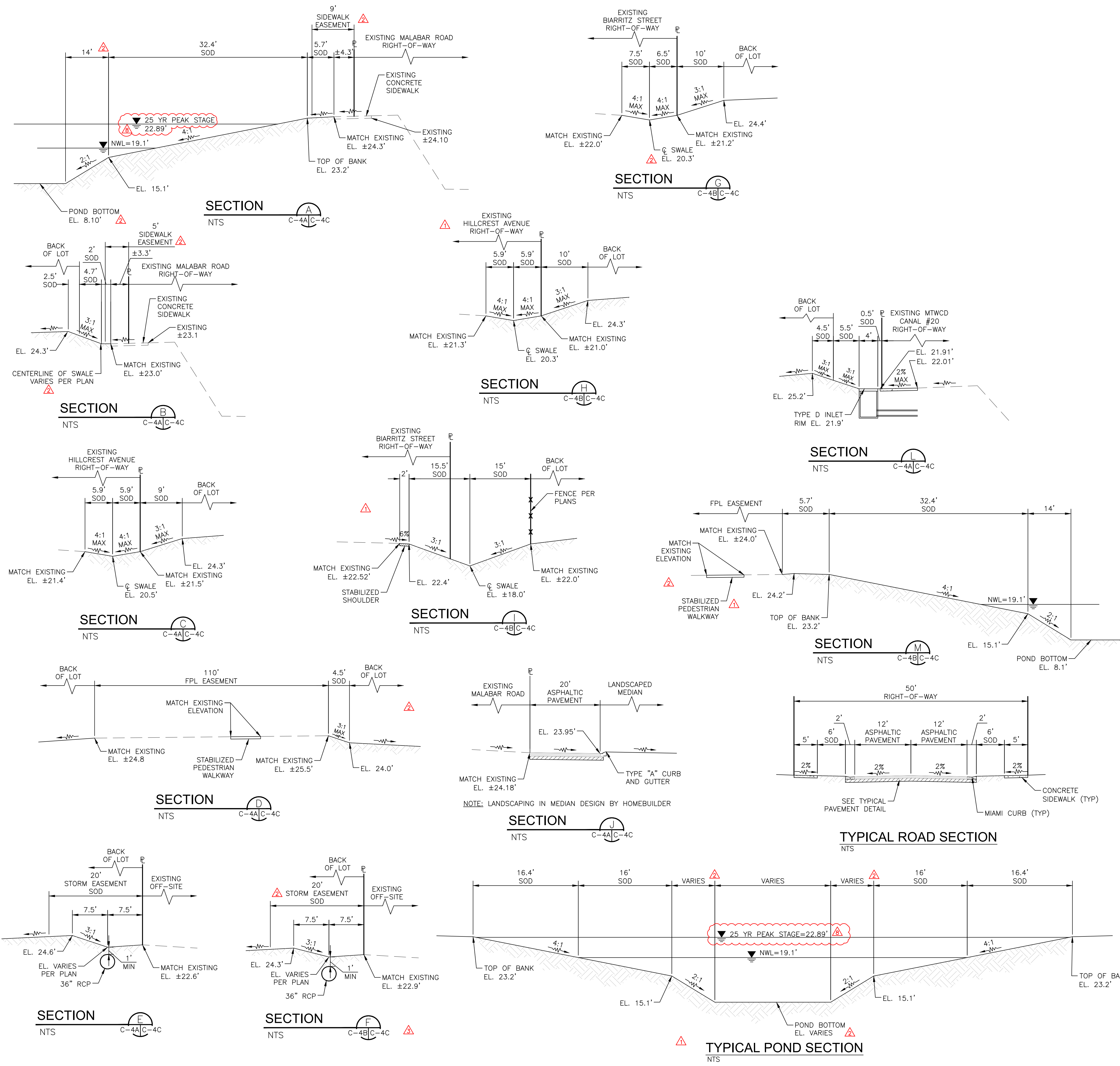


- NOTES:**
- 2-1. SEE DRAWING C-4C FOR STORM STRUCTURE TABLE.
 - 2-2. SEE TYPICAL POND CROSS SECTION ON DRAWING C-4C.
 - 2-3. FINAL GRADING OF POOL AND AMENITY CENTER AT TIME OF BUILDING PERMIT.
 - 2-4. REGRADE SWALE TO MATCH PROPOSED CROSS SECTION.
 - 2-5. PROVIDE ±25 LF OF 18" RCP AT 0.5% SLOPE STORM STUB-OUT FOR FUTURE LIFT STATION PROJECT. CAP AT PROPERTY LINE FOR FUTURE EXTENSION.
 - 2-6. TRACT K GRADING PART OF CITY LIFT STATION PROJECT. PROVIDE STRAIGHT SAND-CEMENT ENDWALLS PER FDOT INDEX NO. 258. SEE TYPICAL DETAILS.
 - 2-8. PROVIDE BERM AT MINIMUM ELEVATION 24.2' ALONG WEST POND TOP OF BANK ADJACENT TO EASEMENT. DO NOT DISTURB FPL EASEMENT.
 - 2-9. CONNECT EXISTING 36" HOPE PIE TO STRUCTURE 50 AT EXISTING INVERT EL. ±16.32. GROUT FILL ANNUAL SPACE. PROVIDE SWALE TO MATCH PLAN GRADE ELEVATIONS WITH CONSTANT SLOPE TO MATCH EXISTING ELEVATION AT FPL EASEMENT.
 - 2-11. PROVIDE 2% CROSS SLOPE.
 - 2-12. PROVIDE BAHIA SODDED SWALE WITH CONSTANT SLOPE FOR POSITIVE DRAINAGE FLOW.



<p>CONSTRUCTION ENGINEERING GROUP consulting engineers</p> <p>2651 non-palms blvd. suite 6 melbourne, fl 32935 tel: 321.281.0701 fax: 321.253.1233 www.cegroupinc.com license #008897</p>	REVISION	DATE	REVISION
	1	5/17/17	SURV AND CITY COMMENTS
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	3	8/28/17	CITY COMMENTS
	4	11/20/17	CITY COMMENTS AND LOWERING SITE
	6	6/06/18	CITY COMMENTS AND LOWERING SITE
	8	9/24/18	SURV AND CITY COMMENTS
	<p>AVERY SPRINGS SUBDIVISION TRIANGLE PALM BAY, LLC MALABAR ROAD AND HILL CREST AVENUE PALM BAY, FLORIDA DRAWING TITLE GRADING AND DRAINAGE PLAN</p>		
<p>DATE: 3/21/17 SCALE: PER PLAN PROJ. NO.: 160460 DESIGNED BY: JRT DRAWN BY: SMB CHECKED BY: JTW DRAWING NO.: C-4A</p>			





DRAINAGE STRUCTURE TABLE									
NAME	FOOT INDEX NO.	DESCRIPTION	TOP ELEVATION	INVERTS	SIZE	PIPE LENGTH (FEET)	TO	COMMENT	
1B	210	4	22.90	E=20.00 N=20.00	18"	84'	2B	SEE NOTE 3 BELOW	
1A	210	4	22.90	W=20.00	18"	61'	1B	SEE NOTE 3 BELOW	
2A	210	4	22.90	W=20.00	18"	52'	2B	SEE NOTE 3 BELOW	
2B	210	4	22.90	E=19.50 N=19.50 S=19.50	24"	89'	3	SEE NOTE 3 BELOW	
3	200/201	J-8	23.85	S=19.10 W=19.10	24"	186'	4		
4	210	4	22.90	E=16.60 NE=16.60	24"	40'	5	SEE NOTE 3 BELOW	
5	210	4	22.90	SW=15.90 N=15.90	24"	166'	6	SEE NOTE 3 BELOW	
6	272	MES	-	S=14.90	-	-	-	-	
7	200/201	J-8	24.50	S=18.60 NE=18.60	18"	66'	8		
8	200/201	J-8	23.75	SW=18.20 NW=18.10	18"	57'	9		
9	200/201	J-8	24.70	SE=18.00 N=17.90	18"	90'	10		
10	210	4	22.90	S=16.40 NE=16.30	24"	41'	11	SEE NOTE 3 BELOW	
11	210	4	22.90	SW=16.10 E=16.00	24"	138'	12	SEE NOTE 3 BELOW	
12	200/201	J-8	23.50	W=15.40 NE=15.30	24"	34'	13		
13	272	MES	-	SW=14.90	-	-	-	-	
14	210	4	22.90	SE=17.20	18"	36'	15	SEE NOTE 3 BELOW	
15	210	4	22.90	NW=17.00 N=16.90	24"	143'	18	SEE NOTE 3 BELOW	
16	210	4	22.90	E=17.20	18"	24'	17	SEE NOTE 3 BELOW	
17	210	4	22.90	W=17.00 E=16.90	24"	193'	18	SEE NOTE 3 BELOW	
18	200/201	J-8	21.62	W=15.10 N=16.10 S=15.00	30"	26'	19		
19	272	MES	-	N=14.90	-	-	-	-	
20A	210	4	22.90	S=17.20	18"	30'	20B	SEE NOTE 3 BELOW	
20B	210	4	22.98	N=17.00 SW=17.00	24"	160'	21	SEE NOTE 3 BELOW	
21	272	MES	-	NE=14.90	-	-	-	-	
22	272	MES	-	NE=10.90	36"	165'	24		
23	210	4	22.90	W=13.30	18"	37'	24	SEE NOTE 3 BELOW	
24	210	4	22.90	E=13.10 SW=13.10 SE=13.10	36"	313'	25	SEE NOTE 3 BELOW	
25	200/201	J-8	23.35	S=11.60 NW=11.60	36"	50'	26		
26	210	4	22.90	E=11.30 N=11.30	36"	34'	27	SEE NOTE 3 BELOW	
27	210	4	22.90	W=11.10 E=11.10	36"	169'	28	SEE NOTE 3 BELOW	
28	272	MES	-	W=10.20	-	-	-	-	
29	210	4	22.90	S=18.60	18"	24'	30	SEE NOTE 3 BELOW	
30	210	4	22.90	N=18.30 E=18.20	24"	274'	32	SEE NOTE 3 BELOW	
31	210	4	24.04	SW=19.50	18"	32'	32	SEE NOTE 3 BELOW	
32	210	4	24.00	NE=17.00 N=19.30 S=16.90	30"	166'	33	SEE NOTE 3 BELOW	
33	272	MES	-	N=14.90	-	-	-	-	
34	232	D	-	E=14.90	24"	169'	35	-	
35	210	4	22.90	W=15.60 SE=15.50	24"	32'	36	SEE NOTE 3 BELOW	
36	210	4	22.90	NW=15.50 S=15.40	24"	149'	37	SEE NOTE 3 BELOW	
37	200/201	J-8	23.70	N=14.90 S=14.80	24"	98'	38		
38	200/201	J-8	23.90	N=14.60 S=14.50	24"	162'	39		
39	272	MES	-	N=14.00	-	-	-	-	
40	272	MES	-	SW=15.00	36"	195'	41	-	
41	272	MES	-	NE=15.00	-	-	-	-	
42	232	D	23.60	S=16.00	15"	63'	43	CONTROL STRUCTURE	
43	-	PIPE END	-	N=16.00	-	-	-	-	
44	250	HEADWALL	-	S=17.30	36"	276'	45	-	
45	232	D	21.20	N=17.00 S=16.90	36"	400'	46	-	
46	232	D	20.90	N=16.75 S=16.65	36"	268'	48	-	
47	232	D	22.50	E=18.50	24"	24'	48	-	
48	233	D	21.10	N=16.60 S=16.50 W=16.00	36"	178'	49	-	
49	232	D	20.40	N=16.50 S=16.45	36"	48'	50	-	
50	232	D	24.00	N=16.32 S=16.22	-	-	-	SEE NOTE 8 BELOW	
51	292	BOX CULVERT	21.35	W=13.50	-	93'	52	*96"x72" RCP	
52	292	BOX CULVERT	21.35	E=13.50	-	-	-	-	
53	232	D	21.90	S=16.00	15"	45'	54	-	
54	-	PIPE END	-	N=16.00	-	-	-	-	
55	272	MES	-	SW=20.40	12"x18"	48'	56	ERCPC	
56	272	MES	-	NE=20.60	-	-	-	-	

STORM DRAIN STRUCTURE NOTES:

- ALL STRUCTURES SHALL BE MINIMUM 6" DEEPER THAN LOWEST PIPE INVERT.
- ALL GRATES SHALL BE GALVANIZED STEEL WITH H-20 LOADING.
- TOP ELEVATION OF TYPE 4 INLET IS MIAMI CURB GUTTER ELEVATION.
- PROVIDE ADEQUATE BOX SIZE AT BASE OF TYPE 4 INLETS AND TYPE J-8 MANHOLES FOR PIPE SIZES PER THIS PLAN.
- ALL STORM DRAIN PIPING SHALL BE RCP, ADS N-12 WITH WATERTIGHT JOINTS, OR OTHER FDOT APPROVED ALTERNATIVE UNLESS COMMENTS SPECIFY RCP.
- ALL PROPOSED ELEVATIONS ARE REFERENCED IN NAVD 88.
- STRUCTURES 51 AND 52: CONNECT HEADWALL AND TOEWALL TO PRECAST BOX CULVERT PER FOOT INDEX NO. 291 ON BOTH ENDS OF STRUCTURE.
- PROVIDE 10" HIGH X 18" WIDE WEIR ON WEST SIDE OF STRUCTURE 50 AT ELEVATION 21.0'.

REVISION

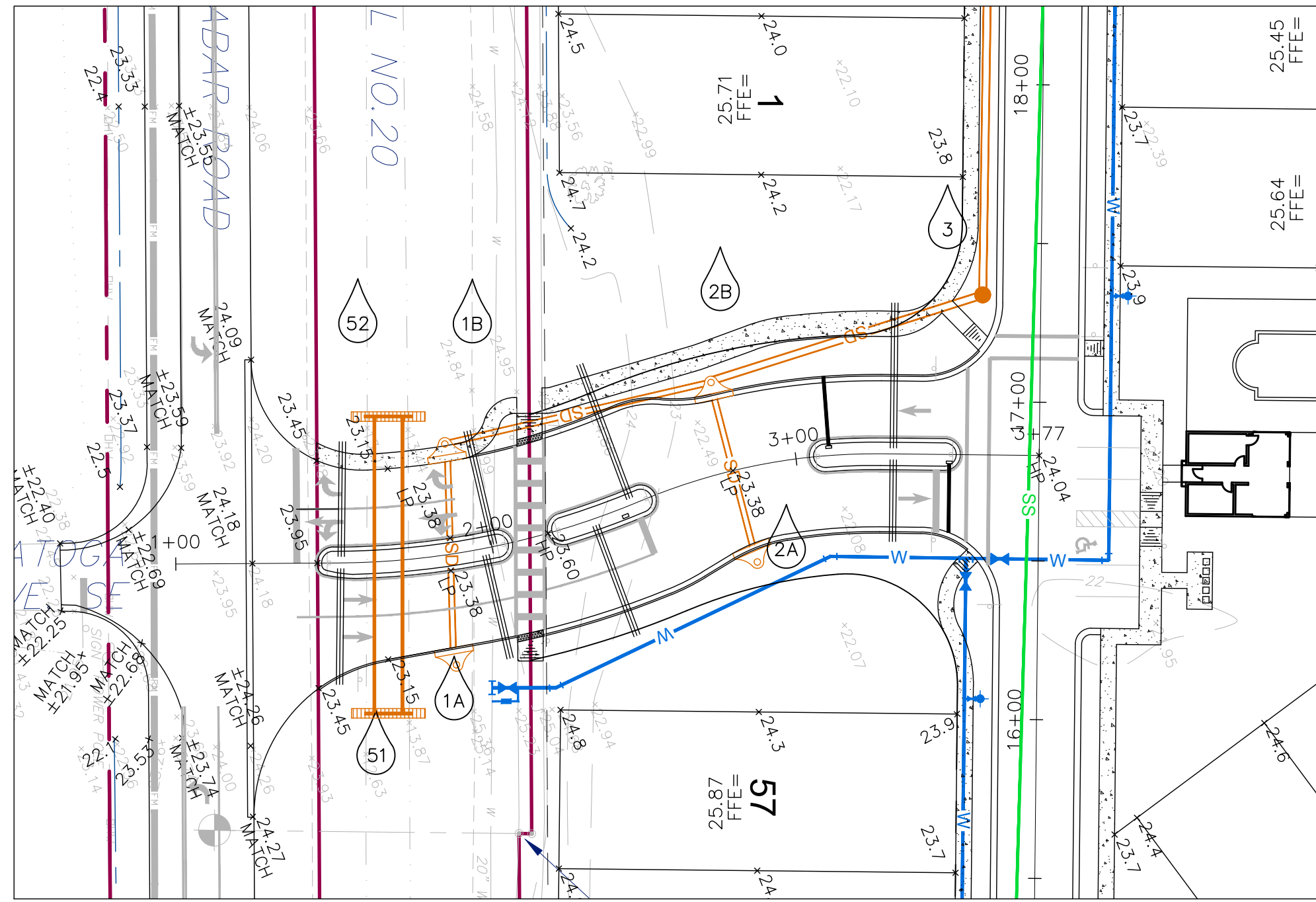
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1	5/17/17	SURV AND CITY COMMENTS
2	7/17/17	SURV AND CITY COMMENTS
3	8/28/17	CITY COMMENTS
5	12/29/17	CITY COMMENTS
6	6/06/18	CITY COMMENTS AND LOWERED SITE
8	9/24/18	SURV AND CITY COMMENTS

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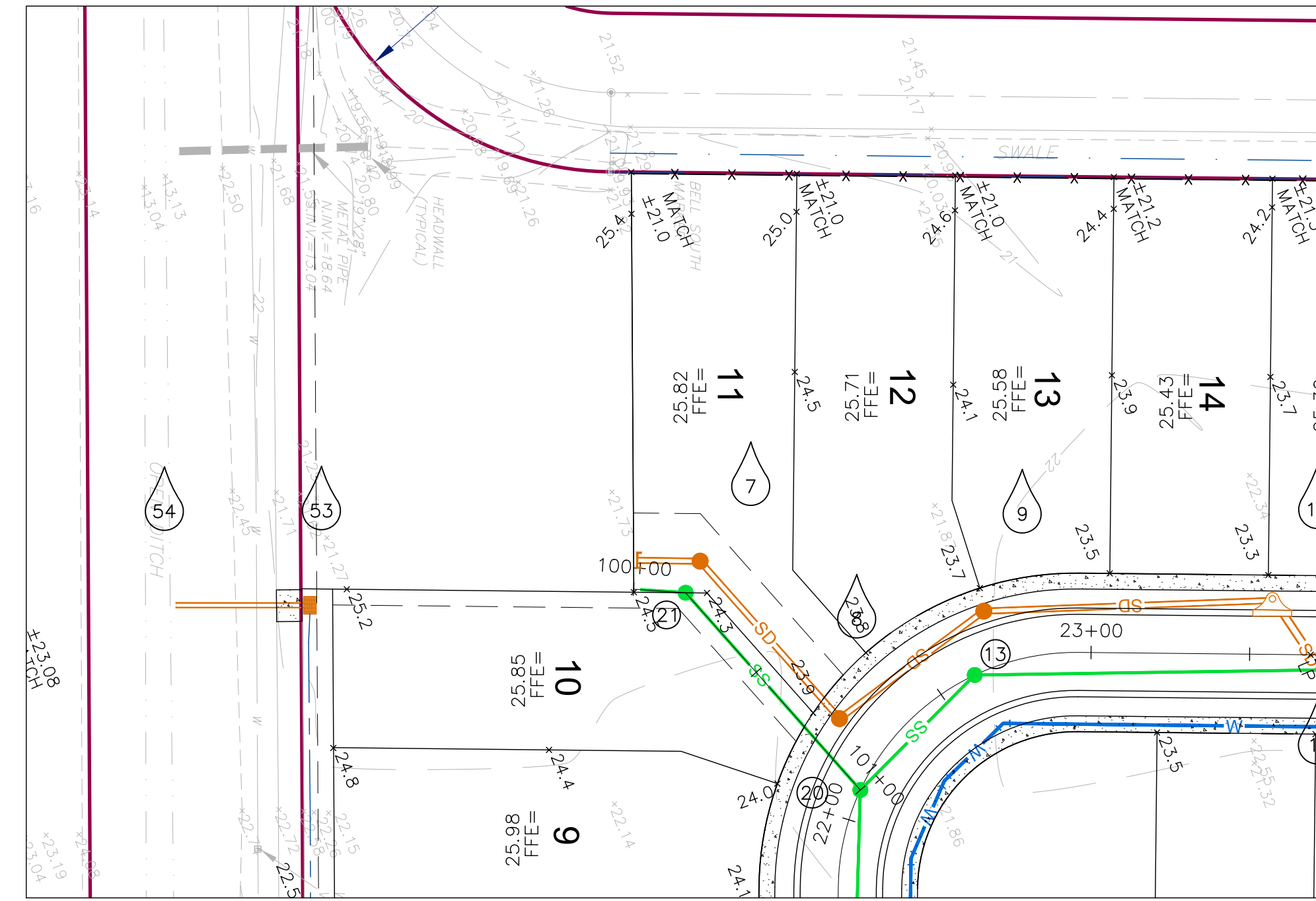
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GRADING AND DRAINAGE DETAILS

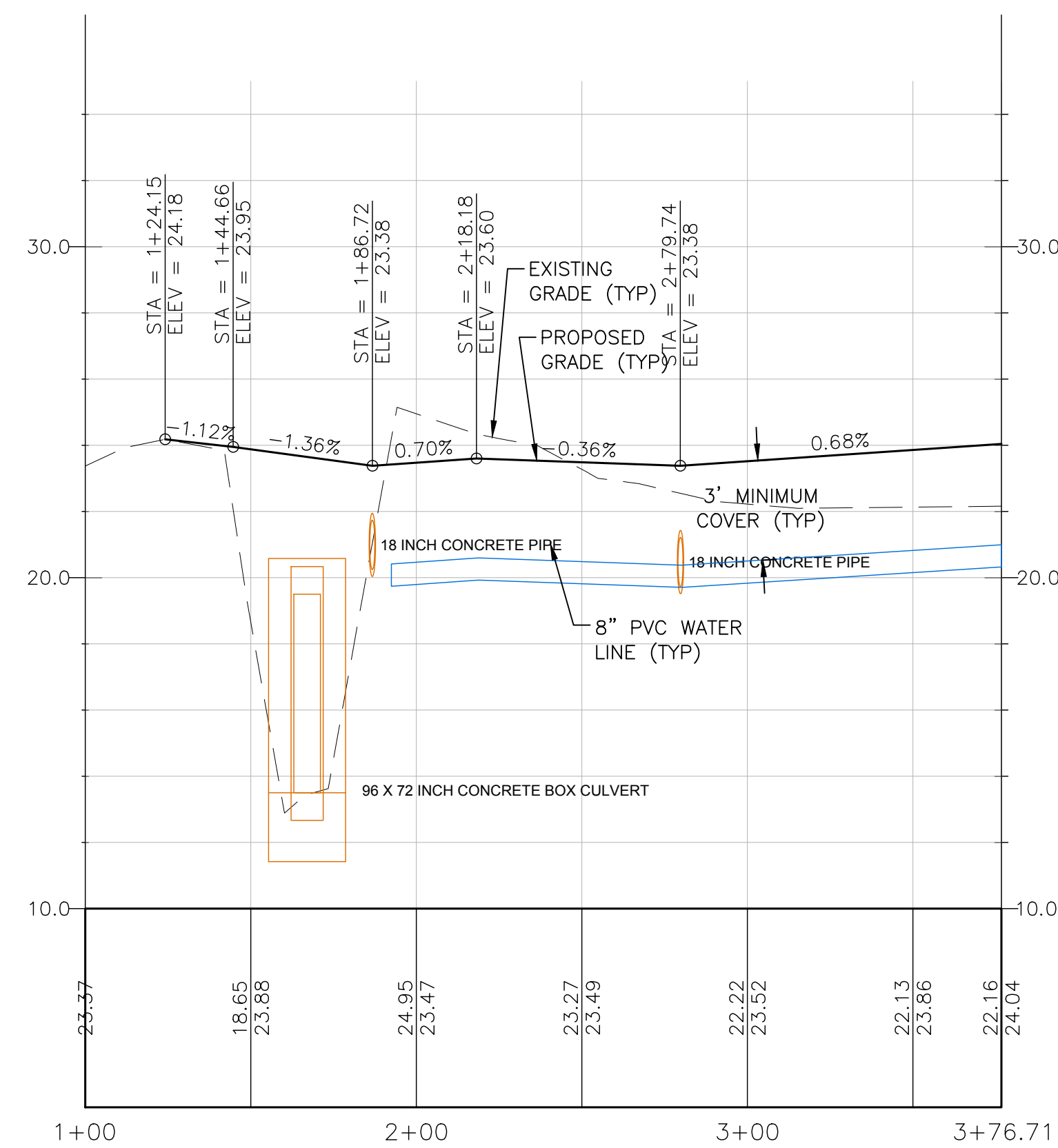
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DRAWING NO.: C-4C



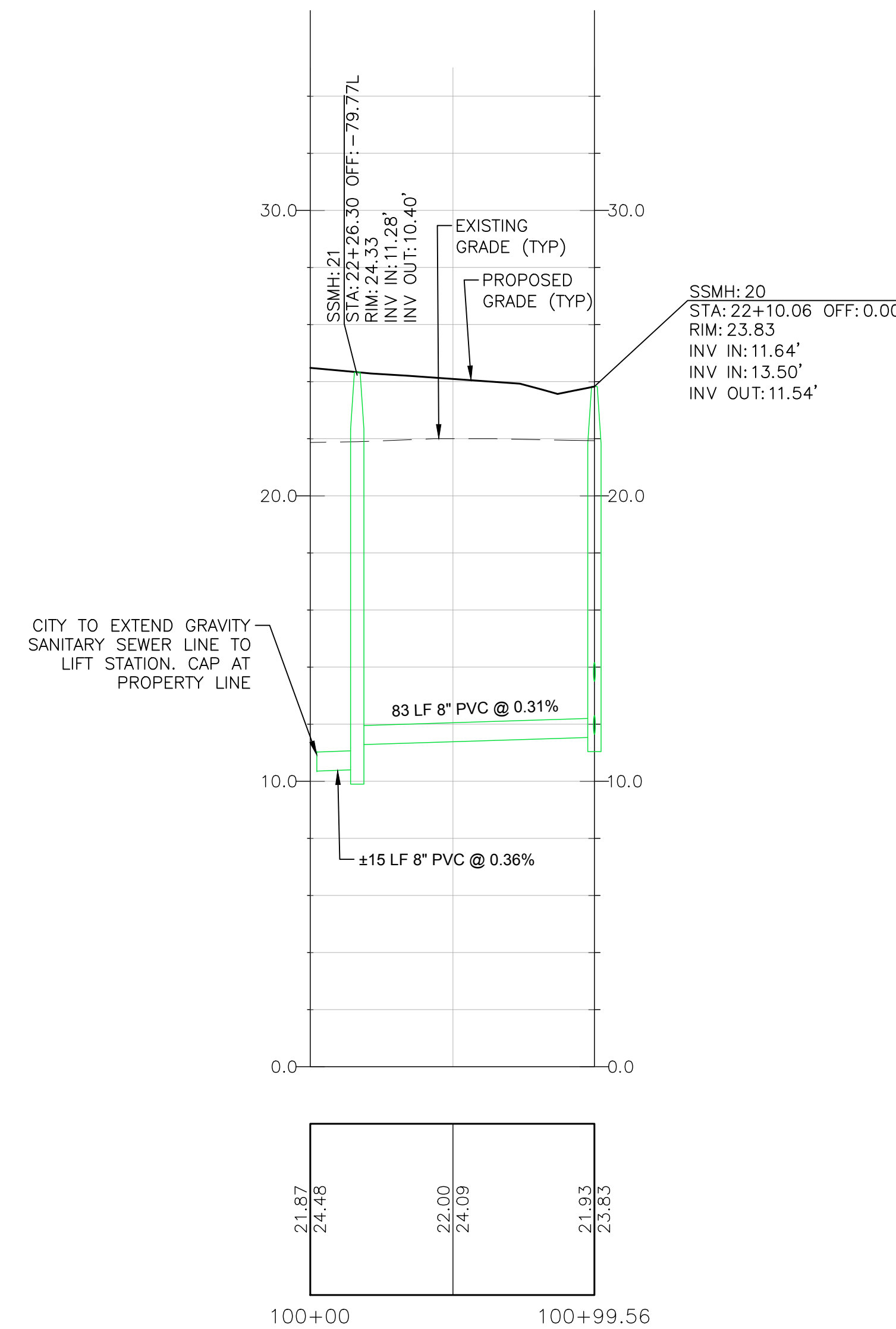
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1"=40'



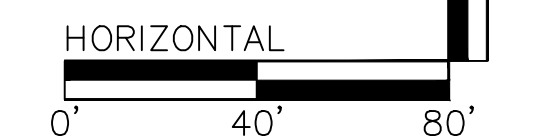
PLAN STA: 100+00 THRU 101+48.07
1"=40'



PROFILE STA: 1+00 THRU 3+76.71
HORIZONTAL: 1"=40' VERTICAL: 1"=4'



PROFILE STA: 100+00 THRU 101+48.07
HORIZONTAL: 1"=40' VERTICAL: 1"=4'



REV#	DATE	REVISION
6	16/06/18	CITY COMMENTS AND LOWERED SITE

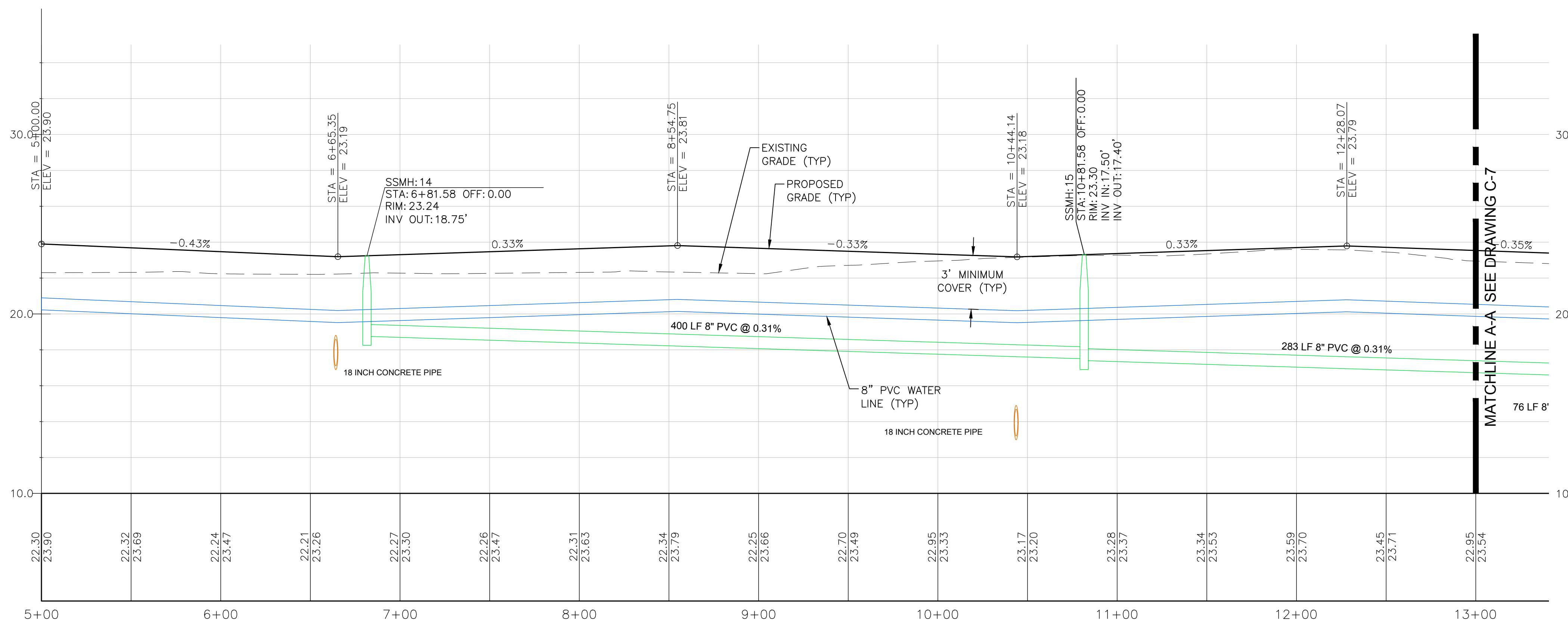
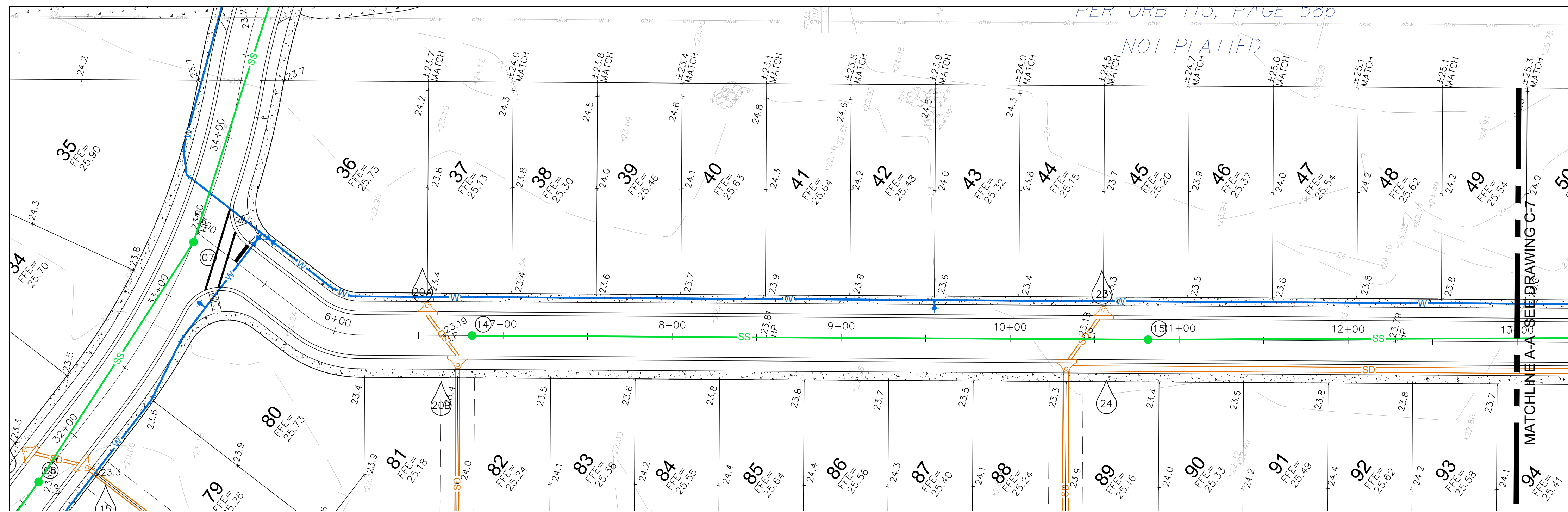
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PLAN AND PROFILE STA: 1+00 THRU 3+76.71
PLAN AND PROFILE STA: 100+00 THRU 101+48.07

DATE: 3/21/17
SCALE: H: 1"=40' V: 1"=4'
PROJ. NO.: 160460
DESIGNED BY: JRT
DRAWN BY: SMB
CHECKED BY: JTW
DRAWING NO. C-5

DATE	3/21/17
SCALE	H: 1"=40' V: 1"=4'
PROJ. NO.	160460
DESIGNED BY	JRT
DRAWN BY	SMB
CHECKED BY	JTW
DRAWING NO.	C-5



REV#	DATE	REVISION
6	6/06/18	CITY COMMENTS AND LOWERED SITE

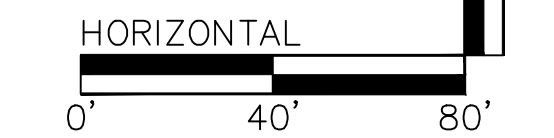
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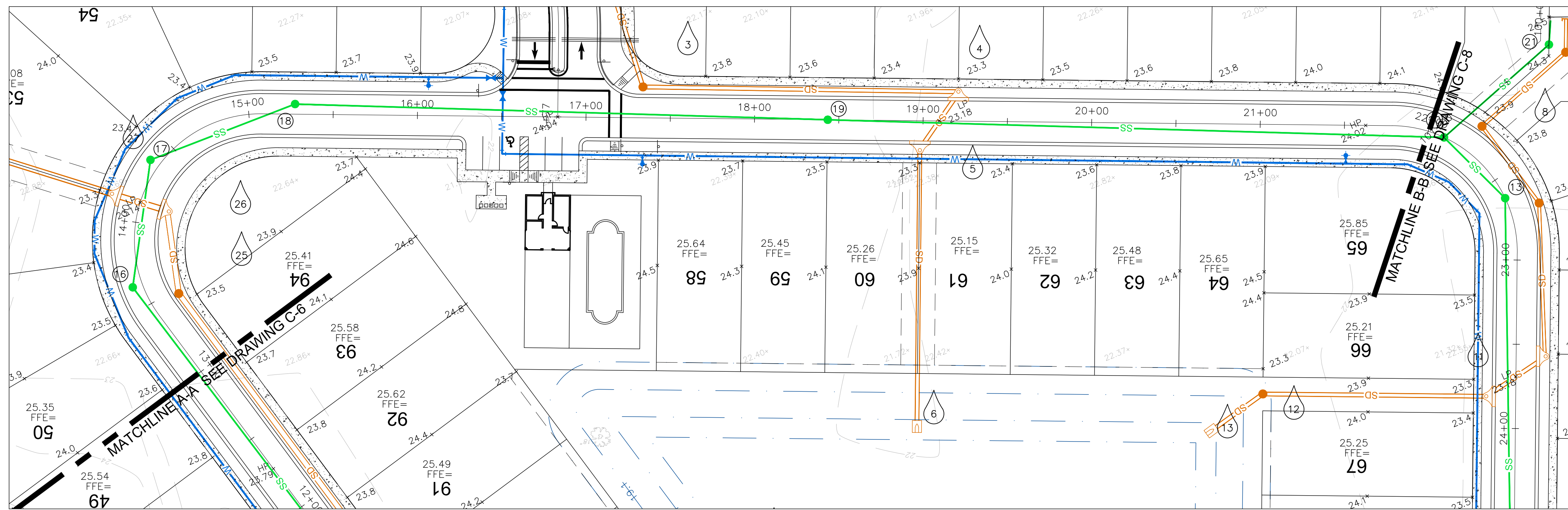
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PLAN AND PROFILE STA: 5+00 THRU 13+00

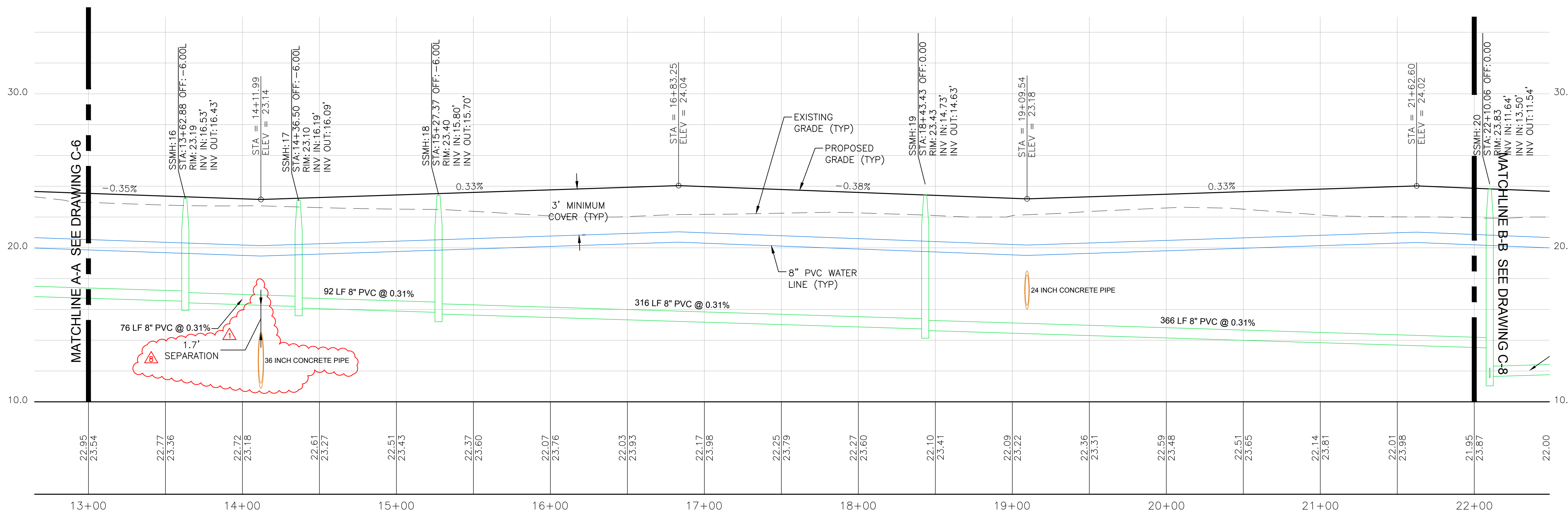
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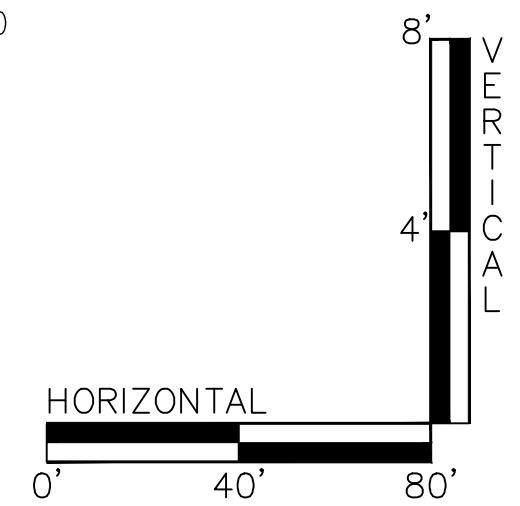


PLAN STA: 13+00 THRU 22+00
1"=40'



PROFILE STA: 13+00 THRU 22+00
HORIZONTAL: 1"=40' VERTICAL: 1"=4'

LOWERED SITE



REV#	DATE	REVISION
1	5/17/17	SURV AND CITY COMMENTS
6	6/06/18	CITY COMMENTS AND LOWERED SITE
8	9/24/18	SURV AND CITY COMMENTS

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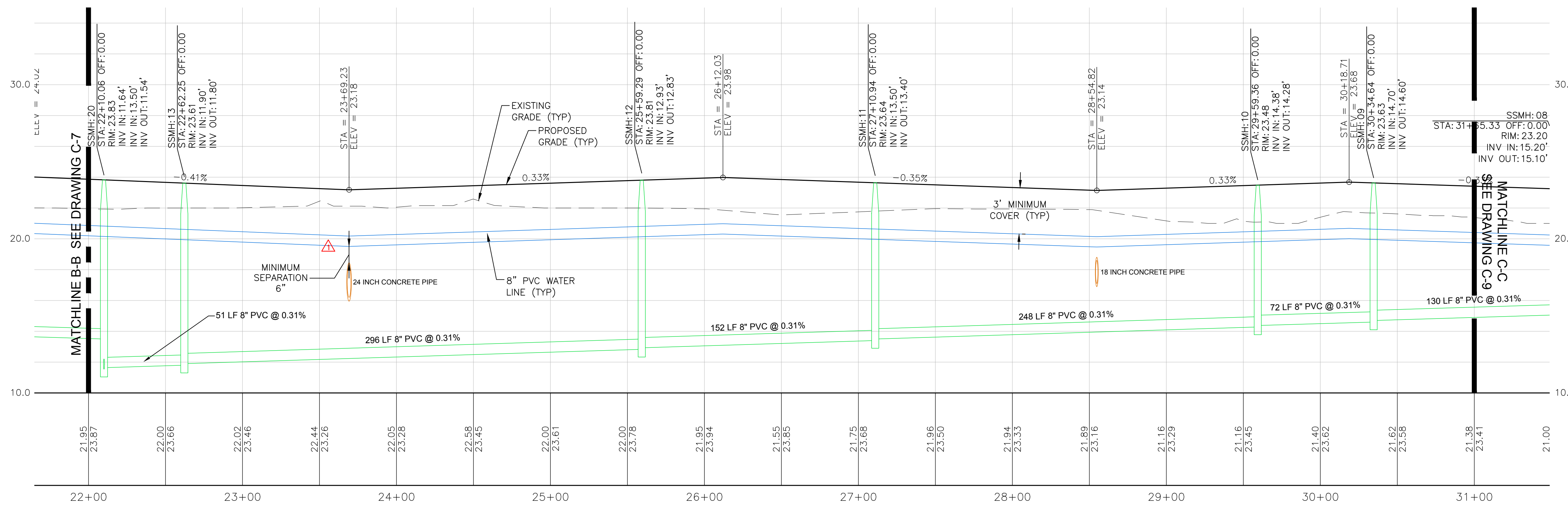
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DRAWING NO.	C-7



PLAN STA: 22+00 THRU 31+00
1"=40'



PROFILE STA: 22+00 THRU 31+00
HORIZONTAL: 1"=40' VERTICAL: 1"=4'



REV#	DATE	REVISION
1	5/17/17	SURVMD AND CITY COMMENTS
9	6/06/18	CITY COMMENTS AND LOWERED SITE

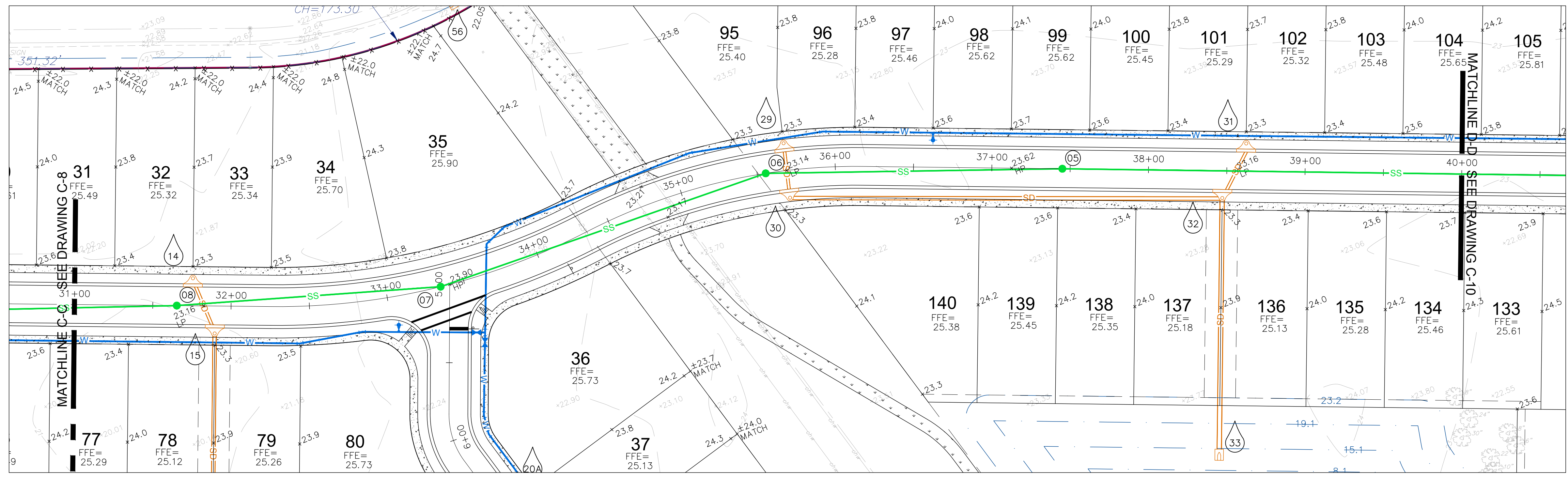
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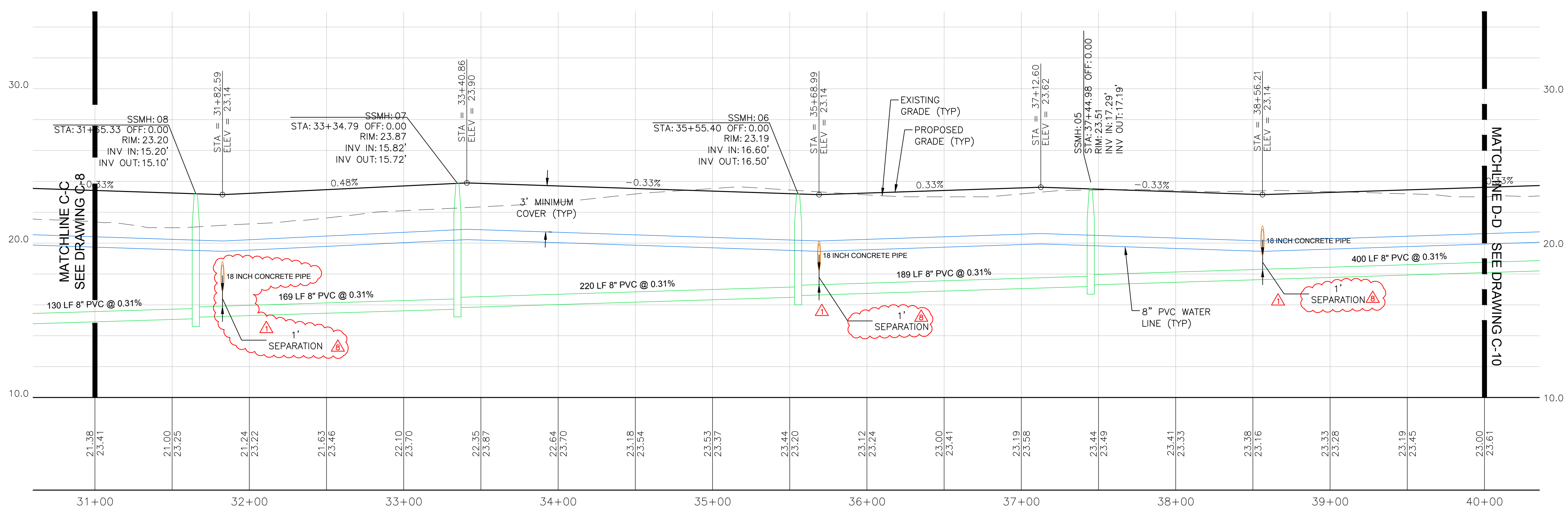
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CHECKED BY:	JTW
DRAWING NO.	C-8



PLAN STA: 31+00 THRU 40+00
1"=40'



PROFILE STA: 31+00 THRU 40+00
HORIZONTAL: 1"=40' VERTICAL: 1"=4'



LOWERED SITE

REV#	DATE	REVISION
1	5/17/17	SURV AND CITY COMMENTS
6	6/06/18	CITY COMMENTS AND LOWERED SITE
8	9/24/18	SURV AND CITY COMMENTS

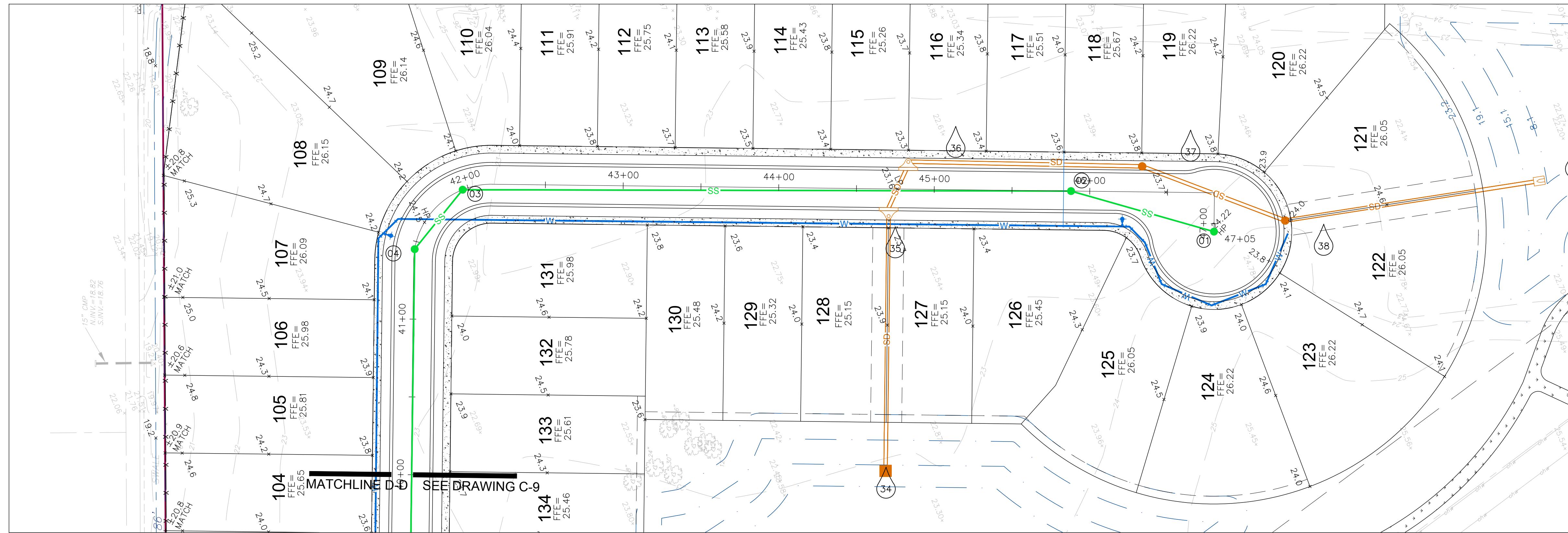
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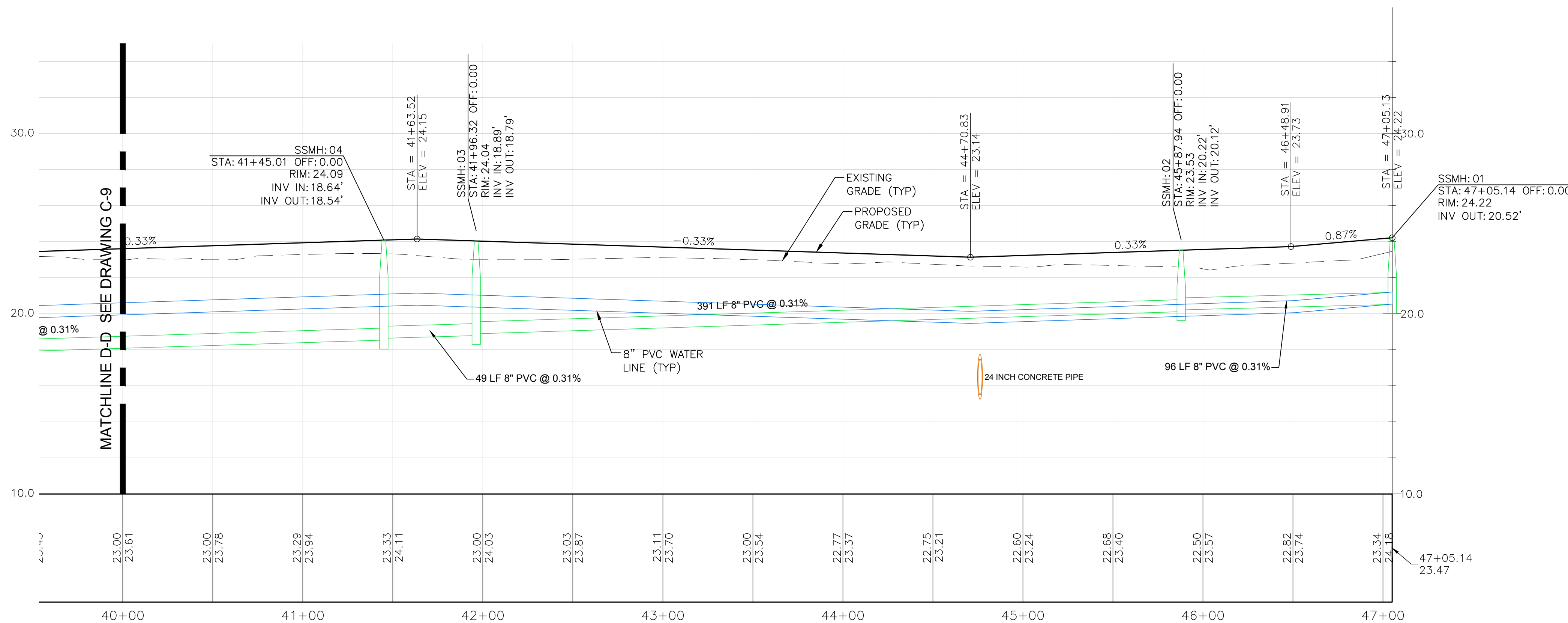
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PLAN AND PROFILE STA: 31+00 THRU 40+00

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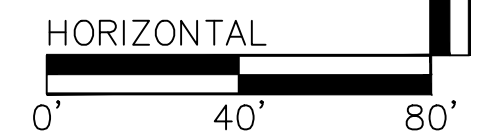
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PROJ. NO.:	160460
DESIGNED BY:	JRT
DRAWN BY:	SMB
CHECKED BY:	JTW
DRAWING NO.	C-9



PLAN STA: 40+00 THRU 47+05.14
1"=40'



PROFILE STA: 40+00 THRU 47+05.14
HORIZONTAL: 1"=40' VERTICAL: 1"=4'



REV#	DATE	REVISION
6	6/06/18	CITY COMMENTS AND LOWERED SITE

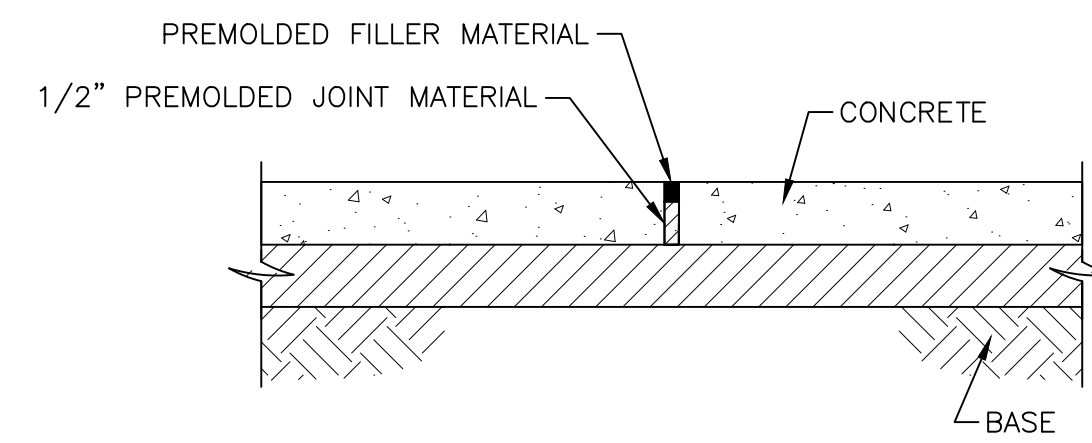
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DRAWING TITLE
PLAN AND PROFILE STA: 40+00 THRU 47+05.14

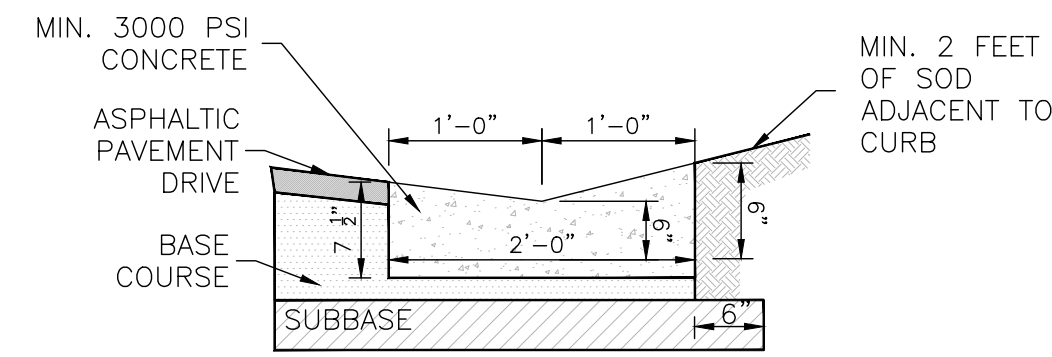
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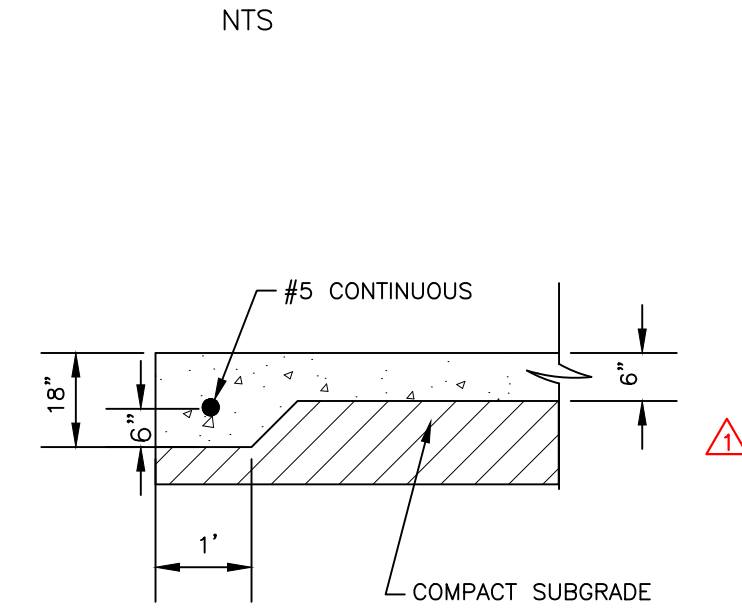


NOTE: CONTRACTOR SHALL PROVIDE A JOINT PLAN FOR APPROVAL ONE WEEK PRIOR TO POURING.

TYPICAL EXPANSION JOINT (EJ) DETAIL
NTS

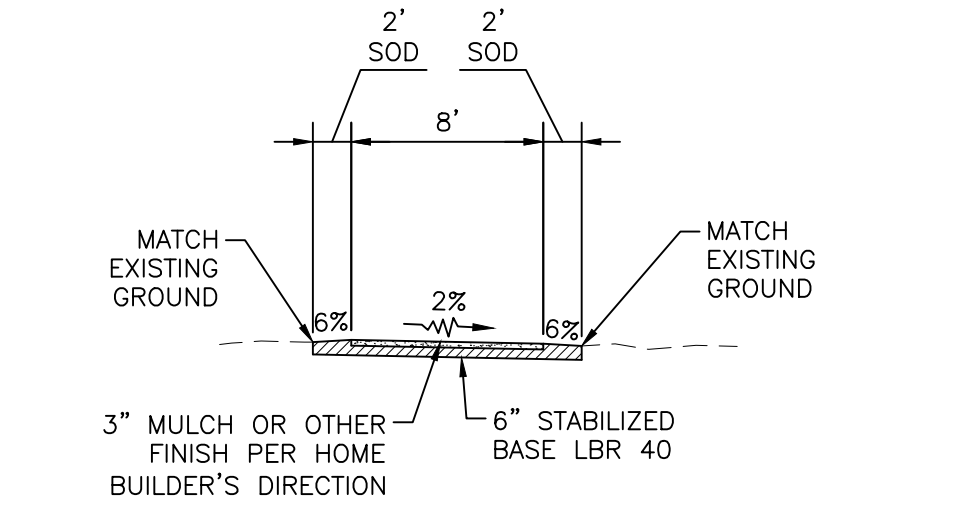


TYPICAL MIAMI CURB AND GUTTER DETAIL
NTS

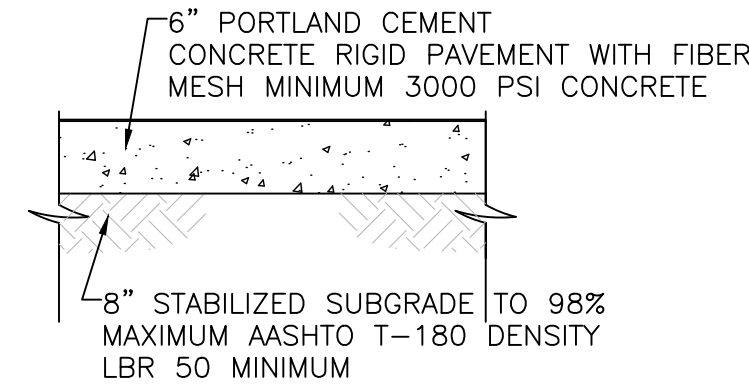


NOTE: PROVIDE 8" STABILIZED SUBGRADE BENEATH SLAB (LBR 50.) COMPACT TO 95% MODIFIED PROCTOR MAX DENSITY

TYPICAL THICKENED EDGE DETAIL
NTS

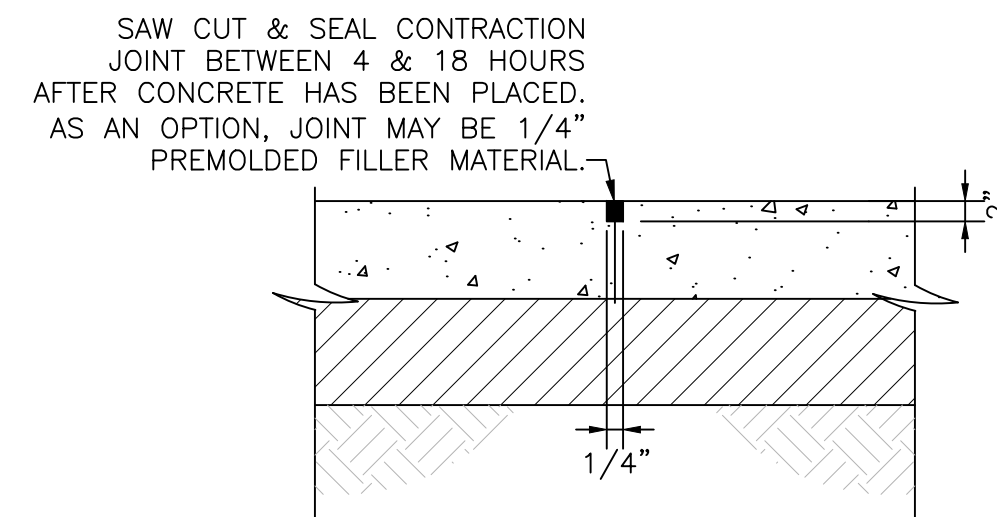


TYPICAL PEDESTRIAN PATH DETAIL
NTS



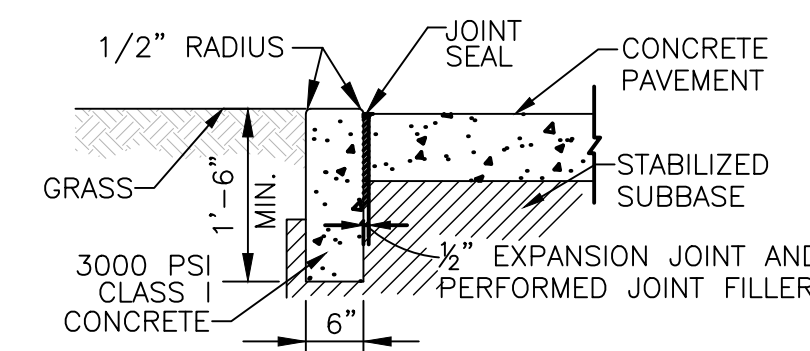
NOTES:
1. PROVIDE THICKENED EDGE PER TYPICAL DETAIL ON ALL EDGES.
2. PROVIDE ENGINEER A JOINT PLAN FOR APPROVAL A MINIMUM OF ONE WEEK PRIOR TO POURING.

TYPICAL CONCRETE DRIVE DETAIL
NTS

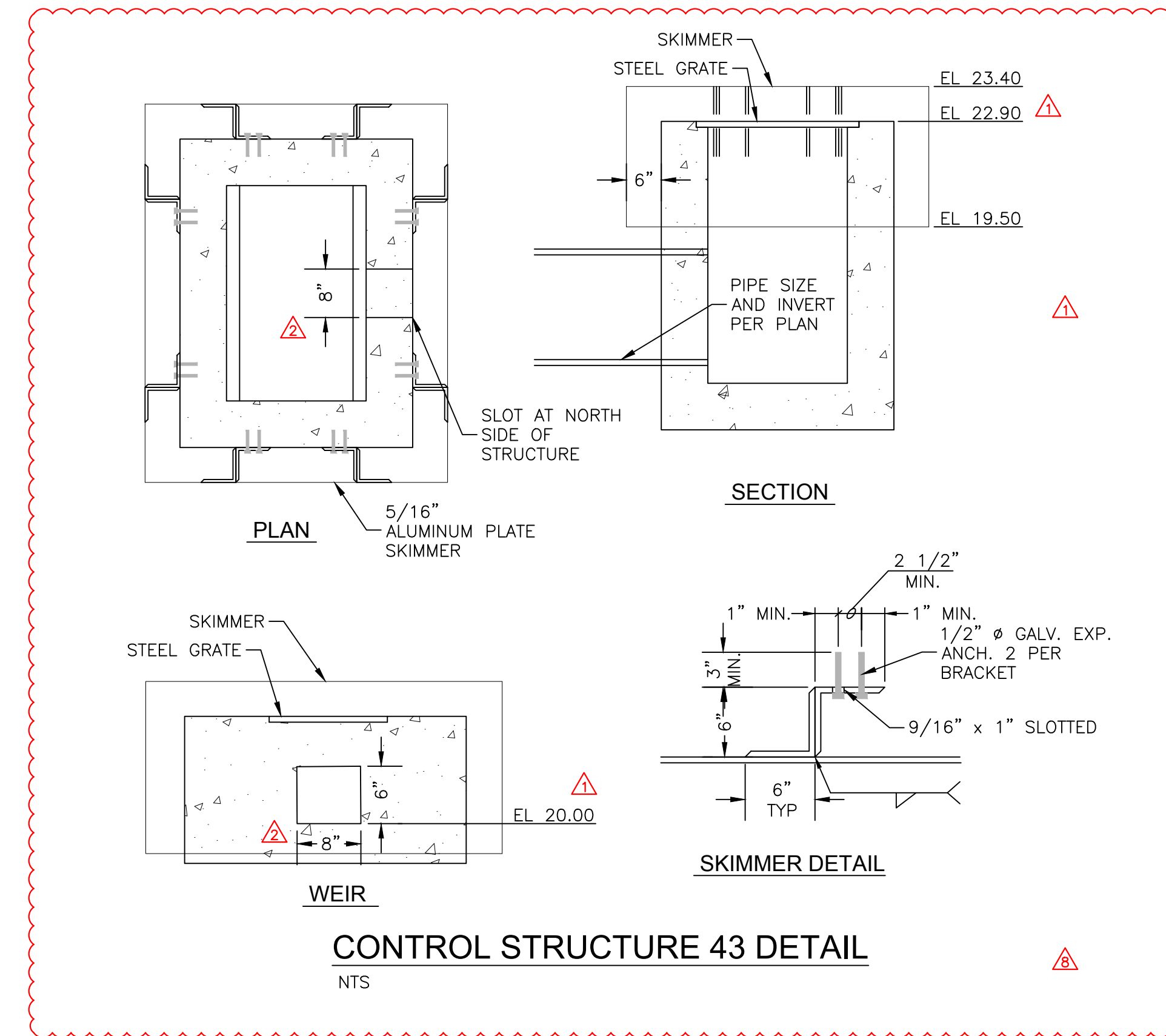


NOTE: CONTRACTOR SHALL PROVIDE A JOINT PLAN FOR APPROVAL ONE WEEK PRIOR TO POURING.

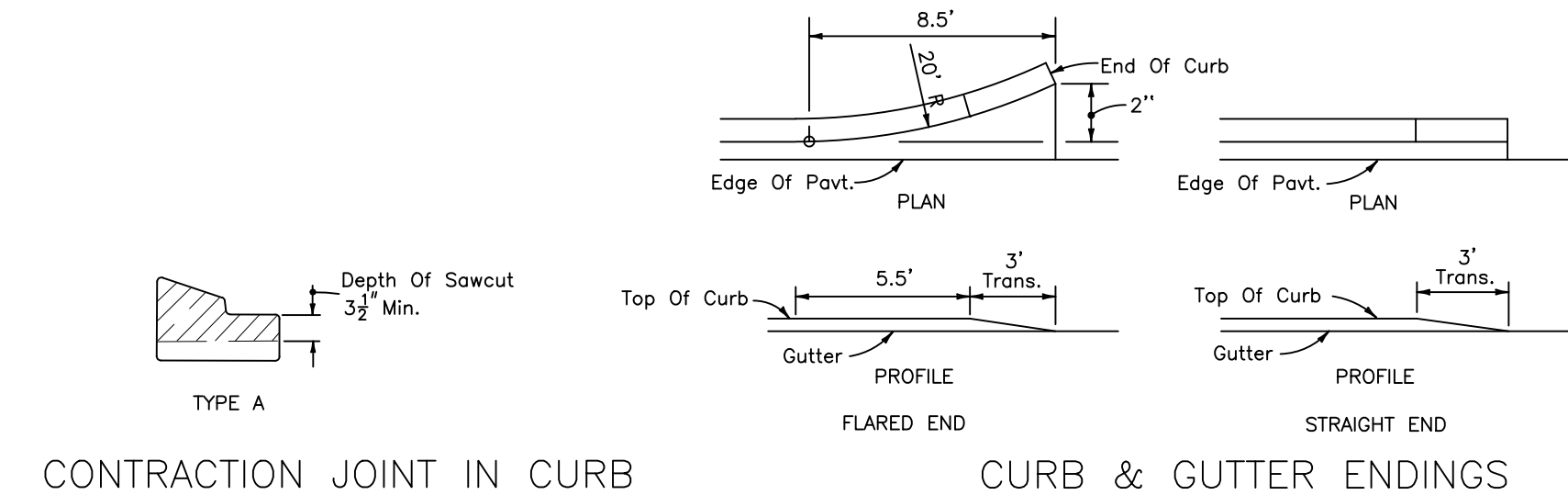
TYPICAL CONTRACTION JOINT (CJ) DETAIL
NTS



TYPICAL RIBBON CURB DETAIL
NTS

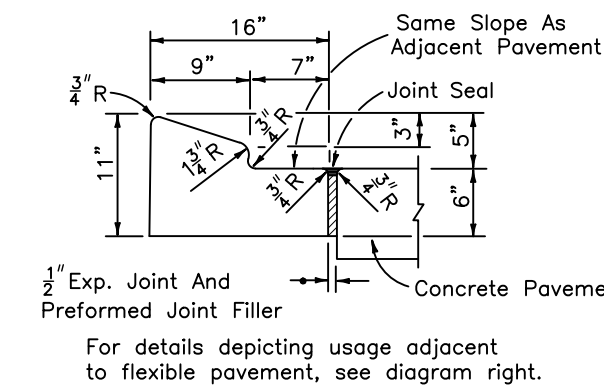


CONTROL STRUCTURE 43 DETAIL
NTS



CONTRACTION JOINT IN CURB

CURB & GUTTER ENDINGS

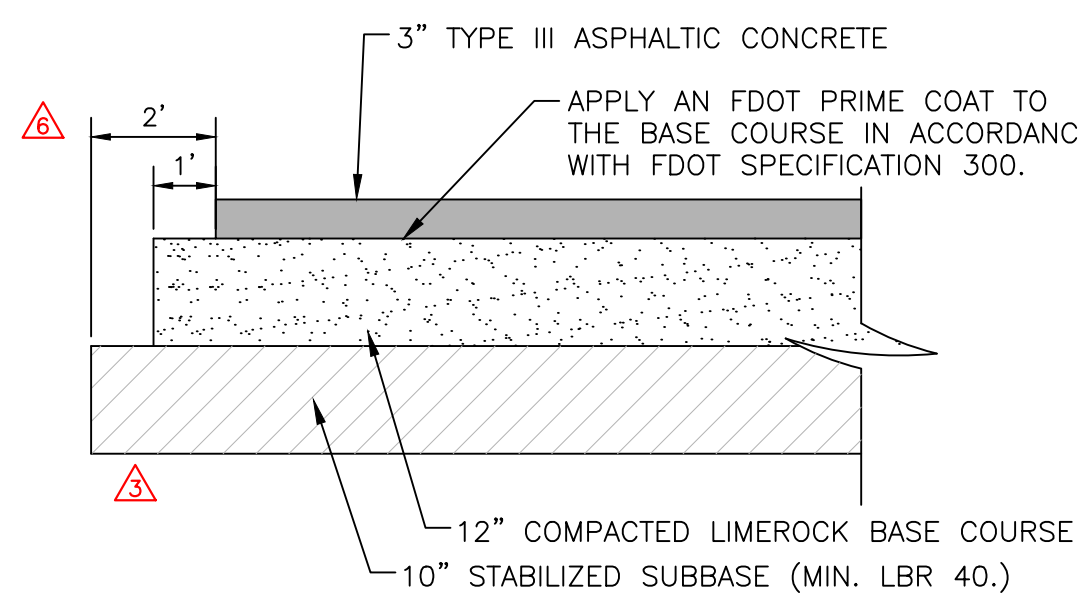


For details depicting usage adjacent to flexible pavement, see diagram right.

NOTE: For use adjacent to concrete or flexible pavement, concrete shown. Expansion joint, preformed joint filler and joint seal are required between curbs and concrete pavement only, see diagram right.

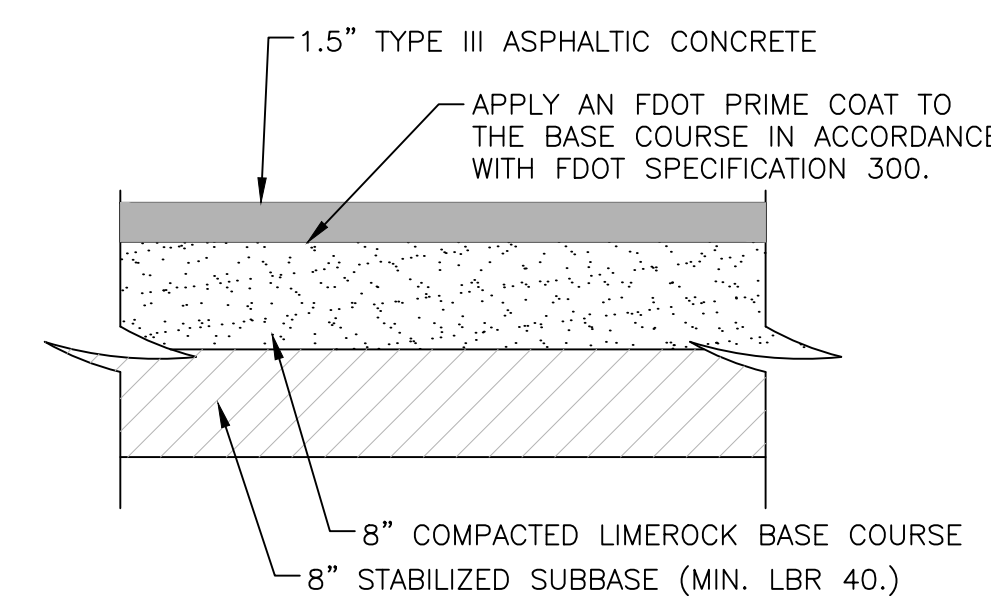
NOTE: FDOT DETAILS ARE PROVIDED FOR REFERENCE INFO ONLY. SEE CORRESPONDING INDEX NUMBER IN FDOT LATEST EDITION OF THE ROADWAY AND TRAFFIC DESIGN STANDARDS MANUAL FOR ALL REQUIREMENTS.

TYPICAL FDOT TYPE 'A' CURB DETAIL
NTS



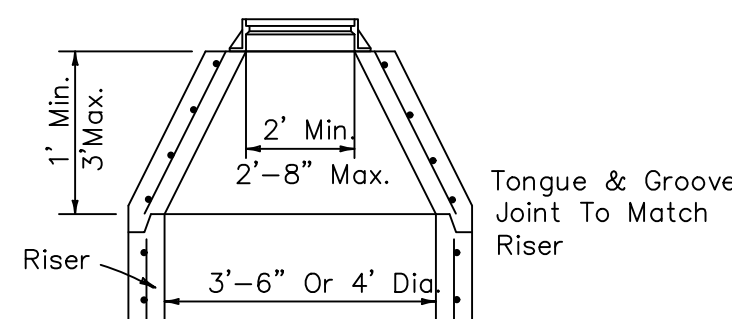
NOTES:
1. BASE COARSE MINIMUM LBR SHALL NOT BE LESS THAN 100. COMPACT TO 98% MAX DENSITY PER AASHTO T-180, MODIFIED PROCTOR.
2. SUBGRADE SHALL BE STABILIZED TO LBR 40 PER FDOT STANDARD SPECIFICATIONS 160-2. COMPACTION SHALL BE SAME AS BASE COURSE.

TYPICAL MALABAR ROAD RIGHT-OF-WAY PAVEMENT SECTION
NTS

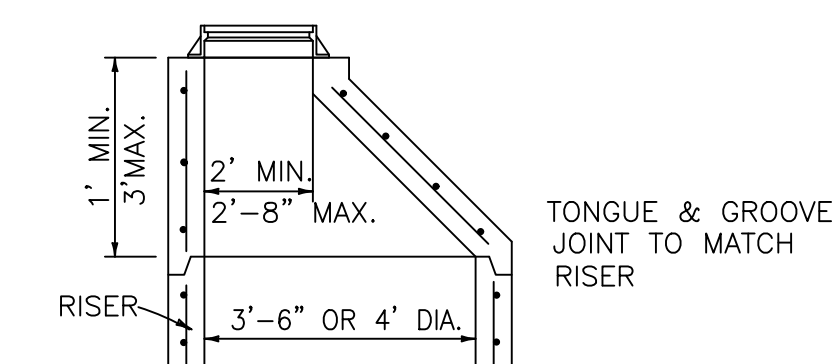


NOTES:
1. BASE COARSE MINIMUM LBR SHALL NOT BE LESS THAN 100. COMPACT TO 98% MAX DENSITY PER AASHTO T-180, MODIFIED PROCTOR.
2. SUBGRADE SHALL BE STABILIZED TO LBR 40 PER FDOT STANDARD SPECIFICATIONS 160-2. COMPACTION SHALL BE SAME AS BASE COURSE.

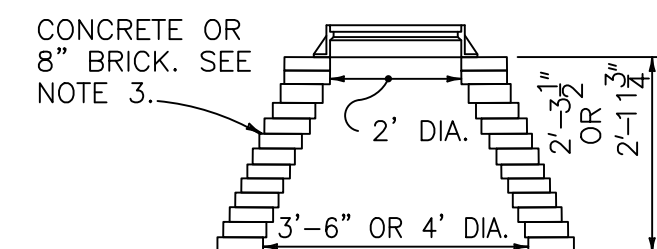
TYPICAL ON-SITE AND MTWCD CANAL ROADWAY PAVEMENT SECTION
NTS



PRECAST CONCENTRIC CONE



PRECAST ECCENTRIC CONE



TYPE 8 MANHOLES

TYPICAL J-8 MANHOLE DETAIL
NTS

NOTES (TOPS)

1. MANHOLE TOP TYPE 7 SLABS SHALL BE OF CLASS ~ CONCRETE. CONCRETE AS SPECIFIED IN ASTM C-478 MAY BE USED FOR PRECAST UNITS; SEE GENERAL NOTE NO. 3.
2. MANHOLE TOP TYPE 7 SLABS MAY BE OF CAST-IN-PLACE OR PRECAST CONSTRUCTION. THE OPTIONAL KEY IS FOR PRECAST TOPS AND IN LIEU OF DOWELS. FRAME AND SLAB OPENINGS ARE TO BE OMITTED WHEN TOP IS USED OVER A JUNCTION BOX. FRAMES CAN BE ADJUSTED WITH FROM ONE TO SIX COURSES OF BRICK.
3. MANHOLE TOP TYPE 8 MAY BE OF CAST-IN-PLACE OR PRECAST CONCRETE CONSTRUCTION OR BRICK CONSTRUCTION. FOR CONCRETE CONSTRUCTION, THE CONCRETE AND STEEL REINFORCEMENT SHALL BE THE SAME AS THE SUPPORTING WALL UNIT. AN ECCENTRIC CONE MAY BE USED.
4. MANHOLE TOPS SHALL BE SECURED TO STRUCTURES BY OPTIONAL CONSTRUCTION JOINTS AS SHOWN ON SHEET 3 OF 6.

REV#	DATE	REVISION
1	5/17/17	SURV AND CITY COMMENTS
2	7/17/17	SURV AND CITY COMMENTS
3	8/28/17	CITY COMMENTS
4	11/20/17	CITY COMMENTS
5	12/29/17	CITY COMMENTS
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8	9/24/18	SURV AND CITY COMMENTS

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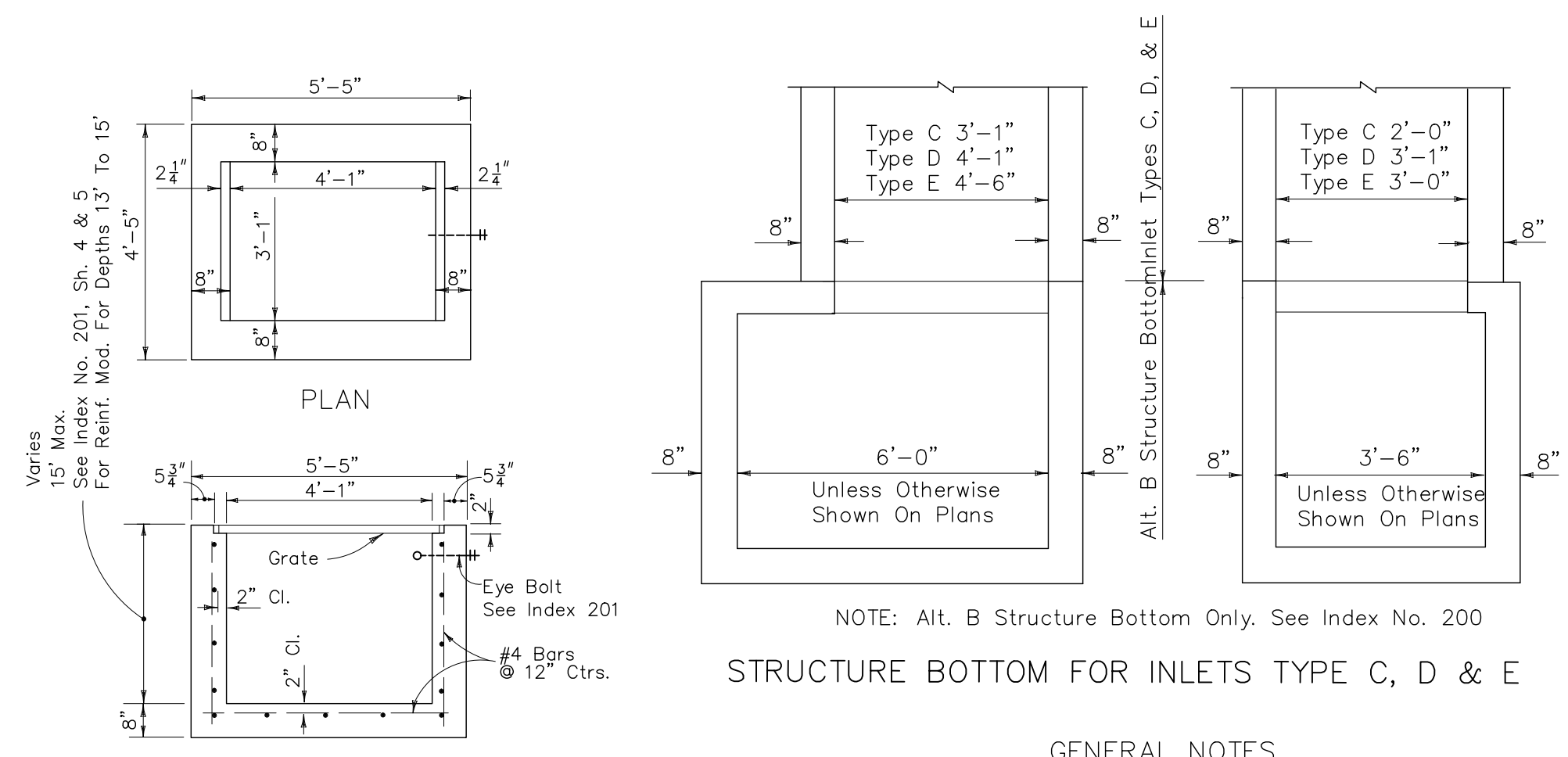
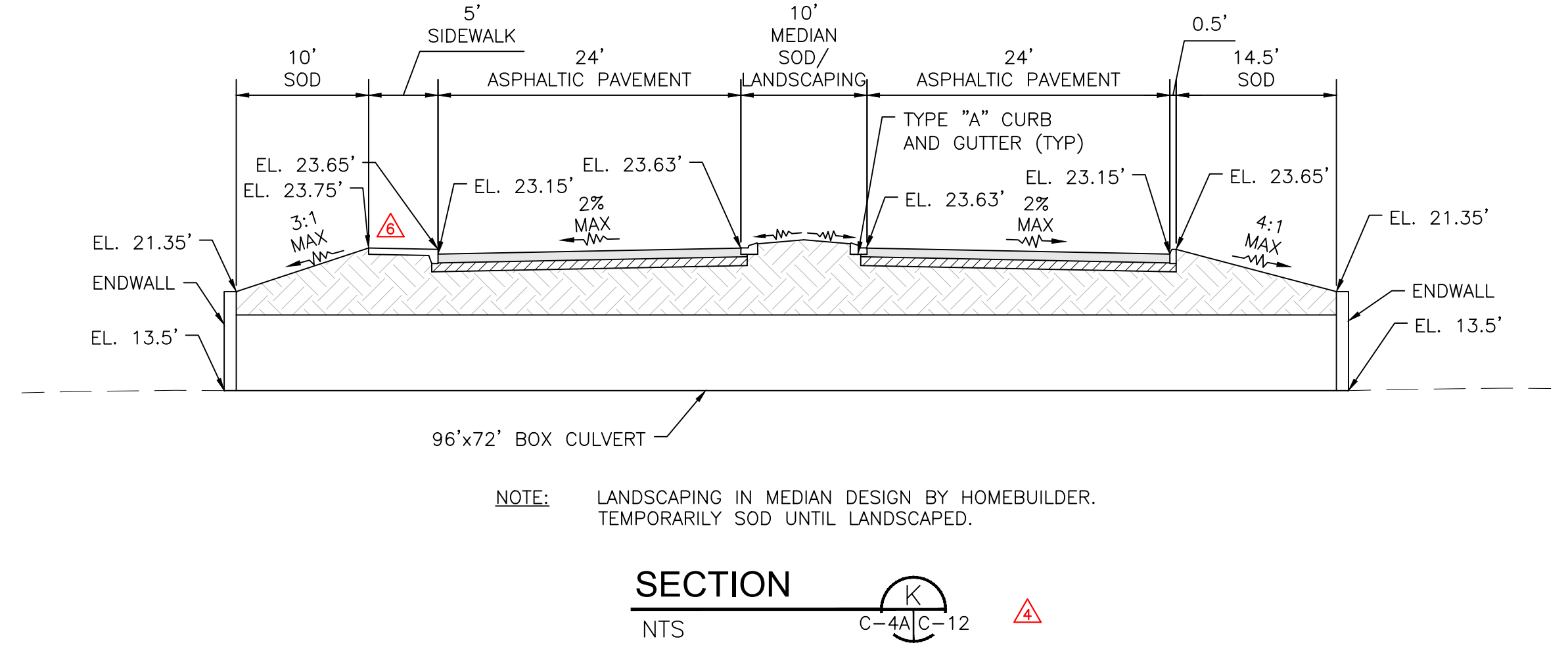
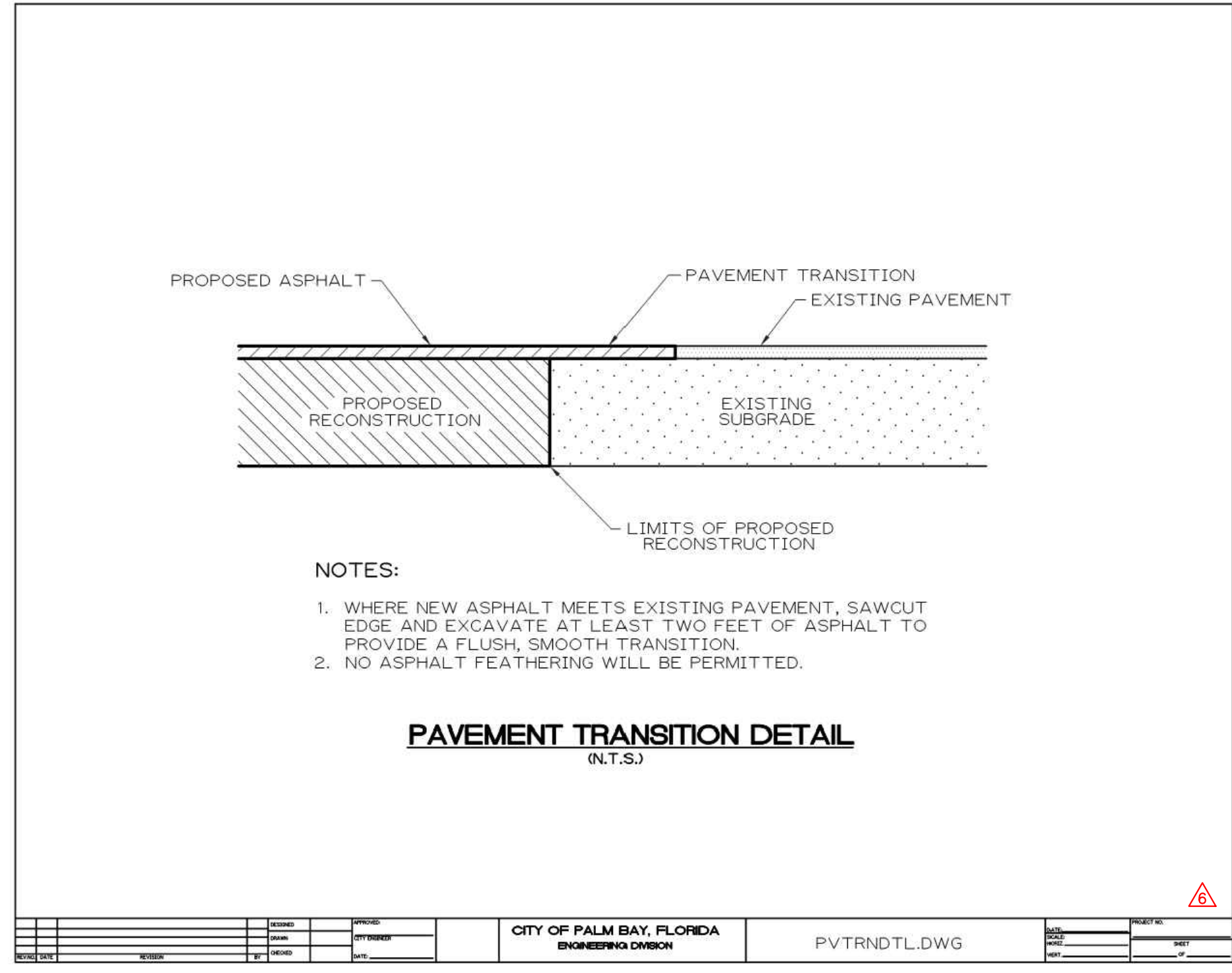
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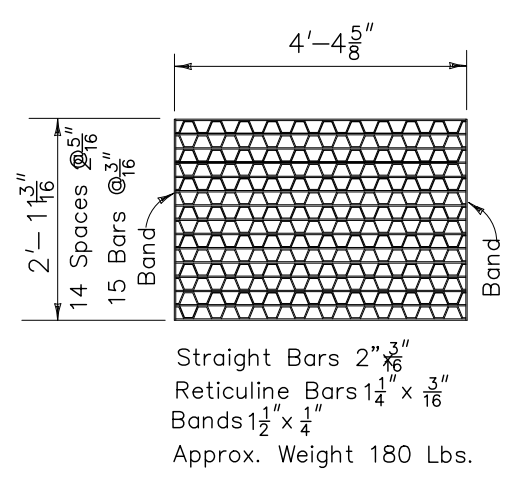
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- GENERAL NOTES**
- These inlets are suitable for bicycle and pedestrian areas and are to be used in ditches, medians and other areas subject to infrequent traffic loadings but are not to be placed in areas subject to heavy wheel loads.
 - Inlets subject to minimal debris should be constructed without slots. Where debris is a problem inlets should be constructed with slots. Slotted inlets located within roadway clear zones and in areas accessible to pedestrians shall have traversable slots. The traversable slot modification is not adaptable to inlet Type H. Slots may be constructed at either or both ends as shown on plans.
 - Steel grates are to be used on all inlets where bicycle traffic is anticipated. Steel grates are to be used on all inlets with traversable slots. Either cast iron or steel grates may be used on inlets without slots where bicycle traffic is not anticipated. Either cast iron or steel grates may be used on all inlets with non-traversable slots. Subject to the selection described above, when Alternate G grate is specified in the plans, either the steel grate, hot dipped galvanized after fabrication, or the cast iron grate may be used, unless the plans stipulate the particular type.
 - Recommended maximum pipe sizes shown are for concrete pipe. Pipe sizes larger than those recommended must be checked for fit.
 - All exposed corners and edges of concrete are to be chamfered.
 - Pavement to be used on inlets without slots and inlets with non-traversable slots only when called for in the plans; but required on all traversable slot inlets. Cost to be included in contract unit price for inlets. Quantities shown are for information only.
 - Traversable slots constructed in existing inlets shall be paid for as inlets partial, and shall include the cost for slot openings, paving and any required replacement grates.
 - Sodding to be used on all inlets not located in paved areas and paid for under contract unit price for Sodding \$7.
 - For supplementary details see Index No. 201.

NOTICE: Steel Grates Are Required On Inlets With Traversable Slots And On Inlets where Bicycle Traffic Is Anticipated.

TYPICAL FDOT TYPE 'D' INLET DETAIL
NTS



NOTE:
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6	2/01/18	CITY COMMENTS

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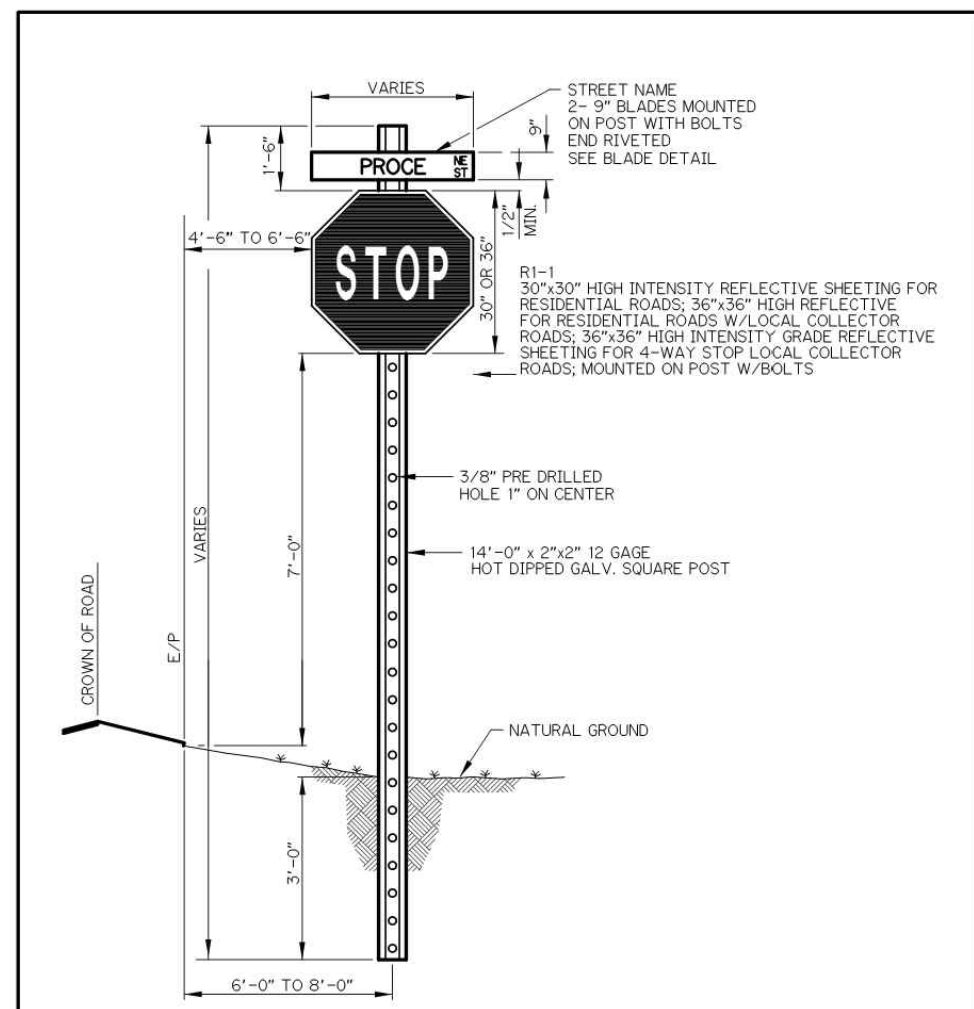
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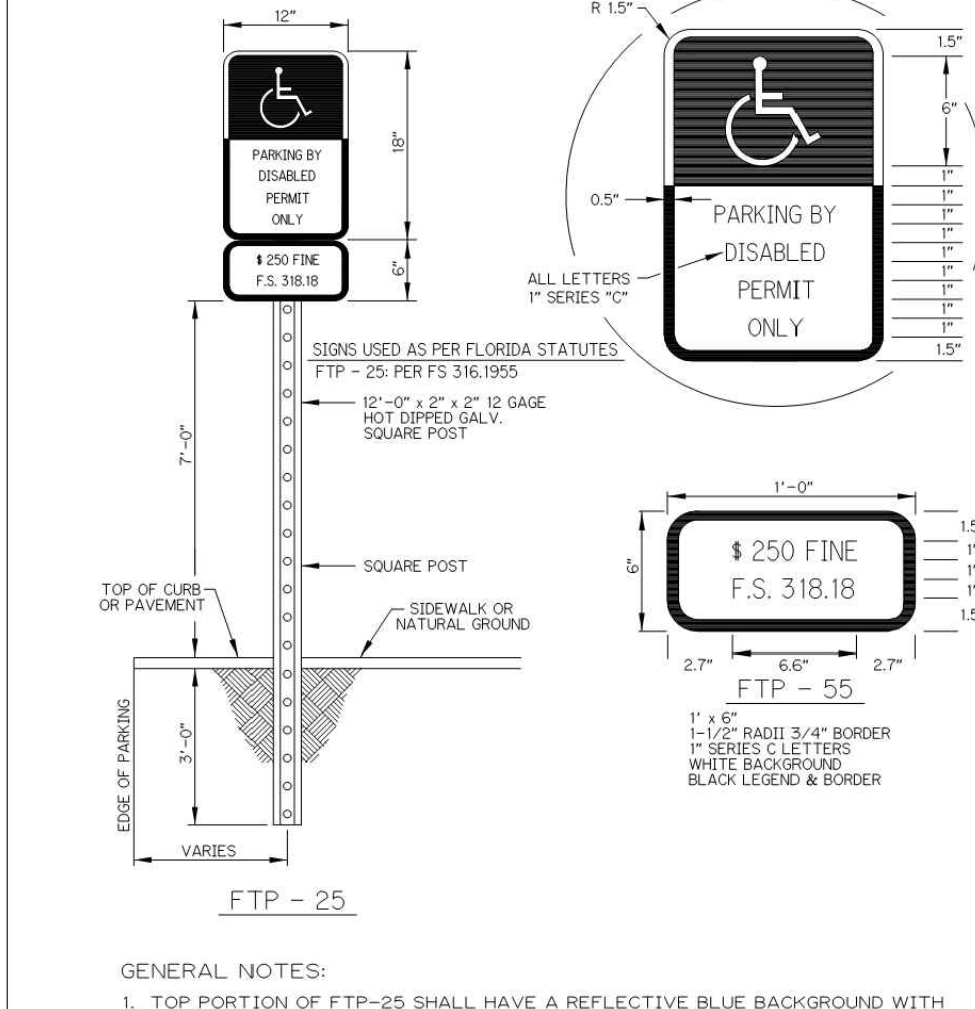
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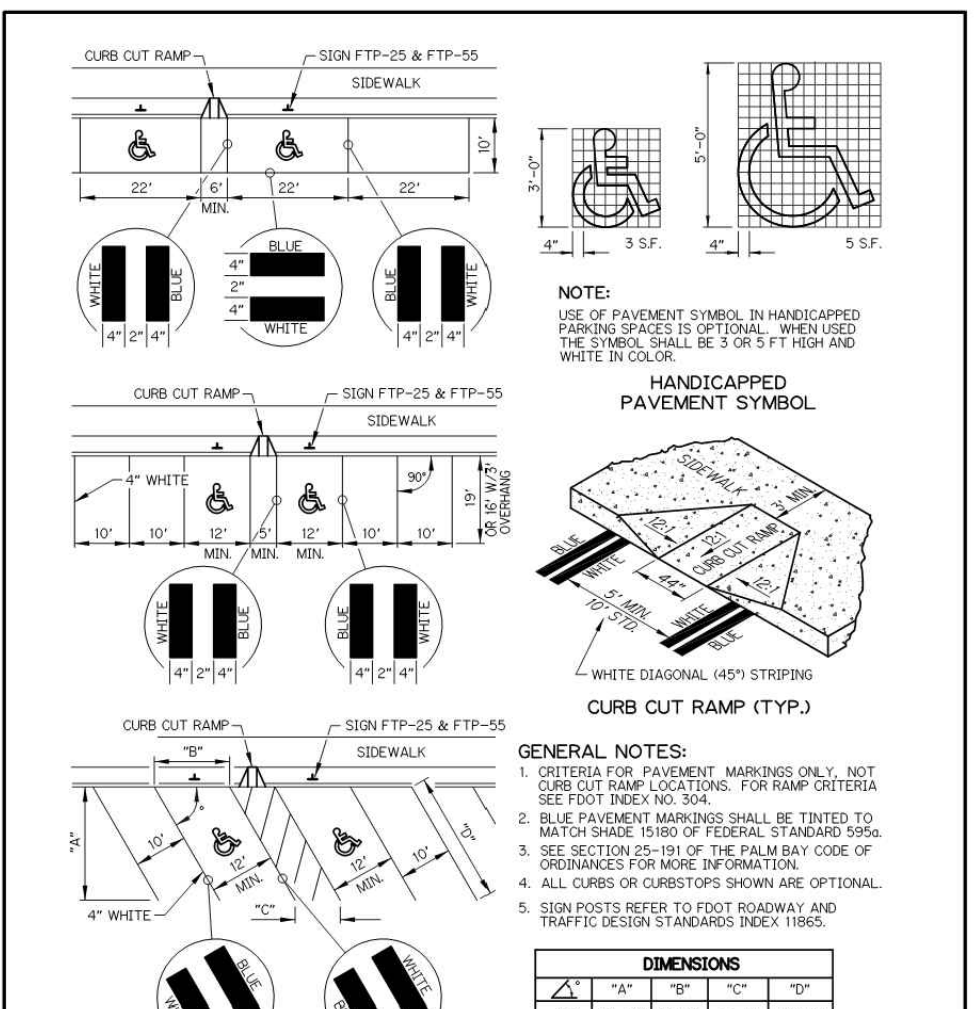
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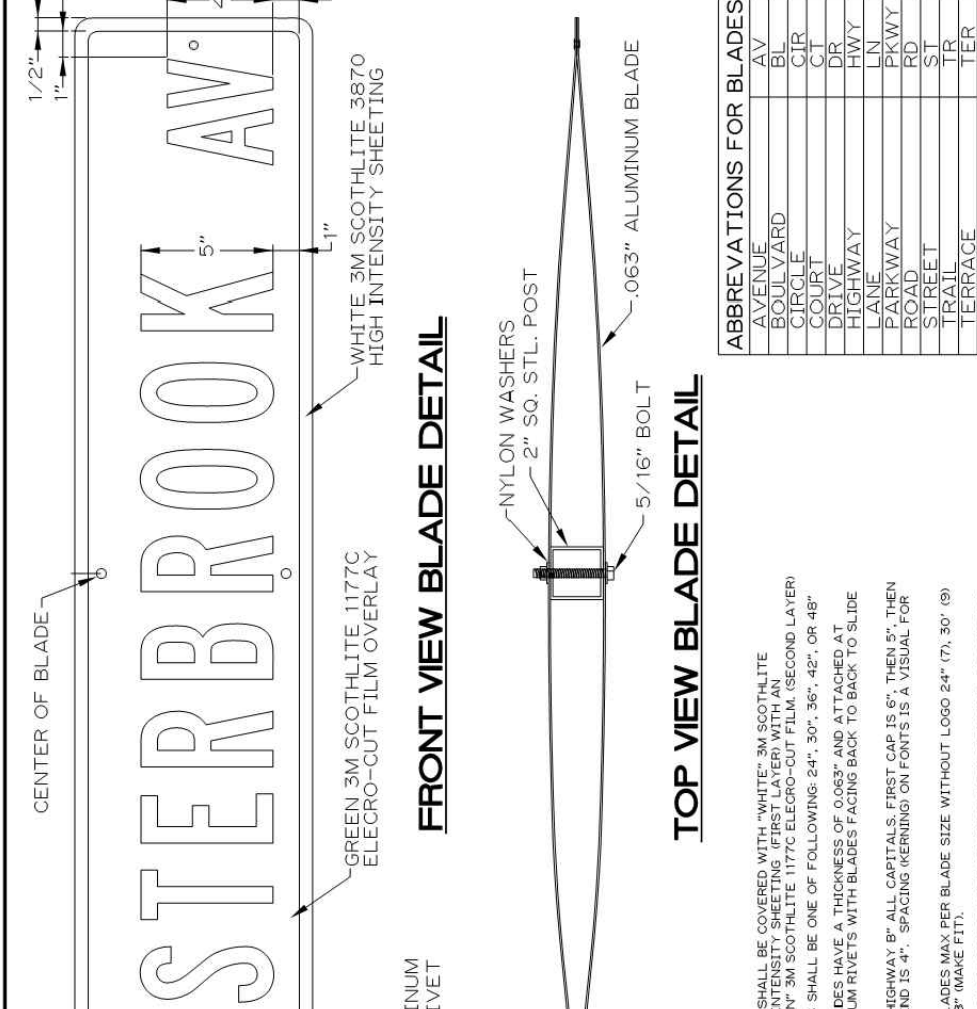
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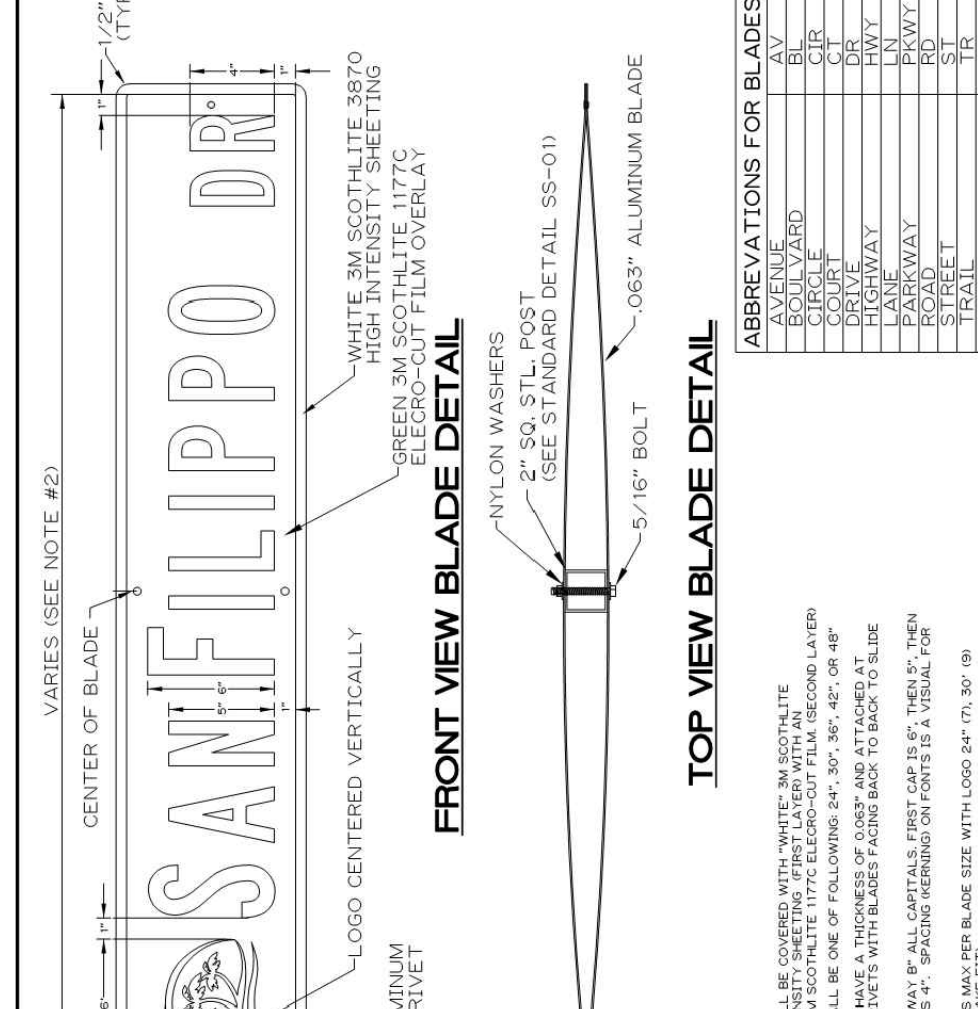
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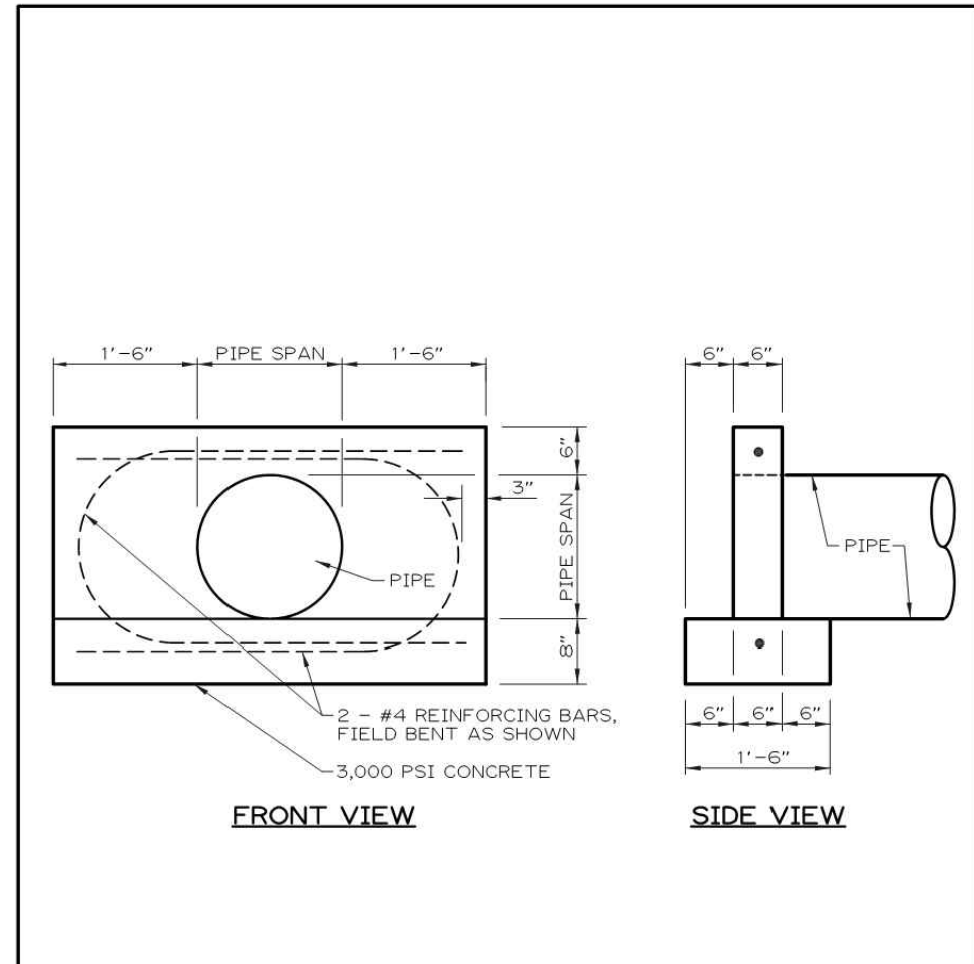
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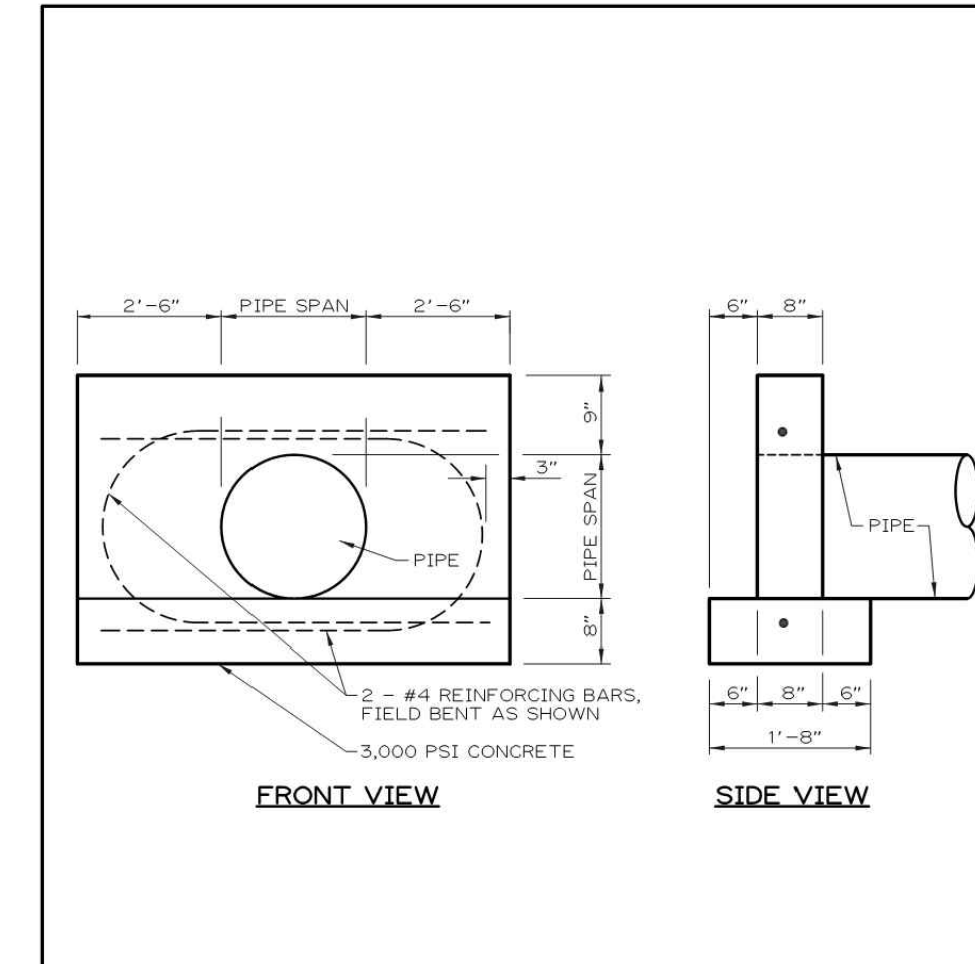
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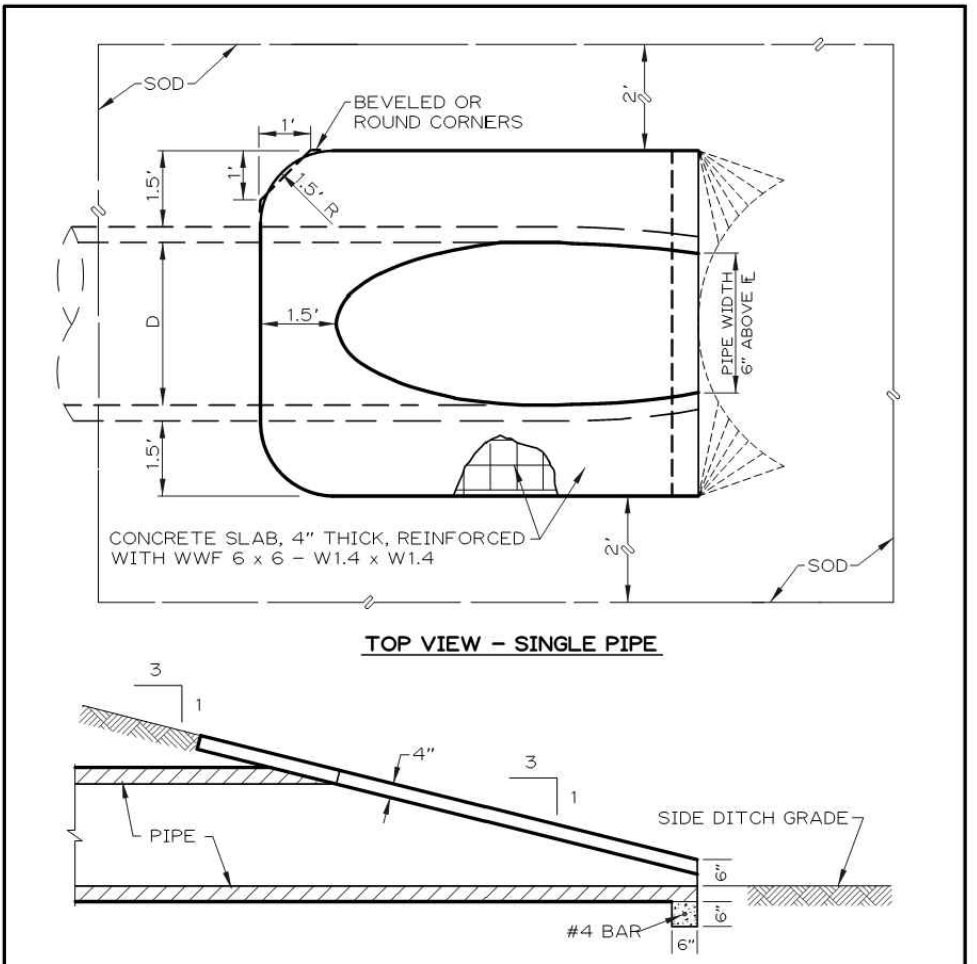
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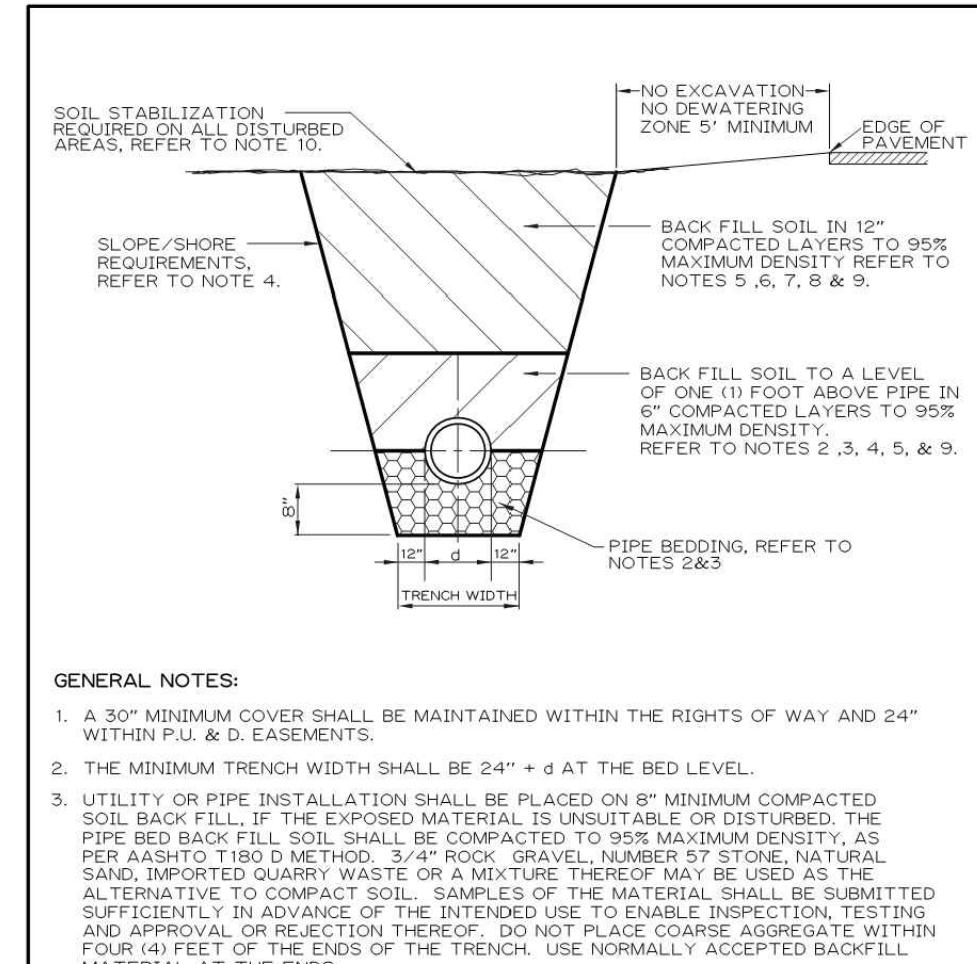
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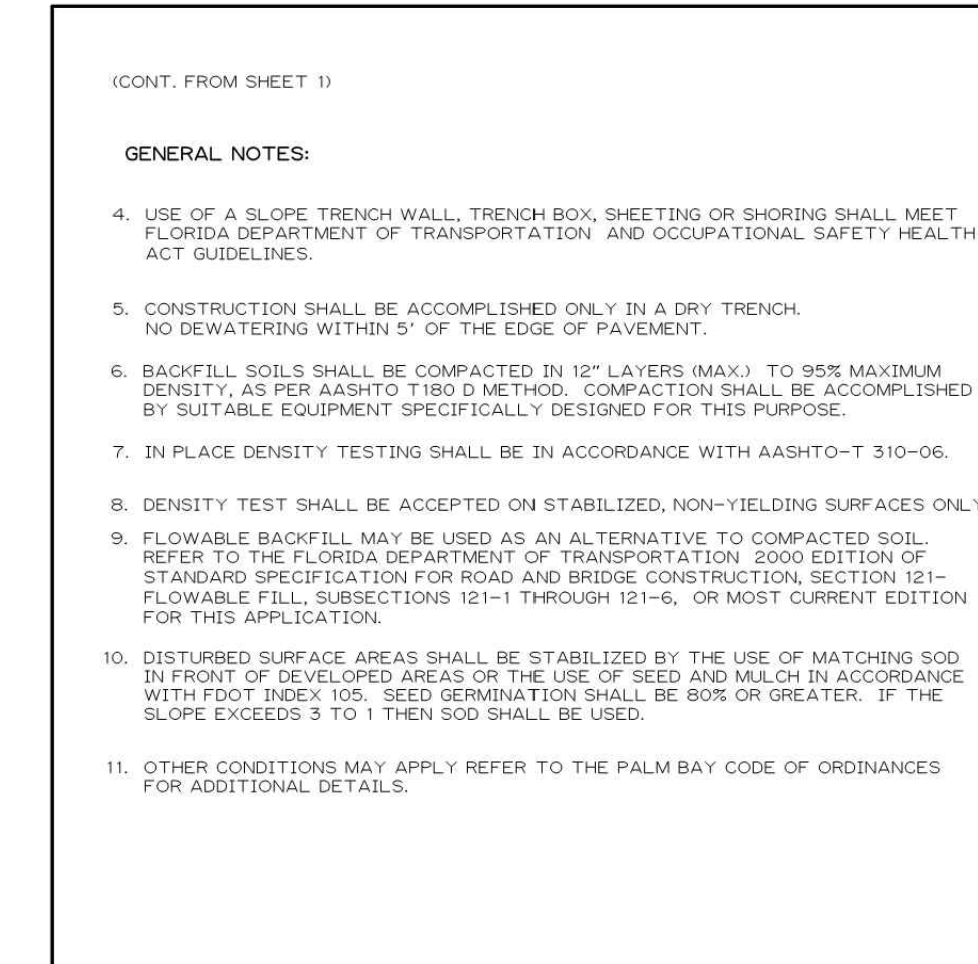
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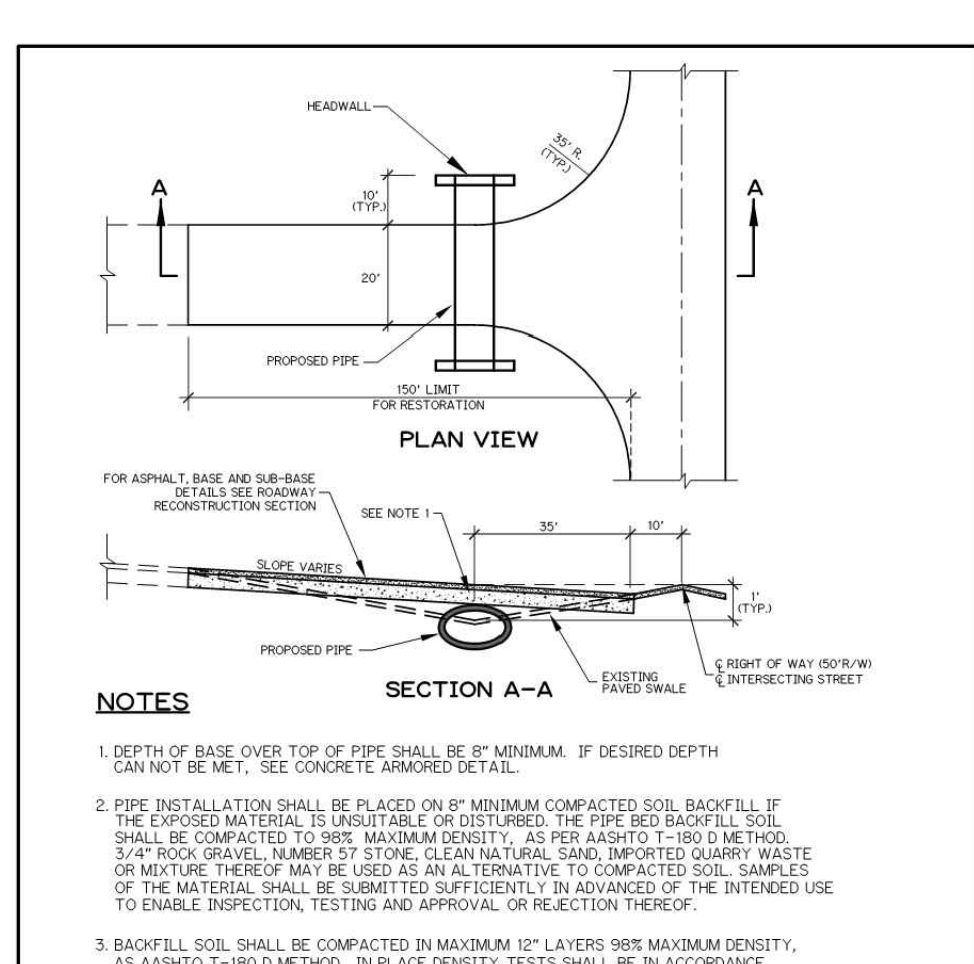
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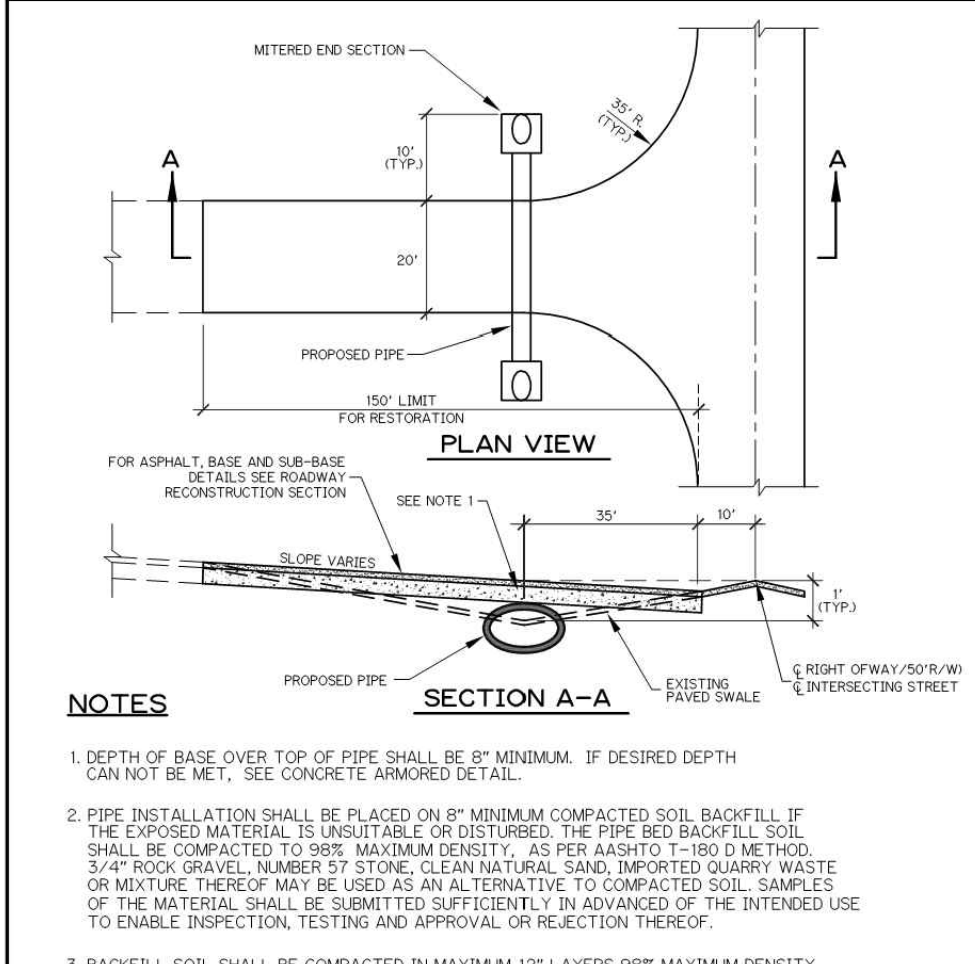
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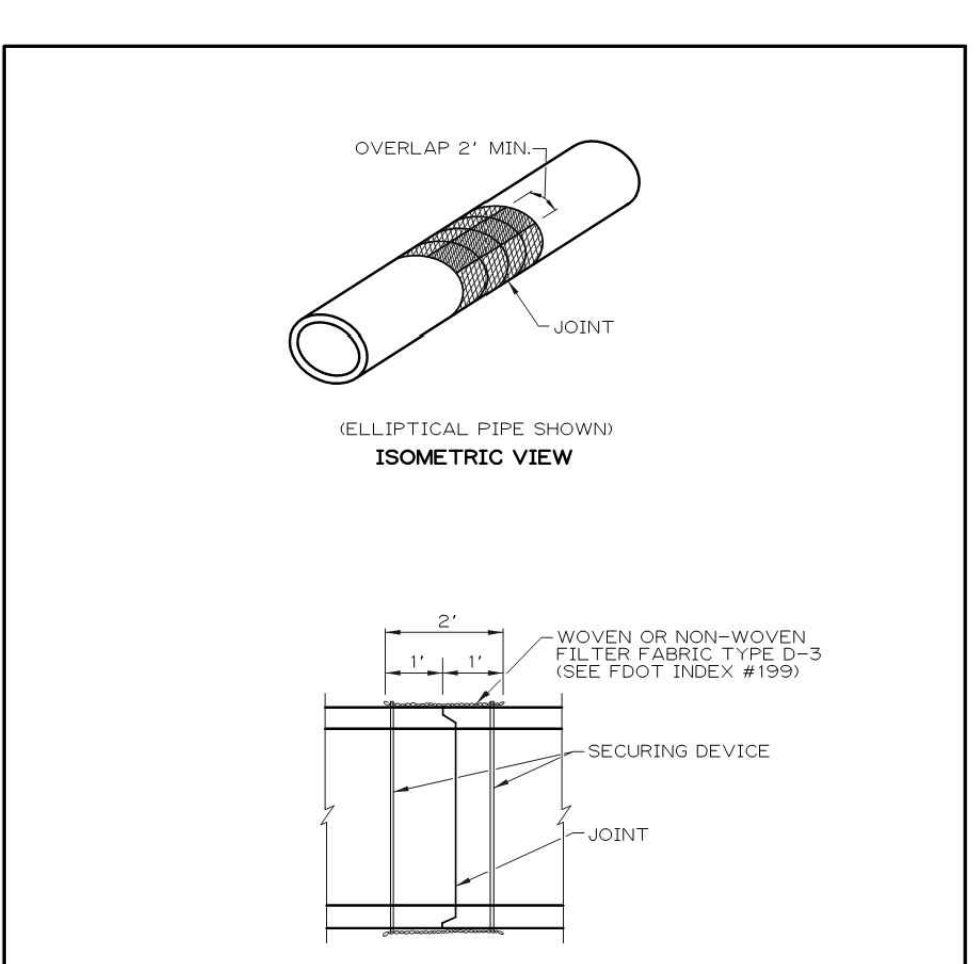
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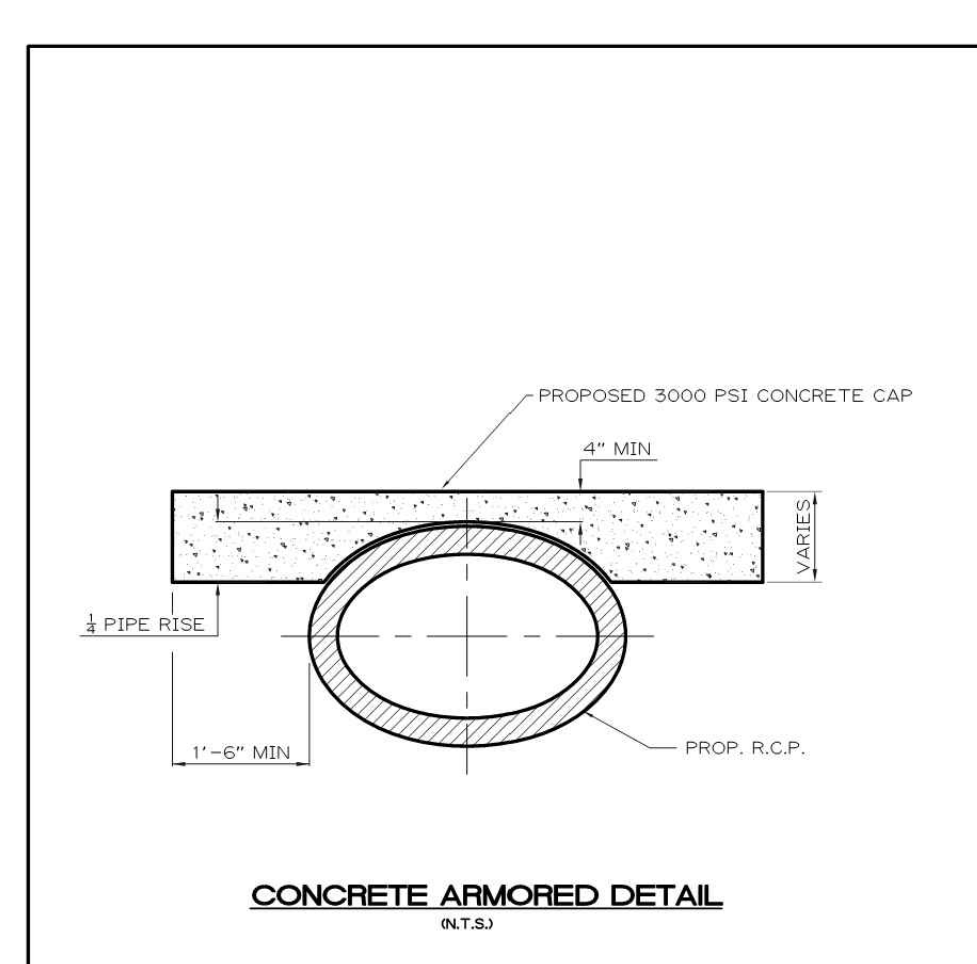
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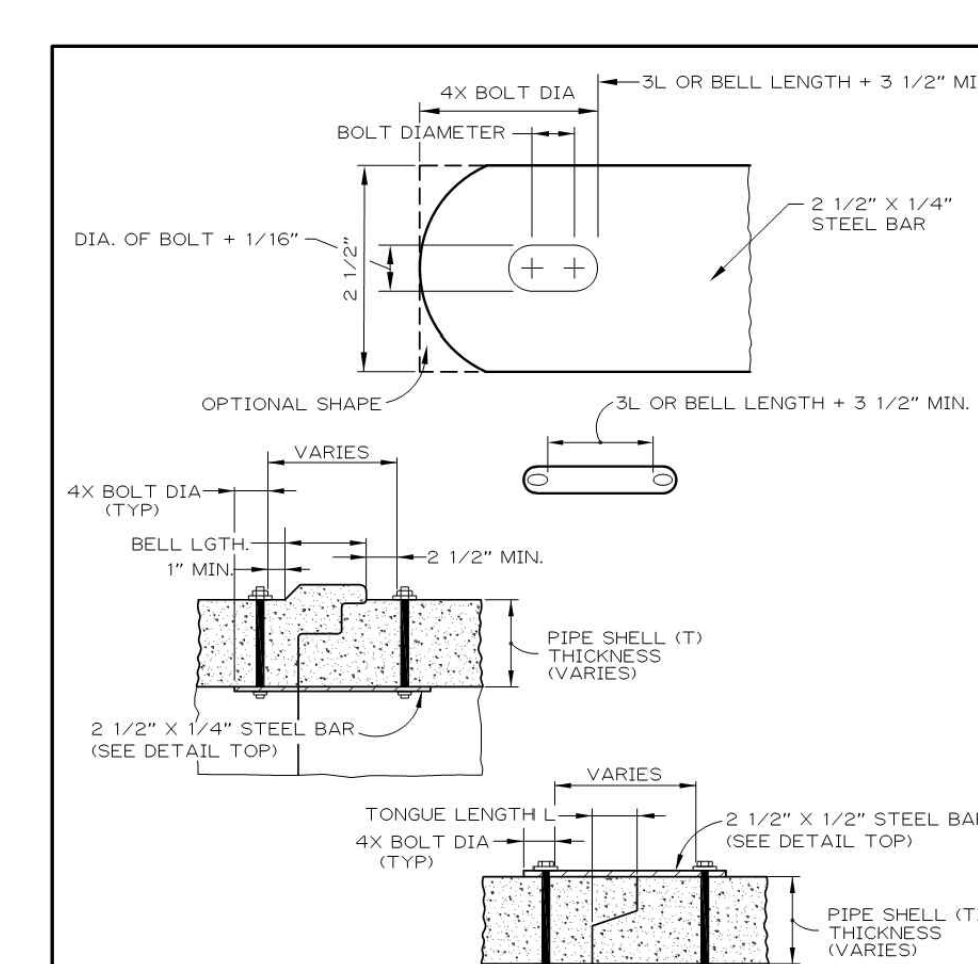
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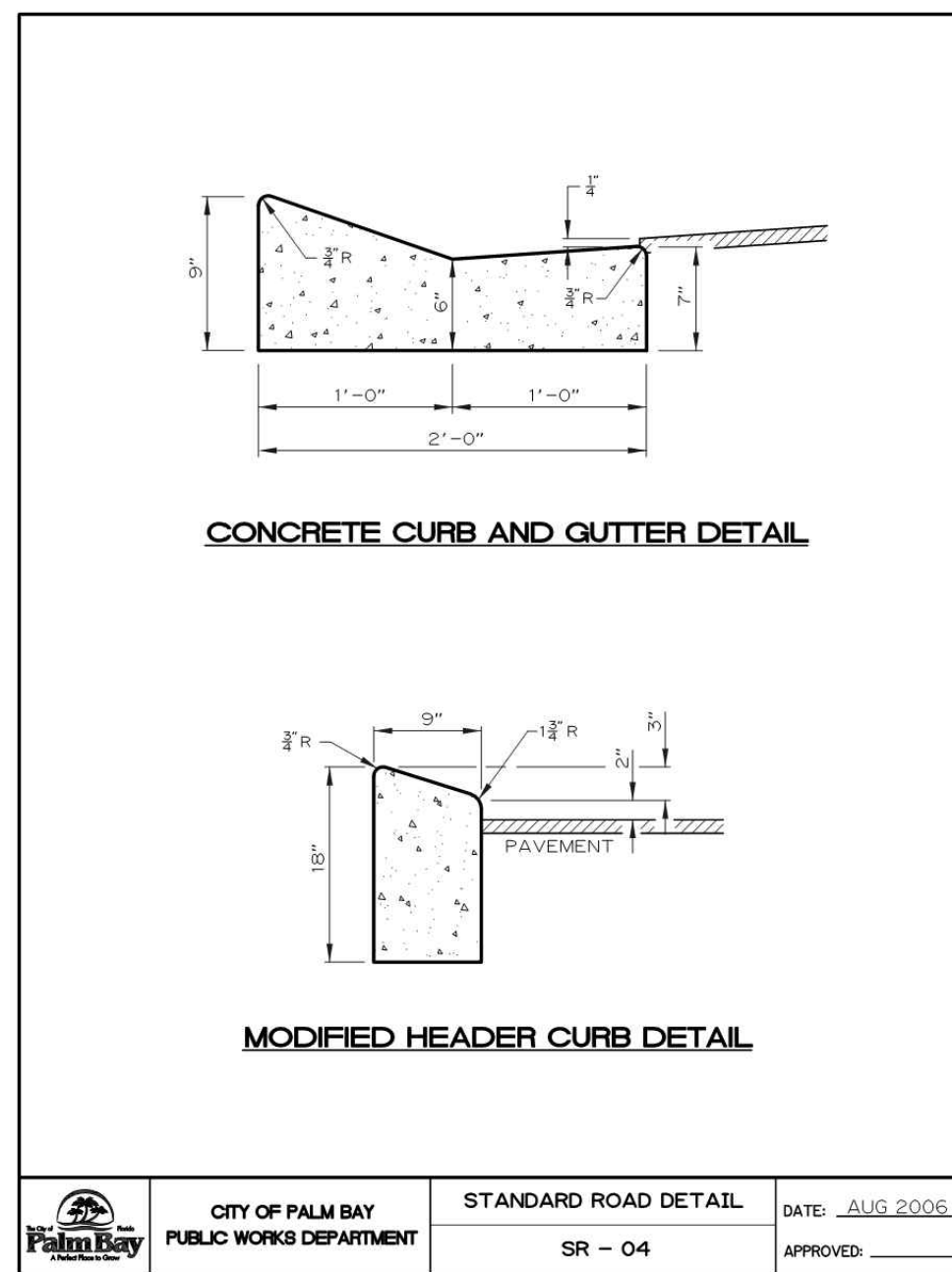
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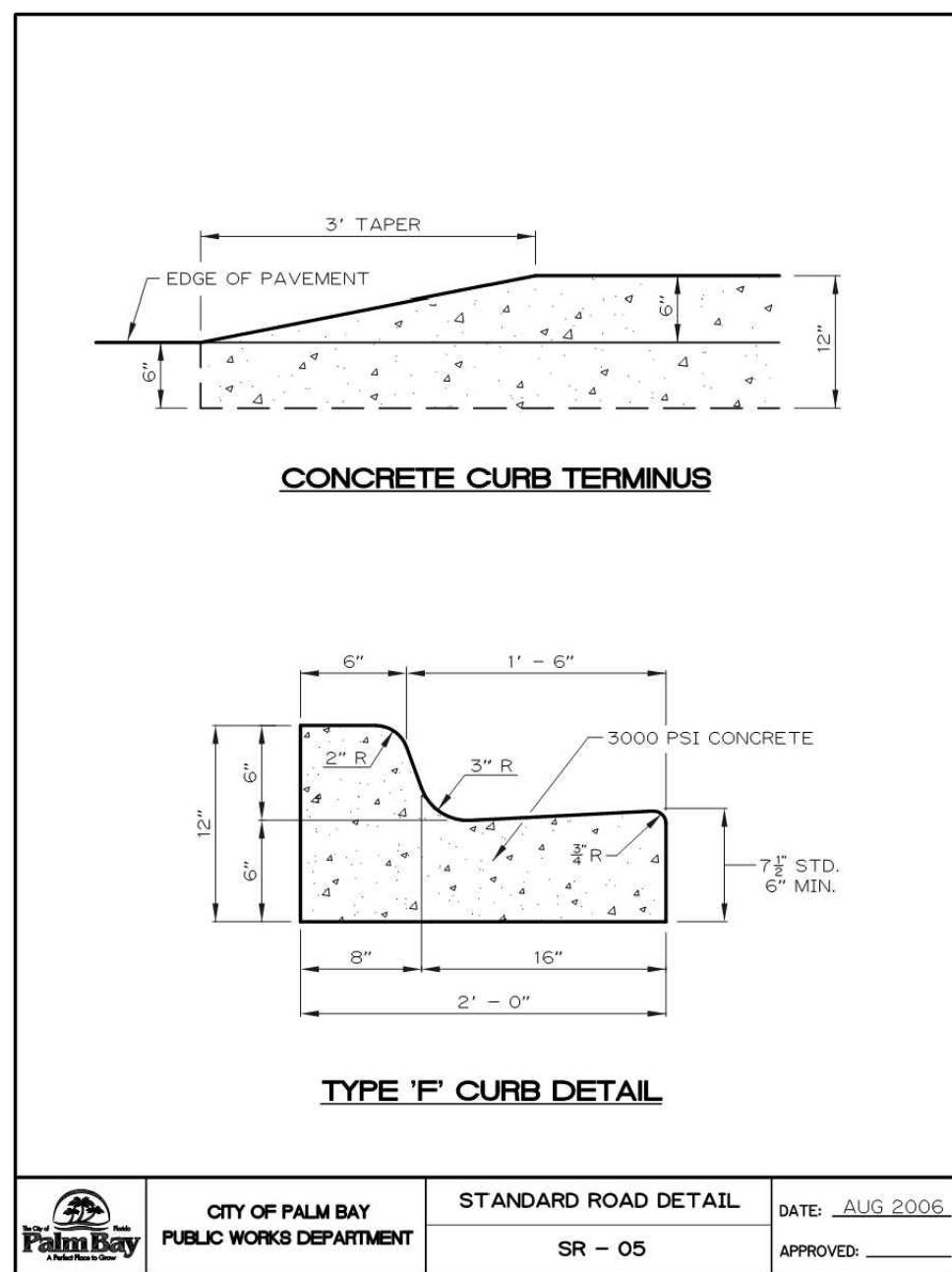
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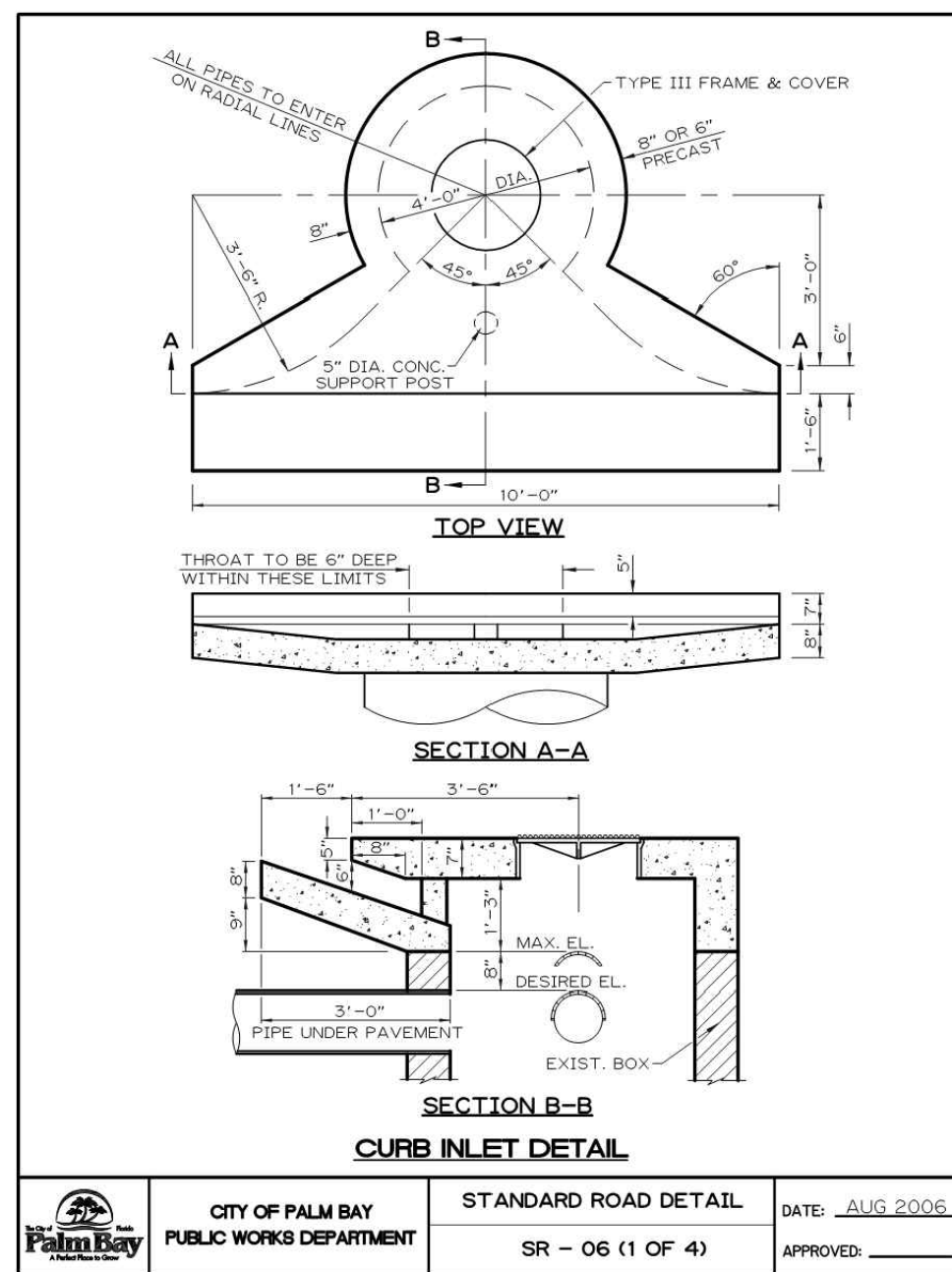
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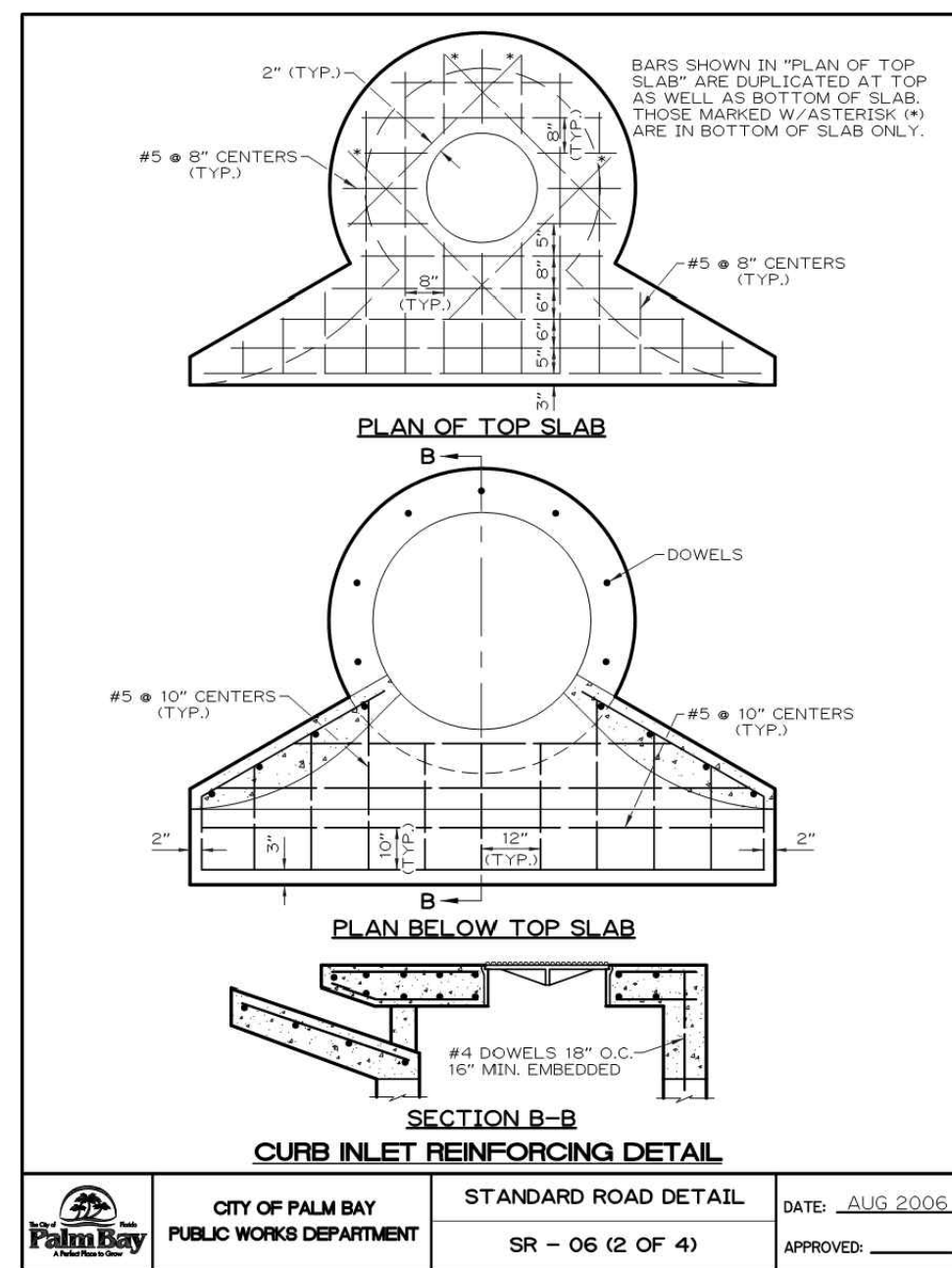
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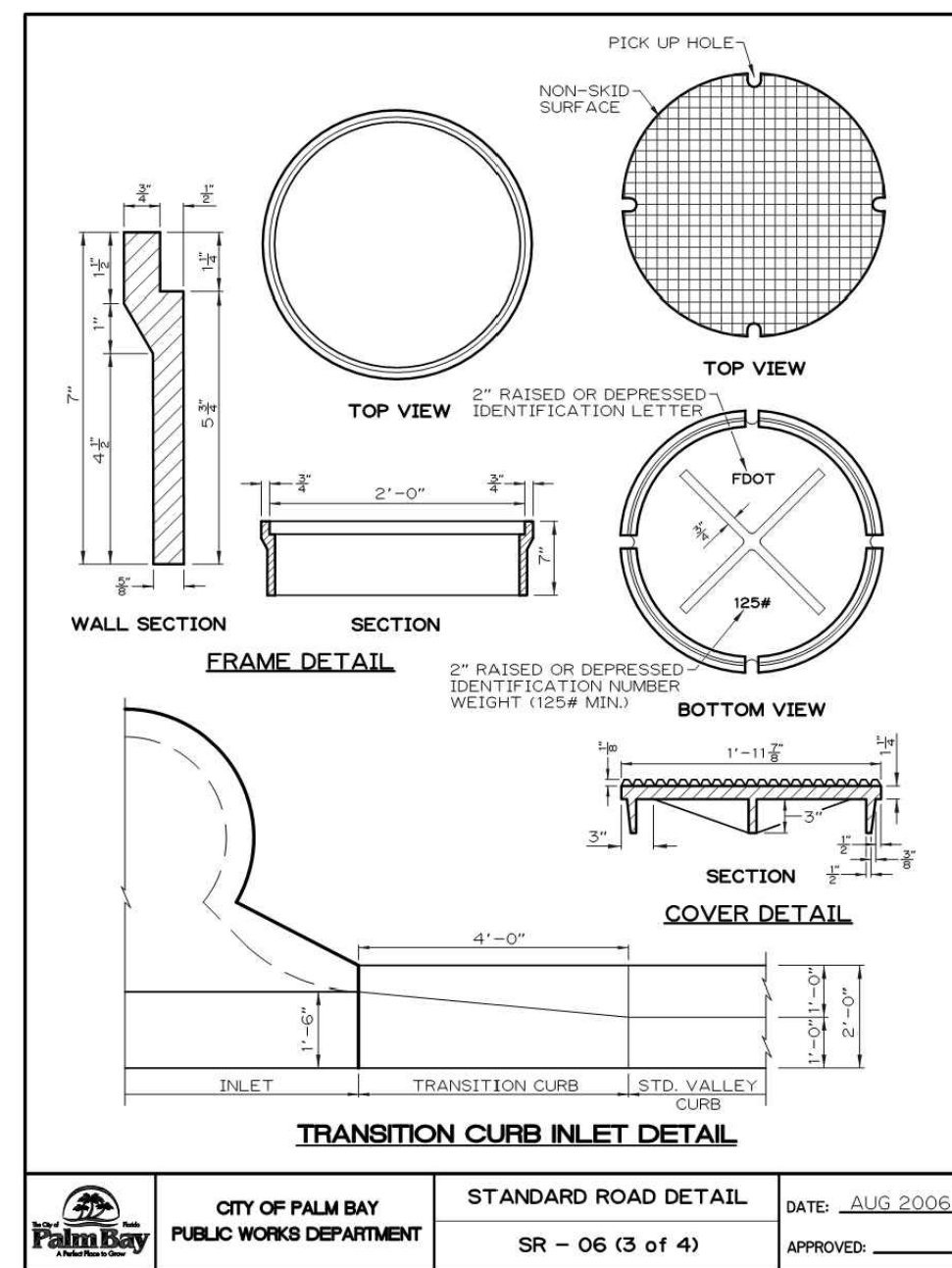
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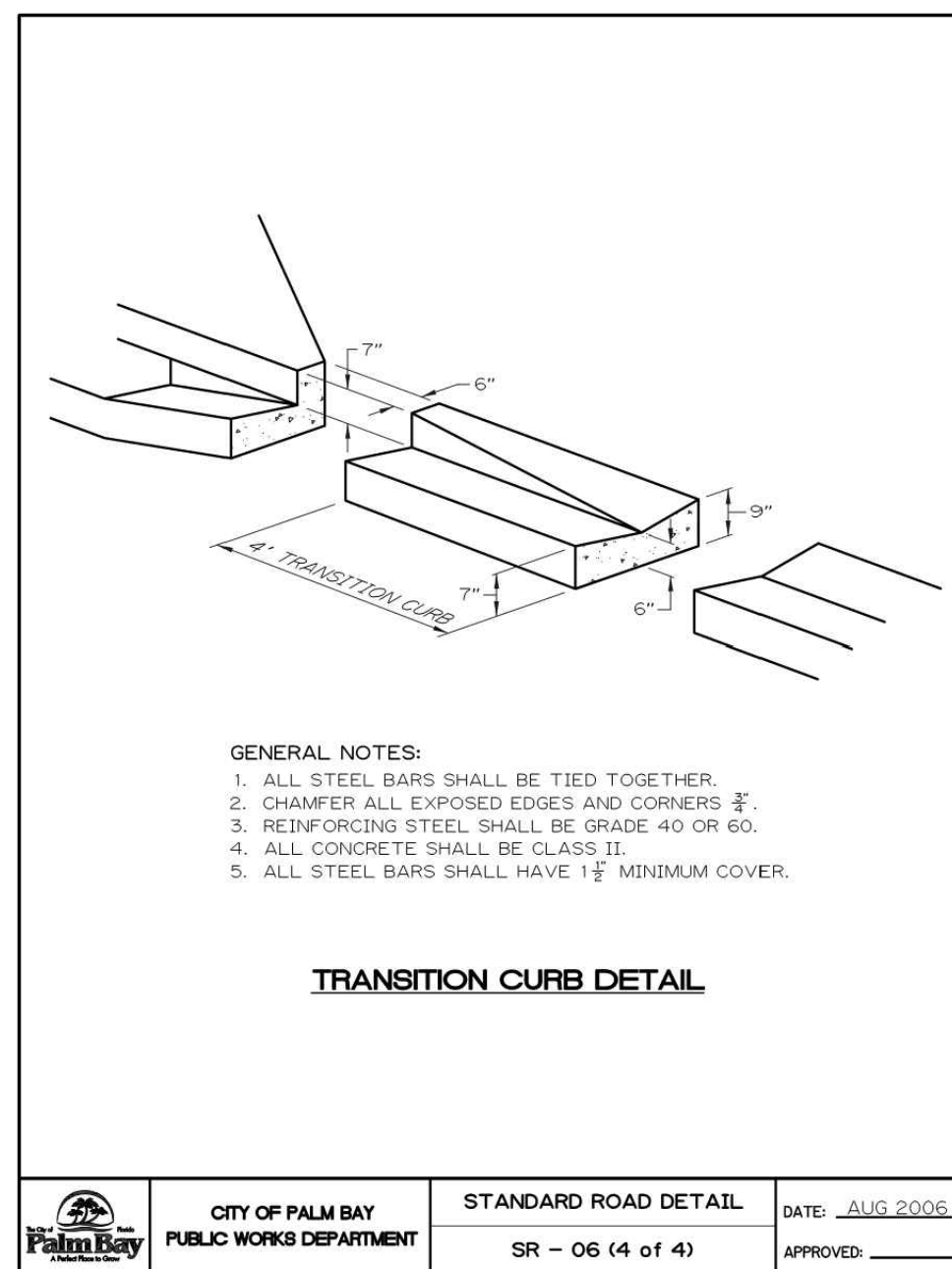
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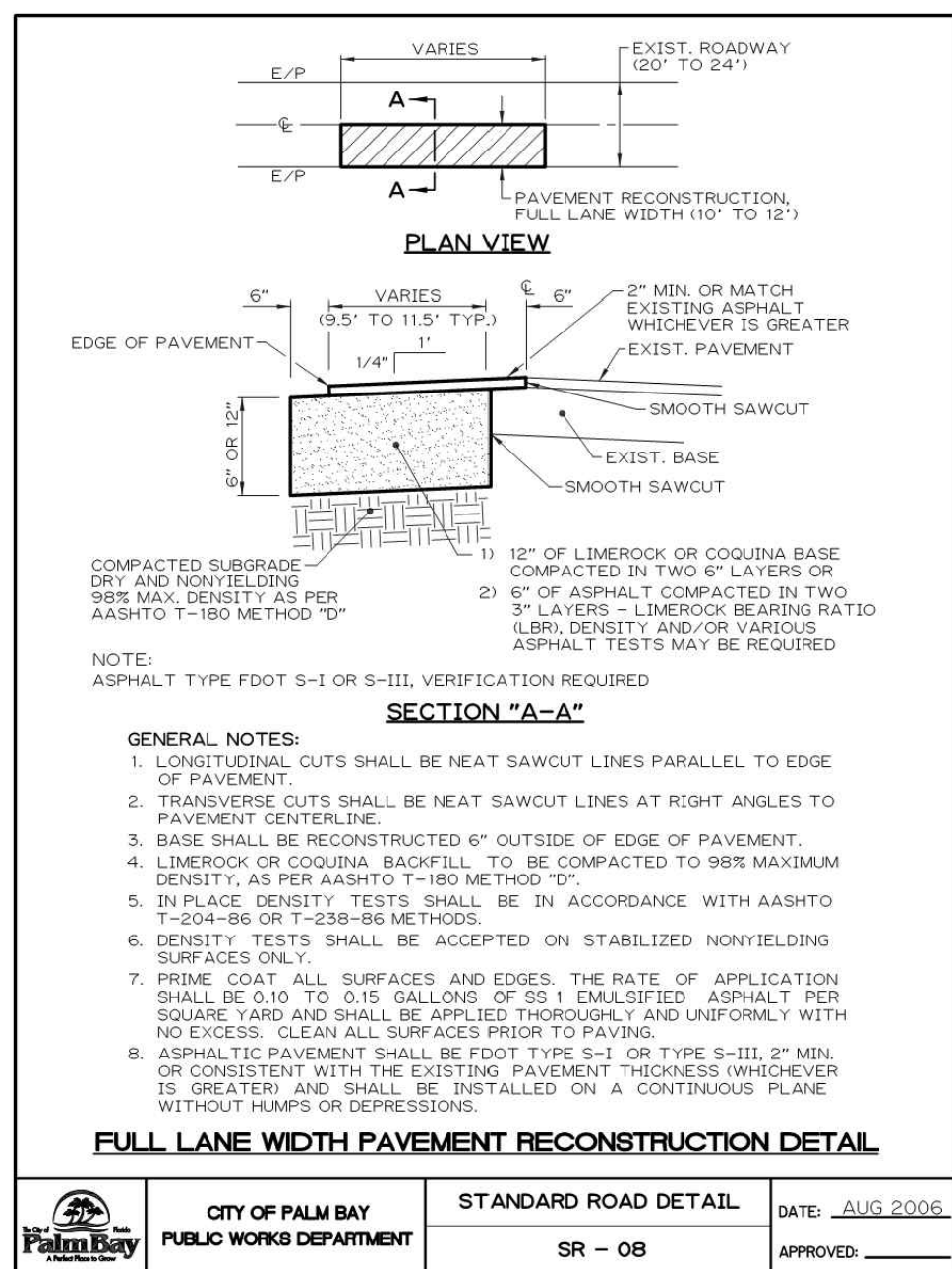
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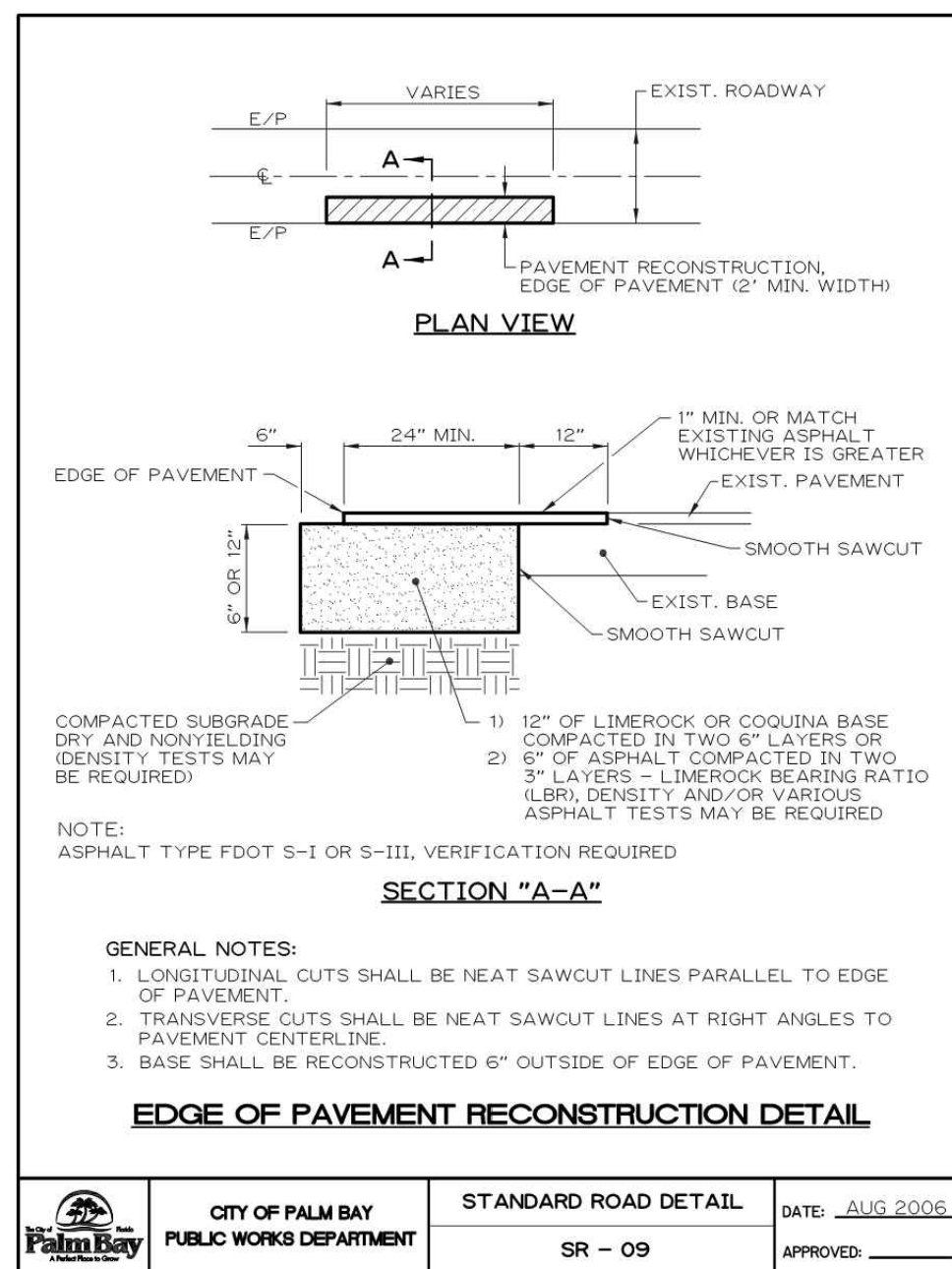
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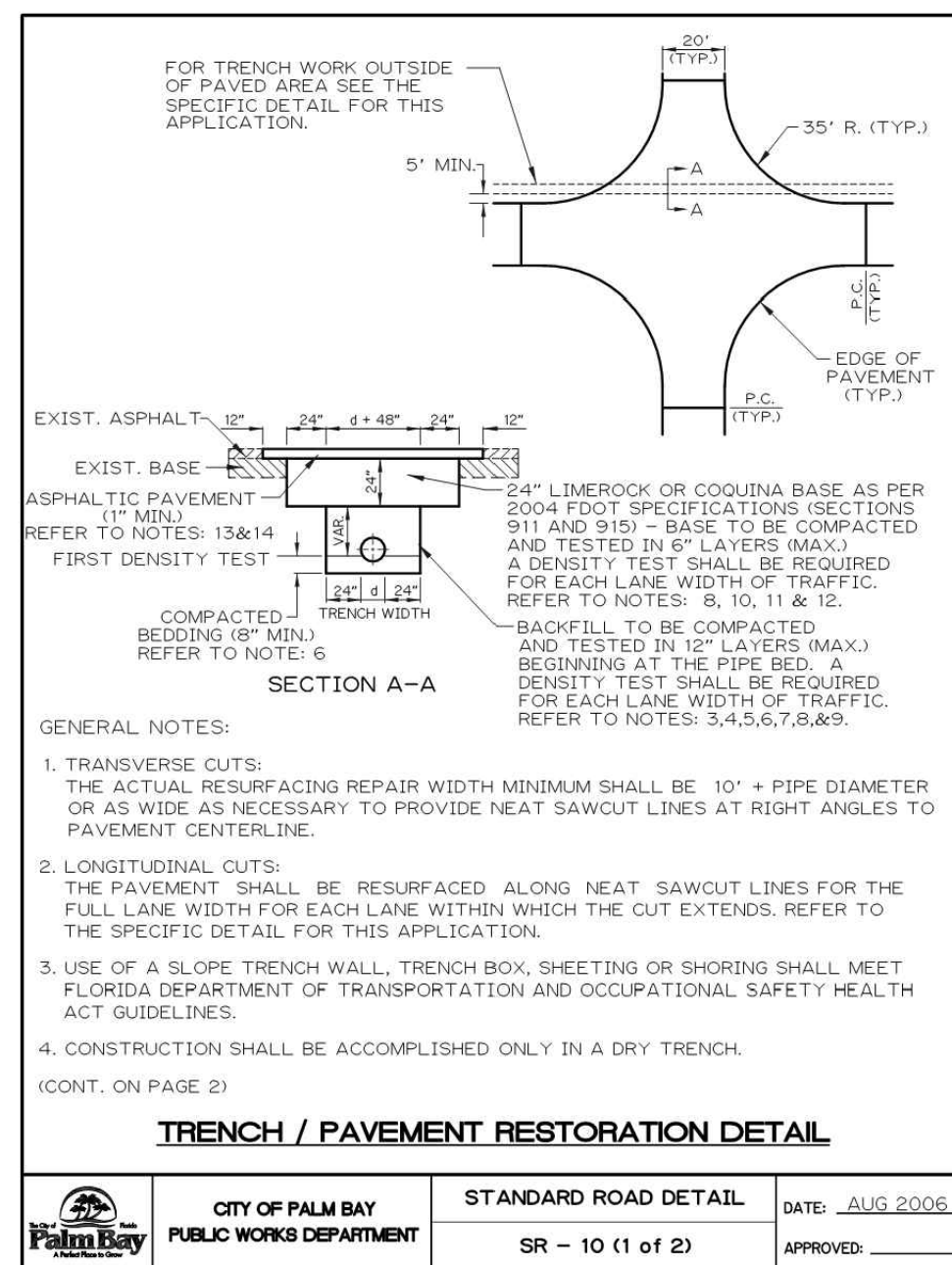
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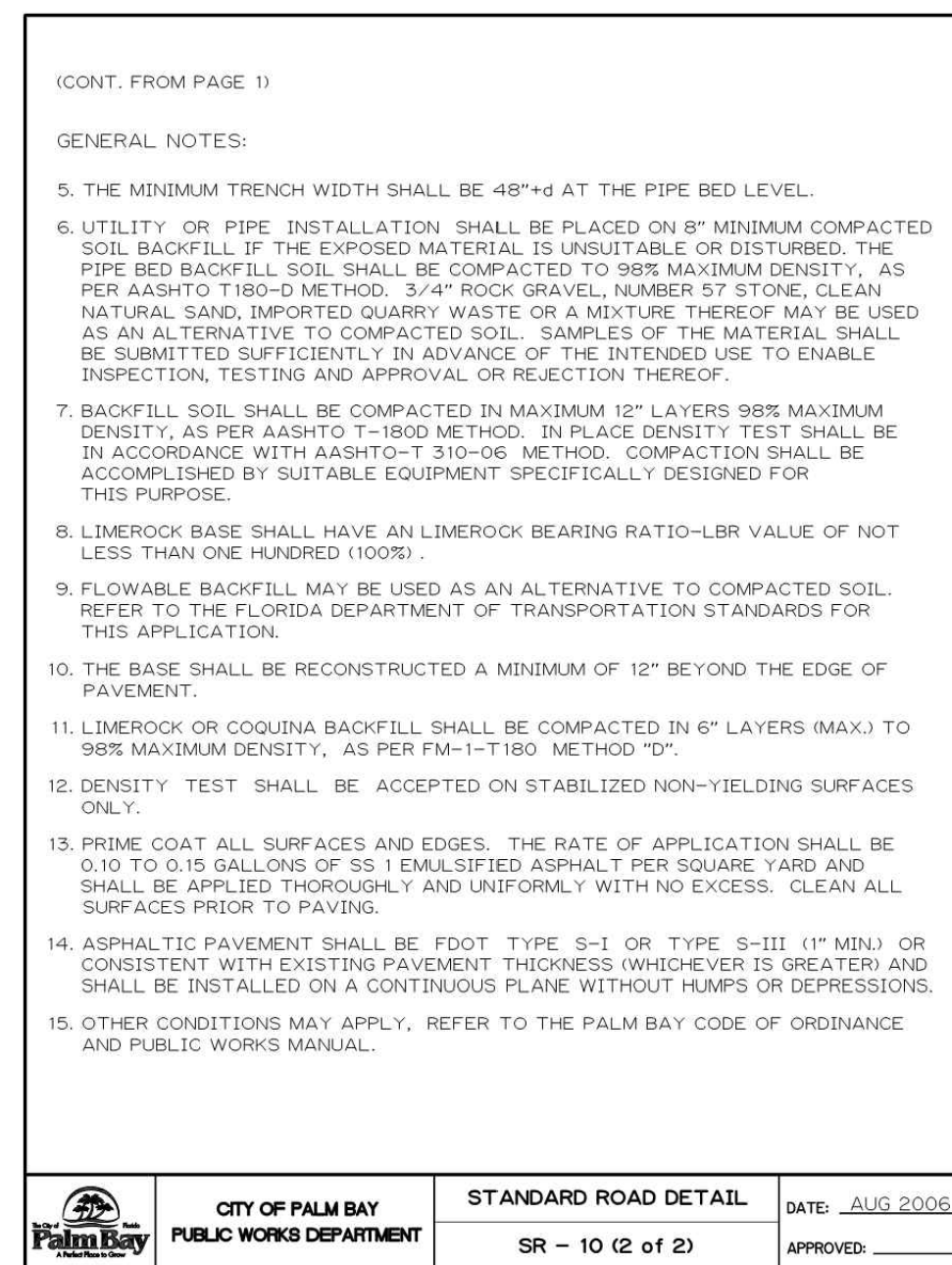
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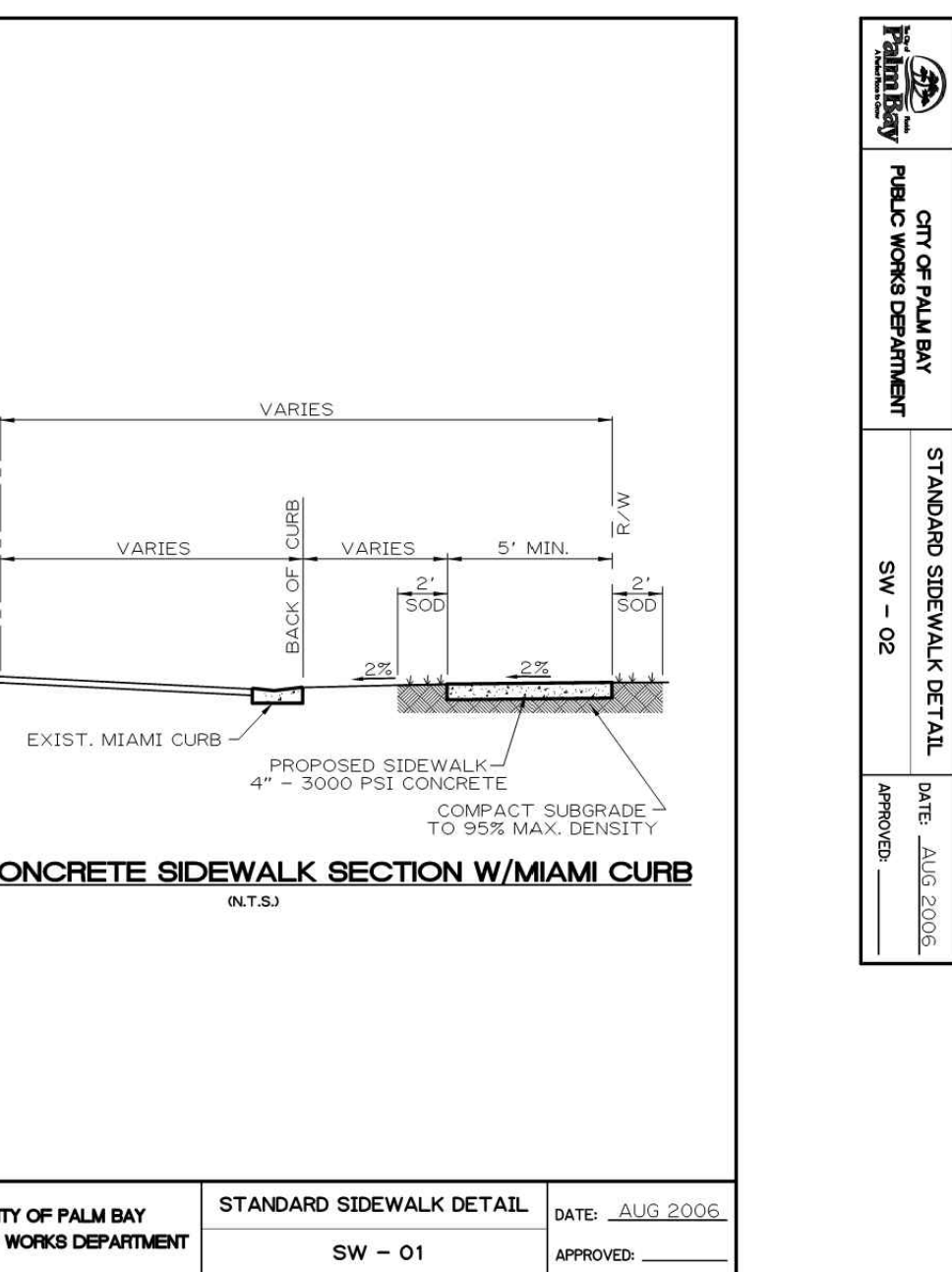
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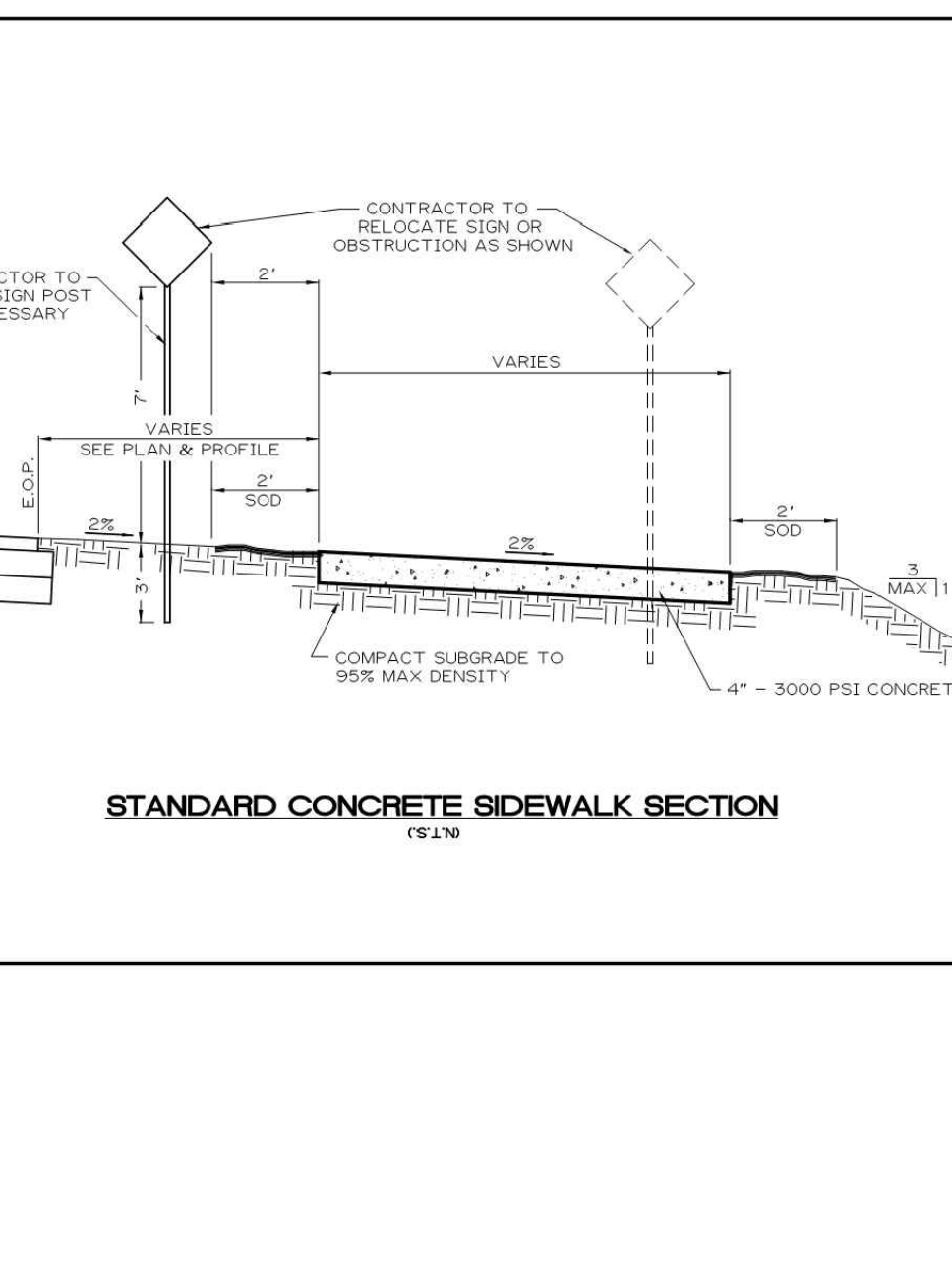
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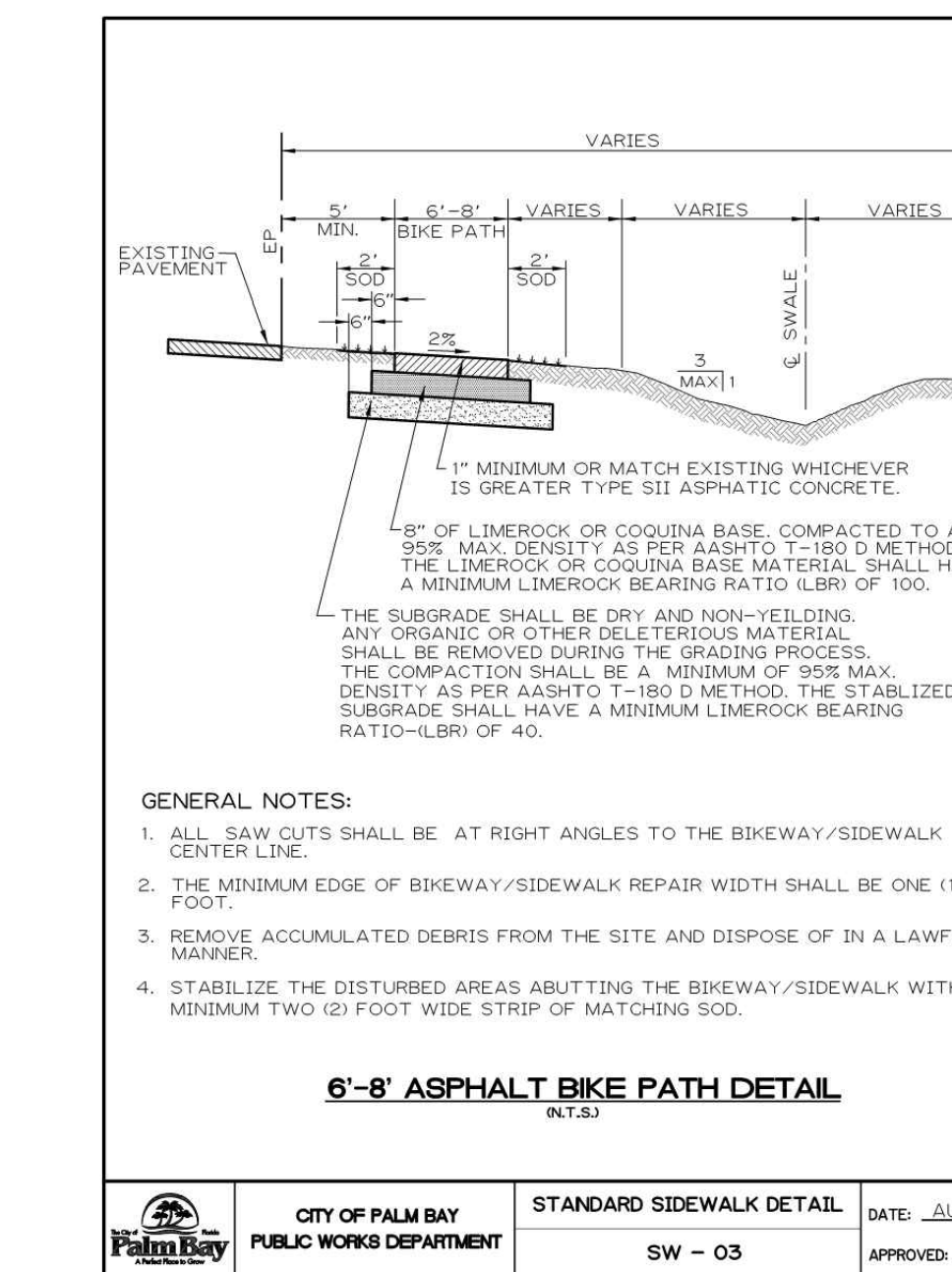
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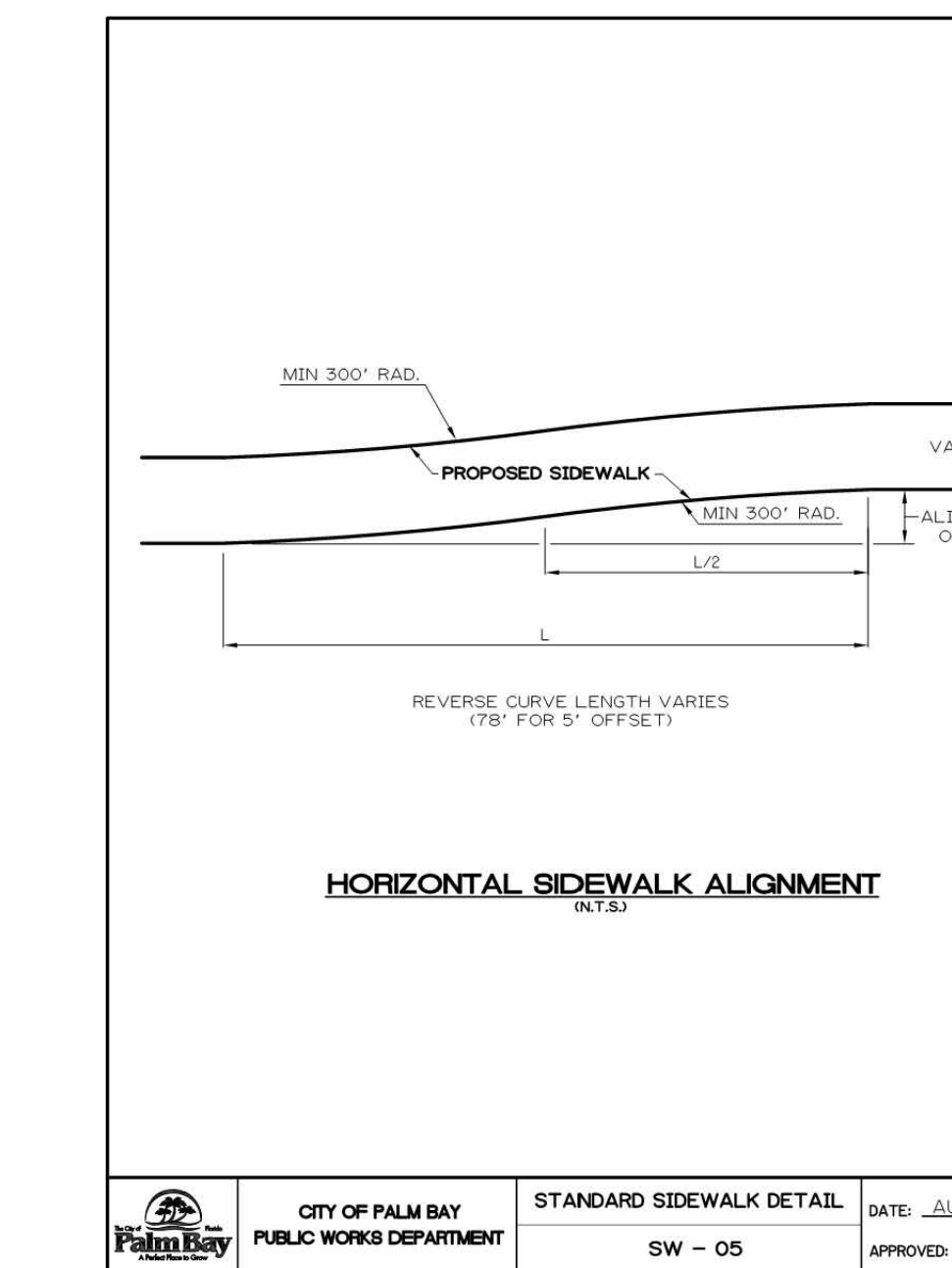
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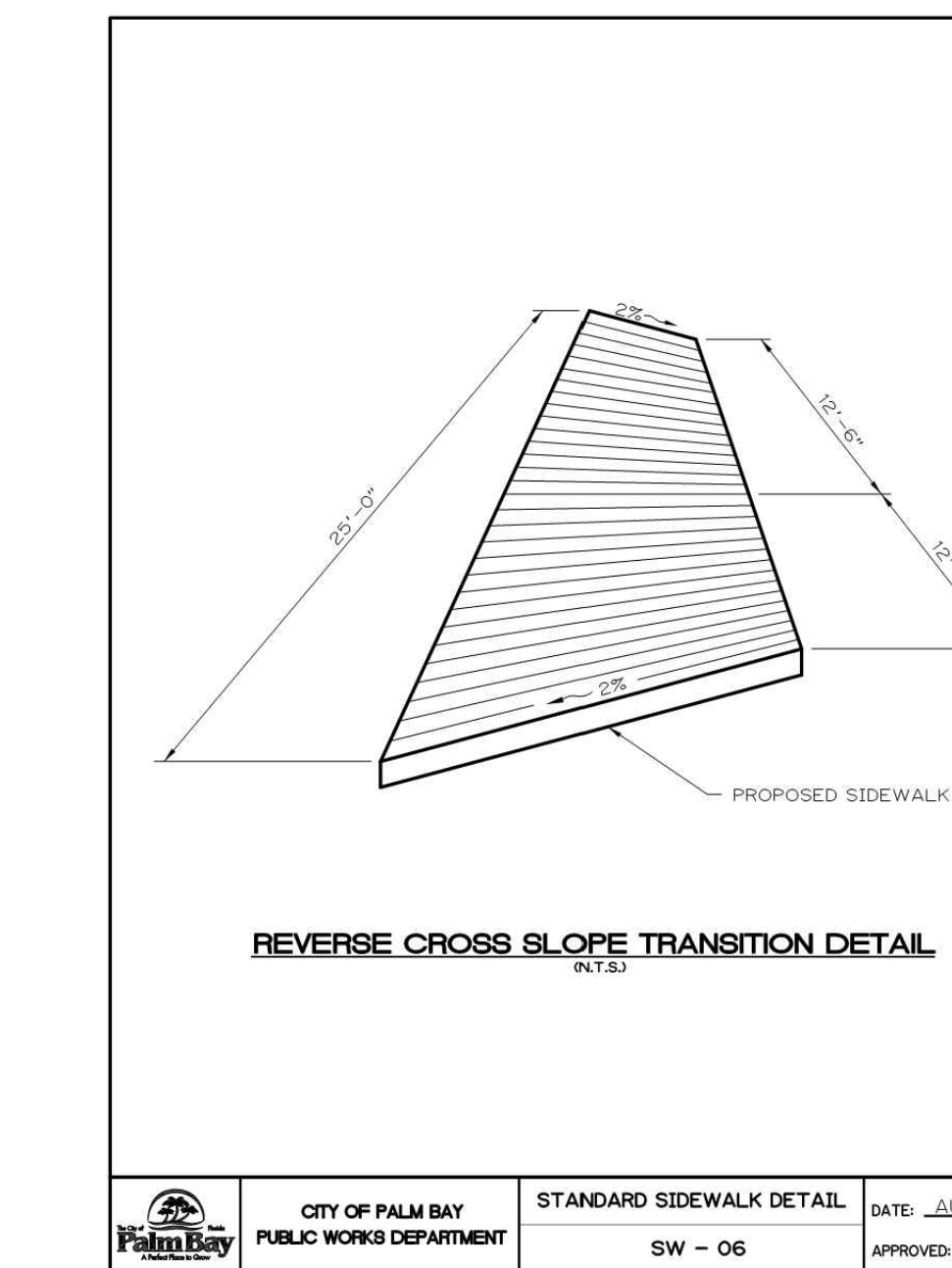
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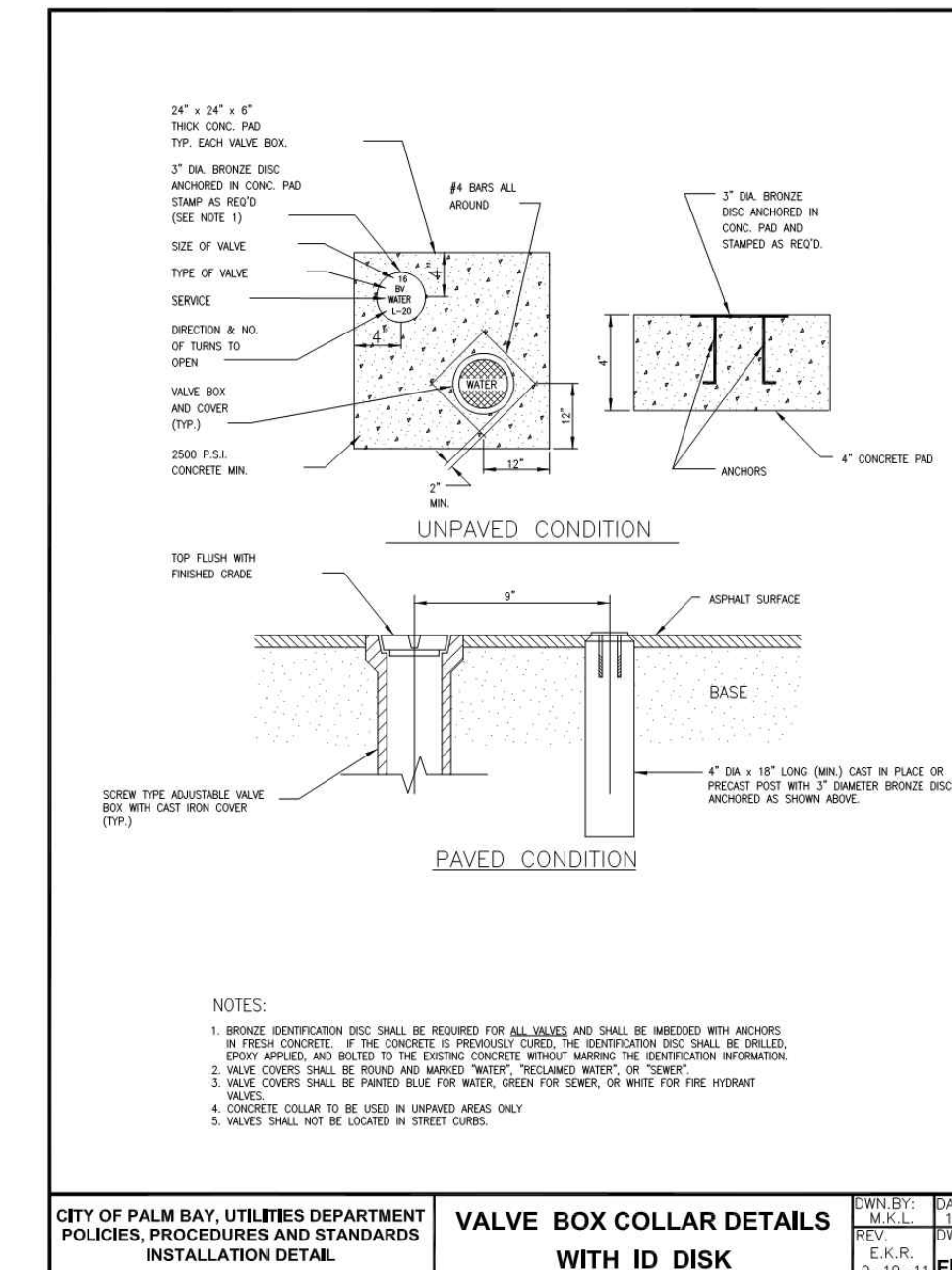
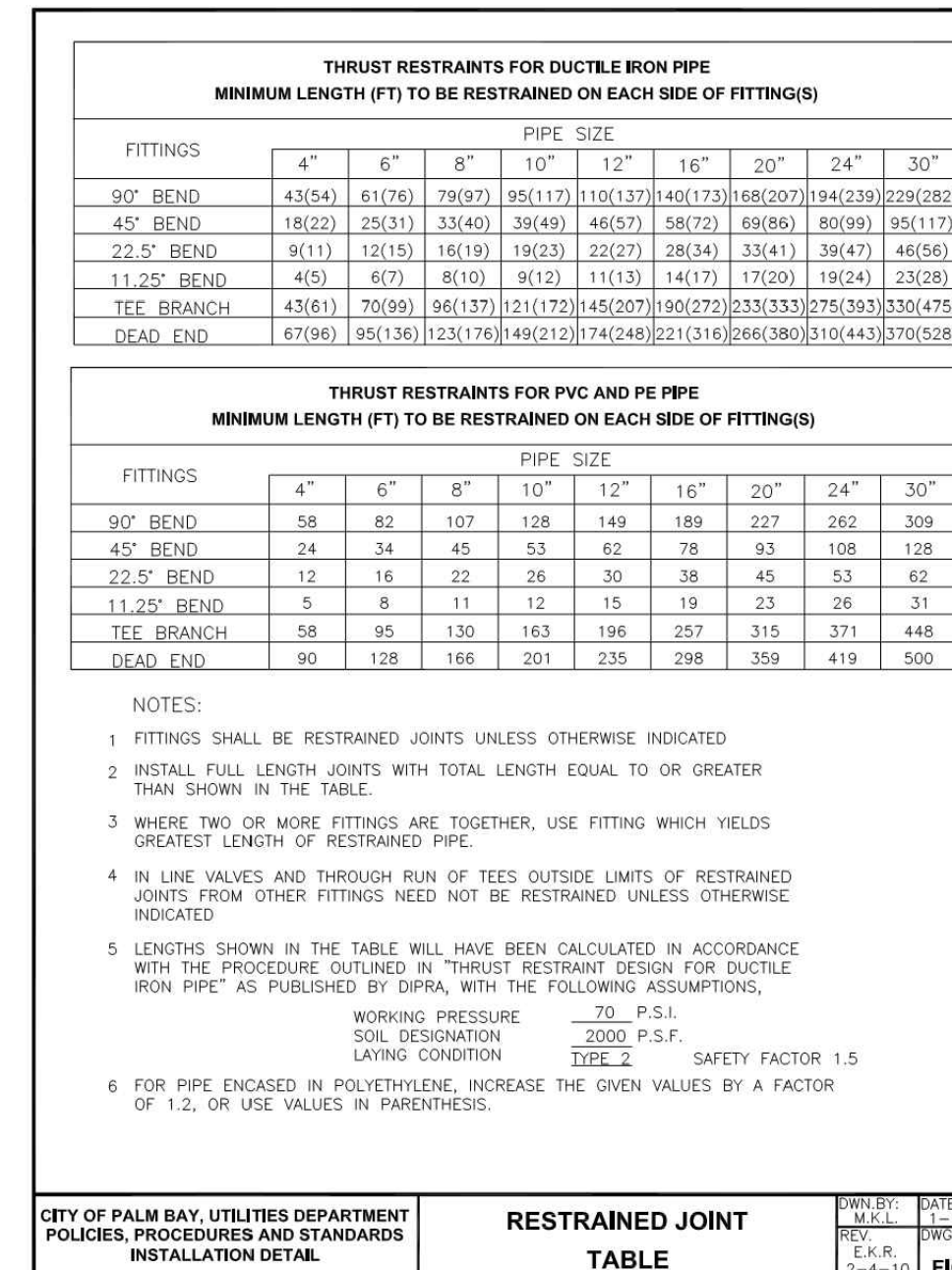
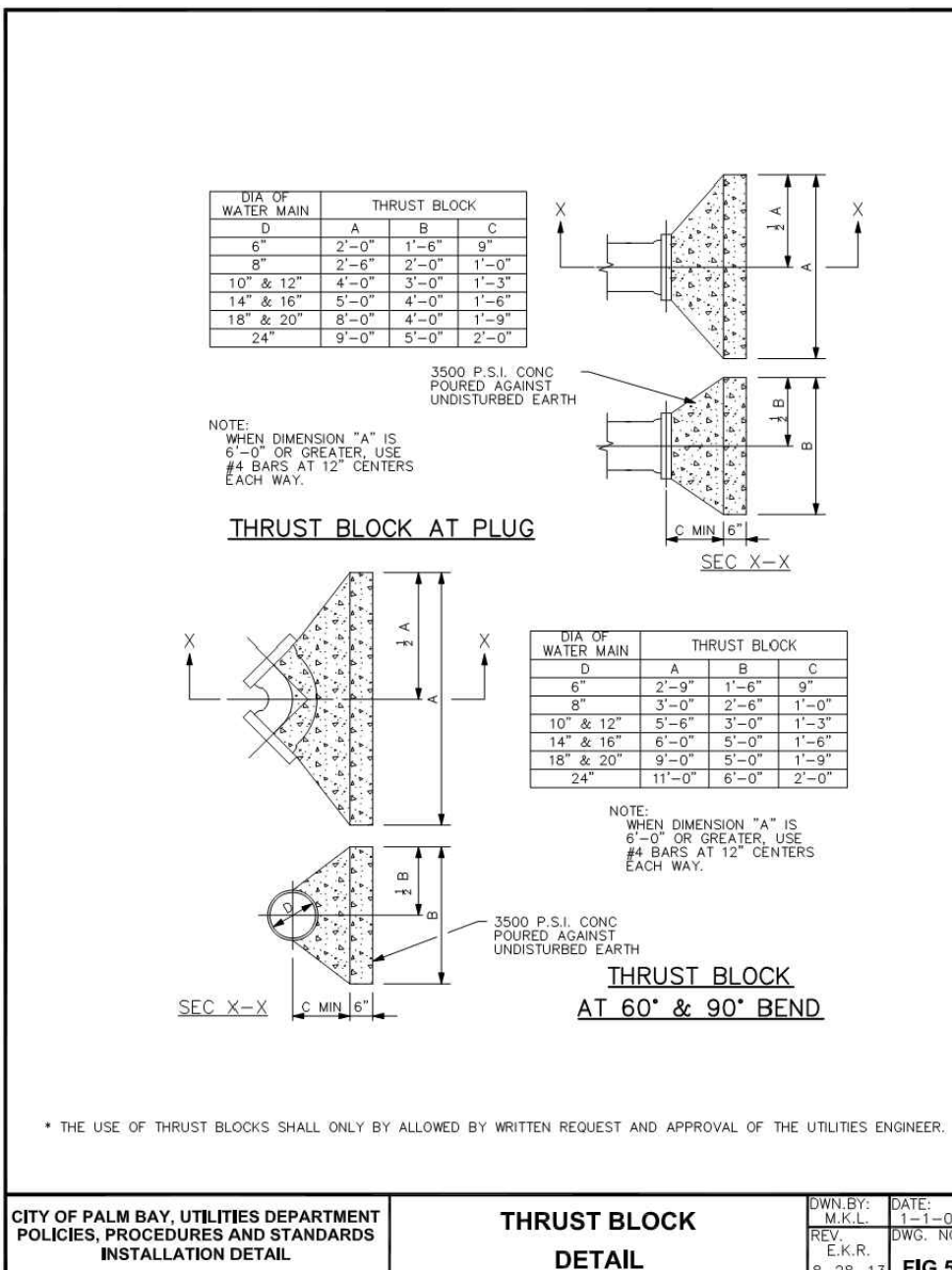
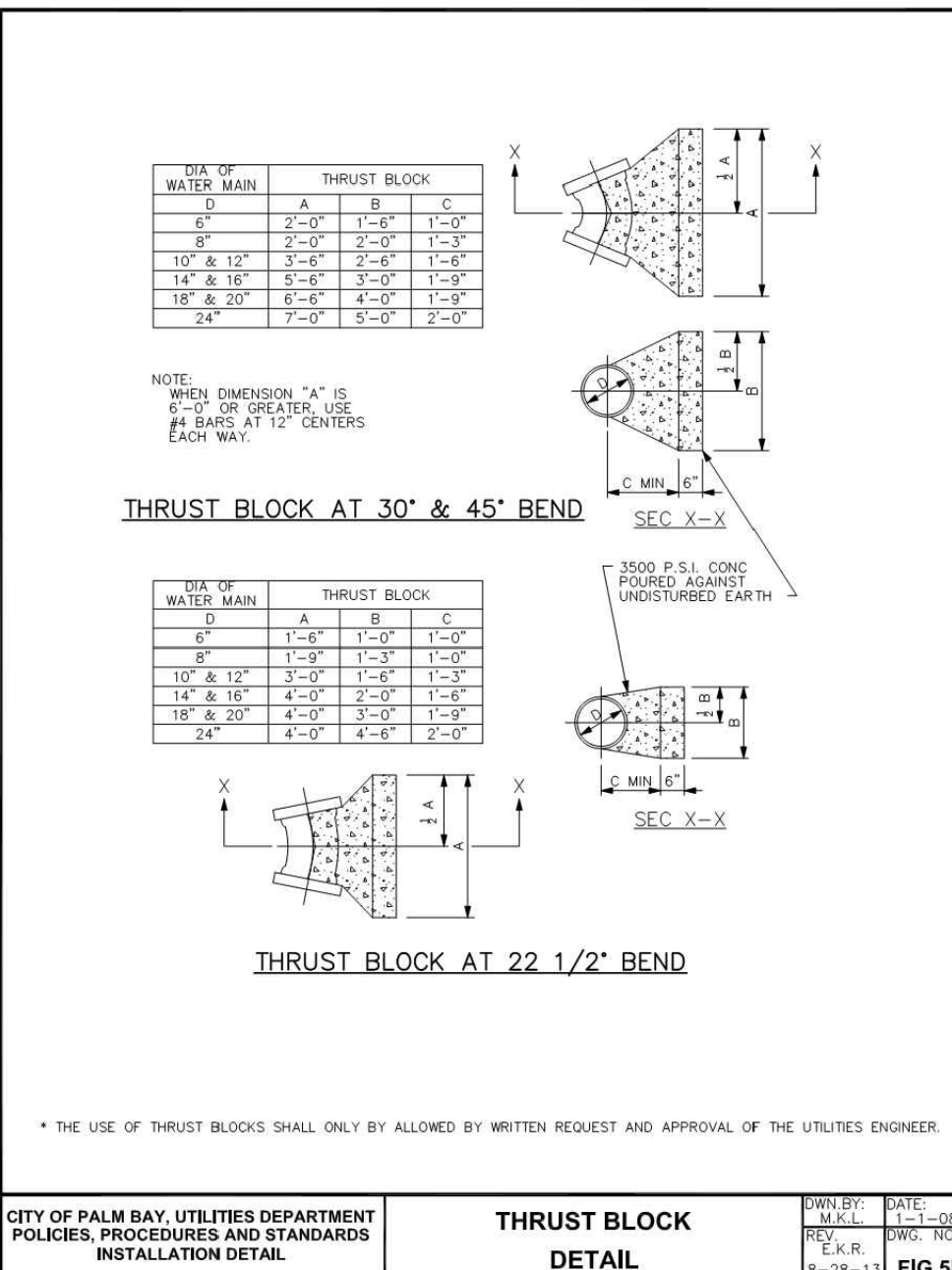
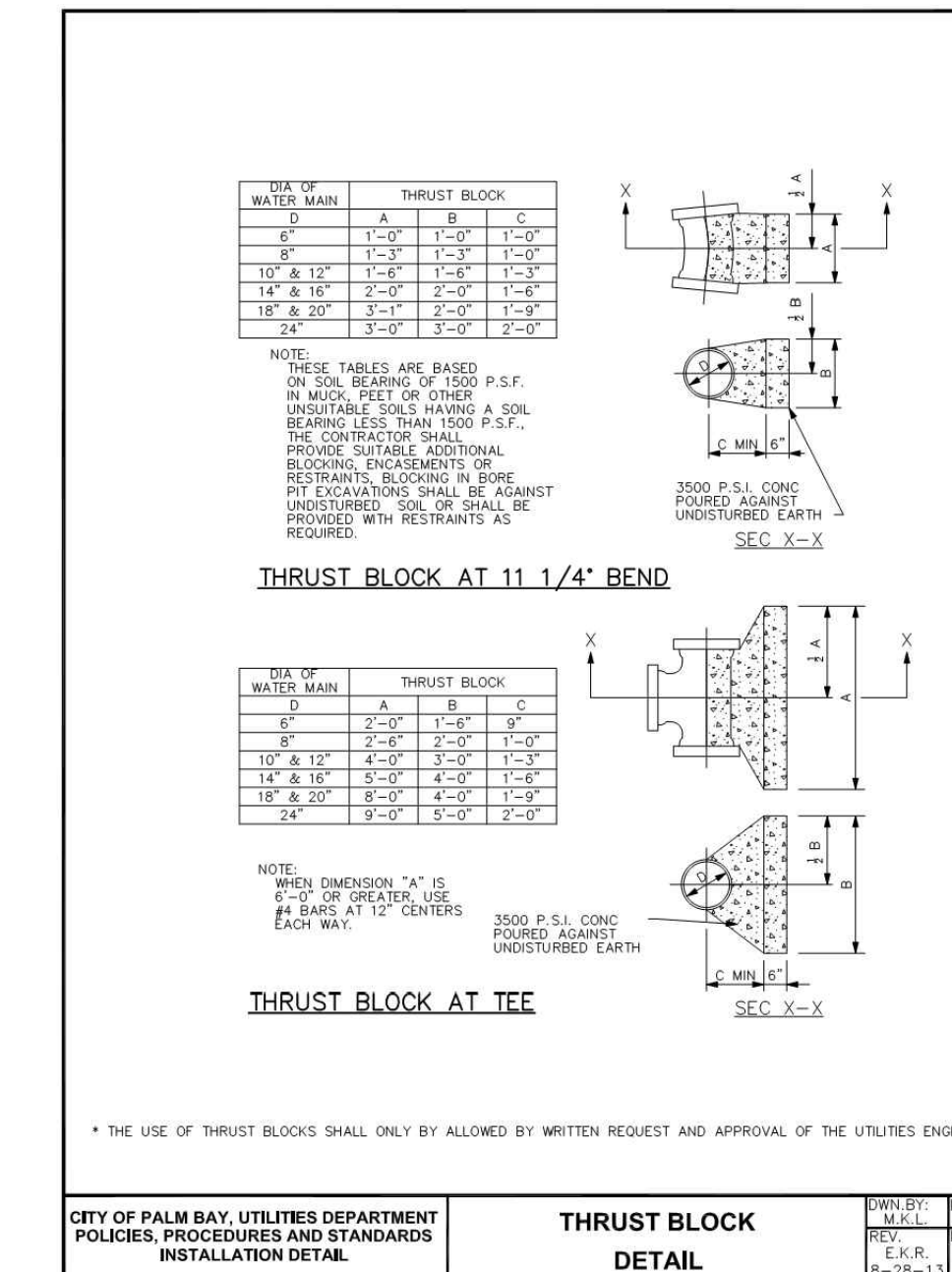
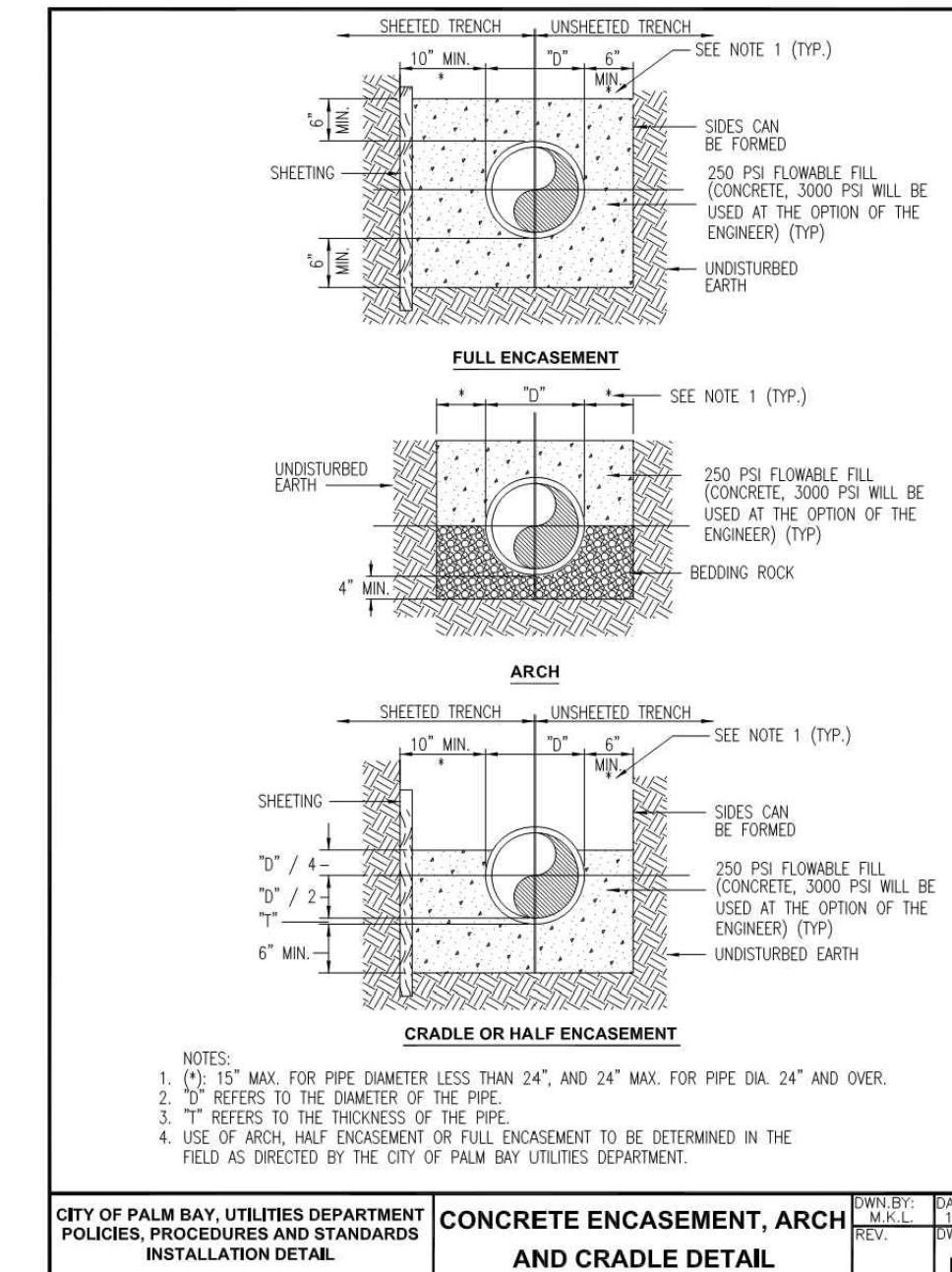
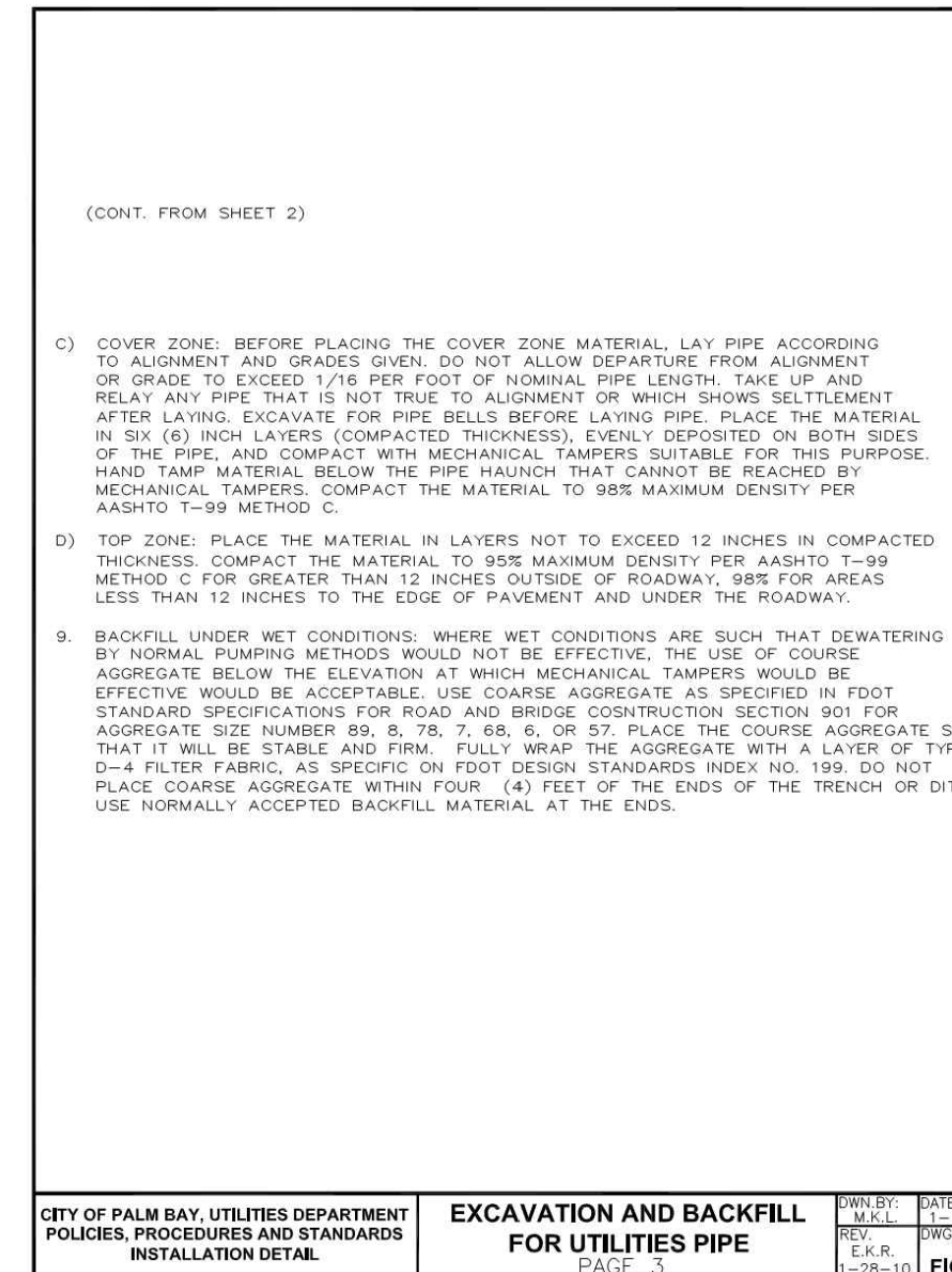
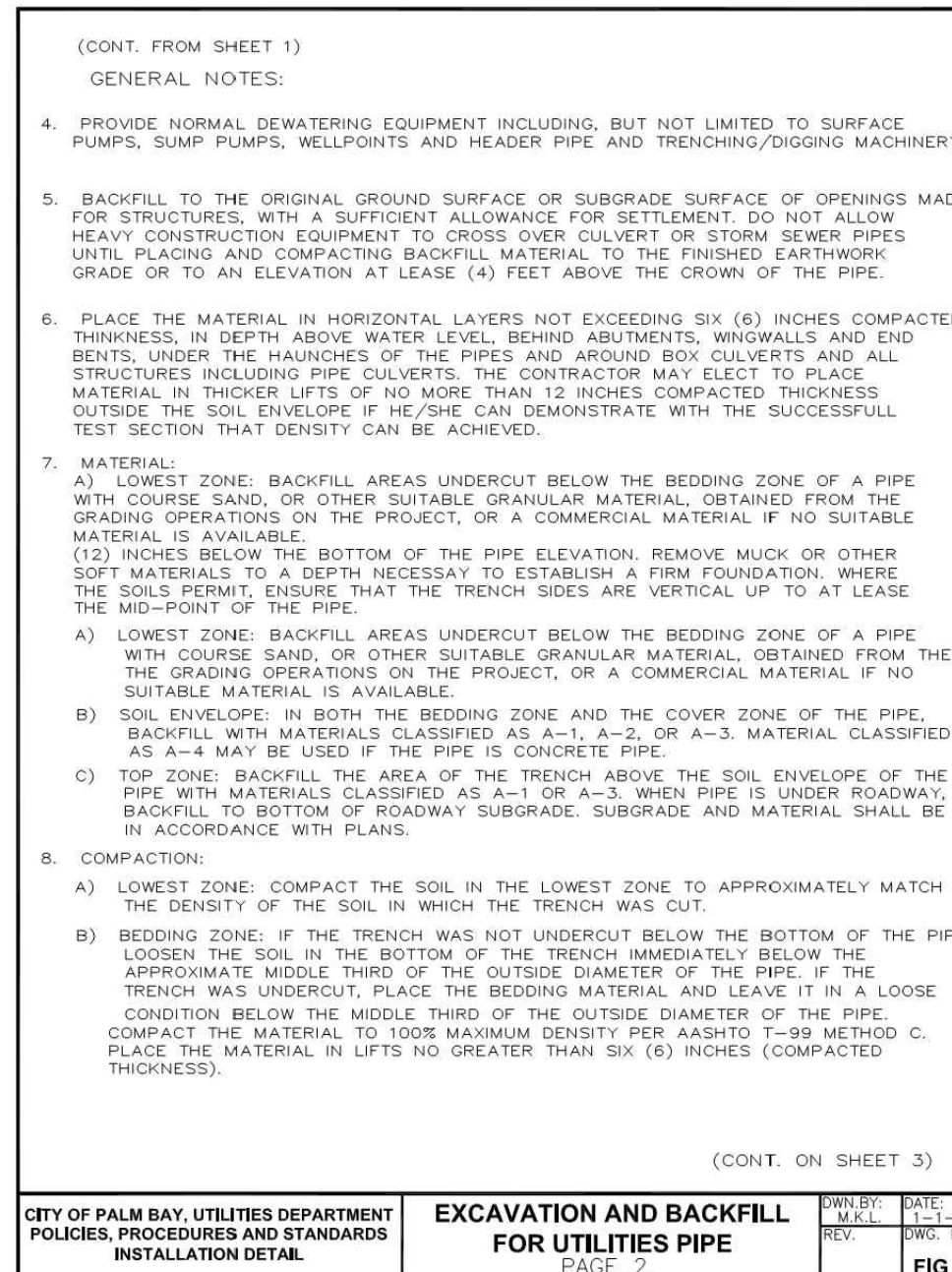
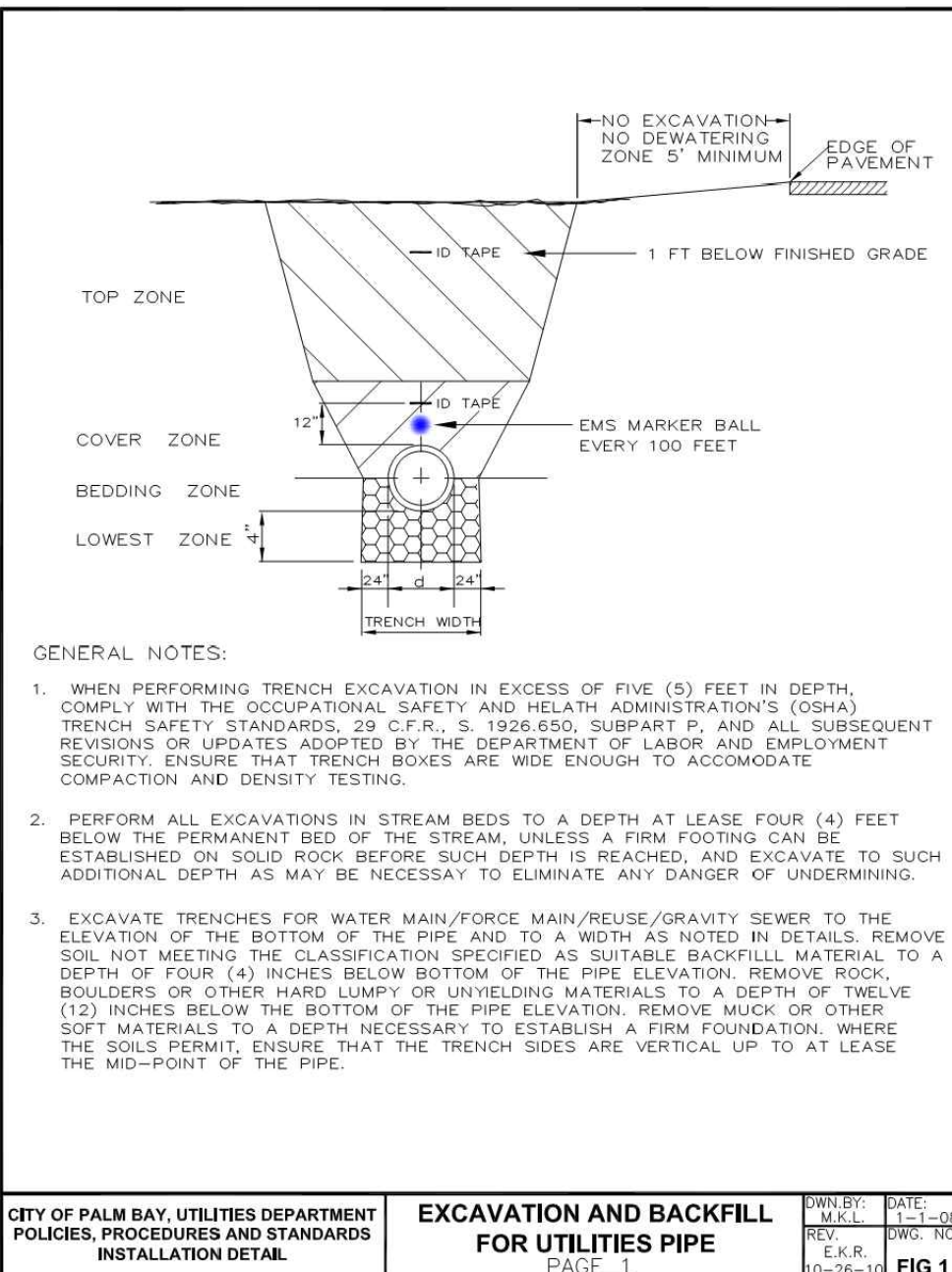
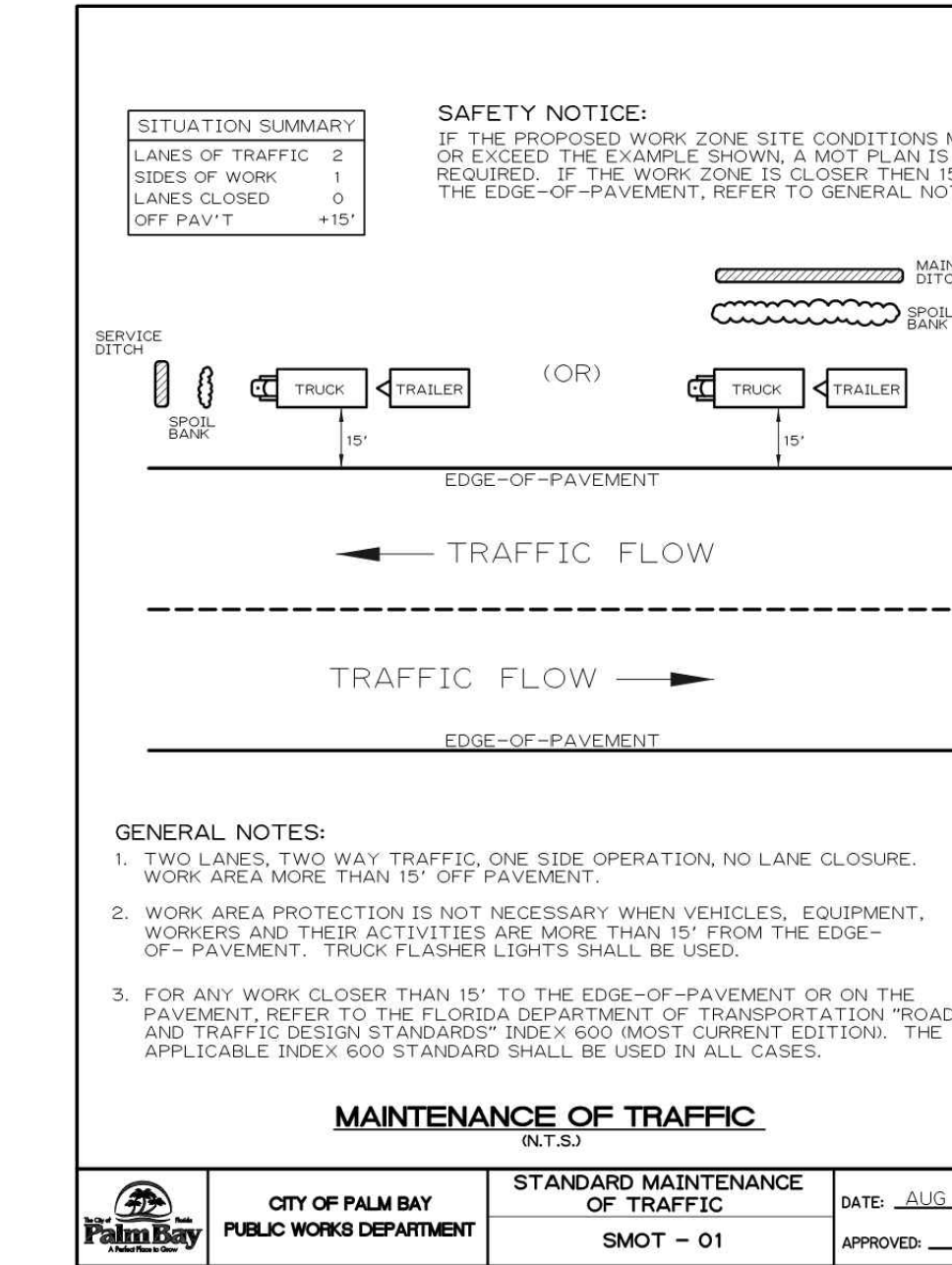
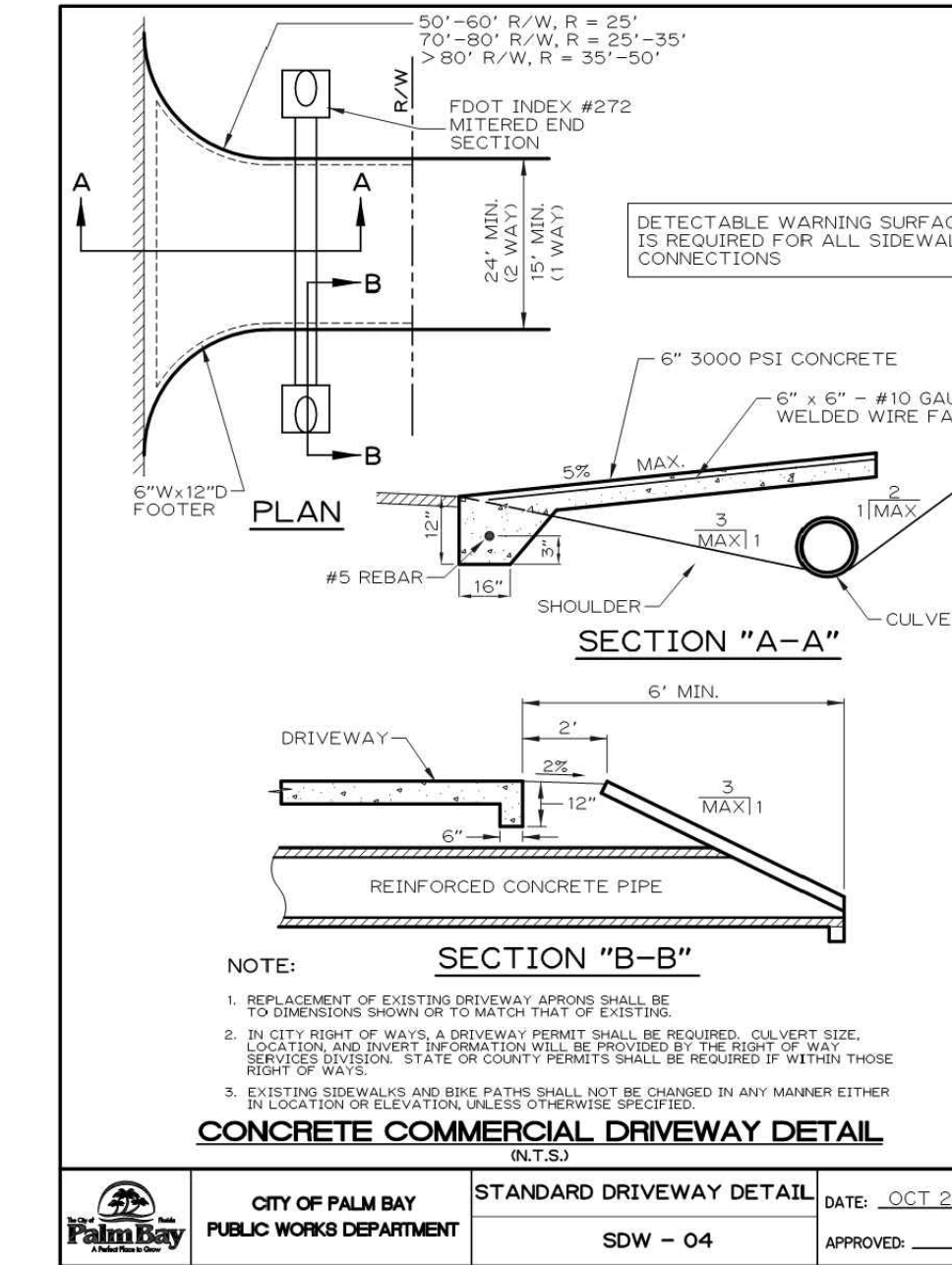
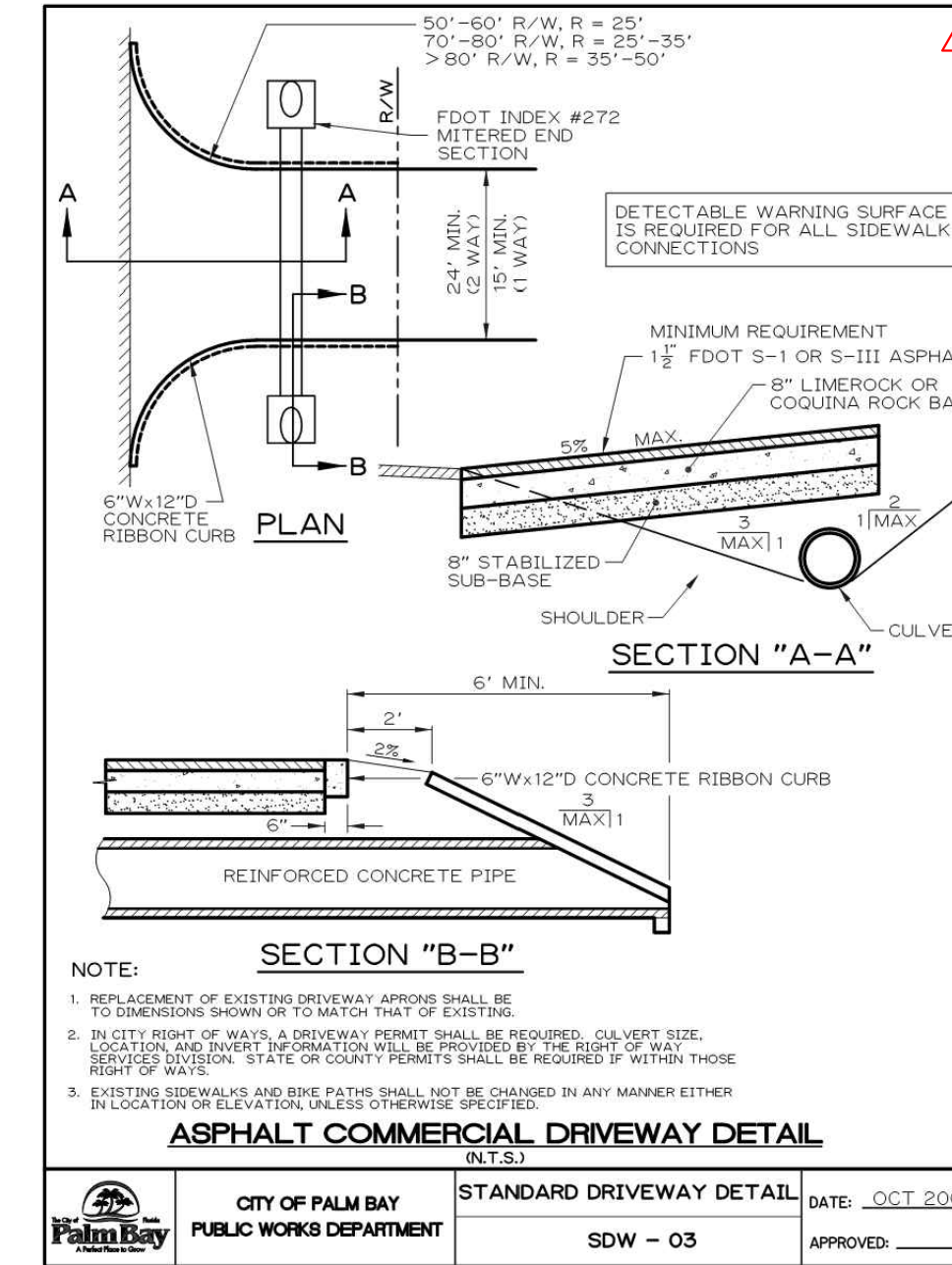
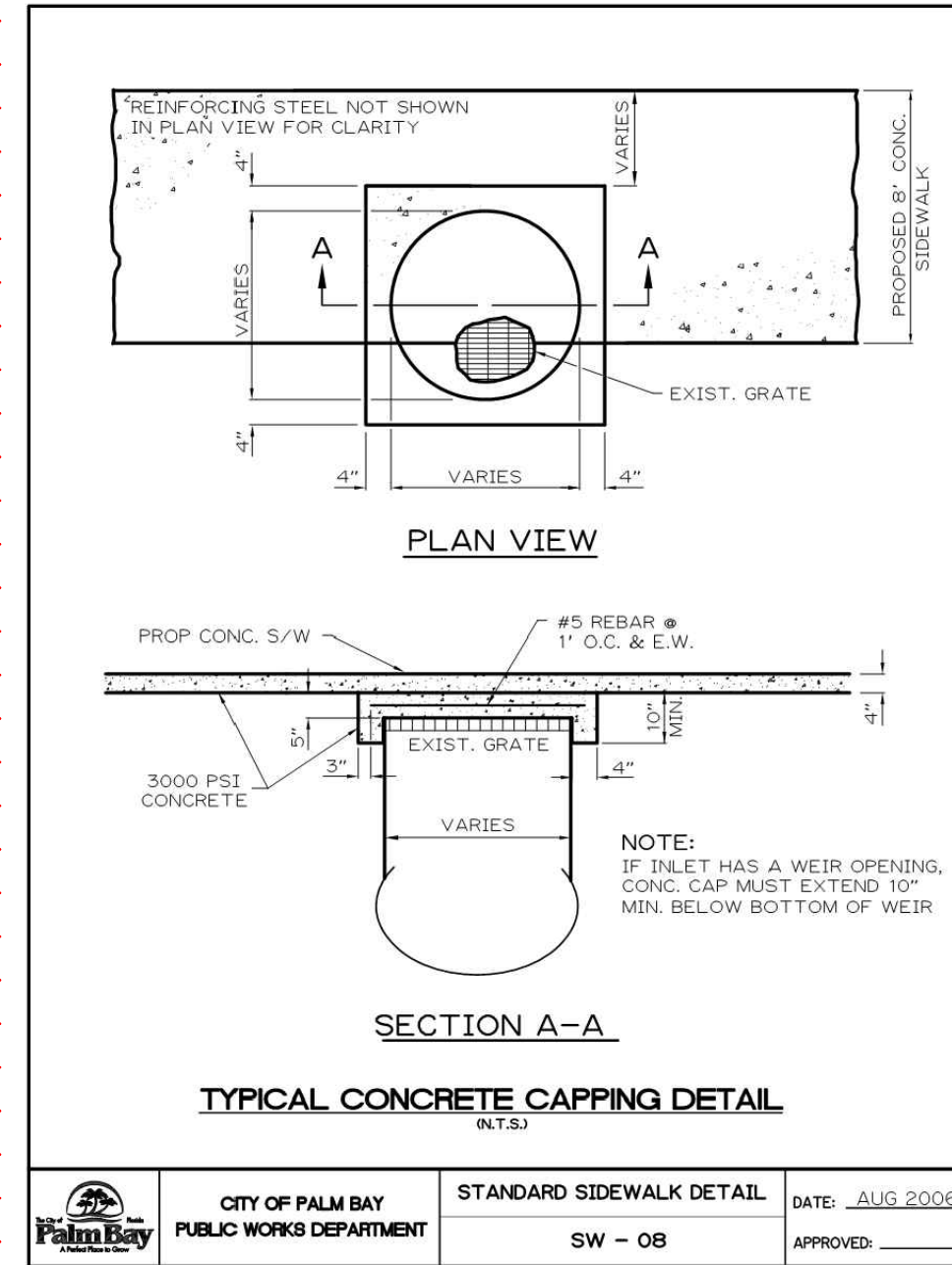
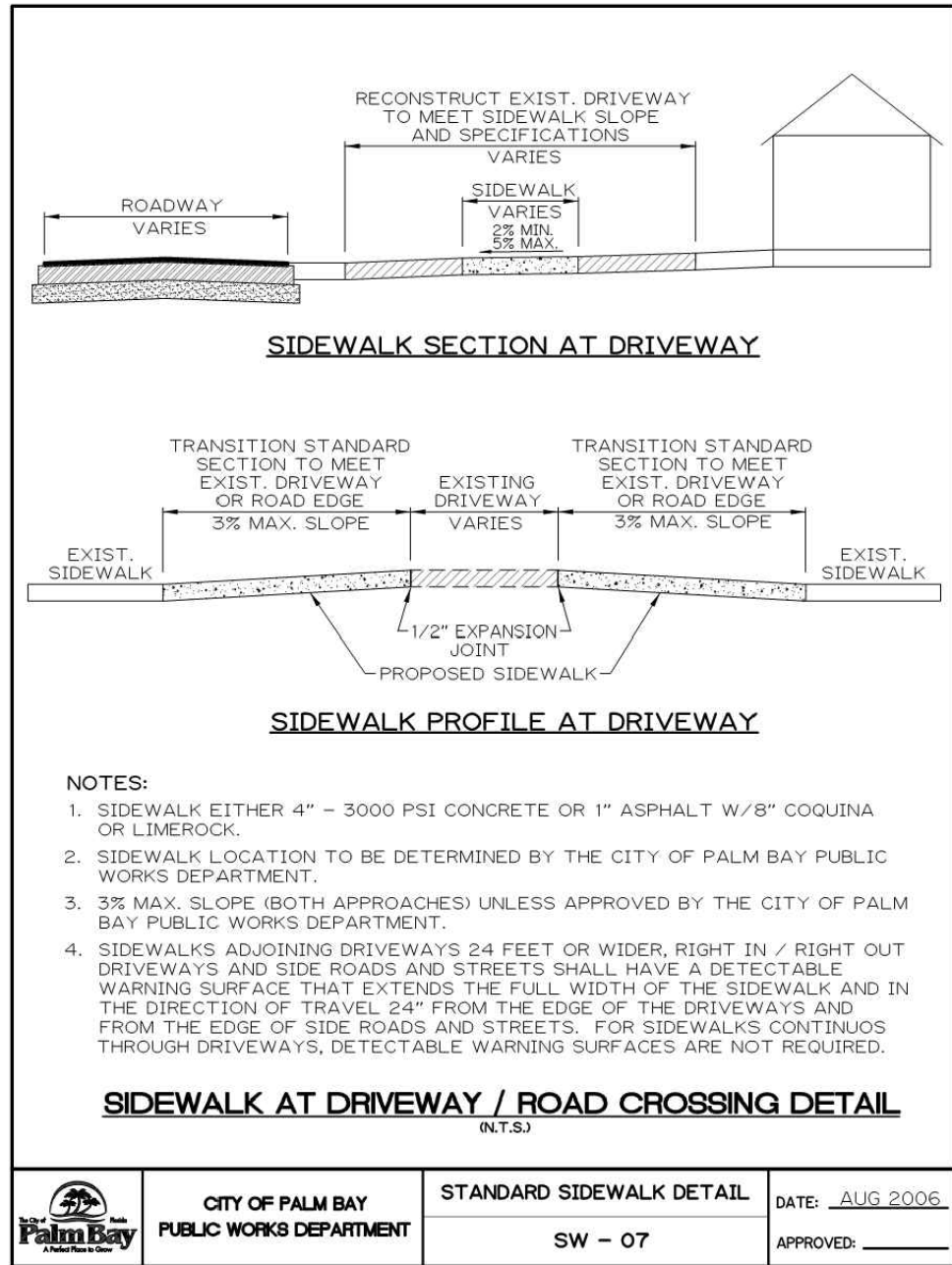
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DETAILS

DATE: 3/21/17
SCALE: NTS
PROJ. NO.: 160460
DESIGNED BY: JRT
DRAWN BY: SMB
CHECKED BY: JTJ
DRAWING NO. C-14

ADDED CITY DETAILS



CONSTRUCTION ENGINEERING GROUP
 consulting engineers

2485 east palm blvd. suite 100
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REVISION

NO.	DATE	DESCRIPTION
1	5/17/17	SURV AND CITY COMMENTS
2	8/9/24/18	SURV AND CITY COMMENTS

DATE 3/21/17

SCALE NTS

PROJ. NO.: 160460

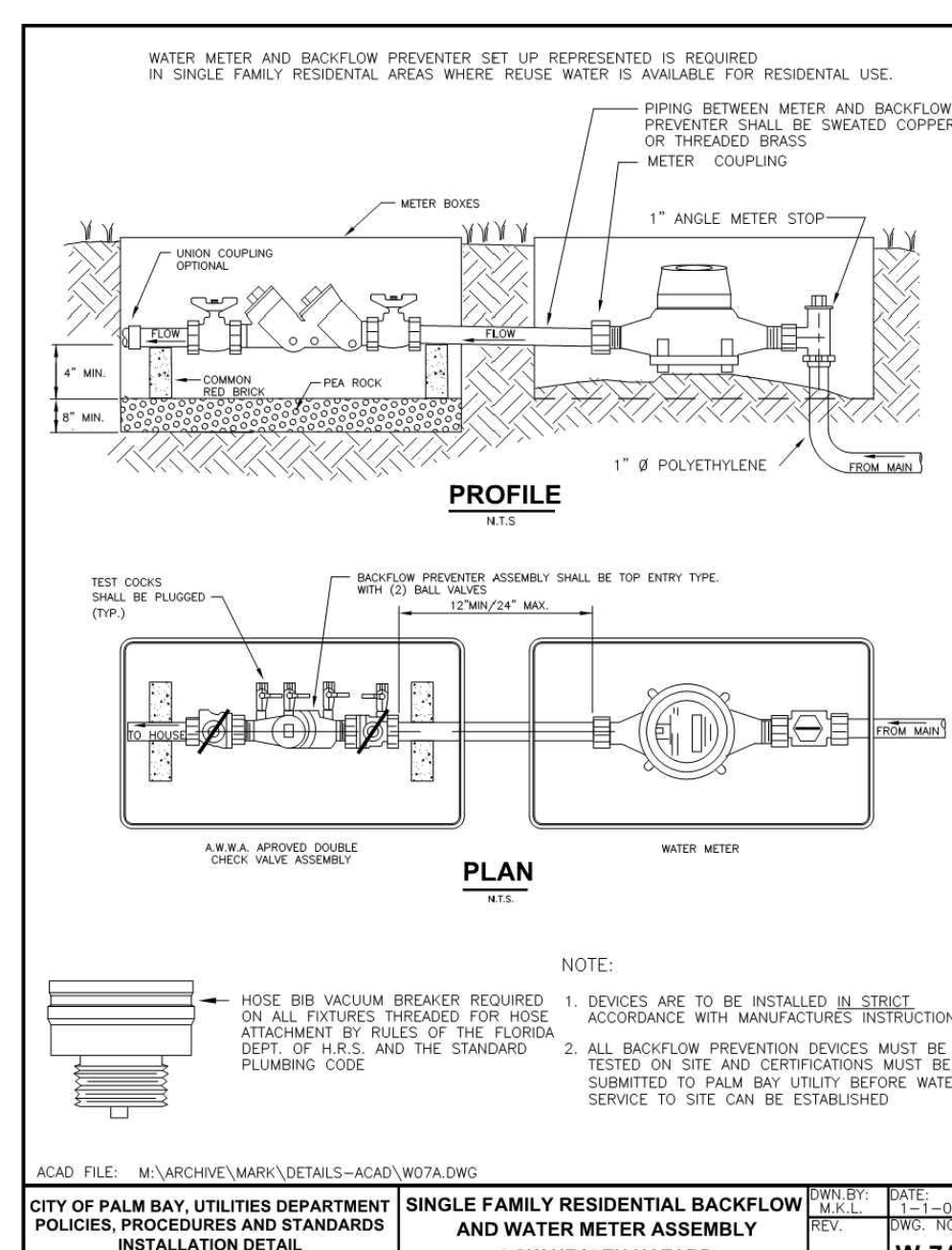
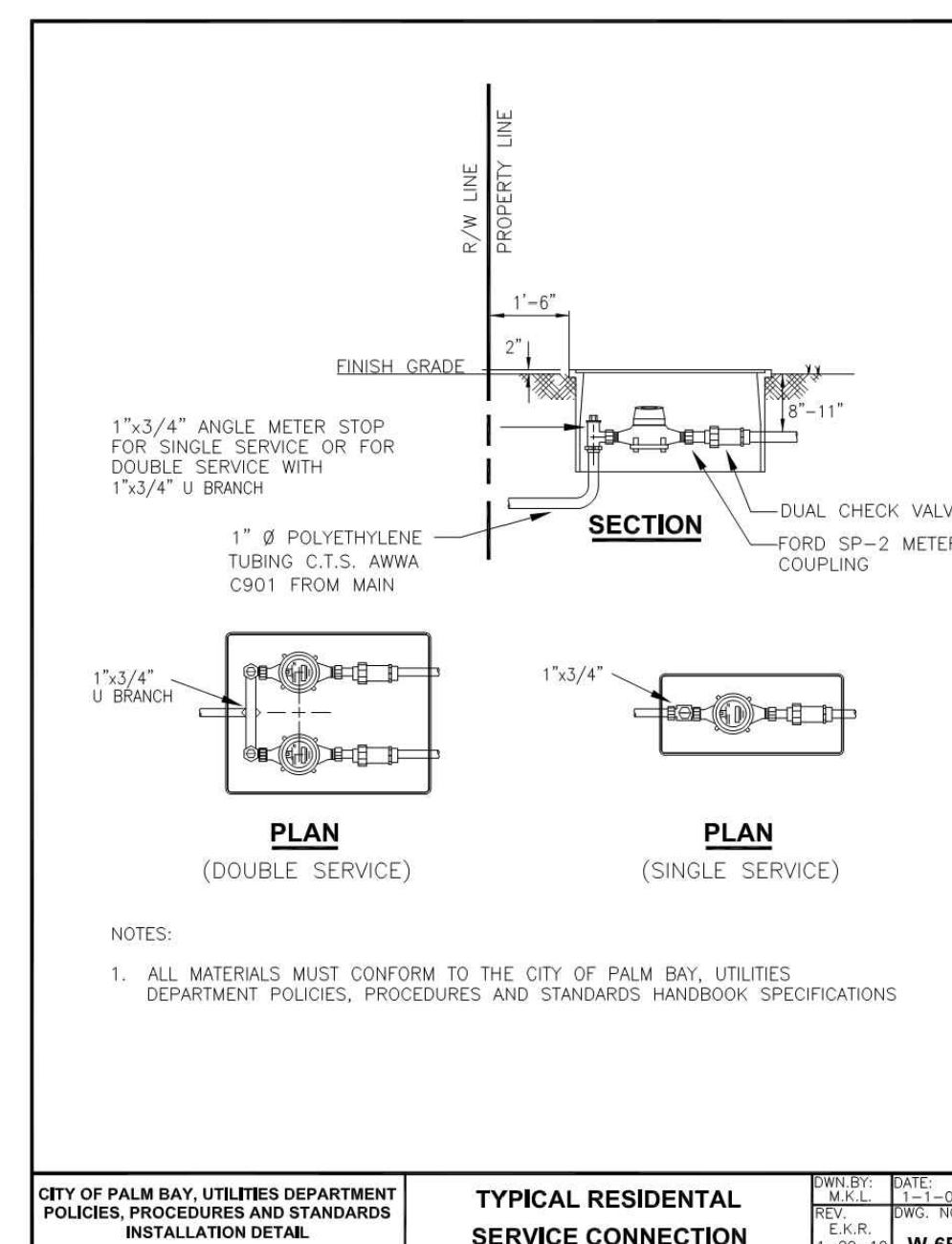
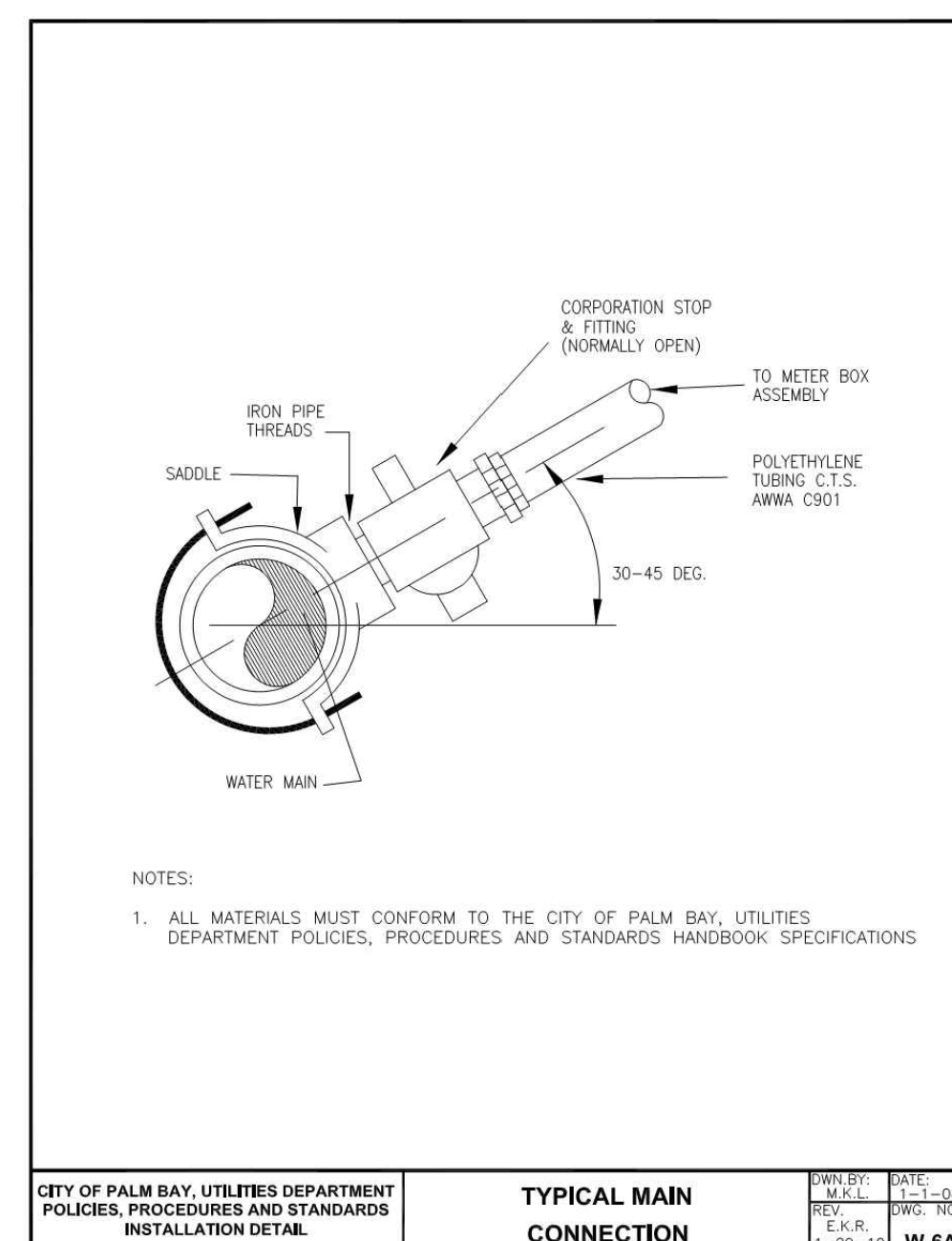
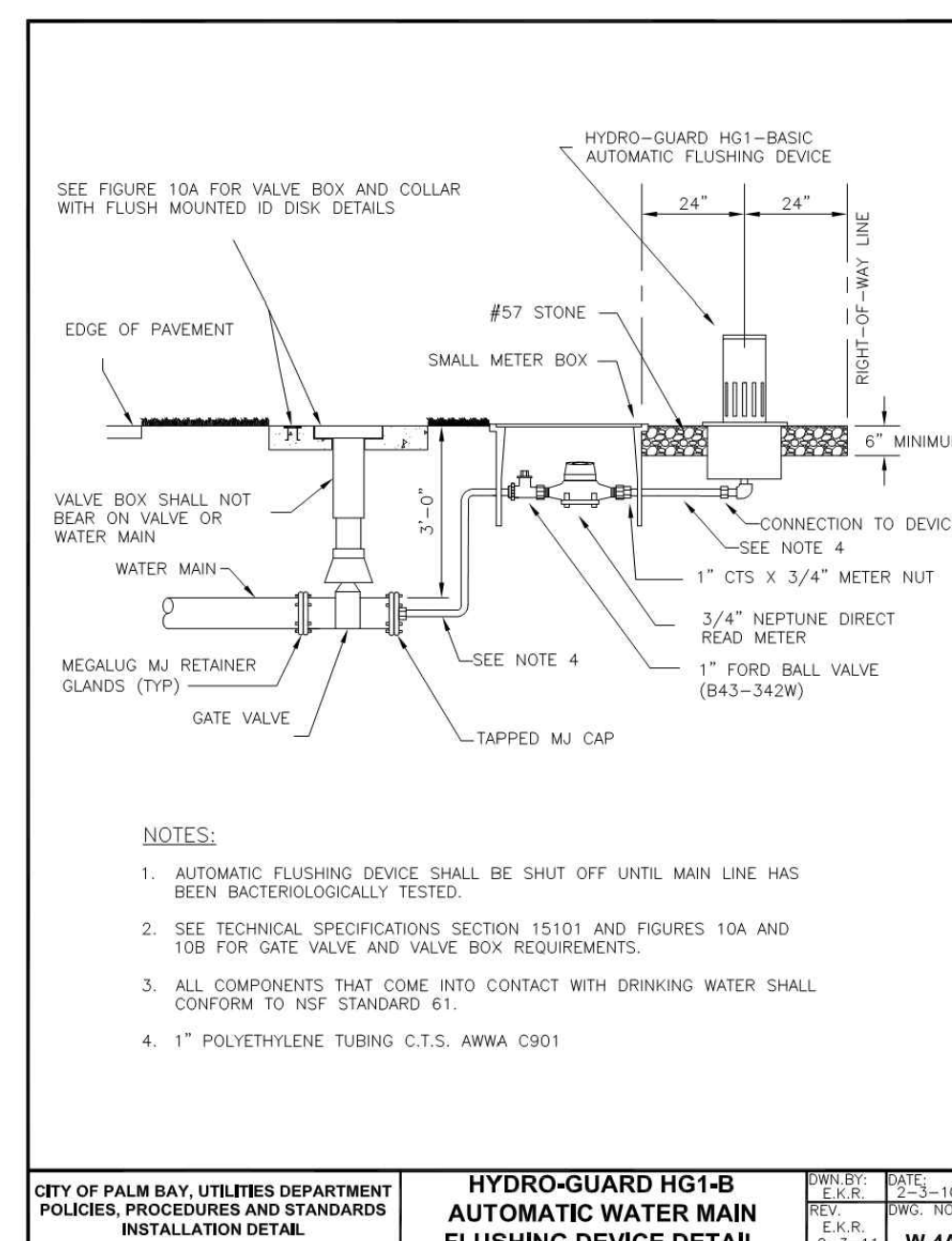
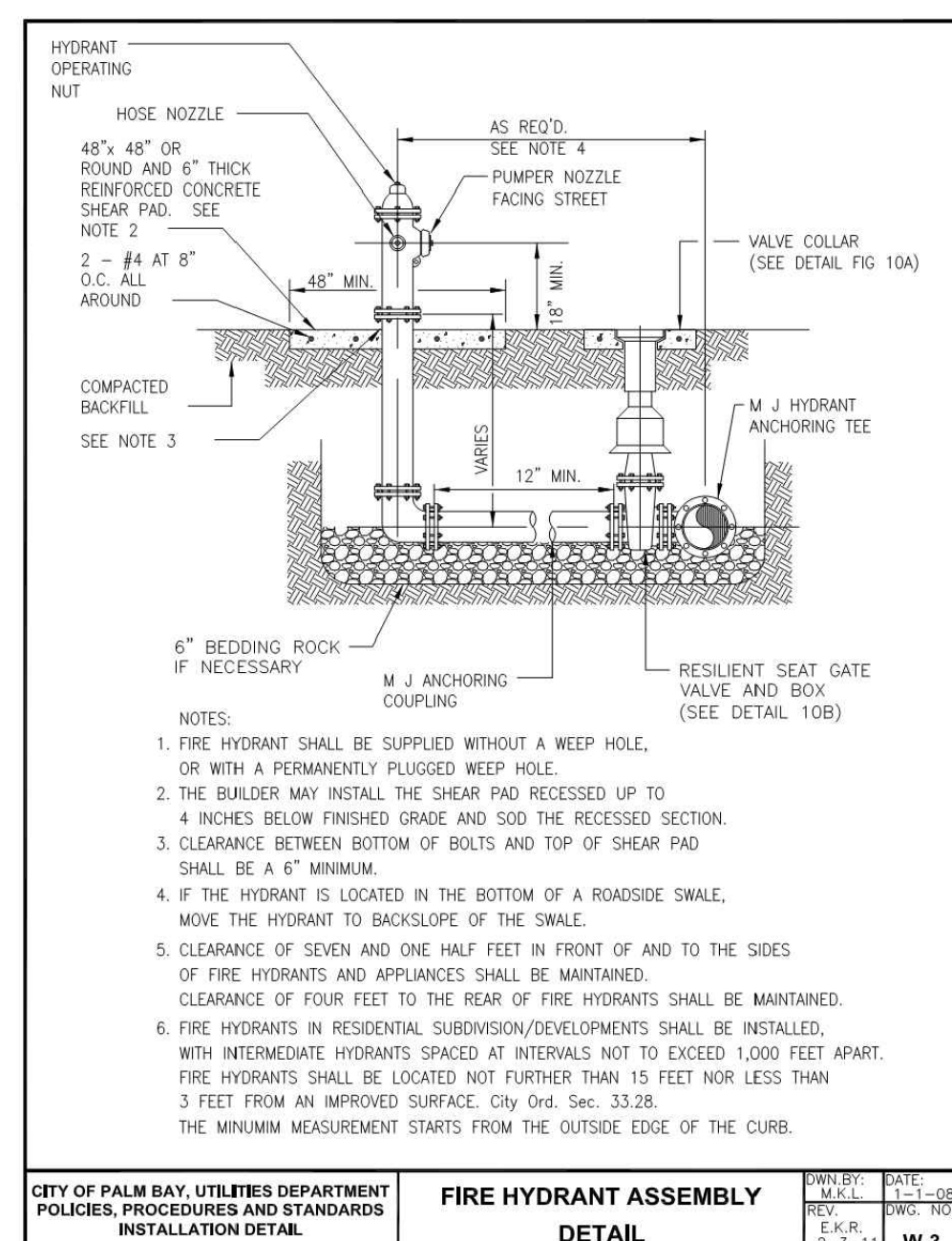
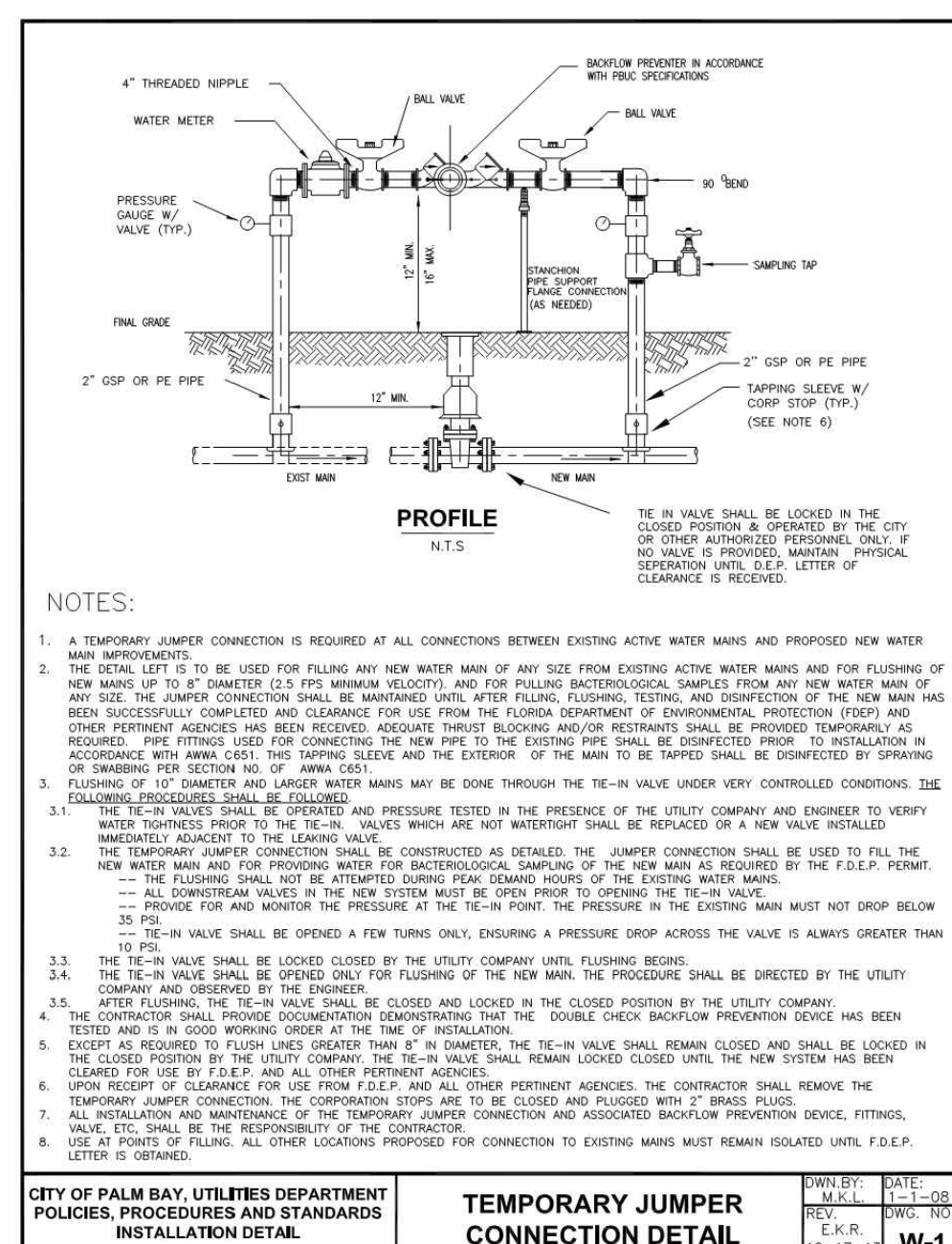
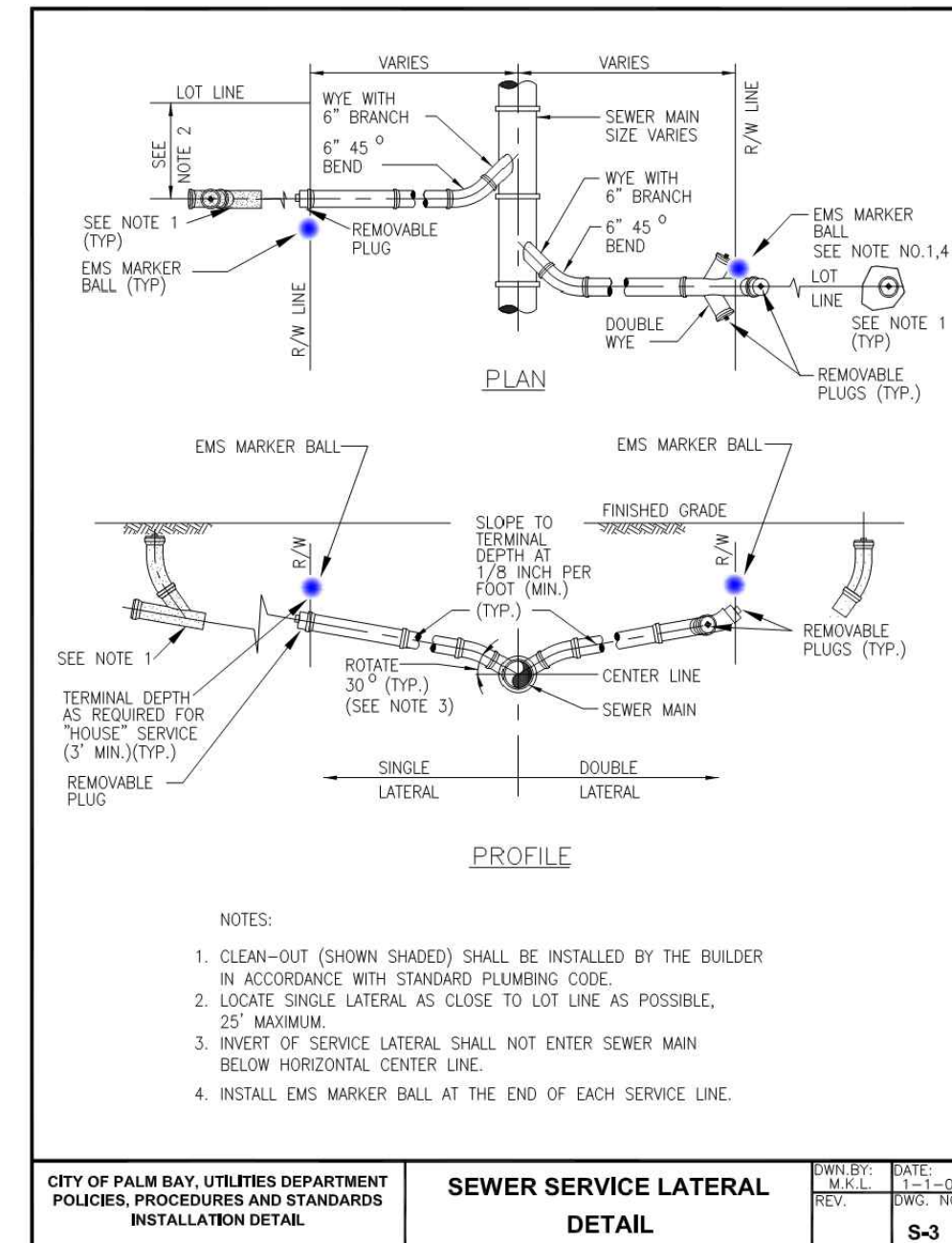
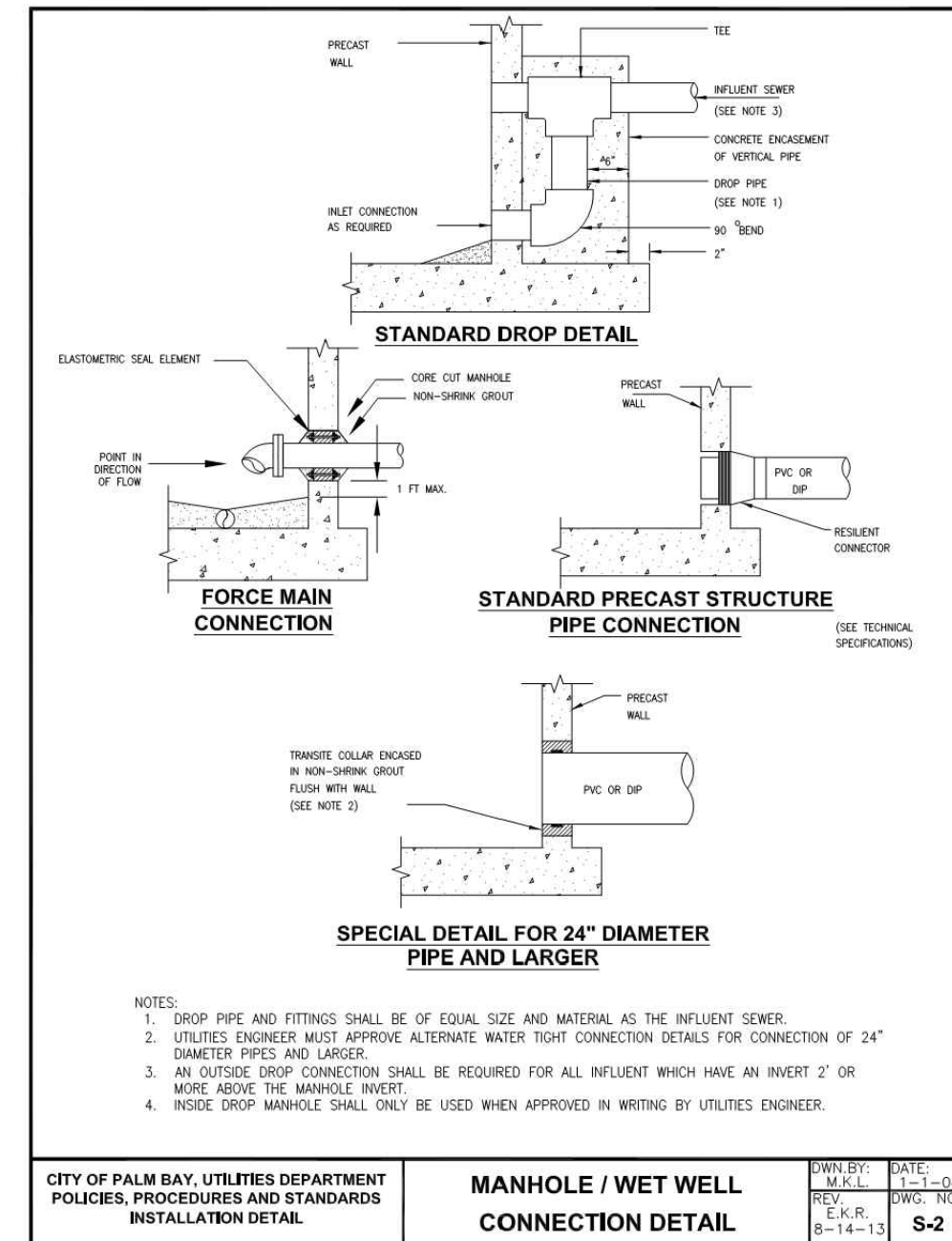
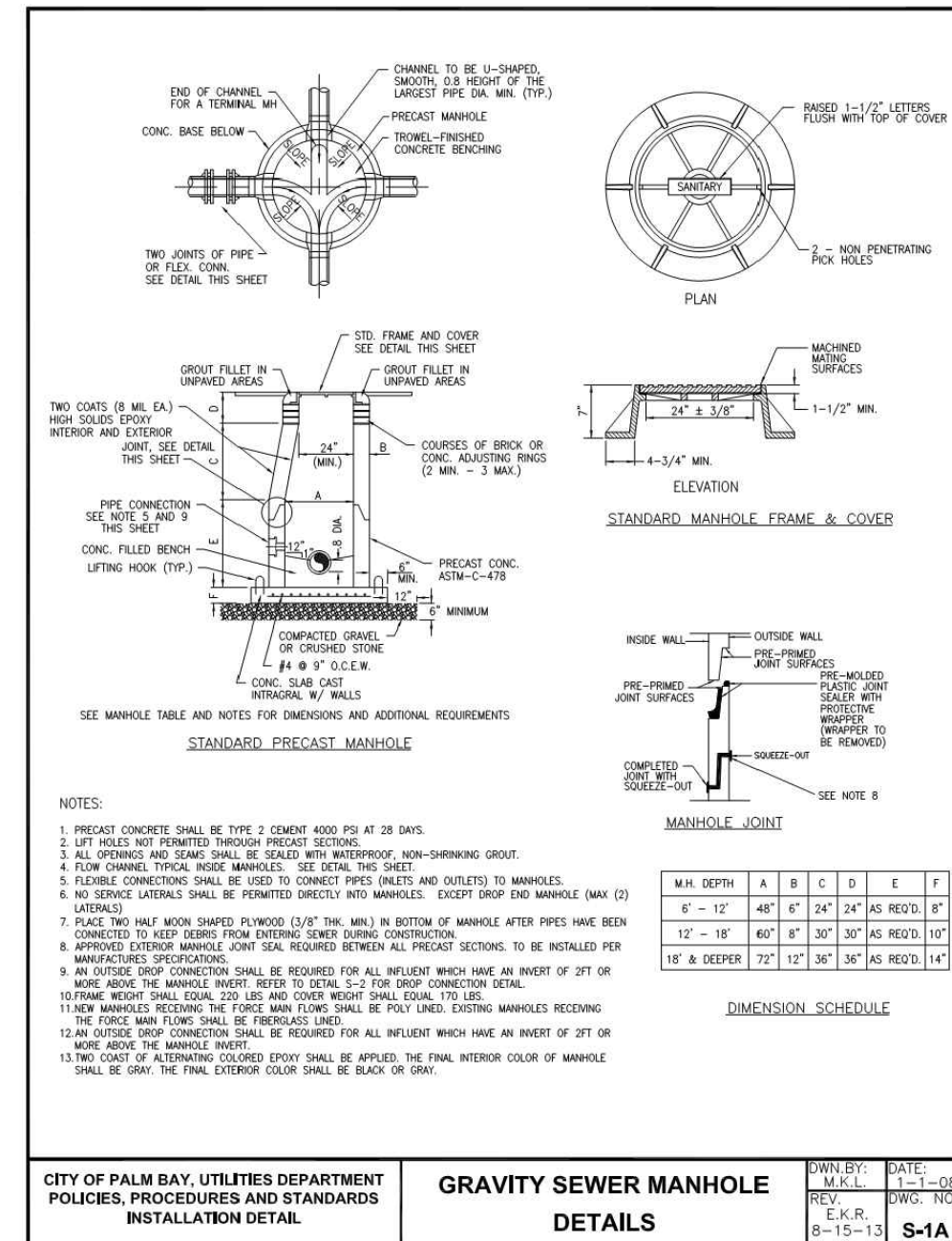
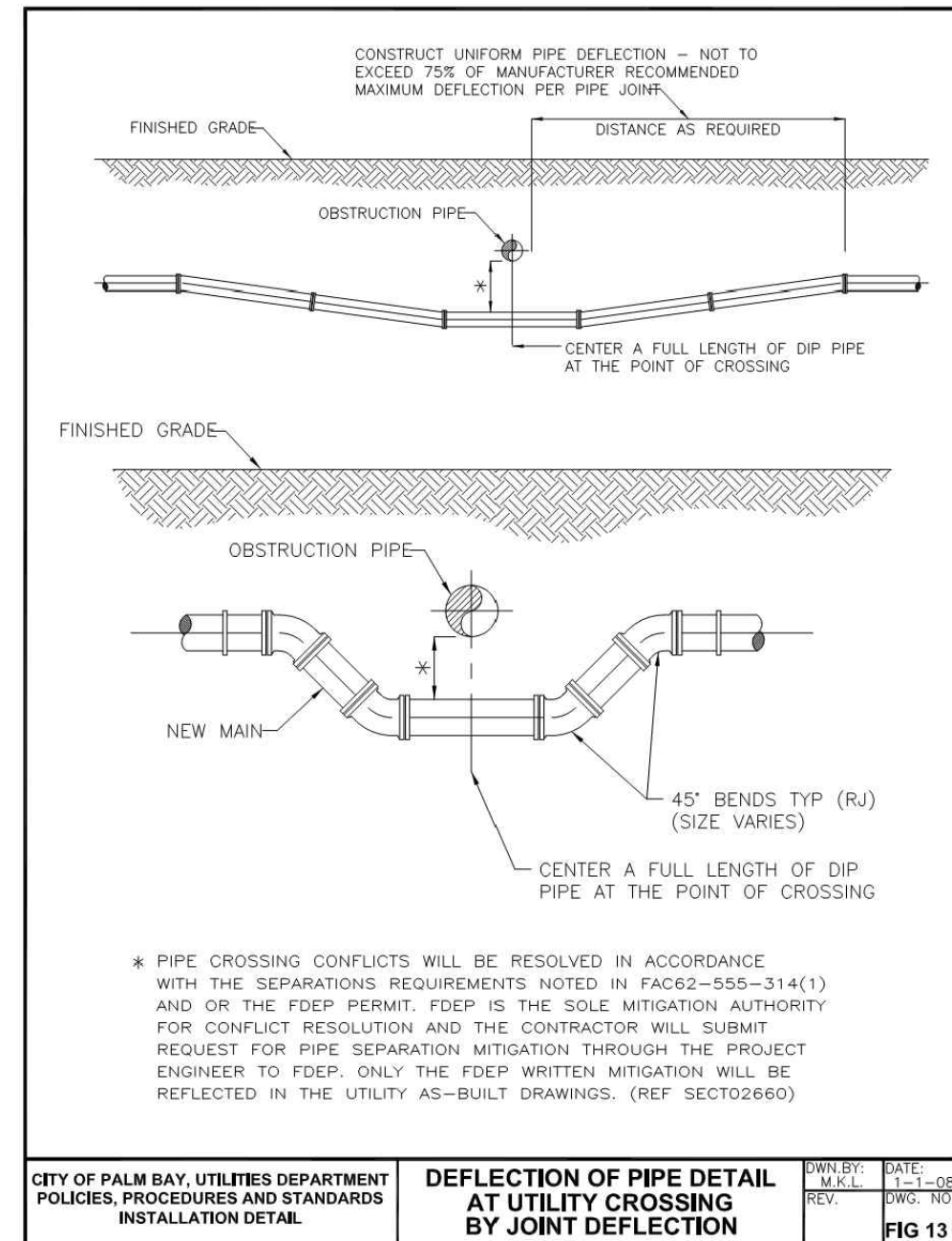
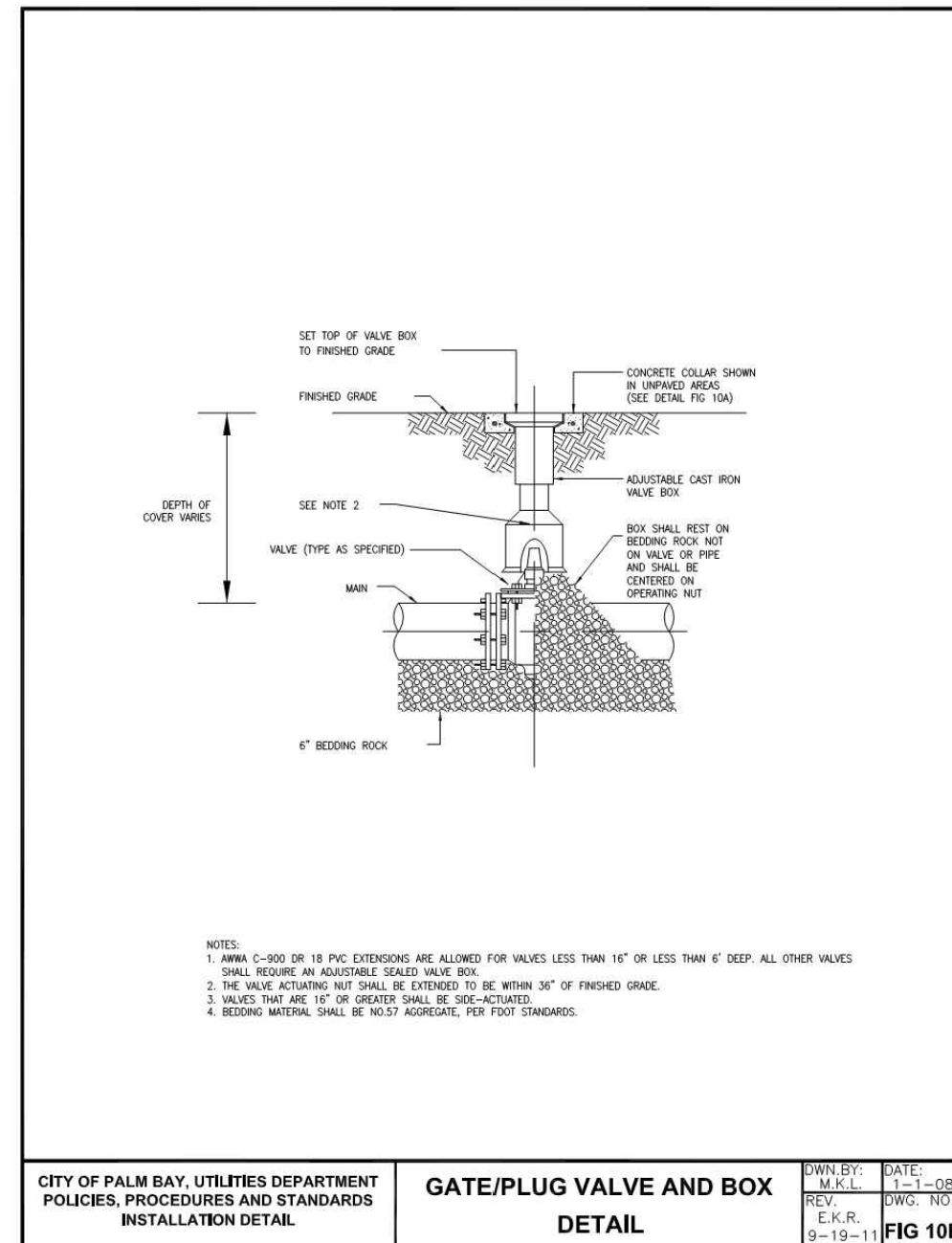
DESIGNED BY: JRT

DRAWN BY: SMB

CHECKED BY: JTJW

DRAWING NO.: C-15

AVERY SPRINGS SUBDIVISION
 TRIANGLE PALM BAY, LLC
 MALABAR ROAD AND HILL CREST AVENUE PALM BAY, FLORIDA
 DRAWING TITLE: DETAILS



LOCATION OF PUBLIC WATER SYSTEM MAINS IN ACCORDANCE WITH F.A.C. RULE 62-555.314

OTHER PIPE	HORIZONTAL SEPARATION	CROSSINGS (1)	JOINT SPACING @ CROSSINGS (FULL JOINT CENTERED)
STORM SEWER, STORMWATER FORCE MAIN, RECLAIMED WATER (2)	Water Main 3 FT. MINIMUM	Water Main 12 INCHES IS THE MINIMUM, EXCEPT FOR STORM SEWER, THEN 6 INCHES IS THE MINIMUM AND 12 INCHES IS PREFERRED	ALTERNATE 3 FT. MINIMUM WATER MAIN
VACUUM SANITARY SEWER	Water Main 10 FT. PREFERRED 3 FT. MINIMUM	Water Main 12 INCHES PREFERRED 6 INCHES MINIMUM	ALTERNATE 3 FT. MINIMUM WATER MAIN
GRAVITY OR PRESSURE SANITARY SEWER, SANITARY SEWER FORCE MAIN, RECLAIMED WATER (4)	Water Main 10 FT. PREFERRED 6 FT. MINIMUM (3)	Water Main 12 INCHES IS THE MINIMUM, EXCEPT FOR GRAVITY SEWER, THEN 6 INCHES IS THE MINIMUM AND 12 INCHES IS PREFERRED	ALTERNATE 6 FT. MINIMUM WATER MAIN
ON-SITE SEWAGE TREATMENT & DISPOSAL SYSTEM	10 FT. MINIMUM	-	-

- (1) WATER MAIN SHOULD CROSS ABOVE OTHER PIPE. WHEN WATER MAIN MUST BE BELOW OTHER PIPE, THE MINIMUM SEPARATION IS 12 INCHES.
- (2) RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 63-610, F.A.C.
- (3) 3 FEET FOR GRAVITY SANITARY SEWER WHERE THE BOTTOM OF THE WATER MAIN IS LAID AT LEAST 6 INCHES ABOVE THE TOP OF THE GRAVITY SANITARY SEWER.
- (4) RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.

REVISION
DATE
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1 5/17/17 SURWARD CITY COMMENTS

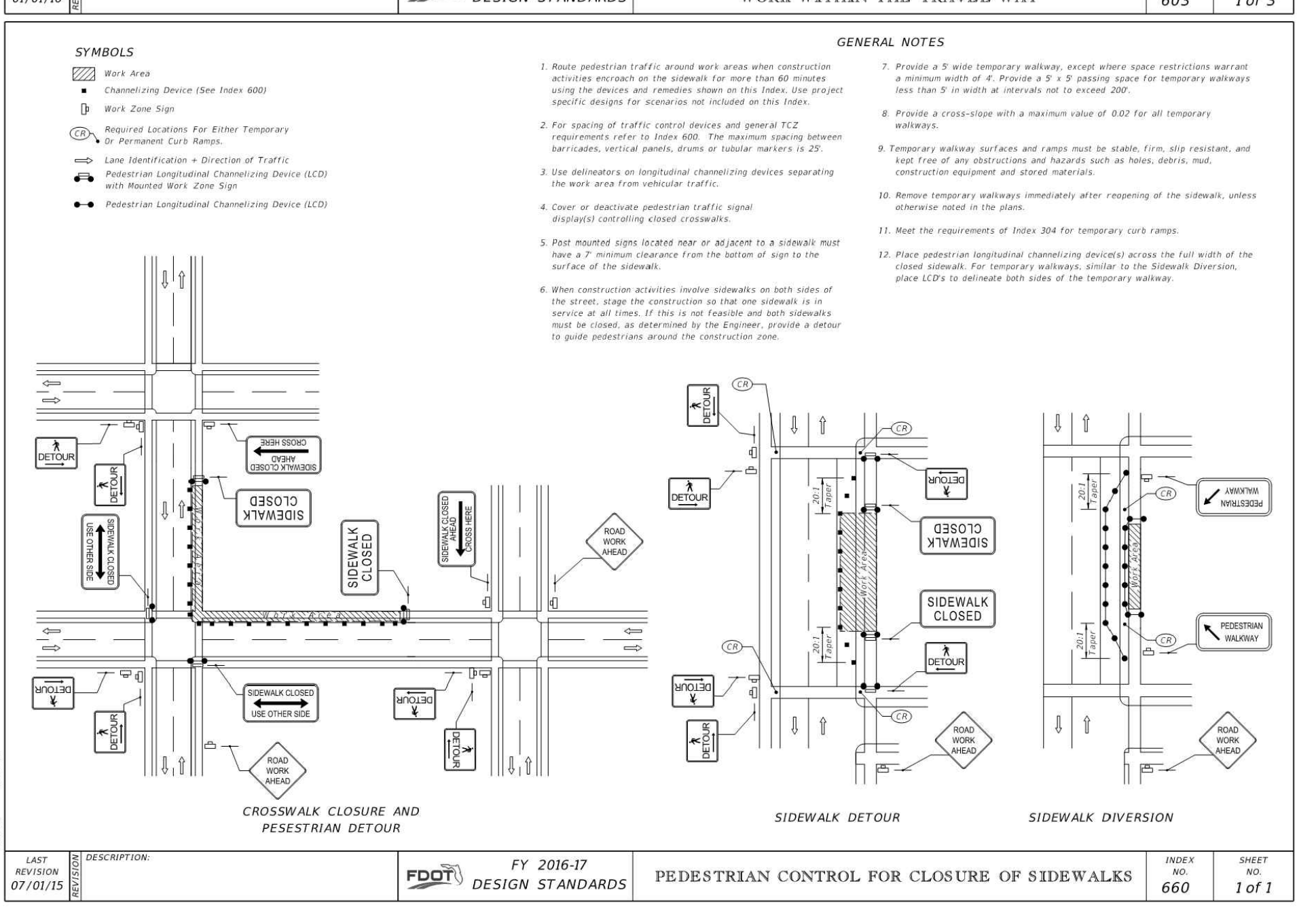
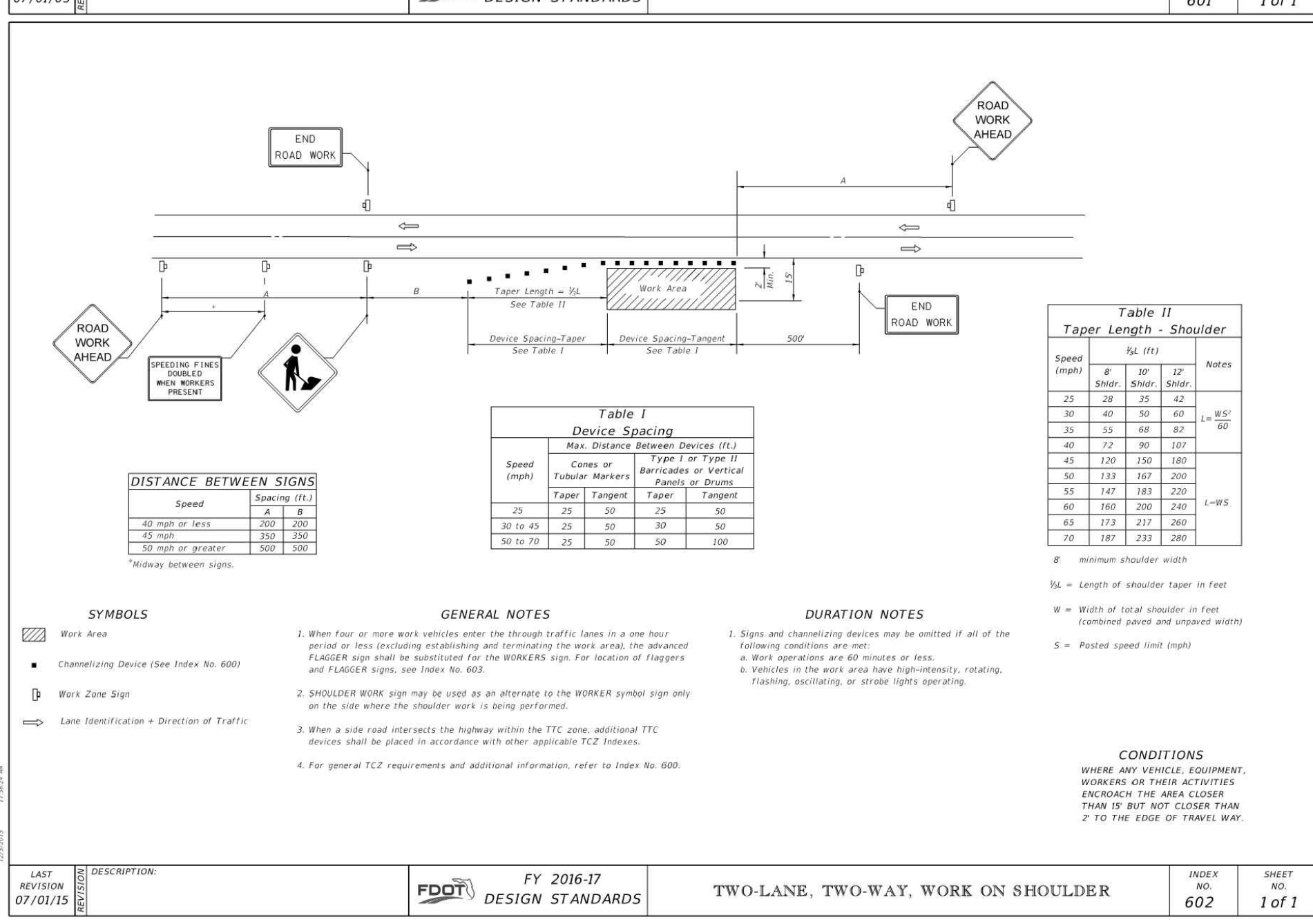
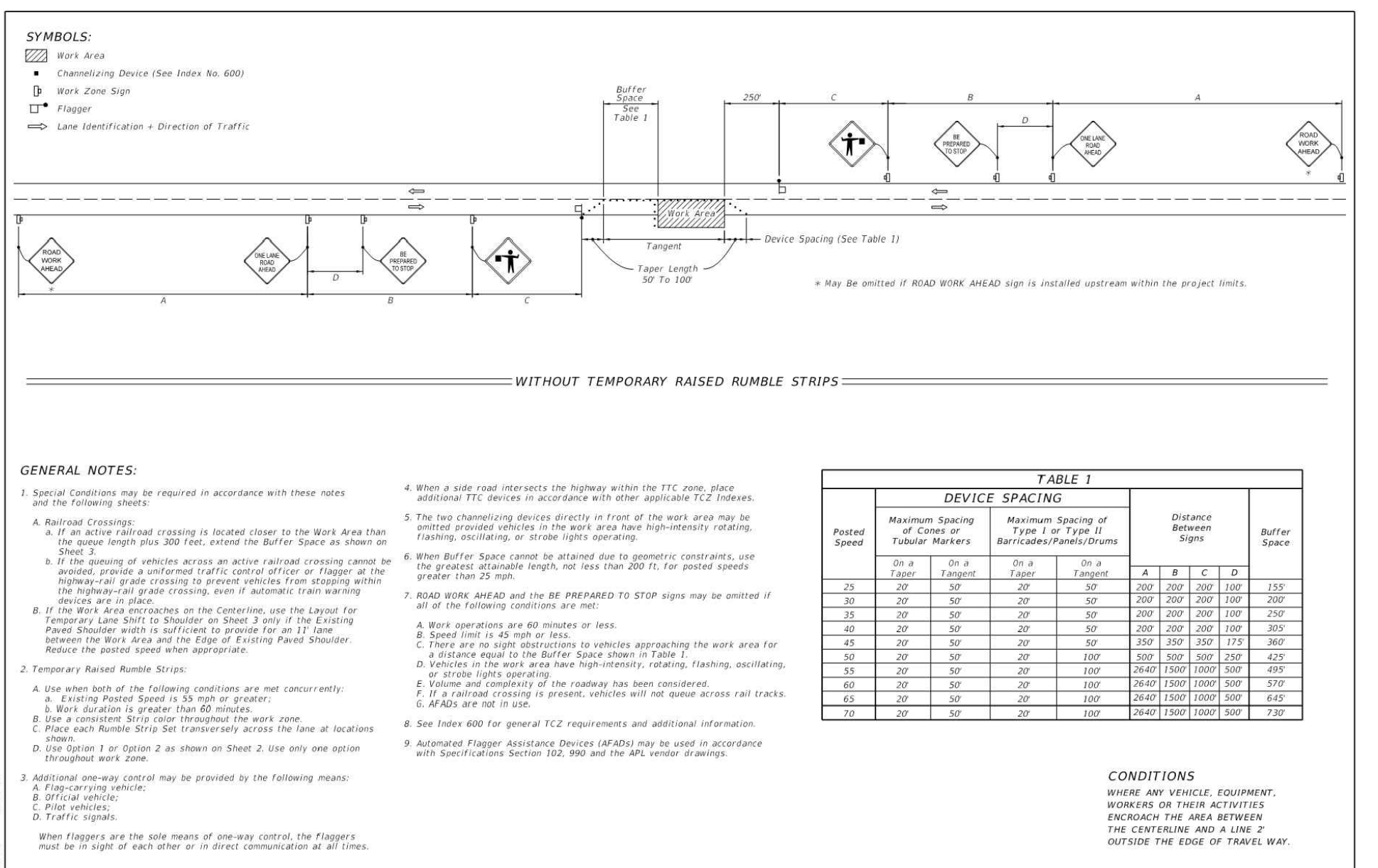
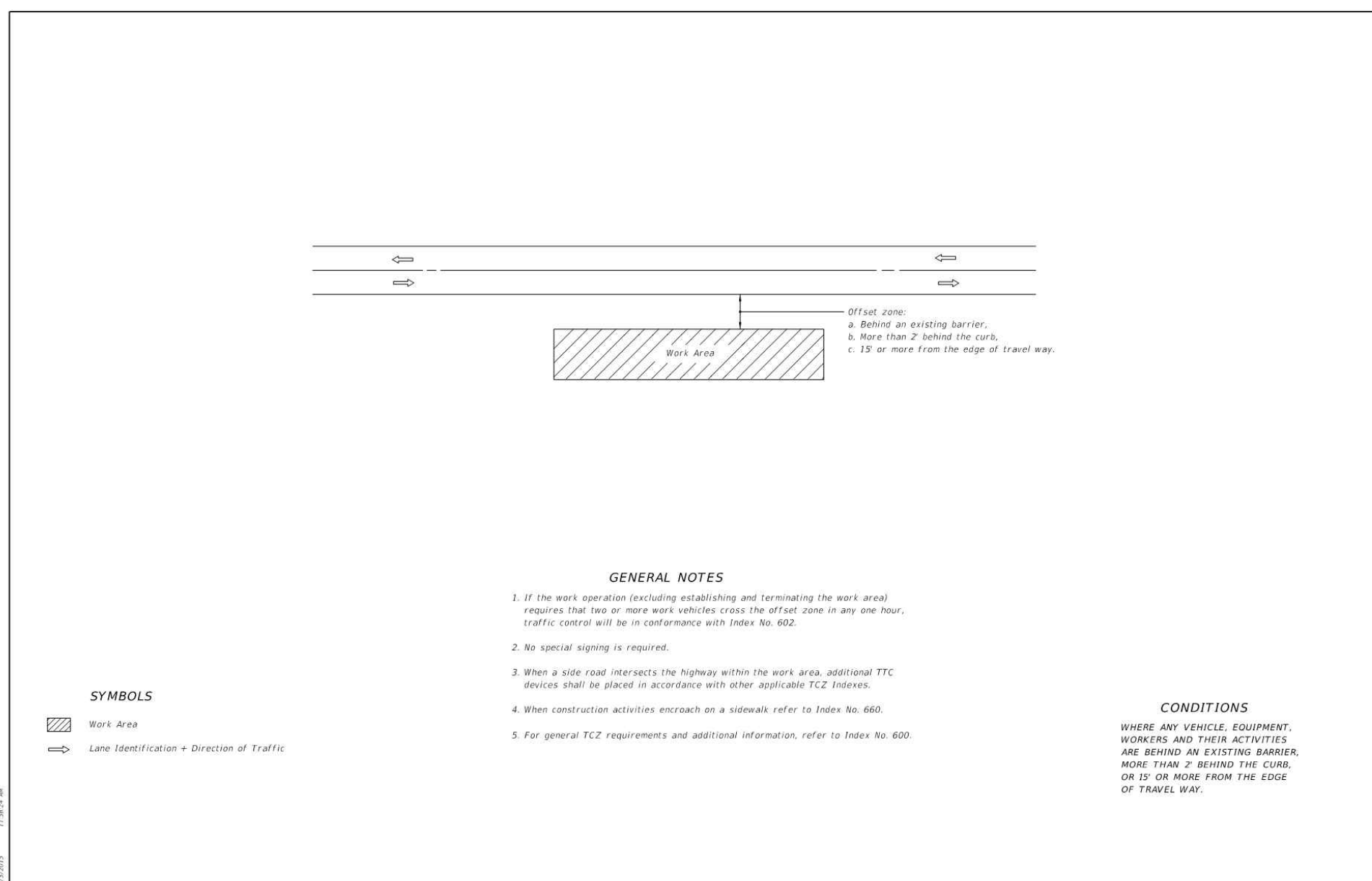
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CONSTRUCTION ENGINEERING GROUP
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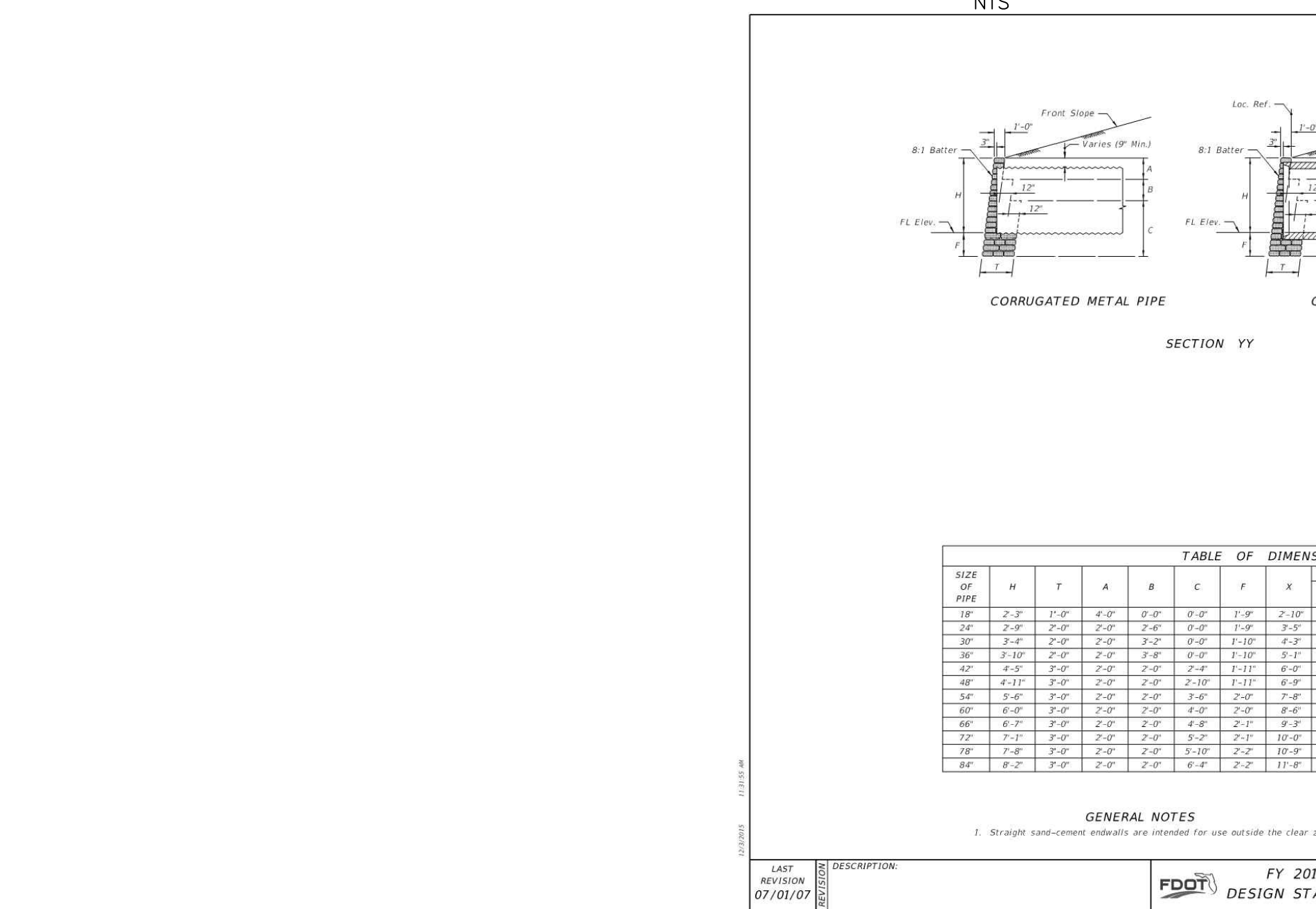
EVERY SPRINGS SUBDIVISION
TRIANGLE PALM BAY, LLC
MALABAR ROAD AND HILL CREST AVENUE PALM BAY, FLORIDA
DRAWING TITLE
DETAILS

DATE: 3/21/17
SCALE: NTS
PROJ. NO.: 160460
DESIGNED BY: JRT
DRAWN BY: SMB
CHECKED BY: JTJW
DRAWING NO.: C-16

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TYPICAL MAINTENANCE OF TRAFFIC DETAILS



TYPICAL CULVERT ENDWALL DETAILS



NOTE:
 FDOT DETAILS ARE PROVIDED FOR REFERENCE INFORMATION ONLY. SEE CORRESPONDING INDEX NUMBER IN FDOT LATEST EDITION OF THE ROADWAY AND TRAFFIC DESIGN STANDARDS MANUAL FOR ALL REQUIREMENTS.

REVISION DATE

REV#

2481 600 traffic build, multi-courts, 1-23-15
 2481 600 traffic build, multi-courts, 1-23-15
 2481 600 traffic build, multi-courts, 1-23-15
 2481 600 traffic build, multi-courts, 1-23-15

CONSTRUCTION ENGINEERING GROUP
 consulting engineers

EVERY SPRINGS SUBDIVISION

TRIANGLE PALM BAY, LLC
 MALABAR ROAD AND HILL CREST AVENUE PALM BAY, FLORIDA

DRAWING TITLE
 MALABAR ROAD RIGHT-OF-WAY DETAILS

DATE: 3/21/17

SCALE: NTS

PROJ. NO.: 160460

DESIGNED BY: JRT

DRAWN BY: SMB

CHECKED BY: JTW

DRAWING NO. C-17

FDEP SEPARATION NOTES: (ALL DRAWINGS)

1. HORIZONTAL SEPARATION BETWEEN UNDERGROUND WATER MAINS AND SANITARY OR STORM SEWERS, WASTEWATER OR STORMWATER FORCE MAINS, RECLAIMED WATER PIPELINES, AND ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEMS.
 - a. NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST THREE FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED STORM SEWER, STORMWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.
 - b. NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST THREE FEET, AND PREFERABLY TEN FEET, BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED VACUUM-TYPE SANITARY SEWER.
 - c. NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST SIX FEET, AND PREFERABLY TEN FEET, BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED GRAVITY- OR PRESSURE-TYPE SANITARY SEWER, WASTEWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C. THE MINIMUM HORIZONTAL SEPARATION DISTANCE BETWEEN WATER MAINS AND GRAVITY-TYPE SANITARY SEWERS SHALL BE REDUCED TO THREE FEET WHERE THE BOTTOM OF THE WATER MAIN IS LAID AT LEAST SIX INCHES ABOVE THE TOP OF THE SEWER.
 - d. NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST TEN FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND ALL PARTS OF ANY EXISTING OR PROPOSED "ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEM" AS DEFINED IN SECTION 381.0065(2), F.S., AND RULE 64E-6.002, F.A.C.(2)
2. VERTICAL SEPARATION BETWEEN UNDERGROUND WATER MAINS AND SANITARY OR STORM SEWERS, WASTEWATER OR STORMWATER FORCE MAINS, AND RECLAIMED WATER PIPELINES
 - a. NEW OR RELOCATED, UNDERGROUND WATER MAINS CROSSING ANY EXISTING OR PROPOSED GRAVITY- OR VACUUM-TYPE SANITARY SEWER OR STORM SEWER SHALL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST SIX INCHES, AND PREFERABLY 12 INCHES, ABOVE OR AT LEAST 12 INCHES BELOW THE OUTSIDE OF THE OTHER PIPELINE. HOWEVER, IT IS PREFERABLE TO LAY THE WATER MAIN ABOVE THE OTHER PIPELINE.
 - b. NEW OR RELOCATED, UNDERGROUND WATER MAINS CROSSING ANY EXISTING OR PROPOSED PRESSURE-TYPE SANITARY SEWER, WASTEWATER OR STORMWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER SHALL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST 12 INCHES ABOVE OR BELOW THE OUTSIDE OF THE OTHER PIPELINE. HOWEVER, IT IS PREFERABLE TO LAY THE WATER MAIN ABOVE THE OTHER PIPELINE.
 - c. AT THE UTILITY CROSSINGS DESCRIBED IN PARAGRAPHS (A) AND (B) ABOVE, ONE FULL LENGTH OF WATER MAIN PIPE SHALL BE CENTERED ABOVE OR BELOW THE OTHER PIPELINE SO THE WATER MAIN JOINTS WILL BE AS FAR AS POSSIBLE FROM THE OTHER PIPELINE. ALTERNATIVELY, AT SUCH CROSSINGS, THE PIPES SHALL BE ARRANGED SO THAT ALL WATER MAIN JOINTS ARE AT LEAST THREE FEET FROM ALL JOINTS IN VACUUM-TYPE SANITARY SEWERS, STORM SEWERS, STORMWATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C., AND AT LEAST SIX FEET FROM ALL JOINTS IN GRAVITY- OR PRESSURE-TYPE SANITARY SEWERS, WASTEWATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.(3)
3. SEPARATION BETWEEN WATER MAINS AND SANITARY OR STORM SEWER MANHOLES
 - a. NO WATER MAIN SHALL PASS THROUGH, OR COME INTO CONTACT WITH, ANY PART OF A SANITARY SEWER MANHOLE.
 - b. EFFECTIVE AUGUST 28, 2003, WATER MAINS SHALL NOT BE CONSTRUCTED OR ALTERED TO PASS THROUGH, OR COME INTO CONTACT WITH, ANY PART OF A STORM SEWER MANHOLE OR INLET STRUCTURE. WHERE IT IS NOT TECHNICALLY FEASIBLE OR ECONOMICALLY SENSIBLE TO COMPLY WITH THIS REQUIREMENT (I.E., WHERE THERE IS A CONFLICT IN THE ROUTING OF A WATER MAIN AND A STORM SEWER AND WHERE ALTERNATIVE ROUTING OF THE WATER MAIN OR THE STORM SEWER IS NOT TECHNICALLY FEASIBLE OR IS NOT ECONOMICALLY SENSIBLE), THE DEPARTMENT SHALL ALLOW EXCEPTIONS TO THIS REQUIREMENT (I.E., THE DEPARTMENT SHALL ALLOW CONSTRUCTION OF CONFLICT MANHOLES), BUT SUPPLIERS OF WATER OR PERSONS PROPOSING TO CONSTRUCT CONFLICT MANHOLES MUST FIRST OBTAIN A SPECIFIC PERMIT FROM THE DEPARTMENT IN ACCORDANCE WITH PART V OF THIS CHAPTER AND MUST PROVIDE IN THE PRELIMINARY DESIGN REPORT OR DRAWINGS, SPECIFICATIONS, AND DESIGN DATA ACCOMPANYING THEIR PERMIT APPLICATION THE FOLLOWING INFORMATION:
 1. TECHNICAL OR ECONOMIC JUSTIFICATION FOR EACH CONFLICT MANHOLE.
 2. A STATEMENT IDENTIFYING THE PARTY RESPONSIBLE FOR MAINTAINING EACH CONFLICT MANHOLE.
 3. ASSURANCE OF COMPLIANCE WITH THE DESIGN AND CONSTRUCTION REQUIREMENTS IN SUB-SUBPARAGRAPHS a. THROUGH d. BELOW.
 - a. EACH WATER MAIN PASSING THROUGH A CONFLICT MANHOLE SHALL HAVE A FLEXIBLE, WATERTIGHT JOINT ON EACH SIDE OF THE MANHOLE TO ACCOMMODATE DIFFERENTIAL SETTLING BETWEEN THE MAIN AND THE MANHOLE.
 - b. WITHIN EACH CONFLICT MANHOLE, THE WATER MAIN PASSING THROUGH THE MANHOLE SHALL BE INSTALLED IN A WATERTIGHT CASING PIPE HAVING HIGH IMPACT STRENGTH (I.E., HAVING AN IMPACT STRENGTH AT LEAST EQUAL TO THAT OF 0.25-INCH-THICK DUCTILE IRON PIPE).
 - c. EACH CONFLICT MANHOLE SHALL HAVE AN ACCESS OPENING, AND SHALL BE SIZED, TO ALLOW FOR EASY CLEANING OF THE MANHOLE.
 - d. GRATINGS SHALL BE INSTALLED AT ALL STORM SEWER INLETS UPSTREAM OF EACH CONFLICT MANHOLE TO PREVENT LARGE OBJECTS FROM ENTERING THE MANHOLE.

4. SEPARATION BETWEEN FIRE HYDRANT DRAINS AND SANITARY OR STORM SEWERS, WASTEWATER OR STORMWATER FORCE MAINS, RECLAIMED WATER PIPELINES, AND ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEMS. NEW OR RELOCATED FIRE HYDRANTS WITH UNDERGROUND DRAINS SHALL BE LOCATED SO THAT THE DRAINS ARE AT LEAST THREE FEET FROM ANY EXISTING OR PROPOSED STORM SEWER, STORMWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.; AT LEAST THREE FEET, AND PREFERABLY TEN FEET, FROM ANY EXISTING OR PROPOSED VACUUM-TYPE SANITARY SEWER; AT LEAST SIX FEET, AND PREFERABLY TEN FEET, FROM ANY EXISTING OR PROPOSED GRAVITY- OR PRESSURE-TYPE SANITARY SEWER, WASTEWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.; AND AT LEAST TEN FEET FROM ANY EXISTING OR PROPOSED "ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEM" AS DEFINED IN SECTION 381.0065(2), F.S., AND RULE 64E-6.002, F.A.C. HORIZONTAL SEPARATION BETWEEN UNDERGROUND WATER MAINS AND SANITARY OR STORM SEWERS, WASTEWATER OR STORMWATER FORCE MAINS, RECLAIMED WATER PIPELINES, AND ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEMS.
 - a. NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST THREE FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED STORM SEWER, STORMWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.
 - b. NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST THREE FEET, AND PREFERABLY TEN FEET, BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED VACUUM-TYPE SANITARY SEWER.
 - c. NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST SIX FEET, AND PREFERABLY TEN FEET, BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED GRAVITY- OR PRESSURE-TYPE SANITARY SEWER, WASTEWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C. THE MINIMUM HORIZONTAL SEPARATION DISTANCE BETWEEN WATER MAINS AND GRAVITY-TYPE SANITARY SEWERS SHALL BE REDUCED TO THREE FEET WHERE THE BOTTOM OF THE WATER MAIN IS LAID AT LEAST SIX INCHES ABOVE THE TOP OF THE SEWER.
 - d. NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST TEN FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND ALL PARTS OF ANY EXISTING OR PROPOSED "ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEM" AS DEFINED IN SECTION 381.0065(2), F.S., AND RULE 64E-6.002, F.A.C.(2)

5. THE CONTRACTOR IS TO CONTACT THE ENGINEER TO RESOLVE ALL SEPARATION PROBLEMS ENCOUNTERED IN THE FIELD. NOTE: MOST STRINGENT LOCAL, STATE AND FEDERAL RULES TO APPLY.
 21. VERIFY THAT THE LANDSCAPE WORK IS COORDINATED WITH ALL UTILITIES AND STORMWATER SYSTEMS. A MINIMUM OF FIVE (5) FOOT HORIZONTAL SEPARATION BETWEEN TREES AND BURIED, AERIAL, OR GRADE-MOUNTED UTILITY SYSTEMS IS REQUIRED.
 22. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO PUBLIC ROADWAYS, EASEMENTS, CURBS, SIDEWALKS, DRAINAGE SYSTEM, BENCHMARKS, OR UTILITIES AS A DIRECT RESULT OF CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR HAVING ALL BOUNDARY CORNERS AND BENCHMARKS DISTURBED OR DESTROYED DURING CONSTRUCTION REPLACED BY A FLORIDA LICENSED LAND SURVEYOR.
 23. ALL EXCAVATIONS OF GREATER DEPTH THAN 5' SHALL COMPLY WITH THE CURRENT OSHA TRENCH SAFETY STANDARDS 29 C.F.R. s. 1926.650 SUBPART P. ANY EXCAVATION WITHIN THE CLEARZONE SHALL ALSO COMPLY WITH ALL WARNING AND/OR BARRIER REQUIREMENTS OF FDOT INDEX NO. 600.
 24. CONSTRUCTION ENGINEERING GROUP DOES NOT WARRANT THE ACCURACY OF THE RECORD SURVEY.
 25. GRADING ADJACENT TO BUILDINGS SHALL BE 6" BELOW FINISHED FLOOR UNLESS IDENTIFIED OTHERWISE BY ARCHITECT OR ON GRADING PLANS.
 26. ALL PROPOSED ELEVATIONS ARE REFERENCED IN NAVD.
 27. IRRIGATION SHALL BE PROVIDED TO THE AMENITY TRACT, THE ENTRANCE ROAD MEDIAN ISLANDS, STORMWATER EASEMENTS AROUND TRACT D AND ALL GREEN AREAS BETWEEN LOT NOS. 1AND 57, ALL POND TOP OF BANKS, AND FPL EASEMENT.

GENERAL NOTES: (ALL DRAWINGS)

1. SEE TYPICAL DETAILS ON DETAIL SHEETS FOR ADDITIONAL CONSTRUCTION DETAIL INFORMATION.
2. CONTRACTOR SHALL BECOME FAMILIAR AND COMPLY WITH ALL PERMITS AND PERMIT CONDITIONS. CONTRACTOR SHALL OBTAIN PERMISSION FROM CEG OR ALL PERMIT AGENCIES IDENTIFIED IN SPECIFICATIONS PRIOR TO COMMENCING SITE WORK.
3. ALL AREAS DISTURBED OFF-SITE SHALL BE RESTORED TO EQUAL OR BETTER CONDITION THAN PRE-CONSTRUCTION WITH SAME TYPE OF SOD AS EXISTING.
4. CONTRACTOR SHALL COMPLY WITH ALL RECOMMENDATIONS OF KSM ENGINEERING SUBSURFACE EXPLORATION REPORT FOR THIS SITE. CONTRACTOR SHALL OBTAIN FROM CEG OR THE GEOTECHNICAL COMPANY.
5. PROVIDE CONSTANT SLOPE BETWEEN ALL SPOT ELEVATIONS.
6. UTILITY LENGTHS ARE APPROXIMATE BASED ON FIELD OBSERVATIONS AND AS-BUILT DRAWINGS. CONTRACTOR SHALL VERIFY EXACT LOCATION, SIZE, DEPTH, AND MATERIAL OF EXISTING UTILITIES. PROVIDE ADDITIONAL PIPING AND FITTINGS AS NECESSARY. NOTIFY ENGINEER OF SIGNIFICANT INCREASES.
7. NOTIFY ENGINEER MINIMUM 72 HOURS (WEEKDAYS) PRIOR TO MAKING UTILITY CONNECTIONS OR BACK FILLING UTILITY TRENCHES FOR INSPECTION. IF NOT NOTIFIED, CONTRACTOR SHALL EXPOSE LINES PER ENGINEER'S REQUEST FOR INSPECTIONS.
8. ALL TRAFFIC SIGNS SHALL BE INSTALLED PER STANDARD FDOT INDEX NOS. 11860 AND 17302.
9. ALL RADII ARE 5' UNLESS IDENTIFIED OTHERWISE.
10. PROVIDE 36" LONG TRANSITION WITH CONSTANT SLOPE FROM TOP OF CURB TO GRADE AT TERMINATION POINT OF CURBS.
11. CONTRACTOR SHALL CLEAR AND GRUB ALL VEGETATION ON-SITE EXCEPT TREES SHOWN TO REMAIN ON DWG C-1 OR LANDSCAPE PLANS.
12. PROVIDE SILT FENCE ALONG ENTIRE PERIMETER OF PROJECT AREA EXCLUDING ENTRANCE DRIVEWAYS OR AS SHOWN ON DRAWING G-2.
13. ALL WASTE SHALL BE DISPOSED OF OFF-SITE IN A SAFE AND LEGAL MANNER UNLESS OWNER SPECIFICALLY REQUESTS OTHERWISE.
14. FOR DEMOLITION OF ALL ASPHALT AND CONCRETE MATERIALS, SAWCUT EDGES FOR SMOOTH STRAIGHT EDGE. ALSO SAWCUT ALL EXISTING PAVEMENT EDGES FOR SMOOTH STRAIGHT EDGE AT ALL TIE-IN POINTS WITH NEW PAVEMENT OR CONCRETE.
15. CONTRACTOR SHALL VERIFY ON-SITE PRIOR TO BIDDING WORK THE FULL EXTENT OF DEMOLITION REQUIRED BASED ON SITE PLAN CONSTRUCTION DRAWINGS. ALL ITEMS SHALL BE INCLUDED IN BASE BID.
16. REMOVE ALL ABOVE GROUND IMPROVEMENTS IN AREAS SHOWN FOR DEMOLITION UNLESS SPECIFICALLY IDENTIFIED OTHERWISE.
17. ALL SLOPES 4H:1V OR STEEPER SHALL BE SODDED. ALL SLOPES STEEPER THEN 3H:1V SHALL BE SODDED AND STAKED.
18. CONTRACTOR SHALL PROVIDE ALL FITTINGS REQUIRED TO INSTALL UTILITIES PER PLAN.
19. CONTACT UNDERGROUND UTILITIES LOCATE BEFORE COMMENCING ANY DIGGING A MINIMUM OF 48 HOURS IN ADVANCE AT 811.
20. SUBMIT PROPOSED JOINT PLAN TO ENGINEER A MINIMUM OF ONE WEEK PRIOR TO POURING CONCRETE PAVEMENT FOR APPROVAL OR MODIFICATIONS.
21. VERIFY THAT THE LANDSCAPE WORK IS COORDINATED WITH ALL UTILITIES AND STORMWATER SYSTEMS. A MINIMUM OF FIVE (5) FOOT HORIZONTAL SEPARATION BETWEEN TREES AND BURIED, AERIAL, OR GRADE-MOUNTED UTILITY SYSTEMS IS REQUIRED.
22. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO PUBLIC ROADWAYS, EASEMENTS, CURBS, SIDEWALKS, DRAINAGE SYSTEM, BENCHMARKS, OR UTILITIES AS A DIRECT RESULT OF CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR HAVING ALL BOUNDARY CORNERS AND BENCHMARKS DISTURBED OR DESTROYED DURING CONSTRUCTION REPLACED BY A FLORIDA LICENSED LAND SURVEYOR.
23. ALL EXCAVATIONS OF GREATER DEPTH THAN 5' SHALL COMPLY WITH THE CURRENT OSHA TRENCH SAFETY STANDARDS 29 C.F.R. s. 1926.650 SUBPART P. ANY EXCAVATION WITHIN THE CLEARZONE SHALL ALSO COMPLY WITH ALL WARNING AND/OR BARRIER REQUIREMENTS OF FDOT INDEX NO. 600.
24. CONSTRUCTION ENGINEERING GROUP DOES NOT WARRANT THE ACCURACY OF THE RECORD SURVEY.
25. GRADING ADJACENT TO BUILDINGS SHALL BE 6" BELOW FINISHED FLOOR UNLESS IDENTIFIED OTHERWISE BY ARCHITECT OR ON GRADING PLANS.
26. ALL PROPOSED ELEVATIONS ARE REFERENCED IN NAVD.
27. IRRIGATION SHALL BE PROVIDED TO THE AMENITY TRACT, THE ENTRANCE ROAD MEDIAN ISLANDS, STORMWATER EASEMENTS AROUND TRACT D AND ALL GREEN AREAS BETWEEN LOT NOS. 1AND 57, ALL POND TOP OF BANKS, AND FPL EASEMENT.

PALM BAY: (ALL DRAWINGS)

1. PROVIDE AS-BUILT INFORMATION WHEN REQUESTING A CERTIFICATE OF OCCUPANCY AND ALLOW FIVE (5) DAYS FOR PROCESSING.
2. ALL DISTURBED AREAS SHALL HAVE GRASS/VEGETATION ESTABLISHED (80% GERMINATION) PRIOR TO FINAL INSPECTION FOR THE CERTIFICATE OF OCCUPANCY.
3. DURING CONSTRUCTION AN ALL-WEATHER ACCESSIBLE ROADWAY SHALL BE MAINTAINED AT ALL TIMES FOR FIRE APPARATUS.
4. TESTING OF PAVED AREAS IS REQUIRED AND SHALL BE SPECIFIED ON PLANS WITH A DESCRIPTION OF THE IMPROVEMENTS AND THE TESTING METHODS TO BE USED.
5. PROVIDE FILTER FABRIC JACKET AT JOINTS OF STORM DRAIN PIPING PER FDOT INDEX NO. 280. SEE TYPICAL DETAIL ON THESE PLANS.
6. ALL WORK IN PALM BAY RIGHT-OF-WAY SHALL CONFORM TO LATEST EDITION OF CITY OF PALM BAY GENERAL RIGHT-OF-WAY USE SPECIFICATIONS, CONDITIONS, AND DETAILS.
7. ACCESS ROADS SHALL BE INSTALLED AT THE START OF THE PROJECT AND MAINTAINED THROUGHOUT THE PROJECT.
8. NOTIFY THE INSPECTOR IN THE LAND DEVELOPMENT DIVISION BY EMAIL TO ROBERT.LORING@PALMBAYFLORIDA.ORG 72 HOURS PRIOR TO START OF CONSTRUCTION. CORRECT INFORMATION (NAMES AND PHONE NUMBER TO CONTACT CONTRACTORS, SUB-CONTRACTORS) AND SEQUENCE OF WORK IS REQUIRED.
9. FIRE HYDRANTS AND FIRE PROTECTION APPLIANCES SHALL BE KEPT ACCESSIBLE TO THE FIRE DEPARTMENT AT ALL TIMES. CLEARANCE OF 7.5 FEET IN FRONT OF AND TO THE SIDES OF FIRE HYDRANTS AND APPLIANCES SHALL BE MAINTAINED. CLEARANCE OF FOUR FEET TO THE REAR OF FIRE HYDRANTS SHALL BE MAINTAINED. NFPA 1, 3-6.6.2., 3-5.6.2.1, 3-5.6.2.2.
10. WATER TUBING SERVICE SHALL BE POLYETHYLENE (PE) 3408 TUBING WITH STIFFENERS BY ORANGEBURG INDUSTRIES OR AN EQUAL.
11. PROVIDE A BRASS COPPERATION STOP AND CURB STOP MANUFACTURED BY FORD FOR PE 3408 PLASTIC TUBING.
12. NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEMS CONSTRUCTION PERMIT IS REQUIRED FOR PROJECTS OVER 1 ACRES IN SIZE. THE CONTRACTOR SHALL PREPARE THE NECESSARY NOTICE OF INTENT (N.O.I.) AND STORMWATER POLLUTION PREVENTION PLAN (S.W.P.P.P.) PERMIT SHALL BE REQUIRED TO BE POSTED AT THE PROJECT SITE AT ALL TIMES.
13. THE N.O.I. WILL BE FILED TO THE APPROPRIATE SECTION OF F.D.E.P. COPIES OF THE N.O.I. AND S.W.P.P.P. WILL BE SUBMITTED TO THE LAND DEVELOPMENT DIVISION BEFORE ANY WORK CAN START ON SITE.
14. PROVIDE NOTIFICATION SCHEDULE OF WORK IN 30 DAY PERIODS WITH DATE OF WORK DESCRIPTION OF WORK, NAMES, PHONE NUMBERS AND FAX NUMBERS OF CONTRACTORS AND SUB-CONTRACTORS.
15. SILT FENCE SPECIFICATION SHALL BE PER F.D.O.T. EROSION AND SEDIMENT CONTROL DESIGNER AND REVIEWER MANUAL.
16. AFTER INSTALLATION OF EROSION CONTROL MEASURES AND PRIOR TO CLEARING, AN INSPECTION IS REQUIRED.
17. SILT FENCE IS REQUIRED AROUND PROPERTY, CHANGES REQUIRE INSPECTOR APPROVAL.
18. FOR TREES ALONG THE PERIMETER OF PROPERTY PRIOR TO REMOVAL CONTRACTOR SHALL OBTAIN ABUTTING PROPERTY OWNER AUTHORIZATION. A TEMPORARY CONSTRUCTION DRIVEWAY SHALL BE REQUIRED.
19. A 72 HOURS NOTIFICATION IS REQUIRED FOR ROAD WORK PROPOSED IN PUBLIC RIGHT OF WAY.
20. CONTRACTOR SHALL PROVIDE F.D.O.T. MAINTENANCE OF TRAFFIC PLAN, INDEX TO BE USED, INCLUDE TAPER LENGTH, TRAFFIC OPERATION AND DESCRIPTION OF WORK.
21. DRIVEWAYS, ROADS, RIGHT OF WAY, DRAINAGE PIPES...ETC. "CITY PROPERTY" AROUND PROJECT SHALL BE KEPT IN GOOD CONDITION AND CLEAN.
22. PAVEMENT MARKINGS AND SIGNAGE AT THE DRIVEWAY ENTRANCE AND ON-SITE ARE THE PERPETUAL MAINTENANCE RESPONSIBILITY OF THE OWNER AND ASSIGNS.
23. NOTIFY THE LAND DEVELOPMENT DIVISION INSPECTOR TO SCHEDULE A PRE-SITE CONSTRUCTION MEETING 72 HOURS PRIOR TO START OF CONSTRUCTION. CORRECT INFORMATION (NAMES AND PHONE NUMBER TO CONTACT CONTRACTORS, SUB-CONTRACTORS) AND SEQUENCE OF WORK IS REQUIRED.
24. NOTIFY THE CITY OF PALM BAY RIGHT-OF-WAY USE SERVICES DIVISION AT (321) 953-8965 48 HOURS PRIOR TO THE START OF CONSTRUCTION ACTIVITIES IN A ROAD RIGHT-OF-WAY, SUCH AS PAVING, PLACING A PIPE, ETC. THESE ACTIVITIES SHALL BE PERFORMED ONLY IN THE PRESENCE OF A PALM BAY PUBLIC WORKS DEPARTMENT INSPECTOR.
25. FIRE HYDRANT SHALL BE INSTALLED AND OPERATIONAL PRIOR TO CONSTRUCTION WORK. NFPA 241, 6-7.2.2.
26. ALL UTILITY CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST REVISION OF THE PALM BAY UTILITY DEPARTMENT'S "POLICIES, PROCEDURES, AND STANDARDS" HANDBOOK AND THE STANDARD DETAIL DRAWINGS.
27. THE OWNER OR AUTHORIZED AGENT TO CALL THE DRIVEWAY PERMIT SECTION (321-952-3403) FOR A DRIVEWAY PRE-POUR INSPECTION. CITY INSPECTORS WILL VERIFY THE INVERT ELEVATION AND CONSTRUCTION REQUIREMENTS PRIOR TO THE PLACEMENT OF THE DRIVEWAYS. FAILURE TO COMPLY WITH THE SPECIFIED INVERT ELEVATIONS WILL RESULT IN CORRECTIVE MEASURES AT THE EXPENSE OF THE PERMITEE. THE INSPECTOR WILL LEAVE A PASS OR FAIL NOTICE ON-SITE.
28. THE OWNER OR AUTHORIZED AGENT TO CALL THE RIGHT-OF-WAY USE SECTION (321-952-8985) FOR THE PRE-POUR INSPECTION OF THE PROPOSED SIDEWALK WITHIN THE RIGHT-OF-WAY. CITY INSPECTORS WILL VERIFY THE CONSTRUCTION REQUIREMENTS PRIOR TO THE PLACEMENT OF THE SIDEWALK.
29. THE CONTRACTOR WILL NOTIFY THE LAND DEVELOPMENT DIVISION 48 HOURS PRIOR TO ANY CONSTRUCTION ACTIVITY. THE CONTRACTOR WILL PROVIDE THE LAND DEVELOPMENT DIVISION WITH A COPY OF ALL TEST RESULTS FROM THE PROPOSED IMPROVEMENTS, ALL CONCRETE TESTS AND ALL TEST RESULTS FROM THE PROPOSED IMPROVEMENTS.
30. DRIVEWAY SIGNS AND PAVEMENT MARKINGS IN DRIVE SHALL BE THE PERPETUAL MAINTENANCE RESPONSIBILITY OF THE SITE OWNERS.
31. PER THE CITY PUBLIC WORKS MANUAL SECTION 2.1.4.5: THE CONTRACTOR SHALL PROVIDE FOR SATISFACTORY DISPOSAL OF SURPLUS WATER AND SHALL SUBMIT A PLAN TO THE ENGINEER FOR HIS/HER REVIEW PRIOR TO INITIATION AND IMPLEMENTATION OF THE PLAN.
32. ALL UTILITY CONSTRUCTION MATERIALS, AND TESTING SHALL BE IN ACCORDANCE WITH THE LATEST REVISION OF THE PALM BAY UTILITY DEPARTMENTS POLICIES, PROCEDURES AND STANDARDS HANDBOOK AND THE STANDARD DETAIL DRAWINGS.
33. ANY BACKFLOW PREVENTION ASSEMBLIES MUST HAVE THE LABORATORY AND FIELD PERFORMANCE SPECIFICATIONS OF THE FOUNDATION FOR CROSS-CONNECTION CONTROL AND HYDRAULIC RESEARCH OF THE UNIVERSITY OF SOUTHERN CALIFORNIA, OR TOGETHER APPROVED TESTING LABORATORY.
34. IT SHALL BE THE DUTY OF THE CONSUMER AT ANY PREMISES WHERE BACKFLOW PREVENTION ASSEMBLIES ARE INSTALLED TO HAVE CERTIFIED INSPECTIONS AND OPERATIONAL TESTS MADE UPON INSTALLATION AND AT LEAST ONCE PER YEAR AS SCHEDULED BY THE UTILITY. ANY CONTRACTOR HIRED BY THE CONSUMER SHALL BE A LICENSED PLUMBING, FIRE, OR IRRIGATION CONTRACTOR REGISTERED WITH THE CITY OF PALM BAY.

35. IF THE PROJECT REQUIRES A GREASE TRAP, OIL/SAND INTERCEPTOR, OR WILL HAVE A PRIVATE LIFT STATION. A PERMIT APPLICATION FOR THE CITY'S FATS, OILS, AND GREASE (FOG) PROGRAM SHALL BE COMPLETED AND SUBMITTED TO THE UTILITIES DEPARTMENT BEFORE PROJECT CLOSE-OUT.
36. THE CITY OF PALM BAY UTILITIES INSPECTOR MUST BE NOTIFIED 48 HOURS PRIOR TO ANY UTILITIES WORK.
37. THE UTILITIES WORK OCCURRING WITHIN THE CITY'S RIGHT-OF-WAY SHALL BE DONE IN ACCORDANCE WITH THE PALM BAY UTILITY DEPARTMENT POLICIES, PROCEDURES AND STANDARDS HANDBOOK (JANUARY 2014).
38. MAINTENANCE OF ALL SIGNAGE AND STRIPING IN THE CITY RIGHT-OF-WAY IS TO BE THE PERPETUAL RESPONSIBILITY OF THE CURRENT AND ALL SUBSEQUENT PROPERTY OWNERS.
39. THE ENGINEER SHALL BE NOTIFIED:
 - A. PRIOR TO ANY MAJOR DEVIATION FROM THE APPROVED PLANS.
 - B. PRIOR TO BACKFILLING ANY PIPE TRENCHES.
 - C. UPON COMPLETION OF SUBGRADE GRADING AND COMPACTION.
 - D. BEGINNING OF SPREADING OF ROCK BASE MATERIAL.
 - E. COMPLETION OF GRADING AND COMPACTION OF THE BASE MATERIAL AND PRIOR TO PRIMING.
 - F. IMMEDIATELY PRIOR TO AND UPON APPLICATION OF A.C.S.C..
 - G. UPON COMPLETION OF CONSTRUCTION.
40. THE ENGINEER OF RECORD WILL REVIEW AND APPROVE SHOP DRAWINGS AND FURNISH APPROVALS TO THE APPROPRIATE CITY DEPARTMENT AND TESTING LOGS, FROM THE TESTING COMPANY, WILL BE "CARBON COPIED" TO THE APPROPRIATE CITY DEPARTMENT.
41. ANY BACKFLOW PREVENTION ASSEMBLY REQUIRED SHALL BE OF A MANUFACTURER APPROVED BY THE UTILITIES DEPARTMENT. THE TERM, APPROVED BACKFLOW PREVENTION ASSEMBLY SHALL MEAN AN ASSEMBLY THAT HAS BEEN MANUFACTURED IN FULL CONFORMANCE WITH THE STANDARDS ESTABLISHED BY THE AMERICAN WATER WORKS ASSOCIATION ENTITLED: AWWA C505-69 STANDARDS FOR REDUCED PRESSURE PRINCIPLE AND DOUBLE CHECK VALVE BACKFLOW PREVENTION ASSEMBLIES, OR LATER ADOPTED VERSION. BACKFLOW PREVENTION ASSEMBLIES MUST HAVE THE LABORATORY AND FIELD PERFORMANCE SPECIFICATIONS OF THE FOUNDATION FOR CROSS-CONNECTION CONTROL AND HYDRAULIC RESEARCH OF THE UNIVERSITY OF SOUTHERN CALIFORNIA, OR OTHER APPROVED TESTING LABORATORY.
42. A MAINTENANCE OF TRAFFIC NOTIFICATION SHALL BE REQUIRED 72 HOURS PRIOR TO TURN LANE WORK STARTING IN THE RIGHT-OF-WAY WHEN IT WILL IMPACT TRAFFIC. THE NOTICE OF LANE CLOSURE FORM SHALL BE FILLED OUT BY THE CONTRACTOR AND SUBMITTED TO PUBLIC WORKS. VARIABLE MESSAGE SIGNS SHALL BE INSTALLED 5 DAYS PRIOR TO ANY WORK STARTS INDICATING THE START AND END DATE OF CONSTRUCTION, THE SEGMENT OF CONSTRUCTION AND THE TIMES CONSTRUCTION WILL TAKE PLACE DAILY.
43. NO PEAK HOUR WORK ALLOWED FOR THE OFFSITE WORK ON MALABAR ROAD. ROADWORK SHALL BE RESTRICTED TO OFF PEAK HOUR TIMES WHICH ARE 9:30 AM TO 3:30 PM.
44. THE OFFSITE CONSTRUCTION CONTRACTOR SHALL PROVIDE A SITE-SPECIFIC MOT FOR ALL OFFSITE WORK 14 DAYS PRIOR TO WORK STARTING FOR REVIEW.
45. ALL CONSTRUCTION MATERIALS FOR THE OFFSITE WORK SHALL BE REQUIRED TO BE APPROVED BY THE ENGINEER OF RECORD, SITE CONTRACTOR MANAGER AND THEN SENT TO CITY OF PALM BAY FOR REVIEW AND APPROVAL PRIOR TO ORDERING. ANY MATERIAL NOT HAVING PRIOR APPROVAL IS SUBJECT TO REJECTION AND REMOVAL AT THE CONTRACTOR'S EXPENSE.

REVISION		SURMOD AND CITY COMMENTS		CITY COMMENTS	
REV#	DATE	1	7/26/17	5	12/29/17
1	7/26/17	5	12/29/17		
<p>2481 avo park blvd, suite 100 maitland, fl 32751 tel: 321.281.0701 fax: 321.253.1723 www.cebgroupinc.com license #008897</p> <p>CONSTRUCTION ENGINEERING GROUP consulting engineers</p>					
<p>EVERY SPRINGS SUBDIVISION TRIANGLE PALM BAY, LLC MALABAR ROAD AND HILL CREST AVENUE PALM BAY, FLORIDA DRAWING TITLE</p> <p>SPECIFICATIONS AND GENERAL NOTES</p>					
<p>DATE 3/21/17</p> <p>SCALE NTS</p> <p>PROJ. NO.: 160460</p> <p>DESIGNED BY: JRT</p> <p>DRAWN BY: SMB</p> <p>CHECKED BY: JTJW</p> <p>DRAWING NO. C-19</p>					

APPENDIX O – TRAFFIC FORECASTING INFORMATION

Contained in this Appendix –

- Specific Intersection Volume Growth Explanation
- NCHRP Tool Supporting Information
- Traffic Forecast Volumes Supporting Information

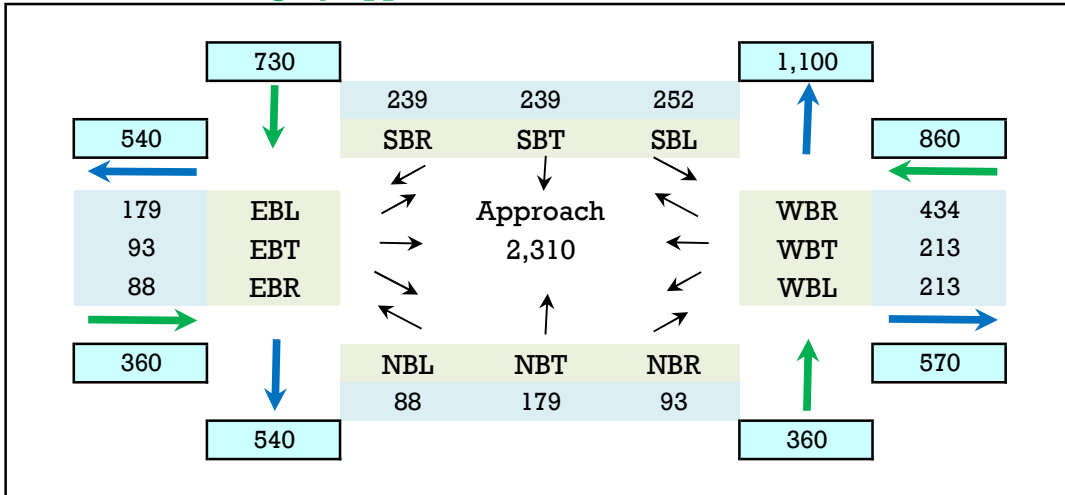
VOLUME GROWTH EXPLANATION

ST. JOHNS HERITAGE PARKWAY GROWTH EXPLANATION

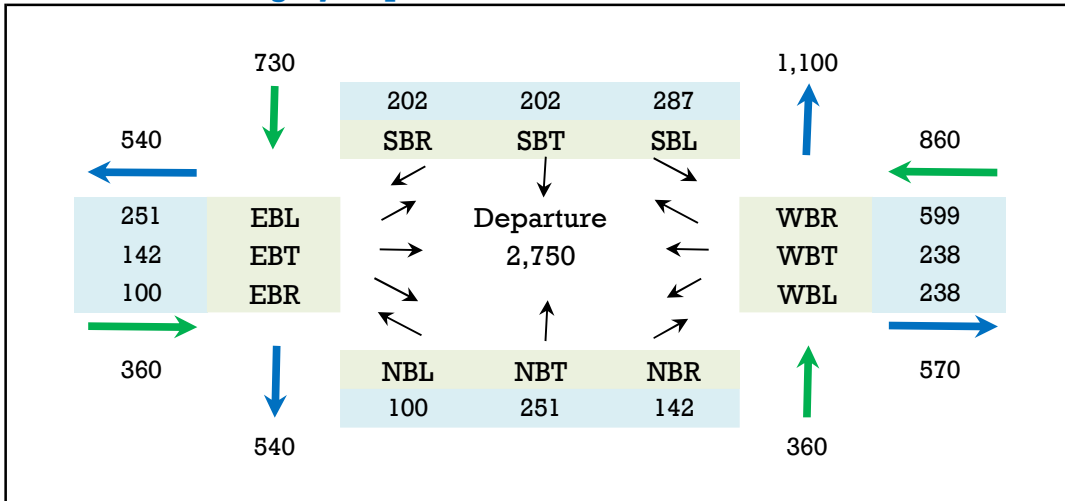
ROAD A & ROAD B

Committed Turning Movement Volume Development 2050 AM

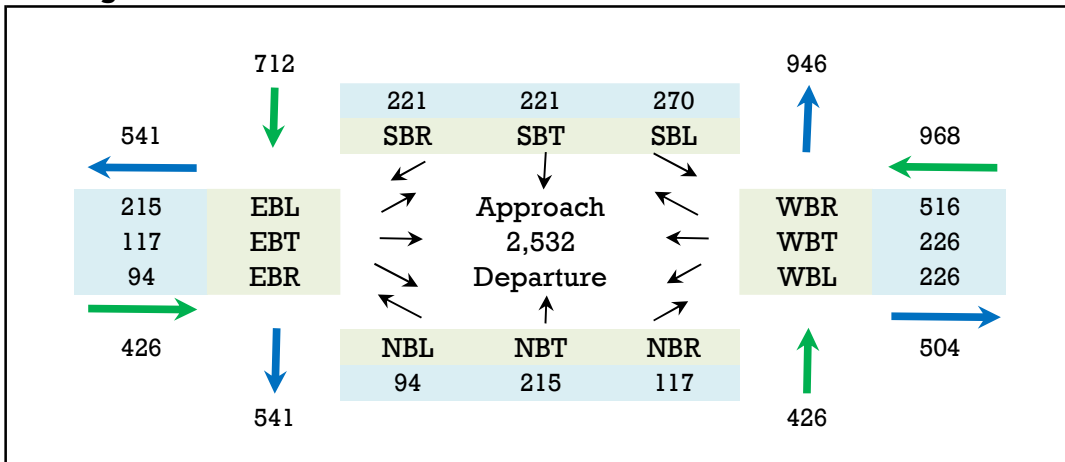
Volume Balancing by Approach



Volume Balancing by Departure



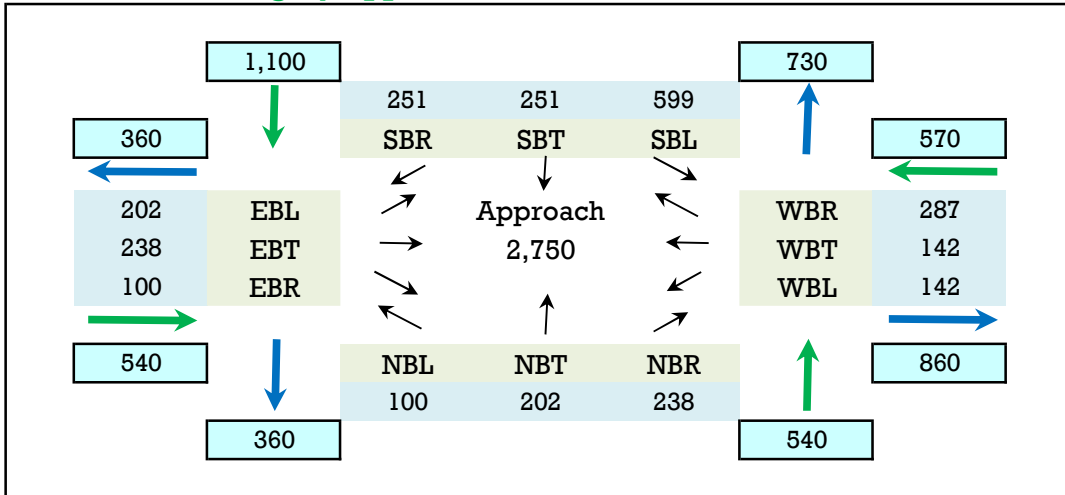
Average Balanced Volumes



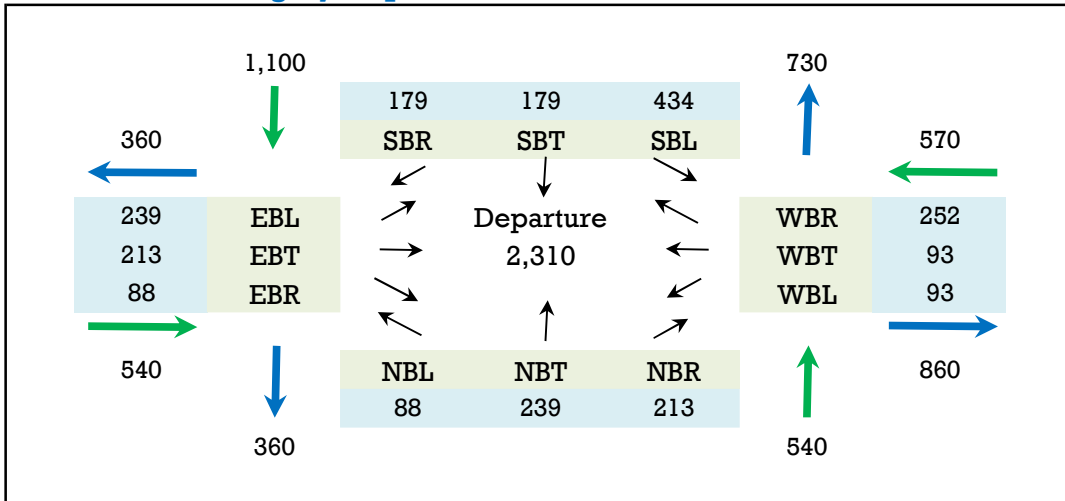
ROAD A & ROAD B

Committed Turning Movement Volume Development 2050 PM

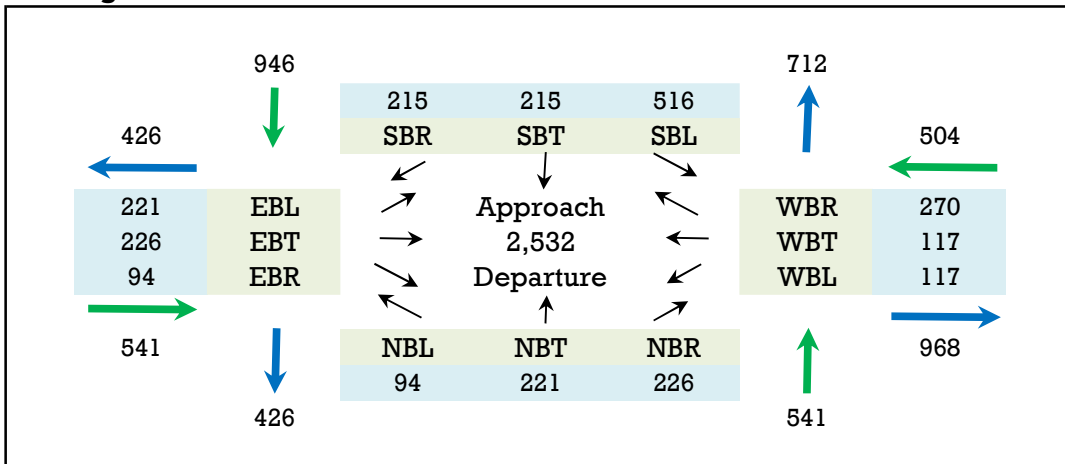
Volume Balancing by Approach



Volume Balancing by Departure



Average Balanced Volumes



Calculation of Forecasted Trips by Turning Movement Malabar Road & St. Johns Heritage Parkway

The intersection volumes for major intersections along Malabar Road were forecasted by using existing turning movements and future Directional Design-Hour Volumes (DDHVs) into the FDOT Turns tool. The intersection of Malabar Road and St. Johns Heritage Parkway changes from a three-leg intersection in the existing condition to a four-leg intersection in the future condition. In order to estimate appropriate “existing” volumes for the four-leg intersection, the forecasted trips at the intersection were calculated based on the forecasted approach and departure volumes from the adjacent roadway segments. The procedure of this calculation is outlined below:

1. The City’s peak-hour forecasted approach and departure volumes for the study intersection were obtained from the forecasted traffic volumes.
2. Two different approaches (approach-based and departure-based) were used in distributing the City’s peak-hour forecasted trips on each intersection leg to the different turning movements. As an example,
3. In approach-based analysis:

$$\text{EBL Volume} = \text{EB Approach Vested Volume} \times \frac{\text{NB Departure Volume}}{\text{NB Departure Volume} + \text{EB Departure Volume} + \text{SB Departure Volume}}$$

4. In departure-based analysis:

$$\text{EBL Volume} = \text{NB Departure Vested Volume} \times \frac{\text{EB Approach Volume}}{\text{NB Approach Volume} + \text{EB Approach Volume} + \text{SB Approach Volume}}$$

5. The final peak-hour forecasted turning movement volumes were calculated by averaging the volumes obtained from both the analyses in Steps 3 and 4.

St. Johns Heritage Parkway

AM

Growth Rate		8923	2030 AADT		
Existing	SBL	SBR	WBR		
		73	192		
		28%	72%		
Entering		60%			
Exiting		40%			
2030 DHV		803			
2030 Entering		482			
2030 Exiting		321			
2030 SBL		128			
2030 SBR		193			
		Malabar WB		60%	
		Malabar EB		40%	
SJ Preserve Single Dwelling Units		Total AM Trips	AM In	AM Out	
620 homes			445	111	334
SJ Preserve Commercial (Supermarket)					
28400 SF			95	57	38
	153 Total AM Trips				
	92 Entering				
	61 Exiting		Exit to Garvey		49%
Add Future SBL		76	Exit to Malabar		51%
Add Future SBR		114			
Final 2050 SBL		204			
Final 2050 SBR		307			

PM

Growth Rate		8923	2030 AADT		
Existing	SBL	SBR	WBR		
		427	40		
		91%	9%		
Entering		40%			
Exiting		60%			
2030 DHV		803			
2030 Entering		321			
2030 Exiting		482			
2030 SBL		289			
2030 SBR		193			
		Malabar WB		40%	
		Malabar EB		60%	
SJ Preserve Single Dwelling Units		Total PM Trips	PM In	PM Out	
620 homes			586	369	217
SJ Preserve Commercial (Supermarket)					
28400 SF			229	117	112
	586 Total PM Trips				
	188 Entering				
	182 Exiting		Exit to SJHP		49%
Add Future SBL		101	Exit to Malabar		51%
Add Future SBR		67			
Final 2050 SBL		390			
Final 2050 SBR		260			

WISTERIA AVENE/ABILENE DRIVE GROWTH EXPLANATION

KRASSNER DRIVE/BENDING BRANCH LANE GROWTH EXPLANATION

Bending Branch Ln.

332 homes have been built, 97 homes still to be built

Land Use	Code	Quantity	Units	Daily Trips	AM Trips	AM Entering	AM Exiting	PM Trips	PM Entering	PM Exiting
Single Family Homes		210	97 DU		1011	74 0	19	56	99	62 37
Directionality	AM WB	AM EB	PM WB	PM EB						
	60%	40%	40%	60%						
	AM Entering from West	AM Entering from East	AM Exiting West	AM Exiting East	PM Entering from West	PM Entering from East	PM Exiting West	PM Exiting East		
	8	11	34	22	37	25	15	22		

HURLEY BOULEVARD GROWTH EXPLANATION

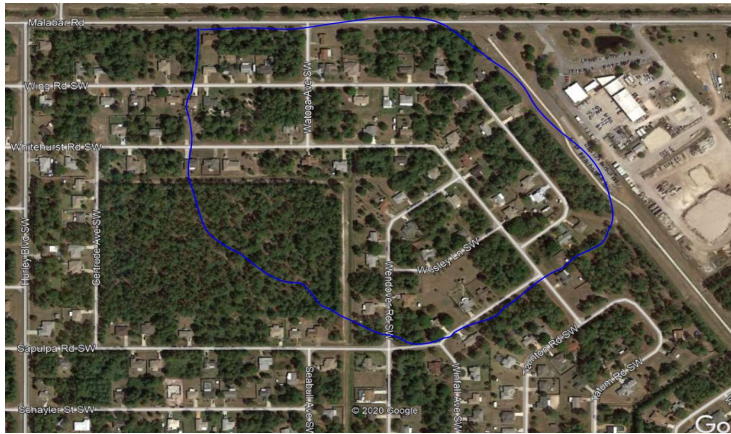
WATOGA AVENUE/AVERY SPRINGS GROWTH EXPLANATION

Avery Springs

Land Use	Code	Quantity	Units	Daily Trips	AM Trips	AM Entering	AM Exiting	PM Trips	PM Entering	PM Exiting		
Single Family Homes		210	140 DU	1417		104	26	78	140	88	52	
Estimated Homes (east side of Wisteria quadrant)												
	AM WB		PM WB	PM EB								
Directionality	AM Entering from West	55%	AM Entering from East	45%	AM Exiting West	45%	AM Exiting East	55%	PM Entering from West	PM Entering from East	PM Exiting West	PM Exiting East
		12		14		43		35	48	40	23	29

Watoga Ave.

Land Use	Code	Quantity	Units	Daily Trips	AM Trips	AM Entering	AM Exiting	PM Trips	PM Entering	PM Exiting		
Single Family Homes		210	48 DU		529	39	10	29	50	32	19	
			SUM		529	39	10	29	50	32	19	
	AM WB		AM EB	PM WB	PM EB							
Directionality	AM Entering from West	55%	AM Entering from East	45%	AM Exiting West	45%	AM Exiting East	55%	PM Entering from West	PM Entering from East	PM Exiting West	PM Exiting East
		5		6		16		13	18	14	9	10



GARVEY ROAD GROWTH EXPLANATION

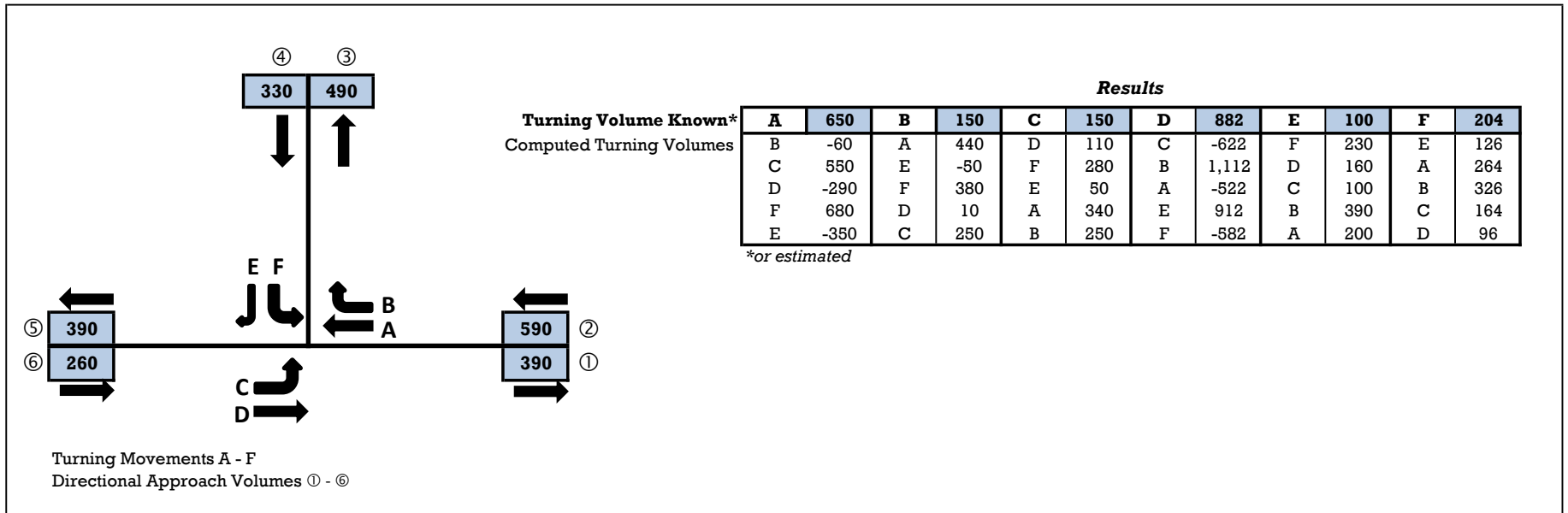
Garvey AM					Garvey AM				
Growth Rate					Growth Rate				
Existing	7290 2050 AADT	NBL	NBR	WBR	Existing	3743 2030 AADT	NBL	NBR	WBR
			14	122				14	122
			10%	90%				10%	90%
Entering			40%		Entering			40%	
Exiting			60%		Exiting			60%	
2050 DHV			656		2030 DHV			337	
2050 Entering			262		2030 Entering			135	
2050 Exiting			394		2030 Exiting			202	
2050 NBL			217		2030 NBL			111	
2050 NBR			177		2030 NBR			91	
Thrifty Produce			Malabar WB	55%	Thrifty Produce			Malabar WB	55%
40000 SF			Malabar EB	45%	40000 SF			Malabar EB	45%
	153 Total AM Trips					153 Total AM Trips			
	92 Entering					92 Entering			
	61 Exiting					61 Exiting			
Add Future NBL			40	Exit to Garvey	22%	Add Future NBL		40	Exit to Garvey
Add Future NBR			21	Exit to Malabar	78%	Add Future NBR		21	Exit to Malabar
Final 2050 NBL			257			Final 2050 NBL		151	
Final 2050 NBR			198			Final 2050 NBR		112	

Garvey PM					Garvey PM				
Growth Rate					Growth Rate				
Existing	7290 2050 AADT	NBL	NBR	WBR	Existing	3743 2030 AADT	NBL	NBR	WBR
			12	69				12	69
			15%	85%				15%	85%
Entering			60%		Entering			60%	
Exiting			40%		Exiting			40%	
2050 DHV			656		2030 DHV			337	
2050 Entering			394		2030 Entering			202	
2050 Exiting			262		2030 Exiting			135	
2050 NBL			118		2030 NBL			61	
2050 NBR			144		2030 NBR			74	
Thrifty Produce			Malabar WB	45%	Thrifty Produce			Malabar WB	45%
40000 SF			Malabar EB	55%	40000 SF			Malabar EB	55%
	370 Total PM Trips					370 Total PM Trips			
	188 Entering					188 Entering			
	182 Exiting					182 Exiting			
Add Future NBL			64	Exit to Garvey	22%	Add Future NBL		64	Exit to Garvey
Add Future NBR			78	Exit to Malabar	78%	Add Future NBR		78	Exit to Malabar
Final 2050 NBL			182			Final 2050 NBL		125	
Final 2050 NBR			222			Final 2050 NBR		152	

NCHRP TOOL

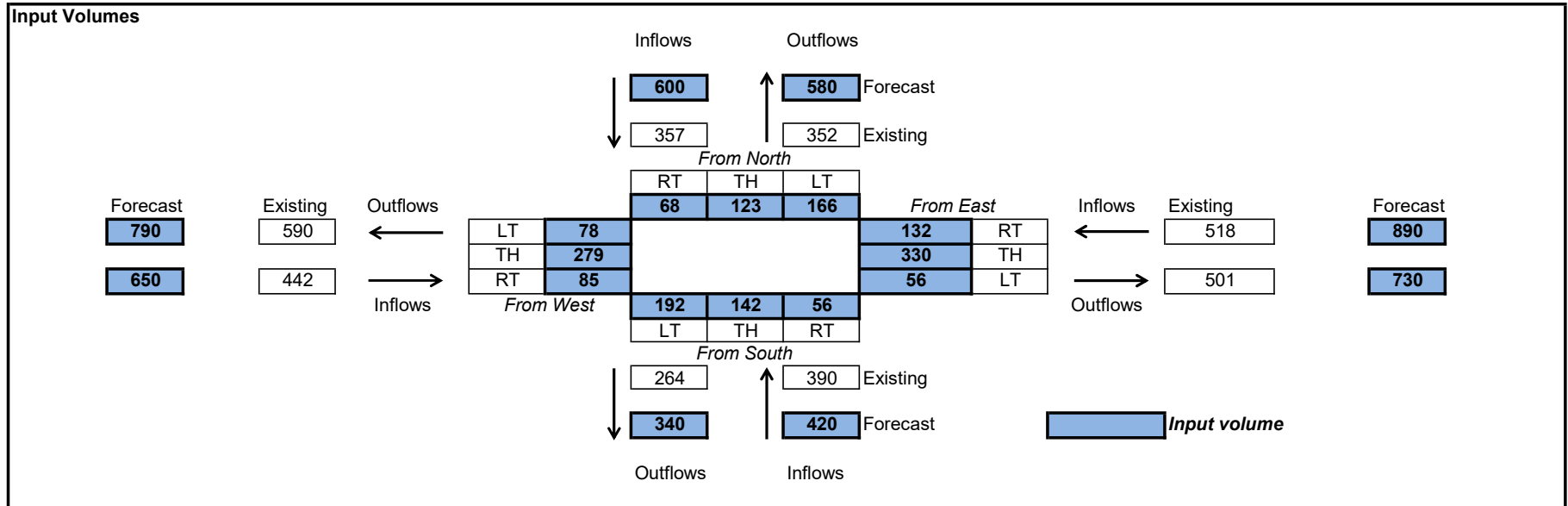
2030 AM ST. JOHNS HERITAGE PARKWAY NCHRP TOOL INPUTS AND OUTPUTS

"T" Intersection Directional Turning Movements



2030 AM JUPITER BOULEVARD NCHRP TOOL INPUTS AND OUTPUTS

Iterative Method Estimated Turning Movements



Initial Turning Movement Matrix, T_{ij}

	Forecasts	East Leg	North Leg	West Leg	South Leg	D_{jf}
East Leg	890	518	132	330	56	outflows, j
North Leg	600	357	166	68	123	
West Leg	650	442	279	78	85	
South Leg	420	390	56	142	192	
O_{if}		Oib				
inflows, i						

first row iteration

		D_{jf}^*			
		749	495	888	428
890	0	227	567	96	
600	279	0	114	207	
650	410	115	0	125	
420	60	153	207	0	

compare

	D_{jf}^*	D_{jf}	change
$j=1$	749	730	3.0%
$j=2$	495	580	-15.0%
$j=3$	888	790	12.0%
$j=4$	428	340	26.0%
Totals	2560	2440	

first column iteration

		730	580	790	340
846	0	266	504	76	

Iterative Method Estimated Turning Movements

537	272	0	101	164
634	400	135	0	99
421	58	179	184	0

Oif*

compare	<u>Oif*</u>	<u>Oif</u>	<u>change</u>
i=1	846	890	-5.00%
i=2	537	600	-11.00%
i=3	634	650	-2.00%
i=4	421	420	0.00%
Totals	2438	2560	

second row iteration

	772	597	827	364
890	0	280	530	80
600	304	0	113	183
650	410	138	0	101
420	58	179	184	0

compare	<u>Djf*</u>	<u>Djf</u>	<u>change</u>
j=1	772	730	6.00%
j=2	597	580	3.00%
j=3	827	790	5.00%
j=4	364	340	7.00%
Totals	2560	2440	

second column iteration

	730	580	790	340
853	0	272	506	75
566	287	0	108	171
616	388	134	0	94
405	55	174	176	0

compare	<u>Oif*</u>	<u>Oif</u>	<u>change</u>
i=1	853	890	-4.00%
i=2	566	600	-6.00%
i=3	616	650	-5.00%
i=4	405	420	-4.00%
Totals	2440	2560	

third row iteration

	770	605	825	358
890	0	284	528	78
600	304	0	114	181
650	409	141	0	99
420	57	180	183	0

	<u>Djf*</u>	<u>Djf</u>	<u>change</u>
j=1	770	730	5.00%
j=2	605	580	4.00%
j=3	825	790	4.00%

Iterative Method Estimated Turning Movements

j=4	358	340	5.00%
Totals	2558	2440	

third column iteration

	730	580	790	340
852	0	272	506	74
569	288	0	109	172
617	388	135	0	94
402	54	173	175	0

	<u>Oif*</u>	<u>Oif</u>	<u>change</u>
i=1	852	890	-4.00%
i=2	569	600	-5.00%
i=3	617	650	-5.00%
i=4	402	420	-4.00%
Totals	2440	2560	

fourth row iteration

	769	607	827	357
890	0	284	529	77
600	304	0	115	181
650	409	142	0	99
420	56	181	183	0

	<u>Djf*</u>	<u>Djf</u>	<u>change</u>
j=1	769	730	5.00%
j=2	607	580	5.00%
j=3	827	790	5.00%
j=4	357	340	5.00%
Totals	2560	2440	

fourth column iteration

	730	580	790	340
849	0	271	505	73
571	289	0	110	172
618	388	136	0	94
401	53	173	175	0

	<u>Oif*</u>	<u>Oif</u>	<u>change</u>
i=1	849	890	-5.00%
i=2	571	600	-5.00%
i=3	618	650	-5.00%
i=4	401	420	-5.00%
Totals	2439	2560	

fifth row iteration

768	608	828	357
-----	-----	-----	-----

Iterative Method Estimated Turning Movements

890	0	284	529	77
600	304	0	116	181
650	408	143	0	99
420	56	181	183	0

	Djf*	Djf	change
j=1	768	730	5.00%
j=2	608	580	5.00%
j=3	828	790	5.00%
j=4	357	340	5.00%
Totals	2561	2440	

	e	n	w	s	
fifth column iteration	730	580	790	340	
e	849	0	271	505	73
n	572	289	0	111	172
w	618	388	136	0	94
s	401	53	173	175	0

	Oif*	Oif	change
i=1	849	890	-5.00%
i=2	572	600	-5.00%
i=3	618	650	-5.00%
i=4	401	420	-5.00%
Totals			

	e	n	w	s
sixth row iteration	767	608	828	356
890	0	284	529	77
600	303	0	116	180
650	408	143	0	99
420	56	181	183	0

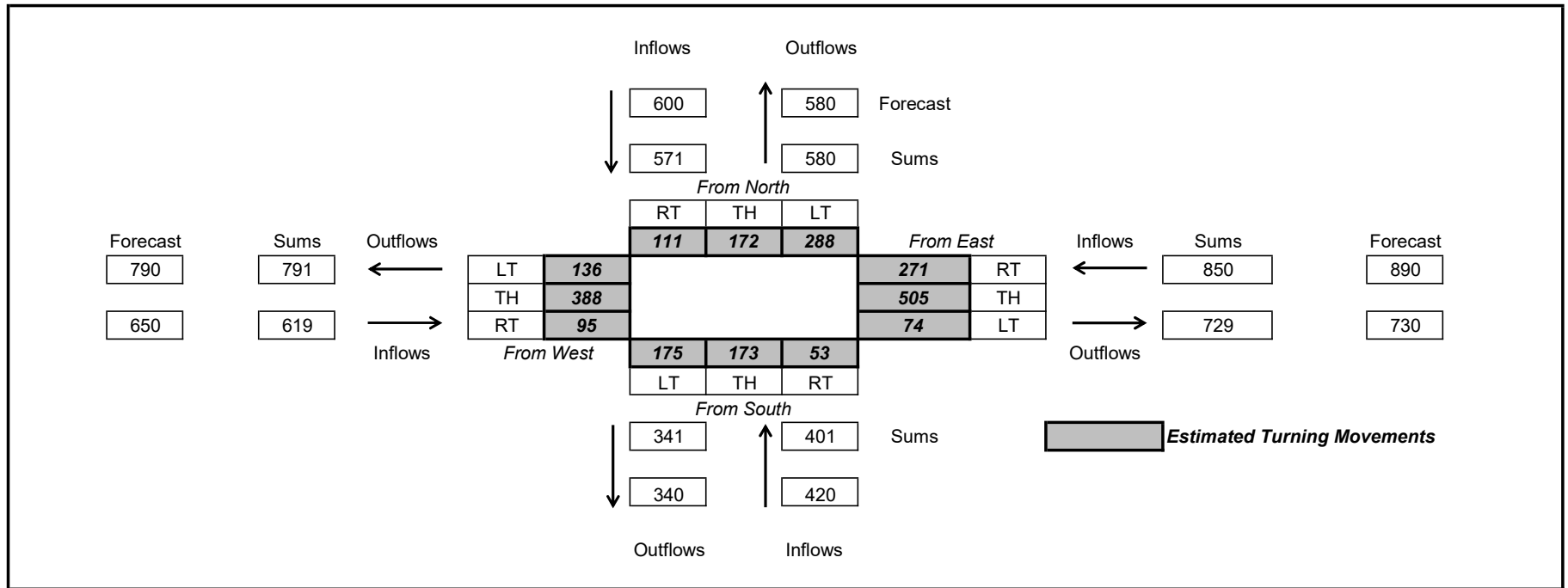
	Djf*	Djf	change
j=1	767	730	5.00%
j=2	608	580	5.00%
j=3	828	790	5.00%
j=4	356	340	5.00%
Totals	2559	2440	

	e	n	w	s	
sixth column iteration	730	580	790	340	
e	850	0	271	505	74
n	571	288	0	111	172
w	619	388	136	0	95
s	401	53	173	175	0

Iterative Method Estimated Turning Movements

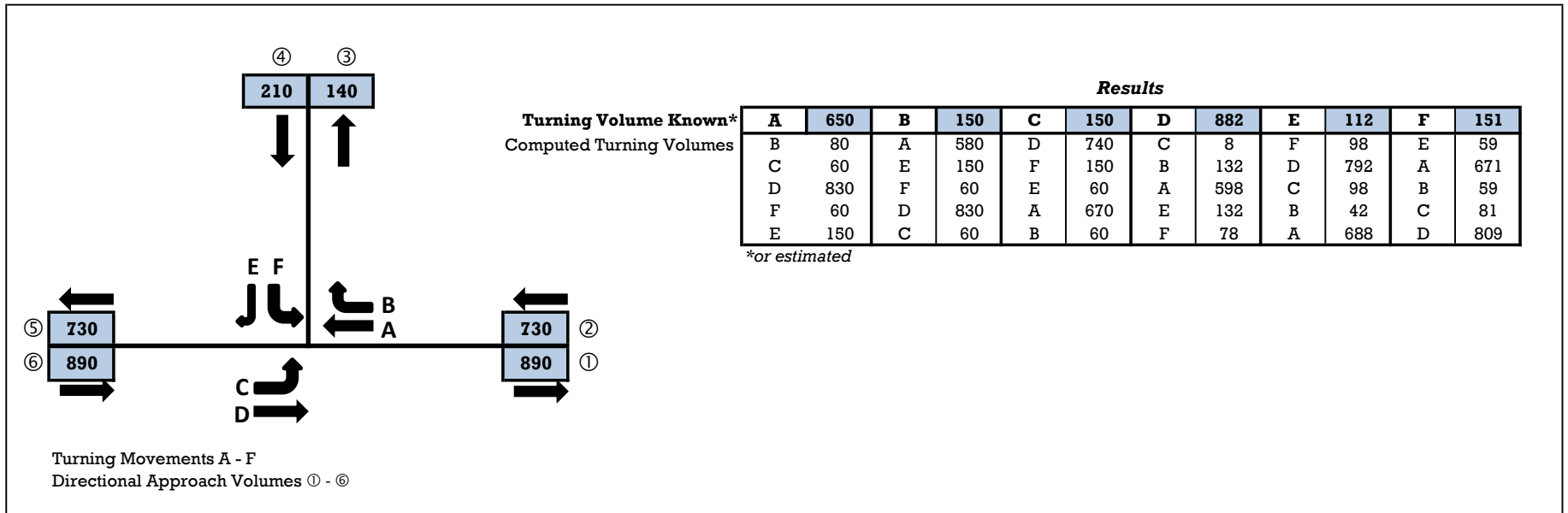
	Oif*	Oif	change
i=1	850	890	-4.00%
i=2	571	600	-5.00%
i=3	619	650	-5.00%
i=4	401	420	-5.00%
Totals			

Estimated Turning Movements



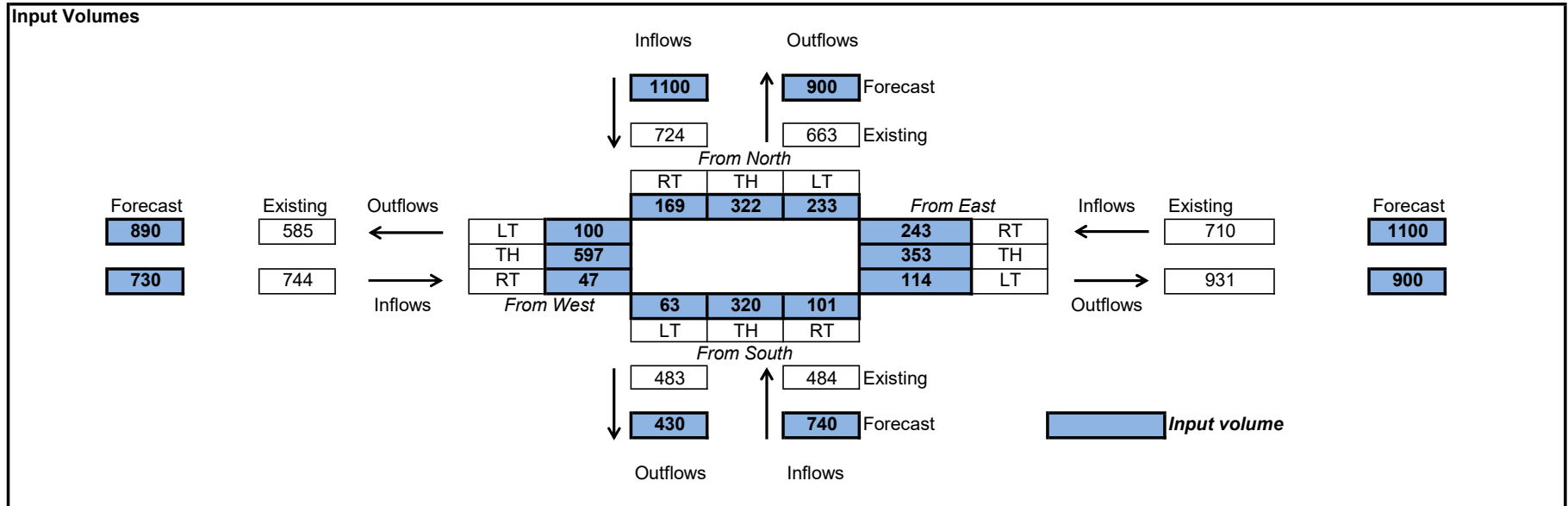
2030 AM GARVEY ROAD NCHRP TOOL INPUTS AND OUTPUTS

"T" Intersection Directional Turning Movements



2030 AM MINTON ROAD NCHRP TOOL INPUTS AND OUTPUTS

Iterative Method Estimated Turning Movements



Initial Turning Movement Matrix, T_{ij}

	Forecasts	East Leg	North Leg	West Leg	South Leg		
		900	900	890	430	D_{jf} outflows, j	
	Counts	931	663	585	483		
East Leg	1100	710	0	243	353		114
North Leg	1100	724	233	0	169		322
West Leg	730	744	597	100	0		47
South Leg	740	484	101	320	63	0	
	Oif	Oib					

inflows, i

first row iteration

		D_{jf}^*			
		1094	963	900	712
1100	0	376	547	177	
1100	354	0	257	489	
730	586	98	0	46	
740	154	489	96	0	

compare

	D_{jf}^*	D_{jf}	change
j=1	1094	900	22.0%
j=2	963	900	7.0%
j=3	900	890	1.0%
j=4	712	430	66.0%
Totals	3669	3120	

first column iteration

	900	900	890	430
999	0	351	541	107

Iterative Method Estimated Turning Movements

840	291	0	254	295
602	482	92	0	28
679	127	457	95	0

Oif*

compare	<u>Oif*</u>	<u>Oif</u>	<u>change</u>
i=1	999	1100	-9.00%
i=2	840	1100	-24.00%
i=3	602	730	-18.00%
i=4	679	740	-8.00%
Totals	3120	3670	

second row iteration

	1103	996	1033	538
1100	0	386	596	118
1100	381	0	333	386
730	584	112	0	34
740	138	498	104	0

compare	<u>Djf*</u>	<u>Djf</u>	<u>change</u>
j=1	1103	900	23.00%
j=2	996	900	11.00%
j=3	1033	890	16.00%
j=4	538	430	25.00%
Totals	3670	3120	

second column iteration

	900	900	890	430
956	0	349	513	94
907	311	0	287	309
605	477	101	0	27
653	113	450	90	0

compare	<u>Oif*</u>	<u>Oif</u>	<u>change</u>
i=1	956	1100	-13.00%
i=2	907	1100	-18.00%
i=3	605	730	-17.00%
i=4	653	740	-12.00%
Totals	3121	3670	

third row iteration

	1081	1034	1040	516
1100	0	402	590	108
1100	377	0	348	375
730	576	122	0	33
740	128	510	102	0

	<u>Djf*</u>	<u>Djf</u>	<u>change</u>
j=1	1081	900	20.00%
j=2	1034	900	15.00%
j=3	1040	890	17.00%

Iterative Method Estimated Turning Movements

j=4	516	430	20.00%
Totals	3671	3120	

third column iteration

	900	900	890	430
945	0	350	505	90
925	314	0	298	313
614	480	106	0	28
638	107	444	87	0

	<u>Oif*</u>	<u>Oif</u>	<u>change</u>
i=1	945	1100	-14.00%
i=2	925	1100	-16.00%
i=3	614	730	-16.00%
i=4	638	740	-14.00%
Totals	3122	3670	

fourth row iteration

	1068	1048	1043	510
1100	0	407	588	105
1100	373	0	354	372
730	571	126	0	33
740	124	515	101	0

	<u>Djf*</u>	<u>Djf</u>	<u>change</u>
j=1	1068	900	19.00%
j=2	1048	900	16.00%
j=3	1043	890	17.00%
j=4	510	430	19.00%
Totals	3669	3120	

fourth column iteration

	900	900	890	430
941	0	350	502	89
930	314	0	302	314
617	481	108	0	28
632	104	442	86	0

	<u>Oif*</u>	<u>Oif</u>	<u>change</u>
i=1	941	1100	-14.00%
i=2	930	1100	-15.00%
i=3	617	730	-15.00%
i=4	632	740	-15.00%
Totals	3120	3670	

fifth row iteration

1062	1055	1045	508
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Iterative Method Estimated Turning Movements

1100	0	409	587	104
1100	371	0	357	371
730	569	128	0	33
740	122	518	101	0

	Djf*	Djf	change
j=1	1062	900	18.00%
j=2	1055	900	17.00%
j=3	1045	890	17.00%
j=4	508	430	18.00%
Totals	3670	3120	

	e	n	w	s
fifth column iteration	900	900	890	430
e	937	0	349	500
n	932	314	0	304
w	619	482	109	0
s	631	103	442	86

	Oif*	Oif	change
i=1	937	1100	-15.00%
i=2	932	1100	-15.00%
i=3	619	730	-15.00%
i=4	631	740	-15.00%
Totals			

	e	n	w	s
sixth row iteration	1060	1057	1047	507
1100	0	410	587	103
1100	371	0	359	371
730	568	129	0	33
740	121	518	101	0

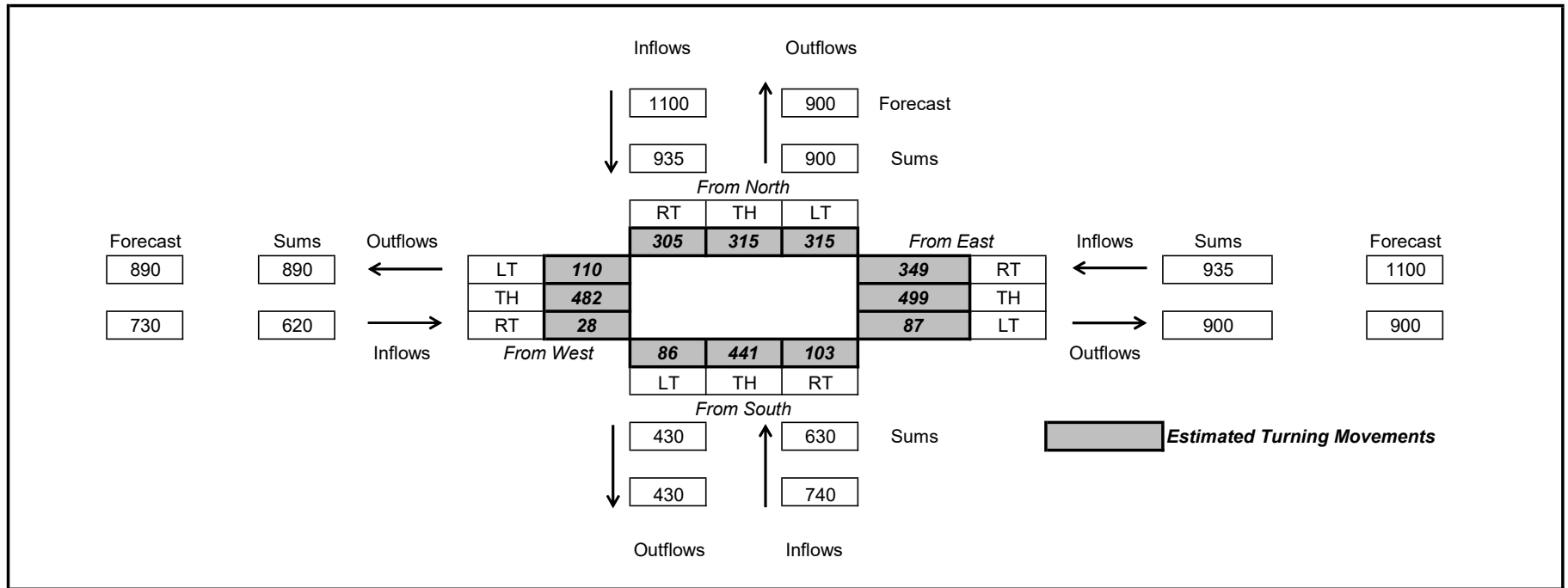
	Djf*	Djf	change
j=1	1060	900	18.00%
j=2	1057	900	17.00%
j=3	1047	890	18.00%
j=4	507	430	18.00%
Totals	3671	3120	

	e	n	w	s
sixth column iteration	900	900	890	430
e	935	0	349	499
n	935	315	0	305
w	620	482	110	0
s	630	103	441	86

Iterative Method Estimated Turning Movements

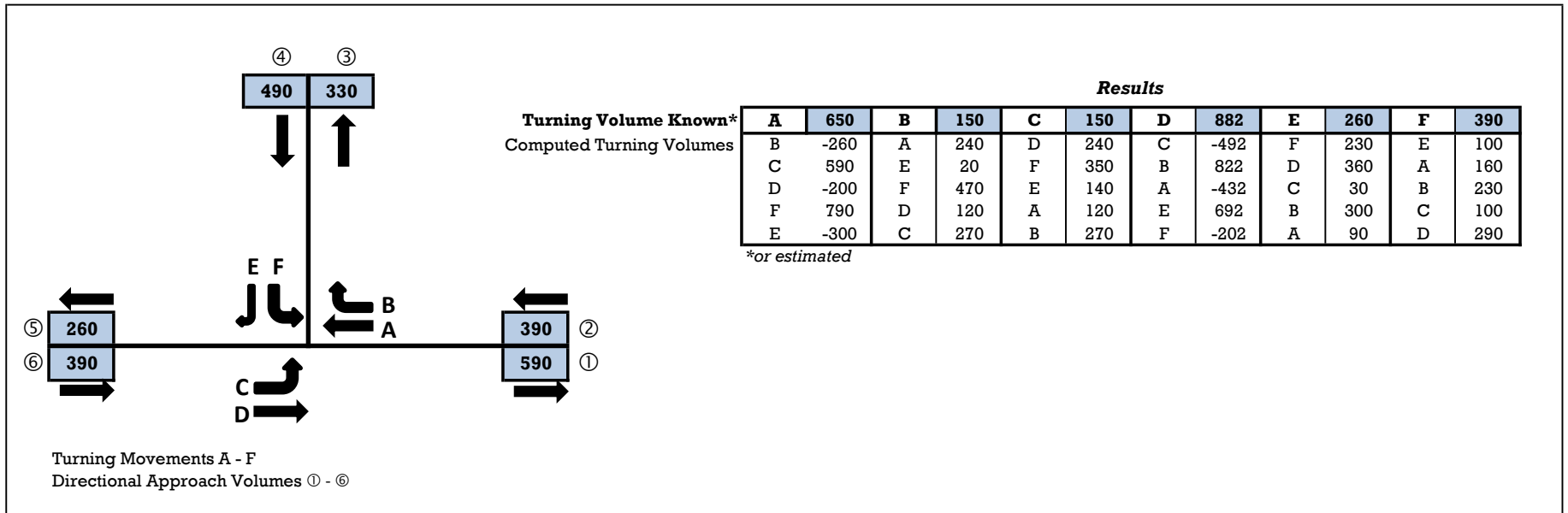
	Oif*	Oif	change
i=1	935	1100	-15.00%
i=2	935	1100	-15.00%
i=3	620	730	-15.00%
i=4	630	740	-15.00%
Totals			

Estimated Turning Movements



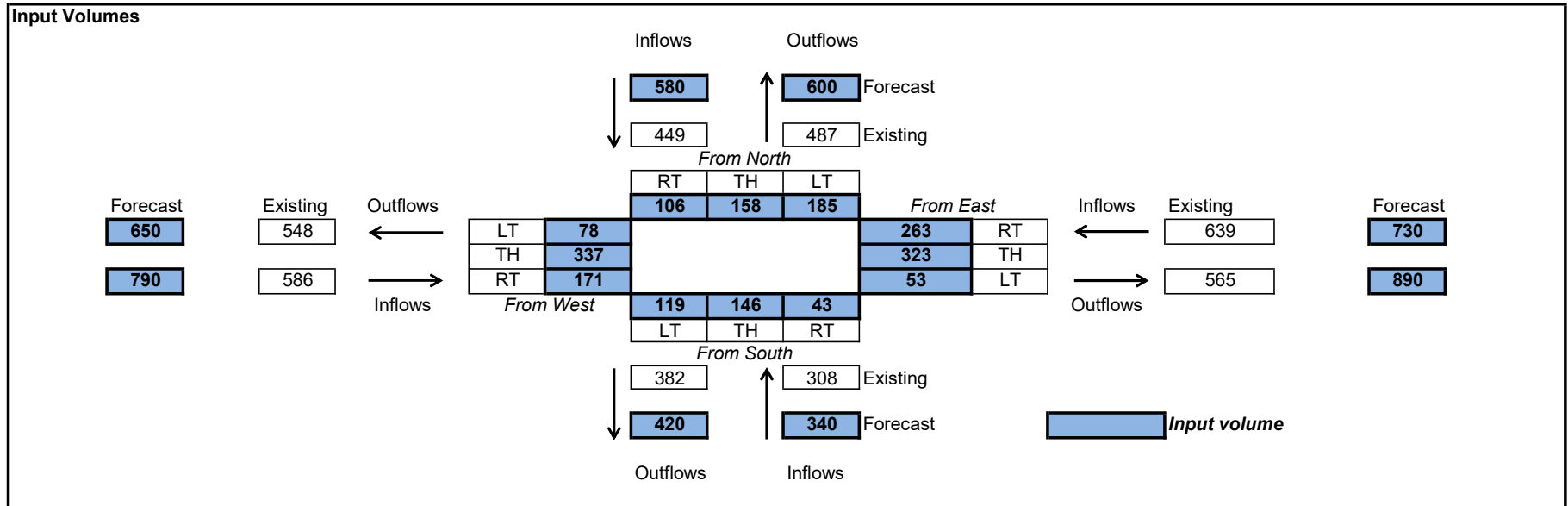
2030 PM ST. JOHNS HERITAGE PARKWAY NCHRP TOOL INPUTS AND OUTPUTS

"T" Intersection Directional Turning Movements



2030 PM JUPITER BOULEVARD NCHRP TOOL INPUTS AND OUTPUTS

Iterative Method Estimated Turning Movements



Initial Turning Movement Matrix, T_{ij}

	Forecasts	East Leg	North Leg	West Leg	South Leg	D_{jf}
Counts		890	600	650	420	outflows, j
East Leg	730	639	0	263	323	53
North Leg	580	449	185	0	106	158
West Leg	790	586	337	78	0	171
South Leg	340	308	43	146	119	0
O_{if}		Oib				
inflows, i						

first row iteration

	D_{jf}^*	740	566	637	496
730	0	300	369	61	
580	239	0	137	204	
790	454	105	0	231	
340	47	161	131	0	

compare

	D_{jf}^*	D_{jf}	change
j=1	740	890	-17.0%
j=2	566	600	-6.0%
j=3	637	650	-2.0%
j=4	496	420	18.0%
Totals	2439	2560	

first column iteration

	890	600	650	420
747	0	318	377	52

Iterative Method Estimated Turning Movements

600	287	0	140	173
853	546	111	0	196
362	57	171	134	0

Oif*

compare	<u>Oif*</u>	<u>Oif</u>	<u>change</u>
i=1	747	730	2.00%
i=2	600	580	3.00%
i=3	853	790	8.00%
i=4	362	340	6.00%
Totals	2562	2440	

second row iteration

	837	575	629	400
730	0	311	368	51
580	277	0	135	167
790	506	103	0	182
340	54	161	126	0

compare	<u>Djf*</u>	<u>Djf</u>	<u>change</u>
j=1	837	890	-6.00%
j=2	575	600	-4.00%
j=3	629	650	-3.00%
j=4	400	420	-5.00%
Totals	2441	2560	

second column iteration

	890	600	650	420
759	0	325	380	54
610	295	0	140	175
836	538	107	0	191
355	57	168	130	0

compare	<u>Oif*</u>	<u>Oif</u>	<u>change</u>
i=1	759	730	4.00%
i=2	610	580	5.00%
i=3	836	790	6.00%
i=4	355	340	4.00%
Totals	2560	2440	

third row iteration

	843	575	623	398
730	0	313	365	52
580	280	0	133	166
790	508	101	0	180
340	55	161	125	0

compare	<u>Djf*</u>	<u>Djf</u>	<u>change</u>
j=1	843	890	-5.00%
j=2	575	600	-4.00%
j=3	623	650	-4.00%

Iterative Method Estimated Turning Movements

j=4	398	420	-5.00%
Totals	2439	2560	

third column iteration

	890	600	650	420
763	0	327	381	55
610	296	0	139	175
831	536	105	0	190
356	58	168	130	0

	<u>Oif*</u>	<u>Oif</u>	<u>change</u>
i=1	763	730	5.00%
i=2	610	580	5.00%
i=3	831	790	5.00%
i=4	356	340	5.00%
Totals	2560	2440	

fourth row iteration

	846	573	621	400
730	0	313	365	53
580	281	0	132	166
790	510	100	0	181
340	55	160	124	0

	<u>Djf*</u>	<u>Djf</u>	<u>change</u>
j=1	846	890	-5.00%
j=2	573	600	-5.00%
j=3	621	650	-4.00%
j=4	400	420	-5.00%
Totals	2440	2560	

fourth column iteration

	890	600	650	420
766	0	328	382	56
608	296	0	138	174
832	537	105	0	190
356	58	168	130	0

	<u>Oif*</u>	<u>Oif</u>	<u>change</u>
i=1	766	730	5.00%
i=2	608	580	5.00%
i=3	832	790	5.00%
i=4	356	340	5.00%
Totals	2562	2440	

fifth row iteration

847	573	620	399
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Iterative Method Estimated Turning Movements

730	0	313	364	53
580	282	0	132	166
790	510	100	0	180
340	55	160	124	0

	Djf*	Djf	change
j=1	847	890	-5.00%
j=2	573	600	-5.00%
j=3	620	650	-5.00%
j=4	399	420	-5.00%
Totals	2439	2560	

	e	n	w	s
fifth column iteration	890	600	650	420
e	766	0	382	56
n	609	296	138	175
w	830	536	0	189
s	356	58	168	0

	Oif*	Oif	change
i=1	766	730	5.00%
i=2	609	580	5.00%
i=3	830	790	5.00%
i=4	356	340	5.00%
Totals			

	e	n	w	s
sixth row iteration	847	573	619	400
730	0	313	364	53
580	282	0	131	167
790	510	100	0	180
340	55	160	124	0

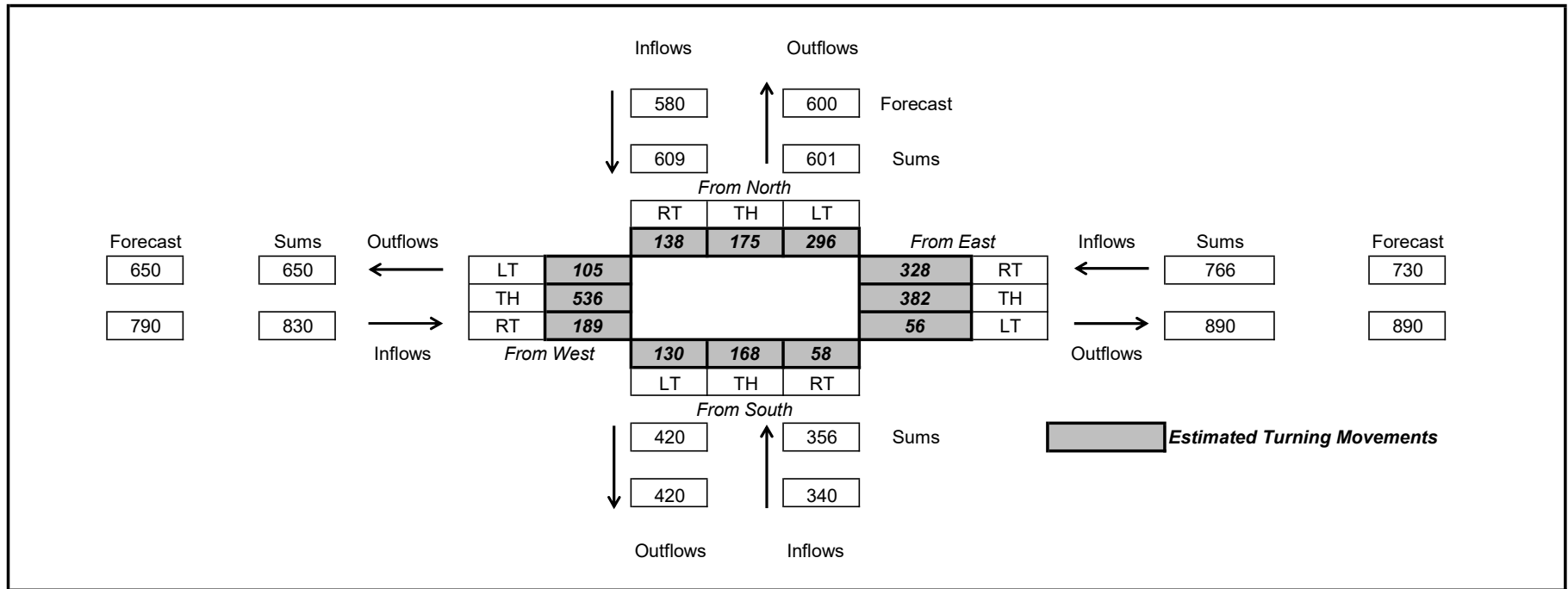
	Djf*	Djf	change
j=1	847	890	-5.00%
j=2	573	600	-5.00%
j=3	619	650	-5.00%
j=4	400	420	-5.00%
Totals	2439	2560	

	e	n	w	s
sixth column iteration	890	600	650	420
e	766	0	382	56
n	609	296	138	175
w	830	536	0	189
s	356	58	168	0

Iterative Method Estimated Turning Movements

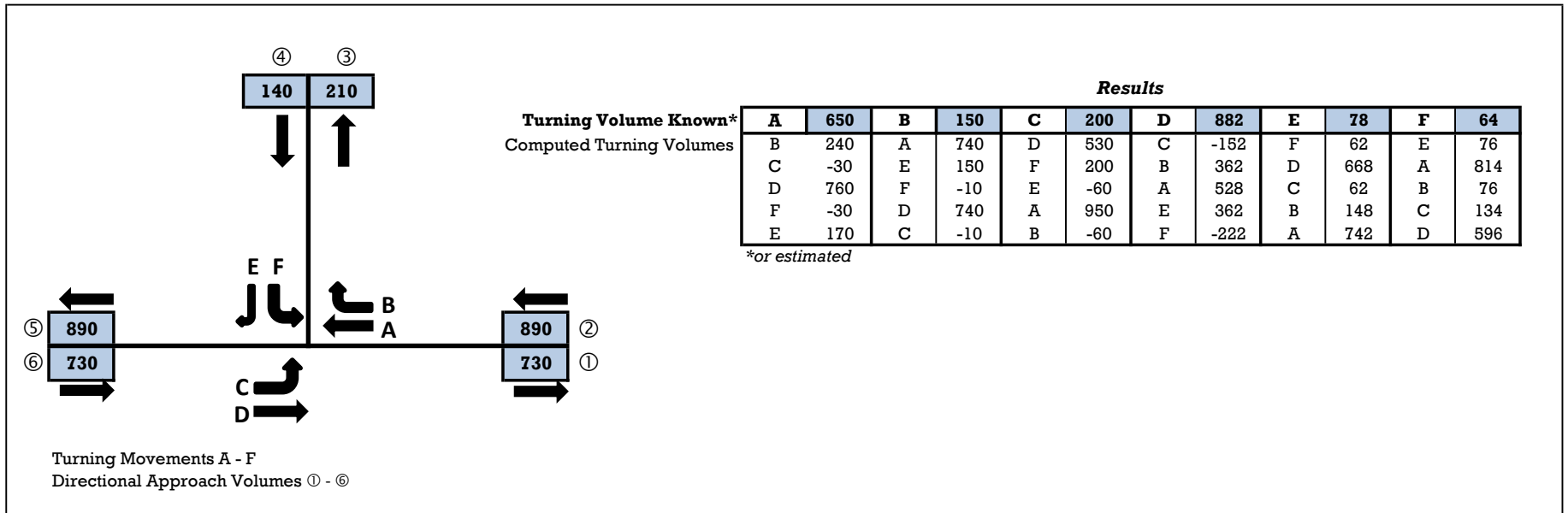
	Oif*	Oif	change
i=1	766	730	5.00%
i=2	609	580	5.00%
i=3	830	790	5.00%
i=4	356	340	5.00%
Totals			

Estimated Turning Movements



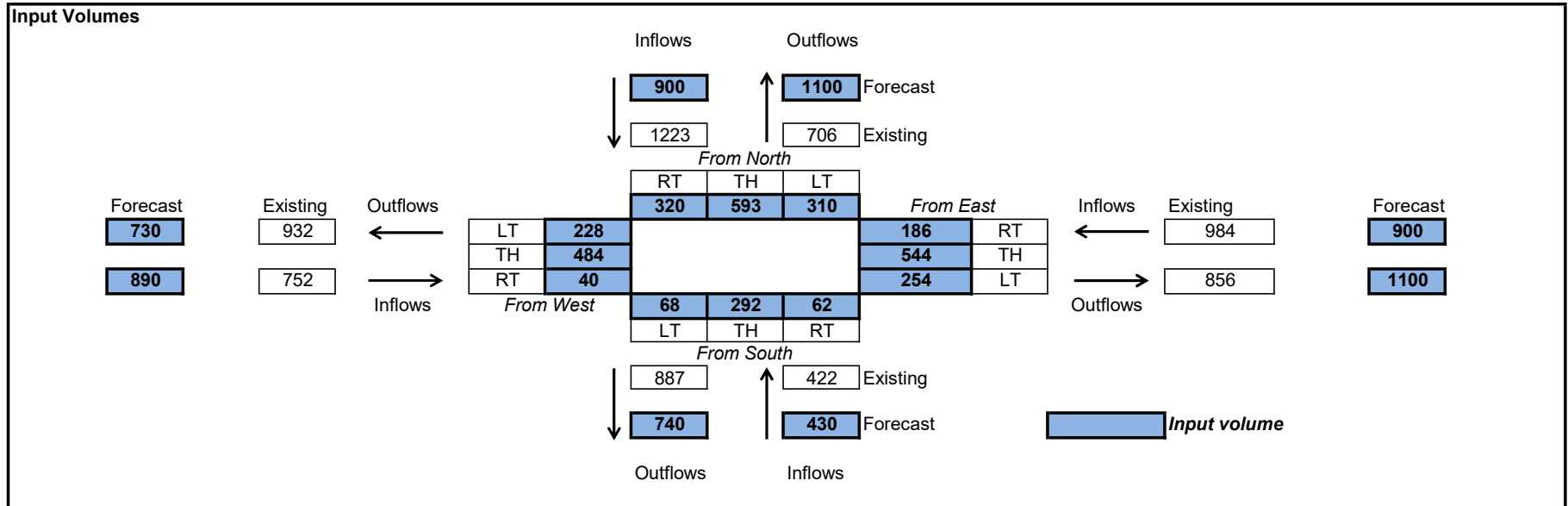
2030 PM GARVEY ROAD NCHRP TOOL INPUTS AND OUTPUTS

"T" Intersection Directional Turning Movements



2030 PM MINTON ROAD NCHRP TOOL INPUTS AND OUTPUTS

Iterative Method Estimated Turning Movements



Initial Turning Movement Matrix, T_{ij}

	Forecasts	East Leg	North Leg	West Leg	South Leg	D_{jf}	outflows, j
East Leg	900	856	706	932	887		
North Leg	900	984	0	186	544		
West Leg	890	1223	310	0	320		
South Leg	430	752	484	228	0		
Oif		422	62	292	68		
		Oib					
		inflows, i					

first row iteration

		D_{jf}^*			
		864	738	802	715
900		0	170	498	232
900		228	0	235	436
890		573	270	0	47
430		63	298	69	0

compare

	D_{jf}^*	D_{jf}	change
j=1	864	1100	-21.0%
j=2	738	1100	-33.0%
j=3	802	730	10.0%
j=4	715	740	-3.0%
Totals	3119	3670	

first column iteration

		1100	1100	730	740
946		0	253	453	240

Iterative Method Estimated Turning Movements

955	290	0	214	451
1181	730	402	0	49
587	80	444	63	0

Oif*

compare	<u>Oif*</u>	<u>Oif</u>	<u>change</u>
i=1	946	900	5.00%
i=2	955	900	6.00%
i=3	1181	890	33.00%
i=4	587	430	37.00%
Totals	3669	3120	

second row iteration

	882	869	679	690
900	0	241	431	228
900	273	0	202	425
890	550	303	0	37
430	59	325	46	0

compare	<u>Djf*</u>	<u>Djf</u>	<u>change</u>
j=1	882	1100	-20.00%
j=2	869	1100	-21.00%
j=3	679	730	-7.00%
j=4	690	740	-7.00%
Totals	3120	3670	

second column iteration

	1100	1100	730	740
1013	0	305	463	245
1013	340	0	217	456
1110	686	384	0	40
534	74	411	49	0

compare	<u>Oif*</u>	<u>Oif</u>	<u>change</u>
i=1	1013	900	13.00%
i=2	1013	900	13.00%
i=3	1110	890	25.00%
i=4	534	430	24.00%
Totals	3670	3120	

third row iteration

	912	910	643	655
900	0	271	411	218
900	302	0	193	405
890	550	308	0	32
430	60	331	39	0

compare	<u>Djf*</u>	<u>Djf</u>	<u>change</u>
j=1	912	1100	-17.00%
j=2	910	1100	-17.00%
j=3	643	730	-12.00%

Iterative Method Estimated Turning Movements

j=4	655	740	-11.00%
Totals	3120	3670	

third column iteration

	1100	1100	730	740
1041	0	328	467	246
1041	364	0	219	458
1071	663	372	0	36
516	72	400	44	0

	Oif*	Oif	change
i=1	1041	900	16.00%
i=2	1041	900	16.00%
i=3	1071	890	20.00%
i=4	516	430	20.00%
Totals	3669	3120	

fourth row iteration

	926	926	630	639
900	0	284	404	213
900	315	0	189	396
890	551	309	0	30
430	60	333	37	0

	Djf*	Djf	change
j=1	926	1100	-16.00%
j=2	926	1100	-16.00%
j=3	630	730	-14.00%
j=4	639	740	-14.00%
Totals	3121	3670	

fourth column iteration

	1100	1100	730	740
1052	0	337	468	247
1052	374	0	219	459
1057	655	367	0	35
510	71	396	43	0

	Oif*	Oif	change
i=1	1052	900	17.00%
i=2	1052	900	17.00%
i=3	1057	890	19.00%
i=4	510	430	19.00%
Totals	3671	3120	

fifth row iteration

	932	931	623	633
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Iterative Method Estimated Turning Movements

900	0	288	400	211
900	320	0	187	393
890	552	309	0	29
430	60	334	36	0

	Djf*	Djf	change
j=1	932	1100	-15.00%
j=2	931	1100	-15.00%
j=3	623	730	-15.00%
j=4	633	740	-14.00%
Totals	3119	3670	

	e	n	w	s
fifth column iteration	1100	1100	730	740
e	1056	0	469	247
n	1056	378	219	459
w	1051	652	0	34
s	508	71	395	42

	Oif*	Oif	change
i=1	1056	900	17.00%
i=2	1056	900	17.00%
i=3	1051	890	18.00%
i=4	508	430	18.00%
Totals			

	e	n	w	s
sixth row iteration	934	933	623	631
900	0	290	400	211
900	322	0	187	391
890	552	309	0	29
430	60	334	36	0

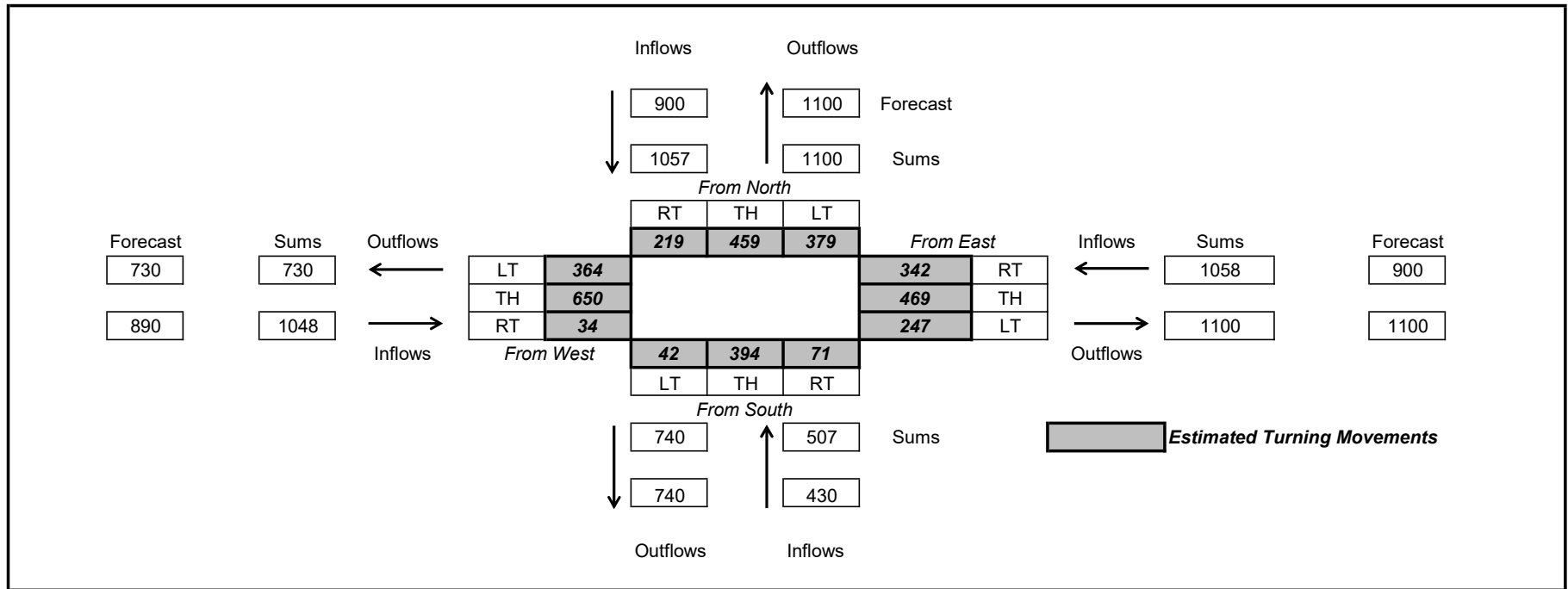
	Djf*	Djf	change
j=1	934	1100	-15.00%
j=2	933	1100	-15.00%
j=3	623	730	-15.00%
j=4	631	740	-15.00%
Totals	3121	3670	

	e	n	w	s
sixth column iteration	1100	1100	730	740
e	1058	0	469	247
n	1057	379	219	459
w	1048	650	0	34
s	507	71	394	42

Iterative Method Estimated Turning Movements

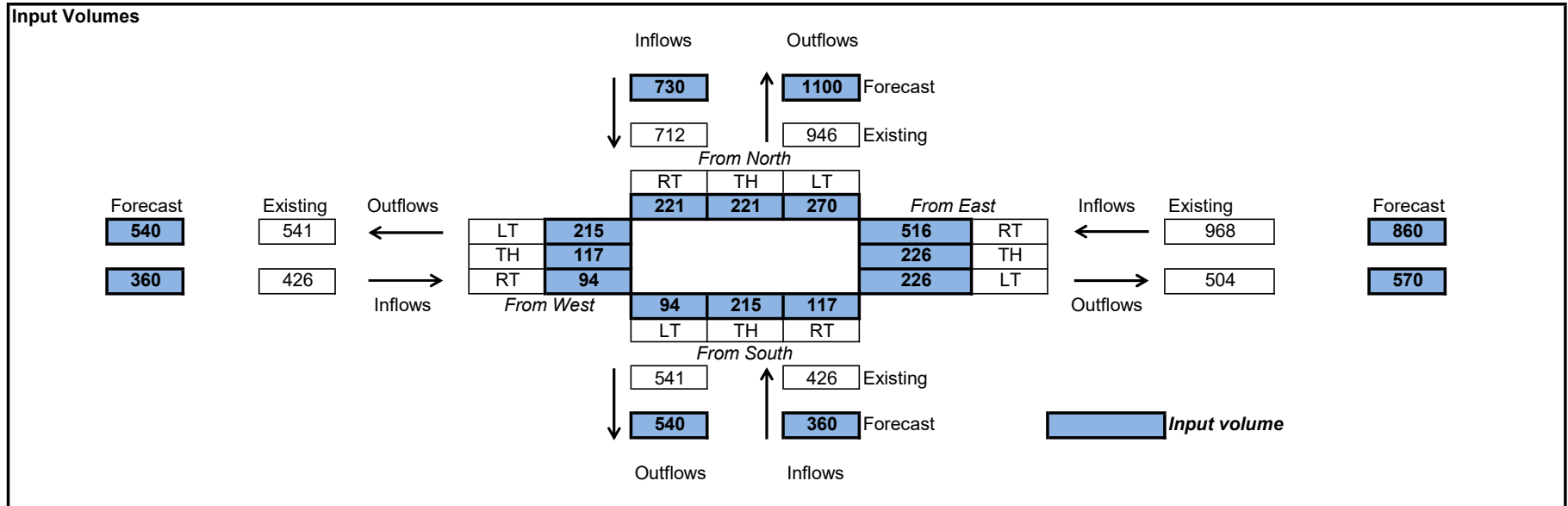
	Oif*	Oif	change
i=1	1058	900	18.00%
i=2	1057	900	17.00%
i=3	1048	890	18.00%
i=4	507	430	18.00%
Totals			

Estimated Turning Movements



2050 AM ST. JOHNS HERITAGE PARKWAY NCHRP TOOL INPUTS AND OUTPUTS

Iterative Method Estimated Turning Movements



Initial Turning Movement Matrix, T_{ij}

		East Leg	North Leg	West Leg	South Leg		
East Leg North Leg West Leg South Leg	Forecasts	570	1100	540	540	D_{jf} outflows, j	
	Counts	504	946	541	541		
	968	0	516	226	226		
	730	712	270	0	221		221
	360	426	117	215	0		94
360	426	117	215	94	0		
	O_{if}	O_{ib}					
	inflows, i						
first row iteration		D_{jf}^*					
		475	822	507	507		
	860	0	458	201	201		
	730	277	0	227	227		
	360	99	182	0	79		
	360	99	182	79	0		
compare							
		D_{jf}^*	D_{jf}	change			
j=1		475	570	-17.0%			
j=2		822	1100	-25.0%			
j=3		507	540	-6.0%			
j=4		507	540	-6.0%			
Totals		2311	2750				
first column iteration							
		570	1100	540	540		
	1041	0	613	214	214		

Iterative Method Estimated Turning Movements

816	332	0	242	242
447	119	244	0	84
447	119	244	84	0

Oif*

compare	<u>Oif*</u>	<u>Oif</u>	<u>change</u>
i=1	1041	860	21.00%
i=2	816	730	12.00%
i=3	447	360	24.00%
i=4	447	360	24.00%
Totals	2751	2310	

second row iteration

	489	900	461	461
860	0	506	177	177
730	297	0	216	216
360	96	197	0	68
360	96	197	68	0

compare	<u>Djf*</u>	<u>Djf</u>	<u>change</u>
j=1	489	570	-14.00%
j=2	900	1100	-18.00%
j=3	461	540	-15.00%
j=4	461	540	-15.00%
Totals	2311	2750	

second column iteration

	570	1100	540	540
1032	0	618	207	207
852	346	0	253	253
433	112	241	0	80
433	112	241	80	0

compare	<u>Oif*</u>	<u>Oif</u>	<u>change</u>
i=1	1032	860	20.00%
i=2	852	730	17.00%
i=3	433	360	20.00%
i=4	433	360	20.00%
Totals	2750	2310	

third row iteration

	482	915	457	457
860	0	515	173	173
730	296	0	217	217
360	93	200	0	67
360	93	200	67	0

compare	<u>Djf*</u>	<u>Djf</u>	<u>change</u>
j=1	482	570	-15.00%
j=2	915	1100	-17.00%
j=3	457	540	-15.00%

Iterative Method Estimated Turning Movements

j=4	457	540	-15.00%
Totals	2311	2750	

third column iteration

	570	1100	540	540
1027	0	619	204	204
862	350	0	256	256
429	110	240	0	79
429	110	240	79	0

	Oif*	Oif	change
i=1	1027	860	19.00%
i=2	862	730	18.00%
i=3	429	360	19.00%
i=4	429	360	19.00%
Totals	2747	2310	

fourth row iteration

	480	920	454	454
860	0	518	171	171
730	296	0	217	217
360	92	201	0	66
360	92	201	66	0

	Djf*	Djf	change
j=1	480	570	-16.00%
j=2	920	1100	-16.00%
j=3	454	540	-16.00%
j=4	454	540	-16.00%
Totals	2308	2750	

fourth column iteration

	570	1100	540	540
1025	0	619	203	203
868	352	0	258	258
428	109	240	0	79
428	109	240	79	0

	Oif*	Oif	change
i=1	1025	860	19.00%
i=2	868	730	19.00%
i=3	428	360	19.00%
i=4	428	360	19.00%
Totals	2749	2310	

fifth row iteration

480	923	453	453
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Iterative Method Estimated Turning Movements

860	0	519	170	170
730	296	0	217	217
360	92	202	0	66
360	92	202	66	0

	Djf*	Djf	change
j=1	480	570	-16.00%
j=2	923	1100	-16.00%
j=3	453	540	-16.00%
j=4	453	540	-16.00%
Totals	2309	2750	

	e	n	w	s
fifth column iteration	570	1100	540	540
e	1025	0	619	203
n	870	352	0	259
w	429	109	241	0
s	429	109	241	79

	Oif*	Oif	change
i=1	1025	860	19.00%
i=2	870	730	19.00%
i=3	429	360	19.00%
i=4	429	360	19.00%
Totals			

	e	n	w	s
sixth row iteration	477	923	453	453
860	0	519	170	170
730	295	0	217	217
360	91	202	0	66
360	91	202	66	0

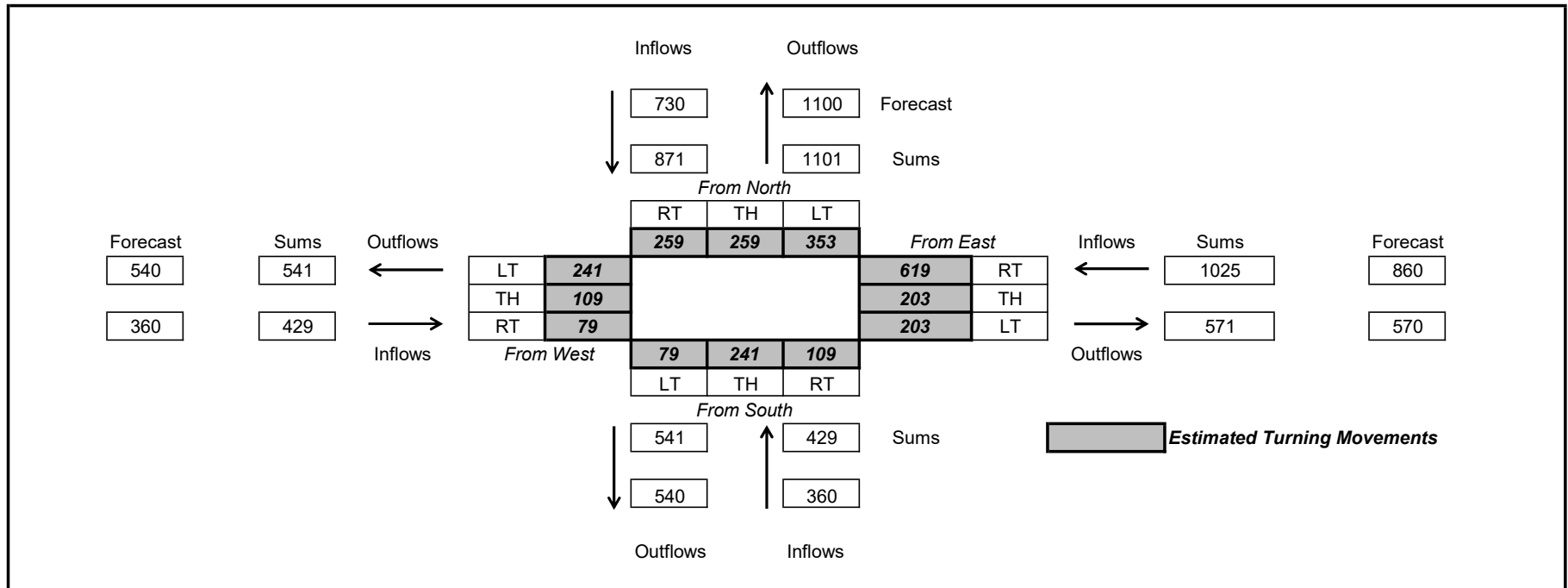
	Djf*	Djf	change
j=1	477	570	-16.00%
j=2	923	1100	-16.00%
j=3	453	540	-16.00%
j=4	453	540	-16.00%
Totals	2306	2750	

	e	n	w	s
sixth column iteration	570	1100	540	540
e	1025	0	619	203
n	871	353	0	259
w	429	109	241	0
s	429	109	241	79

Iterative Method Estimated Turning Movements

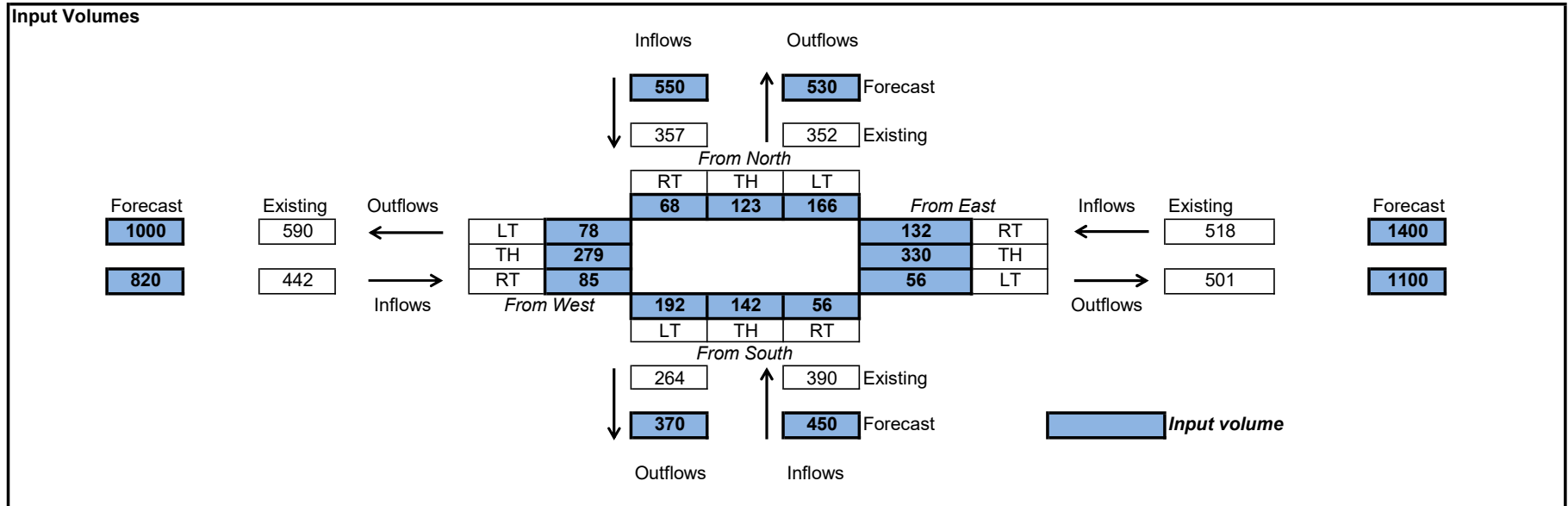
	Oif*	Oif	change
i=1	1025	860	19.00%
i=2	871	730	19.00%
i=3	429	360	19.00%
i=4	429	360	19.00%
Totals			

Estimated Turning Movements



2050 AM JUPITER BOULEVARD NCHRP TOOL INPUTS AND OUTPUTS

Iterative Method Estimated Turning Movements



Initial Turning Movement Matrix, T_{ij}

	Forecasts	East Leg	North Leg	West Leg	South Leg	D_{jf}
Counts		1100	530	1000	370	outflows, j
East Leg	1400	501	352	590	264	
North Leg	550	518	0	132	330	56
West Leg	820	357	166	0	68	123
South Leg	450	442	279	78	0	85
O_{if}		390	56	142	192	0
inflows, i		Oib				

first row iteration

	D_{jf}^*	839	666	1219	498
1400	0	357	892	151	
550	256	0	105	189	
820	518	145	0	158	
450	65	164	222	0	

compare

	D_{jf}^*	D_{jf}	change
j=1	839	1100	-24.0%
j=2	666	530	26.0%
j=3	1219	1000	22.0%
j=4	498	370	35.0%
Totals	3222	3000	

first column iteration

	1100	530	1000	370
1128	0	284	732	112

Iterative Method Estimated Turning Movements

562	336	0	86	140
911	679	115	0	117
398	85	131	182	0

Oif*

compare	<u>Oif*</u>	<u>Oif</u>	<u>change</u>
i=1	1128	1400	-19.00%
i=2	562	550	2.00%
i=3	911	820	11.00%
i=4	398	450	-12.00%
Totals	2999	3220	

second row iteration

	1036	604	1199	381
1400	0	352	909	139
550	329	0	84	137
820	611	104	0	105
450	96	148	206	0

compare	<u>Djf*</u>	<u>Djf</u>	<u>change</u>
j=1	1036	1100	-6.00%
j=2	604	530	14.00%
j=3	1199	1000	20.00%
j=4	381	370	3.00%
Totals	3220	3000	

second column iteration

	1100	530	1000	370
1202	0	309	758	135
552	349	0	70	133
842	649	91	0	102
404	102	130	172	0

compare	<u>Oif*</u>	<u>Oif</u>	<u>change</u>
i=1	1202	1400	-14.00%
i=2	552	550	0.00%
i=3	842	820	3.00%
i=4	404	450	-10.00%
Totals	3000	3220	

third row iteration

	1094	594	1145	389
1400	0	360	883	157
550	348	0	70	133
820	632	89	0	99
450	114	145	192	0

	<u>Djf*</u>	<u>Djf</u>	<u>change</u>
j=1	1094	1100	-1.00%
j=2	594	530	12.00%
j=3	1145	1000	15.00%

Iterative Method Estimated Turning Movements

j=4	389	370	5.00%
Totals	3222	3000	

third column iteration

	1100	530	1000	370
1241	0	321	771	149
538	350	0	61	127
808	635	79	0	94
412	115	129	168	0

	<u>Oif*</u>	<u>Oif</u>	<u>change</u>
i=1	1241	1400	-11.00%
i=2	538	550	-2.00%
i=3	808	820	-1.00%
i=4	412	450	-8.00%
Totals	2999	3220	

fourth row iteration

	1128	583	1115	393
1400	0	362	870	168
550	358	0	62	130
820	644	80	0	95
450	126	141	183	0

	<u>Djf*</u>	<u>Djf</u>	<u>change</u>
j=1	1128	1100	3.00%
j=2	583	530	10.00%
j=3	1115	1000	12.00%
j=4	393	370	6.00%
Totals	3219	3000	

fourth column iteration

	1100	530	1000	370
1267	0	329	780	158
527	349	0	56	122
790	628	73	0	89
415	123	128	164	0

	<u>Oif*</u>	<u>Oif</u>	<u>change</u>
i=1	1267	1400	-10.00%
i=2	527	550	-4.00%
i=3	790	820	-4.00%
i=4	415	450	-8.00%
Totals	2999	3220	

fifth row iteration

1149	579	1098	394
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Iterative Method Estimated Turning Movements

1400	0	364	862	175
550	364	0	58	127
820	652	76	0	92
450	133	139	178	0

	Djf*	Djf	change
j=1	1149	1100	4.00%
j=2	579	530	9.00%
j=3	1098	1000	10.00%
j=4	394	370	6.00%
Totals	3220	3000	

	e	n	w	s
fifth column iteration	1100	530	1000	370
e	1282	0	785	164
n	520	348	53	119
w	780	624	0	86
s	416	127	162	0

	Oif*	Oif	change
i=1	1282	1400	-8.00%
i=2	520	550	-5.00%
i=3	780	820	-5.00%
i=4	416	450	-8.00%
Totals			

	e	n	w	s
sixth row iteration	1161	575	1088	395
1400	0	364	857	179
550	368	0	56	126
820	656	74	0	90
450	137	137	175	0

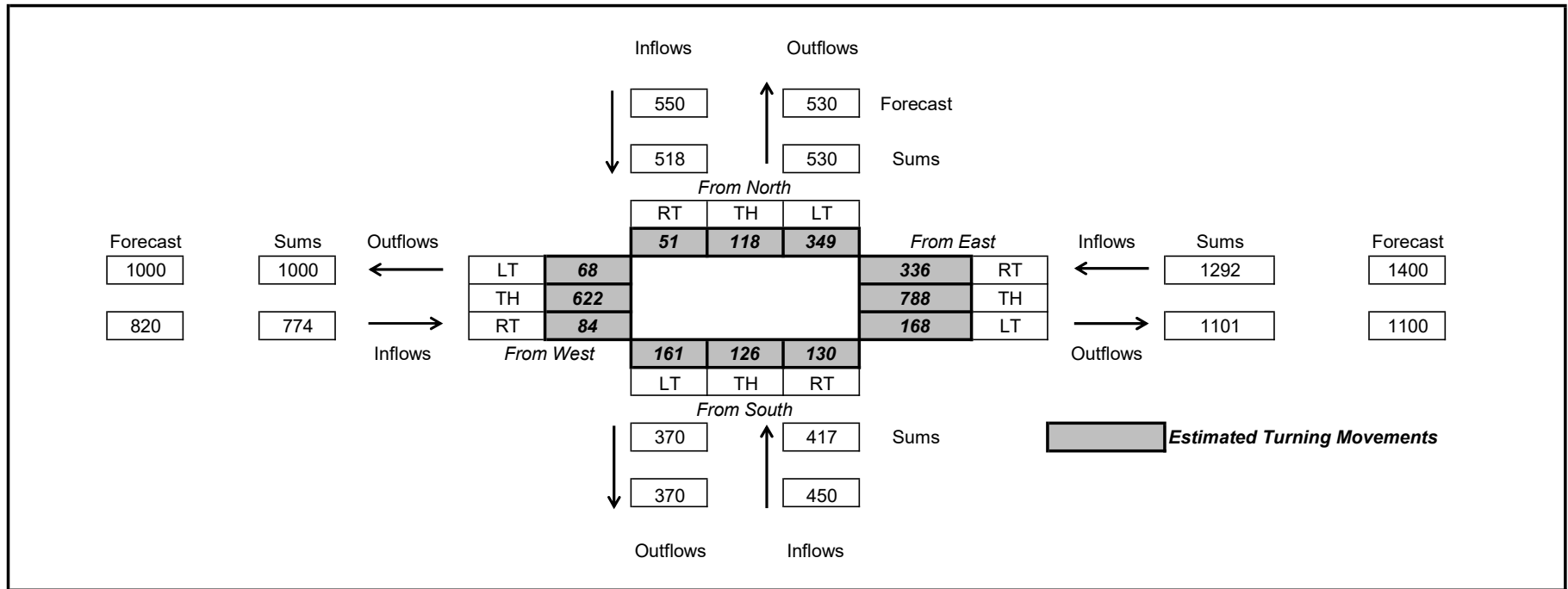
	Djf*	Djf	change
j=1	1161	1100	6.00%
j=2	575	530	8.00%
j=3	1088	1000	9.00%
j=4	395	370	7.00%
Totals	3219	3000	

	e	n	w	s
sixth column iteration	1100	530	1000	370
e	1292	0	788	168
n	518	349	51	118
w	774	622	0	84
s	417	130	161	0

Iterative Method Estimated Turning Movements

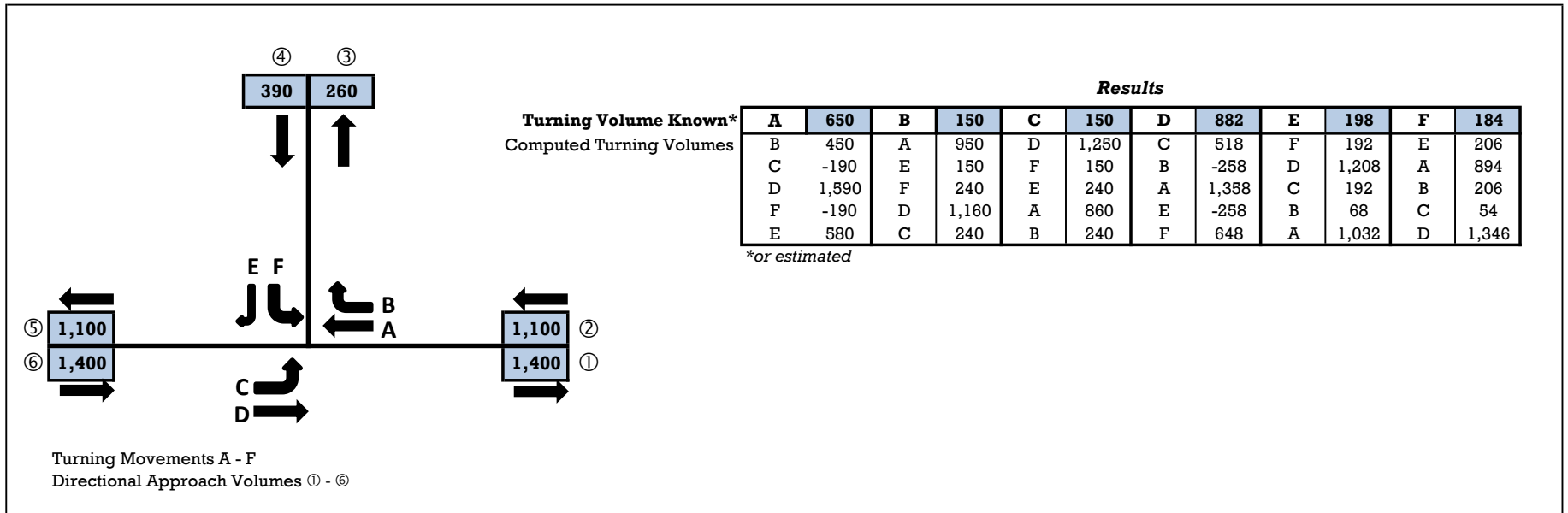
	Oif*	Oif	change
i=1	1292	1400	-8.00%
i=2	518	550	-6.00%
i=3	774	820	-6.00%
i=4	417	450	-7.00%
Totals			

Estimated Turning Movements



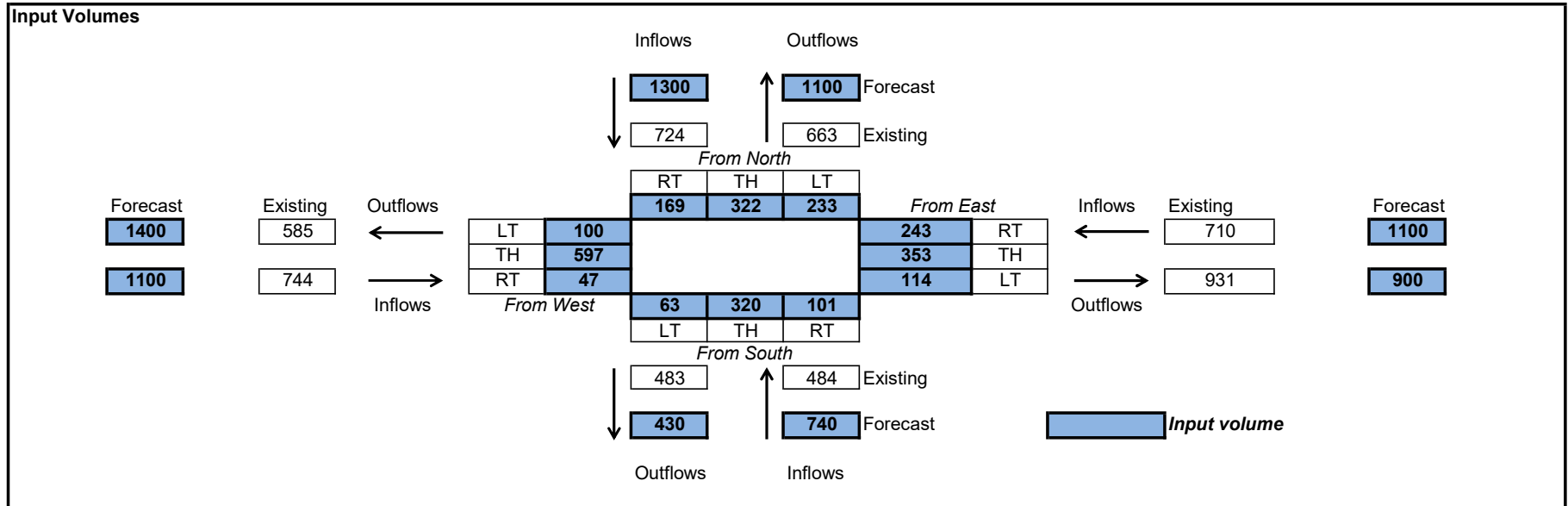
2050 AM GARVEY ROAD NCHRP TOOL INPUTS AND OUTPUTS

"T" Intersection Directional Turning Movements



2050 AM MINTON ROAD NCHRP TOOL INPUTS AND OUTPUTS

Iterative Method Estimated Turning Movements



Initial Turning Movement Matrix, T_{ij}

	Forecasts	East Leg	North Leg	West Leg	South Leg	
		900	1100	1400	430	D_{jf}
	Counts	931	663	585	483	D_{jb} outflows, j
East Leg	1100	710	0	243	353	114
North Leg	1300	724	233	0	169	322
West Leg	1100	744	597	100	0	47
South Leg	740	484	101	320	63	0
	O_{if}	O_{ib}				
	inflows, i					

first row iteration

		D_{jf}^*			
		1455	1013	946	824
1100		0	376	547	177
1300		418	0	303	578
1100		883	148	0	69
740		154	489	96	0

compare

	D_{jf}^*	D_{jf}	change
j=1	1455	900	62.0%
j=2	1013	1100	-8.0%
j=3	946	1400	-32.0%
j=4	824	430	92.0%
Totals	4238	3830	

first column iteration

		900	1100	1400	430
1310		0	408	810	92

Iterative Method Estimated Turning Movements

1009	259	0	448	302
743	546	161	0	36
768	95	531	142	0
Oif*				

compare	<u>Oif*</u>	<u>Oif</u>	<u>change</u>
i=1	1310	1100	19.00%
i=2	1009	1300	-22.00%
i=3	743	1100	-32.00%
i=4	768	740	4.00%
Totals	3830	4240	

second row iteration	1234	1093	1394	519
1100	0	343	680	77
1300	334	0	577	389
1100	808	238	0	53
740	92	512	137	0

compare	<u>Djf*</u>	<u>Djf</u>	<u>change</u>
j=1	1234	900	37.00%
j=2	1093	1100	-1.00%
j=3	1394	1400	0.00%
j=4	519	430	21.00%
Totals	4240	3830	

second column iteration	900	1100	1400	430
1092	0	345	683	64
1145	244	0	579	322
873	589	240	0	44
720	67	515	138	0

compare	<u>Oif*</u>	<u>Oif</u>	<u>change</u>
i=1	1092	1100	-1.00%
i=2	1145	1300	-12.00%
i=3	873	1100	-21.00%
i=4	720	740	-3.00%
Totals	3830	4240	

third row iteration	1088	1179	1487	485
1100	0	348	688	64
1300	277	0	657	366
1100	742	302	0	55
740	69	529	142	0

	<u>Djf*</u>	<u>Djf</u>	<u>change</u>
j=1	1088	900	21.00%
j=2	1179	1100	7.00%
j=3	1487	1400	6.00%

Iterative Method Estimated Turning Movements

j=4	485	430	13.00%
Totals	4239	3830	

third column iteration

	900	1100	1400	430
1030	0	325	648	57
1172	229	0	619	324
945	614	282	0	49
685	57	494	134	0

	<u>Oif*</u>	<u>Oif</u>	<u>change</u>
i=1	1030	1100	-6.00%
i=2	1172	1300	-10.00%
i=3	945	1100	-14.00%
i=4	685	740	-7.00%
Totals	3832	4240	

fourth row iteration

	1031	1209	1524	477
1100	0	347	692	61
1300	254	0	687	359
1100	715	328	0	57
740	62	534	145	0

	<u>Djf*</u>	<u>Djf</u>	<u>change</u>
j=1	1031	900	15.00%
j=2	1209	1100	10.00%
j=3	1524	1400	9.00%
j=4	477	430	11.00%
Totals	4241	3830	

fourth column iteration

	900	1100	1400	430
1007	0	316	636	55
1177	222	0	631	324
973	624	298	0	51
673	54	486	133	0

	<u>Oif*</u>	<u>Oif</u>	<u>change</u>
i=1	1007	1100	-8.00%
i=2	1177	1300	-9.00%
i=3	973	1100	-12.00%
i=4	673	740	-9.00%
Totals	3830	4240	

fifth row iteration

1009	1216	1538	476
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Iterative Method Estimated Turning Movements

1100	0	345	695	60
1300	245	0	697	358
1100	705	337	0	58
740	59	534	146	0

	Djf*	Djf	change
j=1	1009	900	12.00%
j=2	1216	1100	11.00%
j=3	1538	1400	10.00%
j=4	476	430	11.00%
Totals	4239	3830	

	e	n	w	s
fifth column iteration	900	1100	1400	430
e	999	0	633	54
n	1176	219	634	323
w	986	629	0	52
s	669	53	483	133

	Oif*	Oif	change
i=1	999	1100	-9.00%
i=2	1176	1300	-10.00%
i=3	986	1100	-10.00%
i=4	669	740	-10.00%
Totals			

	e	n	w	s
sixth row iteration	1003	1218	1545	474
1100	0	344	697	59
1300	242	0	701	357
1100	702	340	0	58
740	59	534	147	0

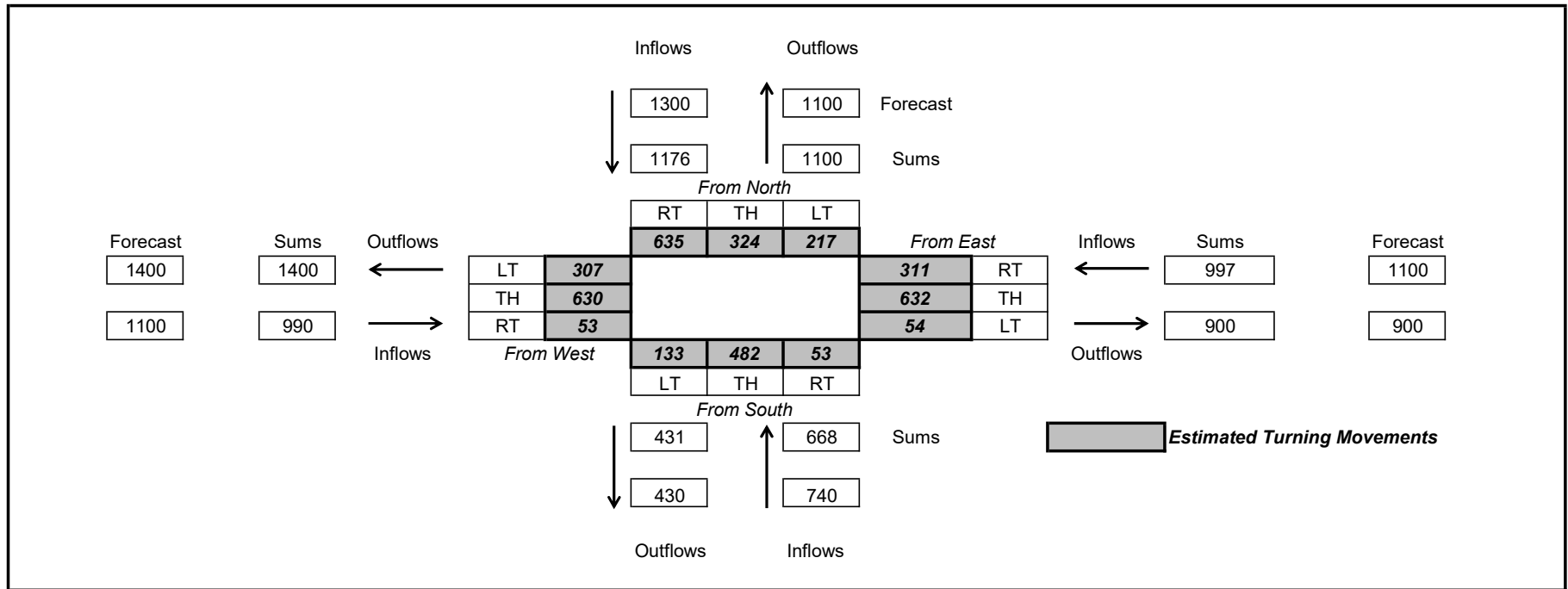
	Djf*	Djf	change
j=1	1003	900	11.00%
j=2	1218	1100	11.00%
j=3	1545	1400	10.00%
j=4	474	430	10.00%
Totals	4240	3830	

	e	n	w	s
sixth column iteration	900	1100	1400	430
e	997	0	632	54
n	1176	217	635	324
w	990	630	0	53
s	668	53	482	133

Iterative Method Estimated Turning Movements

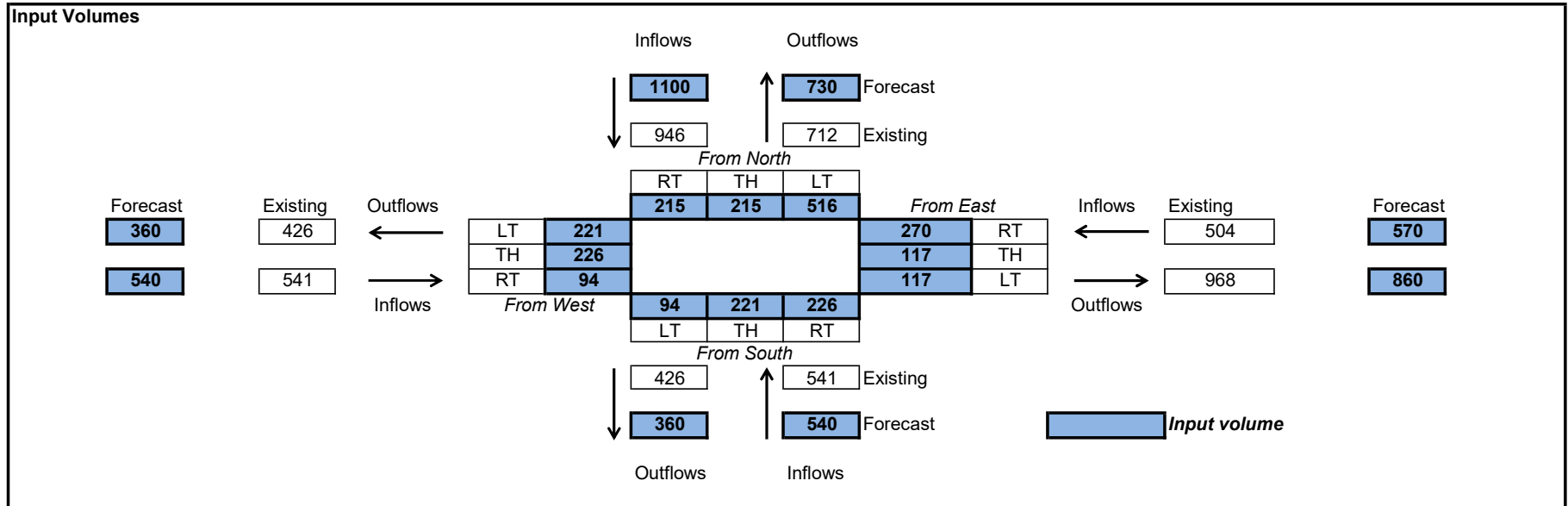
	Oif*	Oif	change
i=1	997	1100	-9.00%
i=2	1176	1300	-10.00%
i=3	990	1100	-10.00%
i=4	668	740	-10.00%
Totals			

Estimated Turning Movements



2050 PM ST. JOHNS HERITAGE PARKWAY NCHRP TOOL INPUTS AND OUTPUTS

Iterative Method Estimated Turning Movements



Initial Turning Movement Matrix, T_{ij}

	Forecasts	East Leg	North Leg	West Leg	South Leg	D_{jf}
Counts		968	712	426	426	outflows, j
East Leg	570	504	0	270	117	117
North Leg	1100	946	516	0	215	215
West Leg	540	541	226	221	0	94
South Leg	540	541	226	221	94	0
O_{if}		O_{ib}				
		inflows, i				

		D_{jf}^*			
first row iteration		1052	747	476	476
	570	0	305	132	132
	1100	600	0	250	250
	540	226	221	0	94
	540	226	221	94	0

		D_{if}^*	D_{if}	change
j=1		1052	860	22.0%
j=2		747	730	2.0%
j=3		476	360	32.0%
j=4		476	360	32.0%
Totals		2751	2310	

		860	730	360	360
first column iteration	498	0	298	100	100

Iterative Method Estimated Turning Movements

868	490	0	189	189
472	185	216	0	71
472	185	216	71	0

Oif*

compare	<u>Oif*</u>	<u>Oif</u>	<u>change</u>
i=1	498	570	-13.00%
i=2	868	1100	-21.00%
i=3	472	540	-13.00%
i=4	472	540	-13.00%
Totals	2310	2750	

second row iteration

	1045	835	435	435
570	0	341	114	114
1100	621	0	240	240
540	212	247	0	81
540	212	247	81	0

compare	<u>Djf*</u>	<u>Djf</u>	<u>change</u>
j=1	1045	860	22.00%
j=2	835	730	14.00%
j=3	435	360	21.00%
j=4	435	360	21.00%
Totals	2750	2310	

second column iteration

	860	730	360	360
486	0	298	94	94
909	511	0	199	199
457	174	216	0	67
457	174	216	67	0

compare	<u>Oif*</u>	<u>Oif</u>	<u>change</u>
i=1	486	570	-15.00%
i=2	909	1100	-17.00%
i=3	457	540	-15.00%
i=4	457	540	-15.00%
Totals	2309	2750	

third row iteration

	1030	860	430	430
570	0	350	110	110
1100	618	0	241	241
540	206	255	0	79
540	206	255	79	0

	<u>Djf*</u>	<u>Djf</u>	<u>change</u>
j=1	1030	860	20.00%
j=2	860	730	18.00%
j=3	430	360	19.00%

Iterative Method Estimated Turning Movements

j=4	430	360	19.00%
Totals	2750	2310	

third column iteration

	860	730	360	360
481	0	297	92	92
920	516	0	202	202
454	172	216	0	66
454	172	216	66	0

	Oif*	Oif	change
i=1	481	570	-16.00%
i=2	920	1100	-16.00%
i=3	454	540	-16.00%
i=4	454	540	-16.00%
Totals	2309	2750	

fourth row iteration

	1027	866	430	430
570	0	352	109	109
1100	617	0	242	242
540	205	257	0	79
540	205	257	79	0

	Djf*	Djf	change
j=1	1027	860	19.00%
j=2	866	730	19.00%
j=3	430	360	19.00%
j=4	430	360	19.00%
Totals	2753	2310	

fourth column iteration

	860	730	360	360
479	0	297	91	91
923	517	0	203	203
455	172	217	0	66
455	172	217	66	0

	Oif*	Oif	change
i=1	479	570	-16.00%
i=2	923	1100	-16.00%
i=3	455	540	-16.00%
i=4	455	540	-16.00%
Totals	2312	2750	

fifth row iteration

1024	869	428	428
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Iterative Method Estimated Turning Movements

570	0	353	108	108
1100	616	0	242	242
540	204	258	0	78
540	204	258	78	0

	Djf*	Djf	change
j=1	1024	860	19.00%
j=2	869	730	19.00%
j=3	428	360	19.00%
j=4	428	360	19.00%
Totals	2749	2310	

	e	n	w	s
fifth column iteration	860	730	360	360
e	479	0	297	91
n	925	517	0	204
w	454	171	217	0
s	454	171	217	66

	Oif*	Oif	change
i=1	479	570	-16.00%
i=2	925	1100	-16.00%
i=3	454	540	-16.00%
i=4	454	540	-16.00%
Totals			

	e	n	w	s
sixth row iteration	1021	869	430	430
570	0	353	108	108
1100	615	0	243	243
540	203	258	0	79
540	203	258	79	0

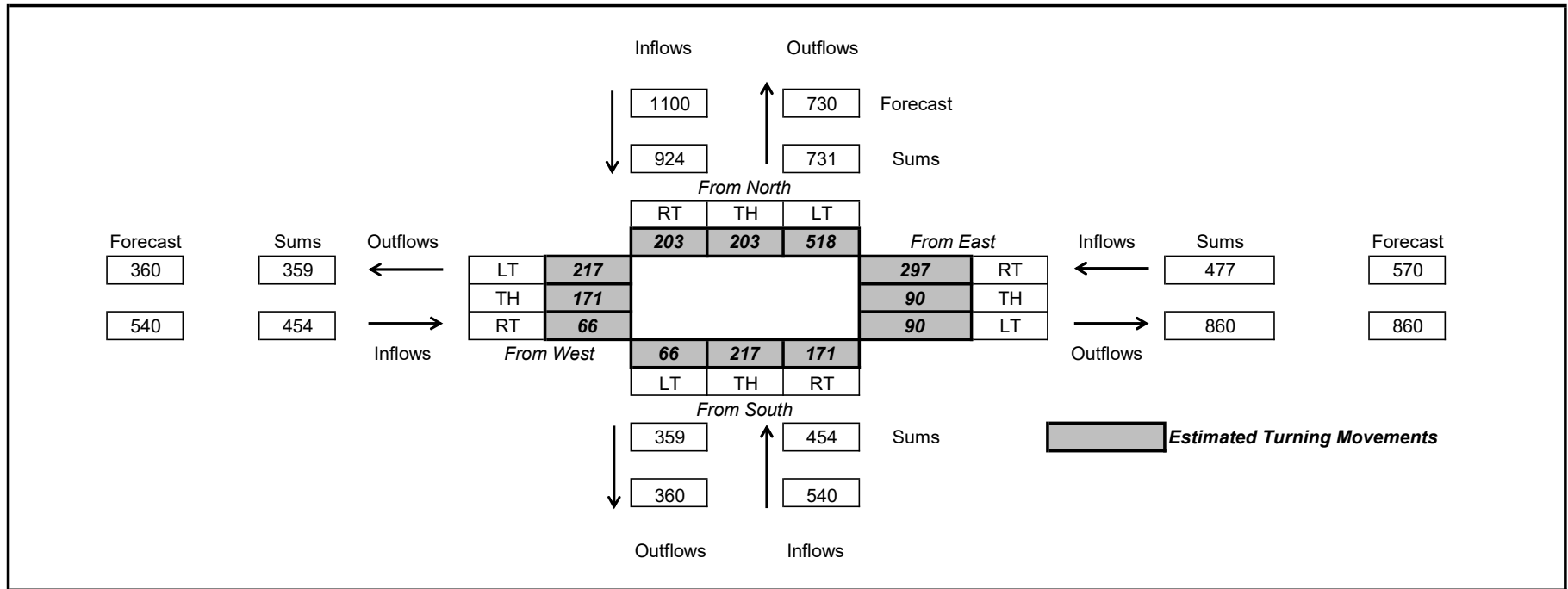
	Djf*	Djf	change
j=1	1021	860	19.00%
j=2	869	730	19.00%
j=3	430	360	19.00%
j=4	430	360	19.00%
Totals	2750	2310	

	e	n	w	s
sixth column iteration	860	730	360	360
e	477	0	297	90
n	924	518	0	203
w	454	171	217	0
s	454	171	217	66

Iterative Method Estimated Turning Movements

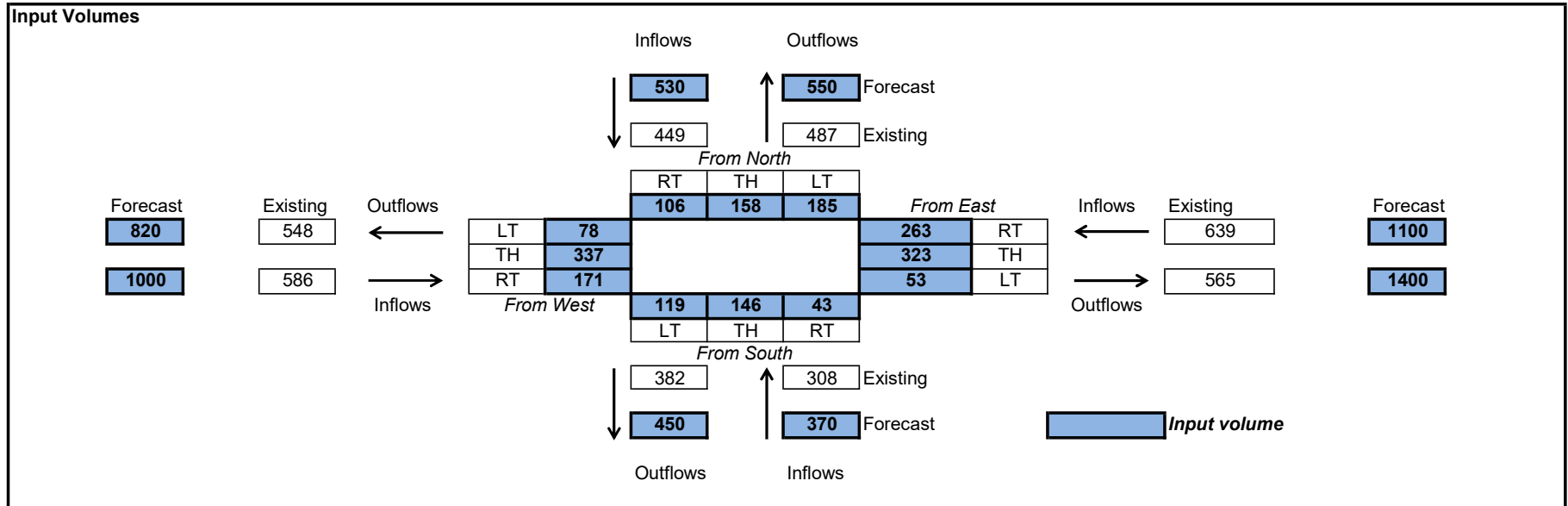
	Oif*	Oif	change
i=1	477	570	-16.00%
i=2	924	1100	-16.00%
i=3	454	540	-16.00%
i=4	454	540	-16.00%
Totals			

Estimated Turning Movements



2050 PM JUPITER BOULEVARD NCHRP TOOL INPUTS AND OUTPUTS

Iterative Method Estimated Turning Movements



Initial Turning Movement Matrix, T_{ij}

	Forecasts	East Leg	North Leg	West Leg	South Leg	D_{jf}
Counts		565	487	548	382	D_{jb} outflows, j
East Leg	1100	639	0	263	323	53
North Leg	530	449	185	0	106	158
West Leg	1000	586	337	78	0	171
South Leg	370	308	43	146	119	0
O_{if}		Oib				
inflows, i						

first row iteration

		D_{jf}^*			
		845	761	824	570
1100	0	453	556	91	
530	218	0	125	187	
1000	575	133	0	292	
370	52	175	143	0	

compare

	D_{jf}^*	D_{jf}	change
j=1	845	1400	-40.0%
j=2	761	550	38.0%
j=3	824	820	0.0%
j=4	570	450	27.0%
Totals	3000	3220	

first column iteration

		1400	550	820	450
952	0	327	553	72	

Iterative Method Estimated Turning Movements

633	361	0	124	148
1280	953	96	0	231
354	86	126	142	0

Oif*

compare	<u>Oif*</u>	<u>Oif</u>	<u>change</u>
i=1	952	1100	-13.00%
i=2	633	530	19.00%
i=3	1280	1000	28.00%
i=4	354	370	-4.00%
Totals	3219	3000	

second row iteration

	1137	585	891	387
1100	0	378	639	83
530	302	0	104	124
1000	745	75	0	180
370	90	132	148	0

compare	<u>Djf*</u>	<u>Djf</u>	<u>change</u>
j=1	1137	1400	-19.00%
j=2	585	550	6.00%
j=3	891	820	9.00%
j=4	387	450	-14.00%
Totals	3000	3220	

second column iteration

	1400	550	820	450
1040	0	355	588	97
612	372	0	96	144
1197	917	71	0	209
371	111	124	136	0

compare	<u>Oif*</u>	<u>Oif</u>	<u>change</u>
i=1	1040	1100	-5.00%
i=2	612	530	15.00%
i=3	1197	1000	20.00%
i=4	371	370	0.00%
Totals	3220	3000	

third row iteration

	1199	558	841	403
1100	0	375	622	103
530	322	0	83	125
1000	766	59	0	175
370	111	124	136	0

compare	<u>Djf*</u>	<u>Djf</u>	<u>change</u>
j=1	1199	1400	-14.00%
j=2	558	550	1.00%
j=3	841	820	3.00%

Iterative Method Estimated Turning Movements

j=4	403	450	-10.00%
Totals	3001	3220	

third column iteration

	1400	550	820	450
1091	0	370	606	115
597	376	0	81	140
1147	894	58	0	195
385	130	122	133	0

	<u>Oif*</u>	<u>Oif</u>	<u>change</u>
i=1	1091	1100	-1.00%
i=2	597	530	13.00%
i=3	1147	1000	15.00%
i=4	385	370	4.00%
Totals	3220	3000	

fourth row iteration

	1238	541	811	410
1100	0	373	611	116
530	334	0	72	124
1000	779	51	0	170
370	125	117	128	0

	<u>Djf*</u>	<u>Djf</u>	<u>change</u>
j=1	1238	1400	-12.00%
j=2	541	550	-2.00%
j=3	811	820	-1.00%
j=4	410	450	-9.00%
Totals	3000	3220	

fourth column iteration

	1400	550	820	450
1124	0	379	618	127
587	378	0	73	136
1120	881	52	0	187
389	141	119	129	0

	<u>Oif*</u>	<u>Oif</u>	<u>change</u>
i=1	1124	1100	2.00%
i=2	587	530	11.00%
i=3	1120	1000	12.00%
i=4	389	370	5.00%
Totals	3220	3000	

fifth row iteration

1262	530	794	414
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Iterative Method Estimated Turning Movements

1100	0	371	605	124
530	341	0	66	123
1000	787	46	0	167
370	134	113	123	0

	Djf*	Djf	change
j=1	1262	1400	-10.00%
j=2	530	550	-4.00%
j=3	794	820	-3.00%
j=4	414	450	-8.00%
Totals	3000	3220	

	e	n	w	s
fifth column iteration	1400	550	820	450
e	1145	0	625	135
n	580	378	68	134
w	1103	873	48	182
s	393	149	117	127

	Oif*	Oif	change
i=1	1145	1100	4.00%
i=2	580	530	9.00%
i=3	1103	1000	10.00%
i=4	393	370	6.00%
Totals			

	e	n	w	s
sixth row iteration	1276	524	782	417
1100	0	370	600	130
530	345	0	62	122
1000	791	44	0	165
370	140	110	120	0

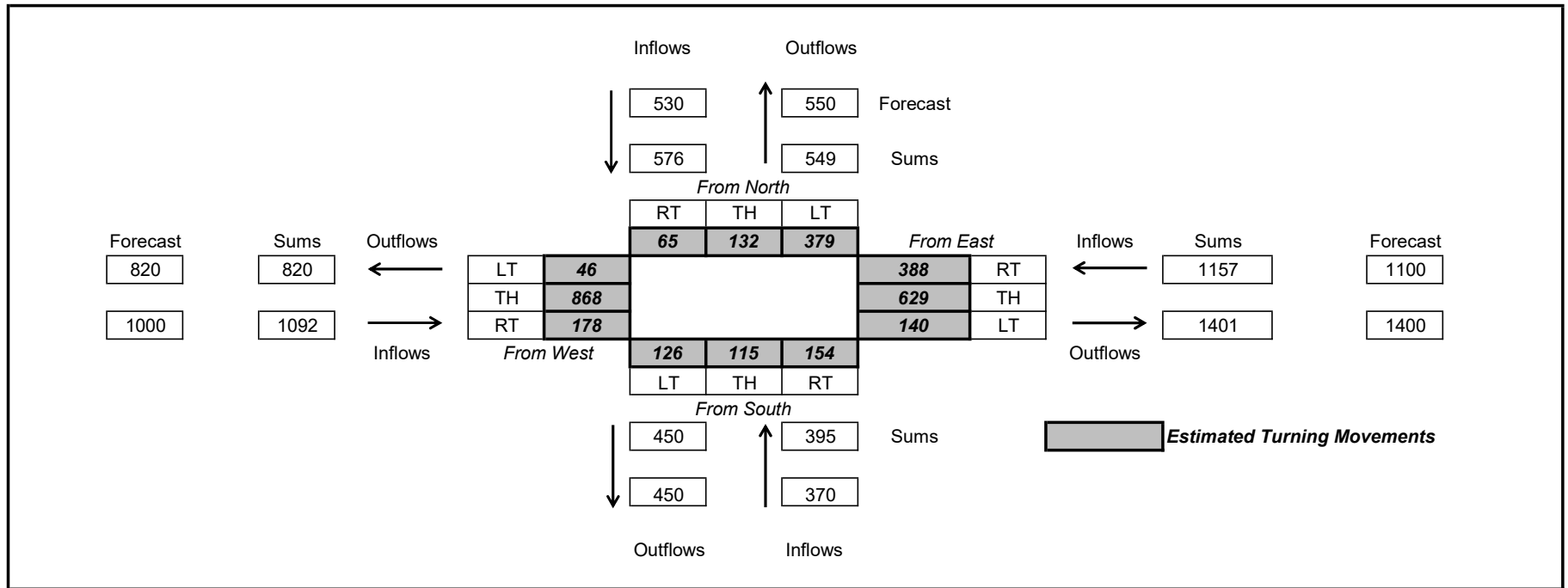
	Djf*	Djf	change
j=1	1276	1400	-9.00%
j=2	524	550	-5.00%
j=3	782	820	-5.00%
j=4	417	450	-7.00%
Totals	2999	3220	

	e	n	w	s
sixth column iteration	1400	550	820	450
e	1157	0	629	140
n	576	379	65	132
w	1092	868	46	178
s	395	154	115	126

Iterative Method Estimated Turning Movements

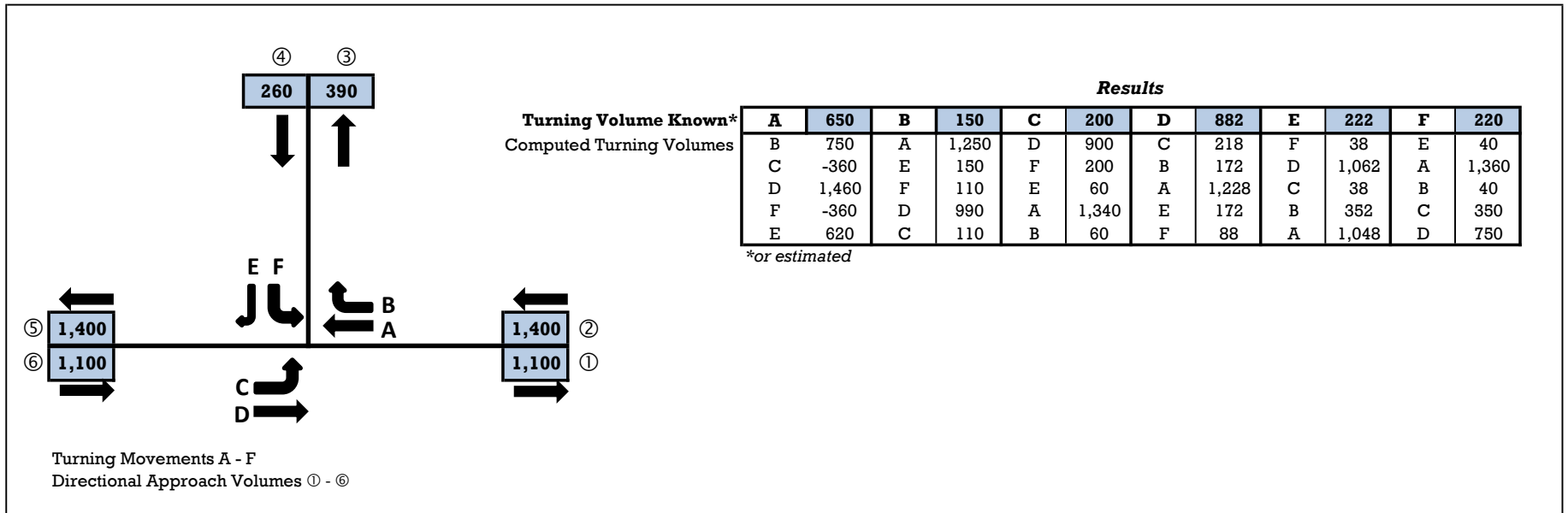
	Oif*	Oif	change
i=1	1157	1100	5.00%
i=2	576	530	9.00%
i=3	1092	1000	9.00%
i=4	395	370	7.00%
Totals			

Estimated Turning Movements



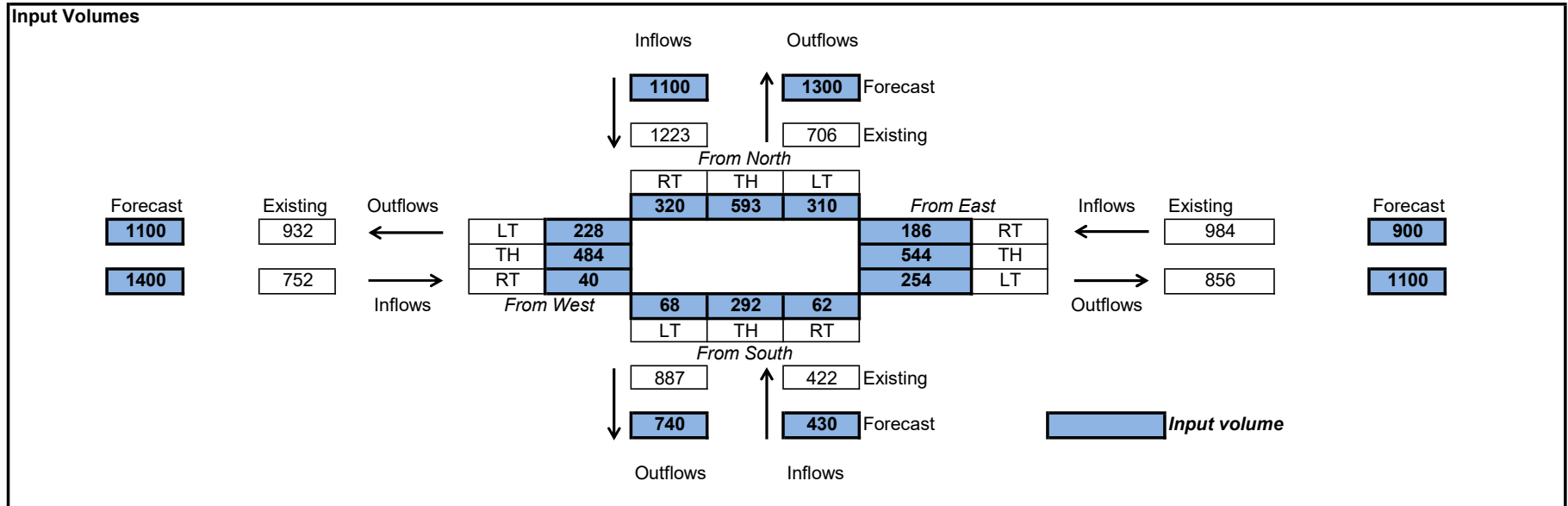
2050 PM GARVEY ROAD NCHRP TOOL INPUTS AND OUTPUTS

"T" Intersection Directional Turning Movements



2050 PM MINTON ROAD NCHRP TOOL INPUTS AND OUTPUTS

Iterative Method Estimated Turning Movements



Initial Turning Movement Matrix, T_{ij}

	Forecasts	East Leg	North Leg	West Leg	South Leg	D_{jf}
East Leg	900	856	706	932	887	outflows, j
North Leg	1100	984	0	186	544	
West Leg	1400	1223	310	0	320	
South Leg	430	752	484	228	0	40
O_{if}		422	62	292	68	0
inflows, i						

first row iteration

		D_{jf}^*			
		1243	892	855	839
900		0	170	498	232
1100		279	0	288	533
1400		901	424	0	74
430		63	298	69	0

compare

	D_{jf}^*	D_{jf}	change
j=1	1243	1100	13.0%
j=2	892	1300	-31.0%
j=3	855	1100	-22.0%
j=4	839	740	13.0%
Totals	3829	4240	

first column iteration

		1100	1300	1100	740
1094		0	248	641	205

Iterative Method Estimated Turning Movements

1088	247	0	371	470
1480	797	618	0	65
579	56	434	89	0

Oif*

compare	<u>Oif*</u>	<u>Oif</u>	<u>change</u>
i=1	1094	900	22.00%
i=2	1088	1100	-1.00%
i=3	1480	1400	6.00%
i=4	579	430	35.00%
Totals	4241	3830	

second row iteration

	1046	1111	968	705
900	0	204	527	169
1100	250	0	375	475
1400	754	585	0	61
430	42	322	66	0

compare	<u>Djf*</u>	<u>Djf</u>	<u>change</u>
j=1	1046	1100	-5.00%
j=2	1111	1300	-15.00%
j=3	968	1100	-12.00%
j=4	705	740	-5.00%
Totals	3830	4240	

second column iteration

	1100	1300	1100	740
1015	0	239	599	177
1188	263	0	426	499
1542	793	685	0	64
496	44	377	75	0

compare	<u>Oif*</u>	<u>Oif</u>	<u>change</u>
i=1	1015	900	13.00%
i=2	1188	1100	8.00%
i=3	1542	1400	10.00%
i=4	496	430	15.00%
Totals	4241	3830	

third row iteration

	1002	1161	990	677
900	0	212	531	157
1100	244	0	394	462
1400	720	622	0	58
430	38	327	65	0

compare	<u>Djf*</u>	<u>Djf</u>	<u>change</u>
j=1	1002	1100	-9.00%
j=2	1161	1300	-11.00%
j=3	990	1100	-10.00%

Iterative Method Estimated Turning Movements

j=4	677	740	-9.00%
Totals	3830	4240	

third column iteration

	1100	1300	1100	740
999	0	237	590	172
1211	268	0	438	505
1549	790	696	0	63
480	42	366	72	0

	<u>Oif*</u>	<u>Oif</u>	<u>change</u>
i=1	999	900	11.00%
i=2	1211	1100	10.00%
i=3	1549	1400	11.00%
i=4	480	430	12.00%
Totals	4239	3830	

fourth row iteration

	995	1171	995	671
900	0	214	532	155
1100	243	0	398	459
1400	714	629	0	57
430	38	328	65	0

	<u>Djf*</u>	<u>Djf</u>	<u>change</u>
j=1	995	1100	-10.00%
j=2	1171	1300	-10.00%
j=3	995	1100	-10.00%
j=4	671	740	-9.00%
Totals	3832	4240	

fourth column iteration

	1100	1300	1100	740
997	0	238	588	171
1215	269	0	440	506
1550	789	698	0	63
478	42	364	72	0

	<u>Oif*</u>	<u>Oif</u>	<u>change</u>
i=1	997	900	11.00%
i=2	1215	1100	10.00%
i=3	1550	1400	11.00%
i=4	478	430	11.00%
Totals	4240	3830	

fifth row iteration

995	1172	994	669
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Iterative Method Estimated Turning Movements

900	0	215	531	154
1100	244	0	398	458
1400	713	630	0	57
430	38	327	65	0

	Djf*	Djf	change
j=1	995	1100	-10.00%
j=2	1172	1300	-10.00%
j=3	994	1100	-10.00%
j=4	669	740	-10.00%
Totals	3830	4240	

fifth column iteration		e	n	w	s
		1100	1300	1100	740
e	996	0	238	588	170
n	1217	270	0	440	507
w	1550	788	699	0	63
s	477	42	363	72	0

	Oif*	Oif	change
i=1	996	900	11.00%
i=2	1217	1100	11.00%
i=3	1550	1400	11.00%
i=4	477	430	11.00%
Totals			

sixth row iteration		994	1173	994	669
	900	0	215	531	154
	1100	244	0	398	458
	1400	712	631	0	57
	430	38	327	65	0

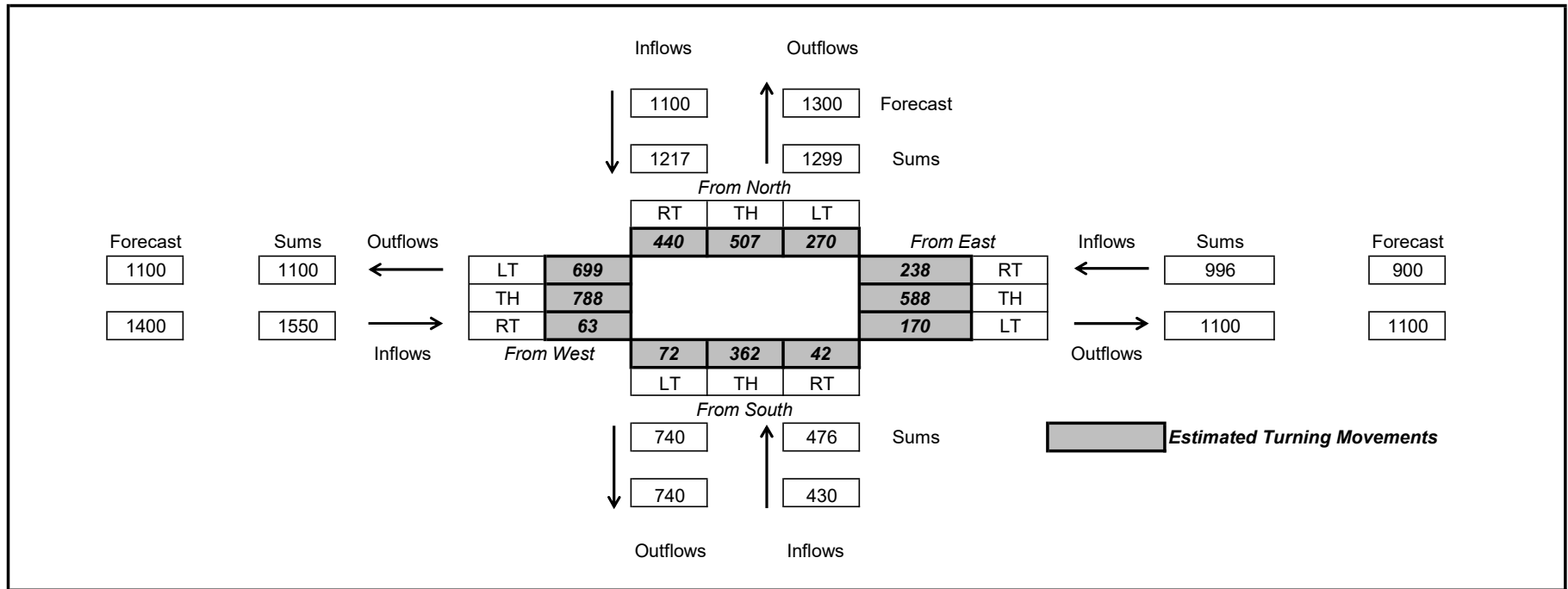
	Djf*	Djf	change
j=1	994	1100	-10.00%
j=2	1173	1300	-10.00%
j=3	994	1100	-10.00%
j=4	669	740	-10.00%
Totals	3830	4240	

sixth column iteration		e	n	w	s
		1100	1300	1100	740
e	996	0	238	588	170
n	1217	270	0	440	507
w	1550	788	699	0	63
s	476	42	362	72	0

Iterative Method Estimated Turning Movements

	Oif*	Oif	change
i=1	996	900	11.00%
i=2	1217	1100	11.00%
i=3	1550	1400	11.00%
i=4	476	430	11.00%
Totals			

Estimated Turning Movements



TRAFFIC FORECAST VOLUMES

2030 AM NO-BUILD RAW TRAFFIC FORECAST VOLUMES

		330	7%	0%	12%	463		City:
		0				SB		State:
		204	0	126				
571	EB	St. Johns Heritage Pkwy.		0	90	693		
		7:45 AM - 8:45 AM			326		3%	
		TEV: 1350	1	1.00	367		4%	
		2020	1	16	0		0%	
327	WB	Malabar Rd.			270	316		
		0	0	0	0			
		NB			180			
		0	0%	0%	0%	0		
Notes								

-69

53

		87	0%	0%	0%	44		City:
		0				SB		State:
		56	0	31				
624	EB	Snapdragon Dr.		0	90	604		
		7:45 AM - 8:45 AM			36		0%	
		TEV: 954	2	1.00	568		4%	
		2020	1	16	0		0%	
263	WB	Malabar Rd.			270	286		
		0	0	0	0			
		NB			180			
		0	0%	0%	0%	0		
Notes								

-12

22

		0	↓	0%	↙	0%	↓	0%	↘	0%	↑	0	City:
		0										0	State:
		0										0	
575	←	EB	Association	Bavarian Ave.	0	90	⊖	←	569				
				7:45 AM - 8:45 AM	0				0%				
				TEV: 966	5	1.00			4%				
				2020	1	16			0%				
389	↔	⊖	270	Malabar Rd.					WB	↔		390	
				6	0	2							
				NB					⊖			180	
				1	↓	17%	↑	0%	↘	0%	↑	8	
Notes													

1

0

		0	↓	0%	↙	0%	↓	0%	↘	0%	↑	0	City:
		0										0	State:
		0										0	
570	←	EB	Association	Hurley Blvd.	0	90	⊖	←	550				
				7:45 AM - 8:45 AM	0				0%				
				TEV: 1075	6	1.00			5%				
				2020	1	16			3%				
390	↔	⊖	270	Malabar Rd.					WB	↔		410	
				77	0	58							
				NB					⊖			180	
				95	↓	1%	↑	0%	↘	0%	↑	135	
Notes													

		0	↓	0%	↙	0%	↓	0%	↘	0%	↑	0	City:
		0	↓	0%	↙	0%	↓	0%	↘	0%	↑	0	State:
		0	↓	0%	↙	0%	↓	0%	↘	0%	↑	0	City:
		0	↓	0%	↙	0%	↓	0%	↘	0%	↑	0	State:
3	553	EB	Association Associates, Inc.	Palm Bay Public Works (W)	0	90	↻	558					
				7:45 AM - 8:45 AM	0	0%	↻						
				TEV: 986	7	1.00		552					
				2020	1	16		6					
-15	425	↻	270	Malabar Rd.		WB	↻	425					
				1	0	2		0					
				NB				180					
				8	↓	0%	↙	0%	↘	0%	↑	3	
				Notes									

		0	↓	0%	↙	0%	↓	0%	↘	0%	↑	0	City:
		0	↓	0%	↙	0%	↓	0%	↘	0%	↑	0	State:
		0	↓	0%	↙	0%	↓	0%	↘	0%	↑	0	City:
		0	↓	0%	↙	0%	↓	0%	↘	0%	↑	0	State:
-2	556	EB	Association Associates, Inc.	Palm Bay Public Works (E)	0	90	↻	582					
				7:45 AM - 8:45 AM	0	0%	↻						
				TEV: 1031	8	1.00		552					
				2020	1	16		30					
	425	↻	270	Malabar Rd.		WB	↻	439					
				4	0	20		0					
				NB				180					
				36	↓	0%	↙	0%	↘	0%	↑	24	
				Notes									

		78	↓	0%	↙	0%	↓	0%	↘	0%	↑	26	City:
		0	↓	0%	↙	0%	↓	0%	↘	0%	↑	0	State:
		0	↓	0%	↙	0%	↓	0%	↘	0%	↑	0	City:
		0	↓	0%	↙	0%	↓	0%	↘	0%	↑	0	State:
-491	59	EB	Association Associates, Inc.	Watoga Ave.	0	90	↻	20	533				
				7:45 AM - 8:45 AM	14	0%	↻						
				TEV: 144	19	1.00		0					
				2020	1	16		6					
393	17	↻	270	Malabar Rd.		WB	↻	48	-377				
				16	0	13		0					
				NB				180					
				11	↓	0%	↙	0%	↘	0%	↑	29	
				Notes									

		0	0%	0%	0%	0	0	City:
		0	0	0	0	0	0	State:
592	EB	0	7:45 AM - 8:45 AM	0	90	0	595	
		0	TEV: 1074	9	1.00	581	0%	
		431	2020	1	16	14	0%	
		18	2020	1	16	14	0%	
449	WB	270	Malabar Rd.		WB	450		
		11	0	19	0			
	NB	180						
		32	0%	0%	0%	0	30	
Notes								

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-169

9

		571	7%	5%	2%	580	0	City:
		0	0	0	0	0	0	State:
		111	172	288				
808	EB	0	Jupiter Blvd.	0	90	0	850	
		0	7:45 AM - 8:45 AM	271	3%			
		136	TEV: 2461	10	1.00	505	4%	
		388	2020	1	16	74	6%	
		18	2020	1	16	14	0%	
619	WB	270	Malabar Rd.		WB	732		
		192	173	56	0			
	NB	180						
		341	5%	4%	2%	421		
Notes								

-317

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		0	↓	0%	↶	0%	↷	0%	↑	0	City:			
		θ		0						SB	State:			
				0		0		0						
573	↶	EB	Association's Association's							90	θ	↶	585	
	↶			0		7:45 AM - 8:45 AM		0			0%	↶		
	↶			2%		609	TEV: 1283	13	1.00	550		3%	↶	
	↶			4%		22	2020	1	16	35		0%	↶	
631	↶	θ		270							WB	↶	653	
						23		0	44	0				
											θ		180	
						57	↓	0%	↶	0%	↷	2%	↑	67
Notes														

0

1

		0	↓	0%	↶	0%	↷	0%	↑	0	City:			
		θ		0						SB	State:			
				0		0		0						
585	↶	EB	Association's Association's							90	θ	↶	588	
	↶			0%		0		7:45 AM - 8:45 AM		0		0%	↶	
	↶			2%		646	TEV: 1262	14	1.00	579		2%	↶	
	↶			0%		6	2020	1	16	9		0%	↶	
652	↶	θ		270							WB	↶	662	
						6		0	16	0				
											θ		180	
						15	↓	0%	↶	0%	↷	0%	↑	22
Notes														

2

0

		94	↓ 4%	↶ 0%	↓ 0%	↷ 0%	↑ 64				
		0						SB	City:		
		48		0		46			State:		
590	↶	EB	Maywood Ave./Daffodil Dr.				0	90	⊖	↶	615
	↷ 25%		8	7:45 AM - 8:45 AM			56		↷ 5%		
	↶ 1%		641	TEV: 1424	15	1.00	528		↶ 2%		
	↷ 8%		13	2020	1	16	31		↷ 0%		
662	↶	⊖	270	Malabar Rd.					WB	↶	726
			14		0	39	0				
			NB				⊖	180			
			44	↓ 7%	↶ 0%	↷ 0%	↑ 53				
			Notes								

3

-13

		25	↓ 0%	↶ 0%	↓ 0%	↷ 0%	↑ 12				
		0						SB	City:		
		14		4		7			State:		
618	↶	EB	Plaza Entrance				0	90	⊖	↶	589
	↷ 0%		8	7:45 AM - 8:45 AM			1		↷ 0%		
	↶ 2%		688	TEV: 1462	16	1.00	535		↶ 3%		
	↷ 0%		43	2020	1	16	53		↷ 0%		
739	↶	⊖	270	Malabar Rd.					WB	↶	732
			69		3	37	0				
			NB				⊖	180			
			100	↓ 0%	↶ 0%	↷ 0%	↑ 109				
			Notes								

301

-22

		942	5%	2%	0%	862		
		0					SB	City:
		305	322	315			State:	
890	EB	Minton Rd.				0	90	924
		110	7:45 AM - 8:45 AM		311		0%	
		597	TEV: 3250	17	1.00	499	3%	
		47	2020	1	16	114	2%	
754	WB	Malabar Rd.					1015	
		86	441	103	0			
	NB				180			
		483	0%	1%	0%	630		
Notes								
23.9%								

2030 AM NO-BUILD TRAFFIC FORECAST VOLUME ADJUSTMENTS

		113	7%	0%	12%	215	City:
		0				SB	State:
		0			113		
205	EB	St. Johns Heritage Pkwy.			0	90	420
		7:45 AM - 8:45 AM			215		3%
		TEV: 610	1	1.00	205		4%
		2020	1	16	0		0%
77	WB	Malabar Rd.					190
		0			0		
		NB					180
		0	0%	0%	0%		0
Notes							

69

-53

		0	0%	0%	0%	0	City:
		0				SB	State:
		0			0		
489	EB	Snapdragon Dr.			0	90	489
		7:45 AM - 8:45 AM			0		0%
		TEV: 732	2	1.00	489		4%
		2020	1	16	0		0%
243	WB	Malabar Rd.					243
		0			0		
		NB					180
		0	0%	0%	0%		0
Notes							

12

-22

		0	0%	0%	0%	0	City:
		0				SB	State:
		0	0	0	0		
345	EB	Associates, Inc.	Bavarian Ave.	0	90	345	
0%		0	7:45 AM - 8:45 AM	0		0%	
5%		362	TEV: 707	5	1.00	345	4%
0%		0	2020	1	16	0	0%
362	WB		Malabar Rd.			362	
		0	0	0	0		
	NB				180		
0			17%	0%	0%	0	
Notes							

-1

0

		0	0%	0%	0%	0	City:
		0				SB	State:
		0	0	0	0		
344	EB	Associates, Inc.	Hurley Blvd.	0	90	324	
0%		0	7:45 AM - 8:45 AM	0		0%	
4%		302	TEV: 706	6	1.00	324	5%
3%		60	2020	1	16	0	3%
362	WB		Malabar Rd.			302	
		20	0	0	0		
	NB				180		
60			1%	0%	0%	20	
Notes							

-42

-16

		0	↓	0%	↙	0%	↓	0%	↘	0		City:	
		θ	0							SB		State:	
		0		0		0		0		0			
282	←	EB	Anderson & Associates, Inc.	Palm Bay Public Works (W)		0	90	θ	→	282			
↘	0%			0	7:45 AM - 8:45 AM	0			0%	↙			
↘	3%		318	TEV: 600	7	1.00	282		5%	↙			
↘	0%		0	2020	1	16	0		0%	↙			
318	←	θ	270	Malabar Rd.			WB	→	318				
				0	0	0	0						
				NB			θ	180					
				0	↙	0%	↘	0%	↘	0%	↑	0	
Notes													

2

0

		0	↓	0%	↙	0%	↓	0%	↘	0		City:	
		θ	0							SB		State:	
		0		0		0		0		0			
284	←	EB	Anderson & Associates, Inc.	Palm Bay Public Works (E)		0	90	θ	→	284			
↘	0%			0	7:45 AM - 8:45 AM	0			0%	↙			
↘	3%		318	TEV: 602	8	1.00	284		5%	↙			
↘	0%		0	2020	1	16	0		0%	↙			
318	←	θ	270	Malabar Rd.			WB	→	318				
				0	0	0	0						
				NB			θ	180					
				0	↙	0%	↘	0%	↘	0%	↑	0	
Notes													

		0	↓	0%	↙	0%	↓	0%	↘	0		City:	
		θ	0							SB		State:	
		0		0		0		0		0			
815	←	EB	Anderson & Associates, Inc.	Watoga Ave.		0	90	θ	→	815			
↘	0%			0	7:45 AM - 8:45 AM	0			0%	↙			
↘	0%		695	TEV: 1510	19	1.00	815		0%	↙			
↘	0%		0	2020	1	16	0		0%	↙			
695	←	θ	270	Malabar Rd.			WB	→	695				
				0	0	0	0						
				NB			θ	180					
				0	↙	0%	↘	0%	↘	0%	↑	0	
Notes													

-10

10

		0	0%	0%	0%	0%	0	City:
		0					SB	State:
274	EB	Post Office	0	90	0	274		
		7:45 AM - 8:45 AM	0		0%			
		TEV: 582	9	1.00	274		5%	
		2020	1	16	0		0%	
308	WB	Malabar Rd.	0	270	0	308		
		0	0	0	0			
		NB			180			
		0	0%	0%	0%	0		
Notes								

-213

169

9

		41	7%	5%	2%	53	City:	
		0				SB	State:	
61	EB	Jupiter Blvd.	0	90	0	20		
		7:45 AM - 8:45 AM	0		3%			
		TEV: 200	10	1.00	20		4%	
		2020	1	16	0		6%	
139	WB	Malabar Rd.	0	270	0	308		
		0	0	0	0			
		NB			180			
		86	5%	4%	2%	0		
Notes								

319

-203

		0	0%	0%	0%	0	City:
		0				SB	State:
339	EB	0				90	339
0%		0				0%	
2%		203	TEV: 542	11	1.00	339	3%
0%		0	2020	1	16	0	0%
203	WB	0				270	203
		0				0	
	NB	0				180	
0		0%	0%	0%	0		
Notes							

-339

197

		0	0%	0%	0%	0	City:
		0				SB	State:
0	EB	0				90	0
0%		0				0%	
2%		6	TEV: 6	12	1.00	0	2%
5%		0	2020	1	16	0	2%
6	WB	0				270	6
		0				0	
	NB	0				180	
0		14%	0%	2%	0		
Notes							

317

-191

		0	0%	0%	0%	0%	0	City:
		0					SB	State:
		0	0	0	0			
317	EB	Associates, Inc.	Madalyn Landing	0	90	0	317	
		0	7:45 AM - 8:45 AM	0		0%		
		197	TEV: 514	13	1.00	317	3%	
		0	2020	1	16	0	0%	
197	WB		Malabar Rd.				197	
		0	0	0	0			
		NB				180		
		0	0%	0%	2%	0		
Notes								

0

-1

		0	0%	0%	0%	0%	0	City:
		0					SB	State:
		0	0	0	0			
317	EB	Associates, Inc.	Sutherland Dr.	0	90	0	317	
		0	7:45 AM - 8:45 AM	0		0%		
		198	TEV: 515	14	1.00	317	2%	
		0	2020	1	16	0	0%	
198	WB		Malabar Rd.				198	
		0	0	0	0			
		NB				180		
		0	0%	0%	0%	0		
Notes								

-301

22

		0	5%	2%	0%	25		
		0				SB	City:	
		0	0	0	0		State:	
11	EB	Minton Rd.		0	90	11		
2%		25	7:45 AM - 8:45 AM		0		0%	
1%		113	TEV: 174	17	1.00	11		3%
2%		25	2020	1	16	0		2%
163	WB	Malabar Rd.			WB	113		
		0	0	0	0			
	NB				180			
25		0%	1%	0%		0		
Notes								

2030 AM NO-BUILD FINAL TRAFFIC FORECAST VOLUMES

		443	7%	0%	12%	678			
		0				SB	City:		
		204	0	239			State:		
776	EB	St. Johns Heritage Pkwy.		0	90	1113			
11%		137	7:45 AM - 8:45 AM		541		3%		
6%		267	TEV: 1960	1	1.00	572		4%	
0%		0	2020	1	16	0		0%	
404	WB	Malabar Rd.				506			
		0	0	0	0				
		NB				180			
0		0%	0%	0%	0%	0			
Notes									

0

0

		87	0%	0%	0%	44			
		0				SB	City:		
		56	0	31			State:		
1113	EB	Snapdragon Dr.		0	90	1093			
0%		8	7:45 AM - 8:45 AM		36		0%		
7%		498	TEV: 1686	2	1.00	1057		4%	
0%		0	2020	1	16	0		0%	
506	WB	Malabar Rd.				529			
		0	0	0	0				
		NB				180			
0		0%	0%	0%	0%	0			
Notes									

0

0

		9	0%	0%	0%	15			
		0					SB	City:	
		3	0	6				State:	
1093	EB	Kittelson & Associates, Inc.		Championship Cir.		0	90	1101	
0%		4	7:45 AM - 8:45 AM		11		0%		
7%		525	TEV: 1639	3	1.00	1090	4%		
0%		0	2020	1	16	0	0%		
529	WB	Malabar Rd.						531	
		0	0	0					
			NB			180			
		0	0%	0%	0%	0			
Notes									

		104	3%	0%	1%	88			
		0					SB	City:	
		37	1	66				State:	
919	EB	Kittelson & Associates, Inc.		Krassner Dr./ Bending Branch Ln		0	90	920	
7%		14	7:45 AM - 8:45 AM		72		3%		
6%		617	TEV: 1826	4	1.00	803	5%		
21%		22	2020	1	16	45	6%		
653	WB	Malabar Rd.						751	
		79	2	68					
			NB			180			
		68	4%	50%	2%	149			
Notes									

		45	0%	0%	0%	15			
		0					SB	City:	
		27	0	18				State:	
1101	EB	Kittelson & Associates, Inc.		Wisteria Ave.		0	90	919	
0%		6	7:45 AM - 8:45 AM		9		0%		
0%		471	TEV: 1904	18	1.00	829	0%		
0%		54	2020	1	16	81	0%		
531	WB	Malabar Rd.						653	
		245	0	164					
			NB			180			
		135	0%	0%	0%	409			
Notes									

0

0

		0	↓	0%	↙	0%	↓	0%	↘	0%	↑	0	City:
		0	⊖	0								0	State:
920	↔	EB	Kittelson & Associates, Inc.	Bavarian Ave.		0	90	⊕				914	
↘	0%		0	7:45 AM - 8:45 AM		0						0%	↘
↘	5%		750	TEV: 1673	5	1.00	914					4%	↙
↘	0%		1	2020	1	16	0					0%	↙
751	↔	⊖	270	Malabar Rd.									WB
				6	0	2	0						
				NB								180	
				1	↓	17%	↗	0%	↘	0%	↑	8	
Notes													

0

0

		0	↓	0%	↙	0%	↓	0%	↘	0%	↑	0	City:
		0	⊖	0								0	State:
914	↔	EB	Kittelson & Associates, Inc.	Hurley Blvd.		0	90	⊕				874	
↘	0%		0	7:45 AM - 8:45 AM		0						0%	↘
↘	4%		654	TEV: 1781	6	1.00	817					5%	↙
↘	3%		98	2020	1	16	57					3%	↙
752	↔	⊖	270	Malabar Rd.									WB
				97	0	58	0						
				NB								180	
				155	↓	1%	↗	0%	↘	0%	↑	155	
Notes													

		0	0%	0%	0%	0%	0	City:
		0					0	State:
835	EB	Kittelson & Associates, Inc.	Palm Bay Public Works (W)	0	90	0	840	
0%		0	7:45 AM - 8:45 AM	0		0%		
3%		741	TEV: 1586	7	1.00	834	5%	
0%		2	2020	1	16	6	0%	
743	WB	270	Malabar Rd.				743	
		1	0	2	0			
	NB				180			
		3	0%	0%	0%	0%	3	
Notes								

		0	0%	0%	0%	0%	0	City:
		0					0	State:
840	EB	Kittelson & Associates, Inc.	Palm Bay Public Works (E)	0	90	0	866	
0%		0	7:45 AM - 8:45 AM	0		0%		
3%		737	TEV: 1633	8	1.00	836	5%	
0%		6	2020	1	16	30	0%	
743	WB	270	Malabar Rd.				757	
		4	0	20	0			
	NB				180			
		36	0%	0%	0%	0%	24	
Notes								

		78	0%	0%	0%	0%	26	City:
		0					0	State:
874	EB	Kittelson & Associates, Inc.	Watoga Ave.	0	90	0	835	
0%		12	7:45 AM - 8:45 AM	14		0%		
0%		695	TEV: 1654	19	1.00	815	0%	
0%		5	2020	1	16	6	0%	
712	WB	270	Malabar Rd.				743	
		16	0	13	0			
	NB				180			
		11	0%	0%	0%	0%	29	
Notes								

0

0

		0	0%	0%	0%	0	City:
		0				SB	State:
866	EB	0	0	0	0	90	869
0%		0	7:45 AM - 8:45 AM	0	0%		
4%		739	TEV: 1656	9	1.00	855	5%
0%		18	2020	1	16	14	0%
757		270	Malabar Rd.	WB		758	
		11	0	19	0		
			NB			180	
		32	0%	0%	0%	30	
Notes							

0

0

		612	7%	5%	2%	633	City:
		0				SB	State:
869	EB	152	172	288	0	90	870
1%		189	Jupiter Blvd.	7:45 AM - 8:45 AM	271	3%	
2%		388	TEV: 2661	10	1.00	525	4%
11%		181	2020	1	16	74	6%
758		270	Malabar Rd.	WB		732	
		192	173	56	0		
			NB			180	
		427	5%	4%	2%	421	
Notes							

0

0

		0	↓ 0%	↙ 0%	↘ 0%	↕ 0%	↑ 0%	0		
		0						0	SB	City:
		0						0		State:
870	↔	EB	Kittling & Associates, Inc.		Santa Rosa Ave.		0	90	↕	868
↙ 0%		0	7:45 AM - 8:45 AM			0		0%	↘	
↔ 2%		731	TEV: 1609	11	1.00	866		3%	↙	
↘ 0%		1	2020	1	16	2		0%	↘	
732	↔	↕ 270	Malabar Rd.						WB	↔ 736
			4	0	5	0				
									↕ 180	
			3	↓	0%	↙ 0%	↘ 0%	↕ 0%	↑ 9	
Notes										

0

0

		0	↓ 0%	↙ 0%	↘ 0%	↕ 0%	↑ 0%	0		
		0						0	SB	City:
		0						0		State:
868	↔	EB	Kittling & Associates, Inc.		Garvey Rd.		0	90	↕	890
↙ 0%		0	7:45 AM - 8:45 AM			0		0%	↘	
↔ 2%		677	TEV: 1836	12	1.00	809		2%	↙	
↘ 5%		59	2020	1	16	81		2%	↘	
736	↔	↕ 270	Malabar Rd.						WB	↔ 828
			59	0	151	0				
									↕ 180	
			140	↓	14%	↙ 0%	↘ 2%	↕ 2%	↑ 210	
Notes										

0

0

		0	0%	0%	0%	0	City:
		0				SB	State:
890	EB	0	0	0	0	90	902
0%		0	7:45 AM - 8:45 AM	0	0%		
2%		806	TEV: 1797	13	1.00	867	3%
4%		22	2020	1	16	35	0%
828	270		Malabar Rd.	WB			850
		23	0	44	0		
	NB					180	
		57	0%	0%	2%	67	
Notes							

0

0

		0	0%	0%	0%	0	City:
		0				SB	State:
902	EB	0	0	0	0	90	905
0%		0	7:45 AM - 8:45 AM	0	0%		
2%		844	TEV: 1777	14	1.00	896	2%
0%		6	2020	1	16	9	0%
850	270		Malabar Rd.	WB			860
		6	0	16	0		
	NB					180	
		15	0%	0%	0%	22	
Notes							

0

0

		94	↓ 4%	↙ 0%	↘ 0%	↗ 0%	↑ 64					
		0						SB	City:			
				48	0	46			State:			
905	←	EB	Plaza Entrance	Maywood Ave./Daffodil Dr.	0	90	↻	930				
	↘ 25%		8	7:45 AM - 8:45 AM	56			5%	↗			
	↘ 1%		839	TEV: 1937	15	1.00	843		2%	↙		
	↘ 8%		13	2020	1	16	31		0%	↙		
860	↻	0	270	Malabar Rd.				WB		924		
				14	0	39	0					
				NB				180				
				44	↓ 7%	↙ 0%	↘ 0%	↑ 53				
				Notes								

0

0

		25	↓ 0%	↙ 0%	↘ 0%	↗ 0%	↑ 12					
		0						SB	City:			
				14	4	7			State:			
930	←	EB	Plaza Entrance	Plaza Entrance	0	90	↻	901				
	↘ 0%		8	7:45 AM - 8:45 AM	1			0%	↗			
	↘ 2%		873	TEV: 1959	16	1.00	847		3%	↙		
	↘ 0%		43	2020	1	16	53		0%	↙		
924	↻	0	270	Malabar Rd.				WB		917		
				69	3	37	0					
				NB				180				
				100	↓ 0%	↙ 0%	↘ 0%	↑ 109				
				Notes								

0

0

		942	5%	2%	0%	887		
		0				SB	City:	
			305	322	315		State:	
901	EB	Mitelson & Associates, Inc.	Minton Rd.			0	90	935
		135	7:45 AM - 8:45 AM			311		0%
		710	TEV: 3424	17	1.00	510		3%
		72	2020	1	16	114		2%
917		270	Malabar Rd.				WB	1128
			86	441	103	0		
			NB			180		
		508	0%	1%	0%	630		
Notes								

2030 PM NO-BUILD RAW TRAFFIC FORECAST VOLUMES

0

0

		40	0%	0%	0%	76	City:
		0				SB	State:
		16		0	24	90	
339	EB	Championship Cir.	5:00 PM - 6:00 PM	0	373		
		26			50		0%
		471	TEV: 910	3	1.00	323	3%
		0	2020	1	16	0	0%
497	WB	Malabar Rd.		0	495		
		0		0	0		
	NB				180		
		0	0%	0%	0%	0	
Notes							

22.8%
28.1%
-20.5%

25

-24

		92	11%	0%	0%	142	City:
		0				SB	State:
		17		1	74	90	
398	EB	Krassner Dr./ Bending Branch Ln	5:00 PM - 6:00 PM	0	547		
		39			100		1%
		415	TEV: 1262	4	1.00	351	3%
		65	2020	1	16	96	1%
519	WB	Malabar Rd.		0	560		
		0		0	0		
	NB				180		
		162	7%	33%	4%	104	
Notes							

15.1%
22.2%

		50	0%	0%	0%	50	City:
		0				SB	State:
		12		0	18	90	
-256	EB	Wisteria Ave.	5:00 PM - 6:00 PM	0	200		
		30			20		0%
		0	TEV: 310	18	1.00	0	0%
		269	2020	1	16	180	0%
196	WB	Malabar Rd.		0	176		
		0		0	0		
	NB				180		
		145	0%	0%	0%	85	
Notes							

-24

21

		0	0%	0%	0%	0%	0	0	City:
		0	0%	0%	0%	0%	0	0	State:
		0	0%	0%	0%	0%	0	0	SB
523	EB	0	0%	0%	0%	0%	0	90	521
		0	0%	0%	0%	0%	0	0	
		533	TEV: 1064	5	1.00	519	0	0%	
		6	2020	1	16	2	0	1%	
539	WB	270					0	0%	533
		4					0		
		180					0		
		8					4		
Notes									

0

1

		0	0%	0%	0%	0%	0	0	City:
		0	0%	0%	0%	0%	0	0	State:
		0	0%	0%	0%	0%	0	0	SB
521	EB	0	0%	0%	0%	0%	0	90	546
		0	0%	0%	0%	0%	0	0	
		435	TEV: 1215	6	1.00	474	0	0%	
		97	2020	1	16	72	0	1%	
532	WB	270					0	3%	525
		47					0		
		180					0		
		169					137		
Notes									

-131

339

		1	0%	0%	0%	0%	0	City:		
		0					0	State:		
		1	0	0	0	0	0	SB		
635	←	EB	Santa Rosa Ave.				0	90	→	638
			5:00 PM - 6:00 PM				0			
			0%						0%	
			1%						0%	
			0%						0%	
			549	TEV: 1202	11	1.00	632			
			2	2020	1	16	6			
551	←	WB	Malabar Rd.				0	WB	→	559
			2	0	10	0				
			NB				180			
			8	0%	0%	0%	12			
Notes										

39

-331

		0	0%	0%	0%	0%	0	City:		
		0					0	State:		
		0	0	0	0	0	0	SB		
677	←	EB	Garvey Rd.				0	90	→	782
			5:00 PM - 6:00 PM				0			
			0%						0%	
			1%						0%	
			0%						0%	
			814	TEV: 1786	12	1.00	639			
			76	2020	1	16	143			
890	←	WB	Malabar Rd.				0	WB	→	890
			270							
			38	0	76	0				
			NB				180			
			219	0%	0%	1%	114			
Notes										

60.1%

-2

287

		0	0%	0%	0%	0%	0	0	City:
		0	0%	0%	0%	0%	0	0	State:
780	EB	0	0	0	0	0	90	848	
		0							
		585	TEV: 1495	13	1.00	770			
		18	2020	1	16	78			
603	WB	270						619	
		10				34			
	NB							180	
		96		0%	0%	0%		44	
Notes									

0

0

		0	0%	0%	0%	0%	0	0	City:
		0	0%	0%	0%	0%	0	0	State:
848	EB	0	0	0	0	0	90	579	
		0							
		617	TEV: 1522	14	1.00	845			
		2	2020	1	16	34			
619	WB	270						638	
		3				21			
	NB							180	
		36		0%	0%	0%		24	
Notes									

		1292	1%	1%	1%	1068			
		0					SB	City:	
		320		593	379			State:	
842	EB	Minton Rd.				0	90	1140	
		5:00 PM - 6:00 PM				342		1%	
		364	TEV: 3997	17	1.00	544		1%	
		650	2020	1	16	254		1%	
		40						1%	
1054		270	Malabar Rd.					WB	1100
			78	362	71	0			
			NB				180		
		887	0%	2%	3%	511			
Notes									
24.9%									

2030 PM NO-BUILD TRAFFIC FORECAST VOLUME ADJUSTMENTS

			70	↓	7%	↶	0%	↷	0%	↶	31		City:
			0								0	SB	State:
			0								70		
40	↶	EB	Assoc. St.	St. Johns Heritage Pkwy.	5:00 PM - 6:00 PM	0	90	↷	71		3%		
			0								31		
↶	0%		274	TEV: 415	1	1.00	40				4%		
↶	0%		0	2020	1	16	0				0%		
274	↶	270		Malabar Rd.				WB			344		
			0								0		
			NB								180		
			0	↓	0%	↶	0%	↷	0%	↑	0		
Notes													

86

-197

			0	↓	0%	↶	0%	↷	0%	↶	0		City:
			0								0	SB	State:
			0								0		
157	↶	EB	Assoc. St.	Snapdragon Dr.	5:00 PM - 6:00 PM	0	90	↷	157		0%		
			0								0		
↶	0%		541	TEV: 698	2	1.00	157				0%		
↶	0%		0	2020	1	16	0				0%		
541	↶	270		Malabar Rd.				WB			541		
			0								0		
			NB								180		
			0	↓	0%	↶	0%	↷	0%	↑	0		
Notes													

0

0

		0	↓	0%	↘	0%	↓	0%	↙	0%	↑	0			City:	
		0											SB		State:	
157	↔	EB	Championship Cir.	0	90	↻	157									
			5:00 PM - 6:00 PM	0			0%									
			TEV: 698	3	1.00		157									
			2020	1	16		0									
541	↔	WB	Malabar Rd.	0			541									
				0			0									
			NB	0			180									
			0	↓	0%	↘	0%	↙	0%	↑	0					
Notes																

0

58

147

		0	↓	11%	↘	0%	↓	0%	↙	0%	↑	0			City:	
		0											SB		State:	
215	↔	EB	Krassner Dr./ Bending Branch Ln	0	90	↻	215									
			5:00 PM - 6:00 PM	0			1%									
			TEV: 609	4	1.00		215									
			2020	1	16		0									
394	↔	WB	Malabar Rd.	0			394									
				0			0									
			NB	0			180									
			0	↓	7%	↘	33%	↙	4%	↑	0					
Notes																

0

		0	↓	0%	↘	0%	↓	0%	↙	0%	↑	0			City:	
		0											SB		State:	
413	↔	EB	Wisteria Ave.	0	90	↻	413									
			5:00 PM - 6:00 PM	0			0%									
			TEV: 1715	18	1.00		413									
			2020	1	16		0									
737	↔	WB	Malabar Rd.	0			737									
				0			0									
			NB	0			180									
			0	↓	0%	↘	0%	↙	0%	↑	0					
Notes																

-2

-5

			0	↓	0%	↩	0%	↓	0%	↩	↑	0	City:	
			0	↓	0%	↩	0%	↓	0%	↩	↑	0	State:	
			0	↓	0%	↩	0%	↓	0%	↩	↑	0	SB	
187	↔	EB	0	↓	0%	↩	0%	↓	0%	↩	↑	187	Palm Bay Public Works (W)	
			0	↓	0%	↩	0%	↓	0%	↩	↑	0	5:00 PM - 6:00 PM	
			371	↓	0%	↩	0%	↓	0%	↩	↑	187	TEV: 558	7
			0	↓	0%	↩	0%	↓	0%	↩	↑	0	2020	1
			0	↓	0%	↩	0%	↓	0%	↩	↑	0	16	
371	↔	WB	0	↓	0%	↩	0%	↓	0%	↩	↑	371	Malabar Rd.	
			0	↓	0%	↩	0%	↓	0%	↩	↑	0	WB	
			0	↓	0%	↩	0%	↓	0%	↩	↑	0	NB	
			0	↓	0%	↩	0%	↓	0%	↩	↑	180	180	
			0	↓	0%	↩	0%	↓	0%	↩	↑	0	Notes	

0

1

			0	↓	0%	↩	0%	↓	0%	↩	↑	0	City:	
			0	↓	0%	↩	0%	↓	0%	↩	↑	0	State:	
			0	↓	0%	↩	0%	↓	0%	↩	↑	0	SB	
187	↔	EB	0	↓	0%	↩	0%	↓	0%	↩	↑	187	Palm Bay Public Works (E)	
			0	↓	0%	↩	0%	↓	0%	↩	↑	0	5:00 PM - 6:00 PM	
			370	↓	0%	↩	0%	↓	0%	↩	↑	187	TEV: 557	8
			0	↓	0%	↩	0%	↓	0%	↩	↑	0	2020	1
			0	↓	0%	↩	0%	↓	0%	↩	↑	0	16	
370	↔	WB	0	↓	0%	↩	0%	↓	0%	↩	↑	370	Malabar Rd.	
			0	↓	0%	↩	0%	↓	0%	↩	↑	0	WB	
			0	↓	0%	↩	0%	↓	0%	↩	↑	0	NB	
			0	↓	0%	↩	0%	↓	0%	↩	↑	180	180	
			0	↓	0%	↩	0%	↓	0%	↩	↑	0	Notes	

			-52	↓	0%	↩	0%	↓	0%	↩	↑	-88	City:	
			0	↓	0%	↩	0%	↓	0%	↩	↑	-88	State:	
			0	↓	0%	↩	0%	↓	0%	↩	↑	-88	SB	
703	↔	EB	0	↓	0%	↩	0%	↓	0%	↩	↑	681	Watoga Ave.	
			0	↓	0%	↩	0%	↓	0%	↩	↑	0	5:00 PM - 6:00 PM	
			825	↓	0%	↩	0%	↓	0%	↩	↑	681	TEV: -191	19
			0	↓	0%	↩	0%	↓	0%	↩	↑	0	2020	1
			0	↓	0%	↩	0%	↓	0%	↩	↑	0	16	
825	↔	WB	0	↓	0%	↩	0%	↓	0%	↩	↑	852	Malabar Rd.	
			0	↓	0%	↩	0%	↓	0%	↩	↑	0	WB	
			0	↓	0%	↩	0%	↓	0%	↩	↑	0	NB	
			-32	↓	0%	↩	0%	↓	0%	↩	↑	-19	180	
			-32	↓	0%	↩	0%	↓	0%	↩	↑	-19	Notes	

131

-339

		0 ↓ 0%		0% ↓ 0%		0% ↓ 0%		0 ↑ 0		City: State:	
		0		0		0		0		SB	
131 ←		EB		0		0		0		90 (H) → 131	
0%		0		5:00 PM - 6:00 PM		0		0%		0%	
1%		438		TEV: 569		11		1.00		131	
0%		0		2020		1		16		0	
438 →		0		270		Malabar Rd.		WB		→ 438	
		0		0		0		0			
		NB		0		0		0		(H) 180	
0 ↓		0%		0%		0%		0%		0	
		Notes									

-39

331

		0 ↓ 0%		0% ↓ 0%		0% ↓ 0%		0 ↑ 0		City: State:	
		0		0		0		0		SB	
92 ←		EB		0		0		0		90 (H) → 92	
0%		0		5:00 PM - 6:00 PM		0		0%		0%	
1%		107		TEV: 199		12		1.00		92	
0%		0		2020		1		16		0	
107 →		0		270		Malabar Rd.		WB		→ 107	
		0		0		0		0			
		NB		0		0		0		(H) 180	
0 ↓		0%		0%		0%		1%		0	
		Notes									

2030 PM NO-BUILD FINAL TRAFFIC FORECAST VOLUMES

		597	7%	0%	0%	361	City:
		0				SB	State:
		100			497		
300	EB	St. Johns Heritage Pkwy.		0	90	461	
		100	5:00 PM - 6:00 PM	261		3%	
		564	TEV: 1722	1	1.00	200	4%
		0	2020	1	16	0	9%
564	WB	Malabar Rd.				1061	
		0		0			
	NB					180	
		0	0%	0%	0%	0	
Notes							

0
0

		39	0%	0%	0%	97	City:
		0				SB	State:
		15			24		
461	EB	Snapdragon Dr.		0	90	496	
		47	5:00 PM - 6:00 PM	50		0%	
		1014	TEV: 1596	2	1.00	446	0%
		0	2020	1	16	0	0%
1061	WB	Malabar Rd.				1038	
		0		0			
	NB					180	
		0	0%	0%	0%	0	
Notes							

0

0

		40	0%	0%	0%	76	City:
		0				SB	State:
		16	0	24			
496	EB	Championship Cir.	0	90	530		
		5:00 PM - 6:00 PM					
		26			50		
		TEV: 1608	3	1.00	480		
		0			0		
		2020	1	16			
1038	WB	Malabar Rd.			1036		
		0	0	0			
		NB			180		
		0	0%	0%	0%	0	

89.2%
125.4%
-52.2%

0

0

		92	11%	0%	0%	142	City:
		0				SB	State:
		17	1	74			
613	EB	Krassner Dr./ Bending Branch Ln	0	90	762		
		5:00 PM - 6:00 PM					
		39			100		
		TEV: 1871	4	1.00	566		
		0			96		
		2020	1	16			
913	WB	Malabar Rd.			954		
		30	3	71			
		NB			180		
		162	7%	33%	4%	104	

63.6%
155.8%

		30	0%	0%	0%	50	City:
		0				SB	State:
		12	0	18			
530	EB	Wisteria Ave.	0	90	613		
		5:00 PM - 6:00 PM					
		30			20		
		TEV: 2025	18	1.00	413		
		0			180		
		2020	1	16			
1036	WB	Malabar Rd.			913		
		105	0	158			
		NB			180		
		145	0%	0%	0%	85	

0

0

0

0

		0	0%	0%	0%	0	City:
		0				SB	State:
726	EB	0	0	0	0	90	729
		0				0	0%
		932	TEV: 1713	9	1.00	711	1%
		16	2020	1	16	18	0%
948		270	Malabar Rd.			WB	953
		15	0	21	0		
	NB					180	
		34	0%	0%	0%	36	
Notes							

0

0

		662	0%	1%	2%	633	City:
		0				SB	State:
		191	175	296			
729	EB	0	Jupiter Blvd.			0	766
		137	5:00 PM - 6:00 PM			328	0%
		605	TEV: 2793	10	1.00	382	1%
		211	2020	1	16	56	0%
953		270	Malabar Rd.			WB	989
		156	168	88	0		
	NB					180	
		442	0%	1%	2%	412	
Notes							

0

0

		1	0%	0%	0%	0	City:
		0				SB	State:
		1	0	0			
766	EB	Santa Rosa Ave.			0	90	769
		0	5:00 PM - 6:00 PM			0	0%
		987	TEV: 1771	11	1.00	763	0%
		2	2020	1	16	6	0%
889	WB	Malabar Rd.			WB	997	
		0	270				
		2	0	10	0		
	NB				180		
		8	0%	0%	0%	1.2	
Notes							

0

0

		0	0%	0%	0%	0	City:
		0				SB	State:
		0	0	0			
769	EB	Garvey Rd.			0	90	874
		0	5:00 PM - 6:00 PM			0	0%
		921	TEV: 1985	12	1.00	731	0%
		76	2020	1	16	143	0%
997	WB	Malabar Rd.			WB	997	
		0	270				
		38	0	76	0		
	NB				180		
		219	0%	0%	1%	114	
Notes							

60.1%

0

0

		0	0%	0%	0%	0	City:
		0				SB	State:
874	EB	0	0	0	0	90	942
		0					0%
		979	TEV: 1983	13	1.00	864	1%
		18	2020	1	16	78	0%
997		0	270			WB	1013
		10	0	34	0		
	NB					180	
		96		0%	0%	0%	44
Notes							

0

0

		0	0%	0%	0%	0	City:
		0				SB	State:
942	EB	0	0	0	0	90	973
		0					0%
		1011	TEV: 2010	14	1.00	939	1%
		2	2020	1	16	34	0%
1013		0	270			WB	1032
		3	0	21	0		
	NB					180	
		36		0%	0%	0%	24
Notes							

0

0

		110	0%	0%	2%	90	City:	
		0				SB	State:	
		54	1	55				
973	EB	Maywood Ave./Daffodil Dr.				0	90	1037
		8	5:00 PM - 6:00 PM			81		0%
		1019	TEV: 2213	15	1.00	912		0%
		5	2020	1	16	44		0%
1032	0	270	Malabar Rd.				WB	1100
		7	1	26	0			
	NB					180		
	50	0%	0%	0%	0%	34		
Notes								

0

0

		86	0%	0%	3%	59	City:	
		0				SB	State:	
		35	13	38				
1037	EB	Plaza Entrance				0	90	969
		30	5:00 PM - 6:00 PM			21		5%
		955	TEV: 2393	16	1.00	833		0%
		115	2020	1	16	115		0%
1100	0	270	Malabar Rd.				WB	1054
		169	8	61	0			
	NB					180		
	243	0%	0%	0%	0%	238		
Notes								

0

0

			1292	1%	1%	1%	1068	City:
			0				SB	State:
			320		593	379		
969	EB	14	Minton Rd.			0	90	1167
			5:00 PM - 6:00 PM					
			364		TEV: 4024	17	1.00	342
			650		2020	1	16	571
			40					254
1054	WB	270	Malabar Rd.				WB	1100
			78		362	71	0	
			NB					180
			887	0%	2%	3%		511
Notes								
-24.9%								

2050 AM NO-BUILD RAW TRAFFIC FORECAST VOLUMES

		871	7%	0%	12%	833			
		0				SB	City:		
			259	259	353		State:		
830	EB	Kittelson & Associates, Inc.	St. Johns Heritage Pkwy.			0	90	1082	
			7:45 AM - 8:45 AM						
		137				455		3%	
		247	TEV: 2811	1	1.00	492		4%	
		45	2020	1	16	135		0%	
429		270	Malabar Rd.				WB	709	
			79	241	109	0			
			NB			180			
		439	0%	0%	0%	429			
Notes									

31

203

		87	0%	0%	0%	44			
		0				SB	City:		
			56	0	31		State:		
1113	EB	Kittelson & Associates, Inc.	Snapdragon Dr.			0	90	1093	
			7:45 AM - 8:45 AM						
		8				36		0%	
		498	TEV: 1686	2	1.00	1057		4%	
		0	2020	1	16	0		0%	
506		270	Malabar Rd.				WB	529	
			0	0	0	0			
			NB			180			
		0	0%	0%	0%	0			
Notes									

		0	↓ 0%	↶ 0%	↓ 0%	↷ 0%	↑ 0	0	City:
		0	0	0	0	0	0	0	State:
		0	0	0	0	0	0	0	
-39	835	←	EB	Kittelson & Associates, Inc.	Palm Bay Public Works (W)	0	90	↷	840
					7:45 AM - 8:45 AM	0			0%
					TEV: 1586	7	1.00		834
					2020	1	16		6
-31	743	↷	0	270	Malabar Rd.		WB	↶	743
					1	0	2		0
					NB				180
					8	↓	0%	↶ 0%	↷ 0%
					Notes				3

0

0

		0	↓ 0%	↶ 0%	↓ 0%	↷ 0%	↑ 0	0	City:
		0	0	0	0	0	0	0	State:
		0	0	0	0	0	0	0	
	840	←	EB	Kittelson & Associates, Inc.	Palm Bay Public Works (E)	0	90	↷	866
					7:45 AM - 8:45 AM	0			0%
					TEV: 1633	8	1.00		836
					2020	1	16		30
	743	↷	0	270	Malabar Rd.		WB	↶	757
					4	0	20		0
					NB				180
					36	↓	0%	↶ 0%	↷ 0%
					Notes				24

		78	↓ 0%	↶ 0%	↓ 0%	↷ 0%	↑ 26	26	City:
		0	0	0	0	0	0	0	State:
		43	0	35					
-815	59	←	EB	Kittelson & Associates, Inc.	Watoga Ave.	0	90	↷	20
					7:45 AM - 8:45 AM	14			0%
					TEV: 144	19	1.00		0
					2020	1	16		6
695	17	↷	0	270	Malabar Rd.		WB	↶	48
					16	0	13		0
					NB				180
					11	↓	0%	↶ 0%	↷ 0%
					Notes				29

0

0

		0	↓	0%	↙	0%	↓	0%	↘	0%	↑	0		
		0		0								0	SB	City:
		0		0								0	State:	
866	↔	EB	Kittelson & Associates, Inc.	Post Office	0	90	⊖	↔	869					
	↙	0%		7:45 AM - 8:45 AM	0				0%	↘				
	↘	4%	739	TEV: 1656	9	1.00	855		5%	↙				
	↙	0%	18	2020	1	16	14		0%	↘				
757	↔	⊖	270	Malabar Rd.									WB	↔
				11	0	19	0							
				NB								⊖	180	
				32	↓	0%	↙	0%	↘	0%	↑	30		
				Notes										

162

-57

9

		518	↓	7%	↙	5%	↓	2%	↘	2%	↑	546		
		0										0	SB	City:
		0		51		118		349				0	State:	
1031	↔	EB	Kittelson & Associates, Inc.	Jupiter Blvd.	0	90	⊖	↔	1292					
	↙	1%	68	7:45 AM - 8:45 AM	336				3%	↘				
	↘	2%	622	TEV: 3089	10	1.00	788		4%	↙				
	↙	11%	125	2020	1	16	168		6%	↘				
815	↔	⊖	270	Malabar Rd.									WB	↔
				192	142	130	0							
				NB								⊖	180	
				411	↓	5%	↙	4%	↘	2%	↑	464		
				Notes										

-422

369

		0	↓	0%	↙	0%	↓	0%	↘	0%	↑	0	City:
		0										0	State:
		0										0	
870	←	EB	Kittelson & Associates, Inc.	Santa Rosa Ave.	0	90	⊕	←	868				
	↘	0%		7:45 AM - 8:45 AM	0				0%				
	↘	2%	731	TEV: 1609	11	1.00			866				3%
	↘	0%	1	2020	1	16			2				0%
732	←	⊕	270	Malabar Rd.						WB	↔	736	
				4	0	5			0				
				NB					⊕			180	
				3	↓	0%	↙	0%	↘	0%	↑	9	
				Notes									

532

-364

		0	↓	0%	↙	0%	↓	0%	↘	0%	↑	0	City:
		0										0	State:
		0										0	
1400	←	EB	Kittelson & Associates, Inc.	Garvey Rd.	0	90	⊕	←	1400				
	↘	0%		7:45 AM - 8:45 AM	0				0%				
	↘	2%	1032	TEV: 2890	12	1.00			1208				2%
	↘	5%	68	2020	1	16			192				2%
1100	←	⊕	270	Malabar Rd.						WB	↔	1230	
				192	0	198			0				
				NB					⊕			180	
				260	↓	14%	↙	0%	↘	2%	↑	390	
				Notes									

-510

402

		0	↓	0%	↶	0%	↓	0%	↷	0		
		θ		0						SB	City:	
				0		0		0			State:	
890	↶	EB	Association	Madalyn Landing	0	90	θ	↷	902			
	↶	0%	0	7:45 AM - 8:45 AM	0			0%	↷			
	↶	2%	806	TEV: 1797	13	1.00	867	3%	↷			
	↶	4%	22	2020	1	16	35	0%	↷			
828	↶	θ	270	Malabar Rd.					WB	↷	850	
				23	0	44	0					
				NB				θ	180			
				57	↓	0%	↶	0%	↷	2%	↑	67
Notes												

0

0

		0	↓	0%	↶	0%	↓	0%	↷	0		
		θ		0						SB	City:	
				0		0		0			State:	
902	↶	EB	Association	Sutherland Dr.	0	90	θ	↷	905			
	↶	0%	0	7:45 AM - 8:45 AM	0			0%	↷			
	↶	2%	844	TEV: 1777	14	1.00	896	2%	↷			
	↶	0%	6	2020	1	16	9	0%	↷			
850	↶	θ	270	Malabar Rd.					WB	↷	860	
				6	0	16	0					
				NB				θ	180			
				15	↓	0%	↶	0%	↷	0%	↑	22
Notes												

0

0

		94	↓ 4%	↶ 0%	↷ 0%	↑ 64			
		θ	0				SB	City:	
			48	0	46			State:	
905	↶	EB	Maywood Ave./Daffodil Dr.			0	90	θ	↷ 930
			8	7:45 AM - 8:45 AM		56			5% ↶
			839	TEV: 1937	15	1.00	843		2% ↶
			13	2020	1	16	31		0% ↶
860	↶	θ	270	Malabar Rd.				WB	↷ 924
			14	0	39	0			
			NB				θ	180	
			44	↓ 7%	↶ 0%	↷ 0%	↑ 53		
Notes									

0

0

		25	↓ 0%	↶ 0%	↷ 0%	↑ 12			
		θ	0				SB	City:	
			14	4	7			State:	
930	↶	EB	Plaza Entrance			0	90	θ	↷ 901
			8	7:45 AM - 8:45 AM		1			0% ↶
			873	TEV: 1959	16	1.00	847		3% ↶
			43	2020	1	16	53		0% ↶
924	↶	θ	270	Malabar Rd.				WB	↷ 917
			69	3	37	0			
			NB				θ	180	
			100	↓ 0%	↶ 0%	↷ 0%	↑ 109		
Notes									

499

-172

		1274	5%	2%	0%	1100			
		0					SB	City:	
		635		324	315			State:	
1400	EB	Minton Rd.				0	90	1057	
		307	7:45 AM - 8:45 AM			311		0%	
		710	TEV: 4138	17	1.00	632		3%	
		72	2020	1	16	114		2%	
1089		270	Malabar Rd.					WB	1128
		133	482	103	0				
	NB					180			
		510	0%	1%	0%	718			
	Notes								
		36.7%							

2050 AM NO-BUILD TRAFFIC FORECAST VOLUME ADJUSTMENTS

		40	7%	0%	12%	86	City:		
		0				SB	State:		
		0		0	40				
190	EB	St. Johns Heritage Pkwy.		0	90	377			
11%		7:45 AM - 8:45 AM		86		3%			
6%		98	TEV: 579	1	1.00	190	4%		
0%		0	2020	1	16	101	0%		
98	WB	Malabar Rd.		0	202				
		0		0	64	0			
		NB		0	180				
		101	0%	0%	0%	64			
Notes									

-31

-203

		0	0%	0%	0%	0	City:		
		0				SB	State:		
		0		0	0				
346	EB	Snapdragon Dr.		0	90	346			
0%		7:45 AM - 8:45 AM		0		0%			
7%		405	TEV: 751	2	1.00	346	4%		
0%		0	2020	1	16	0	0%		
405	WB	Malabar Rd.		0	405				
		0		0	0	0			
		NB		0	180				
		0	0%	0%	0%	0			
Notes									

0

0

		0	0%	0%	0%	0	City:
		0				SB	State:
		0	0	0	0		
346	EB	0	Bavarian Ave.			0	90
0%		0	7:45 AM - 8:45 AM			0	0%
5%		405	TEV: 751	5	1.00	346	4%
0%		0	2020	1	16	0	0%
405	WB	270	Malabar Rd.			0	405
		0	0	0	0	0	
		NB				180	
		0	17%	0%	0%	0	
Notes							

0

0

		0	0%	0%	0%	0	City:
		0				SB	State:
		0	0	0	0		
346	EB	0	Hurley Blvd.			0	90
0%		0	7:45 AM - 8:45 AM			0	0%
4%		405	TEV: 761	6	1.00	331	5%
3%		0	2020	1	16	0	3%
405	WB	270	Malabar Rd.			0	415
		15	0	10	0	0	
		NB				180	
		0	1%	0%	0%	25	
Notes							

0

0

		0	0%	0%	0%	0	City:
		0				SB	State:
331	EB	0				90	331
0%		0				0%	
4%		415	TEV: 746	9	1.00	331	5%
0%		0	2020	1	16	0	0%
415		270	Malabar Rd.			WB	415
		0	0	0	0		
		NB				180	
0		0%	0%	0%	0%	0	
Notes							

-162

57

9

		163	7%	5%	2%	181	City:
		0				SB	State:
		101	54	8			
169	EB	0				90	110
1%		121	7:45 AM - 8:45 AM			29	3%
2%		177	TEV: 702	10	1.00	68	4%
11%		60	2020	1	16	13	6%
358		270	Malabar Rd.			WB	225
		0	31	40	0		
		NB				180	
127		5%	4%	2%	71		
Notes							

422

-369

		0	0%	0%	0%	0%	0	City:
		0					SB	State:
		0	0	0	0			
532	EB	0	Santa Rosa Ave.			0	90	532
0%		0	7:45 AM - 8:45 AM			0		0%
2%		594	TEV: 1126	11	1.00	532		3%
0%		0	2020	1	16	0		0%
594	WB	270	Malabar Rd.				WB	594
		0	0	0	0	0		
	NB					180		
0		0	0%	0%	0%	0		
Notes								

-532

364

		0	0%	0%	0%	0%	0	City:
		0					SB	State:
		0	0	0	0			
0	EB	0	Garvey Rd.			0	90	0
0%		0	7:45 AM - 8:45 AM			0		0%
2%		222	TEV: 230	12	1.00	0		2%
5%		8	2020	1	16	0		2%
230	WB	270	Malabar Rd.				WB	222
		0	0	0	0	0		
	NB					180		
8		8	14%	0%	2%	0		
Notes								

510

-402

		0	0%	0%	0%	0%	0	City:
		0					SB	State:
		0	0	0	0			
510	EB	Associates, Inc.	Madalyn Landing	0	90	0	510	
		0	7:45 AM - 8:45 AM	0		0%		
		624	TEV: 1134	13	1.00	510	3%	
		0	2020	1	16	0	0%	
624	WB	270	Malabar Rd.				624	
		0	0	0	0			
		NB				180		
		0	0%	0%	2%	0		
Notes								

0

0

		0	0%	0%	0%	0%	0	City:
		0					SB	State:
		0	0	0	0			
510	EB	Associates, Inc.	Sutherland Dr.	0	90	0	510	
		0	7:45 AM - 8:45 AM	0		0%		
		624	TEV: 1134	14	1.00	510	2%	
		0	2020	1	16	0	0%	
624	WB	270	Malabar Rd.				624	
		0	0	0	0			
		NB				180		
		0	0%	0%	0%	0		
Notes								

0

0

		0	4%	0%	0%	0	City:
		0				SB	State:
510	EB	0	Maywood Ave./Daffodil Dr.	0	90	510	
25%		0	7:45 AM - 8:45 AM	0		5%	
1%		624	TEV: 1134	15	1.00	510	2%
8%		0	2020	1	16	0	0%
624	270		Malabar Rd.			WB	624
		0	0	0	0		
		NB				180	
		0	7%	0%	0%	0	
Notes							

0

0

		0	0%	0%	0%	0	City:
		0				SB	State:
510	EB	0	Plaza Entrance	0	90	510	
0%		0	7:45 AM - 8:45 AM	0		0%	
2%		624	TEV: 1134	16	1.00	510	3%
0%		0	2020	1	16	0	0%
624	270		Malabar Rd.			WB	624
		0	0	0	0		
		NB				180	
		0	0%	0%	0%	0	
Notes							

-499

172

		0	5%	2%	0%	112		
		0				SB	City: State:	
		0	0	0	0			
11	EB	Minton Rd.				0	90	
2%		7:45 AM - 8:45 AM				0	0%	
1%		TEV: 511	17	1.00		11	3%	
2%		2020	1	16		0	2%	
452	WB	Malabar Rd.					360	
		0	0	48		0		
	NB					0	180	
		28	0%	1%	0%		48	
		Notes						

2050 AM NO-BUILD FINAL TRAFFIC FORECAST VOLUMES

		911	7%	0%	12%	919	City:	
		0				SB	State:	
		259	259	393				
1020	EB	Kittelson & Associates, Inc.		St. Johns Heritage Pkwy.		0	90	1459
		137	7:45 AM - 8:45 AM		541		3%	
		345	TEV: 339%	1	1.00	682		4%
		45	2020	1	16	236		0%
527	0	270	Malabar Rd.				WB	911
			79	241	173	0		
		NB				180		
		540	0%	0%	0%	493		
Notes								

0

0

		87	0%	0%	0%	44	City:	
		0				SB	State:	
		56	0	31				
1459	EB	Kittelson & Associates, Inc.		Snapdragon Dr.		0	90	1439
		8	7:45 AM - 8:45 AM		36		0%	
		903	TEV: 2437%	2	1.00	1403		4%
		0	2020	1	16	0		0%
911	0	270	Malabar Rd.				WB	934
			0	0	0	0		
		NB				180		
		0	0%	0%	0%	0		
Notes								

0

0

		9	0%	0%	0%	15			
		0				SB	City:		
			3	0	6		State:		
1439	EB	Championship Cir.	0	90	1447				
		7:45 AM - 8:45 AM	11		0%				
		TEV: 2390	3	1.00	1436				
		2020	1	16	0				
934	WB	Malabar Rd.	0	270	936				
			0	0	0				
	NB				180				
			0	0%	0%	0%			
			0		0				
Notes									

		104	3%	0%	1%	88			
		0				SB	City:		
			37	1	66		State:		
1265	EB	Krassner Dr./ Bending Branch Ln	0	90	1266				
		7:45 AM - 8:45 AM	72		3%				
		TEV: 2577	4	1.00	1149				
		2020	1	16	45				
1058	WB	Malabar Rd.	0	270	1156				
			79	2	68	0			
	NB				180				
			68	4%	50%	2%	149		
Notes									



		45	0%	0%	0%	15			
		0				SB	City:		
			27	0	18		State:		
1447	EB	Wisteria Ave.	0	90	1265				
		7:45 AM - 8:45 AM	9		0%				
		TEV: 2655	18	1.00	1175				
		2020	1	16	81				
936	WB	Malabar Rd.	0	270	1058				
			245	0	164	0			
	NB				180				
			135	0%	0%	0%	409		
Notes									

0

0

		0	↓ 0%	↶ 0%	↷ 0%	↑ 0%	0	City:			
		0					SB	State:			
		0	0	0	0						
1266	↶	EB	Kittelson & Associates, Inc.		Bavarian Ave.		0	90	↷	1260	
	↶		0%			7:45 AM - 8:45 AM	0		0%	↷	
	↶		5%		1155	TEV: 2424	5	1.00	1260	4%	↶
	↶		0%		1	2020	1	16	0	0%	↷
1156	↶	θ	270			Malabar Rd.		WB	↷	1157	
					6	0	2	0			
						NB		θ	180		
		1	↓	↶ 17%	↷ 0%	↸ 0%	↑	8			
Notes											

0

0

		0	↓ 0%	↶ 0%	↷ 0%	↑ 0%	0	City:			
		0					SB	State:			
		0	0	0	0						
1260	↶	EB	Kittelson & Associates, Inc.		Hurley Blvd.		0	90	↷	1205	
	↶		0%			7:45 AM - 8:45 AM	0		0%	↷	
	↶		4%		1059	TEV: 2542	6	1.00	1148	5%	↶
	↶		3%		98	2020	1	16	57	3%	↷
1157	↶	θ	270			Malabar Rd.		WB	↷	1127	
					112	0	68	0			
						NB		θ	180		
		155	↓	↶ 1%	↷ 0%	↸ 0%	↑	180			
Notes											

		0	↓ 0%	↶ 0%	↓ 0%	↷ 0%	↑ 0	0	City:
		0	0	0	0	0	0	0	State:
1166	EB	Kittelson & Associates, Inc.	Palm Bay Public Works (W)		0	90	0	1171	
0%		0	7:45 AM - 8:45 AM		0	0%		0%	
3%		1156	TEV: 2332	7	1.00	1165	5%		
0%		2	2020	1	16	6	0%		
1158	WB	Malabar Rd.				WB		1158	
		1	0	2	0				
	NB				0	180			
		8	↓ 0%	↶ 0%	↷ 0%	↑ 0	3		
Notes									

0

0

		0	↓ 0%	↶ 0%	↓ 0%	↷ 0%	↑ 0	0	City:
		0	0	0	0	0	0	0	State:
1171	EB	Kittelson & Associates, Inc.	Palm Bay Public Works (E)		0	90	0	1197	
0%		0	7:45 AM - 8:45 AM		0	0%		0%	
3%		1152	TEV: 2378	8	1.00	1167	5%		
0%		6	2020	1	16	30	0%		
1158	WB	Malabar Rd.				WB		1172	
		4	0	20	0				
	NB				0	180			
		36	↓ 0%	↶ 0%	↷ 0%	↑ 0	24		
Notes									

0

0

		78	↓ 0%	↶ 0%	↓ 0%	↷ 0%	↑ 26	0	City:
		0	43	0	35	0	0	0	State:
1205	EB	Kittelson & Associates, Inc.	Watoga Ave.		0	90	0	1166	
0%		12	7:45 AM - 8:45 AM		14	0%		0%	
0%		1110	TEV: 2400	19	1.00	1146	0%		
0%		5	2020	1	16	6	0%		
1127	WB	Malabar Rd.				WB		1158	
		16	0	13	0				
	NB				0	180			
		11	↓ 0%	↶ 0%	↷ 0%	↑ 0	29		
Notes									

0

0

0

0

		94	↓ 4%	0%	↓ 0%	0%	↑ 64			
		0					SB	City:		
		48	0	46				State:		
1415	←	EB	Kittelson & Associates, Inc.		Maywood Ave./Daffodil Dr.		0	90	↻	1440
	↘	25%	8	7:45 AM - 8:45 AM		56		5%	↘	
	↘	1%	1463	TEV: 3071	15	1.00	1353	2%	↘	
	↘	8%	13	2020	1	16	31	0%	↘	
1484	↻	270	Malabar Rd.					WB	↻	1548
			14	0	39	0				
			NB				180			
			44	↓ 7%	0%	0%	53			
Notes										

0

0

		25	↓ 0%	0%	↓ 0%	0%	↑ 12			
		0					SB	City:		
		14	4	7				State:		
1440	←	EB	Kittelson & Associates, Inc.		Plaza Entrance		0	90	↻	1411
	↘	0%	8	7:45 AM - 8:45 AM		1		0%	↘	
	↘	2%	1497	TEV: 3093	16	1.00	1357	3%	↘	
	↘	0%	43	2020	1	16	53	0%	↘	
1548	↻	270	Malabar Rd.					WB	↻	1541
			69	3	37	0				
			NB				180			
			100	↓ 0%	0%	0%	109			
Notes										

		1274	5%	2%	0%	1212			
		0				SB	City:		
		635	324	315			State:		
1411	EB	Minton Rd.			0	90	1068		
		419	7:45 AM - 8:45 AM		311		0%		
		1022	TEV: 4645	17	1.00	643		3%	
		100	2020	1	16	114		2%	
1541		270	Malabar Rd.			WB	1488		
		133	482	151	0				
		NB			180				
		538	0%	1%	0%	766			
Notes									
-11.5%									

0

0

2050 PM NO-BUILD RAW TRAFFIC FORECAST VOLUMES

0

0

		40	0%	0%	0%	0%	76	City:
		0					SB	State:
		16		0	24		90	530
496	EB	Championship Cir.	5:00 PM - 6:00 PM	0	50	0%		
		26	TEV: 1608	3	1.00	480		3%
		1012	2020	1	16	0		0%
1038	WB	Malabar Rd.		0	0	0		1038
		0		0	0	0		
		0		0%	0%	0%	180	
		0		0%	0%	0%	0	

89.2%
125.4%
-52.2%

83

123

		92	11%	0%	0%	142	City:	
		0				SB	State:	
		17		1	74		90	762
613	EB	Krassner Dr./ Bending Branch Ln	5:00 PM - 6:00 PM	0	100	1%		
		39	TEV: 1871	4	1.00	566		3%
		809	2020	1	16	96		1%
913	WB	Malabar Rd.		0	0	0		954
		0		3	71	0		
		0		0%	0%	0%	180	
		162		7%	33%	4%	104	

63.6%
155.8%

-413

737

		50	0%	0%	0%	50	City:	
		0				SB	State:	
		12		0	18		90	200
117	EB	Wisteria Ave.	5:00 PM - 6:00 PM	0	20	0%		
		30	TEV: 310	18	1.00	0		0%
		0	2020	1	16	180		0%
299	WB	Malabar Rd.		0	0	0		176
		105		0	158	0		
		0		0%	0%	0%	180	
		145		0%	0%	0%	85	

413

-737

0

0

		0	0%	0%	0%	0%	0	City:
		0					0	State:
726	EB	0	0	0	0	0	90	729
		0					0	
		932	TEV: 1713	9	1.00	711		
		16	2020	1	16	18		
948	WB	270					0	953
							0	
							180	
		34		0%	0%	0%	0%	36

91

-147

		576	0%	1%	2%	549	City:	
		0				0	State:	
820	EB	65	132	379	0	90	1157	
		46			388			
		868	TEV: 3228	10	1.00	629		
		186	2020	1	16	140		
1100	WB	270				0	1401	
							0	
							180	
		458		0%	1%	2%	0%	395

-391

412

		1	0%	0%	0%	0%	0	SB	City:
		0							State:
766	EB	1	0	0	0	0	0	90	769
0%		0							0%
1%		987	TEV: 1771	11	1.00	763			0%
0%		2	2020	1	16	6			0%
989	0	270						WB	997
		2	0	10		0			
	NB								180
8		0	0%	0%	0%	0%	12		
Notes									

331

-403

		0	0%	0%	0%	0%	0	SB	City:
		0							State:
1100	EB	0	0	0	0	0	0	90	1205
0%		0							0%
1%		1048	TEV: 2865	12	1.00	1062			0%
0%		352	2020	1	16	143			0%
1400	0	270						WB	1270
		38	0	222		0			
	NB								180
495		0	0%	0%	0%	1%	260		
Notes									

-331

273

263.0%

		1412	1%	1%	1%	1403			
		0					SB	City:	
		440	593	379			State:		
1106	EB	Minton Rd.				0	90	1184	
		699	5:00 PM - 6:00 PM			342		1%	
		788	TEV: 4657	17	1.00	588		1%	
		63	2020	1	16	254		1%	
1550		270	Malabar Rd.					WB	1238
			78	362	71	0			
			NB				180		
		910	0%	2%	3%	511			
Notes									
27.0%									

2050 PM NO-BUILD TRAFFIC FORECAST VOLUME ADJUSTMENTS

		83	7%	0%	0%	7	City:
		0				SB	State:
		0			83		
15	←	EB	Ammon & Associates, Inc.	St. Johns Heritage Pkwy.	0	90	51
				5:00 PM - 6:00 PM	7		3%
	0%			TEV: 357	1	1.00	15
	1%			2020	1	16	29
	0%			Malabar Rd.		WB	306
179	←	270			0		
					0		
					180		
					44		
Notes							

76

-42

		0	0%	0%	0%	0	City:
		0				SB	State:
		0			0		
127	←	EB	Ammon & Associates, Inc.	Snapdragon Dr.	0	90	127
				5:00 PM - 6:00 PM	0		0%
	0%			TEV: 475	2	1.00	127
	0%			2020	1	16	0
	0%			Malabar Rd.		WB	348
348	←	270			0		
					0		
					180		
					0		
Notes							

0

0

		0	0%	0%	0%	0%	0	City:
		0					0	State:
127	EB	0	0	0	0	0	90	127
		0					0	0%
		401	TEV: 528	9	1.00	127		1%
		0	2020	1	16	0		0%
401	WB	270	0	0	0	0	WB	401
		0					0	
	NB	0	0%	0%	0%	0%	180	
		0					0	

-91

147

		139	0%	1%	2%	0	144	City:
		0					0	State:
36	EB	0	36	43	60	0	90	0
		0					0	0%
		91	TEV: 470	10	1.00	138		1%
		0	2020	1	16	0		0%
254	WB	270	0	53	24	0	WB	222
		0					0	
	NB	0	0%	1%	2%	0	180	
		68					77	

0

0

				0	0%	0%	2%	0	City:
				0				0	State:
496	←	EB	Ammon & Associates, Inc.	Maywood Ave./Daffodil Dr.	0	90	0	496	
				5:00 PM - 6:00 PM	0			0%	
				TEV: 1000	15	1.00	496	0%	
				2020	1	16	0	0%	
504	←			Malabar Rd.	WB			504	
				0	0	0	0	0	
				NB				180	
				0	0%	0%	0%	0	
Notes									

0

0

				0	0%	0%	3%	0	City:
				0				0	State:
496	←	EB	Ammon & Associates, Inc.	Plaza Entrance	0	90	0	496	
				5:00 PM - 6:00 PM	0			5%	
				TEV: 1000	16	1.00	496	0%	
				2020	1	16	0	0%	
504	←			Malabar Rd.	WB			504	
				0	0	0	0	0	
				NB				180	
				0	0%	0%	0%	0	
Notes									

-137

496

		122	1%	1%	1%	0	0	City:
		0					SB	State:
		122	0	0			90	209
359	EB	Minton Rd.						
		5:00 PM - 6:00 PM						1%
		0	TEV: 387	17	1.00	209		1%
		8	2020	1	16	0		1%
		0						
8		270					WB	28
		Malabar Rd.						
		28	0	20		0		
		NB						180
		0	0%	2%	3%	48		
Notes								

2050 PM NO-BUILD FINAL TRAFFIC FORECAST VOLUMES

		1007	7%	0%	0%	711	City:
		0				SB	State:
		203	203	601		90	
459	←	EB	Ammon & Anderson, Etz	St. Johns Heritage Pkwy.	0	588	
		217		5:00 PM - 6:00 PM	277		3%
		593	TEV: 2969	1	1.00	200	
		66	2020	1	16	111	
876	←	270		Malabar Rd.		WB	1409
				66	217	215	0
				NB			180
		380	0%	0%	0%	0%	498
Notes							

0

0

		39	0%	0%	0%	97	City:
		0				SB	State:
		15	0	24		90	
588	←	EB	Ammon & Anderson, Etz	Snapdragon Dr.	0	623	
		47		5:00 PM - 6:00 PM	50		0%
		1362	TEV: 2071	2	1.00	573	
		0	2020	1	16	0	
1409	←	270		Malabar Rd.		WB	1386
				0	0	0	0
				NB			180
		0	0%	0%	0%	0%	0
Notes							

0

0

		40	0%	0%	0%	76	City:
		0				SB	State:
		16	0	24	0	90	657
623	EB	Championship Cir.	5:00 PM - 6:00 PM	0	0%		
		26	TEV: 2083	3	1.00	607	3%
		1360	2020	1	16	0	0%
		0					
1386	WB	Malabar Rd.				1384	
		0	0	0	0		
	NB					180	
		0	0%	0%	0%	0	

-30.0%

0

0

		105	11%	0%	0%	142	City:
		0				SB	State:
		17	1	87	0	90	889
740	EB	Krassner Dr./ Bending Branch Ln	5:00 PM - 6:00 PM	0	100	1%	
		39	TEV: 2359	4	1.00	693	3%
		1157	2020	1	16	96	1%
		0					
1261	WB	Malabar Rd.				1315	
		30	3	71	0		
	NB					180	
		162	7%	33%	4%	104	

0

0

0

		30	0%	0%	0%	50	City:
		0				SB	State:
		12	0	18	0	90	740
657	EB	Wisteria Ave.	5:00 PM - 6:00 PM	0	0%		
		30	TEV: 2025	18	1.00	540	0%
		1085	2020	1	16	180	0%
		269					
1384	WB	Malabar Rd.				1261	
		105	0	158	0		
	NB					180	
		145	0%	0%	0%	85	

0

0

		0	0%	0%	0%	0%	0	0	City:
		0					0	0	State:
889	EB	Ammon & Associates, Inc.	Bavarian Ave.	0	90	0	887		
		0	5:00 PM - 6:00 PM	0		0%			
		1309	TEV: 2206	5	1.00	885		1%	
		6	2020	1	16	2		0%	
1315	WB	270	Malabar Rd.				1309		
				4	0	0			
	NB					180			
		8		0%	0%	0%	4		
Notes									

0

0

		0	0%	0%	0%	0%	0	0	City:
		0					0	0	State:
887	EB	Ammon & Associates, Inc.	Hurley Blvd.	0	90	0	862		
		0	5:00 PM - 6:00 PM	0		0%			
		1162	TEV: 2398	6	1.00	790		1%	
		147	2020	1	16	72		3%	
1309	WB	270	Malabar Rd.				1292		
				97	0	130			
	NB					180			
		219		0%	0%	3%	227		
Notes									

			0	0%	0%	0%	0%	0%	0	0	City:
			0	0%	0%	0%	0%	0%	0	0	State:
			0	0%	0%	0%	0%	0%	0	0	City:
862	←	EB	0						90	↻	853
			0						0		0%
			1292		TEV: 2197	7	1.00		851		1%
			0		2020	1	16		2		0%
1292	←	(H)	270						WB	↻	1333
									0		0%
									180		0%
									52		0%
Notes											

0

0

			0	0%	0%	0%	0%	0%	0	0	City:
			0	0%	0%	0%	0%	0%	0	0	State:
			0	0%	0%	0%	0%	0%	0	0	City:
853	←	EB	0						90	↻	853
			0						0		0%
			1308		TEV: 2223	8	1.00		852		1%
			25		2020	1	16		1		0%
1333	←	(H)	270						WB	↻	1349
									0		0%
									180		0%
									42		0%
Notes											

			30	0%	0%	0%	0%	0%	50	0	City:
			0	0%	0%	0%	0%	0%	0	0	State:
			0	0%	0%	0%	0%	0%	0	0	City:
862	←	EB	34						90	↻	862
			48						40		0%
			1226		TEV: 2025	19	1.00		808		0%
			18		2020	1	16		14		0%
1292	←	(H)	270						WB	↻	1292
									0		0%
									180		0%
									85		0%
Notes											

0

0

0

0

		0	0%	0%	0%	0%	0		
		0					0	SB	City: State:
		0					0		
853	EB	0					90	856	
		0					0		
		1333	TEV: 2241	9	1.00		838		
		16	2020	1	16		18		
1349		270						WB	1354
							0		
		15					21		
							0		
							180		
		34		0%	0%	0%	0%		
Notes									

0

0

		715	0%	1%	2%		693		
		0					0	SB	City: State:
		101		175	439		0		
856	EB	0					90	1157	
		0					0		
		137					388		
		1006	TEV: 3228	10	1.00		629		
		211	2020	1	16		140		
1354		270						WB	1623
							0		
							126		
							168		
							178		
							0		
							180		
		526		0%	1%	2%	472		
Notes									

0

0

		110	0%	0%	2%	90	City:
		0				SB	State:
		54	1	55		90	1533
1469	EB	Maywood Ave./Daffodil Dr.					
		8	5:00 PM - 6:00 PM			81	0%
		1523	TEV: 3213	15	1.00	1408	0%
		5	2020	1	16	44	0%
1536	WB	Malabar Rd.					1604
		7	1	26		0	
		50				180	
			0%	0%	0%	34	

0

0

		86	0%	0%	3%	59	City:
		0				SB	State:
		35	13	38		90	1465
1533	EB	Plaza Entrance					
		30	5:00 PM - 6:00 PM			21	5%
		1459	TEV: 3393	16	1.00	1329	0%
		115	2020	1	16	115	0%
1604	WB	Malabar Rd.					1558
		169	8	61		0	
		243				180	
			0%	0%	0%	238	

0

0

		1534	1%	1%	1%	1403	
		0				SB	City: State:
		562	593	379	0	90	1393
1465	EB	Minton Rd.					
		699	5:00 PM - 6:00 PM		342		1%
		796	TEV: 5044	17	1.00	797	1%
		63	2020	1	16	254	1%
1558		270	Malabar Rd.			WB	1266
			106	362	91	0	
	NB					180	
		910	0%	2%	3%	558	
Notes							
25.6%							

2030 AM BUILD RAW TRAFFIC FORECAST VOLUMES

		443	7%	0%	12%	678			
		0				SB	City:		
		204	0	239			State:		
776	EB	137	St. Johns Heritage Pkwy.		0	90	1113		
		137	7:45 AM - 8:45 AM		541		3%		
		267	TEV: 1960	1	1.00	572		4%	
		0	2020	1	16	0		0%	
404	WB	270	Malabar Rd.				506		
		0	0	0	0				
			NB			180			
		0	0%	0%	0%	0			
Notes									

0

0

		87	0%	0%	0%	44			
		0				SB	City:		
		56	0	31			State:		
1113	EB	8	Snapdragon Dr.		0	90	1093		
		8	7:45 AM - 8:45 AM		36		0%		
		498	TEV: 1686	2	1.00	1057		4%	
		0	2020	1	16	0		0%	
506	WB	270	Malabar Rd.				529		
		0	0	0	0				
			NB			180			
		0	0%	0%	0%	0			
Notes									

0

0

		9	0%	0%	0%	15			
		0				SB	City:		
		3	0	6			State:		
1093	EB	Kittelson & Associates, Inc.		Championship Cir.		0	90	1101	
0%		4	7:45 AM - 8:45 AM		11		0%		
7%		525	TEV: 1639	3	1.00	1090	4%		
0%		0	2020	1	16	0	0%		
529	WB	Malabar Rd.						531	
		0	0	0					
			NB			180			
		0	0%	0%	0%	0			
Notes									

		104	3%	0%	1%	88			
		0				SB	City:		
		37	1	66			State:		
919	EB	Kittelson & Associates, Inc.		Krassner Dr./ Bending Branch Ln		0	90	920	
7%		14	7:45 AM - 8:45 AM		72		3%		
6%		617	TEV: 1826	4	1.00	803	5%		
21%		22	2020	1	16	45	6%		
653	WB	Malabar Rd.						751	
		79	2	68					
			NB			180			
		68	4%	50%	2%	149			
Notes									

		45	0%	0%	0%	15			
		0				SB	City:		
		27	0	18			State:		
1101	EB	Kittelson & Associates, Inc.		Wisteria Ave.		0	90	919	
0%		6	7:45 AM - 8:45 AM		9		0%		
0%		471	TEV: 1904	18	1.00	829	0%		
0%		54	2020	1	16	81	0%		
531	WB	Malabar Rd.						653	
		245	0	164					
			NB			180			
		135	0%	0%	0%	409			
Notes									

0

0

		0	↓	0%	↙	0%	↓	0%	↘	0%	↑	0	City:
		0	⊖	0								0	State:
920	↔	EB	Kittelson & Associates, Inc.	Bavarian Ave.		0	90	⊕				914	
↘	0%		0	7:45 AM - 8:45 AM		0						0%	↘
↘	5%		750	TEV: 1673	5	1.00	914					4%	↙
↘	0%		1	2020	1	16	0					0%	↙
751	↔	⊖	270	Malabar Rd.									WB
				6	0	2	0						
				NB			⊕	180					
			1	↓	17%	↗	0%	↘	0%	↑	8		
Notes													

0

0

		0	↓	0%	↙	0%	↓	0%	↘	0%	↑	0	City:
		0	⊖	0								0	State:
914	↔	EB	Kittelson & Associates, Inc.	Hurley Blvd.		0	90	⊕				874	
↘	0%		0	7:45 AM - 8:45 AM		0						0%	↘
↘	4%		654	TEV: 1781	6	1.00	817					5%	↙
↘	3%		98	2020	1	16	57					3%	↙
752	↔	⊖	270	Malabar Rd.									WB
				97	0	58	0						
				NB			⊕	180					
			155	↓	1%	↗	0%	↘	0%	↑	155		
Notes													

		0	0%	0%	0%	0%	0	City:
		0					0	State:
835	EB	Kittelson & Associates, Inc.	Palm Bay Public Works (W)	0	90	0	840	
0%			7:45 AM - 8:45 AM	0			0%	
3%		741	TEV: 1586	7	1.00	834	5%	
0%		2	2020	1	16	6	0%	
743	WB		Malabar Rd.				743	
				1	0	2	0	
			NB				180	
				0%	0%	0%	0%	
				3				
Notes								

0

0

		0	0%	0%	0%	0%	0	City:
		0					0	State:
840	EB	Kittelson & Associates, Inc.	Palm Bay Public Works (E)	0	90	0	866	
0%			7:45 AM - 8:45 AM	0			0%	
3%		737	TEV: 1633	8	1.00	836	5%	
0%		6	2020	1	16	30	0%	
743	WB		Malabar Rd.				757	
				4	0	20	0	
			NB				180	
				0%	0%	0%	0%	
				36			24	
Notes								

		78	0%	0%	0%	0%	26	City:
		0					0	State:
874	EB	Kittelson & Associates, Inc.	Watoga Ave.	0	90	0	835	
0%			7:45 AM - 8:45 AM	14			0%	
0%		695	TEV: 1654	19	1.00	815	0%	
0%		5	2020	1	16	6	0%	
712	WB		Malabar Rd.				743	
				16	0	13	0	
			NB				180	
				0%	0%	0%	0%	
				11			29	
Notes								

0

0

		0	0%	0%	0%	0	City:
		0				SB	State:
866	EB	0	0	0	0	90	869
0%		0	7:45 AM - 8:45 AM	0	0%		
4%		739	TEV: 1656	9	1.00	855	5%
0%		18	2020	1	16	14	0%
757		270	Malabar Rd.	WB		758	
		11	0	19	0		
			NB			180	
		32	0%	0%	0%	30	
Notes							

0

0

		612	7%	5%	2%	633	City:
		0				SB	State:
869	EB	152	172	288	0	90	870
1%		189	Jupiter Blvd.	7:45 AM - 8:45 AM	271	3%	
2%		388	TEV: 2661	10	1.00	525	4%
11%		181	2020	1	16	74	6%
758		270	Malabar Rd.	WB		732	
		192	173	56	0		
			NB			180	
		427	5%	4%	2%	421	
Notes							

0

0

			0	0%	0%	0%	0%	0%	0%	0	City:
			0							0	State:
			0							0	SB
870	EB	Kilbuck & Associates, Inc.		Santa Rosa Ave.				90	0	868	
0%			0	7:45 AM - 8:45 AM					0%		
2%			731	TEV: 1609	11	1.00	866		3%		
0%			1	2020	1	16	2		0%		
732			0	Malabar Rd.				WB		736	
			4		0	5	0				
				NB				0		180	
			3	0%	0%	0%				9	
Notes											

0

0

			0	0%	0%	0%	0%	0%	0%	0	City:
			0							0	State:
			0							0	SB
868	EB	Kilbuck & Associates, Inc.		Garvey Rd.				90	0	890	
0%			0	7:45 AM - 8:45 AM					0%		
2%			677	TEV: 1836	12	1.00	809		2%		
5%			59	2020	1	16	81		2%		
736			0	Malabar Rd.				WB		828	
			59		0	151	0				
				NB				0		180	
			140	14%	0%	2%				210	
Notes											

0

0

		0	0%	0%	0%	0	City:
		0				SB	State:
890	EB	0	0	0	0	90	902
		0	7:45 AM - 8:45 AM			0%	
		806	TEV: 1797	13	1.00	867	3%
		22	2020	1	16	35	0%
828		270	Malabar Rd.	WB			850
		23	0	44	0		
			NB			180	
		57	0%	0%	2%	67	
Notes							

0

0

		0	0%	0%	0%	0	City:
		0				SB	State:
902	EB	0	0	0	0	90	905
		0	7:45 AM - 8:45 AM			0%	
		844	TEV: 1777	14	1.00	896	2%
		6	2020	1	16	9	0%
850		270	Malabar Rd.	WB			860
		6	0	16	0		
			NB			180	
		15	0%	0%	0%	22	
Notes							

0

0

		942	5%	2%	0%	887		
		0				SB	City:	
			305	322	315		State:	
901	EB	Mitelson & Associates, Inc.	Minton Rd.			0	90	935
		135	7:45 AM - 8:45 AM			311		0%
		710	TEV: 3424	17	1.00	510		3%
		72	2020	1	16	114		2%
917		270	Malabar Rd.				WB	1128
			86	441	103	0		
			NB			180		
		508	0%	1%	0%	630		
Notes								

2030 AM BUILD TRAFFIC FORECAST VOLUME ADJUSTMENTS

0

0

		0	↓	0%	↘	0%	↓	0%	↙	0%	0	City:
		0	↓	0%	↘	0%	↓	0%	↙	0%	0	State:
		0	↔	0%	↔	0%	↔	0%	↔	0%	0	
0	↔	EB	Kittelson & Associates, Inc.		Bavarian Ave.		0	90	θ	↔	6	
						7:45 AM - 8:45 AM	0			0%		
						TEV: 6	5	1.00		4%	↔	
						2020	1	16		0%	↔	
0	↔	θ	270	Malabar Rd.						WB	↔	6
						-6	0	6				
						NB				θ	180	
						↓	↙	17%	↘	0%	↙	0%
						↑	0%	↘	0%	↙	0%	
						Notes						

43

-5

		89	↓	0%	↘	0%	↓	0%	↙	0%	43	City:
		0	↓	0%	↘	0%	↓	0%	↙	0%	0	State:
		49	↔	0%	↔	0%	↔	0%	↔	0%	16	
49	↔	EB	Kittelson & Associates, Inc.		Hurley Blvd.		0	90	θ	↔	16	
						7:45 AM - 8:45 AM	16			0%	↔	
						TEV: 132	6	1.00		5%	↔	
						2020	1	16		3%	↔	
11	↔	θ	270	Malabar Rd.						WB	↔	32
						0	16	0				
						NB				θ	180	
						↓	↙	1%	↘	0%	↙	0%
						↑	0%	↘	0%	↙	0%	
						Notes						

-6

6

		0	↓	4%	↩	0%	↓	0%	↪	0			
		0	θ	0						0	SB	City:	
				0		0		0				State:	
0	↩	EB	Kittelson & Associates, Inc.	Maywood Ave./Daffodil Dr.	0	90	θ	↩	0				
↩	25%			7:45 AM - 8:45 AM	0				5%	↩			
↩	1%			TEV: 0	15	1.00			2%	↩			
↩	8%			2020	1	16			0%	↩			
0	↩	θ	270	Malabar Rd.						WB	↪		
				0		0		0					
				NB					θ	180			
				0	↩	7%	↩	0%	↪	0%	↩		
				Notes									

0

0

		0	↓	0%	↩	0%	↓	0%	↪	0			
		0	θ	0						0	SB	City:	
				0		0		0				State:	
0	↩	EB	Kittelson & Associates, Inc.	Plaza Entrance	0	90	θ	↩	0				
↩	0%			7:45 AM - 8:45 AM	0				0%	↩			
↩	2%			TEV: 0	16	1.00			3%	↩			
↩	0%			2020	1	16			0%	↩			
0	↩	θ	270	Malabar Rd.						WB	↪		
				0		0		0					
				NB					θ	180			
				0	↩	0%	↩	0%	↪	0%	↩		
				Notes									

		0	↓ 5%	← 2%	↓ 0%	↑ 0	0	City:	
		0	0				SB	State:	
		0	0	0	0		90	0	
0	←	EB	Kimmelson & Associates, Inc.				Minton Rd.	0	0
			7:45 AM - 8:45 AM					0%	0
←	2%		0	TEV: 0	17	1.00	0	3%	
→	1%		0	2020	1	16	0	2%	
→	2%		0						
0	→	0	270	Malabar Rd.				WB	0
			0	0	0	0	0		
			NB				0	180	
0	↓		0%	1%	0%				
			Notes						

0

0

2030 AM BUILD FINAL TRAFFIC FORECAST VOLUMES

		443	7%	0%	12%	678	City:
		0				SB	State:
		204	0	239	0	90	1113
776	EB	Kittelson & Associates, Inc.		St. Johns Heritage Pkwy.		0	1113
		137	7:45 AM - 8:45 AM		541	3%	
		267	TEV: 1960	1	1.00	572	4%
		0	2020	1	16	0	0%
404		270	Malabar Rd.		WB	506	
		0	0	0	0		
		NB			0	180	
		0	0%	0%	0%	0	
Notes							

7.6%

3.8%

U-turn
 31 31
 -31

		87	0%	0%	0%	44	City:
		0				SB	State:
		87	0	0	0	90	1093
1144	EB	Kittelson & Associates, Inc.		Snapdragon Dr.		0	1093
		8	7:45 AM - 8:45 AM		36	0%	
		529	TEV: 1717	2	1.00	1057	4%
		0	2020	1	16	0	0%
537		270	Malabar Rd.		WB	529	
		0	0	0	0		
		NB			0	180	
		0	0%	0%	0%	0	
Notes							

0

0

		9	0%	0%	0%	15	City: State:
		0				SB	
			3	0	6		
1093	EB	Kittelson & Associates, Inc.	Championship Cir.			0	1101
			7:45 AM - 8:45 AM			11	
		4	TEV: 1639	3	1.00	1090	
		0	2020	1	16	0	
529	0	270	Malabar Rd.			WB	531
			0	0	0	0	
			NB			180	
			0	0%	0%	0%	
Notes							

2133
1.9%

		104	3%	0%	1%	88	City: State:
		0				SB	
			37	1	66		
919	EB	Kittelson & Associates, Inc.	Krassner Dr./ Bending Branch Ln			0	920
			7:45 AM - 8:45 AM			72	
		14	TEV: 1826	4	1.00	803	
		617	2020	1	16	45	
653	0	270	Malabar Rd.			WB	751
			79	2	68	0	
			NB			180	
			68	4%	50%	2%	149
Notes							

6.2% 4.5%

3.9%
2411

		45	0%	0%	0%	15	City: State:
		0				SB	
			27	0	18		
1101	EB	Kittelson & Associates, Inc.	Wisteria Ave.			0	919
			7:45 AM - 8:45 AM			9	
		6	TEV: 1904	18	1.00	829	
		471	2020	1	16	81	
531	0	270	Malabar Rd.			WB	653
			245	0	164	0	
			NB			180	
			135	0%	0%	0%	409
Notes							

		0	0%	0%	0%	0%	0%	0	City:
		0						0	State:
920	EB	0	0	0	0	0	0	920	
0%		0	7:45 AM - 8:45 AM	0	0%	0%			
5%		750	TEV: 1679	5	1.00	920	4%		
0%		1	2020	1	16	0	0%		
751	WB	270	Malabar Rd.			758			
		0	0	8	0				
	NB					180			
		1	17%	0%	0%	8			
Notes									

0
0

		89	0%	0%	0%	0%	43	City:	
		0					0	State:	
969	EB	0	49	8	32	0	925		
0%		11	Hurley Blvd.			16	0%		
4%		654	7:45 AM - 8:45 AM	0	16	0%			
3%		98	TEV: 1913	6	1.00	817	5%		
769	WB	270	2020	1	16	57	3%		
		97	Malabar Rd.			779			
		0	16	58	0				
	NB					180			
		163	1%	0%	0%	171			
Notes									

49
-11
35
U-turn

3707

Roundabout Volumes

		89	0%	0%	0%	41	City:	
		0					State:	
914	EB	0	0	0	0	90	890	
0%		0	Hurley Blvd.			0	0%	
4%		654	7:45 AM - 8:45 AM	0	0	0%		
3%		38	TEV: 1701	1.00	817	5%		
658	WB	270	2020	1	16	57	3%	
		77	Malabar Rd.			728		
		0	0	58	0			
	NB					180		
		103	1%	0%	0%	149		
Notes								

U-turn
6
3.8%
4.8%
35
U-turn

			0	0%	0%	0%	0%	0	City:
			0	0%	0%	0%	0%	0	State:
			0	0	0	0	0	0	SB
U-turn	16	851	EB	Kittelson & Associates, Inc.	Palm Bay Public Works (W)	0	90	0	841
		0%	0	7:45 AM - 8:45 AM	0	0%	0%	0%	
		3%	741	TEV: 1587	7	1.00	835	5%	
		0%	2	2020	1	16	6	0%	
		759	0	Malabar Rd.				WB	744
			0	0	3	0			
			NB				0	180	
			8	0%	0%	0%	0%	3	

			0	0%	0%	0%	0%	0	City:
			0	0%	0%	0%	0%	0	State:
			0	0	0	0	0	0	SB
U-turn	1	841	EB	Kittelson & Associates, Inc.	Palm Bay Public Works (E)	0	90	0	880
		0%	0	7:45 AM - 8:45 AM	0	0%	0%	0%	
		3%	737	TEV: 1633	8	1.00	836	5%	
		0%	6	2020	1	16	30	0%	
		744	0	Malabar Rd.				WB	771
			4	0	20	0			
			NB				0	180	
			36	0%	0%	0%	0%	24	

			78	0%	0%	0%	0%	26	City:
			0	0%	0%	0%	0%	0	State:
			78	0	0	0	0	0	SB
-16		909	EB	Kittelson & Associates, Inc.	Watoga Ave.	0	90	0	851
		0%	12	7:45 AM - 8:45 AM	14	0%	0%	0%	
		0%	730	TEV: 1705	19	1.00	831	0%	
		0%	5	2020	1	16	6	0%	
32		747	0	Malabar Rd.				WB	759
			0	0	29	0			
			NB				0	180	
			11	0%	0%	0%	0%	29	

		0	0%	0%	0%	0%	0	City:
		0					0	State:
		0					0	
872	EB	Kittelson & Associates, Inc.	Santa Rosa Ave.			0	90	872
0%		0	7:45 AM - 8:45 AM			0	0%	
2%		731	TEV: 1615	11	1.00	872	3%	
0%		3	2020	1	16	0	0%	
734		270	Malabar Rd.			WB	740	
			0	0	9	0		
			NB			180		
		3	0%	0%	0%	9		
Notes								

2 U-turn
2

-2

		0	0%	0%	0%	0%	0	City:
		0					0	State:
		0					0	
868	EB	Kittelson & Associates, Inc.	Garvey Rd.			0	90	890
0%		0	7:45 AM - 8:45 AM			0	0%	
2%		677	TEV: 1836	12	1.00	809	2%	
5%		59	2020	1	16	81	2%	
736		270	Malabar Rd.			WB	828	
			59	0	151	0		
			NB			180		
		140	14%	0%	2%	210		
Notes								

-4 U-turn U-turn
4

4

0

0

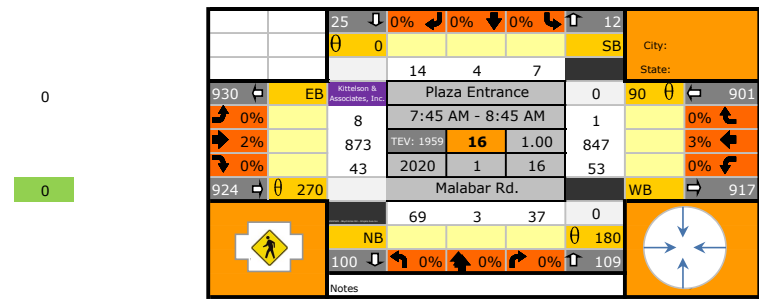
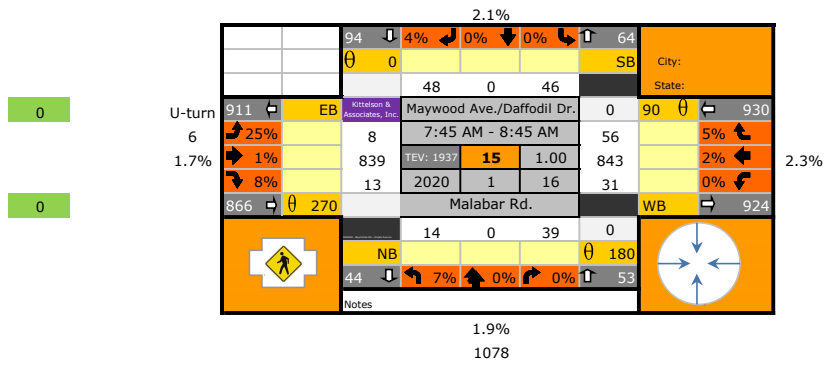
		0	0%	0%	0%	0%	0	City:
		0					0	State:
890	EB	Kittelson & Associates, Inc.	Madalyn Landing	0	90	0	925	
			7:45 AM - 8:45 AM	0		0%		
		0	TEV: 1820	13	1.00	890	3%	
		22	2020	1	16	35	0%	
828	WB		Malabar Rd.				873	
				0	0	67	0	
			NB			180		
		57		0%	0%	2%	67	
Notes								

0

0

		0	0%	0%	0%	0%	0	City:
		0					0	State:
925	EB	Kittelson & Associates, Inc.	Sutherland Dr.	0	90	0	911	
			7:45 AM - 8:45 AM	0		0%		
		0	TEV: 1783	14	1.00	902	2%	
		6	2020	1	16	9	0%	
873	WB		Malabar Rd.				866	
				0	0	22	0	
			NB			180		
		15		0%	0%	0%	22	
Notes								

U-turn
23



0
0

		942	5%	2%	0%	887		
		0				SB	City:	
							State:	
901	EB	Kittelson & Associates, Inc.	Minton Rd.			0	90	935
		135	7:45 AM - 8:45 AM			311		0%
		710	TEV: 3424	17	1.00	510		3%
		72	2020	1	16	114		2%
917	WB		Malabar Rd.				WB	1128
			86	441	103	0		
			NB			0		180
		508	0%	1%	0%	630		
Notes								

-26.7%

2030 PM BUILD RAW TRAFFIC FORECAST VOLUMES

		597	7%	0%	0%	361	City:
		0				SB	State:
		100			497		
300	EB	St. Johns Heritage Pkwy.		0	90	461	
		100	5:00 PM - 6:00 PM	261		3%	
		564	TEV: 1722	1	1.00	200	4%
		0	2020	1	16	0	0%
564	WB	Malabar Rd.				1061	
		0		0		0	
	NB					180	
		0	0%	0%	0%	0	
Notes							

0
0

		39	0%	0%	0%	97	City:
		0				SB	State:
		15			24		
461	EB	Snapdragon Dr.		0	90	496	
		47	5:00 PM - 6:00 PM	50		0%	
		1014	TEV: 1596	2	1.00	446	0%
		0	2020	1	16	0	0%
1061	WB	Malabar Rd.				1038	
		0		0		0	
	NB					180	
		0	0%	0%	0%	0	
Notes							

0

0

		40	0%	0%	0%	76	City:
		0				SB	State:
		16	0	24			
496	EB	Championship Cir.	0	90	530		
		5:00 PM - 6:00 PM			0%		
		26			50		
		TEV: 1608	3	1.00	480		3%
		0			0		0%
		2020	1	16			
1038	WB	Malabar Rd.			1036		
		0	0	0			
		NB			180		
		0	0%	0%	0%		
		0			0		

89.2%
125.4%
-52.2%

0

0

		92	11%	0%	0%	142	City:
		0				SB	State:
		17	1	74			
613	EB	Krassner Dr./ Bending Branch Ln	0	90	762		
		5:00 PM - 6:00 PM			100		1%
		39			100		
		TEV: 1871	4	1.00	566		3%
		0			96		1%
		2020	1	16			
913	WB	Malabar Rd.			954		
		30	3	71			
		NB			180		
		162	7%	33%	4%	104	

63.6%
155.8%

		30	0%	0%	0%	50	City:
		0				SB	State:
		12	0	18			
530	EB	Wisteria Ave.	0	90	613		
		5:00 PM - 6:00 PM			20		0%
		30			413		0%
		TEV: 2025	18	1.00	180		0%
		0			269		0%
		2020	1	16			
1036	WB	Malabar Rd.			913		
		105	0	158			
		NB			180		
		145	0%	0%	0%	85	

0

0

0

0

		0	0%	0%	0%	0	City:
		0				SB	State:
		0					
726	EB	Post Office	0	90	729		
		5:00 PM - 6:00 PM	0		0%		
		TEV: 1713	9	1.00	711	1%	
		2020	1	16	18	0%	
948		Malabar Rd.		WB	953		
		15	0	21	0		
	NB				180		
		34	0%	0%	0%	36	
Notes							

0

0

		662	0%	1%	2%	633	City:
		0				SB	State:
		191		175	296		
729	EB	Jupiter Blvd.	0	90	766		
		5:00 PM - 6:00 PM	328		0%		
		TEV: 2793	10	1.00	382	1%	
		2020	1	16	56	0%	
953		Malabar Rd.		WB	989		
		156	168	88	0		
	NB				180		
		442	0%	1%	2%	412	
Notes							

0

0

		1	↓	0%	0%	0%	0%	0	City:
		0						SB	State:
		1		0					
766	EB	Santa Rosa Ave.		0	90	769			
		0	5:00 PM - 6:00 PM		0				
		987	TEV: 1771	11	1.00	763			
		2	2020	1	16	6			
889		0	Malabar Rd.		WB	997			
		2		0	10	0			
	NB			0	180				
	8	↓	0%	0%	0%	0%	1.2		
Notes									

0

0

		0	↓	0%	0%	0%	0%	0	City:
		0						SB	State:
		0		0					
769	EB	Garvey Rd.		0	90	874			
		0	5:00 PM - 6:00 PM		0				
		921	TEV: 1985	12	1.00	731			
		76	2020	1	16	143			
997		0	Malabar Rd.		WB	997			
		38		0	76	0			
	NB			0	180				
	219	↓	0%	0%	0%	1%	114		
Notes									

60.1%

0

0

		0	0%	0%	0%	0	City:
		0				SB	State:
874	EB	0	0	0	0	90	942
		0				0	0%
		979	TEV: 1983	13	1.00	864	1%
		18	2020	1	16	78	0%
997		0	270			WB	1013
		10	0	34	0		
	NB					180	
		96	0%	0%	0%	44	
Notes							

0

0

		0	0%	0%	0%	0	City:
		0				SB	State:
942	EB	0	0	0	0	90	973
		0				0	0%
		1011	TEV: 2010	14	1.00	939	0%
		2	2020	1	16	34	0%
1013		0	270			WB	1032
		3	0	21	0		
	NB					180	
		36	0%	0%	0%	24	
Notes							

0

0

		110	0%	0%	2%	90	City:
		0				SB	State:
		54	1	55			
973	EB	Maywood Ave./Daffodil Dr.		0	90	1037	
		8	5:00 PM - 6:00 PM		81	0%	
		1019	TEV: 2213	15	1.00	912	0%
		5	2020	1	16	44	0%
1032	WB	Malabar Rd.			WB	1100	
		7	1	26	0		
	NB			180			
	50	0%	0%	0%	34		
Notes							

0

0

		86	0%	0%	3%	59	City:
		0				SB	State:
		35	13	38			
1037	EB	Plaza Entrance		0	90	969	
		30	5:00 PM - 6:00 PM		21	5%	
		955	TEV: 2393	16	1.00	833	0%
		115	2020	1	16	115	0%
1100	WB	Malabar Rd.			WB	1054	
		169	8	61	0		
	NB			180			
	243	0%	0%	0%	238		
Notes							

0

0

			1292	1%	1%	1%	1068	City:
			0				SB	State:
			320		593	379		
969	EB	14	Minton Rd.			0	90	1167
			5:00 PM - 6:00 PM					
			364				342	1%
			650	TEV: 4024	17	1.00	571	1%
			40	2020	1	16	254	1%
1054		270	Malabar Rd.				WB	1100
			78		362	71	0	
			NB				180	
			887	0%	2%	3%	511	
Notes								
-24.9%								

2030 PM BUILD TRAFFIC FORECAST VOLUME ADJUSTMENTS

0

0

		0	↓	0%	↩	0%	↓	0%	↩	↑	0			City:
		0										SB		State:
		0												
0	↔	EB	Widener & Associates, Inc.	Championship Cir.	0	90	↻	0						
				5:00 PM - 6:00 PM										
				TEV: 0	3	1.00								
				2020	1	16								
0	↔	0	270	Malabar Rd.	WB									
				NB									180	
0	↓			0%	↩	0%	↩	0%	↩	↑	0			
														Notes



0

0



		0	↓	11%	↩	0%	↓	0%	↩	↑	0			City:
		0										SB		State:
		0												
0	↔	EB	Widener & Associates, Inc.	Krassner Dr./ Bending Branch Ln	0	90	↻	0						
				5:00 PM - 6:00 PM										
				TEV: 0	4	1.00								
				2020	1	16								
0	↔	0	270	Malabar Rd.	WB									
				NB									180	
0	↓			7%	↩	33%	↩	4%	↩	↑	0			
														Notes



		0	↓	0%	↩	0%	↓	0%	↩	↑	0			City:
		0										SB		State:
		0												
0	↔	EB	Widener & Associates, Inc.	Wisteria Ave.	0	90	↻	0						
				5:00 PM - 6:00 PM										
				TEV: 1715	18	1.00								
				2020	1	16								
0	↔	0	270	Malabar Rd.	WB									
				NB									180	
0	↓			0%	↩	0%	↩	0%	↩	↑	0			
														Notes



6

-6

0	↓	0%	↙	0%	↘	0%	↖	↑	0	City:
0	↓	0%	↙	0%	↘	0%	↖	↑	0	State:
0	↓	0%	↙	0%	↘	0%	↖	↑	0	SB
6	↔	0%	EB	0	0	0	0	0	90	⊕
Santa Rosa Ave.										
5:00 PM - 6:00 PM										
0	↔	0%	0	TEV: 8	11	1.00	8	0%	↔	2
0	↔	1%	0	2020	1	16	-6	0%	↔	2
0	↔	0%	0	6	1	16	-6	0%	↔	2
6	↔	0	270	Malabar Rd.			WB	↔	2	0
										
NB										
0	↓	0%	↙	0%	↘	0%	↖	↑	0	180
0	↓	0%	↙	0%	↘	0%	↖	↑	0	0
Notes										
										

-2

2

0	↓	0%	↙	0%	↘	0%	↖	↑	0	City:
0	↓	0%	↙	0%	↘	0%	↖	↑	0	State:
0	↓	0%	↙	0%	↘	0%	↖	↑	0	SB
0	↔	0%	EB	0	0	0	0	0	90	⊕
Garvey Rd.										
5:00 PM - 6:00 PM										
0	↔	0%	0	TEV: 0	12	1.00	0	0%	↔	0
0	↔	1%	0	2020	1	16	0	0%	↔	0
0	↔	0%	0	0	1	16	0	0%	↔	0
0	↔	0	270	Malabar Rd.			WB	↔	0	0
										
NB										
0	↓	0%	↙	0%	↘	0%	↖	↑	0	180
0	↓	0%	↙	0%	↘	0%	↖	↑	0	0
Notes										
										

2030 PM BUILD FINAL TRAFFIC FORECAST VOLUMES

0

0

		40	↓	0%	0%	0%	0%	76	City:
		0						SB	State:
		16		0		24			
496	←	EB				Championship Cir.		90	→
		26				5:00 PM - 6:00 PM		50	→
		1012				TEV: 1608	3	1.00	480
		0				2020	1	16	0
1038	←	0		270		Malabar Rd.		WB	→
		0		0		0		0	
		NB						180	
		0	↓	0%	0%	0%	0%	0	
Notes									

89.2%
125.4%
-52.2%

				2600					
		92	↓	11%	0%	0%	0%	142	City:
		0						SB	State:
		17		1		74			
613	←	EB				Krassner Dr./ Bending Branch Ln		90	→
		39				5:00 PM - 6:00 PM		100	→
		809				TEV: 1871	4	1.00	566
		0				2020	1	16	96
913	←	0		270		Malabar Rd.		WB	→
		0		0		0		0	
		NB						180	
		162	↓	7%	33%	4%		104	
Notes									
5.6%									
2956									

63.6%
155.8%

		30	↓	0%	0%	0%	0%	50	City:
		0						SB	State:
		12		0		18			
530	←	EB		EB		Wisteria Ave.		90	→
		30				5:00 PM - 6:00 PM		20	→
		737				TEV: 2025	18	1.00	413
		0				2020	1	16	180
1036	←	0		270		Malabar Rd.		WB	→
		0		0		0		0	
		NB						180	
		449	↓	0%	0%	0%	0%	263	
Notes									

7911 ↓

6 U-turn
6

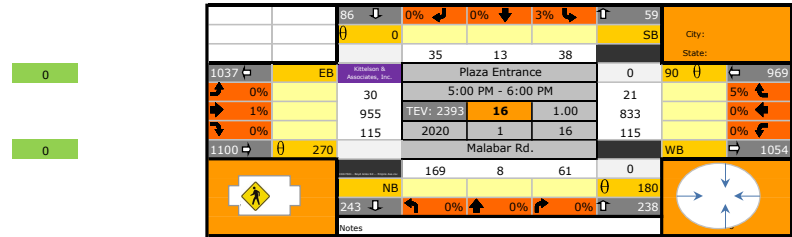
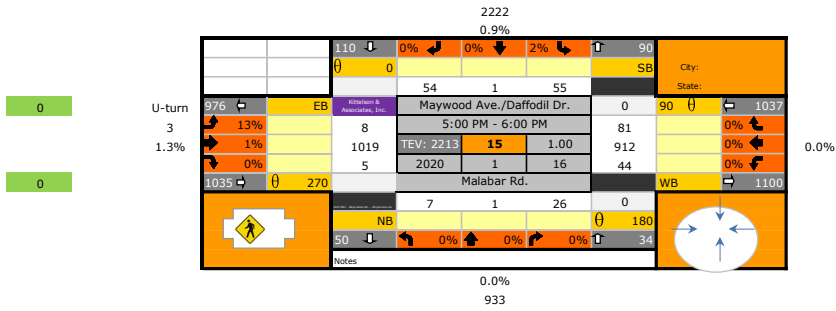
-6

			1	0%	0%	0%	0	City:
			0				SB	State:
			1	0	0			
772	EB	0	Santa Rosa Ave.			0	90	771
		0	5:00 PM - 6:00 PM			0		
		987	TEV: 1779	11	1.00	771		
		8	2020	1	16	0		
995	WB	0	Malabar Rd.			0	WB	999
			0	0	12	0		
			NB			180		
		8	0%	0%	0%	12		
Notes								

U-turn
2

2

			0	0%	0%	0%	0	City:
			0				SB	State:
			0	0	0			
769	EB	0	Garvey Rd.			0	90	874
		0	5:00 PM - 6:00 PM			0		
		921	TEV: 1985	12	1.00	731		
		76	2020	1	16	143		
997	WB	0	Malabar Rd.			0	WB	997
			0	0	12	0		
			NB			180		
		219	0%	0%	1%	114		
Notes								



0

0

		1292	1%	1%	1%	1068		
		0				SB	City:	
		320		593	379		State:	
969	EB	Minton Rd.		0	90	1167		
		364	5:00 PM - 6:00 PM		342		1%	
		650	TEV: 4024	17	1.00	571		1%
		40	2020	1	16	254		1%
1054	WB	Malabar Rd.				1100		
		78	362	71	0			
	NB				180			
		887	0%	2%	3%	511		
	Notes							
								-24.9%

2050 AM BUILD RAW TRAFFIC FORECAST VOLUMES

0

0

		9	0%	0%	0%	15			
		0				SB	City:		
			3	0	6		State:		
1439	EB	Kitelson & Associates, Inc.	Championship Cir.	0	90	1447			
			7:45 AM - 8:45 AM	11		0%			
		4	TEV: 2390	3	1.00	1436			
		930	2020	1	16	0			
		0							
934	WB		Malabar Rd.	0	WB	936			
			0	0	0				
			NB			180			
			0	0%	0%	0%			
			0			0			
			Notes						

		104	3%	0%	1%	88			
		0				SB	City:		
			37	1	66		State:		
1265	EB	Kitelson & Associates, Inc.	Krassner Dr./ Bending Branch Ln	0	90	1266			
			7:45 AM - 8:45 AM	72		3%			
		14	TEV: 2577	4	1.00	1149			
		1022	2020	1	16	45			
		0							
1058	WB		Malabar Rd.	0	WB	1156			
			79	2	68	0			
			NB			180			
			68	4%	50%	2%			
			149						
			Notes						



		45	0%	0%	0%	15			
		0				SB	City:		
			27	0	18		State:		
1447	EB	Kitelson & Associates, Inc.	Wisteria Ave.	0	90	1265			
			7:45 AM - 8:45 AM	9		0%			
		6	TEV: 2655	18	1.00	1175			
		876	2020	1	16	81			
		54							
936	WB		Malabar Rd.	0	WB	1058			
			245	0	164	0			
			NB			180			
			135	0%	0%	0%			
			409						
			Notes						

0

0

		0	↓ 0%	↶ 0%	↷ 0%	↑ 0%	0	City:						
		0					0	State:						
		0					0							
1266	↶	EB	Kittelson & Associates, Inc.		Bavarian Ave.		0	90	↷	1260				
			7:45 AM - 8:45 AM				0		0%					
			0%											
			5%				1155	TEV: 2424	5	1.00	1260		4%	↶
			0%				1	2020	1	16	0		0%	↷
1156	↶	θ	270	Malabar Rd.				WB	↷	1157				
				6	0	2	0							
				NB			θ	180						
			1	↓	17%	↑	0%	↶	0%	↑	8			
Notes														

0

0

		0	↓ 0%	↶ 0%	↷ 0%	↑ 0%	0	City:						
		0					0	State:						
		0					0							
1260	↶	EB	Kittelson & Associates, Inc.		Hurley Blvd.		0	90	↷	1205				
			7:45 AM - 8:45 AM				0		0%					
			0%											
			4%				1059	TEV: 2542	6	1.00	1148		5%	↶
			3%				98	2020	1	16	57		3%	↷
1157	↶	θ	270	Malabar Rd.				WB	↷	1127				
				112	0	68	0							
				NB			θ	180						
			155	↓	1%	↑	0%	↶	0%	↑	180			
Notes														

		0	↓ 0%	↶ 0%	↓ 0%	↷ 0%	↑ 0	0	City:	
		0	0	0	0	0	0	0	State:	
		0	0	0	0	0	0	0		
1166	↔	EB	Kittelson & Associates, Inc.	Palm Bay Public Works (W)	0	90	↷	1171		
↶ 0%				7:45 AM - 8:45 AM	0			0%	↷	
↷ 3%			1156	TEV: 2332	7	1.00	1165		5%	↶
↶ 0%			2	2020	1	16	6		0%	↷
1158	↔	0	270	Malabar Rd.		WB	↷	1158		
				1	0	2	0			
				NB			0	180		
				8	↓	↶ 0%	↷ 0%	↶ 0%	↷ 0%	↑ 3
				Notes						

0

0

		0	↓ 0%	↶ 0%	↓ 0%	↷ 0%	↑ 0	0	City:	
		0	0	0	0	0	0	0	State:	
		0	0	0	0	0	0	0		
1171	↔	EB	Kittelson & Associates, Inc.	Palm Bay Public Works (E)	0	90	↷	1197		
↶ 0%				7:45 AM - 8:45 AM	0			0%	↷	
↷ 3%			1152	TEV: 2378	8	1.00	1167		5%	↶
↶ 0%			6	2020	1	16	30		0%	↷
1158	↔	0	270	Malabar Rd.		WB	↷	1172		
				4	0	20	0			
				NB			0	180		
				36	↓	↶ 0%	↷ 0%	↶ 0%	↷ 0%	↑ 24
				Notes						

0

0

		78	↓ 0%	↶ 0%	↓ 0%	↷ 0%	↑ 26	26	City:	
		0	0	0	0	0	0	0	State:	
		43	0	35						
1205	↔	EB	Kittelson & Associates, Inc.	Watoga Ave.	0	90	↷	1166		
↶ 0%				7:45 AM - 8:45 AM	14			0%	↷	
↷ 0%			1110	TEV: 2400	19	1.00	1146		0%	↶
↶ 0%			5	2020	1	16	6		0%	↷
1127	↔	0	270	Malabar Rd.		WB	↷	1158		
				16	0	13	0			
				NB			0	180		
				11	↓	↶ 0%	↷ 0%	↶ 0%	↷ 0%	↑ 29
				Notes						

0

0

0

0

		94	4%	0%	0%	64			
		0				SB	City:		
		48	0	46			State:		
1415	EB	Kitelson & Associates, Inc.	Maywood Ave./Daffodil Dr.			0	90	1440	
		8	7:45 AM - 8:45 AM			56		5%	
		1463	TEV: 3071	15	1.00	1353		2%	
		13	2020	1	16	31		0%	
1484		270	Malabar Rd.				WB	1548	
			14	0	39	0			
			NB			180			
		44	7%	0%	0%	53			
Notes									

0

0

		25	0%	0%	0%	12			
		0				SB	City:		
		14	4	7			State:		
1440	EB	Kitelson & Associates, Inc.	Plaza Entrance			0	90	1411	
		8	7:45 AM - 8:45 AM			1		0%	
		1497	TEV: 3093	16	1.00	1357		3%	
		43	2020	1	16	53		0%	
1548		270	Malabar Rd.				WB	1541	
			69	3	37	0			
			NB			180			
		100	0%	0%	0%	109			
Notes									

		1274	5%	2%	0%	1212			
		0				SB	City:		
		635	324	315			State:		
1411	EB	Minton Rd.			0	90	1068		
		419	7:45 AM - 8:45 AM		311		0%		
		1022	TEV: 4645	17	1.00	643		3%	
		100	2020	1	16	114		2%	
1541		270	Malabar Rd.				WB	1488	
			133	482	151	0			
			NB			180			
		538	0%	1%	0%	766			
Notes									
-11.5%									

0

0

2050 AM BUILD TRAFFIC FORECAST VOLUME ADJUSTMENTS

0

0

		0	↓	0%	↩	0%	↩	0%	↩	0		City:
		0		0		0		0		0	SB	State:
0	←	EB		0	0	0		0	90	⊕	6	
	↘	0%		0		7:45 AM - 8:45 AM		0		0%	↘	
	↘	5%		0	TEV: 6	5	1.00	6		4%	↘	
	↘	0%		0	2020	1	16	0		0%	↘	
0	←	⊕	270			Malabar Rd.			WB	↔	6	
				-6		0		6			0	
						NB			⊕	180		
				0	↘	17%	↗	0%	↗	0%	↘	
Notes												

43

-5

		89	↓	0%	↩	0%	↩	0%	↩	45		City:
		0		0		0		0		0	SB	State:
49	←	EB		49	8	32		0	90	⊕	16	
	↘	0%		11		7:45 AM - 8:45 AM		16		0%	↘	
	↘	4%		0	TEV: 134	6	1.00	0		5%	↘	
	↘	3%		0	2020	1	16	0		3%	↘	
11	←	⊕	270			Malabar Rd.			WB	↔	32	
				0		18		0			0	
						NB			⊕	180		
				8	↘	1%	↗	0%	↗	0%	↘	
Notes												

14

-14

		0	0%	0%	0%	0%	0	City:
		0	0%	0%	0%	0%	0	State:
		0	0%	0%	0%	0%	0	City:
		0	0%	0%	0%	0%	0	State:
14	EB	Kittelson & Associates, Inc.	Post Office	0	90	11		
			7:45 AM - 8:45 AM	0		0%		
			TEV: 25	9	1.00	25		5%
			2020	1	16	-14		0%
14	WB		Malabar Rd.			11		
				-11	0	11		
				0	180			
				0%	0%	0%		
Notes								

-11

11

9

		0	7%	5%	2%	0%	0	City:
		0	7%	5%	2%	0%	0	State:
		0	7%	5%	2%	0%	0	City:
		0	7%	5%	2%	0%	0	State:
0	EB	Kittelson & Associates, Inc.	Jupiter Blvd.	0	90	0		
			7:45 AM - 8:45 AM	0		3%		
			TEV: 0	10	1.00	0		4%
			2020	1	16	0		6%
0	WB		Malabar Rd.			0		
				0	0	0		
				0	180			
				5%	4%	2%		
Notes								

0

0

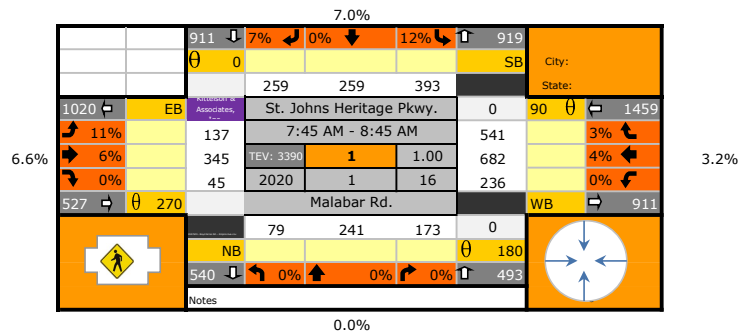
		0	0%	0%	0%	0	0	0	0	City:
		0	0%	0%	0%	0	0	0	0	State:
0	EB	Kittelson & Associates, Inc.	Madalyn Landing	0	90	0	23			
			7:45 AM - 8:45 AM	0		0%				
0%		0	TEV: 23	13	1.00	23		3%		
2%		0	2020	1	16	0		0%		
4%		0								
0	0	270	Malabar Rd.	WB			23			
			-23	0	23	0				
			NB			0	180			
			0	0%	0%	2%	0			
Notes										

-23

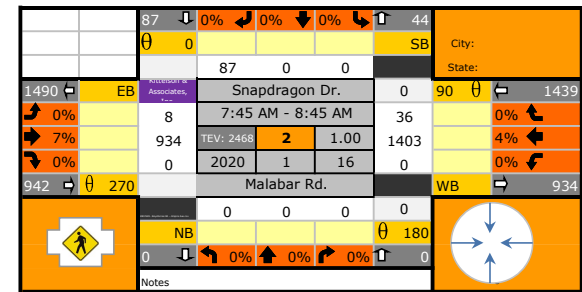
23

		0	0%	0%	0%	0	0	0	0	City:
		0	0%	0%	0%	0	0	0	0	State:
0	EB	Kittelson & Associates, Inc.	Sutherland Dr.	0	90	0	6			
			7:45 AM - 8:45 AM	0		0%				
0%		0	TEV: 6	14	1.00	6		2%		
2%		0	2020	1	16	0		0%		
0%		0								
0	0	270	Malabar Rd.	WB			6			
			-6	0	6	0				
			NB			0	180			
			0	0%	0%	0%	0			
Notes										

2050 AM BUILD FINAL TRAFFIC FORECAST VOLUMES



U-turn
31 31
-31



		0	↓ 0%	↘ 0%	↙ 0%	↑ 0	0	City:		
		0	0	0	0	0	0	State:		
1266	↔	EB	Bavarian Ave.				0	90	↻	1266
	↘	0%	0	7:45 AM - 8:45 AM		0	0	0%	↙	
	↘	5%	1155	TEV: 2430	5	1.00	1266	4%	↙	
	↘	0%	1	2020	1	16	0	0%	↙	
1156	↔	270	Malabar Rd.					WB	↔	1163
			0	0	8	0				
			NB					180		
			1	↓ 17%	↑ 0%	↘ 0%	↑ 8			
Notes										

0
0

		89	↓ 0%	↘ 0%	↙ 0%	↑ 45	45	City:		
		0	0	0	0	0	0	State:		
1315	↔	EB	Hurley Blvd.				0	90	↻	1256
	↘	0%	11	7:45 AM - 8:45 AM		16	0	0%	↙	
	↘	4%	1059	TEV: 2676	6	1.00	1148	5%	↙	
	↘	3%	98	2020	1	16	57	3%	↙	
1174	↔	270	Malabar Rd.					WB	↔	1194
			112	18	68	0				
			NB					180		
			163	↓ 1%	↑ 0%	↘ 0%	↑ 198			
Notes										

49
-11

U-turn
6

35
U-turn

4012

Roundabout Volumes

		89	↓ 0%	↘ 0%	↙ 0%	↑ 43	43	City:		
		0	0	0	0	0	0	State:		
1206	↔	EB	Hurley Blvd.				0	90	↻	1167
	↘	0%	0	7:45 AM - 8:45 AM		0	0	0%	↙	
	↘	4%	1059	TEV: 2462	1.00	1148	5%	↙		4.8%
	↘	3%	38	2020	1	16	57	3%	↙	35
1020	↔	270	Malabar Rd.					WB	↔	1100
			92	0	68	0				
			NB					180		
			103	↓ 1%	↑ 0%	↘ 0%	↑ 176			
Notes										

U-turn
6
3.8%

4.8%
35
U-turn

		0	↓ 0%	↘ 0%	↙ 0%	↕ 0%	↑ 0%	0	City:
		0	0	0	0	0	0	0	State:
		0	0	0	0	0	0	0	
U-turn	16	1182	EB	0	7:45 AM - 8:45 AM	0	90	0	1172
		0%		0		0	0%		0%
		3%		1156	TEV: 2333	7	1.00	1166	5%
		0%		2	2020	1	16	6	0%
		1174	↕ 270		Malabar Rd.		WB	↕ 1159	
				0		0	3	0	
			NB				180		
		8	↓	0%	↘ 0%	↙ 0%	↕ 0%	↑ 3	
Notes									

		0	↓ 0%	↘ 0%	↙ 0%	↕ 0%	↑ 0%	0	City:
		0	0	0	0	0	0	0	State:
		0	0	0	0	0	0	0	
U-turn	1	1172	EB	0	7:45 AM - 8:45 AM	0	90	0	1211
		0%		0		0	0%		0%
		3%		1152	TEV: 2379	8	1.00	1167	5%
		0%		6	2020	1	16	30	0%
		1159	↕ 270		Malabar Rd.		WB	↕ 1186	
				4		0	20	0	
			NB				180		
		36	↓	0%	↘ 0%	↙ 0%	↕ 0%	↑ 24	
Notes									

		78	↓ 0%	↘ 0%	↙ 0%	↕ 0%	↑ 26	0	City:
		0	0	0	0	0	0	0	State:
		78	0	0					
-16		1240	EB	0	7:45 AM - 8:45 AM	14	90	0	1182
		0%		12			0%		0%
		0%		1145	TEV: 2451	19	1.00	1162	0%
		0%		5	2020	1	16	6	0%
32		1162	↕ 270		Malabar Rd.		WB	↕ 1174	
				0		0	29	0	
			NB				180		
		11	↓	0%	↘ 0%	↙ 0%	↕ 0%	↑ 29	
Notes									

0

0

		0	↓ 0%	↙ 0%	↓ 0%	↘ 0%	↑ 0%	0	City:
		0	0	0	0	0	0	0	State:
1211	←	EB	Post Office			0	90	↻	1211
	↘	0%	0	7:45 AM - 8:45 AM	0		0%	↘	
	↘	4%	1154	TEV: 2427	9	1.00	1211	5%	↘
	↘	0%	32	2020	1	16	0	0%	↘
1186	↻	θ	270	Malabar Rd.			WB	↻	1184
			0	0	30	0			
		NB					θ	180	
		32	↓	↙ 0%	↘ 0%	↘ 0%	↑	30	
Notes									

0

0

		681	↓ 7%	↙ 5%	↓ 2%	↘ 2%	↑ 727	727	City:
		0	0	0	0	0	0	0	State:
1211	←	EB	Jupiter Blvd.			0	90	↻	1402
	↘	1%	189	7:45 AM - 8:45 AM	365		3%	↘	
	↘	2%	799	TEV: 3791	10	1.00	856	4%	↘
	↘	11%	185	2020	1	16	181	6%	↘
1184	↻	θ	270	Malabar Rd.			WB	↻	1326
			192	173	170	0			
		NB					θ	180	
		538	↓	↙ 5%	↘ 4%	↘ 2%	↑	535	
Notes									

0

0

		0	↓	0%	↶	0%	↓	0%	↷	0			
		0								SB	City:		
		0								State:			
1400	↶	EB								90	⊕	1435	
	↷	0%								0%			
	↷	2%		1430	TEV: 2954	13	1.00	1400		3%	↶		
	↷	4%		22	2020	1	16	35		0%	↷		
1452	↶	⊕	270		Malabar Rd.					WB	↶	1497	
								67					
										⊕	180		
				57	↓	0%	↶	0%	↷	2%	↶	67	
				Notes									

0

0

U-turn
23

		0	↓	0%	↶	0%	↓	0%	↷	0			
		0								SB	City:		
		0								State:			
1435	↶	EB								90	⊕	1421	
	↷	0%								0%			
	↷	2%		1468	TEV: 2917	14	1.00	1412		2%	↶		
	↷	0%		6	2020	1	16	9		0%	↷		
1497	↶	⊕	270		Malabar Rd.					WB	↶	1490	
								22					
										⊕	180		
				15	↓	0%	↶	0%	↷	0%	↶	22	
				Notes									

0

0

		1274	5%	2%	0%	1212		
		0					SB	City:
		635	324	315			State:	
1411	EB	Minton Rd.			0	90	1068	
		419	7:45 AM - 8:45 AM		311		0%	
		1022	TEV: 4649	17	1.00	643		3%
		100	2020	1	16	114		2%
1541		270	Malabar Rd.				WB	1488
		133	482	151	0			
	NB				180			
		538	0%	1%	0%	766		
Notes								

45.2%

2050 PM BUILD RAW TRAFFIC FORECAST VOLUMES

		1007	7%	0%	0%	711	
		0				SB	City: State:
		203	203	601	0	90	588
459	←	EB	Ammon & Astoria, Or.	St. Johns Heritage Pkwy.	0	90	588
		217		5:00 PM - 6:00 PM	277		3%
		593	TEV: 2969	1	1.00	200	4%
		66	2020	1	16	111	0%
876	←	270		Malabar Rd.		WB	1409
				66	217	215	0
				NB			180
		380	0%	0%	0%	498	
Notes							

0

0

		39	0%	0%	0%	97	
		0				SB	City: State:
		15	0	24	0	90	623
588	←	EB	Ammon & Astoria, Or.	Snapdragon Dr.	0	90	623
		47		5:00 PM - 6:00 PM	50		0%
		1362	TEV: 2071	2	1.00	573	0%
		0	2020	1	16	0	0%
1409	←	270		Malabar Rd.		WB	1386
				0	0	0	0
				NB			180
		0	0%	0%	0%	0	
Notes							

0

0

		40	0%	0%	0%	76	City:
		0				SB	State:
		16	0	24	0	90	657
623	EB	Championship Cir.	5:00 PM - 6:00 PM	0	0%		
		26	TEV: 2083	3	1.00	607	3%
		1360	2020	1	16	0	0%
		0					
1386	WB	Malabar Rd.				1384	
		0	0	0	0		
	NB					180	
		0	0%	0%	0%	0	

-30.0%

0

0

		105	11%	0%	0%	142	City:
		0				SB	State:
		17	1	87	0	90	889
740	EB	Krassner Dr./ Bending Branch Ln	5:00 PM - 6:00 PM	0	100	693	1%
		39	TEV: 2359	4	1.00	96	3%
		1157	2020	1	16	0	1%
		0					
1261	WB	Malabar Rd.				1315	
		30	3	71	0		
	NB					180	
		162	7%	33%	4%	104	

0

0

0

		30	0%	0%	0%	50	City:
		0				SB	State:
		12	0	18	0	90	740
657	EB	Wisteria Ave.	5:00 PM - 6:00 PM	0	20	540	0%
		30	TEV: 2025	18	1.00	180	0%
		1085	2020	1	16	0	0%
		269					
1384	WB	Malabar Rd.				1261	
		105	0	158	0		
	NB					180	
		145	0%	0%	0%	85	

0

0

		0	0%	0%	0%	0%	0	0	City:
		0					0	0	State:
889	EB	Ammon & Associates, Inc.	Bavarian Ave.	0	90	0	887		
		0	5:00 PM - 6:00 PM	0		0%			
		1309	TEV: 2206	5	1.00	885		1%	
		6	2020	1	16	2		0%	
1315	WB	270	Malabar Rd.				1309		
				4	0	0			
	NB					180			
		8		0%	0%	0%	4		
Notes									

0

0

		0	0%	0%	0%	0%	0	0	City:
		0					0	0	State:
887	EB	Ammon & Associates, Inc.	Hurley Blvd.	0	90	0	862		
		0	5:00 PM - 6:00 PM	0		0%			
		1162	TEV: 2398	6	1.00	790		1%	
		147	2020	1	16	72		3%	
1309	WB	270	Malabar Rd.				1292		
				97	0	130			
	NB					180			
		219		0%	0%	3%	227		
Notes									

		0	0%	0%	0%	0%	0%	0	0	City:
		0	0%	0%	0%	0%	0%	0	0	State:
		0	0%	0%	0%	0%	0%	0	0	SB
862	EB	0	0%	0%	0%	0%	0%	90	853	
		0	0%	0%	0%	0%	0%	0	0%	
		1292	0%	7	1.00	851	0%	1%	1%	
		0	0%	2020	1	16	2	0%	0%	
1292	WB	270	0%	0%	0%	0%	0%	0%	1333	
		0	0%	0%	0%	0%	0%	0	0	
		11	0%	0%	0%	41	0	0	180	
		2	0%	0%	0%	0%	0%	0	52	
Notes										

0

0

		0	0%	0%	0%	0%	0%	0	0	City:
		0	0%	0%	0%	0%	0%	0	0	State:
		0	0%	0%	0%	0%	0%	0	0	SB
853	EB	0	0%	0%	0%	0%	0%	90	853	
		0	0%	0%	0%	0%	0%	0	0%	
		1308	0%	8	1.00	852	0%	1%	1%	
		25	0%	2020	1	16	1	0%	0%	
1333	WB	270	0%	0%	0%	0%	0%	0%	1349	
		0	0%	0%	0%	0%	0%	0	0	
		1	0%	0%	0%	41	0	0	180	
		26	0%	0%	0%	0%	0%	0	42	
Notes										

		30	0%	0%	0%	0%	0%	50	50	City:
		0	0%	0%	0%	0%	0%	0	0	State:
		0	0%	0%	0%	0%	0%	0	0	SB
862	EB	34	0%	0%	0%	46	0	90	862	
		48	0%	0%	0%	40	0%	0%	0%	
		1226	0%	19	1.00	808	0%	0%	0%	
		18	0%	2020	1	16	14	0%	0%	
1292	WB	270	0%	0%	0%	0%	0%	0%	1292	
		0	0%	0%	0%	0%	0%	0	0	
		20	0%	0%	0%	20	0	0	180	
		145	0%	0%	0%	0%	0%	0	85	
Notes										

0

0

0

0

		110	0%	0%	2%	90	City:
		0				SB	State:
		54	1	55		90	1533
1469	EB	Maywood Ave./Daffodil Dr.					
		8				81	0%
		1523	TEV: 3213	15	1.00	1408	0%
		5	2020	1	16	44	0%
1536	WB	Malabar Rd.					1604
		7	1	26		0	
						180	
		50	0%	0%	0%	34	
Notes							

0

0

		86	0%	0%	3%	59	City:
		0				SB	State:
		35	13	38		90	1465
1533	EB	Plaza Entrance					
		30				21	5%
		1459	TEV: 3393	16	1.00	1329	0%
		115	2020	1	16	115	0%
1604	WB	Malabar Rd.					1558
		169	8	61		0	
						180	
		243	0%	0%	0%	238	
Notes							

0

0

		1534	1%	1%	1%	1403	City:	
		0				SB	State:	
		562			379			
1465	EB	Minton Rd.				0	90	1393
		699	5:00 PM - 6:00 PM			342		1%
		796	TEV: 5044	17	1.00	797		1%
		63	2020	1	16	254		1%
1558		270	Malabar Rd.				WB	1266
			106	362	91	0		
			NB			180		
		910	0%	2%	3%	558		
Notes								
								25.6%

2050 PM BUILD TRAFFIC FORECAST VOLUME ADJUSTMENTS

2050 PM BUILD FINAL TRAFFIC FORECAST VOLUMES

0

0

		40	0%	0%	0%	76	City:
		0				SB	State:
		16	0	24			
623	EB	Championship Cir.	0	90	657		
		5:00 PM - 6:00 PM			0%		
		26	TEV: 2083	3	1.00	50	
		1360	2020	1	16	607	
		0				0	
1386	WB	Malabar Rd.			1384		
		0	0	0			
	NB				180		
		0	0%	0%	0%	0	

-128.4%
-211.4%
-63.6%

-102.8%
-241.7%

		105	11%	0%	0%	142	City:
		0				SB	State:
		17	1	87			
740	EB	Krassner Dr./ Bending Branch Ln	0	90	889		
		5:00 PM - 6:00 PM			1%		
		39	TEV: 2359	4	1.00	100	
		1157	2020	1	16	693	
		0				96	
1261	WB	Malabar Rd.			1315		
		30	3	71			
	NB				180		
		162	7%	33%	4%	104	

449

		30	0%	0%	0%	50	City:
		0				SB	State:
		12	0	18			
657	EB	Wisteria Ave.	0	90	740		
		5:00 PM - 6:00 PM			0%		
		30	TEV: 2025	18	1.00	20	
		1085	2020	1	16	540	
		269				180	
1384	WB	Malabar Rd.			1261		
		105	0	158			
	NB				180		
		449	0%	0%	0%	263	

0

0

		0	↓	0%	0%	0%	0%	0	SB	City:	
		0								State:	
889	←	EB						0	90	↻	891
								0			0%
								1309			1%
								6			0%
1315	↻	0	270						WB		1313
								0			0
								8	↓		4

22

-55

U-turn

4

		59	↓	0%	0%	0%	0%	115	SB	City:	
		0								State:	
913	←	EB						22	5	32	0
								55			0%
								1162			1%
								147			0%
1368	↻	0	270						WB		1370
								97	23	130	0
								224	↓		250

46

U-turn

5268

Roundabout Volumes

U-turn

4

0.0%

		59	↓	0%	0%	0%	0%	106	SB	City:	
		0								State:	
862	←	EB						0	90	↻	944
								0			0%
								1162			1%
								97			3%
1276	↻	0	270						WB		1288
								47	0	90	0
								174	↓		151

1.2%

46

U-turn

2.1%

2222
0.9%

		110	0%	0%	2%	90	City:	
		0				SB	State:	
		54	1	55				
U-turn	1472	EB	Maywood Ave./Daffodil Dr.			0	90	1533
3			8	5:00 PM - 6:00 PM			81	0%
1.3%			1523	TEV: 3213	15	1.00	1408	0%
			5	2020	1	16	44	0%
	1539	0	270	Malabar Rd.			WB	1604
			7	1	26	0		
			NB			180		
			50	0%	0%	0%	3.4	
			Notes					

0.0%
933

0

0

0

0

		86	0%	0%	3%	59	City:	
		0				SB	State:	
		35	13	38				
	1533	EB	Plaza Entrance			0	90	1465
			30	5:00 PM - 6:00 PM			21	5%
			1459	TEV: 3393	16	1.00	1329	0%
			115	2020	1	16	115	0%
	1604	0	270	Malabar Rd.			WB	1558
			169	8	61	0		
			NB			180		
			243	0%	0%	0%	238	
			Notes					

0

0

		1534	1%	1%	1%	1403		
		0				SB	City:	
		562	593	379			State:	
1465	EB	Minton Rd.		0	90	1393		
		699	5:00 PM - 6:00 PM			342		1%
		796	TEV: 504.4	17	1.00	797		1%
		63	2020	1	16	254		1%
1558		270	Malabar Rd.			WB		1266
		106	362	91	0			
	NB				180			
		910	0%	2%	3%	559		
		Notes						
		31.3%						

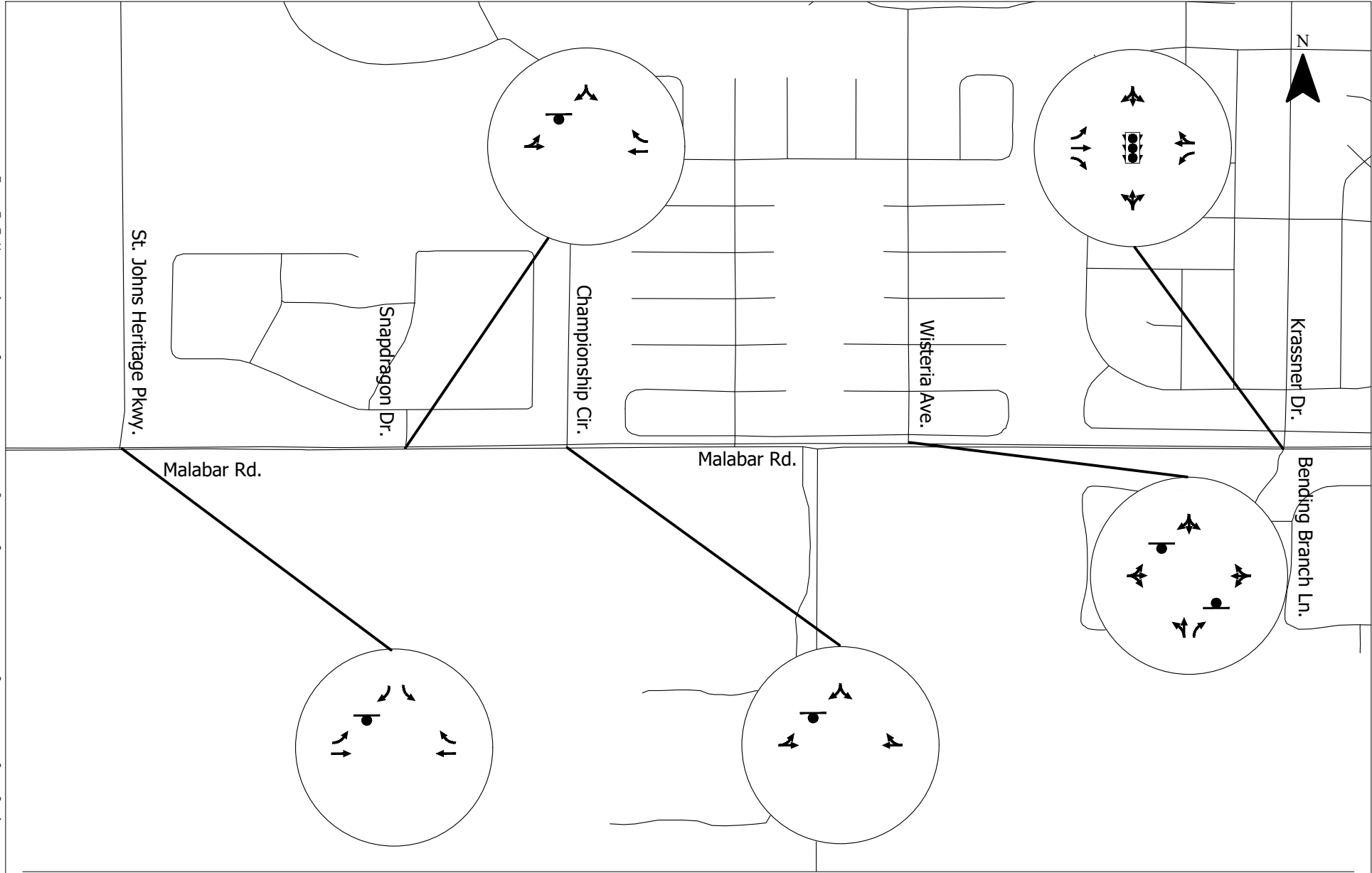
APPENDIX P – 2030 NO-BUILD LANE CONFIGURATIONS, TURNING MOVEMENTS, AND OPERATIONAL PERFORMANCE

Contained in this Appendix –

- 2030 No-Build Lane Configurations
- 2030 No-Build Turning Movements and Operational Performance

2030 NO-BUILD LANE CONFIGURATIONS

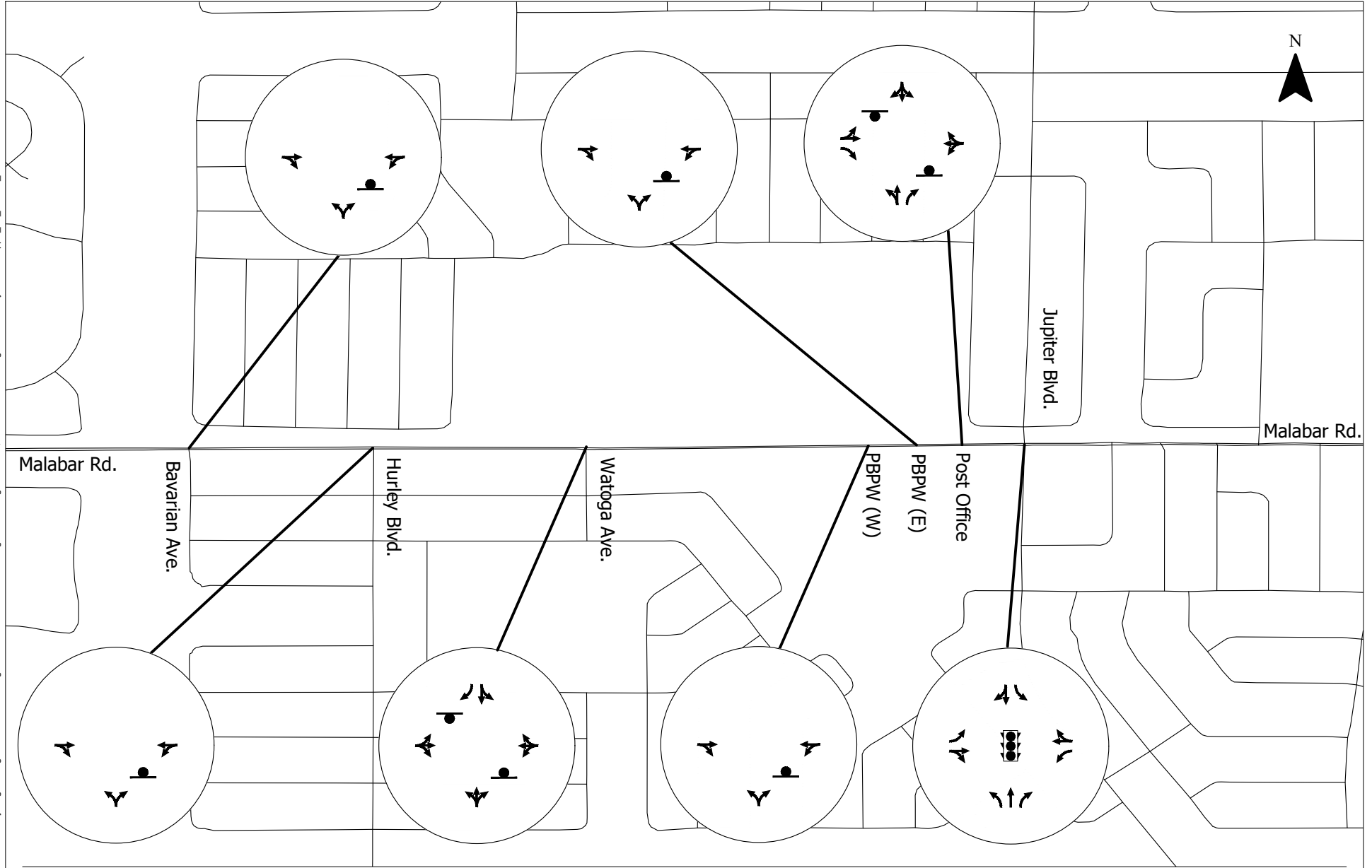
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2030 No-Build Lane Configurations
Not to Scale

Figure
X_A

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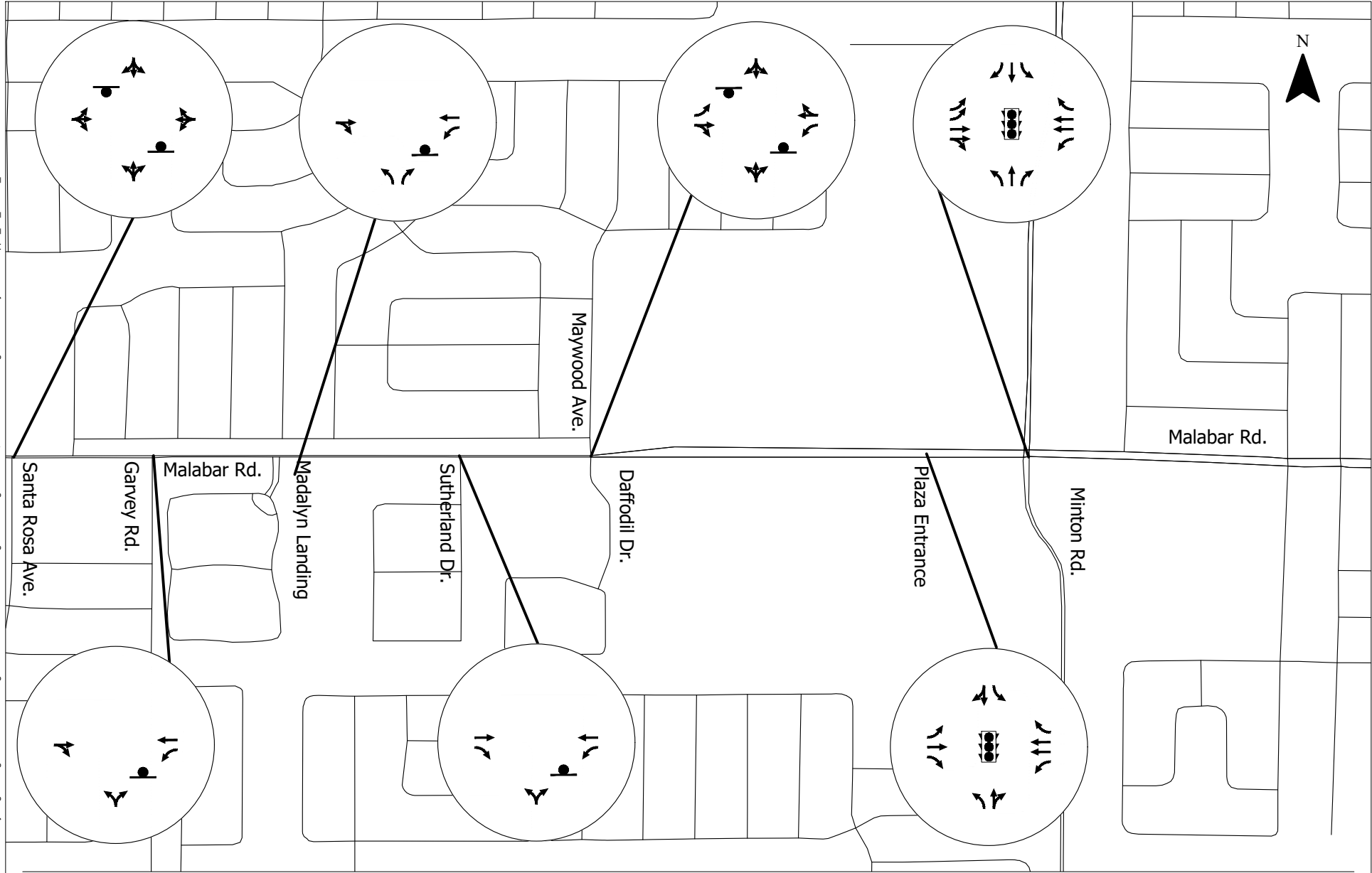


2030 No-Build Lane Configurations

Not to Scale

Figure X_B

H:\23\23773 - Malabar Road PD&E Study\Engineering\Traffic\AutoCAD Figures\23773-Malabar-PD&E-Figures V7.dwg Jan 21, 2021 - 11:10am - agarrison Layout Tab: AppP_Ln_PTARc_L



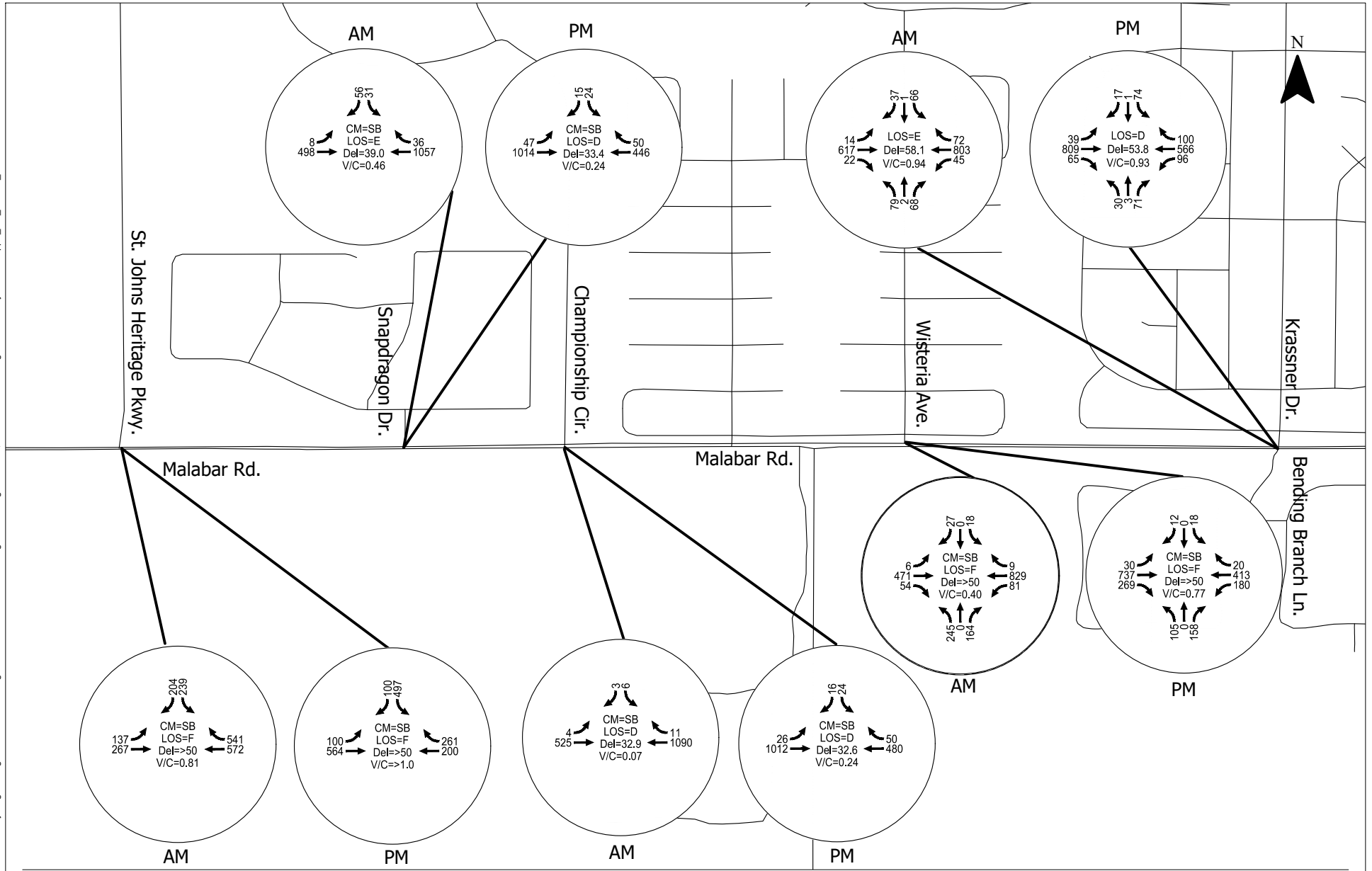
2030 No-Build Lane Configurations

Not to Scale

Figure X_C

2030 NO-BUILD TURNING MOVEMENTS AND OPERATIONAL
PERFORMANCE

H:\23\23773 - Malabar Road PD&E Study\Engineering\Traffic\AutoCAD Figures\23773-Malabar-PD&E-Figures V7.dwg Jan 21, 2021 - 11:10am - agarrison Layout Tab: AppP_Vol_PTARa_L

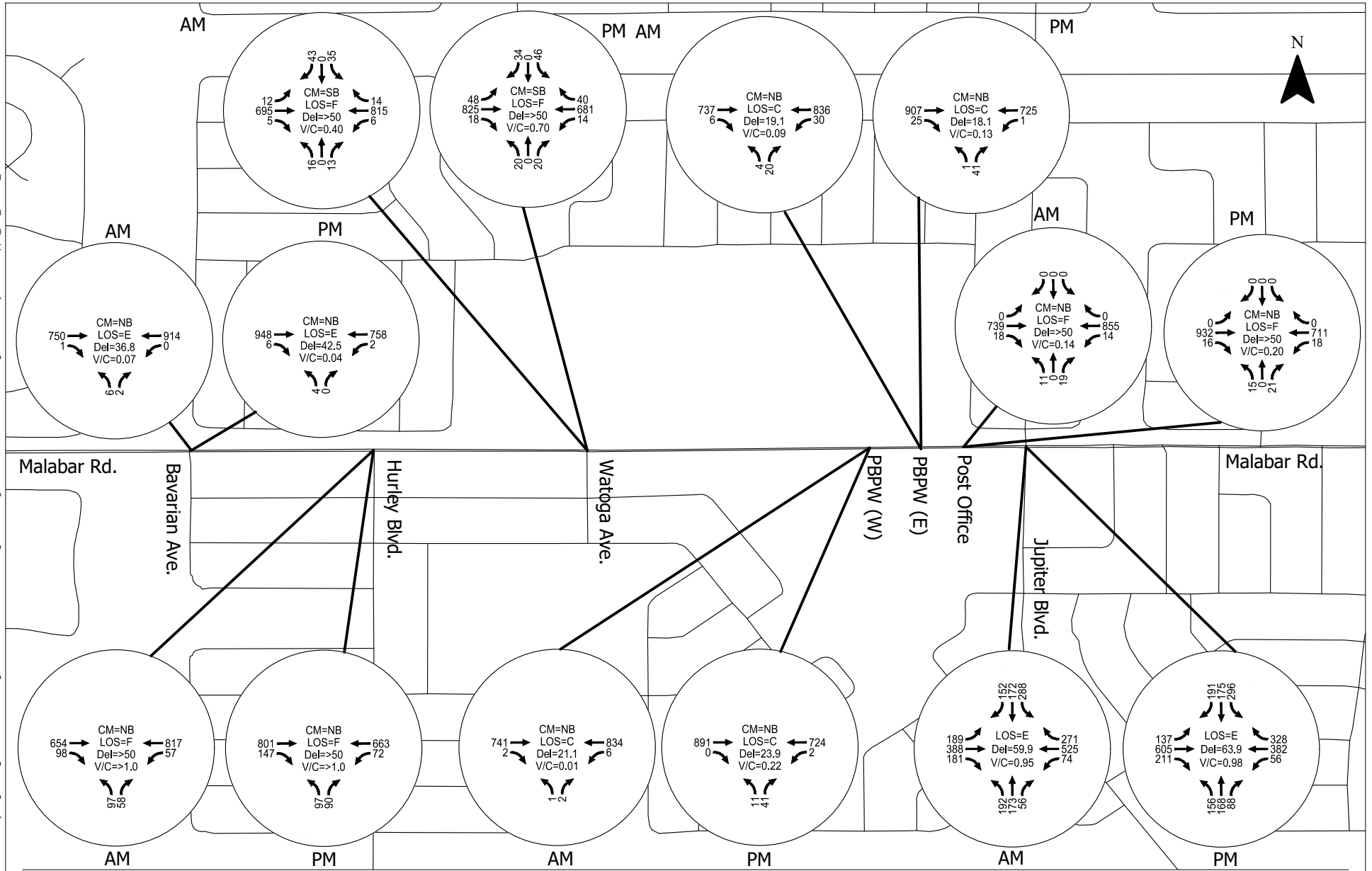


2030 No-Build Traffic Volumes and Operational Performance

Not to Scale

Figure X_A

H:\23\23773 - Malabar Road PD&E Study\Engineering\Traffic\AutoCAD Figures\23773-Malabar-PD&E-Figures V7.dwg Jan 21, 2021 - 11:10am - agarrison Layout Tab: AppP_Vol_PTARb_L

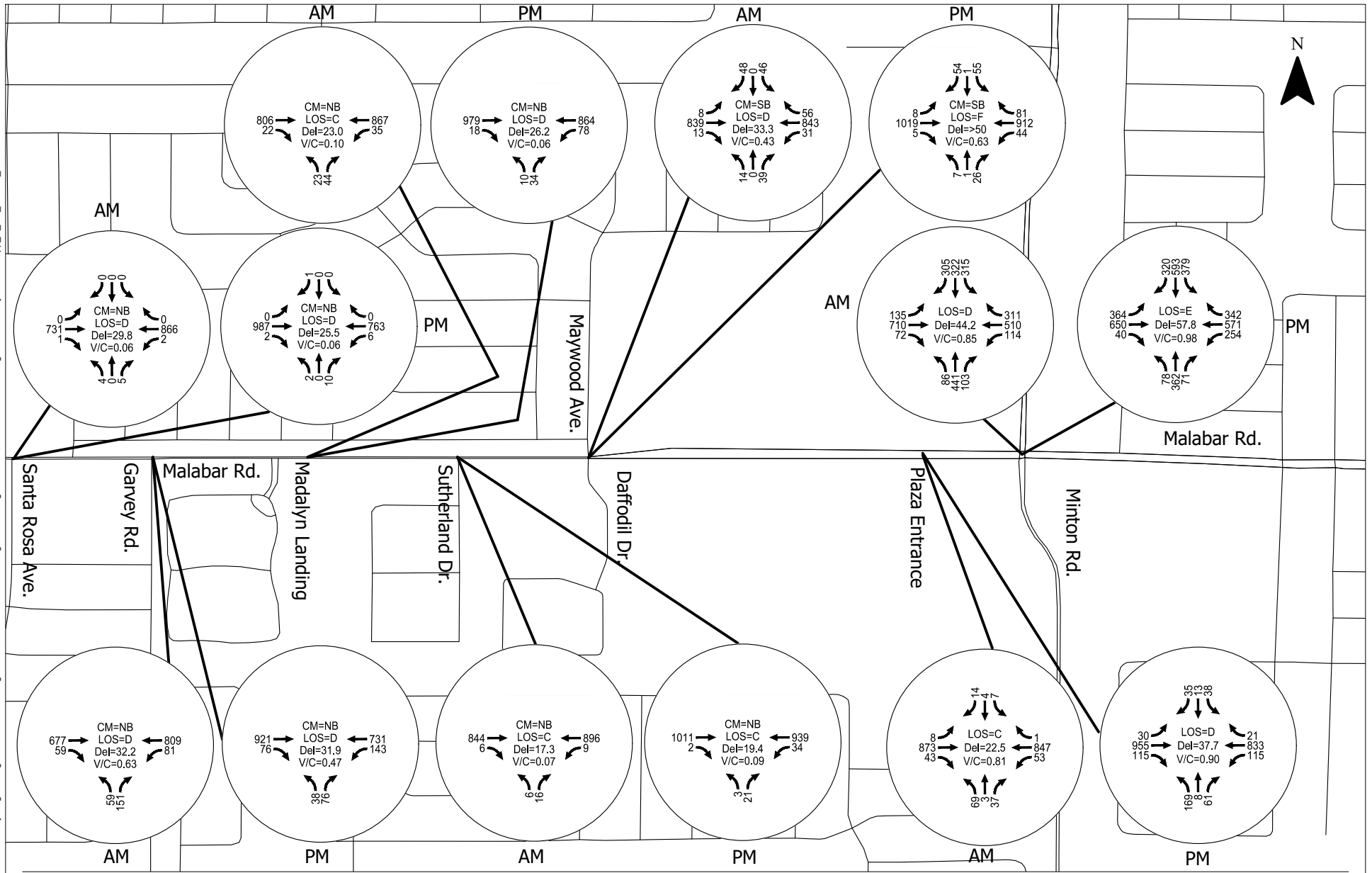


2030 No-Build Traffic Volumes and Operational Performance

Not to Scale

Figure X_B

H:\23\23773 - Malabar Road PD&E Study\Engineering\Traffic\AutoCAD Figures\23773-Malabar-PD&E-Figures V7.dwg Jan 21, 2021 - 11:10am - agarrison Layout Tab: App_P_Vol_PTARc_L



2030 No-Build Traffic Volumes and Operational Performance

Not to Scale

Figure X_C

APPENDIX Q – FUTURE NO-BUILD INTERSECTION OPERATIONS REPORTS

Contained in this Appendix –

- 2030 No-Build AM Peak Hour Intersection Measures of Effectiveness (MOE) Tables
- 2030 No-Build AM Peak Hour Intersection Operations Synchro Reports
- 2030 No-Build PM Peak Hour Intersection Measures of Effectiveness (MOE) Tables
- 2030 No-Build PM Peak Hour Intersection Operations Synchro Reports
- 2050 No-Build AM Peak Hour Intersection Measures of Effectiveness (MOE) Tables
- 2050 No-Build AM Peak Hour Intersection Operations Synchro Reports
- 2050 No-Build PM Peak Hour Intersection Measures of Effectiveness (MOE) Tables
- 2050 No-Build PM Peak Hour Intersection Operations Synchro Reports

2030 AM NO-BUILD MOE TABLES

2030 AM No Build Unsignalized Network												
Malabar Rd. & St. Johns Heritage Pkwy.											Intersection ID: 1	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	-	-	-	0.23	-	-	-	-	-	0.81	-	0.40
HCM Control Delay (s)	-	-	-	12.9	-	-	-	-	-	53.7	-	16.7
HCM Lane LOS	-	-	-	B	-	-	-	-	-	F	-	C
HCM 95th Percentile Queue (veh/In)	-	-	-	0.9	-	-	-	-	-	6.6	-	1.9
Turn Lane Length (Veh)	-	-	-	15.0	-	-	-	-	12.0	15.0	-	15.0
Malabar Rd. & Snapdragon Dr.											Intersection ID: 2	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	-	-	-	0.01	-	-	-	-	-	-	-	0.46
HCM Control Delay (s)	-	-	-	10.6	0.0	-	-	-	-	-	-	39.0
HCM Lane LOS	-	-	-	B	A	-	-	-	-	-	-	E
HCM 95th Percentile Queue (veh/In)	-	-	-	0.0	-	-	-	-	-	-	-	2.2
Turn Lane Length (Veh)	-	-	-	-	-	-	-	-	9.0	-	-	-
Malabar Rd. & Championship Cir.											Intersection ID: 3	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	-	-	-	0.01	-	-	-	-	-	-	-	0.07
HCM Control Delay (s)	-	-	-	10.6	0.0	-	-	-	-	-	-	32.9
HCM Lane LOS	-	-	-	B	A	-	-	-	-	-	-	D
HCM 95th Percentile Queue (veh/In)	-	-	-	0.0	-	-	-	-	-	-	-	0.2
Turn Lane Length (Veh)	-	-	-	-	-	-	-	-	-	-	-	-
Malabar Rd. & Wisteria Ave./Abilene Dr.											Intersection ID: 18	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	3.06	-	0.29	0.01	-	-	0.08	-	-	-	-	0.40
HCM Control Delay (s)	1040.7	-	13.7	9.5	0.0	-	8.7	0.0	-	-	-	55.8
HCM Lane LOS	F	-	B	A	A	-	A	A	-	-	-	F
HCM 95th Percentile Queue (veh/In)	24.4	-	1.2	0.0	-	-	0.2	-	-	-	-	1.6
Turn Lane Length (Veh)	-	-	8.0	-	-	-	-	-	-	-	-	-
Malabar Rd. & Bavarian Ave.											Intersection ID: 5	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	-	0.07	-	-	-	-	-	-	-	-	-	-
HCM Control Delay (s)	-	36.8	-	-	-	-	0.0	-	-	-	-	-
HCM Lane LOS	-	E	-	-	-	-	A	-	-	-	-	-
HCM 95th Percentile Queue (veh/In)	-	0.2	-	-	-	-	0.0	-	-	-	-	-
Turn Lane Length (Veh)	-	-	-	-	-	-	-	-	-	-	-	-
Malabar Rd. & Hurley Blvd.											Intersection ID: 6	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	-	1.12	-	-	-	-	0.07	-	-	-	-	-
HCM Control Delay (s)	-	176.9	-	-	-	-	9.5	0.0	-	-	-	-
HCM Lane LOS	-	F	-	-	-	-	A	A	-	-	-	-
HCM 95th Percentile Queue (veh/In)	-	8.8	-	-	-	-	0.2	-	-	-	-	-
Turn Lane Length (Veh)	-	-	-	-	-	-	-	-	-	-	-	-
Malabar Rd. & Watoga Ave.											Intersection ID: 19	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	-	0.23	-	0.02	-	-	0.01	-	-	0.40	-	0.11
HCM Control Delay (s)	-	42.7	-	9.5	0.0	-	9.0	0.0	-	71.8	-	15.8
HCM Lane LOS	-	E	-	A	A	-	A	A	-	F	-	C
HCM 95th Percentile Queue (veh/In)	-	0.9	-	0.0	-	-	0.0	-	-	1.6	-	0.4
Turn Lane Length (Veh)	-	-	-	-	-	-	-	-	-	-	-	-
Malabar Rd. & Palm Bay Public Works (W)											Intersection ID: 7	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	-	0.01	-	-	-	-	0.01	-	-	-	-	-
HCM Control Delay (s)	-	21.1	-	-	-	-	9.2	0.0	-	-	-	-
HCM Lane LOS	-	C	-	-	-	-	A	A	-	-	-	-
HCM 95th Percentile Queue (veh/In)	-	0.0	-	-	-	-	0.0	-	-	-	-	-
Turn Lane Length (Veh)	-	-	-	-	-	-	-	-	-	-	-	-
Malabar Rd. & Palm Bay Public Works (E)											Intersection ID: 8	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	-	0.09	-	-	-	-	0.03	-	-	-	-	-
HCM Control Delay (s)	-	19.1	-	-	-	-	9.3	0.0	-	-	-	-
HCM Lane LOS	-	C	-	-	-	-	A	A	-	-	-	-
HCM 95th Percentile Queue (veh/In)	-	0.3	-	-	-	-	0.1	-	-	-	-	-
Turn Lane Length (Veh)	-	-	-	-	-	-	-	-	-	-	-	-
Malabar Rd. & Post Office											Intersection ID: 9	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	0.14	-	0.05	-	-	-	0.02	-	-	-	-	-
HCM Control Delay (s)	56.3	-	14.0	0.0	-	-	9.2	0.0	-	-	-	0.0
HCM Lane LOS	F	-	B	A	-	-	A	A	-	-	-	A
HCM 95th Percentile Queue (veh/In)	0.4	-	0.1	0.0	-	-	0.0	-	-	-	-	-
Turn Lane Length (Veh)	2.0	-	2.0	-	-	6.0	-	-	-	-	-	-

2030 AM No Build Unsignalized Network												
Malabar Rd. & Santa Rosa Ave.											Intersection ID: 11	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	0.06			-	-	-	0.00	-	-		-	
HCM Control Delay (s)	29.8			0.0	-	-	9.1	0.0	-		0.0	
HCM Lane LOS	D			A	-	-	A	A	-		A	
HCM 95th Percentile Queue (veh/In)	0.2			0.0	-	-	0.0	-	-		-	
Turn Lane Length (Veh)	-			-	-	-	-	-	-		-	
Malabar Rd. & Garvey Rd.											Intersection ID: 12	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	0.63			-	-	-	0.09	-	-		-	
HCM Control Delay (s)	32.2			-	-	-	9.6	-	-		-	
HCM Lane LOS	D			-	-	-	A	-	-		-	
HCM 95th Percentile Queue (veh/In)	4.0			-	-	-	0.3	-	-		-	
Turn Lane Length (Veh)	-			-	-	-	11.0	-	-		-	
Malabar Rd. & Madalyn Landing											Intersection ID: 13	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	0.10	-	0.12	-	-	-	0.04	-	-		-	
HCM Control Delay (s)	23.0	-	15.8	-	-	-	9.6	-	-		-	
HCM Lane LOS	C	-	C	-	-	-	A	-	-		-	
HCM 95th Percentile Queue (veh/In)	0.3	-	0.4	-	-	-	0.1	-	-		-	
Turn Lane Length (Veh)	4.0	-	4.0	-	-	-	10.0	-	-		-	
Malabar Rd. & Sutherland Dr.											Intersection ID: 14	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	0.07			-	-	-	0.01	-	-		-	
HCM Control Delay (s)	17.3			-	-	-	9.6	-	-		-	
HCM Lane LOS	C			-	-	-	A	-	-		-	
HCM 95th Percentile Queue (veh/In)	0.2			-	-	-	0.0	-	-		-	
Turn Lane Length (Veh)	-			-	-	9.0	15.0	-	-		-	
Malabar Rd. & Maywood Ave./Daffodil Dr.											Intersection ID: 15	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	0.20			0.01	-	-	0.04	-	-		0.43	
HCM Control Delay (s)	22.0			10.5	-	-	9.7	-	-		33.3	
HCM Lane LOS	C			B	-	-	A	-	-		D	
HCM 95th Percentile Queue (veh/In)	0.7			0.0	-	-	0.1	-	-		2.0	
Turn Lane Length (Veh)	-			12.0	-	-	13.0	-	-		-	

*Vehicle length is assumed to be 25 feet.

2030 AM No Build Signalized Network												
Malabar Rd. & Krassner Dr./ Bending Branch Ln.											Intersection ID: 4	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	0.65	0.00	0.00	0.03	0.93	0.03	0.06	0.00	0.94	0.34	0.00	0.00
HCM Lane Group Delay (s)	69.9	0.0	0.0	43.4	66.1	30.4	27.4	0.0	52.9	62.1	0.0	0.0
HCM Lane LOS	E	A	A	D	E	C	C	A	D	E	A	A
HCM 95th Percentile Queue (veh/ln)	7.5	0.0	0.0	0.7	33.4	0.6	1.8	0.0	42.4	5.0	0.0	0.0
Turn Lane Length (Veh)	16.0	-	-	12.0	-	10.0	-	-	-	-	-	-
HCM6 Intersection Ctrl Delay	58.1											
HCM6 Intersection LOS	E											
Malabar Rd. & Jupiter Blvd.											Intersection ID: 10	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	0.92	0.56	0.03	0.49	0.00	0.51	0.27	0.00	0.98	0.86	0.00	0.95
HCM Lane Group Delay (s)	90.0	59.9	52.4	53.4	0.0	18.2	29.7	0.0	67.5	71.0	0.0	98.9
HCM Lane LOS	F	E	D	D	A	B	C	A	E	E	A	F
HCM 95th Percentile Queue (veh/ln)	13.0	10.3	0.4	10.4	0.0	16.1	2.9	0.0	42.4	8.3	0.0	21.0
Turn Lane Length (Veh)	8.0	-	11.0	8.0	-	-	10.0	-	-	13.0	-	-
HCM6 Intersection Ctrl Delay	59.9											
HCM6 Intersection LOS	E											
Malabar Rd. & Plaza Entrance											Intersection ID: 16	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	0.19	0.00	0.02	0.02	0.81	0.02	0.25	0.41	0.00	0.02	0.00	0.02
HCM Lane Group Delay (s)	48.5	0.0	47.4	16.6	32.4	6.9	50.7	8.2	6.5	49.8	0.0	50.7
HCM Lane LOS	D	A	D	B	C	A	D	A	A	D	A	D
HCM 95th Percentile Queue (veh/ln)	3.9	0.0	0.4	0.2	33.6	0.7	3.1	6.4	0.0	0.4	0.0	0.3
Turn Lane Length (Veh)	2.0	-	-	6.0	-	-	9.0	-	9.0	3.0	-	-
HCM6 Intersection Ctrl Delay	22.5											
HCM6 Intersection LOS	C											
Malabar Rd. & Minton Rd.											Intersection ID: 17	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	0.24	0.78	0.03	0.59	0.80	0.81	0.74	0.50	0.25	0.85	0.43	0.27
HCM Lane Group Delay (s)	35.2	57.7	18.9	65.0	39.1	39.0	83.8	46.4	20.0	48.7	34.4	16.0
HCM Lane LOS	D	E	B	E	D	D	F	D	C	D	C	B
HCM 95th Percentile Queue (veh/ln)	4.1	23.2	0.8	4.2	12.8	13.1	8.6	12.7	5.9	13.9	13.6	7.4
Turn Lane Length (Veh)	6.0	-	7.0	15.0	-	-	16.0	-	17.0	6.0	-	6.0
HCM6 Intersection Ctrl Delay	44.2											
HCM6 Intersection LOS	D											

*Vehicle length is assumed to be 25 feet.

2030 NO-BUILD AM PEAK HOUR INTERSECTION OPERATIONS SYNCHRO
REPORTS

HCM 6th TWSC
1: Malabar Rd. & St. Johns Heritage Pkwy.

01/08/2021

Intersection						
Int Delay, s/veh	9.2					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↘	↗	↗	↘	↘	↘
Traffic Vol, veh/h	137	267	572	541	239	204
Future Vol, veh/h	137	267	572	541	239	204
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	375	-	-	300	0	375
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	11	6	4	3	12	7
Mvmt Flow	137	267	572	541	239	204
Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	1113	0	-	0	1113	572
Stage 1	-	-	-	-	572	-
Stage 2	-	-	-	-	541	-
Critical Hdwy	4.21	-	-	-	6.52	6.27
Critical Hdwy Stg 1	-	-	-	-	5.52	-
Critical Hdwy Stg 2	-	-	-	-	5.52	-
Follow-up Hdwy	2.299	-	-	-	3.608	3.363
Pot Cap-1 Maneuver	595	-	-	-	~ 221	510
Stage 1	-	-	-	-	545	-
Stage 2	-	-	-	-	564	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	595	-	-	-	~ 170	510
Mov Cap-2 Maneuver	-	-	-	-	295	-
Stage 1	-	-	-	-	420	-
Stage 2	-	-	-	-	564	-
Approach	EB	WB	SB			
HCM Control Delay, s	4.4	0	36.7			
HCM LOS			E			
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	595	-	-	-	295	510
HCM Lane V/C Ratio	0.23	-	-	-	0.81	0.4
HCM Control Delay (s)	12.9	-	-	-	53.7	16.7
HCM Lane LOS	B	-	-	-	F	C
HCM 95th %tile Q(veh)	0.9	-	-	-	6.6	1.9
Notes						
~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon						

Intersection						
Int Delay, s/veh	2.1					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↑	↗	↘	
Traffic Vol, veh/h	8	498	1057	36	31	56
Future Vol, veh/h	8	498	1057	36	31	56
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	225	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	7	4	0	0	0
Mvmt Flow	8	498	1057	36	31	56

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	1093	0	-	0	1571 1057
Stage 1	-	-	-	-	1057 -
Stage 2	-	-	-	-	514 -
Critical Hdwy	4.1	-	-	-	6.4 6.2
Critical Hdwy Stg 1	-	-	-	-	5.4 -
Critical Hdwy Stg 2	-	-	-	-	5.4 -
Follow-up Hdwy	2.2	-	-	-	3.5 3.3
Pot Cap-1 Maneuver	646	-	-	-	123 276
Stage 1	-	-	-	-	337 -
Stage 2	-	-	-	-	605 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	646	-	-	-	121 276
Mov Cap-2 Maneuver	-	-	-	-	121 -
Stage 1	-	-	-	-	331 -
Stage 2	-	-	-	-	605 -

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	39
HCM LOS			E

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	646	-	-	-	190
HCM Lane V/C Ratio	0.012	-	-	-	0.458
HCM Control Delay (s)	10.6	0	-	-	39
HCM Lane LOS	B	A	-	-	E
HCM 95th %tile Q(veh)	0	-	-	-	2.2

HCM 6th TWSC
 3: Malabar Rd. & Championship Cir.

01/08/2021

Intersection						
Int Delay, s/veh	0.2					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↶	↷		↶	
Traffic Vol, veh/h	4	525	1090	11	6	3
Future Vol, veh/h	4	525	1090	11	6	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	7	4	0	0	0
Mvmt Flow	4	525	1090	11	6	3

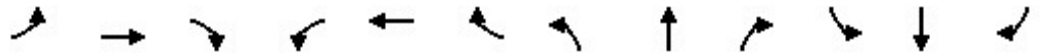
Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	1101	0	-	0	1629 1096
Stage 1	-	-	-	-	1096 -
Stage 2	-	-	-	-	533 -
Critical Hdwy	4.1	-	-	-	6.4 6.2
Critical Hdwy Stg 1	-	-	-	-	5.4 -
Critical Hdwy Stg 2	-	-	-	-	5.4 -
Follow-up Hdwy	2.2	-	-	-	3.5 3.3
Pot Cap-1 Maneuver	642	-	-	-	113 262
Stage 1	-	-	-	-	323 -
Stage 2	-	-	-	-	593 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	642	-	-	-	112 262
Mov Cap-2 Maneuver	-	-	-	-	112 -
Stage 1	-	-	-	-	320 -
Stage 2	-	-	-	-	593 -

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	32.9
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	642	-	-	-	138
HCM Lane V/C Ratio	0.006	-	-	-	0.065
HCM Control Delay (s)	10.6	0	-	-	32.9
HCM Lane LOS	B	A	-	-	D
HCM 95th %tile Q(veh)	0	-	-	-	0.2

HCM 6th Signalized Intersection Summary
 4: Krassner Dr./ Bending Branch Ln & Malabar Rd.

01/08/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	14	617	22	45	803	72	79	2	68	66	1	37
Future Volume (veh/h)	14	617	22	45	803	72	79	2	68	66	1	37
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	1796	1811	1589	1811	1826	1826	1159	1159	1159	1900	1900	1900
Adj Flow Rate, veh/h	14	617	14	45	803	69	79	2	22	66	1	10
Peak Hour 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
Percent Heavy Veh, %	7	6	21	6	5	5	50	50	50	0	0	0
Cap, veh/h	457	667	496	734	852	73	128	6	25	197	6	24
Arrive On Green	0.24	0.37	0.37	0.39	0.51	0.51	0.12	0.12	0.12	0.12	0.12	0.12
Sat Flow, veh/h	1711	1811	1346	1725	1658	142	707	47	205	1262	49	196
Grp Volume(v), veh/h	14	617	14	45	0	872	103	0	0	77	0	0
Grp Sat Flow(s),veh/h/ln	1711	1811	1346	1725	0	1800	959	0	0	1507	0	0
Q Serve(g_s), s	0.0	49.0	1.0	0.0	0.0	68.5	8.7	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	49.0	1.0	0.0	0.0	68.5	15.7	0.0	0.0	7.0	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.08	0.77		0.21	0.86		0.13
Lane Grp Cap(c), veh/h	457	667	496	734	0	925	158	0	0	227	0	0
V/C Ratio(X)	0.03	0.93	0.03	0.06	0.00	0.94	0.65	0.00	0.00	0.34	0.00	0.00
Avail Cap(c_a), veh/h	457	1162	864	734	0	1155	229	0	0	340	0	0
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(l)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	43.4	45.4	30.3	27.3	0.0	34.4	64.5	0.0	0.0	61.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	20.7	0.1	0.0	0.0	18.5	5.3	0.0	0.0	1.1	0.0	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(95%),veh/ln	0.7	33.4	0.6	1.8	0.0	42.4	7.5	0.0	0.0	5.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	43.4	66.1	30.4	27.4	0.0	52.9	69.9	0.0	0.0	62.1	0.0	0.0
LnGrp LOS	D	E	C	C	A	D	E	A	A	E	A	A
Approach Vol, veh/h		645			917			103			77	
Approach Delay, s/veh		64.9			51.6			69.9			62.1	
Approach LOS		E			D			E			E	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	63.8	62.0		24.2	41.9	83.9		24.2				
Change Period (Y+Rc), s	6.0	* 6.8		* 6.1	6.0	6.8		6.1				
Max Green Setting (Gmax), s	5.6	* 96		* 30	5.0	96.2		29.9				
Max Q Clear Time (g_c+I1), s	2.0	51.0		9.0	2.0	70.5		17.7				
Green Ext Time (p_c), s	0.0	4.2		0.4	0.0	6.6		0.4				

Intersection Summary

HCM 6th Ctrl Delay	58.1
HCM 6th LOS	E

Notes

- User approved pedestrian interval to be less than phase max green.
- * HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection						
Int Delay, s/veh	0.2					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	T			T		T
Traffic Vol, veh/h	750	1	0	914	6	2
Future Vol, veh/h	750	1	0	914	6	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	5	0	0	4	17	0
Mvmt Flow	750	1	0	914	6	2

Major/Minor	Major1	Major2	Minor1			
Conflicting Flow All	0	0	751	0	1665	751
Stage 1	-	-	-	-	751	-
Stage 2	-	-	-	-	914	-
Critical Hdwy	-	-	4.1	-	6.57	6.2
Critical Hdwy Stg 1	-	-	-	-	5.57	-
Critical Hdwy Stg 2	-	-	-	-	5.57	-
Follow-up Hdwy	-	-	2.2	-	3.653	3.3
Pot Cap-1 Maneuver	-	-	868	-	98	414
Stage 1	-	-	-	-	441	-
Stage 2	-	-	-	-	368	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	868	-	98	414
Mov Cap-2 Maneuver	-	-	-	-	98	-
Stage 1	-	-	-	-	441	-
Stage 2	-	-	-	-	368	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	36.8
HCM LOS			E

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	121	-	-	868	-
HCM Lane V/C Ratio	0.066	-	-	-	-
HCM Control Delay (s)	36.8	-	-	0	-
HCM Lane LOS	E	-	-	A	-
HCM 95th %tile Q(veh)	0.2	-	-	0	-

Intersection						
Int Delay, s/veh	15.7					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	654	98	57	817	97	58
Future Vol, veh/h	654	98	57	817	97	58
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	4	3	3	5	1	0
Mvmt Flow	654	98	57	817	97	58

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	752	0	1634
Stage 1	-	-	-	-	703
Stage 2	-	-	-	-	931
Critical Hdwy	-	-	4.13	-	6.41
Critical Hdwy Stg 1	-	-	-	-	5.41
Critical Hdwy Stg 2	-	-	-	-	5.41
Follow-up Hdwy	-	-	2.227	-	3.509
Pot Cap-1 Maneuver	-	-	853	-	112
Stage 1	-	-	-	-	493
Stage 2	-	-	-	-	385
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	853	-	98
Mov Cap-2 Maneuver	-	-	-	-	98
Stage 1	-	-	-	-	493
Stage 2	-	-	-	-	338

Approach	EB	WB	NB
HCM Control Delay, s	0	0.6	176.9
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	138	-	-	853	-
HCM Lane V/C Ratio	1.123	-	-	0.067	-
HCM Control Delay (s)	176.9	-	-	9.5	0
HCM Lane LOS	F	-	-	A	A
HCM 95th %tile Q(veh)	8.8	-	-	0.2	-

Intersection						
Int Delay, s/veh	0.1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	741	2	6	834	1	2
Future Vol, veh/h	741	2	6	834	1	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	3	0	0	5	0	0
Mvmt Flow	741	2	6	834	1	2

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	743	0	1588
Stage 1	-	-	-	-	742
Stage 2	-	-	-	-	846
Critical Hdwy	-	-	4.1	-	6.4
Critical Hdwy Stg 1	-	-	-	-	5.4
Critical Hdwy Stg 2	-	-	-	-	5.4
Follow-up Hdwy	-	-	2.2	-	3.5
Pot Cap-1 Maneuver	-	-	873	-	120
Stage 1	-	-	-	-	474
Stage 2	-	-	-	-	424
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	873	-	118
Mov Cap-2 Maneuver	-	-	-	-	118
Stage 1	-	-	-	-	474
Stage 2	-	-	-	-	418

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	21.1
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	226	-	-	873	-
HCM Lane V/C Ratio	0.013	-	-	0.007	-
HCM Control Delay (s)	21.1	-	-	9.2	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection						
Int Delay, s/veh	0.4					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	737	6	30	836	4	20
Future Vol, veh/h	737	6	30	836	4	20
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	3	0	0	5	0	0
Mvmt Flow	737	6	30	836	4	20

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	743	0	1636 740
Stage 1	-	-	-	-	740 -
Stage 2	-	-	-	-	896 -
Critical Hdwy	-	-	4.1	-	6.4 6.2
Critical Hdwy Stg 1	-	-	-	-	5.4 -
Critical Hdwy Stg 2	-	-	-	-	5.4 -
Follow-up Hdwy	-	-	2.2	-	3.5 3.3
Pot Cap-1 Maneuver	-	-	873	-	112 420
Stage 1	-	-	-	-	475 -
Stage 2	-	-	-	-	402 -
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	873	-	105 420
Mov Cap-2 Maneuver	-	-	-	-	105 -
Stage 1	-	-	-	-	475 -
Stage 2	-	-	-	-	376 -

Approach	EB	WB	NB
HCM Control Delay, s	0	0.3	19.1
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	280	-	-	873	-
HCM Lane V/C Ratio	0.086	-	-	0.034	-
HCM Control Delay (s)	19.1	-	-	9.3	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	0.3	-	-	0.1	-

HCM 6th TWSC
9: Post Office & Malabar Rd.

01/08/2021

Intersection												
Int Delay, s/veh	0.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↖	↗		↕			↖	↗		↕	
Traffic Vol, veh/h	0	739	18	14	855	0	11	0	19	0	0	0
Future Vol, veh/h	0	739	18	14	855	0	11	0	19	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	175	-	-	-	-	-	50	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	4	0	0	5	0	0	0	0	0	0	0
Mvmt Flow	0	739	18	14	855	0	11	0	19	0	0	0

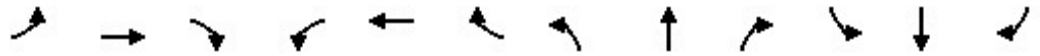
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	855	0	0	757	0	0	1622	1622	739	1641	1640	855
Stage 1	-	-	-	-	-	-	739	739	-	883	883	-
Stage 2	-	-	-	-	-	-	883	883	-	758	757	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	793	-	-	863	-	-	83	104	421	81	101	361
Stage 1	-	-	-	-	-	-	412	427	-	343	367	-
Stage 2	-	-	-	-	-	-	343	367	-	402	419	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	793	-	-	863	-	-	81	101	421	75	98	361
Mov Cap-2 Maneuver	-	-	-	-	-	-	81	101	-	75	98	-
Stage 1	-	-	-	-	-	-	412	427	-	343	356	-
Stage 2	-	-	-	-	-	-	332	356	-	384	419	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0.1			29.5			0		
HCM LOS							D			A		

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	81	421	793	-	-	863	-	-	-
HCM Lane V/C Ratio	0.136	0.045	-	-	-	0.016	-	-	-
HCM Control Delay (s)	56.3	14	0	-	-	9.2	0	-	0
HCM Lane LOS	F	B	A	-	-	A	A	-	A
HCM 95th %tile Q(veh)	0.4	0.1	0	-	-	0	-	-	-

HCM 6th Signalized Intersection Summary
 10: Jupiter Blvd. & Malabar Rd.

01/08/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	189	388	181	74	525	271	192	173	56	288	172	152
Future Volume (veh/h)	189	388	181	74	525	271	192	173	56	288	172	152
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	1885	1870	1870	1811	1841	1841	1826	1841	1870	1870	1826	1826
Adj Flow Rate, veh/h	189	388	168	74	525	254	192	173	7	288	172	130
Peak Hour 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
Percent Heavy Veh, %	1	2	2	6	4	4	5	4	2	2	5	5
Cap, veh/h	384	757	328	272	536	259	210	307	264	335	180	136
Arrive On Green	0.19	0.61	0.61	0.04	0.46	0.46	0.09	0.17	0.17	0.11	0.19	0.19
Sat Flow, veh/h	1795	1238	536	1725	1172	567	1739	1841	1585	1781	965	729
Grp Volume(v), veh/h	189	0	556	74	0	779	192	173	7	288	0	302
Grp Sat Flow(s),veh/h/ln	1795	0	1774	1725	0	1739	1739	1841	1585	1781	0	1695
Q Serve(g_s), s	9.7	0.0	26.6	3.9	0.0	66.1	13.0	13.0	0.6	16.0	0.0	26.5
Cycle Q Clear(g_c), s	9.7	0.0	26.6	3.9	0.0	66.1	13.0	13.0	0.6	16.0	0.0	26.5
Prop In Lane	1.00		0.30	1.00		0.33	1.00		1.00	1.00		0.43
Lane Grp Cap(c), veh/h	384	0	1085	272	0	795	210	307	264	335	0	316
V/C Ratio(X)	0.49	0.00	0.51	0.27	0.00	0.98	0.92	0.56	0.03	0.86	0.00	0.95
Avail Cap(c_a), veh/h	384	0	1085	275	0	800	210	307	264	335	0	316
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	52.4	0.0	16.5	29.1	0.0	40.0	50.2	57.5	52.3	51.2	0.0	60.4
Incr Delay (d2), s/veh	1.0	0.0	1.7	0.5	0.0	27.4	39.8	2.4	0.0	19.8	0.0	38.5
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(95%),veh/ln	10.4	0.0	16.1	2.9	0.0	42.4	13.0	10.3	0.4	8.3	0.0	21.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	53.4	0.0	18.2	29.7	0.0	67.5	90.0	59.9	52.4	71.0	0.0	98.9
LnGrp LOS	D	A	B	C	A	E	F	E	D	E	A	F
Approach Vol, veh/h		745			853			372			590	
Approach Delay, s/veh		27.1			64.2			75.3			85.3	
Approach LOS		C			E			E			F	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	36.4	76.6	23.0	33.0	12.7	100.3	20.0	36.0				
Change Period (Y+Rc), s	8.0	* 8	7.0	8.0	7.0	8.0	7.0	8.0				
Max Green Setting (Gmax), s	10.0	* 69	16.0	25.0	6.0	73.0	13.0	28.0				
Max Q Clear Time (g_c+I1), s	11.7	68.1	18.0	15.0	5.9	28.6	15.0	28.5				
Green Ext Time (p_c), s	0.0	0.5	0.0	0.6	0.0	3.8	0.0	0.0				

Intersection Summary

HCM 6th Ctrl Delay	59.9
HCM 6th LOS	E

Notes

- User approved pedestrian interval to be less than phase max green.
- * HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection												
Int Delay, s/veh	0.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	731	1	2	866	0	4	0	5	0	0	0
Future Vol, veh/h	0	731	1	2	866	0	4	0	5	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	2	0	0	3	0	0	0	0	0	0	0
Mvmt Flow	0	731	1	2	866	0	4	0	5	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	866	0	0	732	0	0	1602	1602	732	1604	1602	866
Stage 1	-	-	-	-	-	-	732	732	-	870	870	-
Stage 2	-	-	-	-	-	-	870	870	-	734	732	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	786	-	-	882	-	-	86	107	424	86	107	356
Stage 1	-	-	-	-	-	-	416	430	-	349	372	-
Stage 2	-	-	-	-	-	-	349	372	-	415	430	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	786	-	-	882	-	-	86	107	424	85	107	356
Mov Cap-2 Maneuver	-	-	-	-	-	-	86	107	-	85	107	-
Stage 1	-	-	-	-	-	-	416	430	-	349	371	-
Stage 2	-	-	-	-	-	-	348	371	-	410	430	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0			29.8			0		
HCM LOS							D			A		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	154	786	-	-	882	-	-	-
HCM Lane V/C Ratio	0.058	-	-	-	0.002	-	-	-
HCM Control Delay (s)	29.8	0	-	-	9.1	0	-	0
HCM Lane LOS	D	A	-	-	A	A	-	A
HCM 95th %tile Q(veh)	0.2	0	-	-	0	-	-	-

Intersection						
Int Delay, s/veh	4.1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	677	59	81	809	59	151
Future Vol, veh/h	677	59	81	809	59	151
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	300	-	0	-
Veh in Median Storage, #	0	-	-	0	1	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	2	5	2	2	14	2
Mvmt Flow	677	59	81	809	59	151

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	736	0	1678
Stage 1	-	-	-	-	707
Stage 2	-	-	-	-	971
Critical Hdwy	-	-	4.12	-	6.54
Critical Hdwy Stg 1	-	-	-	-	5.54
Critical Hdwy Stg 2	-	-	-	-	5.54
Follow-up Hdwy	-	-	2.218	-	3.626
Pot Cap-1 Maneuver	-	-	870	-	98
Stage 1	-	-	-	-	468
Stage 2	-	-	-	-	349
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	870	-	89
Mov Cap-2 Maneuver	-	-	-	-	211
Stage 1	-	-	-	-	468
Stage 2	-	-	-	-	317

Approach	EB	WB	NB
HCM Control Delay, s	0	0.9	32.2
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	335	-	-	870	-
HCM Lane V/C Ratio	0.627	-	-	0.093	-
HCM Control Delay (s)	32.2	-	-	9.6	-
HCM Lane LOS	D	-	-	A	-
HCM 95th %tile Q(veh)	4	-	-	0.3	-

HCM 6th TWSC
 13: Madalyn Landing & Malabar Rd.

01/08/2021

Intersection						
Int Delay, s/veh	0.9					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↶		↷	↶	↷	↷
Traffic Vol, veh/h	806	22	35	867	23	44
Future Vol, veh/h	806	22	35	867	23	44
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	275	-	0	75
Veh in Median Storage, #	0	-	-	0	1	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	2	4	0	3	0	2
Mvmt Flow	806	22	35	867	23	44

Major/Minor	Major1	Major2	Minor1			
Conflicting Flow All	0	0	828	0	1754	817
Stage 1	-	-	-	-	817	-
Stage 2	-	-	-	-	937	-
Critical Hdwy	-	-	4.1	-	6.4	6.22
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.318
Pot Cap-1 Maneuver	-	-	812	-	95	376
Stage 1	-	-	-	-	438	-
Stage 2	-	-	-	-	384	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	812	-	91	376
Mov Cap-2 Maneuver	-	-	-	-	223	-
Stage 1	-	-	-	-	438	-
Stage 2	-	-	-	-	367	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.4	18.3
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	223	376	-	-	812	-
HCM Lane V/C Ratio	0.103	0.117	-	-	0.043	-
HCM Control Delay (s)	23	15.8	-	-	9.6	-
HCM Lane LOS	C	C	-	-	A	-
HCM 95th %tile Q(veh)	0.3	0.4	-	-	0.1	-

Intersection						
Int Delay, s/veh	0.3					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↗	↖	↑	↘	↙
Traffic Vol, veh/h	844	6	9	896	6	16
Future Vol, veh/h	844	6	9	896	6	16
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	275	375	-	0	-
Veh in Median Storage, #	0	-	-	0	1	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	2	0	0	2	0	0
Mvmt Flow	844	6	9	896	6	16

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	850	0	1758
Stage 1	-	-	-	-	844
Stage 2	-	-	-	-	914
Critical Hdwy	-	-	4.1	-	6.4
Critical Hdwy Stg 1	-	-	-	-	5.4
Critical Hdwy Stg 2	-	-	-	-	5.4
Follow-up Hdwy	-	-	2.2	-	3.5
Pot Cap-1 Maneuver	-	-	797	-	94
Stage 1	-	-	-	-	425
Stage 2	-	-	-	-	394
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	797	-	93
Mov Cap-2 Maneuver	-	-	-	-	228
Stage 1	-	-	-	-	425
Stage 2	-	-	-	-	390

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	17.3
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	314	-	-	797	-
HCM Lane V/C Ratio	0.07	-	-	0.011	-
HCM Control Delay (s)	17.3	-	-	9.6	-
HCM Lane LOS	C	-	-	A	-
HCM 95th %tile Q(veh)	0.2	-	-	0	-

HCM 6th TWSC
 15: Maywood Ave./Daffodil Dr. & Malabar Rd.

01/08/2021

Intersection												
Int Delay, s/veh	2.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗			↕			↕	
Traffic Vol, veh/h	8	839	13	31	843	56	14	0	39	46	0	48
Future Vol, veh/h	8	839	13	31	843	56	14	0	39	46	0	48
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	325	-	-	375	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	25	1	8	0	2	5	7	0	0	0	0	4
Mvmt Flow	8	839	13	31	843	56	14	0	39	46	0	48

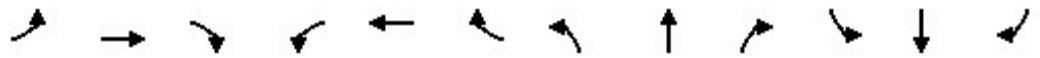
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	899	0	0	852	0	0	1819	1823	846	1814	1801	871
Stage 1	-	-	-	-	-	-	862	862	-	933	933	-
Stage 2	-	-	-	-	-	-	957	961	-	881	868	-
Critical Hdwy	4.35	-	-	4.1	-	-	7.17	6.5	6.2	7.1	6.5	6.24
Critical Hdwy Stg 1	-	-	-	-	-	-	6.17	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.17	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.425	-	-	2.2	-	-	3.563	4	3.3	3.5	4	3.336
Pot Cap-1 Maneuver	668	-	-	795	-	-	58	78	365	61	81	347
Stage 1	-	-	-	-	-	-	343	375	-	322	348	-
Stage 2	-	-	-	-	-	-	303	337	-	344	372	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	668	-	-	795	-	-	48	74	365	52	77	347
Mov Cap-2 Maneuver	-	-	-	-	-	-	150	189	-	158	188	-
Stage 1	-	-	-	-	-	-	339	371	-	318	334	-
Stage 2	-	-	-	-	-	-	251	324	-	304	368	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.1			0.3			22			33.3		
HCM LOS							C			D		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	265	668	-	-	795	-	-	219
HCM Lane V/C Ratio	0.2	0.012	-	-	0.039	-	-	0.429
HCM Control Delay (s)	22	10.5	-	-	9.7	-	-	33.3
HCM Lane LOS	C	B	-	-	A	-	-	D
HCM 95th %tile Q(veh)	0.7	0	-	-	0.1	-	-	2

HCM 6th Signalized Intersection Summary
 16: Plaza Entrance & Malabar Rd.

01/08/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	8	873	43	53	847	1	69	3	37	7	4	14
Future Volume (veh/h)	8	873	43	53	847	1	69	3	37	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	1900	1870	1900	1900	1856	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	8	873	23	53	847	1	69	3	4	7	4	1
Peak Hour 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
Percent Heavy Veh, %	0	2	0	0	3	0	0	0	0	0	0	0
Cap, veh/h	355	1072	923	214	2089	954	363	153	203	318	264	66
Arrive On Green	0.01	0.57	0.57	0.04	0.79	0.79	0.03	0.21	0.21	0.01	0.18	0.18
Sat Flow, veh/h	1810	1870	1610	1810	3526	1610	1810	738	984	1810	1467	367
Grp Volume(v), veh/h	8	873	23	53	847	1	69	0	7	7	0	5
Grp Sat Flow(s),veh/h/ln	1810	1870	1610	1810	1763	1610	1810	0	1723	1810	0	1834
Q Serve(g_s), s	0.3	56.0	0.7	0.0	11.2	0.0	4.7	0.0	0.5	0.5	0.0	0.3
Cycle Q Clear(g_c), s	0.3	56.0	0.7	0.0	11.2	0.0	4.7	0.0	0.5	0.5	0.0	0.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.57	1.00		0.20
Lane Grp Cap(c), veh/h	355	1072	923	214	2089	954	363	0	356	318	0	330
V/C Ratio(X)	0.02	0.81	0.02	0.25	0.41	0.00	0.19	0.00	0.02	0.02	0.00	0.02
Avail Cap(c_a), veh/h	390	1072	923	214	2089	954	363	0	356	354	0	330
HCM Platoon Ratio	1.00	1.00	1.00	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	0.90	0.90	0.90	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	16.5	25.6	6.8	50.2	7.7	6.5	48.3	0.0	47.4	49.8	0.0	50.6
Incr Delay (d2), s/veh	0.0	6.8	0.0	0.5	0.5	0.0	0.3	0.0	0.0	0.0	0.0	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(95%),veh/ln	0.2	33.6	0.7	3.1	6.4	0.0	3.9	0.0	0.4	0.4	0.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.6	32.4	6.9	50.7	8.2	6.5	48.5	0.0	47.4	49.8	0.0	50.7
LnGrp LOS	B	C	A	D	A	A	D	A	D	D	A	D
Approach Vol, veh/h		904			901			76				12
Approach Delay, s/veh		31.6			10.7			48.4				50.2
Approach LOS		C			B			D				D
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.1	95.9	8.0	38.0	11.0	93.0	12.0	34.0				
Change Period (Y+Rc), s	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0				
Max Green Setting (Gmax), s	4.0	86.0	4.0	28.0	4.0	86.0	5.0	27.0				
Max Q Clear Time (g_c+I1), s	2.3	13.2	2.5	2.5	2.0	58.0	6.7	2.3				
Green Ext Time (p_c), s	0.0	6.5	0.0	0.0	0.0	6.8	0.0	0.0				
Intersection Summary												
HCM 6th Ctrl Delay			22.5									
HCM 6th LOS			C									

HCM 6th Signalized Intersection Summary
 17: Minton Rd. & Malabar Rd.

01/08/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖ ↗	↖ ↗		↖ ↗	↖ ↗	↖ ↗	↖ ↗	↖ ↗	↖ ↗	↖ ↗	↖ ↗	↖ ↗
Traffic Volume (veh/h)	135	710	72	114	510	311	86	441	103	315	322	305
Future Volume (veh/h)	135	710	72	114	510	311	86	441	103	315	322	305
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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		No		No
Adj Sat Flow, veh/h/ln	1870	1885	1885	1870	1856	1900	1900	1885	1900	1900	1870	1826
Adj Flow Rate, veh/h	135	710	67	114	510	114	86	441	16	315	322	170
Peak Hour 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
Percent Heavy Veh, %	2	1	1	2	3	0	0	1	0	0	2	5
Cap, veh/h	230	882	83	154	1011	462	361	569	486	370	748	619
Arrive On Green	0.13	0.53	0.53	0.09	0.29	0.29	0.03	0.30	0.30	0.13	0.40	0.40
Sat Flow, veh/h	3456	3308	312	1781	3526	1610	1810	1885	1610	1810	1870	1547
Grp Volume(v), veh/h	135	384	393	114	510	114	86	441	16	315	322	170
Grp Sat Flow(s),veh/h/ln	1728	1791	1829	1781	1763	1610	1810	1885	1610	1810	1870	1547
Q Serve(g_s), s	5.5	26.3	26.4	9.4	18.1	5.5	5.0	32.0	0.8	17.5	18.7	7.8
Cycle Q Clear(g_c), s	5.5	26.3	26.4	9.4	18.1	5.5	5.0	32.0	0.8	17.5	18.7	7.8
Prop In Lane	1.00		0.17	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	230	478	488	154	1011	462	361	569	486	370	748	619
V/C Ratio(X)	0.59	0.80	0.81	0.74	0.50	0.25	0.24	0.78	0.03	0.85	0.43	0.27
Avail Cap(c_a), veh/h	230	478	488	154	1011	462	361	569	486	397	748	619
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	0.51	0.51	0.51	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	63.1	31.8	31.8	66.8	44.6	18.7	34.9	47.7	18.8	33.5	32.6	14.9
Incr Delay (d2), s/veh	2.0	7.3	7.2	17.0	1.8	1.3	0.3	9.9	0.1	15.3	1.8	1.1
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(95%),veh/ln	4.2	12.8	13.1	8.6	12.7	5.9	4.1	23.2	0.8	13.9	13.6	7.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	65.0	39.1	39.0	83.8	46.4	20.0	35.2	57.7	18.9	48.7	34.4	16.0
LnGrp LOS	E	D	D	F	D	C	D	E	B	D	C	B
Approach Vol, veh/h		912			738			543			807	
Approach Delay, s/veh		42.9			48.1			53.0			36.1	
Approach LOS		D			D			D			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.0	50.0	27.7	54.3	21.0	47.0	13.0	69.0				
Change Period (Y+Rc), s	8.0	7.0	8.0	9.0	8.0	7.0	8.0	9.0				
Max Green Setting (Gmax), s	40.0	43.0	22.0	43.0	13.0	40.0	5.0	60.0				
Max Q Clear Time (g_c+1), s	17.5	20.1	19.5	34.0	11.4	28.4	7.0	20.7				
Green Ext Time (p_c), s	0.1	3.5	0.2	1.8	0.0	3.4	0.0	2.4				
Intersection Summary												
HCM 6th Ctrl Delay				44.2								
HCM 6th LOS				D								

Intersection												
Int Delay, s/veh	136.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕	↕		↕	
Traffic Vol, veh/h	6	471	54	81	829	9	245	0	164	18	0	27
Future Vol, veh/h	6	471	54	81	829	9	245	0	164	18	0	27
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	150	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	6	471	54	81	829	9	245	0	164	18	0	27

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	838	0	0	525	0	0	1519	1510	498	1588	1533	834
Stage 1	-	-	-	-	-	-	510	510	-	996	996	-
Stage 2	-	-	-	-	-	-	1009	1000	-	592	537	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	805	-	-	1052	-	-	~98	122	576	88	118	371
Stage 1	-	-	-	-	-	-	550	541	-	297	325	-
Stage 2	-	-	-	-	-	-	292	324	-	496	526	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	805	-	-	1052	-	-	~80	103	576	56	100	371
Mov Cap-2 Maneuver	-	-	-	-	-	-	~80	103	-	56	100	-
Stage 1	-	-	-	-	-	-	544	535	-	294	278	-
Stage 2	-	-	-	-	-	-	~232	277	-	351	520	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.8	\$ 628.9	55.8
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	80	576	805	-	-	1052	-	-	114
HCM Lane V/C Ratio	3.063	0.285	0.007	-	-	0.077	-	-	0.395
HCM Control Delay (s)	\$ 1040.7	13.7	9.5	0	-	8.7	0	-	55.8
HCM Lane LOS	F	B	A	A	-	A	A	-	F
HCM 95th %tile Q(veh)	24.4	1.2	0	-	-	0.2	-	-	1.6

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

Intersection												
Int Delay, s/veh	2.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	↕
Traffic Vol, veh/h	12	695	5	6	815	14	16	0	13	35	0	43
Future Vol, veh/h	12	695	5	6	815	14	16	0	13	35	0	43
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	12	695	5	6	815	14	16	0	13	35	0	43

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	829	0	0	700	0	0	1578	1563	698	1562	1558	822
Stage 1	-	-	-	-	-	-	722	722	-	834	834	-
Stage 2	-	-	-	-	-	-	856	841	-	728	724	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	811	-	-	906	-	-	90	113	444	92	114	377
Stage 1	-	-	-	-	-	-	421	434	-	365	386	-
Stage 2	-	-	-	-	-	-	355	383	-	418	433	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	811	-	-	906	-	-	78	109	444	87	110	377
Mov Cap-2 Maneuver	-	-	-	-	-	-	78	109	-	87	110	-
Stage 1	-	-	-	-	-	-	411	424	-	356	381	-
Stage 2	-	-	-	-	-	-	311	378	-	396	423	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.2			0.1			42.7			40.9		
HCM LOS							E			E		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	124	811	-	-	906	-	-	87	377
HCM Lane V/C Ratio	0.234	0.015	-	-	0.007	-	-	0.402	0.114
HCM Control Delay (s)	42.7	9.5	0	-	9	0	-	71.8	15.8
HCM Lane LOS	E	A	A	-	A	A	-	F	C
HCM 95th %tile Q(veh)	0.9	0	-	-	0	-	-	1.6	0.4

2030 PM NO-BUILD MOE TABLES

2030 PM No Build Unsignalized Network												
Malabar Rd. & St. Johns Heritage Pkwy.											Intersection ID: 1	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	-	-	-	0.09	-	-	-	-	-	1.35	-	0.12
HCM Control Delay (s)	-	-	-	8.6	-	-	-	-	-	202.4	-	9.9
HCM Lane LOS	-	-	-	A	-	-	-	-	-	F	-	A
HCM 95th Percentile Queue (veh/In)	-	-	-	0.3	-	-	-	-	-	23.8	-	0.4
Turn Lane Length (Veh)	-	-	-	15.0	-	-	-	-	12.0	15.0	-	15.0
Malabar Rd. & Snapdragon Dr.											Intersection ID: 2	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	-	-	-	0.04	-	-	-	-	-	-	-	0.24
HCM Control Delay (s)	-	-	-	8.5	0.0	-	-	-	-	-	-	33.4
HCM Lane LOS	-	-	-	A	A	-	-	-	-	-	-	D
HCM 95th Percentile Queue (veh/In)	-	-	-	0.1	-	-	-	-	-	-	-	0.9
Turn Lane Length (Veh)	-	-	-	-	-	-	-	-	9.0	-	-	-
Malabar Rd. & Championship Cir.											Intersection ID: 3	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	-	-	-	0.03	-	-	-	-	-	-	-	0.24
HCM Control Delay (s)	-	-	-	8.5	0.0	-	-	-	-	-	-	32.6
HCM Lane LOS	-	-	-	A	A	-	-	-	-	-	-	D
HCM 95th Percentile Queue (veh/In)	-	-	-	0.1	-	-	-	-	-	-	-	0.9
Turn Lane Length (Veh)	-	-	-	-	-	-	-	-	-	-	-	-
Malabar Rd. & Wisteria Ave./Abilene Dr.											Intersection ID: 18	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	2.14	-	0.45	0.03	-	-	0.26	-	-	-	-	0.77
HCM Control Delay (s)	705.7	-	23.2	8.3	0.0	-	12.0	0.0	-	-	-	231.5
HCM Lane LOS	F	-	C	A	A	-	B	A	-	-	-	F
HCM 95th Percentile Queue (veh/In)	10.7	-	2.2	0.1	-	-	1.0	-	-	-	-	2.8
Turn Lane Length (Veh)	-	-	8.0	-	-	-	-	-	-	-	-	-
Malabar Rd. & Bavarian Ave.											Intersection ID: 5	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	-	0.04	-	-	-	-	0.00	-	-	-	-	-
HCM Control Delay (s)	-	42.5	-	-	-	-	10.0	0.0	-	-	-	-
HCM Lane LOS	-	E	-	-	-	-	A	A	-	-	-	-
HCM 95th Percentile Queue (veh/In)	-	0.1	-	-	-	-	0.0	-	-	-	-	-
Turn Lane Length (Veh)	-	-	-	-	-	-	-	-	-	-	-	-
Malabar Rd. & Hurley Blvd.											Intersection ID: 6	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	-	1.37	-	-	-	-	0.10	-	-	-	-	-
HCM Control Delay (s)	-	264.7	-	-	-	-	10.6	0.0	-	-	-	-
HCM Lane LOS	-	F	-	-	-	-	B	A	-	-	-	-
HCM 95th Percentile Queue (veh/In)	-	12.1	-	-	-	-	0.3	-	-	-	-	-
Turn Lane Length (Veh)	-	-	-	-	-	-	-	-	-	-	-	-
Malabar Rd. & Watoga Ave.											Intersection ID: 19	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	-	0.37	-	0.05	-	-	0.02	-	-	0.70	-	0.08
HCM Control Delay (s)	-	56.7	-	9.3	0.0	-	9.6	0.0	-	138.9	-	13.8
HCM Lane LOS	-	F	-	A	A	-	A	A	-	F	-	B
HCM 95th Percentile Queue (veh/In)	-	1.5	-	0.2	-	-	0.1	-	-	3.1	-	0.2
Turn Lane Length (Veh)	-	-	-	-	-	-	-	-	-	-	-	-
Malabar Rd. & Palm Bay Public Works (W)											Intersection ID: 7	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	-	0.22	-	-	-	-	0.00	-	-	-	-	-
HCM Control Delay (s)	-	23.9	-	-	-	-	9.7	0.0	-	-	-	-
HCM Lane LOS	-	C	-	-	-	-	A	A	-	-	-	-
HCM 95th Percentile Queue (veh/In)	-	0.8	-	-	-	-	0.0	-	-	-	-	-
Turn Lane Length (Veh)	-	-	-	-	-	-	-	-	-	-	-	-
Malabar Rd. & Palm Bay Public Works (E)											Intersection ID: 8	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	-	0.13	-	-	-	-	0.00	-	-	-	-	-
HCM Control Delay (s)	-	18.1	-	-	-	-	9.9	0.0	-	-	-	-
HCM Lane LOS	-	C	-	-	-	-	A	A	-	-	-	-
HCM 95th Percentile Queue (veh/In)	-	0.5	-	-	-	-	0.0	-	-	-	-	-
Turn Lane Length (Veh)	-	-	-	-	-	-	-	-	-	-	-	-
Malabar Rd. & Post Office											Intersection ID: 9	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	0.20	-	0.06	-	-	-	0.03	-	-	-	-	-
HCM Control Delay (s)	65.6	-	16.8	0.0	-	-	10.0	0.0	-	-	-	0.0
HCM Lane LOS	F	-	C	A	-	-	B	A	-	-	-	A
HCM 95th Percentile Queue (veh/In)	0.7	-	0.2	0.0	-	-	0.1	-	-	-	-	-
Turn Lane Length (Veh)	2.0	-	2.0	-	-	6.0	-	-	-	-	-	-
Malabar Rd. & Santa Rosa Ave.											Intersection ID: 11	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	-	0.06	-	-	-	-	0.01	-	-	-	-	0.00
HCM Control Delay (s)	-	25.5	-	0.0	-	-	10.1	0.0	-	-	-	13.8
HCM Lane LOS	-	D	-	A	-	-	B	A	-	-	-	B
HCM 95th Percentile Queue (veh/In)	-	0.2	-	0.0	-	-	0.0	-	-	-	-	0.0
Turn Lane Length (Veh)	-	-	-	-	-	-	-	-	-	-	-	-

2030 PM No Build Unsignalized Network												
Malabar Rd. & Garvey Rd.											Intersection ID: 12	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio		0.47		-	-	-	0.20	-	-			-
HCM Control Delay (s)		31.9		-	-	-	11.4	-	-			-
HCM Lane LOS		D		-	-	-	B	-	-			-
HCM 95th Percentile Queue (veh/ln)		2.3		-	-	-	0.8	-	-			-
Turn Lane Length (Veh)		-		-	-	-	11.0	-	-			-
Malabar Rd. & Madalyn Landing											Intersection ID: 13	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	0.06	-	0.11	-	-	-	0.11	-	-			-
HCM Control Delay (s)	26.2	-	18.4	-	-	-	10.8	-	-			-
HCM Lane LOS	D	-	C	-	-	-	B	-	-			-
HCM 95th Percentile Queue (veh/ln)	0.2	-	0.4	-	-	-	0.4	-	-			-
Turn Lane Length (Veh)	4.0	-	4.0	-	-	-	10.0	-	-			-
Malabar Rd. & Sutherland Dr.											Intersection ID: 14	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio		0.09		-	-	-	0.05	-	-			-
HCM Control Delay (s)		19.4		-	-	-	10.5	-	-			-
HCM Lane LOS		C		-	-	-	B	-	-			-
HCM 95th Percentile Queue (veh/ln)		0.3		-	-	-	0.2	-	-			-
Turn Lane Length (Veh)		-		-	-	9.0	15.0	-	-			-
Malabar Rd. & Maywood Ave./Daffodil Dr.											Intersection ID: 15	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio		0.16		0.01	-	-	0.06	-	-			0.63
HCM Control Delay (s)		24.3		10.6	-	-	10.6	-	-			55.8
HCM Lane LOS		C		B	-	-	B	-	-			F
HCM 95th Percentile Queue (veh/ln)		0.5		0.0	-	-	0.2	-	-			3.6
Turn Lane Length (Veh)		-		12.0	-	-	13.0	-	-			-

*Vehicle length is assumed to be 25 feet.

2030 PM No Build Signalized Network												
Malabar Rd. & Krassner Dr./ Bending Branch Ln.											Intersection ID: 4	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	0.00	0.00	0.00	0.05	0.93	0.08	0.14	0.00	0.93	0.00	0.00	0.00
HCM Lane Group Delay (s)	0.0	0.0	0.0	23.9	56.1	22.9	31.6	0.0	63.4	0.0	0.0	0.0
HCM Lane LOS	A	A	A	C	E	C	C	A	E	A	A	A
HCM 95th Percentile Queue (veh/ln)	2.2	0.0	0.0	1.4	40.3	2.1	4.1	0.0	35.1	0.0	0.0	0.0
Turn Lane Length (Veh)	16.0	-	-	12.0	-	10.0	-	-	-	-	-	-
HCM6 Intersection Ctrl Delay	53.8											
HCM6 Intersection LOS	D											
Malabar Rd. & Jupiter Blvd.											Intersection ID: 10	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	0.78	0.61	0.17	0.86	0.00	0.98	0.38	0.00	0.88	0.80	0.00	0.93
HCM Lane Group Delay (s)	69.4	62.7	37.2	70.1	0.0	68.0	68.7	0.0	50.6	56.6	0.0	85.2
HCM Lane LOS	E	E	D	E	A	E	E	A	D	E	A	F
HCM 95th Percentile Queue (veh/ln)	10.0	10.2	2.4	8.0	0.0	43.7	3.7	0.0	33.3	15.7	0.0	22.0
Turn Lane Length (Veh)	8.0	-	11.0	8.0	-	-	10.0	-	-	13.0	-	-
HCM6 Intersection Ctrl Delay	63.9											
HCM6 Intersection LOS	E											
Malabar Rd. & Plaza Entrance											Intersection ID: 16	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	0.47	0.90	0.11	0.08	0.90	0.11	0.64	0.40	0.02	0.15	0.00	0.17
HCM Lane Group Delay (s)	50.6	0.0	50.8	26.6	41.9	5.4	71.7	27.9	10.5	56.2	0.0	61.1
HCM Lane LOS	D	A	D	C	D	A	E	C	B	E	A	E
HCM 95th Percentile Queue (veh/ln)	9.5	0.0	2.1	1.2	41.6	2.9	7.6	16.5	0.9	2.3	0.0	2.4
Turn Lane Length (Veh)	2.0	-	-	6.0	-	-	9.0	-	9.0	3.0	-	-
HCM6 Intersection Ctrl Delay	37.7											
HCM6 Intersection LOS	D											
Malabar Rd. & Minton Rd.											Intersection ID: 17	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	0.52	0.83	-0.04	0.28	0.42	0.42	0.92	0.66	0.38	0.98	0.86	0.32
HCM Lane Group Delay (s)	52.3	71.2	0.0	48.1	47.0	47.0	97.6	55.6	44.8	77.9	56.9	12.8
HCM Lane LOS	D	E	A	D	D	D	F	E	D	E	E	B
HCM 95th Percentile Queue (veh/ln)	1.8	21.3	0.0	9.2	15.9	16.4	17.7	15.2	7.9	20.7	30.0	8.3
Turn Lane Length (Veh)	6.0	-	7.0	15.0	-	-	16.0	-	17.0	6.0	-	6.0
HCM6 Intersection Ctrl Delay	57.8											
HCM6 Intersection LOS	E											

*Vehicle length is assumed to be 25 feet.

2030 NO-BUILD PM PEAK HOUR INTERSECTION OPERATIONS SYNCHRO
REPORTS

HCM 6th TWSC
1: Malabar Rd. & St. Johns Heritage Pkwy.

01/08/2021

Intersection						
Int Delay, s/veh	59.5					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↘	↗	↗	↘	↘	↘
Traffic Vol, veh/h	100	564	200	261	497	100
Future Vol, veh/h	100	564	200	261	497	100
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	375	-	-	300	0	375
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	1	4	3	0	7
Mvmt Flow	100	564	200	261	497	100
Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	461	0	-	0	964	200
Stage 1	-	-	-	-	200	-
Stage 2	-	-	-	-	764	-
Critical Hdwy	4.1	-	-	-	6.4	6.27
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.363
Pot Cap-1 Maneuver	1111	-	-	-	~ 286	828
Stage 1	-	-	-	-	838	-
Stage 2	-	-	-	-	~ 463	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	1111	-	-	-	~ 260	828
Mov Cap-2 Maneuver	-	-	-	-	~ 369	-
Stage 1	-	-	-	-	763	-
Stage 2	-	-	-	-	~ 463	-
Approach	EB	WB	SB			
HCM Control Delay, s	1.3	0	170.2			
HCM LOS						F
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1111	-	-	-	369	828
HCM Lane V/C Ratio	0.09	-	-	-	1.347	0.121
HCM Control Delay (s)	8.6	-	-	-	202.4	9.9
HCM Lane LOS	A	-	-	-	F	A
HCM 95th %tile Q(veh)	0.3	-	-	-	23.8	0.4
Notes						
~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon						

Intersection						
Int Delay, s/veh	1.1					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↑	↗	↘	
Traffic Vol, veh/h	47	1014	446	50	24	15
Future Vol, veh/h	47	1014	446	50	24	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	225	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	47	1014	446	50	24	15

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	496	0	-	0	1554 446
Stage 1	-	-	-	-	446 -
Stage 2	-	-	-	-	1108 -
Critical Hdwy	4.1	-	-	-	6.4 6.2
Critical Hdwy Stg 1	-	-	-	-	5.4 -
Critical Hdwy Stg 2	-	-	-	-	5.4 -
Follow-up Hdwy	2.2	-	-	-	3.5 3.3
Pot Cap-1 Maneuver	1078	-	-	-	126 617
Stage 1	-	-	-	-	649 -
Stage 2	-	-	-	-	319 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1078	-	-	-	113 617
Mov Cap-2 Maneuver	-	-	-	-	113 -
Stage 1	-	-	-	-	584 -
Stage 2	-	-	-	-	319 -

Approach	EB	WB	SB
HCM Control Delay, s	0.4	0	33.4
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1078	-	-	-	165
HCM Lane V/C Ratio	0.044	-	-	-	0.236
HCM Control Delay (s)	8.5	0	-	-	33.4
HCM Lane LOS	A	A	-	-	D
HCM 95th %tile Q(veh)	0.1	-	-	-	0.9

HCM 6th TWSC
3: Malabar Rd. & Championship Cir.

01/08/2021

Intersection						
Int Delay, s/veh	0.9					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↕		↕	
Traffic Vol, veh/h	26	1012	480	50	24	16
Future Vol, veh/h	26	1012	480	50	24	16
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	3	0	0	0
Mvmt Flow	26	1012	480	50	24	16

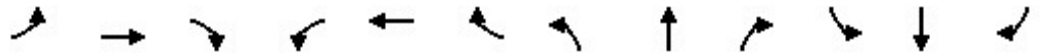
Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	530	0	-	0	1569 505
Stage 1	-	-	-	-	505 -
Stage 2	-	-	-	-	1064 -
Critical Hdwy	4.1	-	-	-	6.4 6.2
Critical Hdwy Stg 1	-	-	-	-	5.4 -
Critical Hdwy Stg 2	-	-	-	-	5.4 -
Follow-up Hdwy	2.2	-	-	-	3.5 3.3
Pot Cap-1 Maneuver	1048	-	-	-	123 571
Stage 1	-	-	-	-	610 -
Stage 2	-	-	-	-	335 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1048	-	-	-	116 571
Mov Cap-2 Maneuver	-	-	-	-	116 -
Stage 1	-	-	-	-	575 -
Stage 2	-	-	-	-	335 -

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	32.6
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1048	-	-	-	170
HCM Lane V/C Ratio	0.025	-	-	-	0.235
HCM Control Delay (s)	8.5	0	-	-	32.6
HCM Lane LOS	A	A	-	-	D
HCM 95th %tile Q(veh)	0.1	-	-	-	0.9

HCM 6th Signalized Intersection Summary
 4: Krassner Dr./ Bending Branch Ln & Malabar Rd.

01/08/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	39	809	65	96	566	100	30	3	71	74	1	17
Future Volume (veh/h)	39	809	65	96	566	100	30	3	71	74	1	17
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	1900	1885	1781	1885	1856	1856	1411	1411	1411	1900	1900	1900
Adj Flow Rate, veh/h	39	809	57	96	566	97	30	3	25	74	1	-10
Peak Hour 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
Percent Heavy Veh, %	0	1	8	1	3	3	33	33	33	0	0	0
Cap, veh/h	830	868	695	682	610	105	0	0	0	296	44	0
Arrive On Green	0.42	0.46	0.46	0.35	0.40	0.40	0.06	0.06	0.06	0.06	0.06	0.00
Sat Flow, veh/h	1810	1885	1510	1795	1543	265	0	0	0	1516	20	-205
Grp Volume(v), veh/h	39	809	57	96	0	663	58	0	0	0	0	0
Grp Sat Flow(s),veh/h/ln	1810	1885	1510	1795	0	1808	0	0	0	0	0	0
Q Serve(g_s), s	0.0	60.8	3.2	1.2	0.0	52.5	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	60.8	3.2	1.2	0.0	52.5	0.0	0.0	0.0	0.0	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.15	0.52		0.43	1.14		-0.15
Lane Grp Cap(c), veh/h	830	868	695	682	0	714	0	0	0	0	0	0
V/C Ratio(X)	0.05	0.93	0.08	0.14	0.00	0.93	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap(c_a), veh/h	830	1184	948	682	0	1159	0	0	0	0	0	0
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(l)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	23.9	38.2	22.7	31.5	0.0	43.3	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	17.9	0.2	0.1	0.0	20.1	0.0	0.0	0.0	0.0	0.0	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(95%),veh/ln	1.4	40.3	2.1	4.1	0.0	35.1	2.2	0.0	0.0	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.9	56.1	22.9	31.6	0.0	63.4	0.0	0.0	0.0	0.0	0.0	0.0
LnGrp LOS	C	E	C	C	A	E	A	A	A	A	A	A
Approach Vol, veh/h		905			759			58				0
Approach Delay, s/veh		52.6			59.4			0.0				0.0
Approach LOS		D			E			A				
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	60.0	75.9		14.1	69.8	66.1		14.1				
Change Period (Y+Rc), s	6.0	* 6.8		* 6.1	6.0	6.8		6.1				
Max Green Setting (Gmax), s	7.6	* 94		* 30	5.0	96.2		29.9				
Max Q Clear Time (g_c+I1), s	3.2	62.8		0.0	2.0	54.5		2.0				
Green Ext Time (p_c), s	0.1	6.3		0.0	0.0	4.7		0.3				

Intersection Summary

HCM 6th Ctrl Delay	53.8
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection						
Int Delay, s/veh	0.1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	948	6	2	758	4	0
Future Vol, veh/h	948	6	2	758	4	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	1	0	0
Mvmt Flow	948	6	2	758	4	0

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	954	0	1713
Stage 1	-	-	-	-	951
Stage 2	-	-	-	-	762
Critical Hdwy	-	-	4.1	-	6.4
Critical Hdwy Stg 1	-	-	-	-	5.4
Critical Hdwy Stg 2	-	-	-	-	5.4
Follow-up Hdwy	-	-	2.2	-	3.5
Pot Cap-1 Maneuver	-	-	729	-	101
Stage 1	-	-	-	-	379
Stage 2	-	-	-	-	464
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	729	-	100
Mov Cap-2 Maneuver	-	-	-	-	100
Stage 1	-	-	-	-	379
Stage 2	-	-	-	-	462

Approach	EB	WB	NB
HCM Control Delay, s	0	0	42.5
HCM LOS			E

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	100	-	-	729	-
HCM Lane V/C Ratio	0.04	-	-	0.003	-
HCM Control Delay (s)	42.5	-	-	10	0
HCM Lane LOS	E	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

HCM 6th TWSC
6: Hurley Blvd. & Malabar Rd.

01/08/2021

Intersection						
Int Delay, s/veh	26.9					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	T			T		T
Traffic Vol, veh/h	801	147	72	663	97	90
Future Vol, veh/h	801	147	72	663	97	90
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	3	1	0	3
Mvmt Flow	801	147	72	663	97	90

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	948	0	1682 875
Stage 1	-	-	-	-	875 -
Stage 2	-	-	-	-	807 -
Critical Hdwy	-	-	4.13	-	6.4 6.23
Critical Hdwy Stg 1	-	-	-	-	5.4 -
Critical Hdwy Stg 2	-	-	-	-	5.4 -
Follow-up Hdwy	-	-	2.227	-	3.5 3.327
Pot Cap-1 Maneuver	-	-	720	-	105 347
Stage 1	-	-	-	-	411 -
Stage 2	-	-	-	-	442 -
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	720	-	~ 88 347
Mov Cap-2 Maneuver	-	-	-	-	~ 88 -
Stage 1	-	-	-	-	411 -
Stage 2	-	-	-	-	372 -

Approach	EB	WB	NB
HCM Control Delay, s	0	1	264.7
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	137	-	-	720	-
HCM Lane V/C Ratio	1.365	-	-	0.1	-
HCM Control Delay (s)	264.7	-	-	10.6	0
HCM Lane LOS	F	-	-	B	A
HCM 95th %tile Q(veh)	12.1	-	-	0.3	-

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

Intersection						
Int Delay, s/veh	0.7					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	891	0	2	724	11	41
Future Vol, veh/h	891	0	2	724	11	41
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	1	0	0	1	0	0
Mvmt Flow	891	0	2	724	11	41

Major/Minor	Major1	Major2	Minor1	Minor2
Conflicting Flow All	0	0	891	0
Stage 1	-	-	-	891
Stage 2	-	-	-	728
Critical Hdwy	-	-	4.1	-
Critical Hdwy Stg 1	-	-	-	5.4
Critical Hdwy Stg 2	-	-	-	5.4
Follow-up Hdwy	-	-	2.2	-
Pot Cap-1 Maneuver	-	-	769	-
Stage 1	-	-	-	404
Stage 2	-	-	-	482
Platoon blocked, %	-	-	-	-
Mov Cap-1 Maneuver	-	-	769	-
Mov Cap-2 Maneuver	-	-	-	115
Stage 1	-	-	-	404
Stage 2	-	-	-	480

Approach	EB	WB	NB
HCM Control Delay, s	0	0	23.9
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	242	-	-	769	-
HCM Lane V/C Ratio	0.215	-	-	0.003	-
HCM Control Delay (s)	23.9	-	-	9.7	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	0.8	-	-	0	-

Intersection						
Int Delay, s/veh	0.4					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	907	25	1	725	1	41
Future Vol, veh/h	907	25	1	725	1	41
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	1	0	0	1	0	0
Mvmt Flow	907	25	1	725	1	41

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	932	0	1647
Stage 1	-	-	-	-	920
Stage 2	-	-	-	-	727
Critical Hdwy	-	-	4.1	-	6.4
Critical Hdwy Stg 1	-	-	-	-	5.4
Critical Hdwy Stg 2	-	-	-	-	5.4
Follow-up Hdwy	-	-	2.2	-	3.5
Pot Cap-1 Maneuver	-	-	743	-	110
Stage 1	-	-	-	-	392
Stage 2	-	-	-	-	482
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	743	-	110
Mov Cap-2 Maneuver	-	-	-	-	110
Stage 1	-	-	-	-	392
Stage 2	-	-	-	-	481

Approach	EB	WB	NB
HCM Control Delay, s	0	0	18.1
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	316	-	-	743	-
HCM Lane V/C Ratio	0.133	-	-	0.001	-
HCM Control Delay (s)	18.1	-	-	9.9	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	0.5	-	-	0	-

HCM 6th TWSC
9: Post Office & Malabar Rd.

01/08/2021

Intersection												
Int Delay, s/veh	0.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↖	↗		↔			↖	↗		↔	
Traffic Vol, veh/h	0	932	16	18	711	0	15	0	21	0	0	0
Future Vol, veh/h	0	932	16	18	711	0	15	0	21	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	175	-	-	-	-	-	50	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	1	0	0	1	0	0	0	0	0	0	0
Mvmt Flow	0	932	16	18	711	0	15	0	21	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	711	0	0	948	0	0	1679	1679	932	1698	1695	711
Stage 1	-	-	-	-	-	-	932	932	-	747	747	-
Stage 2	-	-	-	-	-	-	747	747	-	951	948	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	898	-	-	732	-	-	76	96	326	74	94	436
Stage 1	-	-	-	-	-	-	322	348	-	408	423	-
Stage 2	-	-	-	-	-	-	408	423	-	315	342	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	898	-	-	732	-	-	74	92	326	67	90	436
Mov Cap-2 Maneuver	-	-	-	-	-	-	74	92	-	67	90	-
Stage 1	-	-	-	-	-	-	322	348	-	408	406	-
Stage 2	-	-	-	-	-	-	391	406	-	295	342	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0.2			37.1			0		
HCM LOS							E			A		

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	74	326	898	-	-	732	-	-	-
HCM Lane V/C Ratio	0.203	0.064	-	-	-	0.025	-	-	-
HCM Control Delay (s)	65.6	16.8	0	-	-	10	0	-	0
HCM Lane LOS	F	C	A	-	-	B	A	-	A
HCM 95th %tile Q(veh)	0.7	0.2	0	-	-	0.1	-	-	-

HCM 6th Signalized Intersection Summary
 10: Jupiter Blvd. & Malabar Rd.

01/08/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	137	605	211	56	382	328	156	168	88	296	175	191
Future Volume (veh/h)	137	605	211	56	382	328	156	168	88	296	175	191
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	1900	1885	1885	1900	1885	1885	1900	1885	1870	1870	1885	1885
Adj Flow Rate, veh/h	137	605	198	56	382	311	156	168	39	296	175	169
Peak Hour 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
Percent Heavy Veh, %	0	1	1	0	1	1	0	1	2	2	1	1
Cap, veh/h	159	616	201	147	435	354	200	276	232	371	188	181
Arrive On Green	0.06	0.45	0.45	0.05	0.45	0.45	0.07	0.15	0.15	0.14	0.21	0.21
Sat Flow, veh/h	1810	1360	445	1810	961	783	1810	1885	1585	1781	881	851
Grp Volume(v), veh/h	137	0	803	56	0	693	156	168	39	296	0	344
Grp Sat Flow(s),veh/h/ln	1810	0	1805	1810	0	1744	1810	1885	1585	1781	0	1732
Q Serve(g_s), s	7.2	0.0	65.8	0.4	0.0	54.2	11.0	12.5	2.6	20.9	0.0	29.3
Cycle Q Clear(g_c), s	7.2	0.0	65.8	0.4	0.0	54.2	11.0	12.5	2.6	20.9	0.0	29.3
Prop In Lane	1.00		0.25	1.00		0.45	1.00		1.00	1.00		0.49
Lane Grp Cap(c), veh/h	159	0	817	147	0	789	200	276	232	371	0	369
V/C Ratio(X)	0.86	0.00	0.98	0.38	0.00	0.88	0.78	0.61	0.17	0.80	0.00	0.93
Avail Cap(c_a), veh/h	169	0	818	147	0	789	200	314	264	371	0	404
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(l)	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	37.7	0.0	40.5	67.1	0.0	37.3	51.5	60.0	36.9	45.0	0.0	58.0
Incr Delay (d2), s/veh	32.4	0.0	27.6	1.6	0.0	13.3	17.9	2.7	0.3	11.5	0.0	27.2
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(95%),veh/ln	8.0	0.0	43.7	3.7	0.0	33.3	10.0	10.2	2.4	15.7	0.0	22.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	70.1	0.0	68.0	68.7	0.0	50.6	69.4	62.7	37.2	56.6	0.0	85.2
LnGrp LOS	E	A	E	E	A	D	E	E	D	E	A	F
Approach Vol, veh/h		940			749			363			640	
Approach Delay, s/veh		68.3			52.0			62.8			71.9	
Approach LOS		E			D			E			E	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	16.2	75.8	28.0	30.0	16.1	75.9	18.0	40.0				
Change Period (Y+Rc), s	7.0	8.0	7.0	8.0	8.0	* 8	7.0	8.0				
Max Green Setting (Gmax), s	10.0	64.0	21.0	25.0	6.0	* 68	11.0	35.0				
Max Q Clear Time (g_c+I1), s	9.2	56.2	22.9	14.5	2.4	67.8	13.0	31.3				
Green Ext Time (p_c), s	0.0	2.7	0.0	0.6	0.0	0.1	0.0	0.7				

Intersection Summary

HCM 6th Ctrl Delay	63.9
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection												
Int Delay, s/veh	0.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	987	2	6	763	0	2	0	10	0	0	1
Future Vol, veh/h	0	987	2	6	763	0	2	0	10	0	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	1	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	987	2	6	763	0	2	0	10	0	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	763	0	0	989	0	0	1764	1763	988	1768	1764	763
Stage 1	-	-	-	-	-	-	988	988	-	775	775	-
Stage 2	-	-	-	-	-	-	776	775	-	993	989	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	859	-	-	707	-	-	66	85	303	66	85	408
Stage 1	-	-	-	-	-	-	300	328	-	394	411	-
Stage 2	-	-	-	-	-	-	393	411	-	298	327	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	859	-	-	707	-	-	65	84	303	63	84	408
Mov Cap-2 Maneuver	-	-	-	-	-	-	65	84	-	63	84	-
Stage 1	-	-	-	-	-	-	300	328	-	394	405	-
Stage 2	-	-	-	-	-	-	386	405	-	288	327	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0.1			25.5			13.8		
HCM LOS							D			B		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	188	859	-	-	707	-	-	408
HCM Lane V/C Ratio	0.064	-	-	-	0.008	-	-	0.002
HCM Control Delay (s)	25.5	0	-	-	10.1	0	-	13.8
HCM Lane LOS	D	A	-	-	B	A	-	B
HCM 95th %tile Q(veh)	0.2	0	-	-	0	-	-	0

Intersection						
Int Delay, s/veh	2.7					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	921	76	143	731	38	76
Future Vol, veh/h	921	76	143	731	38	76
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	300	-	0	-
Veh in Median Storage, #	0	-	-	0	1	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	1	0	0	0	0	1
Mvmt Flow	921	76	143	731	38	76

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	997	0	1976 959
Stage 1	-	-	-	-	959 -
Stage 2	-	-	-	-	1017 -
Critical Hdwy	-	-	4.1	-	6.4 6.21
Critical Hdwy Stg 1	-	-	-	-	5.4 -
Critical Hdwy Stg 2	-	-	-	-	5.4 -
Follow-up Hdwy	-	-	2.2	-	3.5 3.309
Pot Cap-1 Maneuver	-	-	702	-	69 313
Stage 1	-	-	-	-	375 -
Stage 2	-	-	-	-	352 -
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	702	-	55 313
Mov Cap-2 Maneuver	-	-	-	-	171 -
Stage 1	-	-	-	-	375 -
Stage 2	-	-	-	-	280 -

Approach	EB	WB	NB
HCM Control Delay, s	0	1.9	31.9
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	245	-	-	702	-
HCM Lane V/C Ratio	0.465	-	-	0.204	-
HCM Control Delay (s)	31.9	-	-	11.4	-
HCM Lane LOS	D	-	-	B	-
HCM 95th %tile Q(veh)	2.3	-	-	0.8	-

HCM 6th TWSC
13: Madalyn Landing & Malabar Rd.

01/08/2021

Intersection						
Int Delay, s/veh	0.9					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↔		↔	↑	↔	↔
Traffic Vol, veh/h	979	18	78	864	10	34
Future Vol, veh/h	979	18	78	864	10	34
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	275	-	0	75
Veh in Median Storage, #	0	-	-	0	1	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	1	0	0	1	0	0
Mvmt Flow	979	18	78	864	10	34

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	997	0	2008 988
Stage 1	-	-	-	-	988 -
Stage 2	-	-	-	-	1020 -
Critical Hdwy	-	-	4.1	-	6.4 6.2
Critical Hdwy Stg 1	-	-	-	-	5.4 -
Critical Hdwy Stg 2	-	-	-	-	5.4 -
Follow-up Hdwy	-	-	2.2	-	3.5 3.3
Pot Cap-1 Maneuver	-	-	702	-	66 303
Stage 1	-	-	-	-	364 -
Stage 2	-	-	-	-	351 -
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	702	-	59 303
Mov Cap-2 Maneuver	-	-	-	-	180 -
Stage 1	-	-	-	-	364 -
Stage 2	-	-	-	-	312 -

Approach	EB	WB	NB
HCM Control Delay, s	0	0.9	20.2
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	180	303	-	-	702	-
HCM Lane V/C Ratio	0.056	0.112	-	-	0.111	-
HCM Control Delay (s)	26.2	18.4	-	-	10.8	-
HCM Lane LOS	D	C	-	-	B	-
HCM 95th %tile Q(veh)	0.2	0.4	-	-	0.4	-

Intersection						
Int Delay, s/veh	0.4					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↗	↖	↑	↘	↙
Traffic Vol, veh/h	1011	2	34	939	3	21
Future Vol, veh/h	1011	2	34	939	3	21
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	275	375	-	0	-
Veh in Median Storage, #	0	-	-	0	1	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	1	0	0	0	0	0
Mvmt Flow	1011	2	34	939	3	21
Major/Minor	Major1	Major2	Minor1			
Conflicting Flow All	0	0	1013	0	2018	1011
Stage 1	-	-	-	-	1011	-
Stage 2	-	-	-	-	1007	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	692	-	65	293
Stage 1	-	-	-	-	355	-
Stage 2	-	-	-	-	356	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	692	-	62	293
Mov Cap-2 Maneuver	-	-	-	-	187	-
Stage 1	-	-	-	-	355	-
Stage 2	-	-	-	-	339	-
Approach	EB	WB	NB			
HCM Control Delay, s	0	0.4	19.4			
HCM LOS			C			
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	274	-	-	692	-	
HCM Lane V/C Ratio	0.088	-	-	0.049	-	
HCM Control Delay (s)	19.4	-	-	10.5	-	
HCM Lane LOS	C	-	-	B	-	
HCM 95th %tile Q(veh)	0.3	-	-	0.2	-	

HCM 6th TWSC
15: Maywood Ave./Daffodil Dr. & Malabar Rd.

01/08/2021

Intersection												
Int Delay, s/veh	3.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗			↕			↕	
Traffic Vol, veh/h	8	1019	5	44	912	81	7	1	26	55	1	54
Future Vol, veh/h	8	1019	5	44	912	81	7	1	26	55	1	54
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	325	-	-	375	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	13	1	0	0	0	0	0	0	0	2	0	0
Mvmt Flow	8	1019	5	44	912	81	7	1	26	55	1	54

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	993	0	0	1024	0	0	2106	2119	1022	2092	2081	953
Stage 1	-	-	-	-	-	-	1038	1038	-	1041	1041	-
Stage 2	-	-	-	-	-	-	1068	1081	-	1051	1040	-
Critical Hdwy	4.23	-	-	4.1	-	-	7.1	6.5	6.2	7.12	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.12	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.12	5.5	-
Follow-up Hdwy	2.317	-	-	2.2	-	-	3.5	4	3.3	3.518	4	3.3
Pot Cap-1 Maneuver	655	-	-	686	-	-	38	51	289	~ 38	54	317
Stage 1	-	-	-	-	-	-	281	311	-	278	310	-
Stage 2	-	-	-	-	-	-	271	296	-	274	310	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	655	-	-	686	-	-	30	47	289	~ 32	50	317
Mov Cap-2 Maneuver	-	-	-	-	-	-	120	152	-	121	148	-
Stage 1	-	-	-	-	-	-	278	307	-	275	290	-
Stage 2	-	-	-	-	-	-	210	277	-	246	306	-

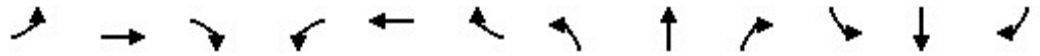
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.1			0.5			24.3			55.8		
HCM LOS							C			F		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	220	655	-	-	686	-	-	174
HCM Lane V/C Ratio	0.155	0.012	-	-	0.064	-	-	0.632
HCM Control Delay (s)	24.3	10.6	-	-	10.6	-	-	55.8
HCM Lane LOS	C	B	-	-	B	-	-	F
HCM 95th %tile Q(veh)	0.5	0	-	-	0.2	-	-	3.6

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

HCM 6th Signalized Intersection Summary
 16: Plaza Entrance & Malabar Rd.

01/08/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	955	115	115	833	21	169	8	61	38	13	35
Future Volume (veh/h)	30	955	115	115	833	21	169	8	61	38	13	35
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	1900	1885	1900	1900	1900	1826	1900	1900	1900	1856	1900	1900
Adj Flow Rate, veh/h	30	955	95	115	833	21	169	8	28	38	13	22
Peak Hour 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
Percent Heavy Veh, %	0	1	0	0	0	5	0	0	0	3	0	0
Cap, veh/h	354	1056	902	180	2070	887	358	69	243	256	76	129
Arrive On Green	0.03	0.56	0.56	0.03	0.38	0.38	0.09	0.19	0.19	0.03	0.12	0.12
Sat Flow, veh/h	1810	1885	1610	1810	3610	1547	1810	370	1296	1767	634	1073
Grp Volume(v), veh/h	30	955	95	115	833	21	169	0	36	38	0	35
Grp Sat Flow(s),veh/h/ln	1810	1885	1610	1810	1805	1547	1810	0	1667	1767	0	1707
Q Serve(g_s), s	0.0	67.8	2.4	0.4	25.2	0.9	12.0	0.0	2.7	2.8	0.0	2.8
Cycle Q Clear(g_c), s	0.0	67.8	2.4	0.4	25.2	0.9	12.0	0.0	2.7	2.8	0.0	2.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.78	1.00		0.63
Lane Grp Cap(c), veh/h	354	1056	902	180	2070	887	358	0	312	256	0	205
V/C Ratio(X)	0.08	0.90	0.11	0.64	0.40	0.02	0.47	0.00	0.12	0.15	0.00	0.17
Avail Cap(c_a), veh/h	354	1056	902	180	2070	887	359	0	312	258	0	205
HCM Platoon Ratio	1.00	1.00	1.00	0.67	0.67	0.67	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.79	0.79	0.79	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	26.5	29.4	5.1	65.9	27.5	10.5	49.6	0.0	50.6	56.0	0.0	59.3
Incr Delay (d2), s/veh	0.1	12.5	0.2	5.8	0.5	0.0	1.0	0.0	0.2	0.3	0.0	1.8
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(95%),veh/ln	1.2	41.6	2.9	7.6	16.5	0.9	9.5	0.0	2.1	2.3	0.0	2.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.6	41.9	5.4	71.7	27.9	10.5	50.6	0.0	50.8	56.2	0.0	61.1
LnGrp LOS	C	D	A	E	C	B	D	A	D	E	A	E
Approach Vol, veh/h		1080			969			205				73
Approach Delay, s/veh		38.3			32.7			50.6				58.6
Approach LOS		D			C			D				E
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	11.1	93.0	10.8	35.1	13.1	91.0	20.9	25.0				
Change Period (Y+Rc), s	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0				
Max Green Setting (Gmax), s	4.0	86.0	4.0	28.0	6.0	84.0	14.0	18.0				
Max Q Clear Time (g_c+I1), s	2.0	27.2	4.8	4.7	2.4	69.8	14.0	4.8				
Green Ext Time (p_c), s	0.0	6.3	0.0	0.1	0.1	6.1	0.0	0.1				
Intersection Summary												
HCM 6th Ctrl Delay											37.7	
HCM 6th LOS											D	

HCM 6th Signalized Intersection Summary
 17: Minton Rd. & Malabar Rd.

01/08/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖↗	↕		↖	↕	↗	↖	↕	↗	↖	↕	↗
Traffic Volume (veh/h)	364	650	40	254	571	342	78	362	71	379	593	320
Future Volume (veh/h)	364	650	40	254	571	342	78	362	71	379	593	320
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	1885	1870	1870	1885	1885	1885	1900	1870	1856	1885	1885	1885
Adj Flow Rate, veh/h	364	650	35	254	571	145	78	362	-16	379	593	185
Peak Hour 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
Percent Heavy Veh, %	1	2	2	1	1	1	0	2	3	1	1	1
Cap, veh/h	1277	1533	82	275	860	383	150	436	367	387	691	586
Arrive On Green	0.12	0.15	0.15	0.15	0.24	0.24	0.03	0.23	0.00	0.16	0.37	0.37
Sat Flow, veh/h	3483	3429	185	1795	3582	1598	1810	1870	1572	1795	1885	1598
Grp Volume(v), veh/h	364	337	348	254	571	145	78	362	-16	379	593	185
Grp Sat Flow(s),veh/h/ln	1742	1777	1837	1795	1791	1598	1810	1870	1572	1795	1885	1598
Q Serve(g_s), s	14.3	25.8	25.9	20.9	21.6	10.7	4.0	27.6	0.0	23.8	43.6	7.2
Cycle Q Clear(g_c), s	14.3	25.8	25.9	20.9	21.6	10.7	4.0	27.6	0.0	23.8	43.6	7.2
Prop In Lane	1.00		0.10	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	1277	794	821	275	860	383	150	436	367	387	691	586
V/C Ratio(X)	0.28	0.42	0.42	0.92	0.66	0.38	0.52	0.83	-0.04	0.98	0.86	0.32
Avail Cap(c_a), veh/h	1277	794	821	275	860	383	150	436	367	387	691	586
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.36	0.36	0.36	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.0	46.4	46.4	62.7	51.5	42.0	49.1	54.7	0.0	37.5	43.9	11.4
Incr Delay (d2), s/veh	0.0	0.6	0.6	34.9	4.0	2.8	3.2	16.5	0.0	40.3	13.1	1.4
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(95%),veh/ln	9.2	15.9	16.4	17.7	15.2	7.9	1.8	21.3	0.0	20.7	30.0	8.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	48.1	47.0	47.0	97.6	55.6	44.8	52.3	71.2	0.0	77.9	56.9	12.8
LnGrp LOS	D	D	D	F	E	D	D	E	A	E	E	B
Approach Vol, veh/h		1049			970			424			1157	
Approach Delay, s/veh		47.3			65.0			70.4			56.7	
Approach LOS		D			E			E			E	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	63.9	43.0	32.0	44.0	30.9	76.0	12.0	64.0				
Change Period (Y+Rc), s	8.0	7.0	8.0	9.0	8.0	* 8	8.0	9.0				
Max Green Setting (Gmax), s	23.0	36.0	24.0	35.0	23.0	* 36	4.0	55.0				
Max Q Clear Time (g_c+1/3), s	11.0	23.6	25.8	29.6	22.9	27.9	6.0	45.6				
Green Ext Time (p_c), s	0.7	3.2	0.0	1.0	0.0	2.4	0.0	2.9				

Intersection Summary

HCM 6th Ctrl Delay	57.8
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection												
Int Delay, s/veh	44.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕	↕		↕	
Traffic Vol, veh/h	30	737	269	180	413	20	105	0	158	18	0	12
Future Vol, veh/h	30	737	269	180	413	20	105	0	158	18	0	12
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	150	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	30	737	269	180	413	20	105	0	158	18	0	12

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	433	0	0	1006	0	0	1721	1725	872	1794	1849	423
Stage 1	-	-	-	-	-	-	932	932	-	783	783	-
Stage 2	-	-	-	-	-	-	789	793	-	1011	1066	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1137	-	-	697	-	-	~71	90	353	63	75	635
Stage 1	-	-	-	-	-	-	322	348	-	390	407	-
Stage 2	-	-	-	-	-	-	387	403	-	291	301	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1137	-	-	697	-	-	~49	56	353	24	46	635
Mov Cap-2 Maneuver	-	-	-	-	-	-	~49	56	-	24	46	-
Stage 1	-	-	-	-	-	-	301	326	-	365	268	-
Stage 2	-	-	-	-	-	-	250	266	-	150	282	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	3.5	295.7	231.5
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	49	353	1137	-	-	697	-	-	39
HCM Lane V/C Ratio	2.143	0.448	0.026	-	-	0.258	-	-	0.769
HCM Control Delay (s)	\$ 705.7	23.2	8.3	0	-	12	0	-	231.5
HCM Lane LOS	F	C	A	A	-	B	A	-	F
HCM 95th %tile Q(veh)	10.7	2.2	0.1	-	-	1	-	-	2.8

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

Intersection												
Int Delay, s/veh	5.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	↕
Traffic Vol, veh/h	48	825	18	14	681	40	20	0	20	46	0	34
Future Vol, veh/h	48	825	18	14	681	40	20	0	20	46	0	34
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	48	825	18	14	681	40	20	0	20	46	0	34

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	721	0	0	843	0	0	1676	1679	834	1669	1668	701
Stage 1	-	-	-	-	-	-	930	930	-	729	729	-
Stage 2	-	-	-	-	-	-	746	749	-	940	939	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	890	-	-	802	-	-	76	96	371	77	97	442
Stage 1	-	-	-	-	-	-	323	349	-	417	431	-
Stage 2	-	-	-	-	-	-	409	422	-	319	345	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	890	-	-	802	-	-	63	84	371	66	85	442
Mov Cap-2 Maneuver	-	-	-	-	-	-	63	84	-	66	85	-
Stage 1	-	-	-	-	-	-	290	313	-	374	419	-
Stage 2	-	-	-	-	-	-	367	410	-	271	310	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.5			0.2			56.7			85.7		
HCM LOS							F			F		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	108	890	-	-	802	-	-	66	442
HCM Lane V/C Ratio	0.37	0.054	-	-	0.017	-	-	0.697	0.077
HCM Control Delay (s)	56.7	9.3	0	-	9.6	0	-	138.9	13.8
HCM Lane LOS	F	A	A	-	A	A	-	F	B
HCM 95th %tile Q(veh)	1.5	0.2	-	-	0.1	-	-	3.1	0.2

2050 AM NO-BUILD MOE TABLES

2050 AM No Build Unsignalized Network												
Malabar Rd. & St. Johns Heritage Pkwy.											Intersection ID: 1	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio		0.25		0.25	-	-	0.20	-	-	6.59	-	0.59
HCM Control Delay (s)		12.1		13.9	-	-	8.8	0.0	-	2597.2	-	24.1
HCM Lane LOS		B		B	-	-	A	A	-	F	-	C
HCM 95th Percentile Queue (veh/In)		1.0		1.0	-	-	0.7	-	-	72.5	-	3.7
Turn Lane Length (Veh)		-		15.0	-	-	-	-	12.0	15.0	-	15.0
Malabar Rd. & Snapdragon Dr.											Intersection ID: 2	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio		-		0.02	-	-	-	-	-	-	-	1.07
HCM Control Delay (s)		-		12.7	0.0	-	-	-	-	-	-	213.6
HCM Lane LOS		-		B	A	-	-	-	-	-	-	F
HCM 95th Percentile Queue (veh/In)		-		0.1	-	-	-	-	-	-	-	6.1
Turn Lane Length (Veh)		-		-	-	-	-	-	9.0	-	-	-
Malabar Rd. & Championship Cir.											Intersection ID: 3	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio		-		0.01	-	-	-	-	-	-	-	0.18
HCM Control Delay (s)		-		12.7	0.0	-	-	-	-	-	-	92.2
HCM Lane LOS		-		B	A	-	-	-	-	-	-	F
HCM 95th Percentile Queue (veh/In)		-		0.0	-	-	-	-	-	-	-	0.6
Turn Lane Length (Veh)		-		-	-	-	-	-	-	-	-	-
Malabar Rd. & Wisteria Ave./Abilene Dr.											Intersection ID: 18	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	12.90	-	0.48	0.01	-	-	0.11	-	-	-	-	1.96
HCM Control Delay (s)	5745.2	-	25.2	11.1	0.0	-	10.4	0.0	-	-	-	805.8
HCM Lane LOS	F	-	D	B	A	-	B	A	-	-	-	F
HCM 95th Percentile Queue (veh/In)	31.2	-	2.5	0.0	-	-	0.4	-	-	-	-	5.7
Turn Lane Length (Veh)	-	-	8.0	-	-	-	-	-	-	-	-	-
Malabar Rd. & Bavarian Ave.											Intersection ID: 5	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio		0.20		-	-	-	-	-	-	-	-	-
HCM Control Delay (s)		113.0		-	-	-	0.0	-	-	-	-	-
HCM Lane LOS		F		-	-	-	A	-	-	-	-	-
HCM 95th Percentile Queue (veh/In)		0.6		-	-	-	0.0	-	-	-	-	-
Turn Lane Length (Veh)		-		-	-	-	-	-	-	-	-	-
Malabar Rd. & Hurley Blvd.											Intersection ID: 6	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio		4.09		-	-	-	0.10	-	-	-	-	-
HCM Control Delay (s)		1578.7		-	-	-	11.6	0.0	-	-	-	-
HCM Lane LOS		F		-	-	-	B	A	-	-	-	-
HCM 95th Percentile Queue (veh/In)		20.3		-	-	-	0.3	-	-	-	-	-
Turn Lane Length (Veh)		-		-	-	-	-	-	-	-	-	-
Malabar Rd. & Watoga Ave.											Intersection ID: 19	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio		0.81		0.02	-	-	0.01	-	-	1.46	-	0.18
HCM Control Delay (s)		256.6		11.0	0.0	-	10.7	0.0	-	588.4	-	23.0
HCM Lane LOS		F		B	A	-	B	A	-	F	-	C
HCM 95th Percentile Queue (veh/In)		2.9		0.1	-	-	0.0	-	-	4.4	-	0.6
Turn Lane Length (Veh)		-		-	-	-	-	-	-	-	-	-
Malabar Rd. & Palm Bay Public Works (W)											Intersection ID: 7	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio		0.03		-	-	-	0.01	-	-	-	-	-
HCM Control Delay (s)		46.4		-	-	-	10.9	0.0	-	-	-	-
HCM Lane LOS		E		-	-	-	B	A	-	-	-	-
HCM 95th Percentile Queue (veh/In)		0.1		-	-	-	0.0	-	-	-	-	-
Turn Lane Length (Veh)		-		-	-	-	-	-	-	-	-	-
Malabar Rd. & Palm Bay Public Works (E)											Intersection ID: 8	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio		0.20		-	-	-	0.05	-	-	-	-	-
HCM Control Delay (s)		43.1		-	-	-	11.2	0.0	-	-	-	-
HCM Lane LOS		E		-	-	-	B	A	-	-	-	-
HCM 95th Percentile Queue (veh/In)		0.7		-	-	-	0.2	-	-	-	-	-
Turn Lane Length (Veh)		-		-	-	-	-	-	-	-	-	-
Malabar Rd. & Post Office											Intersection ID: 9	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	0.46	-	0.08	-	-	-	0.02	-	-	-	-	-
HCM Control Delay (s)	247.1	-	21.1	0.0	-	-	11.1	0.0	-	-	-	0.0
HCM Lane LOS	F	-	C	A	-	-	B	A	-	-	-	A
HCM 95th Percentile Queue (veh/In)	1.4	-	0.3	0.0	-	-	0.1	-	-	-	-	-
Turn Lane Length (Veh)	2.0	-	2.0	-	-	6.0	-	-	-	-	-	-

2050 AM No Build Unsignalized Network												
Malabar Rd. & Santa Rosa Ave.											Intersection ID: 11	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	0.31			-	-	-	0.00	-	-		-	
HCM Control Delay (s)	177.5			0.0	-	-	11.9	0.0	-		0.0	
HCM Lane LOS	F			A	-	-	B	A	-		A	
HCM 95th Percentile Queue (veh/In)	1.0			0.0	-	-	0.0	-	-		-	
Turn Lane Length (Veh)	-			-	-	-	-	-	-		-	
Malabar Rd. & Garvey Rd.											Intersection ID: 12	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	3.65			-	-	-	0.37	-	-		-	
HCM Control Delay (s)	1273.5			-	-	-	16.0	-	-		-	
HCM Lane LOS	F			-	-	-	C	-	-		-	
HCM 95th Percentile Queue (veh/In)	39.1			-	-	-	1.7	-	-		-	
Turn Lane Length (Veh)	-			-	-	-	11.0	-	-		-	
Malabar Rd. & Madalyn Landing											Intersection ID: 13	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	0.22	-	0.27	-	-	-	0.07	-	-		-	
HCM Control Delay (s)	49.2	-	35.1	-	-	-	13.2	-	-		-	
HCM Lane LOS	E	-	E	-	-	-	B	-	-		-	
HCM 95th Percentile Queue (veh/In)	0.8	-	1.0	-	-	-	0.2	-	-		-	
Turn Lane Length (Veh)	4.0	-	4.0	-	-	-	10.0	-	-		-	
Malabar Rd. & Sutherland Dr.											Intersection ID: 14	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	0.16			-	-	-	0.02	-	-		-	
HCM Control Delay (s)	35.4			-	-	-	12.9	-	-		-	
HCM Lane LOS	E			-	-	-	B	-	-		-	
HCM 95th Percentile Queue (veh/In)	0.5			-	-	-	0.1	-	-		-	
Turn Lane Length (Veh)	-			-	-	9.0	15.0	-	-		-	
Malabar Rd. & Maywood Ave./Daffodil Dr.											Intersection ID: 15	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	0.50			0.02	-	-	0.07	-	-		1.16	
HCM Control Delay (s)	67.9			13.8	-	-	13.4	-	-		242.1	
HCM Lane LOS	F			B	-	-	B	-	-		F	
HCM 95th Percentile Queue (veh/In)	2.2			0.1	-	-	0.2	-	-		6.8	
Turn Lane Length (Veh)	-			12.0	-	-	13.0	-	-		-	

*Vehicle length is assumed to be 25 feet.

2050 AM No Build Signalized Network												
Malabar Rd. & Krassner Dr./ Bending Branch Ln.											Intersection ID: 4	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	0.65	0.00	0.00	0.19	0.95	0.02	0.13	0.00	0.91	0.34	0.00	0.00
HCM Lane Group Delay (s)	70.0	0.0	0.0	38.3	47.0	12.7	51.3	0.0	26.6	62.2	0.0	0.0
HCM Lane LOS	E	A	A	D	D	B	D	A	C	E	A	A
HCM 95th Percentile Queue (veh/ln)	7.5	0.0	0.0	0.5	47.0	0.4	2.6	0.0	40.6	5.0	0.0	0.0
Turn Lane Length (Veh)	16.0	-	-	12.0	-	10.0	-	-	-	-	-	-
HCM6 Intersection Ctrl Delay	38.3											
HCM6 Intersection LOS	D											
Malabar Rd. & Jupiter Blvd.											Intersection ID: 10	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	1.09	0.56	0.46	1.58	0.00	1.09	1.11	0.00	1.32	1.34	0.00	1.07
HCM Lane Group Delay (s)	148.1	59.9	37.3	366.7	0.0	94.2	171.7	0.0	189.2	235.7	0.0	135.6
HCM Lane LOS	F	E	D	F	A	F	F	A	F	F	A	F
HCM 95th Percentile Queue (veh/ln)	10.4	10.3	6.0	22.9	0.0	59.7	16.8	0.0	101.7	27.4	0.0	23.9
Turn Lane Length (Veh)	8.0	-	11.0	8.0	-	-	10.0	-	-	13.0	-	-
HCM6 Intersection Ctrl Delay	159.4											
HCM6 Intersection LOS	F											
Malabar Rd. & Plaza Entrance											Intersection ID: 16	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	0.18	0.00	0.02	0.03	1.45	0.03	0.49	0.66	0.00	0.02	0.00	0.01
HCM Lane Group Delay (s)	46.9	0.0	45.8	17.4	239.9	7.5	69.7	1.0	0.0	49.0	0.0	49.8
HCM Lane LOS	D	A	D	B	F	A	E	A	A	D	A	D
HCM 95th Percentile Queue (veh/ln)	3.9	0.0	0.4	0.2	141.0	0.7	3.5	0.5	0.0	0.4	0.0	0.3
Turn Lane Length (Veh)	2.0	-	-	6.0	-	-	9.0	-	9.0	3.0	-	-
HCM6 Intersection Ctrl Delay	121.8											
HCM6 Intersection LOS	F											
Malabar Rd. & Minton Rd.											Intersection ID: 17	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	0.51	0.98	0.15	0.87	0.96	0.96	0.96	0.74	0.29	1.03	0.46	0.87
HCM Lane Group Delay (s)	46.0	91.9	25.3	61.3	47.8	47.8	139.6	57.7	23.1	106.2	37.8	31.3
HCM Lane LOS	D	F	C	E	D	D	F	E	C	F	D	C
HCM 95th Percentile Queue (veh/ln)	4.2	30.8	3.4	8.7	21.0	21.4	10.8	17.2	6.3	18.8	14.2	16.9
Turn Lane Length (Veh)	6.0	-	7.0	15.0	-	-	16.0	-	17.0	6.0	-	6.0
HCM6 Intersection Ctrl Delay	58.7											
HCM6 Intersection LOS	E											

*Vehicle length is assumed to be 25 feet.

2050 NO-BUILD AM PEAK HOUR INTERSECTION OPERATIONS SYNCHRO
REPORTS

HCM 6th TWSC

1: St. Johns Heritage Pkwy. & Malabar Rd.

01/08/2021

Intersection												
Int Delay, s/veh	502.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗			↖	↗		↖	↗		↖	↗
Traffic Vol, veh/h	137	345	45	236	682	541	79	241	173	393	259	259
Future Vol, veh/h	137	345	45	236	682	541	79	241	173	393	259	259
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	375	-	-	-	-	300	-	-	200	-	-	375
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	11	6	0	0	4	3	0	0	0	12	0	7
Mvmt Flow	137	345	45	236	682	541	79	241	173	393	259	259

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1223	0	0	390	0	0	2326	2337	368	2003	1818	682
Stage 1	-	-	-	-	-	-	642	642	-	1154	1154	-
Stage 2	-	-	-	-	-	-	1684	1695	-	849	664	-
Critical Hdwy	4.21	-	-	4.1	-	-	7.1	6.5	6.2	7.22	6.5	6.27
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.22	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.22	5.5	-
Follow-up Hdwy	2.299	-	-	2.2	-	-	3.5	4	3.3	3.608	4	3.363
Pot Cap-1 Maneuver	540	-	-	1180	-	-	~ 26	~ 37	682	~ 42	~ 79	441
Stage 1	-	-	-	-	-	-	466	472	-	~ 229	274	-
Stage 2	-	-	-	-	-	-	121	~ 150	-	~ 342	461	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	540	-	-	1180	-	-	~ 6	682	~ 18	~ 14	441	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ -207	~ -138	-	677	~ 43	-
Stage 1	-	-	-	-	-	-	348	352	-	~ 171	~ 64	-
Stage 2	-	-	-	-	-	-	-	~ 35	-	~ 60	344	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	3.6	1.4		\$ 1865.7
HCM LOS			-	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	-	682	540	-	-	1180	-	-	99	441
HCM Lane V/C Ratio	-	0.254	0.254	-	-	0.2	-	-	6.586	0.587
HCM Control Delay (s)	-	12.1	13.9	-	-	8.8	0		\$ 2597.2	24.1
HCM Lane LOS	-	B	B	-	-	A	A	-	F	C
HCM 95th %tile Q(veh)	-	1	1	-	-	0.7	-	-	72.5	3.7

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

HCM 6th TWSC
2: Malabar Rd. & Snapdragon Dr.

01/08/2021

Intersection						
Int Delay, s/veh	7.7					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑	↑	↑	↑
Traffic Vol, veh/h	8	903	1403	36	31	56
Future Vol, veh/h	8	903	1403	36	31	56
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	225	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	7	4	0	0	0
Mvmt Flow	8	903	1403	36	31	56

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	1439	0	-	0	2322 1403
Stage 1	-	-	-	-	1403 -
Stage 2	-	-	-	-	919 -
Critical Hdwy	4.1	-	-	-	6.4 6.2
Critical Hdwy Stg 1	-	-	-	-	5.4 -
Critical Hdwy Stg 2	-	-	-	-	5.4 -
Follow-up Hdwy	2.2	-	-	-	3.5 3.3
Pot Cap-1 Maneuver	478	-	-	-	42 173
Stage 1	-	-	-	-	230 -
Stage 2	-	-	-	-	392 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	478	-	-	-	41 173
Mov Cap-2 Maneuver	-	-	-	-	41 -
Stage 1	-	-	-	-	222 -
Stage 2	-	-	-	-	392 -

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	213.6
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	478	-	-	-	81
HCM Lane V/C Ratio	0.017	-	-	-	1.074
HCM Control Delay (s)	12.7	0	-	-	213.6
HCM Lane LOS	B	A	-	-	F
HCM 95th %tile Q(veh)	0.1	-	-	-	6.1

HCM 6th TWSC
3: Malabar Rd. & Championship Cir.

01/08/2021

Intersection						
Int Delay, s/veh	0.4					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↶	↷		↶	
Traffic Vol, veh/h	4	930	1436	11	6	3
Future Vol, veh/h	4	930	1436	11	6	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	7	4	0	0	0
Mvmt Flow	4	930	1436	11	6	3

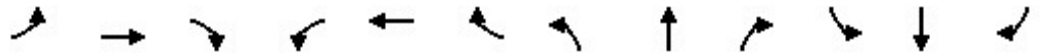
Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	1447	0	-	0	2380 1442
Stage 1	-	-	-	-	1442 -
Stage 2	-	-	-	-	938 -
Critical Hdwy	4.1	-	-	-	6.4 6.2
Critical Hdwy Stg 1	-	-	-	-	5.4 -
Critical Hdwy Stg 2	-	-	-	-	5.4 -
Follow-up Hdwy	2.2	-	-	-	3.5 3.3
Pot Cap-1 Maneuver	474	-	-	-	38 164
Stage 1	-	-	-	-	220 -
Stage 2	-	-	-	-	384 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	474	-	-	-	37 164
Mov Cap-2 Maneuver	-	-	-	-	37 -
Stage 1	-	-	-	-	216 -
Stage 2	-	-	-	-	384 -

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	92.2
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	474	-	-	-	50
HCM Lane V/C Ratio	0.008	-	-	-	0.18
HCM Control Delay (s)	12.7	0	-	-	92.2
HCM Lane LOS	B	A	-	-	F
HCM 95th %tile Q(veh)	0	-	-	-	0.6

HCM 6th Signalized Intersection Summary
 4: Krassner Dr./ Bending Branch Ln & Malabar Rd.

01/08/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	14	1022	22	45	1149	72	79	2	68	66	1	37
Future Volume (veh/h)	14	1022	22	45	1149	72	79	2	68	66	1	37
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	1796	1811	1589	1811	1826	1826	1159	1159	1159	1900	1900	1900
Adj Flow Rate, veh/h	14	1022	14	45	1149	69	79	2	22	66	1	10
Peak Hour 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
Percent Heavy Veh, %	7	6	21	6	5	5	50	50	50	0	0	0
Cap, veh/h	73	1072	797	344	1260	76	127	6	25	196	6	24
Arrive On Green	0.01	0.59	0.59	0.16	0.74	0.74	0.12	0.12	0.12	0.12	0.12	0.12
Sat Flow, veh/h	1711	1811	1346	1725	1705	102	707	47	205	1262	49	196
Grp Volume(v), veh/h	14	1022	14	45	0	1218	103	0	0	77	0	0
Grp Sat Flow(s),veh/h/ln	1711	1811	1346	1725	0	1807	959	0	0	1507	0	0
Q Serve(g_s), s	0.5	79.3	0.6	0.0	0.0	80.9	8.7	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.5	79.3	0.6	0.0	0.0	80.9	15.7	0.0	0.0	7.0	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.06	0.77		0.21	0.86		0.13
Lane Grp Cap(c), veh/h	73	1072	797	344	0	1336	158	0	0	226	0	0
V/C Ratio(X)	0.19	0.95	0.02	0.13	0.00	0.91	0.65	0.00	0.00	0.34	0.00	0.00
Avail Cap(c_a), veh/h	105	1204	895	344	0	1336	211	0	0	312	0	0
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(l)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	37.0	28.7	12.6	51.2	0.0	15.7	64.6	0.0	0.0	61.1	0.0	0.0
Incr Delay (d2), s/veh	1.3	18.3	0.0	0.2	0.0	10.9	5.4	0.0	0.0	1.1	0.0	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(95%),veh/ln	0.5	47.0	0.4	2.6	0.0	40.6	7.5	0.0	0.0	5.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	38.3	47.0	12.7	51.3	0.0	26.6	70.0	0.0	0.0	62.2	0.0	0.0
LnGrp LOS	D	D	B	D	A	C	E	A	A	E	A	A
Approach Vol, veh/h		1050			1263			103				77
Approach Delay, s/veh		46.4			27.5			70.0				62.2
Approach LOS		D			C			E				E
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	30.3	95.6		24.1	8.2	117.6		24.1				
Change Period (Y+Rc), s	6.8	* 6.8		* 6.1	6.0	6.8		6.1				
Max Green Setting (Gmax), s	5.1	* 1E2		* 27	5.0	99.2		26.9				
Max Q Clear Time (g_c+I1), s	2.0	81.3		9.0	2.5	82.9		17.7				
Green Ext Time (p_c), s	0.0	7.5		0.3	0.0	9.2		0.4				

Intersection Summary

HCM 6th Ctrl Delay	38.3
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection						
Int Delay, s/veh	0.4					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1155	1	0	1260	6	2
Future Vol, veh/h	1155	1	0	1260	6	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	5	0	0	4	17	0
Mvmt Flow	1155	1	0	1260	6	2

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	1156	0	2416
Stage 1	-	-	-	-	1156
Stage 2	-	-	-	-	1260
Critical Hdwy	-	-	4.1	-	6.57
Critical Hdwy Stg 1	-	-	-	-	5.57
Critical Hdwy Stg 2	-	-	-	-	5.57
Follow-up Hdwy	-	-	2.2	-	3.653
Pot Cap-1 Maneuver	-	-	612	-	32
Stage 1	-	-	-	-	280
Stage 2	-	-	-	-	249
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	612	-	32
Mov Cap-2 Maneuver	-	-	-	-	32
Stage 1	-	-	-	-	280
Stage 2	-	-	-	-	249

Approach	EB	WB	NB
HCM Control Delay, s	0	0	113
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	41	-	-	612	-
HCM Lane V/C Ratio	0.195	-	-	-	-
HCM Control Delay (s)	113	-	-	0	-
HCM Lane LOS	F	-	-	A	-
HCM 95th %tile Q(veh)	0.6	-	-	0	-

Intersection						
Int Delay, s/veh	112.1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1059	98	57	1148	112	68
Future Vol, veh/h	1059	98	57	1148	112	68
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	4	3	3	5	1	0
Mvmt Flow	1059	98	57	1148	112	68

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	1157	0	2370 1108
Stage 1	-	-	-	-	1108 -
Stage 2	-	-	-	-	1262 -
Critical Hdwy	-	-	4.13	-	6.41 6.2
Critical Hdwy Stg 1	-	-	-	-	5.41 -
Critical Hdwy Stg 2	-	-	-	-	5.41 -
Follow-up Hdwy	-	-	2.227	-	3.509 3.3
Pot Cap-1 Maneuver	-	-	600	-	~ 39 258
Stage 1	-	-	-	-	317 -
Stage 2	-	-	-	-	268 -
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	600	-	~ 29 258
Mov Cap-2 Maneuver	-	-	-	-	~ 29 -
Stage 1	-	-	-	-	317 -
Stage 2	-	-	-	-	198 -

Approach	EB	WB	NB
HCM Control Delay, s	0	0.6	\$ 1578.7
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	44	-	-	600	-
HCM Lane V/C Ratio	4.091	-	-	0.095	-
HCM Control Delay (s)	\$ 1578.7	-	-	11.6	0
HCM Lane LOS	F	-	-	B	A
HCM 95th %tile Q(veh)	20.3	-	-	0.3	-

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

Intersection						
Int Delay, s/veh	0.1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1156	2	6	1165	1	2
Future Vol, veh/h	1156	2	6	1165	1	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	3	0	0	5	0	0
Mvmt Flow	1156	2	6	1165	1	2

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	1158	0	2334
Stage 1	-	-	-	-	1157
Stage 2	-	-	-	-	1177
Critical Hdwy	-	-	4.1	-	6.4
Critical Hdwy Stg 1	-	-	-	-	5.4
Critical Hdwy Stg 2	-	-	-	-	5.4
Follow-up Hdwy	-	-	2.2	-	3.5
Pot Cap-1 Maneuver	-	-	611	-	41
Stage 1	-	-	-	-	302
Stage 2	-	-	-	-	295
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	611	-	40
Mov Cap-2 Maneuver	-	-	-	-	40
Stage 1	-	-	-	-	302
Stage 2	-	-	-	-	287

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	46.4
HCM LOS			E

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	90	-	-	611	-
HCM Lane V/C Ratio	0.033	-	-	0.01	-
HCM Control Delay (s)	46.4	-	-	10.9	0
HCM Lane LOS	E	-	-	B	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection						
Int Delay, s/veh	0.6					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1152	6	30	1167	4	20
Future Vol, veh/h	1152	6	30	1167	4	20
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	3	0	0	5	0	0
Mvmt Flow	1152	6	30	1167	4	20

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	1158	0	2382
Stage 1	-	-	-	-	1155
Stage 2	-	-	-	-	1227
Critical Hdwy	-	-	4.1	-	6.4
Critical Hdwy Stg 1	-	-	-	-	5.4
Critical Hdwy Stg 2	-	-	-	-	5.4
Follow-up Hdwy	-	-	2.2	-	3.5
Pot Cap-1 Maneuver	-	-	611	-	38
Stage 1	-	-	-	-	303
Stage 2	-	-	-	-	280
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	611	-	33
Mov Cap-2 Maneuver	-	-	-	-	33
Stage 1	-	-	-	-	303
Stage 2	-	-	-	-	241

Approach	EB	WB	NB
HCM Control Delay, s	0	0.3	43.1
HCM LOS			E

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	118	-	-	611	-
HCM Lane V/C Ratio	0.203	-	-	0.049	-
HCM Control Delay (s)	43.1	-	-	11.2	0
HCM Lane LOS	E	-	-	B	A
HCM 95th %tile Q(veh)	0.7	-	-	0.2	-

HCM 6th TWSC
9: Post Office & Malabar Rd.

01/08/2021

Intersection												
Int Delay, s/veh	1.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔	↔		↔			↔	↔		↔	
Traffic Vol, veh/h	0	1154	18	14	1186	0	11	0	19	0	0	0
Future Vol, veh/h	0	1154	18	14	1186	0	11	0	19	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	175	-	-	-	-	-	50	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	4	0	0	5	0	0	0	0	0	0	0
Mvmt Flow	0	1154	18	14	1186	0	11	0	19	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1186	0	0	1172	0	0	2368	2368	1154	2387	2386	1186
Stage 1	-	-	-	-	-	-	1154	1154	-	1214	1214	-
Stage 2	-	-	-	-	-	-	1214	1214	-	1173	1172	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	596	-	-	603	-	-	25	35	242	24	35	232
Stage 1	-	-	-	-	-	-	242	274	-	224	257	-
Stage 2	-	-	-	-	-	-	224	257	-	236	269	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	596	-	-	603	-	-	24	33	242	21	33	232
Mov Cap-2 Maneuver	-	-	-	-	-	-	24	33	-	21	33	-
Stage 1	-	-	-	-	-	-	242	274	-	224	240	-
Stage 2	-	-	-	-	-	-	209	240	-	217	269	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0.1			104			0		
HCM LOS							F			A		

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	24	242	596	-	-	603	-	-	-
HCM Lane V/C Ratio	0.458	0.079	-	-	-	0.023	-	-	-
HCM Control Delay (s)	247.1	21.1	0	-	-	11.1	0	-	0
HCM Lane LOS	F	C	A	-	-	B	A	-	A
HCM 95th %tile Q(veh)	1.4	0.3	0	-	-	0.1	-	-	-

HCM 6th Signalized Intersection Summary
 10: Jupiter Blvd. & Malabar Rd.

01/08/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	189	799	185	181	856	365	192	173	170	357	172	152
Future Volume (veh/h)	189	799	185	181	856	365	192	173	170	357	172	152
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	1885	1870	1870	1811	1841	1841	1826	1841	1870	1870	1826	1826
Adj Flow Rate, veh/h	189	799	172	181	856	348	192	173	121	357	172	130
Peak Hour 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
Percent Heavy Veh, %	1	2	2	6	4	4	5	4	2	2	5	5
Cap, veh/h	120	736	158	163	647	263	176	307	264	266	161	122
Arrive On Green	0.04	0.49	0.49	0.07	0.52	0.52	0.07	0.17	0.17	0.07	0.17	0.17
Sat Flow, veh/h	1795	1491	321	1725	1244	506	1739	1841	1585	1781	965	729
Grp Volume(v), veh/h	189	0	971	181	0	1204	192	173	121	357	0	302
Grp Sat Flow(s),veh/h/ln	1795	0	1813	1725	0	1750	1739	1841	1585	1781	0	1695
Q Serve(g_s), s	6.0	0.0	74.0	10.0	0.0	78.0	11.0	13.0	8.3	11.0	0.0	25.0
Cycle Q Clear(g_c), s	6.0	0.0	74.0	10.0	0.0	78.0	11.0	13.0	8.3	11.0	0.0	25.0
Prop In Lane	1.00		0.18	1.00		0.29	1.00		1.00	1.00		0.43
Lane Grp Cap(c), veh/h	120	0	894	163	0	910	176	307	264	266	0	282
V/C Ratio(X)	1.58	0.00	1.09	1.11	0.00	1.32	1.09	0.56	0.46	1.34	0.00	1.07
Avail Cap(c_a), veh/h	120	0	894	163	0	910	176	307	264	266	0	282
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(l)	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	70.8	0.0	38.0	68.5	0.0	36.0	52.8	57.5	36.1	58.0	0.0	62.5
Incr Delay (d2), s/veh	295.9	0.0	56.2	103.2	0.0	153.2	95.2	2.4	1.2	177.7	0.0	73.1
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(95%),veh/ln	22.9	0.0	59.7	16.8	0.0	101.7	10.4	10.3	6.0	27.4	0.0	23.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	366.7	0.0	94.2	171.7	0.0	189.2	148.1	59.9	37.3	235.7	0.0	135.6
LnGrp LOS	F	A	F	F	A	F	F	E	D	F	A	F
Approach Vol, veh/h		1160			1385			486			659	
Approach Delay, s/veh		138.6			186.9			89.1			189.9	
Approach LOS		F			F			F			F	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	13.0	86.0	18.0	33.0	17.0	82.0	18.0	33.0				
Change Period (Y+Rc), s	7.0	8.0	7.0	8.0	7.0	8.0	7.0	8.0				
Max Green Setting (Gmax), s	6.0	78.0	11.0	25.0	10.0	74.0	11.0	25.0				
Max Q Clear Time (g_c+I1), s	8.0	80.0	13.0	15.0	12.0	76.0	13.0	27.0				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0				
Intersection Summary												
HCM 6th Ctrl Delay			159.4									
HCM 6th LOS			F									

HCM 6th TWSC
11: Santa Rosa Ave. & Malabar Rd.

01/08/2021

Intersection												
Int Delay, s/veh	0.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	1325	1	2	1398	0	4	0	5	0	0	0
Future Vol, veh/h	0	1325	1	2	1398	0	4	0	5	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	2	0	0	3	0	0	0	0	0	0	0
Mvmt Flow	0	1325	1	2	1398	0	4	0	5	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1398	0	0	1326	0	0	2728	2728	1326	2730	2728	1398
Stage 1	-	-	-	-	-	-	1326	1326	-	1402	1402	-
Stage 2	-	-	-	-	-	-	1402	1402	-	1328	1326	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	495	-	-	527	-	-	14	21	192	13	21	174
Stage 1	-	-	-	-	-	-	194	227	-	175	209	-
Stage 2	-	-	-	-	-	-	175	209	-	193	227	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	495	-	-	527	-	-	14	21	192	12	21	174
Mov Cap-2 Maneuver	-	-	-	-	-	-	14	21	-	12	21	-
Stage 1	-	-	-	-	-	-	194	227	-	175	205	-
Stage 2	-	-	-	-	-	-	172	205	-	188	227	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0			177.5			0		
HCM LOS							F			A		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	29	495	-	-	527	-	-	-
HCM Lane V/C Ratio	0.31	-	-	-	0.004	-	-	-
HCM Control Delay (s)	177.5	0	-	-	11.9	0	-	0
HCM Lane LOS	F	A	-	-	B	A	-	A
HCM 95th %tile Q(veh)	1	0	-	-	0	-	-	-

HCM 6th TWSC
12: Garvey Rd. & Malabar Rd.

01/08/2021

Intersection						
Int Delay, s/veh	160.2					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1254	76	192	1208	192	198
Future Vol, veh/h	1254	76	192	1208	192	198
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	300	-	0	-
Veh in Median Storage, #	0	-	-	0	1	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	2	5	2	2	14	2
Mvmt Flow	1254	76	192	1208	192	198
Major/Minor	Major1	Major2	Minor1			
Conflicting Flow All	0	0	1330	0	2884	1292
Stage 1	-	-	-	-	1292	-
Stage 2	-	-	-	-	1592	-
Critical Hdwy	-	-	4.12	-	6.54	6.22
Critical Hdwy Stg 1	-	-	-	-	5.54	-
Critical Hdwy Stg 2	-	-	-	-	5.54	-
Follow-up Hdwy	-	-	2.218	-	3.626	3.318
Pot Cap-1 Maneuver	-	-	519	-	~ 16	199
Stage 1	-	-	-	-	243	-
Stage 2	-	-	-	-	~ 172	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	519	-	~ 10	199
Mov Cap-2 Maneuver	-	-	-	-	~ 72	-
Stage 1	-	-	-	-	243	-
Stage 2	-	-	-	-	~ 108	-
Approach	EB	WB	NB			
HCM Control Delay, s	0	2.2	\$ 1273.5			
HCM LOS			F			
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	107	-	-	519	-	
HCM Lane V/C Ratio	3.645	-	-	0.37	-	
HCM Control Delay (s)	\$ 1273.5	-	-	16	-	
HCM Lane LOS	F	-	-	C	-	
HCM 95th %tile Q(veh)	39.1	-	-	1.7	-	
Notes						
~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon						

HCM 6th TWSC
13: Madalyn Landing & Malabar Rd.

01/08/2021

Intersection						
Int Delay, s/veh	1.1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↻		↻	↻	↻	↻
Traffic Vol, veh/h	1430	22	35	1377	23	44
Future Vol, veh/h	1430	22	35	1377	23	44
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	275	-	0	75
Veh in Median Storage, #	0	-	-	0	1	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	2	4	0	3	0	2
Mvmt Flow	1430	22	35	1377	23	44
Major/Minor	Major1	Major2	Minor1			
Conflicting Flow All	0	0	1452	0	2888	1441
Stage 1	-	-	-	-	1441	-
Stage 2	-	-	-	-	1447	-
Critical Hdwy	-	-	4.1	-	6.4	6.22
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.318
Pot Cap-1 Maneuver	-	-	472	-	~ 18	163
Stage 1	-	-	-	-	220	-
Stage 2	-	-	-	-	219	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	472	-	~ 17	163
Mov Cap-2 Maneuver	-	-	-	-	104	-
Stage 1	-	-	-	-	220	-
Stage 2	-	-	-	-	203	-
Approach	EB	WB	NB			
HCM Control Delay, s	0	0.3	39.9			
HCM LOS			E			
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	104	163	-	-	472	-
HCM Lane V/C Ratio	0.221	0.27	-	-	0.074	-
HCM Control Delay (s)	49.2	35.1	-	-	13.2	-
HCM Lane LOS	E	E	-	-	B	-
HCM 95th %tile Q(veh)	0.8	1	-	-	0.2	-
Notes						
~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon						

Intersection						
Int Delay, s/veh	0.3					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↗	↖	↑	↘	↙
Traffic Vol, veh/h	1468	6	9	1406	6	16
Future Vol, veh/h	1468	6	9	1406	6	16
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	275	375	-	0	-
Veh in Median Storage, #	0	-	-	0	1	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	2	0	0	2	0	0
Mvmt Flow	1468	6	9	1406	6	16

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	1474	0	2892 1468
Stage 1	-	-	-	-	1468 -
Stage 2	-	-	-	-	1424 -
Critical Hdwy	-	-	4.1	-	6.4 6.2
Critical Hdwy Stg 1	-	-	-	-	5.4 -
Critical Hdwy Stg 2	-	-	-	-	5.4 -
Follow-up Hdwy	-	-	2.2	-	3.5 3.3
Pot Cap-1 Maneuver	-	-	463	-	18 158
Stage 1	-	-	-	-	214 -
Stage 2	-	-	-	-	224 -
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	463	-	18 158
Mov Cap-2 Maneuver	-	-	-	-	107 -
Stage 1	-	-	-	-	214 -
Stage 2	-	-	-	-	220 -

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	35.4
HCM LOS			E

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	140	-	-	463	-
HCM Lane V/C Ratio	0.157	-	-	0.019	-
HCM Control Delay (s)	35.4	-	-	12.9	-
HCM Lane LOS	E	-	-	B	-
HCM 95th %tile Q(veh)	0.5	-	-	0.1	-

HCM 6th TWSC
15: Maywood Ave./Daffodil Dr. & Malabar Rd.

01/08/2021

Intersection												
Int Delay, s/veh	8.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗			↕			↕	
Traffic Vol, veh/h	8	1463	13	31	1353	56	14	0	39	46	0	48
Future Vol, veh/h	8	1463	13	31	1353	56	14	0	39	46	0	48
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	325	-	-	375	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	25	1	8	0	2	5	7	0	0	0	0	4
Mvmt Flow	8	1463	13	31	1353	56	14	0	39	46	0	48

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1409	0	0	1476	0	0	2953	2957	1470	2948	2935	1381
Stage 1	-	-	-	-	-	-	1486	1486	-	1443	1443	-
Stage 2	-	-	-	-	-	-	1467	1471	-	1505	1492	-
Critical Hdwy	4.35	-	-	4.1	-	-	7.17	6.5	6.2	7.1	6.5	6.24
Critical Hdwy Stg 1	-	-	-	-	-	-	6.17	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.17	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.425	-	-	2.2	-	-	3.563	4	3.3	3.5	4	3.336
Pot Cap-1 Maneuver	419	-	-	462	-	-	~9	15	158	~9	15	175
Stage 1	-	-	-	-	-	-	151	190	-	166	199	-
Stage 2	-	-	-	-	-	-	155	193	-	153	189	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	419	-	-	462	-	-	~6	14	158	~6	14	175
Mov Cap-2 Maneuver	-	-	-	-	-	-	56	88	-	52	83	-
Stage 1	-	-	-	-	-	-	148	186	-	163	186	-
Stage 2	-	-	-	-	-	-	105	180	-	113	185	-

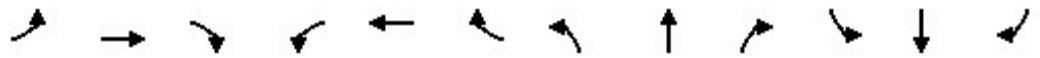
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.1			0.3			67.9			242.1		
HCM LOS							F			F		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	107	419	-	-	462	-	-	81
HCM Lane V/C Ratio	0.495	0.019	-	-	0.067	-	-	1.16
HCM Control Delay (s)	67.9	13.8	-	-	13.4	-	-	242.1
HCM Lane LOS	F	B	-	-	B	-	-	F
HCM 95th %tile Q(veh)	2.2	0.1	-	-	0.2	-	-	6.8

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

HCM 6th Signalized Intersection Summary
 16: Plaza Entrance & Malabar Rd.

01/08/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↑	↗	↖	↑↑	↗	↖	↗		↖	↗	
Traffic Volume (veh/h)	8	1497	43	53	1357	1	69	3	37	7	4	14
Future Volume (veh/h)	8	1497	43	53	1357	1	69	3	37	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	1900	1870	1900	1900	1856	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	8	1497	23	53	1357	1	69	3	4	7	4	1
Peak Hour 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
Percent Heavy Veh, %	0	2	0	0	3	0	0	0	0	0	0	0
Cap, veh/h	265	1035	891	108	2042	932	385	162	217	327	274	68
Arrive On Green	0.01	0.55	0.55	0.07	1.00	1.00	0.04	0.22	0.22	0.01	0.19	0.19
Sat Flow, veh/h	1810	1870	1610	1810	3526	1610	1810	738	984	1810	1467	367
Grp Volume(v), veh/h	8	1497	23	53	1357	1	69	0	7	7	0	5
Grp Sat Flow(s),veh/h/ln	1810	1870	1610	1810	1763	1610	1810	0	1723	1810	0	1834
Q Serve(g_s), s	0.3	83.0	0.7	0.1	0.0	0.0	4.6	0.0	0.5	0.5	0.0	0.3
Cycle Q Clear(g_c), s	0.3	83.0	0.7	0.1	0.0	0.0	4.6	0.0	0.5	0.5	0.0	0.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.57	1.00		0.20
Lane Grp Cap(c), veh/h	265	1035	891	108	2042	932	385	0	379	327	0	342
V/C Ratio(X)	0.03	1.45	0.03	0.49	0.66	0.00	0.18	0.00	0.02	0.02	0.00	0.01
Avail Cap(c_a), veh/h	312	1035	891	108	2042	932	385	0	379	375	0	342
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	0.59	0.59	0.59	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	17.4	33.5	7.5	67.7	0.0	0.0	46.6	0.0	45.8	49.0	0.0	49.8
Incr Delay (d2), s/veh	0.0	206.4	0.1	2.0	1.0	0.0	0.2	0.0	0.0	0.0	0.0	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(95%),veh/ln	0.2	141.0	0.7	3.5	0.5	0.0	3.9	0.0	0.4	0.4	0.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	17.4	239.9	7.5	69.7	1.0	0.0	46.9	0.0	45.8	49.0	0.0	49.8
LnGrp LOS	B	F	A	E	A	A	D	A	D	D	A	D
Approach Vol, veh/h		1528			1411			76				12
Approach Delay, s/veh		235.2			3.6			46.8				49.4
Approach LOS		F			A			D				D
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.1	93.9	8.0	40.0	12.0	90.0	13.0	35.0				
Change Period (Y+Rc), s	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0				
Max Green Setting (Gmax), s	5.0	83.0	5.0	29.0	5.0	83.0	6.0	28.0				
Max Q Clear Time (g_c+I1), s	2.3	2.0	2.5	2.5	2.1	85.0	6.6	2.3				
Green Ext Time (p_c), s	0.0	13.7	0.0	0.0	0.0	0.0	0.0	0.0				
Intersection Summary												
HCM 6th Ctrl Delay	121.8											
HCM 6th LOS	F											

HCM 6th Signalized Intersection Summary

17: Minton Rd. & Malabar Rd.

01/08/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖ ↗	↖ ↗		↖ ↗	↖ ↗	↖ ↗	↖ ↗	↖ ↗	↖ ↗	↖ ↗	↖ ↗	↖ ↗
Traffic Volume (veh/h)	419	1022	100	114	643	311	133	482	151	315	324	635
Future Volume (veh/h)	419	1022	100	114	643	311	133	482	151	315	324	635
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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		No		No
Adj Sat Flow, veh/h/ln	1870	1885	1885	1870	1856	1900	1900	1885	1900	1900	1870	1826
Adj Flow Rate, veh/h	419	1022	95	114	643	114	133	482	64	315	324	500
Peak Hour 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
Percent Heavy Veh, %	2	1	1	2	3	0	0	1	0	0	2	5
Cap, veh/h	484	1060	99	119	870	397	260	490	419	306	698	578
Arrive On Green	0.19	0.43	0.43	0.07	0.25	0.25	0.03	0.26	0.26	0.14	0.37	0.37
Sat Flow, veh/h	3456	3313	308	1781	3526	1610	1810	1885	1610	1810	1870	1547
Grp Volume(v), veh/h	419	552	565	114	643	114	133	482	64	315	324	500
Grp Sat Flow(s),veh/h/ln	1728	1791	1830	1781	1763	1610	1810	1885	1610	1810	1870	1547
Q Serve(g_s), s	17.6	45.1	45.1	9.6	25.2	5.9	4.0	38.1	3.5	21.0	19.7	26.7
Cycle Q Clear(g_c), s	17.6	45.1	45.1	9.6	25.2	5.9	4.0	38.1	3.5	21.0	19.7	26.7
Prop In Lane	1.00		0.17	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	484	573	586	119	870	397	260	490	419	306	698	578
V/C Ratio(X)	0.87	0.96	0.96	0.96	0.74	0.29	0.51	0.98	0.15	1.03	0.46	0.87
Avail Cap(c_a), veh/h	484	573	586	119	870	397	260	490	419	306	698	578
HCM Platoon Ratio	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	0.09	0.09	0.09	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	59.7	42.2	42.2	69.8	52.1	21.3	44.3	55.2	24.5	47.4	35.6	15.4
Incr Delay (d2), s/veh	1.7	5.6	5.6	69.8	5.6	1.8	1.7	36.7	0.8	58.8	2.2	15.9
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(95%),veh/lr	8.7	21.0	21.4	10.8	17.2	6.3	4.2	30.8	3.4	18.8	14.2	16.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	61.3	47.8	47.8	139.6	57.7	23.1	46.0	91.9	25.3	106.2	37.8	31.3
LnGrp LOS	E	D	D	F	E	C	D	F	C	F	D	C
Approach Vol, veh/h		1536			871			679			1139	
Approach Delay, s/veh		51.5			63.9			76.6			53.9	
Approach LOS		D			E			E			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	29.0	44.0	29.0	48.0	18.0	55.0	12.0	65.0				
Change Period (Y+Rc), s	8.0	7.0	8.0	9.0	8.0	7.0	8.0	9.0				
Max Green Setting (Gmax), s	21.0	37.0	21.0	39.0	10.0	48.0	4.0	56.0				
Max Q Clear Time (g_c+1/19), s	11.6	27.2	23.0	40.1	11.6	47.1	6.0	28.7				
Green Ext Time (p_c), s	0.2	3.1	0.0	0.0	0.0	0.6	0.0	3.7				
Intersection Summary												
HCM 6th Ctrl Delay											58.7	
HCM 6th LOS											E	

Intersection												
Int Delay, s/veh	545.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕	↕		↕	
Traffic Vol, veh/h	6	876	54	81	1175	9	245	0	164	18	0	27
Future Vol, veh/h	6	876	54	81	1175	9	245	0	164	18	0	27
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	150	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	6	876	54	81	1175	9	245	0	164	18	0	27

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1184	0	0	930	0	0	2270	2261	903	2339	2284	1180
Stage 1	-	-	-	-	-	-	915	915	-	1342	1342	-
Stage 2	-	-	-	-	-	-	1355	1346	-	997	942	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	597	-	-	744	-	-	~ 29	42	339	26	40	234
Stage 1	-	-	-	-	-	-	329	354	-	190	223	-
Stage 2	-	-	-	-	-	-	~ 186	222	-	297	344	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	597	-	-	744	-	-	~ 19	28	339	~ 10	27	234
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 19	28	-	~ 10	27	-
Stage 1	-	-	-	-	-	-	322	347	-	186	152	-
Stage 2	-	-	-	-	-	-	~ 112	151	-	150	337	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.7	\$ 3451.6	\$ 805.8
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	19	339	597	-	-	744	-	-	23
HCM Lane V/C Ratio	12.895	0.484	0.01	-	-	0.109	-	-	1.957
HCM Control Delay (s)	\$ 5745.2	25.2	11.1	0	-	10.4	0	-	\$ 805.8
HCM Lane LOS	F	D	B	A	-	B	A	-	F
HCM 95th %tile Q(veh)	31.2	2.5	0	-	-	0.4	-	-	5.7

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

Intersection												
Int Delay, s/veh	12.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	↕
Traffic Vol, veh/h	12	1110	5	6	1146	14	16	0	13	35	0	43
Future Vol, veh/h	12	1110	5	6	1146	14	16	0	13	35	0	43
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	12	1110	5	6	1146	14	16	0	13	35	0	43

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1160	0	0	1115	0	0	2324	2309	1113	2308	2304	1153
Stage 1	-	-	-	-	-	-	1137	1137	-	1165	1165	-
Stage 2	-	-	-	-	-	-	1187	1172	-	1143	1139	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	610	-	-	634	-	-	27	39	256	~ 27	39	243
Stage 1	-	-	-	-	-	-	248	279	-	239	271	-
Stage 2	-	-	-	-	-	-	232	269	-	246	278	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	610	-	-	634	-	-	21	36	256	~ 24	36	243
Mov Cap-2 Maneuver	-	-	-	-	-	-	21	36	-	~ 24	36	-
Stage 1	-	-	-	-	-	-	235	264	-	227	264	-
Stage 2	-	-	-	-	-	-	186	262	-	221	264	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.1			0.1			256.6			276.7		
HCM LOS							F			F		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	36	610	-	-	634	-	-	24	243
HCM Lane V/C Ratio	0.806	0.02	-	-	0.009	-	-	1.458	0.177
HCM Control Delay (s)	256.6	11	0	-	10.7	0	-	588.4	23
HCM Lane LOS	F	B	A	-	B	A	-	F	C
HCM 95th %tile Q(veh)	2.9	0.1	-	-	0	-	-	4.4	0.6

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

2050 PM NO-BUILD MOE TABLES

2050 PM No Build Unsignalized Network												
Malabar Rd. & St. Johns Heritage Pkwy.											Intersection ID: 1	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio		0.441		0.20	-	-	0.12	-	-	-	-	0.25
HCM Control Delay (s)		18.1		9.1	-	-	9.3	0.0	-	-	-	10.8
HCM Lane LOS		C		A	-	-	A	A	-	-	-	B
HCM 95th Percentile Queue (veh/In)		2.2		0.7	-	-	0.4	-	-	-	-	1.0
Turn Lane Length (Veh)		-		15.0	-	-	-	-	12.0	15.0	-	15.0
Malabar Rd. & Snapdragon Dr.											Intersection ID: 2	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio		-		0.05	-	-	-	-	-	-	-	0.50
HCM Control Delay (s)		-		8.9	0.0	-	-	-	-	-	-	90.4
HCM Lane LOS		-		A	A	-	-	-	-	-	-	F
HCM 95th Percentile Queue (veh/In)		-		0.2	-	-	-	-	-	-	-	2.1
Turn Lane Length (Veh)		-		-	-	-	-	-	9.0	-	-	-
Malabar Rd. & Championship Cir.											Intersection ID: 3	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio		-		0.03	-	-	-	-	-	-	-	0.46
HCM Control Delay (s)		-		8.9	0.0	-	-	-	-	-	-	77.6
HCM Lane LOS		-		A	A	-	-	-	-	-	-	F
HCM 95th Percentile Queue (veh/In)		-		0.1	-	-	-	-	-	-	-	1.9
Turn Lane Length (Veh)		-		-	-	-	-	-	-	-	-	-
Malabar Rd. & Wisteria Ave./Abilene Dr.											Intersection ID: 18	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	5.83	-	0.71	0.03	-	-	0.35	-	-	-	-	3.75
HCM Control Delay (s)	2599.3	-	53.3	8.6	0.0	-	15.7	0.0	-	-	-	2142.5
HCM Lane LOS	F	-	F	A	A	-	C	A	-	-	-	F
HCM 95th Percentile Queue (veh/In)	13.7	-	4.7	0.1	-	-	1.6	-	-	-	-	5.0
Turn Lane Length (Veh)	-	-	8.0	-	-	-	-	-	-	-	-	-
Malabar Rd. & Bavarian Ave.											Intersection ID: 5	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio		0.08		-	-	-	0.00	-	-	-	-	-
HCM Control Delay (s)		83.2		-	-	-	11.8	0.0	-	-	-	-
HCM Lane LOS		F		-	-	-	B	A	-	-	-	-
HCM 95th Percentile Queue (veh/In)		0.2		-	-	-	0.0	-	-	-	-	-
Turn Lane Length (Veh)		-		-	-	-	-	-	-	-	-	-
Malabar Rd. & Hurley Blvd.											Intersection ID: 6	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio		3.11		-	-	-	0.14	-	-	-	-	-
HCM Control Delay (s)		1071.5		-	-	-	12.9	0.0	-	-	-	-
HCM Lane LOS		F		-	-	-	B	A	-	-	-	-
HCM 95th Percentile Queue (veh/In)		23.0		-	-	-	0.5	-	-	-	-	-
Turn Lane Length (Veh)		-		-	-	-	-	-	-	-	-	-
Malabar Rd. & Watoga Ave.											Intersection ID: 19	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio		0.93		0.06	-	-	0.03	-	-	-	1.84	0.09
HCM Control Delay (s)		260.9		9.8	0.0	-	11.5	0.0	-	731.6	-	15.6
HCM Lane LOS		F		A	A	-	B	A	-	F	-	C
HCM 95th Percentile Queue (veh/In)		3.7		0.2	-	-	0.1	-	-	5.7	-	0.3
Turn Lane Length (Veh)		-		-	-	-	-	-	-	-	-	-
Malabar Rd. & Palm Bay Public Works (W)											Intersection ID: 7	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio		0.41		-	-	-	0.00	-	-	-	-	-
HCM Control Delay (s)		51.2		-	-	-	11.7	0.0	-	-	-	-
HCM Lane LOS		F		-	-	-	B	A	-	-	-	-
HCM 95th Percentile Queue (veh/In)		1.7		-	-	-	0.0	-	-	-	-	-
Turn Lane Length (Veh)		-		-	-	-	-	-	-	-	-	-
Malabar Rd. & Palm Bay Public Works (E)											Intersection ID: 8	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio		0.23		-	-	-	0.00	-	-	-	-	-
HCM Control Delay (s)		30.8		-	-	-	11.9	0.0	-	-	-	-
HCM Lane LOS		D		-	-	-	B	A	-	-	-	-
HCM 95th Percentile Queue (veh/In)		0.9		-	-	-	0.0	-	-	-	-	-
Turn Lane Length (Veh)		-		-	-	-	-	-	-	-	-	-
Malabar Rd. & Post Office											Intersection ID: 9	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	0.50	-	0.11	-	-	-	0.04	-	-	-	-	-
HCM Control Delay (s)	211.6	-	26.3	0.0	-	-	12.2	0.0	-	-	0.0	-
HCM Lane LOS	F	-	D	A	-	-	B	A	-	-	A	-
HCM 95th Percentile Queue (veh/In)	1.6	-	0.4	0.0	-	-	0.1	-	-	-	-	-
Turn Lane Length (Veh)	2.0	-	2.0	-	-	6.0	-	-	-	-	-	-

2050 PM No Build Unsignalized Network												
Malabar Rd. & Santa Rosa Ave.											Intersection ID: 11	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	0.25			-	-	-	0.02	-	-		0.00	
HCM Control Delay (s)	100.8			0.0	-	-	14.0	0.0	-		19.9	
HCM Lane LOS	F			A	-	-	B	A	-		C	
HCM 95th Percentile Queue (veh/In)	0.8			0.0	-	-	0.0	-	-		0.0	
Turn Lane Length (Veh)	-			-	-	-	-	-	-		-	
Malabar Rd. & Garvey Rd.											Intersection ID: 12	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	2.17			-	-	-	0.62	-	-		-	
HCM Control Delay (s)	610.8			-	-	-	27.2	-	-		-	
HCM Lane LOS	F			-	-	-	D	-	-		-	
HCM 95th Percentile Queue (veh/In)	21.9			-	-	-	4.0	-	-		-	
Turn Lane Length (Veh)	-			-	-	-	11.0	-	-		-	
Malabar Rd. & Madalyn Landing											Intersection ID: 13	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	0.11	-	0.22	-	-	-	0.17	-	-		-	
HCM Control Delay (s)	49.9	-	35.1	-	-	-	14.6	-	-		-	
HCM Lane LOS	E	-	E	-	-	-	B	-	-		-	
HCM 95th Percentile Queue (veh/In)	0.4	-	0.8	-	-	-	0.6	-	-		-	
Turn Lane Length (Veh)	4.0	-	4.0	-	-	-	10.0	-	-		-	
Malabar Rd. & Sutherland Dr.											Intersection ID: 14	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	0.17			-	-	-	0.08	-	-		-	
HCM Control Delay (s)	36.2			-	-	-	13.7	-	-		-	
HCM Lane LOS	E			-	-	-	B	-	-		-	
HCM 95th Percentile Queue (veh/In)	0.6			-	-	-	0.2	-	-		-	
Turn Lane Length (Veh)	-			-	-	9.0	15.0	-	-		-	
Malabar Rd. & Maywood Ave./Daffodil Dr.											Intersection ID: 15	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	0.34			0.02	-	-	0.10	-	-		1.57	
HCM Control Delay (s)	58.5			13.7	-	-	14.0	-	-		415.0	
HCM Lane LOS	F			B	-	-	B	-	-		F	
HCM 95th Percentile Queue (veh/In)	1.3			0.1	-	-	0.3	-	-		9.4	
Turn Lane Length (Veh)	-			12.0	-	-	13.0	-	-		-	

*Vehicle length is assumed to be 25 feet.

2050 PM No Build Signalized Network												
Malabar Rd. & Krassner Dr./ Bending Branch Ln.											Intersection ID: 4	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	0.55	0.00	0.00	0.10	0.97	0.06	0.25	0.00	0.55	0.00	0.00	0.00
HCM Lane Group Delay (s)	75.3	0.0	0.0	14.4	45.8	10.6	50.8	0.0	7.5	0.0	0.0	0.0
HCM Lane LOS	E	A	A	B	D	B	D	A	A	A	A	A
HCM 95th Percentile Queue (veh/ln)	4.3	0.0	0.0	0.9	52.3	1.3	5.4	0.0	12.6	0.0	0.0	0.0
Turn Lane Length (Veh)	16.0	-	-	12.0	-	10.0	-	-	-	-	-	-
HCM6 Intersection Ctrl Delay	31.6											
HCM6 Intersection LOS	C											
Malabar Rd. & Jupiter Blvd.											Intersection ID: 10	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	0.69	0.84	0.76	0.63	0.00	1.26	1.16	0.00	1.23	1.54	0.00	0.89
HCM Lane Group Delay (s)	77.0	76.5	72.2	69.3	0.0	163.4	170.8	0.0	154.8	325.4	0.0	78.0
HCM Lane LOS	E	E	E	E	A	F	F	A	F	F	A	E
HCM 95th Percentile Queue (veh/ln)	8.9	11.1	8.8	9.0	0.0	94.5	11.9	0.0	76.9	48.0	0.0	16.1
Turn Lane Length (Veh)	8.0	-	11.0	8.0	-	-	10.0	-	-	13.0	-	-
HCM6 Intersection Ctrl Delay	161.1											
HCM6 Intersection LOS	F											
Malabar Rd. & Plaza Entrance											Intersection ID: 16	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	0.46	0.00	0.11	0.11	1.40	0.11	0.95	0.64	0.02	0.14	0.00	0.16
HCM Lane Group Delay (s)	49.7	0.0	50.0	17.7	218.8	5.7	104.2	0.6	0.0	55.4	0.0	60.0
HCM Lane LOS	D	A	D	B	F	A	F	A	A	E	A	E
HCM 95th Percentile Queue (veh/ln)	9.4	0.0	2.1	0.9	131.4	2.9	7.7	0.3	0.0	2.3	0.0	2.3
Turn Lane Length (Veh)	2.0	-	-	6.0	-	-	9.0	-	9.0	3.0	-	-
HCM6 Intersection Ctrl Delay	104.4											
HCM6 Intersection LOS	F											
Malabar Rd. & Minton Rd.											Intersection ID: 17	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	0.86	0.83	0.01	1.08	0.87	0.87	0.96	0.95	0.39	1.12	0.94	0.80
HCM Lane Group Delay (s)	94.6	71.2	19.4	84.0	33.8	33.7	109.2	78.4	26.5	127.1	73.1	25.8
HCM Lane LOS	F	E	B	F	C	C	F	E	C	F	E	C
HCM 95th Percentile Queue (veh/ln)	5.4	21.3	0.2	15.7	11.2	11.5	18.7	23.8	5.9	25.4	33.4	13.4
Turn Lane Length (Veh)	6.0	-	7.0	15.0	-	-	16.0	-	17.0	6.0	-	6.0
HCM6 Intersection Ctrl Delay	69.3											
HCM6 Intersection LOS	E											

*Vehicle length is assumed to be 25 feet.

2050 NO-BUILD PM PEAK HOUR INTERSECTION OPERATIONS SYNCHRO
REPORTS

HCM 6th TWSC

1: St. Johns Heritage Pkwy. & Malabar Rd.

01/14/2021

Intersection												
Int Delay, s/veh	1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗			↖	↗		↖	↗		↖	↗
Traffic Vol, veh/h	217	593	66	111	200	277	66	217	215	601	203	203
Future Vol, veh/h	217	593	66	111	200	277	66	217	215	601	203	203
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	375	-	-	-	-	300	-	-	200	-	-	375
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	1	0	0	4	3	0	0	0	0	0	7
Mvmt Flow	217	593	66	111	200	277	66	217	215	601	203	203

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	477	0	0	659	0	0	1824	1759	626	1698	1515	200
Stage 1	-	-	-	-	-	-	1060	1060	-	422	422	-
Stage 2	-	-	-	-	-	-	764	699	-	1276	1093	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.27
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.363
Pot Cap-1 Maneuver	1096	-	-	939	-	-	~ 60	~ 86	488	~ 74	~ 121	828
Stage 1	-	-	-	-	-	-	273	303	-	613	592	-
Stage 2	-	-	-	-	-	-	399	445	-	~ 207	293	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1096	-	-	939	-	-	~ 57	488	-	~ 81	828	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ -93	~ 110	-	~ -115	~ 109	-
Stage 1	-	-	-	-	-	-	219	243	-	~ 492	493	-
Stage 2	-	-	-	-	-	-	147	370	-	~ 10	235	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	2.3	1.8		
HCM LOS			-	-

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	-	488	1096	-	-	939	-	-	-	828
HCM Lane V/C Ratio	-	0.441	0.198	-	-	0.118	-	-	-	0.245
HCM Control Delay (s)	-	18.1	9.1	-	-	9.3	0	-	-	10.8
HCM Lane LOS	-	C	A	-	-	A	A	-	-	B
HCM 95th %tile Q(veh)	-	2.2	0.7	-	-	0.4	-	-	-	1

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

HCM 6th TWSC
2: Malabar Rd. & Snapdragon Dr.

01/14/2021

Intersection						
Int Delay, s/veh	1.9					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↑	↗	↘	
Traffic Vol, veh/h	47	1362	573	50	24	15
Future Vol, veh/h	47	1362	573	50	24	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	225	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	47	1362	573	50	24	15

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	623	0	-	0	2029 573
Stage 1	-	-	-	-	573 -
Stage 2	-	-	-	-	1456 -
Critical Hdwy	4.1	-	-	-	6.4 6.2
Critical Hdwy Stg 1	-	-	-	-	5.4 -
Critical Hdwy Stg 2	-	-	-	-	5.4 -
Follow-up Hdwy	2.2	-	-	-	3.5 3.3
Pot Cap-1 Maneuver	968	-	-	-	64 523
Stage 1	-	-	-	-	568 -
Stage 2	-	-	-	-	216 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	968	-	-	-	51 523
Mov Cap-2 Maneuver	-	-	-	-	51 -
Stage 1	-	-	-	-	454 -
Stage 2	-	-	-	-	216 -

Approach	EB	WB	SB
HCM Control Delay, s	0.3	0	90.4
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	968	-	-	-	78
HCM Lane V/C Ratio	0.049	-	-	-	0.5
HCM Control Delay (s)	8.9	0	-	-	90.4
HCM Lane LOS	A	A	-	-	F
HCM 95th %tile Q(veh)	0.2	-	-	-	2.1

HCM 6th TWSC
3: Malabar Rd. & Championship Cir.

01/14/2021

Intersection						
Int Delay, s/veh	1.6					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↕		↕	
Traffic Vol, veh/h	26	1360	607	50	24	16
Future Vol, veh/h	26	1360	607	50	24	16
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	3	0	0	0
Mvmt Flow	26	1360	607	50	24	16

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	657	0	-	0	2044 632
Stage 1	-	-	-	-	632 -
Stage 2	-	-	-	-	1412 -
Critical Hdwy	4.1	-	-	-	6.4 6.2
Critical Hdwy Stg 1	-	-	-	-	5.4 -
Critical Hdwy Stg 2	-	-	-	-	5.4 -
Follow-up Hdwy	2.2	-	-	-	3.5 3.3
Pot Cap-1 Maneuver	940	-	-	-	63 484
Stage 1	-	-	-	-	534 -
Stage 2	-	-	-	-	227 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	940	-	-	-	56 484
Mov Cap-2 Maneuver	-	-	-	-	56 -
Stage 1	-	-	-	-	474 -
Stage 2	-	-	-	-	227 -

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	77.6
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	940	-	-	-	87
HCM Lane V/C Ratio	0.028	-	-	-	0.46
HCM Control Delay (s)	8.9	0	-	-	77.6
HCM Lane LOS	A	A	-	-	F
HCM 95th %tile Q(veh)	0.1	-	-	-	1.9

HCM 6th Signalized Intersection Summary
 4: Krassner Dr./ Bending Branch Ln & Malabar Rd.

01/14/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	39	1157	65	96	693	100	30	3	71	87	1	17
Future Volume (veh/h)	39	1157	65	96	693	100	30	3	71	87	1	17
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	1900	1885	1781	1885	1856	1856	1411	1411	1411	1900	1900	1900
Adj Flow Rate, veh/h	39	1157	57	96	693	97	30	3	25	87	1	-10
Peak Hour 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
Percent Heavy Veh, %	0	1	8	1	3	3	33	33	33	0	0	0
Cap, veh/h	380	1193	956	382	1256	176	66	9	29	266	33	0
Arrive On Green	0.03	0.63	0.63	0.18	0.79	0.79	0.06	0.06	0.06	0.06	0.06	0.00
Sat Flow, veh/h	1810	1885	1510	1795	1593	223	502	158	500	1575	18	-181
Grp Volume(v), veh/h	39	1157	57	96	0	790	58	0	0	0	0	0
Grp Sat Flow(s),veh/h/ln	1810	1885	1510	1795	0	1815	1161	0	0	0	0	0
Q Serve(g_s), s	1.3	87.5	2.2	1.2	0.0	24.5	6.1	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	1.3	87.5	2.2	1.2	0.0	24.5	7.4	0.0	0.0	0.0	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.12	0.52		0.43	1.12		-0.13
Lane Grp Cap(c), veh/h	380	1193	956	382	0	1431	105	0	0	0	0	0
V/C Ratio(X)	0.10	0.97	0.06	0.25	0.00	0.55	0.55	0.00	0.00	0.00	0.00	0.00
Avail Cap(c_a), veh/h	392	1234	988	382	0	1431	241	0	0	0	0	0
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(l)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	14.2	26.1	10.5	50.4	0.0	5.9	69.8	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.1	19.7	0.1	0.3	0.0	1.5	5.4	0.0	0.0	0.0	0.0	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(95%),veh/ln	0.9	52.3	1.3	5.4	0.0	12.6	4.3	0.0	0.0	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.4	45.8	10.6	50.8	0.0	7.5	75.3	0.0	0.0	0.0	0.0	0.0
LnGrp LOS	B	D	B	D	A	A	E	A	A	A	A	A
Approach Vol, veh/h		1253			886			58				0
Approach Delay, s/veh		43.2			12.2			75.3				0.0
Approach LOS		D			B			E				
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	32.9	101.8		15.3	10.0	124.7		15.3				
Change Period (Y+Rc), s	6.8	* 6.8		* 6.1	6.0	6.8		6.1				
Max Green Setting (Gmax), s	6.6	* 98		* 27	5.0	99.2		26.9				
Max Q Clear Time (g_c+I1), s	3.2	89.5		0.0	3.3	26.5		9.4				
Green Ext Time (p_c), s	0.1	5.5		0.0	0.0	6.4		0.3				

Intersection Summary

HCM 6th Ctrl Delay	31.6
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection						
Int Delay, s/veh	0.2					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1309	6	2	885	4	0
Future Vol, veh/h	1309	6	2	885	4	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	1	0	0
Mvmt Flow	1309	6	2	885	4	0

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	1315	0	2201
Stage 1	-	-	-	-	1312
Stage 2	-	-	-	-	889
Critical Hdwy	-	-	4.1	-	6.4
Critical Hdwy Stg 1	-	-	-	-	5.4
Critical Hdwy Stg 2	-	-	-	-	5.4
Follow-up Hdwy	-	-	2.2	-	3.5
Pot Cap-1 Maneuver	-	-	533	-	50
Stage 1	-	-	-	-	254
Stage 2	-	-	-	-	405
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	533	-	50
Mov Cap-2 Maneuver	-	-	-	-	50
Stage 1	-	-	-	-	254
Stage 2	-	-	-	-	402

Approach	EB	WB	NB
HCM Control Delay, s	0	0	83.2
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	50	-	-	533	-
HCM Lane V/C Ratio	0.08	-	-	0.004	-
HCM Control Delay (s)	83.2	-	-	11.8	0
HCM Lane LOS	F	-	-	B	A
HCM 95th %tile Q(veh)	0.2	-	-	0	-

HCM 6th TWSC
6: Hurley Blvd. & Malabar Rd.

01/14/2021

Intersection

Int Delay, s/veh 101.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1162	147	72	790	97	130
Future Vol, veh/h	1162	147	72	790	97	130
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	3	1	0	3
Mvmt Flow	1162	147	72	790	97	130

Major/Minor	Major1	Major2	Minor1	Minor2
Conflicting Flow All	0	0	1309	0
Stage 1	-	-	-	1236
Stage 2	-	-	-	934
Critical Hdwy	-	-	4.13	-
Critical Hdwy Stg 1	-	-	-	5.4
Critical Hdwy Stg 2	-	-	-	5.4
Follow-up Hdwy	-	-	2.227	-
Pot Cap-1 Maneuver	-	-	525	-
Stage 1	-	-	-	277
Stage 2	-	-	-	386
Platoon blocked, %	-	-	-	-
Mov Cap-1 Maneuver	-	-	525	-
Mov Cap-2 Maneuver	-	-	-	-
Stage 1	-	-	-	277
Stage 2	-	-	-	292

Approach	EB	WB	NB
HCM Control Delay, s	0	1.1	\$ 1071.5
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	73	-	-	525	-
HCM Lane V/C Ratio	3.11	-	-	0.137	-
HCM Control Delay (s)	\$ 1071.5	-	-	12.9	0
HCM Lane LOS	F	-	-	B	A
HCM 95th %tile Q(veh)	23	-	-	0.5	-

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

Intersection						
Int Delay, s/veh	1.2					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1292	0	2	851	11	41
Future Vol, veh/h	1292	0	2	851	11	41
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	1	0	0	1	0	0
Mvmt Flow	1292	0	2	851	11	41

Major/Minor	Major1	Major2	Minor1	Minor2
Conflicting Flow All	0	0	1292	0
Stage 1	-	-	-	1292
Stage 2	-	-	-	855
Critical Hdwy	-	-	4.1	-
Critical Hdwy Stg 1	-	-	-	5.4
Critical Hdwy Stg 2	-	-	-	5.4
Follow-up Hdwy	-	-	2.2	-
Pot Cap-1 Maneuver	-	-	543	-
Stage 1	-	-	-	260
Stage 2	-	-	-	420
Platoon blocked, %	-	-	-	-
Mov Cap-1 Maneuver	-	-	543	-
Mov Cap-2 Maneuver	-	-	-	54
Stage 1	-	-	-	260
Stage 2	-	-	-	417

Approach	EB	WB	NB
HCM Control Delay, s	0	0	51.2
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	128	-	-	543	-
HCM Lane V/C Ratio	0.406	-	-	0.004	-
HCM Control Delay (s)	51.2	-	-	11.7	0
HCM Lane LOS	F	-	-	B	A
HCM 95th %tile Q(veh)	1.7	-	-	0	-

Intersection						
Int Delay, s/veh	0.6					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1308	25	1	852	1	41
Future Vol, veh/h	1308	25	1	852	1	41
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	1	0	0	1	0	0
Mvmt Flow	1308	25	1	852	1	41

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	1333	0	2175 1321
Stage 1	-	-	-	-	1321 -
Stage 2	-	-	-	-	854 -
Critical Hdwy	-	-	4.1	-	6.4 6.2
Critical Hdwy Stg 1	-	-	-	-	5.4 -
Critical Hdwy Stg 2	-	-	-	-	5.4 -
Follow-up Hdwy	-	-	2.2	-	3.5 3.3
Pot Cap-1 Maneuver	-	-	524	-	52 193
Stage 1	-	-	-	-	252 -
Stage 2	-	-	-	-	421 -
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	524	-	52 193
Mov Cap-2 Maneuver	-	-	-	-	52 -
Stage 1	-	-	-	-	252 -
Stage 2	-	-	-	-	419 -

Approach	EB	WB	NB
HCM Control Delay, s	0	0	30.8
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	181	-	-	524	-
HCM Lane V/C Ratio	0.232	-	-	0.002	-
HCM Control Delay (s)	30.8	-	-	11.9	0
HCM Lane LOS	D	-	-	B	A
HCM 95th %tile Q(veh)	0.9	-	-	0	-

HCM 6th TWSC
9: Post Office & Malabar Rd.

01/14/2021

Intersection												
Int Delay, s/veh	1.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↖	↗		↕			↖	↗		↕	
Traffic Vol, veh/h	0	1333	16	18	838	0	15	0	21	0	0	0
Future Vol, veh/h	0	1333	16	18	838	0	15	0	21	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	175	-	-	-	-	-	50	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	1	0	0	1	0	0	0	0	0	0	0
Mvmt Flow	0	1333	16	18	838	0	15	0	21	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	838	0	0	1349	0	0	2207	2207	1333	2226	2223	838
Stage 1	-	-	-	-	-	-	1333	1333	-	874	874	-
Stage 2	-	-	-	-	-	-	874	874	-	1352	1349	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	805	-	-	517	-	-	32	45	190	31	44	369
Stage 1	-	-	-	-	-	-	192	225	-	347	370	-
Stage 2	-	-	-	-	-	-	347	370	-	187	221	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	805	-	-	517	-	-	30	42	190	26	41	369
Mov Cap-2 Maneuver	-	-	-	-	-	-	30	42	-	26	41	-
Stage 1	-	-	-	-	-	-	192	225	-	347	346	-
Stage 2	-	-	-	-	-	-	324	346	-	166	221	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0.3			103.5			0		
HCM LOS							F			A		

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	30	190	805	-	-	517	-	-	-
HCM Lane V/C Ratio	0.5	0.111	-	-	-	0.035	-	-	-
HCM Control Delay (s)	211.6	26.3	0	-	-	12.2	0	-	0
HCM Lane LOS	F	D	A	-	-	B	A	-	A
HCM 95th %tile Q(veh)	1.6	0.4	0	-	-	0.1	-	-	-

HCM 6th Signalized Intersection Summary
 10: Jupiter Blvd. & Malabar Rd.

01/14/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	137	1006	211	140	629	388	126	168	178	439	175	101
Future Volume (veh/h)	137	1006	211	140	629	388	126	168	178	439	175	101
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	1900	1885	1885	1900	1885	1885	1900	1885	1870	1870	1885	1885
Adj Flow Rate, veh/h	137	1006	198	140	629	371	126	168	129	439	175	79
Peak Hour 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
Percent Heavy Veh, %	0	1	1	0	1	1	0	1	2	2	1	1
Cap, veh/h	217	796	157	120	511	302	181	201	169	286	196	89
Arrive On Green	0.09	0.52	0.52	0.04	0.46	0.46	0.07	0.11	0.11	0.13	0.16	0.16
Sat Flow, veh/h	1810	1530	301	1810	1112	656	1810	1885	1585	1781	1230	555
Grp Volume(v), veh/h	137	0	1204	140	0	1000	126	168	129	439	0	254
Grp Sat Flow(s),veh/h/ln	1810	0	1831	1810	0	1767	1810	1885	1585	1781	0	1785
Q Serve(g_s), s	6.8	0.0	78.0	6.0	0.0	69.0	6.1	13.1	11.9	20.0	0.0	20.9
Cycle Q Clear(g_c), s	6.8	0.0	78.0	6.0	0.0	69.0	6.1	13.1	11.9	20.0	0.0	20.9
Prop In Lane	1.00		0.16	1.00		0.37	1.00		1.00	1.00		0.31
Lane Grp Cap(c), veh/h	217	0	952	120	0	813	181	201	169	286	0	285
V/C Ratio(X)	0.63	0.00	1.26	1.16	0.00	1.23	0.69	0.84	0.76	1.54	0.00	0.89
Avail Cap(c_a), veh/h	217	0	952	120	0	813	181	314	264	286	0	405
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(l)	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	63.5	0.0	36.0	38.3	0.0	40.5	66.0	65.7	65.2	66.6	0.0	61.8
Incr Delay (d2), s/veh	5.8	0.0	127.4	132.4	0.0	114.3	10.9	10.8	7.0	258.8	0.0	16.2
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(95%),veh/ln	9.0	0.0	94.5	11.9	0.0	76.9	8.9	11.1	8.8	48.0	0.0	16.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	69.3	0.0	163.4	170.8	0.0	154.8	77.0	76.5	72.2	325.4	0.0	78.0
LnGrp LOS	E	A	F	F	A	F	E	E	E	F	A	E
Approach Vol, veh/h		1341			1140			423			693	
Approach Delay, s/veh		153.8			156.8			75.3			234.7	
Approach LOS		F			F			E			F	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	22.0	77.0	27.0	24.0	13.0	86.0	19.1	31.9				
Change Period (Y+Rc), s	8.0	* 8	7.0	8.0	7.0	8.0	8.0	* 8				
Max Green Setting (Gmax), s	6.0	* 69	20.0	25.0	6.0	69.0	11.0	* 34				
Max Q Clear Time (g_c+I1), s	8.8	71.0	22.0	15.1	8.0	80.0	8.1	22.9				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.9	0.0	0.0	0.1	1.0				

Intersection Summary

HCM 6th Ctrl Delay	161.1
HCM 6th LOS	F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection												
Int Delay, s/veh	0.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	1621	2	6	1154	0	2	0	10	0	0	1
Future Vol, veh/h	0	1621	2	6	1154	0	2	0	10	0	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	1	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	1621	2	6	1154	0	2	0	10	0	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1154	0	0	1623	0	0	2789	2788	1622	2793	2789	1154
Stage 1	-	-	-	-	-	-	1622	1622	-	1166	1166	-
Stage 2	-	-	-	-	-	-	1167	1166	-	1627	1623	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	613	-	-	406	-	-	12	19	128	12	19	242
Stage 1	-	-	-	-	-	-	131	163	-	238	270	-
Stage 2	-	-	-	-	-	-	238	270	-	130	163	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	613	-	-	406	-	-	12	18	128	11	18	242
Mov Cap-2 Maneuver	-	-	-	-	-	-	12	18	-	11	18	-
Stage 1	-	-	-	-	-	-	131	163	-	238	259	-
Stage 2	-	-	-	-	-	-	227	259	-	120	163	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0.1			100.8			19.9		
HCM LOS							F			C		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	49	613	-	-	406	-	-	242
HCM Lane V/C Ratio	0.245	-	-	-	0.015	-	-	0.004
HCM Control Delay (s)	100.8	0	-	-	14	0	-	19.9
HCM Lane LOS	F	A	-	-	B	A	-	C
HCM 95th %tile Q(veh)	0.8	0	-	-	0	-	-	0

HCM 6th TWSC
12: Garvey Rd. & Malabar Rd.

01/14/2021

Intersection						
Int Delay, s/veh	50.8					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1279	352	248	1122	38	222
Future Vol, veh/h	1279	352	248	1122	38	222
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	300	-	0	-
Veh in Median Storage, #	0	-	-	0	1	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	1	0	0	0	0	1
Mvmt Flow	1279	352	248	1122	38	222

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	1631	0	3073 1455
Stage 1	-	-	-	-	1455 -
Stage 2	-	-	-	-	1618 -
Critical Hdwy	-	-	4.1	-	6.4 6.21
Critical Hdwy Stg 1	-	-	-	-	5.4 -
Critical Hdwy Stg 2	-	-	-	-	5.4 -
Follow-up Hdwy	-	-	2.2	-	3.5 3.309
Pot Cap-1 Maneuver	-	-	403	-	~ 14 ~ 160
Stage 1	-	-	-	-	217 -
Stage 2	-	-	-	-	180 -
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	403	-	~ 5 ~ 160
Mov Cap-2 Maneuver	-	-	-	-	49 -
Stage 1	-	-	-	-	217 -
Stage 2	-	-	-	-	69 -

Approach	EB	WB	NB
HCM Control Delay, s	0	4.9	\$ 610.8
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	120	-	-	403	-
HCM Lane V/C Ratio	2.167	-	-	0.615	-
HCM Control Delay (s)	\$ 610.8	-	-	27.2	-
HCM Lane LOS	F	-	-	D	-
HCM 95th %tile Q(veh)	21.9	-	-	4	-

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

HCM 6th TWSC
13: Madalyn Landing & Malabar Rd.

01/14/2021

Intersection						
Int Delay, s/veh	1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↔		↔	↑	↔	↔
Traffic Vol, veh/h	1483	18	78	1360	10	34
Future Vol, veh/h	1483	18	78	1360	10	34
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	275	-	0	75
Veh in Median Storage, #	0	-	-	0	1	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	1	0	0	1	0	0
Mvmt Flow	1483	18	78	1360	10	34

Major/Minor	Major1	Major2	Minor1	Minor2
Conflicting Flow All	0	0	1501	0
Stage 1	-	-	-	1492
Stage 2	-	-	-	1516
Critical Hdwy	-	-	4.1	-
Critical Hdwy Stg 1	-	-	-	5.4
Critical Hdwy Stg 2	-	-	-	5.4
Follow-up Hdwy	-	-	2.2	-
Pot Cap-1 Maneuver	-	-	452	-
Stage 1	-	-	-	208
Stage 2	-	-	-	202
Platoon blocked, %	-	-	-	-
Mov Cap-1 Maneuver	-	-	452	-
Mov Cap-2 Maneuver	-	-	-	90
Stage 1	-	-	-	208
Stage 2	-	-	-	167

Approach	EB	WB	NB
HCM Control Delay, s	0	0.8	38.5
HCM LOS			E

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	90	153	-	-	452	-
HCM Lane V/C Ratio	0.111	0.222	-	-	0.173	-
HCM Control Delay (s)	49.9	35.1	-	-	14.6	-
HCM Lane LOS	E	E	-	-	B	-
HCM 95th %tile Q(veh)	0.4	0.8	-	-	0.6	-

HCM 6th TWSC
14: Sutherland Dr. & Malabar Rd.

01/14/2021

Intersection						
Int Delay, s/veh	0.4					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↗	↖	↑	↘	↙
Traffic Vol, veh/h	1515	2	34	1435	3	21
Future Vol, veh/h	1515	2	34	1435	3	21
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	275	375	-	0	-
Veh in Median Storage, #	0	-	-	0	1	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	1	0	0	0	0	0
Mvmt Flow	1515	2	34	1435	3	21

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	1517	0	3018
Stage 1	-	-	-	-	1515
Stage 2	-	-	-	-	1503
Critical Hdwy	-	-	4.1	-	6.4
Critical Hdwy Stg 1	-	-	-	-	5.4
Critical Hdwy Stg 2	-	-	-	-	5.4
Follow-up Hdwy	-	-	2.2	-	3.5
Pot Cap-1 Maneuver	-	-	446	-	15
Stage 1	-	-	-	-	203
Stage 2	-	-	-	-	205
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	446	-	14
Mov Cap-2 Maneuver	-	-	-	-	96
Stage 1	-	-	-	-	203
Stage 2	-	-	-	-	189

Approach	EB	WB	NB
HCM Control Delay, s	0	0.3	36.2
HCM LOS			E

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	139	-	-	446	-
HCM Lane V/C Ratio	0.173	-	-	0.076	-
HCM Control Delay (s)	36.2	-	-	13.7	-
HCM Lane LOS	E	-	-	B	-
HCM 95th %tile Q(veh)	0.6	-	-	0.2	-

HCM 6th TWSC
15: Maywood Ave./Daffodil Dr. & Malabar Rd.

01/14/2021

Intersection												
Int Delay, s/veh	15.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗			↕			↕	
Traffic Vol, veh/h	8	1523	5	44	1408	81	7	1	26	55	1	54
Future Vol, veh/h	8	1523	5	44	1408	81	7	1	26	55	1	54
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	325	-	-	375	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	13	1	0	0	0	0	0	0	0	2	0	0
Mvmt Flow	8	1523	5	44	1408	81	7	1	26	55	1	54

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1489	0	0	1528	0	0	3106	3119	1526	3092	3081	1449
Stage 1	-	-	-	-	-	-	1542	1542	-	1537	1537	-
Stage 2	-	-	-	-	-	-	1564	1577	-	1555	1544	-
Critical Hdwy	4.23	-	-	4.1	-	-	7.1	6.5	6.2	7.12	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.12	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.12	5.5	-
Follow-up Hdwy	2.317	-	-	2.2	-	-	3.5	4	3.3	3.518	4	3.3
Pot Cap-1 Maneuver	420	-	-	442	-	-	7	12	146	~7	12	163
Stage 1	-	-	-	-	-	-	146	178	-	145	179	-
Stage 2	-	-	-	-	-	-	141	171	-	142	178	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	420	-	-	442	-	-	~4	11	146	~5	11	163
Mov Cap-2 Maneuver	-	-	-	-	-	-	47	78	-	~45	71	-
Stage 1	-	-	-	-	-	-	143	175	-	142	161	-
Stage 2	-	-	-	-	-	-	84	154	-	114	175	-

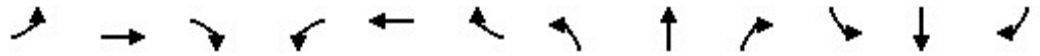
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.1			0.4			58.5			\$ 415		
HCM LOS							F			F		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	100	420	-	-	442	-	-	70
HCM Lane V/C Ratio	0.34	0.019	-	-	0.1	-	-	1.571
HCM Control Delay (s)	58.5	13.7	-	-	14	-	-	\$ 415
HCM Lane LOS	F	B	-	-	B	-	-	F
HCM 95th %tile Q(veh)	1.3	0.1	-	-	0.3	-	-	9.4

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

HCM 6th Signalized Intersection Summary
 16: Plaza Entrance & Malabar Rd.

01/14/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	1459	115	115	1329	21	169	8	61	38	13	35
Future Volume (veh/h)	30	1459	115	115	1329	21	169	8	61	38	13	35
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	1900	1885	1900	1900	1900	1826	1900	1900	1900	1856	1900	1900
Adj Flow Rate, veh/h	30	1459	95	115	1329	21	169	8	28	38	13	22
Peak Hour 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
Percent Heavy Veh, %	0	1	0	0	0	5	0	0	0	3	0	0
Cap, veh/h	283	1043	891	122	2076	890	367	72	251	265	80	136
Arrive On Green	0.02	0.55	0.55	0.08	1.00	1.00	0.09	0.19	0.19	0.03	0.13	0.13
Sat Flow, veh/h	1810	1885	1610	1810	3610	1547	1810	370	1296	1767	634	1073
Grp Volume(v), veh/h	30	1459	95	115	1329	21	169	0	36	38	0	35
Grp Sat Flow(s),veh/h/ln	1810	1885	1610	1810	1805	1547	1810	0	1667	1767	0	1707
Q Serve(g_s), s	1.2	83.0	2.5	5.5	0.0	0.0	11.9	0.0	2.7	2.8	0.0	2.7
Cycle Q Clear(g_c), s	1.2	83.0	2.5	5.5	0.0	0.0	11.9	0.0	2.7	2.8	0.0	2.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.78	1.00		0.63
Lane Grp Cap(c), veh/h	283	1043	891	122	2076	890	367	0	323	265	0	216
V/C Ratio(X)	0.11	1.40	0.11	0.95	0.64	0.02	0.46	0.00	0.11	0.14	0.00	0.16
Avail Cap(c_a), veh/h	321	1043	891	122	2076	890	380	0	323	279	0	216
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	0.39	0.39	0.39	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	17.6	33.5	5.4	67.5	0.0	0.0	48.8	0.0	49.8	55.1	0.0	58.4
Incr Delay (d2), s/veh	0.2	185.3	0.2	36.7	0.6	0.0	0.9	0.0	0.2	0.2	0.0	1.6
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(95%),veh/ln	0.9	131.4	2.9	7.7	0.3	0.0	9.4	0.0	2.1	2.3	0.0	2.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	17.7	218.8	5.7	104.2	0.6	0.0	49.7	0.0	50.0	55.4	0.0	60.0
LnGrp LOS	B	F	A	F	A	A	D	A	D	E	A	E
Approach Vol, veh/h		1584			1465			205				73
Approach Delay, s/veh		202.2			8.7			49.7				57.6
Approach LOS		F			A			D				E
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.9	93.2	10.8	36.1	13.1	90.0	20.9	26.0				
Change Period (Y+Rc), s	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0				
Max Green Setting (Gmax), s	6.0	82.0	5.0	29.0	5.0	83.0	15.0	19.0				
Max Q Clear Time (g_c+I1), s	3.2	2.0	4.8	4.7	7.5	85.0	13.9	4.7				
Green Ext Time (p_c), s	0.0	13.2	0.0	0.1	0.0	0.0	0.1	0.1				
Intersection Summary												
HCM 6th Ctrl Delay				104.4								
HCM 6th LOS				F								

HCM 6th Signalized Intersection Summary
 17: Minton Rd. & Malabar Rd.

01/14/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖↗	↖↗		↖	↖↗	↖	↖	↖	↖	↖	↖	↖
Traffic Volume (veh/h)	699	796	63	254	797	342	106	362	91	379	593	562
Future Volume (veh/h)	699	796	63	254	797	342	106	362	91	379	593	562
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	1885	1870	1870	1885	1885	1885	1900	1870	1856	1885	1885	1885
Adj Flow Rate, veh/h	699	796	58	254	797	145	106	362	4	379	593	427
Peak Hour 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
Percent Heavy Veh, %	1	2	2	1	1	1	0	2	3	1	1	1
Cap, veh/h	650	918	67	263	836	373	124	436	367	338	628	533
Arrive On Green	0.37	0.55	0.55	0.15	0.23	0.23	0.03	0.23	0.23	0.13	0.33	0.33
Sat Flow, veh/h	3483	3358	245	1795	3582	1598	1810	1870	1572	1795	1885	1598
Grp Volume(v), veh/h	699	421	433	254	797	145	106	362	4	379	593	427
Grp Sat Flow(s),veh/h/ln	1742	1777	1826	1795	1791	1598	1810	1870	1572	1795	1885	1598
Q Serve(g_s), s	28.0	30.6	30.7	21.1	32.9	8.0	5.0	27.6	0.2	20.0	45.9	20.1
Cycle Q Clear(g_c), s	28.0	30.6	30.7	21.1	32.9	8.0	5.0	27.6	0.2	20.0	45.9	20.1
Prop In Lane	1.00		0.13	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	650	486	499	263	836	373	124	436	367	338	628	533
V/C Ratio(X)	1.08	0.87	0.87	0.96	0.95	0.39	0.86	0.83	0.01	1.12	0.94	0.80
Avail Cap(c_a), veh/h	650	486	499	263	836	373	124	436	367	338	628	533
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.09	0.09	0.09	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.0	31.6	31.7	63.6	56.7	23.5	53.4	54.7	19.3	41.2	48.6	13.8
Incr Delay (d2), s/veh	37.0	2.1	2.1	45.6	21.7	3.0	41.2	16.5	0.1	86.0	24.4	12.0
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(95%),veh/ft	5.7	11.2	11.5	18.7	23.8	5.9	5.4	21.3	0.2	25.4	33.4	13.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	84.0	33.8	33.7	109.2	78.4	26.5	94.6	71.2	19.4	127.1	73.1	25.8
LnGrp LOS	F	C	C	F	E	C	F	E	B	F	E	C
Approach Vol, veh/h		1553			1196			472			1399	
Approach Delay, s/veh		56.4			78.6			76.0			73.3	
Approach LOS		E			E			E			E	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	36.0	42.0	28.0	44.0	30.0	48.0	13.0	59.0				
Change Period (Y+Rc), s	8.0	7.0	8.0	9.0	8.0	7.0	8.0	9.0				
Max Green Setting (Gmax), s	28.0	35.0	20.0	35.0	22.0	41.0	5.0	50.0				
Max Q Clear Time (g_c+Q), s	30.0	34.9	22.0	29.6	23.1	32.7	7.0	47.9				
Green Ext Time (p_c), s	0.0	0.1	0.0	1.0	0.0	3.1	0.0	1.1				
Intersection Summary												
HCM 6th Ctrl Delay											69.3	
HCM 6th LOS											E	

Intersection												
Int Delay, s/veh	144.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕	↕		↕	
Traffic Vol, veh/h	30	1085	269	180	540	20	105	0	158	18	0	12
Future Vol, veh/h	30	1085	269	180	540	20	105	0	158	18	0	12
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	150	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	30	1085	269	180	540	20	105	0	158	18	0	12

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	560	0	0	1354	0	0	2196	2200	1220	2269	2324	550
Stage 1	-	-	-	-	-	-	1280	1280	-	910	910	-
Stage 2	-	-	-	-	-	-	916	920	-	1359	1414	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1021	-	-	515	-	-	~ 33	45	222	29	38	539
Stage 1	-	-	-	-	-	-	206	239	-	332	356	-
Stage 2	-	-	-	-	-	-	329	352	-	185	206	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1021	-	-	515	-	-	~ 18	19	222	~ 5	16	539
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 18	19	-	~ 5	16	-
Stage 1	-	-	-	-	-	-	178	207	-	287	175	-
Stage 2	-	-	-	-	-	-	158	173	-	46	178	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	3.8	\$ 1069.8	\$ 2142.5
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	18	222	1021	-	-	515	-	-	8
HCM Lane V/C Ratio	5.833	0.712	0.029	-	-	0.35	-	-	3.75
HCM Control Delay (s)	\$ 2599.3	53.3	8.6	0	-	15.7	0	\$ 2142.5	
HCM Lane LOS	F	F	A	A	-	C	A	-	F
HCM 95th %tile Q(veh)	13.7	4.7	0.1	-	-	1.6	-	-	5

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

HCM 6th TWSC
19: Watoga Ave. & Malabar Rd.

01/14/2021

Intersection												
Int Delay, s/veh	19.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	↕
Traffic Vol, veh/h	48	1226	18	14	808	40	20	0	20	46	0	34
Future Vol, veh/h	48	1226	18	14	808	40	20	0	20	46	0	34
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	48	1226	18	14	808	40	20	0	20	46	0	34

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	848	0	0	1244	0	0	2204	2207	1235	2197	2196	828
Stage 1	-	-	-	-	-	-	1331	1331	-	856	856	-
Stage 2	-	-	-	-	-	-	873	876	-	1341	1340	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	798	-	-	567	-	-	32	45	217	~ 33	46	374
Stage 1	-	-	-	-	-	-	192	226	-	355	377	-
Stage 2	-	-	-	-	-	-	348	369	-	190	223	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	798	-	-	567	-	-	24	34	217	~ 25	35	374
Mov Cap-2 Maneuver	-	-	-	-	-	-	24	34	-	~ 25	35	-
Stage 1	-	-	-	-	-	-	154	182	-	285	359	-
Stage 2	-	-	-	-	-	-	301	352	-	139	179	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.4			0.2			260.9			\$ 427.3		
HCM LOS							F			F		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	43	798	-	-	567	-	-	25	374
HCM Lane V/C Ratio	0.93	0.06	-	-	0.025	-	-	1.84	0.091
HCM Control Delay (s)	260.9	9.8	0	-	11.5	0	-	\$ 731.6	15.6
HCM Lane LOS	F	A	A	-	B	A	-	F	C
HCM 95th %tile Q(veh)	3.7	0.2	-	-	0.1	-	-	5.7	0.3

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

APPENDIX R – FUTURE NO-BUILD SEGMENT OPERATIONS REPORTS

Contained in this Appendix –

- 2030 No-Build Uninterrupted Segment Analysis
- 2030 No-Build Interrupted Segment Analysis
- 2050 No-Build Uninterrupted Segment Analysis
- 2050 No-Build Interrupted Segment Analysis

2030 NO-BUILD UNINTERRUPTED SEGMENT ANALYSIS

AM Data

Roadway Segment	Direction	Volume at E Point	Volume at W Point	HCS Volume (Average)	Speed	BFFS	Shoulder Width	Lane Width	Segment Length	PHF	T Value	Access Points	Access Point Density	No Passing Distance	No Passing Zones
St. Johns Heritage Pkwy. to Krassner Dr./Bending Branch Ln.	WB	1113	919	1016	35, 45	50.6	0	11	1.28	1	4.5%	8	6.25	1.28	100.0%
	EB	506	653	580											

Phone: Fax:
E-Mail:

----- Directional Two-Lane Highway Segment Analysis -----

Analyst APG
Agency/Co. Kittelson
Date Performed 01/15/2021
Analysis Time Period AM Peak Hour
Highway Malabar Road
From/To SJHP to Krassner Dr. WB
Jurisdiction FDOT District Five
Analysis Year 2030
Description Malabar Road PD&E

----- Input Data -----

Highway class	Class 3	Peak hour factor, PHF	1.00	
Shoulder width	0.0 ft	% Trucks and buses	5	%
Lane width	11.0 ft	% Trucks crawling	0.0	%
Segment length	1.3 mi	Truck crawl speed	0.0	mi/hr
Terrain type	Level	% Recreational vehicles	5	%
Grade: Length	- mi	% No-passing zones	100	%
Up/down	- %	Access point density	6	/mi

Analysis direction volume, Vd 1016 veh/h
Opposing direction volume, Vo 580 veh/h

----- Average Travel Speed -----

Direction	Analysis (d)	Opposing (o)
PCE for trucks, ET	1.0	1.1
PCE for RVs, ER	1.0	1.0
Heavy-vehicle adj. factor, (note-5) fHV	1.000	0.995
Grade adj. factor, (note-1) fg	1.00	1.00
Directional flow rate, (note-2) vi	1016 pc/h	583 pc/h

Free-Flow Speed from Field Measurement:

Field measured speed, (note-3) S FM	-	mi/h
Observed total demand, (note-3) V	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, (note-3) BFFS	50.6	mi/h
Adj. for lane and shoulder width, (note-3) fLS	4.7	mi/h
Adj. for access point density, (note-3) fA	1.5	mi/h
Free-flow speed, FFSd	44.4	mi/h
Adjustment for no-passing zones, fnp	1.9	mi/h
Average travel speed, ATSD	30.1	mi/h
Percent Free Flow Speed, PFFS	67.8	%

----- Percent Time-Spent-Following -----

Direction	Analysis (d)	Opposing (o)	
PCE for trucks, ET	1.0	1.0	
PCE for RVs, ER	1.0	1.0	
Heavy-vehicle adjustment factor, fHV	1.000	1.000	
Grade adjustment factor, (note-1) fg	1.00	1.00	
Directional flow rate, (note-2) vi	1016 pc/h	580 pc/h	
Base percent time-spent-following, (note-4) BPTSFD	74.5 %		
Adjustment for no-passing zones, fnp	22.5		
Percent time-spent-following, PTSFD	88.8 %		

----- Level of Service and Other Performance Measures -----

Level of service, LOS	D	
Volume to capacity ratio, v/c	0.60	
Peak 15-min vehicle-miles of travel, VMT15	330	veh-mi
Peak-hour vehicle-miles of travel, VMT60	1321	veh-mi
Peak 15-min total travel time, TT15	11.0	veh-h
Capacity from ATS, CdATS	1700	veh/h
Capacity from PTSF, CdPTSF	1700	veh/h
Directional Capacity	1700	veh/h

----- Passing Lane Analysis -----

Total length of analysis segment, Lt	1.3	mi
Length of two-lane highway upstream of the passing lane, Lu	-	mi
Length of passing lane including tapers, Lpl	-	mi
Average travel speed, ATSD (from above)	30.1	mi/h
Percent time-spent-following, PTSFD (from above)	88.8	
Level of service, LOSd (from above)	D	

----- Average Travel Speed with Passing Lane -----

Downstream length of two-lane highway within effective length of passing lane for average travel speed, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for average travel speed, Ld	-	mi
Adj. factor for the effect of passing lane on average speed, fpl	-	
Average travel speed including passing lane, ATSpl	-	
Percent free flow speed including passing lane, PFFSpl	0.0	%

----- Percent Time-Spent-Following with Passing Lane -----

Downstream length of two-lane highway within effective length of passing lane for percent time-spent-following, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for percent time-spent-following, Ld	-	mi
Adj. factor for the effect of passing lane on percent time-spent-following, fpl	-	
Percent time-spent-following including passing lane, PTSFpl	-	%

----- Level of Service and Other Performance Measures with Passing Lane -----

Level of service including passing lane, LOSpl	E	
Peak 15-min total travel time, TT15	-	veh-h

----- Bicycle Level of Service -----

Posted speed limit, Sp	45
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	1016.0
Effective width of outside lane, We	11.00
Effective speed factor, St	4.42
Bicycle LOS Score, BLOS	6.49
Bicycle LOS	F

Notes:

1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific downgrade segments are treated as level terrain.
2. If v_i (v_d or v_o) $\geq 1,700$ pc/h, terminate analysis-the LOS is F.
3. For the analysis direction only and for $v > 200$ veh/h.
4. For the analysis direction only.
5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

PM Data

Roadway Segment	Direction	Volume at E Point	Volume at W Point	HCS Volume (Average)	Speed	BFFS	Shoulder Width	Lane Width	Segment Length	PHF	T Value	Access Points	Access Point Density	No Passing Distance	No Passing Zones
St. Johns Heritage Pkwy. to Krassner Dr./Bending Branch Ln.	WB	461	613	537	35, 45	50.6	0	11	1.28	1	3.5%	8	6.25	1.28	100.0%
	EB	1061	913	987											

Phone: Fax:
E-Mail:

----- Directional Two-Lane Highway Segment Analysis -----

Analyst APG
Agency/Co. Kittelson
Date Performed 01/15/2021
Analysis Time Period PM Peak Hour
Highway Malabar Road
From/To SJHP to Krassner Dr. WB
Jurisdiction FDOT District Five
Analysis Year 2030
Description Malabar Road PD&E

----- Input Data -----

Highway class	Class 3	Peak hour factor, PHF	1.00	
Shoulder width	0.0 ft	% Trucks and buses	4	%
Lane width	11.0 ft	% Trucks crawling	0.0	%
Segment length	1.3 mi	Truck crawl speed	0.0	mi/hr
Terrain type	Level	% Recreational vehicles	5	%
Grade: Length	- mi	% No-passing zones	100	%
Up/down	- %	Access point density	6	/mi

Analysis direction volume, Vd 537 veh/h
Opposing direction volume, Vo 987 veh/h

----- Average Travel Speed -----

Direction	Analysis (d)	Opposing (o)
PCE for trucks, ET	1.2	1.0
PCE for RVs, ER	1.0	1.0
Heavy-vehicle adj. factor, (note-5) fHV	0.992	1.000
Grade adj. factor, (note-1) fg	1.00	1.00
Directional flow rate, (note-2) vi	541 pc/h	987 pc/h

Free-Flow Speed from Field Measurement:

Field measured speed, (note-3) S FM	-	mi/h
Observed total demand, (note-3) V	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, (note-3) BFFS	50.6	mi/h
Adj. for lane and shoulder width, (note-3) fLS	4.7	mi/h
Adj. for access point density, (note-3) fA	1.5	mi/h
Free-flow speed, FFSd	44.4	mi/h
Adjustment for no-passing zones, fnp	1.1	mi/h
Average travel speed, ATSD	31.4	mi/h
Percent Free Flow Speed, PFFS	70.8	%

----- Percent Time-Spent-Following -----

Direction	Analysis (d)	Opposing (o)	
PCE for trucks, ET	1.0	1.0	
PCE for RVs, ER	1.0	1.0	
Heavy-vehicle adjustment factor, fHV	1.000	1.000	
Grade adjustment factor, (note-1) fg	1.00	1.00	
Directional flow rate, (note-2) vi	537 pc/h	987 pc/h	
Base percent time-spent-following, (note-4) BPTSFD	59.3	%	
Adjustment for no-passing zones, fnp	23.1		
Percent time-spent-following, PTSFD	67.4	%	

----- Level of Service and Other Performance Measures -----

Level of service, LOS	D	
Volume to capacity ratio, v/c	0.32	
Peak 15-min vehicle-miles of travel, VMT15	175	veh-mi
Peak-hour vehicle-miles of travel, VMT60	698	veh-mi
Peak 15-min total travel time, TT15	5.6	veh-h
Capacity from ATS, CdATS	1700	veh/h
Capacity from PTSF, CdPTSF	1700	veh/h
Directional Capacity	1700	veh/h

----- Passing Lane Analysis -----

Total length of analysis segment, Lt	1.3	mi
Length of two-lane highway upstream of the passing lane, Lu	-	mi
Length of passing lane including tapers, Lpl	-	mi
Average travel speed, ATSD (from above)	31.4	mi/h
Percent time-spent-following, PTSFD (from above)	67.4	
Level of service, LOSd (from above)	D	

----- Average Travel Speed with Passing Lane -----

Downstream length of two-lane highway within effective length of passing lane for average travel speed, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for average travel speed, Ld	-	mi
Adj. factor for the effect of passing lane on average speed, fpl	-	
Average travel speed including passing lane, ATSpl	-	
Percent free flow speed including passing lane, PFFSpl	0.0	%

----- Percent Time-Spent-Following with Passing Lane -----

Downstream length of two-lane highway within effective length of passing lane for percent time-spent-following, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for percent time-spent-following, Ld	-	mi
Adj. factor for the effect of passing lane on percent time-spent-following, fpl	-	
Percent time-spent-following including passing lane, PTSFpl	-	%

----- Level of Service and Other Performance Measures with Passing Lane -----

Level of service including passing lane, LOSpl	E	
Peak 15-min total travel time, TT15	-	veh-h

----- Bicycle Level of Service -----

Posted speed limit, Sp	45
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	537.0
Effective width of outside lane, We	11.00
Effective speed factor, St	4.42
Bicycle LOS Score, BLOS	5.89
Bicycle LOS	F

Notes:

1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific downgrade segments are treated as level terrain.
2. If v_i (v_d or v_o) $\geq 1,700$ pc/h, terminate analysis-the LOS is F.
3. For the analysis direction only and for $v > 200$ veh/h.
4. For the analysis direction only.
5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

2030 NO-BUILD INTERRUPTED SEGMENT ANALYSIS

 Arterial Level of Service: EB Malabar Rd.

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Krassner Dr./ Bendin	II	41	132.1	13.5	145.6	1.50	37.0	A
Jupiter Blvd.	II	45	96.2	33.4	129.6	1.20	33.4	B
Plaza Entrance	II	45	107.5	34.5	142.0	1.34	34.1	B
Minton Rd.	II	45	15.6	56.4	72.0	0.14	7.1	F
Total	II		351.4	137.8	489.2	4.19	30.8	B

 Arterial Level of Service: WB Malabar Rd.

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Minton Rd.	II	45	17.0	46.8	63.8	0.16	8.8	F
Plaza Entrance	II	45	15.6	7.9	23.5	0.14	21.9	D
Jupiter Blvd.	II	45	107.5	48.9	156.4	1.34	30.9	B
Krassner Dr./ Bendin	II	45	96.2	14.3	110.5	1.20	39.2	A
Total	II		236.3	117.9	354.2	2.85	28.9	B

Arterial Level of Service: EB Malabar Rd.

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Krassner Dr./ Bendin	II	41	132.1	12.8	144.9	1.50	37.2	A
Jupiter Blvd.	II	45	96.2	52.0	148.2	1.20	29.2	B
Plaza Entrance	II	45	107.5	39.4	146.9	1.34	32.9	B
Minton Rd.	II	45	15.6	33.2	48.8	0.14	10.5	F
Total	II		351.4	137.4	488.8	4.19	30.8	B

Arterial Level of Service: WB Malabar Rd.

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Minton Rd.	II	45	17.0	56.0	73.0	0.16	7.7	F
Plaza Entrance	II	45	15.6	7.0	22.6	0.14	22.8	C
Jupiter Blvd.	II	45	107.5	40.6	148.1	1.34	32.7	B
Krassner Dr./ Bendin	II	45	96.2	10.7	106.9	1.20	40.5	A
Total	II		236.3	114.3	350.6	2.85	29.2	B

Malabar 2030 No Build Signalized Segment Analysis

Eastbound AM												
Link	Base Free Flow Speed Calculation					Travel Speed as Percent of BFFS			Using Synchro Travel Speed			
	S_0	S_{sub}	f_{cs}	f_a	f_{sk}	S_{10}	Link	S_{10}	Synchro Speed	P_{FFS}	LOS	
St. Johns Heritage Pkwy. - Krassner Dr./Bending Branch Ln.	46.8	0.0	0.0	0.0	-0.4	0.0	46.4	St. Johns Heritage Pkwy. - Krassner Dr./Bending Branch Ln.	46.4	37.0	79.2%	B
Krassner Dr./Bending Branch Ln. - Jupiter Blvd.	46.8	0.0	0.0	0.0	-0.7	0.0	46.1	Krassner Dr./Bending Branch Ln. - Jupiter Blvd.	46.1	33.4	72.4%	B
Jupiter Blvd. - Plaza Entrance	46.2	0.0	0.0	0.0	-1.2	0.0	45.0	Jupiter Blvd. - Plaza Entrance	45.0	34.1	75.7%	B
Plaza Entrance - Minton Rd.	42.1	0.0	0.0	-2.7	-2.6	0.0	36.8	Plaza Entrance - Minton Rd.	36.8	7.1	19.3%	F
Facility Segment LOS												
61.8% C												
Extra Calculations												
Posted Speed	Length	Travel Direction	Access Points	Opposing Direction	Access Points	Center Median Length	P w/ CM	Curb Length	P w/ Curb	On Street Parking	P w/ OSP	
45	1.28		2		5	0.00	0.00	0.00	0.00	0.00	0.00	
45	1.20		7		3	0.00	0.00	0.03	0.03	0.00	0.00	
35/45	1.35		13		7	0.00	0.00	0.00	0.00	0.00	0.00	
35	0.14		2		2	0.14	1.00	0.14	1.00	0.00	0.00	
Westbound AM												
Link	Base Free Flow Speed Calculation					Travel Speed as Percent of BFFS			Using Synchro Travel Speed			
	S_0	S_{sub}	f_{cs}	f_a	f_{sk}	S_{10}	Link	S_{10}	Synchro Speed	P_{FFS}	LOS	
Krassner Dr./Bending Branch Ln. - Jupiter Blvd.	46.8	0.0	0.0	0.0	-0.7	0.0	46.1	Krassner Dr./Bending Branch Ln. - Jupiter Blvd.	46.1	30.9	67.0%	C
Jupiter Blvd. - Plaza Entrance	46.2	0.0	0.0	0.0	-1.2	0.0	45.0	Jupiter Blvd. - Plaza Entrance	45.0	21.9	48.7%	D
Plaza Entrance - Minton Rd.	42.1	0.0	0.0	-2.7	-1.3	0.0	38.1	Plaza Entrance - Minton Rd.	38.1	6.8	23.1%	F
Facility Segment LOS												
46.3% D												
Extra Calculations												
Posted Speed	Length	Travel Direction	Access Points	Opposing Direction	Access Points	Center Median Length	P w/ CM	Curb	P w/ Curb	On Street Parking	P w/ OSP	
45	1.28		2		5	0.00	0.00	0.03	0.03	0.00	0.00	
45	1.20		7		3	0.00	0.00	0.12	0.09	0.00	0.00	
35/45	1.35		13		7	0.00	0.00	0.00	0.00	0.00	0.00	
35	0.14		2		2	0.14	1.00	0.14	1.00	0.00	0.00	
Eastbound PM												
Link	Base Free Flow Speed Calculation					Travel Speed as Percent of BFFS			Using Synchro Travel Speed			
	S_0	S_{sub}	f_{cs}	f_a	f_{sk}	S_{10}	Link	S_{10}	Synchro Speed	P_{FFS}	LOS	
St. Johns Heritage Pkwy. - Krassner Dr./Bending Branch Ln.	46.8	0.0	0.0	0.0	-0.4	0.0	46.4	St. Johns Heritage Pkwy. - Krassner Dr./Bending Branch Ln.	46.4	37.2	80.2%	A
Krassner Dr./Bending Branch Ln. - Jupiter Blvd.	46.8	0.0	0.0	0.0	-0.7	0.0	46.1	Krassner Dr./Bending Branch Ln. - Jupiter Blvd.	46.1	29.2	63.3%	C
Jupiter Blvd. - Plaza Entrance	46.2	0.0	0.0	0.0	-1.2	0.0	45.0	Jupiter Blvd. - Plaza Entrance	45.0	32.9	73.1%	B
Plaza Entrance - Minton Rd.	42.1	0.0	0.0	-2.7	-2.6	0.0	36.8	Plaza Entrance - Minton Rd.	36.8	10.5	28.5%	F
Facility Segment LOS												
61.3% C												
Extra Calculations												
Posted Speed	Length	Travel Direction	Access Points	Opposing Direction	Access Points	Center Median Length	P w/ CM	Curb	P w/ Curb	On Street Parking	P w/ OSP	
45	1.28		2		5	0.00	0.00	0.00	0.00	0.00	0.00	
45	1.20		7		3	0.00	0.00	0.03	0.03	0.00	0.00	
35/45	1.35		13		7	0.00	0.00	0.00	0.00	0.00	0.00	
35	0.14		2		2	0.14	1.00	0.14	1.00	0.00	0.00	
Westbound PM												
Link	Base Free Flow Speed Calculation					Travel Speed as Percent of BFFS			Using Synchro Travel Speed			
	S_0	S_{sub}	f_{cs}	f_a	f_{sk}	S_{10}	Link	S_{10}	Synchro Speed	P_{FFS}	LOS	
Krassner Dr./Bending Branch Ln. - Jupiter Blvd.	46.8	0.0	0.0	0.0	-0.7	0.0	46.1	Krassner Dr./Bending Branch Ln. - Jupiter Blvd.	46.1	32.7	70.9%	B
Jupiter Blvd. - Plaza Entrance	46.2	0.0	0.0	0.0	-1.2	0.0	45.2	Jupiter Blvd. - Plaza Entrance	45.2	22.8	50.5%	C
Plaza Entrance - Minton Rd.	42.1	0.0	0.0	-2.7	-1.3	0.0	38.1	Plaza Entrance - Minton Rd.	38.1	7.7	20.2%	F
Facility Segment LOS												
47.2% D												
Extra Calculations												
Posted Speed	Length	Travel Direction	Access Points	Opposing Direction	Access Points	Center Median Length	P w/ CM	Curb	P w/ Curb	On Street Parking	P w/ OSP	
45	1.20		5		7	0.00	0.00	0.03	0.03	0.00	0.00	
35/45	1.35		7		13	0.12	0.09	0.00	0.00	0.00	0.00	
35	0.14		2		2	0.14	1.00	0.14	1.00	0.00	0.00	

2050 NO-BUILD UNINTERRUPTED SEGMENT ANALYSIS

AM Data

Roadway Segment	Direction	Volume at E Point	Volume at W Point	HCS Volume (Average)	Speed	BFFS	Shoulder Width	Lane Width	Segment Length	PHF	T Value	Access Points	Access Point Density	No Passing Distance	No Passing Zones
St. Johns Heritage Pkwy. to Krassner Dr./Bending Branch Ln.	WB	1459	1265	1362	35, 45	50.6	0	11	1.28	1	4.5%	8	6.25	1.28	100.0%
	EB	911	1058	985											

Phone: Fax:
E-Mail:

----- Directional Two-Lane Highway Segment Analysis -----

Analyst APG
Agency/Co. Kittelson
Date Performed 01/15/2021
Analysis Time Period AM Peak Hour
Highway Malabar Road
From/To SJHP to Krassner Dr. WB
Jurisdiction FDOT District Five
Analysis Year 2050
Description Malabar Road PD&E

----- Input Data -----

Highway class	Class 3		Peak hour factor, PHF	1.00	
Shoulder width	0.0	ft	% Trucks and buses	5	%
Lane width	11.0	ft	% Trucks crawling	0.0	%
Segment length	1.3	mi	Truck crawl speed	0.0	mi/hr
Terrain type	Level		% Recreational vehicles	5	%
Grade: Length	-	mi	% No-passing zones	100	%
Up/down	-	%	Access point density	6	/mi

Analysis direction volume, Vd 1362 veh/h
Opposing direction volume, Vo 985 veh/h

----- Average Travel Speed -----

Direction	Analysis (d)	Opposing (o)
PCE for trucks, ET	1.0	1.0
PCE for RVs, ER	1.0	1.0
Heavy-vehicle adj. factor, (note-5) fHV	1.000	1.000
Grade adj. factor, (note-1) fg	1.00	1.00
Directional flow rate, (note-2) vi	1362 pc/h	985 pc/h

Free-Flow Speed from Field Measurement:

Field measured speed, (note-3) S FM - mi/h
Observed total demand, (note-3) V - veh/h

Estimated Free-Flow Speed:

Base free-flow speed, (note-3) BFfs 50.6 mi/h
Adj. for lane and shoulder width, (note-3) fLS 4.7 mi/h
Adj. for access point density, (note-3) fA 1.5 mi/h

Free-flow speed, FFsd 44.4 mi/h

Adjustment for no-passing zones, fnp 1.1 mi/h
Average travel speed, ATsd 25.1 mi/h
Percent Free Flow Speed, PFFS 56.5 %

----- Percent Time-Spent-Following -----

Direction	Analysis (d)	Opposing (o)	
PCE for trucks, ET	1.0	1.0	
PCE for RVs, ER	1.0	1.0	
Heavy-vehicle adjustment factor, fHV	1.000	1.000	
Grade adjustment factor, (note-1) fg	1.00	1.00	
Directional flow rate, (note-2) vi	1362 pc/h	985	pc/h
Base percent time-spent-following, (note-4) BPTSFD	85.7	%	
Adjustment for no-passing zones, fnp	13.3		
Percent time-spent-following, PTSFD	93.4	%	

----- Level of Service and Other Performance Measures -----

Level of service, LOS	E	
Volume to capacity ratio, v/c	0.80	
Peak 15-min vehicle-miles of travel, VMT15	443	veh-mi
Peak-hour vehicle-miles of travel, VMT60	1771	veh-mi
Peak 15-min total travel time, TT15	17.7	veh-h
Capacity from ATS, CdATS	1700	veh/h
Capacity from PTSF, CdPTSF	1700	veh/h
Directional Capacity	1700	veh/h

----- Passing Lane Analysis -----

Total length of analysis segment, Lt	1.3	mi
Length of two-lane highway upstream of the passing lane, Lu	-	mi
Length of passing lane including tapers, Lpl	-	mi
Average travel speed, ATSD (from above)	25.1	mi/h
Percent time-spent-following, PTSFD (from above)	93.4	
Level of service, LOSd (from above)	E	

----- Average Travel Speed with Passing Lane -----

Downstream length of two-lane highway within effective length of passing lane for average travel speed, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for average travel speed, Ld	-	mi
Adj. factor for the effect of passing lane on average speed, fpl	-	
Average travel speed including passing lane, ATSpl	-	
Percent free flow speed including passing lane, PFFSpl	0.0	%

----- Percent Time-Spent-Following with Passing Lane -----

Downstream length of two-lane highway within effective length of passing lane for percent time-spent-following, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for percent time-spent-following, Ld	-	mi
Adj. factor for the effect of passing lane on percent time-spent-following, fpl	-	
Percent time-spent-following including passing lane, PTSFpl	-	%

----- Level of Service and Other Performance Measures with Passing Lane -----

Level of service including passing lane, LOSpl	E	
Peak 15-min total travel time, TT15	-	veh-h

----- Bicycle Level of Service -----

Posted speed limit, Sp	45
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	1362.0
Effective width of outside lane, We	11.00
Effective speed factor, St	4.42
Bicycle LOS Score, BLOS	6.64
Bicycle LOS	F

Notes:

1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific downgrade segments are treated as level terrain.
2. If v_i (v_d or v_o) $\geq 1,700$ pc/h, terminate analysis-the LOS is F.
3. For the analysis direction only and for $v > 200$ veh/h.
4. For the analysis direction only.
5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

PM Data

Roadway Segment	Direction	Volume at E Point	Volume at W Point	HCS Volume (Average)	Speed	BFFS	Shoulder Width	Lane Width	Segment Length	PHF	T Value	Access Points	Access Point Density	No Passing Distance	No Passing Zones
St. Johns Heritage Pkwy. to Krassner Dr./Bending Branch Ln.	WB	588	740	664	35, 45	50.6	0	11	1.28	1	3.5%	8	6.25	1.28	100.0%
	EB	1409	1261	1335											

Phone: Fax:
E-Mail:

----- Directional Two-Lane Highway Segment Analysis -----

Analyst APG
Agency/Co. Kittelson
Date Performed 01/15/2021
Analysis Time Period PM Peak Hour
Highway Malabar Road
From/To SJHP to Krassner Dr. WB
Jurisdiction FDOT District Five
Analysis Year 2050
Description Malabar Road PD&E

----- Input Data -----

Highway class	Class 3		Peak hour factor, PHF	1.00	
Shoulder width	0.0	ft	% Trucks and buses	4	%
Lane width	11.0	ft	% Trucks crawling	0.0	%
Segment length	1.3	mi	Truck crawl speed	0.0	mi/hr
Terrain type	Level		% Recreational vehicles	5	%
Grade: Length	-	mi	% No-passing zones	100	%
Up/down	-	%	Access point density	6	/mi

Analysis direction volume, Vd 664 veh/h
Opposing direction volume, Vo 1335 veh/h

----- Average Travel Speed -----

Direction	Analysis (d)	Opposing (o)
PCE for trucks, ET	1.1	1.0
PCE for RVs, ER	1.0	1.0
Heavy-vehicle adj. factor, (note-5) fHV	0.996	1.000
Grade adj. factor, (note-1) fg	1.00	1.00
Directional flow rate, (note-2) vi	667 pc/h	1335 pc/h

Free-Flow Speed from Field Measurement:

Field measured speed, (note-3) S FM - mi/h
Observed total demand, (note-3) V - veh/h

Estimated Free-Flow Speed:

Base free-flow speed, (note-3) BFfs 50.6 mi/h
Adj. for lane and shoulder width, (note-3) fLS 4.7 mi/h
Adj. for access point density, (note-3) fA 1.5 mi/h

Free-flow speed, FFsd 44.4 mi/h

Adjustment for no-passing zones, fnp 0.8 mi/h
Average travel speed, ATsd 28.1 mi/h
Percent Free Flow Speed, PFFS 63.2 %

----- Percent Time-Spent-Following -----

Direction	Analysis (d)	Opposing (o)	
PCE for trucks, ET	1.0	1.0	
PCE for RVs, ER	1.0	1.0	
Heavy-vehicle adjustment factor, fHV	1.000	1.000	
Grade adjustment factor, (note-1) fg	1.00	1.00	
Directional flow rate, (note-2) vi	664 pc/h	1335 pc/h	
Base percent time-spent-following, (note-4) BPTSFD	69.6	%	
Adjustment for no-passing zones, fnp	15.4		
Percent time-spent-following, PTSFD	74.7	%	

----- Level of Service and Other Performance Measures -----

Level of service, LOS	E	
Volume to capacity ratio, v/c	0.39	
Peak 15-min vehicle-miles of travel, VMT15	216	veh-mi
Peak-hour vehicle-miles of travel, VMT60	863	veh-mi
Peak 15-min total travel time, TT15	7.7	veh-h
Capacity from ATS, CdATS	1700	veh/h
Capacity from PTSF, CdPTSF	1700	veh/h
Directional Capacity	1700	veh/h

----- Passing Lane Analysis -----

Total length of analysis segment, Lt	1.3	mi
Length of two-lane highway upstream of the passing lane, Lu	-	mi
Length of passing lane including tapers, Lpl	-	mi
Average travel speed, ATSD (from above)	28.1	mi/h
Percent time-spent-following, PTSFD (from above)	74.7	
Level of service, LOSd (from above)	E	

----- Average Travel Speed with Passing Lane -----

Downstream length of two-lane highway within effective length of passing lane for average travel speed, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for average travel speed, Ld	-	mi
Adj. factor for the effect of passing lane on average speed, fpl	-	
Average travel speed including passing lane, ATSpl	-	
Percent free flow speed including passing lane, PFFSpl	0.0	%

----- Percent Time-Spent-Following with Passing Lane -----

Downstream length of two-lane highway within effective length of passing lane for percent time-spent-following, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for percent time-spent-following, Ld	-	mi
Adj. factor for the effect of passing lane on percent time-spent-following, fpl	-	
Percent time-spent-following including passing lane, PTSFpl	-	%

----- Level of Service and Other Performance Measures with Passing Lane -----

Level of service including passing lane, LOSpl	E	
Peak 15-min total travel time, TT15	-	veh-h

----- Bicycle Level of Service -----

Posted speed limit, Sp	45
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	664.0
Effective width of outside lane, We	11.00
Effective speed factor, St	4.42
Bicycle LOS Score, BLOS	6.00
Bicycle LOS	F

Notes:

1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific downgrade segments are treated as level terrain.
2. If v_i (v_d or v_o) $\geq 1,700$ pc/h, terminate analysis-the LOS is F.
3. For the analysis direction only and for $v > 200$ veh/h.
4. For the analysis direction only.
5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

2050 NO-BUILD INTERRUPTED SEGMENT ANALYSIS

 Arterial Level of Service: EB Malabar Rd.

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Krassner Dr./ Bendin	II	41	132.1	23.2	155.3	1.50	34.7	B
Jupiter Blvd.	II	45	96.2	101.9	198.1	1.20	21.9	D
Plaza Entrance	II	45	107.5	220.3	327.8	1.34	14.8	E
Minton Rd.	II	45	15.6	27.9	43.5	0.14	11.8	F
Total	II		351.4	373.3	724.7	4.19	20.8	D

 Arterial Level of Service: WB Malabar Rd.

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Minton Rd.	II	45	17.0	58.3	75.3	0.16	7.5	F
Plaza Entrance	II	45	15.6	6.9	22.5	0.14	22.9	C
Jupiter Blvd.	II	45	107.5	174.4	281.9	1.34	17.2	D
Krassner Dr./ Bendin	II	45	96.2	27.6	123.8	1.20	35.0	B
Total	II		236.3	267.2	503.5	2.85	20.4	D

Arterial Level of Service: EB Malabar Rd.

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Krassner Dr./ Bendin	II	41	132.1	25.6	157.7	1.50	34.2	B
Jupiter Blvd.	II	45	96.2	235.4	331.6	1.20	13.1	E
Plaza Entrance	II	45	107.5	215.9	323.4	1.34	15.0	E
Minton Rd.	II	45	15.6	47.5	63.1	0.14	8.2	F
Total	II		351.4	524.4	875.8	4.19	17.2	D

Arterial Level of Service: WB Malabar Rd.

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Minton Rd.	II	45	17.0	78.7	95.7	0.16	5.9	F
Plaza Entrance	II	45	15.6	12.9	28.5	0.14	18.1	D
Jupiter Blvd.	II	45	107.5	87.8	195.3	1.34	24.8	C
Krassner Dr./ Bendin	II	45	96.2	13.7	109.9	1.20	39.4	A
Total	II		236.3	193.1	429.4	2.85	23.9	C

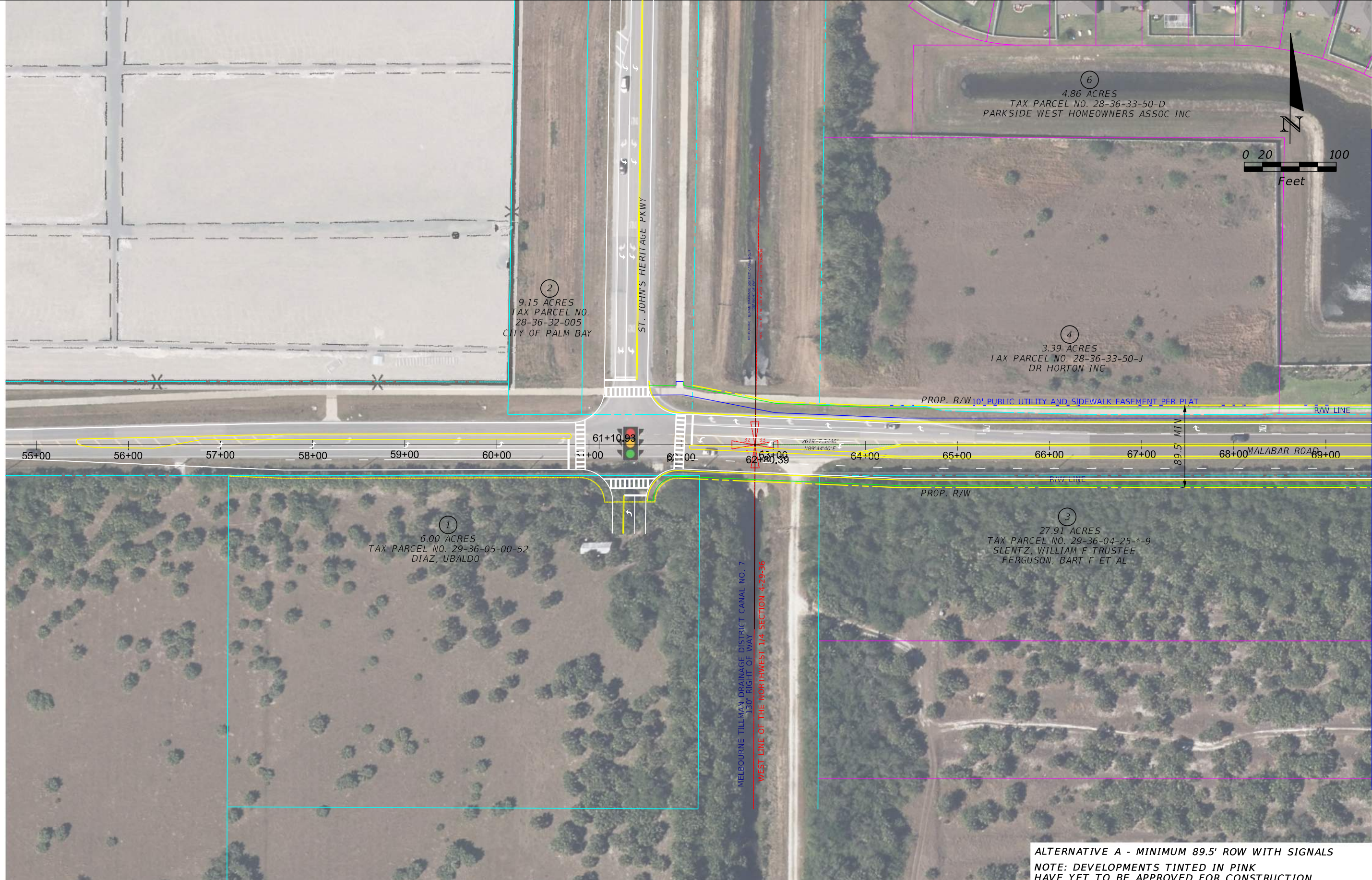
Malabar 2050 No Build Signalized Segment Analysis

Eastbound AM												
Base Free Flow Speed Calculation						Travel Speed as Percent of BFFS						
$S_{10} = S_0 + S_{call} + f_{cs} + f_a + f_{pk}$						Using Synchro Travel Speed						
Link	S_0	S_{call}	f_{cs}	f_a	f_{pk}	S_{10}	Link	S_{10}	Synchro Speed	P_{FFS}	LOS	
St. Johns Heritage Pkwy. - Krassner Dr./Bending Branch Ln.	46.8	0.0	0.0	0.0	-0.4	0.0	46.4	St. Johns Heritage Pkwy. - Krassner Dr./Bending Branch Ln.	46.4	34.7	74.2%	B
Krassner Dr./Bending Branch Ln. - Jupiter Blvd.	46.8	0.0	0.0	0.0	-0.7	0.0	46.1	Krassner Dr./Bending Branch Ln. - Jupiter Blvd.	46.1	21.9	47.5%	D
Jupiter Blvd. - Plaza Entrance	46.2	0.0	0.0	0.0	-1.2	0.0	45.0	Jupiter Blvd. - Plaza Entrance	45.0	14.8	32.1%	E
Plaza Entrance - Minton Rd.	42.1	0.0	-2.7	-2.7	-2.6	0.0	36.8	Plaza Entrance - Minton Rd.	36.8	11.8	32.1%	E
Facility Segment LOS												
46.8% D												
Extra Calculations												
Link	Posted Speed	Length	Travel Direction	Access Points	Opposing Direction	Access Points	Center Median Length	P w/ CM	Curb Length	P w/ Curb	On Street Parking	P w/ OSP
St. Johns Heritage Pkwy. - Krassner Dr./Bending Branch Ln.	45	1.28		2		5	0.00	0.00	0.00	0.00	0.00	0.00
Krassner Dr./Bending Branch Ln. - Jupiter Blvd.	45	1.20		7		3	0.00	0.00	0.03	0.03	0.00	0.00
Jupiter Blvd. - Plaza Entrance	35/45	1.35		13		7	0.00	0.00	0.00	0.00	0.00	0.00
Plaza Entrance - Minton Rd.	35	0.14		2		2	0.14	1.00	0.14	1.00	0.00	0.00
Westbound AM												
Base Free Flow Speed Calculation						Travel Speed as Percent of BFFS						
$S_{10} = S_0 + S_{call} + f_{cs} + f_a + f_{pk}$						Using Synchro Travel Speed						
Link	S_0	S_{call}	f_{cs}	f_a	f_{pk}	S_{10}	Link	S_{10}	Synchro Speed	P_{FFS}	LOS	
Krassner Dr./Bending Branch Ln. - Jupiter Blvd.	46.8	0.0	0.0	0.0	-0.7	0.0	46.1	Krassner Dr./Bending Branch Ln. - Jupiter Blvd.	46.1	17.2	37.3%	E
Jupiter Blvd. - Plaza Entrance	46.2	0.0	0.0	0.0	-1.2	0.0	45.0	Jupiter Blvd. - Plaza Entrance	45.0	22.9	50.9%	C
Plaza Entrance - Minton Rd.	42.1	0.0	-2.7	-2.7	-1.3	0.0	38.1	Plaza Entrance - Minton Rd.	38.1	7.5	19.7%	F
Facility Segment LOS												
36.0% E												
Extra Calculations												
Link	Posted Speed	Length	Travel Direction	Access Points	Opposing Direction	Access Points	Center Median Length	P w/ CM	Curb	P w/ Curb	On Street Parking	P w/ OSP
Krassner Dr./Bending Branch Ln. - Jupiter Blvd.	45	1.28		2		5	0.00	0.00	0.03	0.03	0.00	0.00
Jupiter Blvd. - Plaza Entrance	35/45	1.35		13		7	0.00	0.00	0.12	0.09	0.00	0.00
Plaza Entrance - Minton Rd.	35	0.14		2		2	0.14	1.00	0.14	1.00	0.00	0.00
Eastbound PM												
Base Free Flow Speed Calculation						Travel Speed as Percent of BFFS						
$S_{10} = S_0 + S_{call} + f_{cs} + f_a + f_{pk}$						Using Synchro Travel Speed						
Link	S_0	S_{call}	f_{cs}	f_a	f_{pk}	S_{10}	Link	S_{10}	Synchro Speed	P_{FFS}	LOS	
St. Johns Heritage Pkwy. - Krassner Dr./Bending Branch Ln.	46.8	0.0	0.0	0.0	-0.4	0.0	46.4	St. Johns Heritage Pkwy. - Krassner Dr./Bending Branch Ln.	46.4	34.2	73.8%	B
Krassner Dr./Bending Branch Ln. - Jupiter Blvd.	46.8	0.0	0.0	0.0	-0.7	0.0	46.1	Krassner Dr./Bending Branch Ln. - Jupiter Blvd.	46.1	13.1	28.4%	F
Jupiter Blvd. - Plaza Entrance	46.2	0.0	0.0	0.0	-1.2	0.0	45.0	Jupiter Blvd. - Plaza Entrance	45.0	15.0	33.3%	E
Plaza Entrance - Minton Rd.	42.1	0.0	-2.7	-2.7	-2.6	0.0	36.8	Plaza Entrance - Minton Rd.	36.8	8.2	22.3%	F
Facility Segment LOS												
39.4% E												
Extra Calculations												
Link	Posted Speed	Length	Travel Direction	Access Points	Opposing Direction	Access Points	Center Median Length	P w/ CM	Curb	P w/ Curb	On Street Parking	P w/ OSP
St. Johns Heritage Pkwy. - Krassner Dr./Bending Branch Ln.	45	1.28		2		5	0.00	0.00	0.00	0.00	0.00	0.00
Krassner Dr./Bending Branch Ln. - Jupiter Blvd.	45	1.20		7		3	0.00	0.00	0.03	0.03	0.00	0.00
Jupiter Blvd. - Plaza Entrance	35/45	1.35		13		7	0.00	0.00	0.00	0.00	0.00	0.00
Plaza Entrance - Minton Rd.	35	0.14		2		2	0.14	1.00	0.14	1.00	0.00	0.00
Westbound PM												
Base Free Flow Speed Calculation						Travel Speed as Percent of BFFS						
$S_{10} = S_0 + S_{call} + f_{cs} + f_a + f_{pk}$						Using Synchro Travel Speed						
Link	S_0	S_{call}	f_{cs}	f_a	f_{pk}	S_{10}	Link	S_{10}	Synchro Speed	P_{FFS}	LOS	
Krassner Dr./Bending Branch Ln. - Jupiter Blvd.	46.8	0.0	0.0	0.0	-0.7	0.0	46.1	Krassner Dr./Bending Branch Ln. - Jupiter Blvd.	46.1	24.8	53.8%	C
Jupiter Blvd. - Plaza Entrance	46.2	0.0	0.0	0.0	-1.2	0.0	45.2	Jupiter Blvd. - Plaza Entrance	45.2	18.1	40.3%	D
Plaza Entrance - Minton Rd.	42.1	0.0	-2.7	-2.7	-1.3	0.0	38.1	Plaza Entrance - Minton Rd.	38.1	5.9	15.5%	F
Facility Segment LOS												
36.4% E												
Extra Calculations												
Link	Posted Speed	Length	Travel Direction	Access Points	Opposing Direction	Access Points	Center Median Length	P w/ CM	Curb	P w/ Curb	On Street Parking	P w/ OSP
Krassner Dr./Bending Branch Ln. - Jupiter Blvd.	45	1.20		5		7	0.00	0.00	0.03	0.03	0.00	0.00
Jupiter Blvd. - Plaza Entrance	35/45	1.35		13		7	0.12	0.09	0.00	0.00	0.00	0.00
Plaza Entrance - Minton Rd.	35	0.14		2		2	0.14	1.00	0.14	1.00	0.00	0.00

APPENDIX S – BUILD ALTERNATIVE

Contained in this Appendix –

- Build Alternative



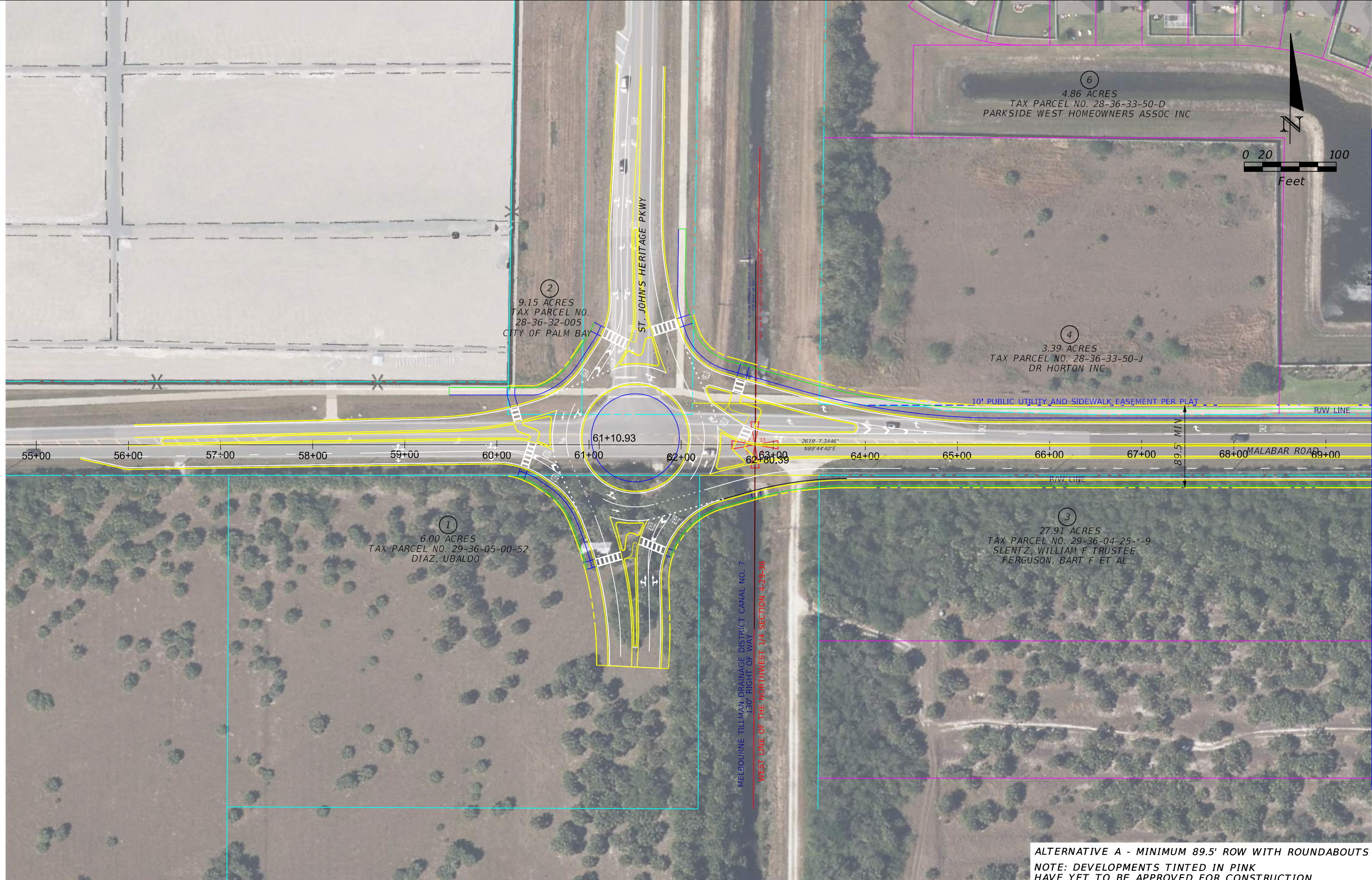
ALTERNATIVE A - MINIMUM 89.5' ROW WITH SIGNALS
 NOTE: DEVELOPMENTS TINTED IN PINK
 HAVE YET TO BE APPROVED FOR CONSTRUCTION.

LEGEND	
	EXISTING PARCEL LINE
	SUBDIVISION PARCEL LINES
	EXISTING RIGHT OF WAY
	BUS STOP LOCATIONS
	PROPOSED RIGHT OF WAY
	CITY ACQUIRED PARCELS

CITY OF PALM BAY		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
	BREVARD	

MALABAR ROAD PD&E STUDY
PLANSHEET

SHEET NO.
S-2
1

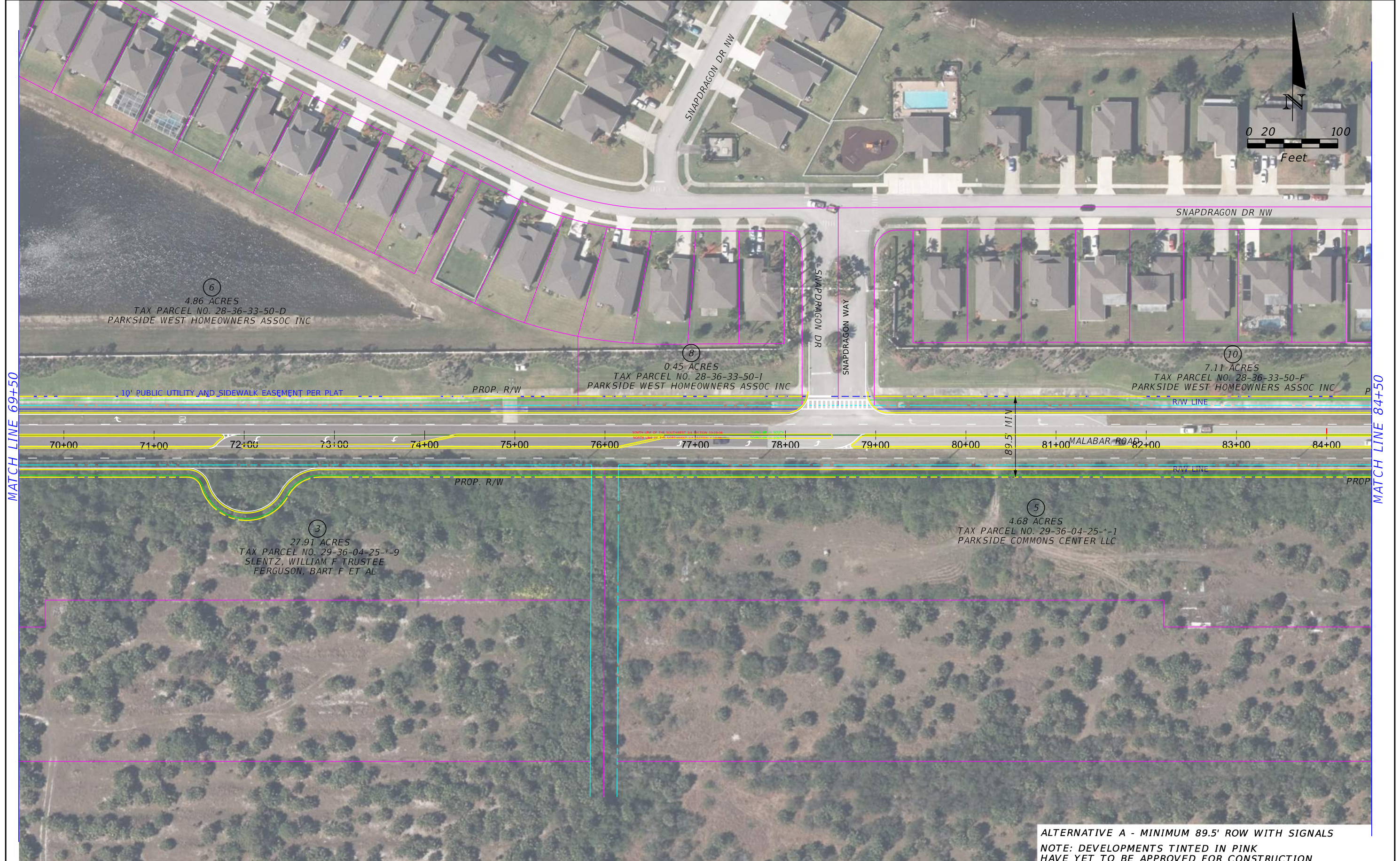
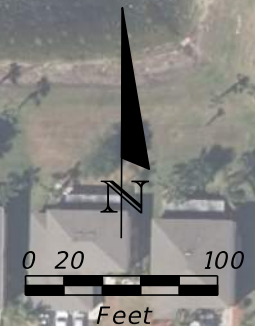


LEGEND	
	EXISTING PARCEL LINE
	SUBDIVISION PARCEL LINES
	EXISTING RIGHT OF WAY
	BUS STOP LOCATIONS
	PROPOSED RIGHT OF WAY
	CITY ACQUIRED PARCELS

CITY OF PALM BAY		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
	BREVARD	

MALABAR ROAD PD&E STUDY
PLANSHEET

SHEET NO.
S-3 1A



⑥
4.86 ACRES
TAX PARCEL NO. 28-36-33-50-D
PARKSIDE WEST HOMEOWNERS ASSOC INC

⑧
0.45 ACRES
TAX PARCEL NO. 28-36-33-50-I
PARKSIDE WEST HOMEOWNERS ASSOC INC

⑩
7.11 ACRES
TAX PARCEL NO. 28-36-33-50-F
PARKSIDE WEST HOMEOWNERS ASSOC INC

③
27.91 ACRES
TAX PARCEL NO. 29-36-04-25-*9
SLENTZ, WILLIAM F TRUSTEE
FERGUSON, BART F ET AL

⑤
4.68 ACRES
TAX PARCEL NO. 29-36-04-25-*1
PARKSIDE COMMONS CENTER LLC

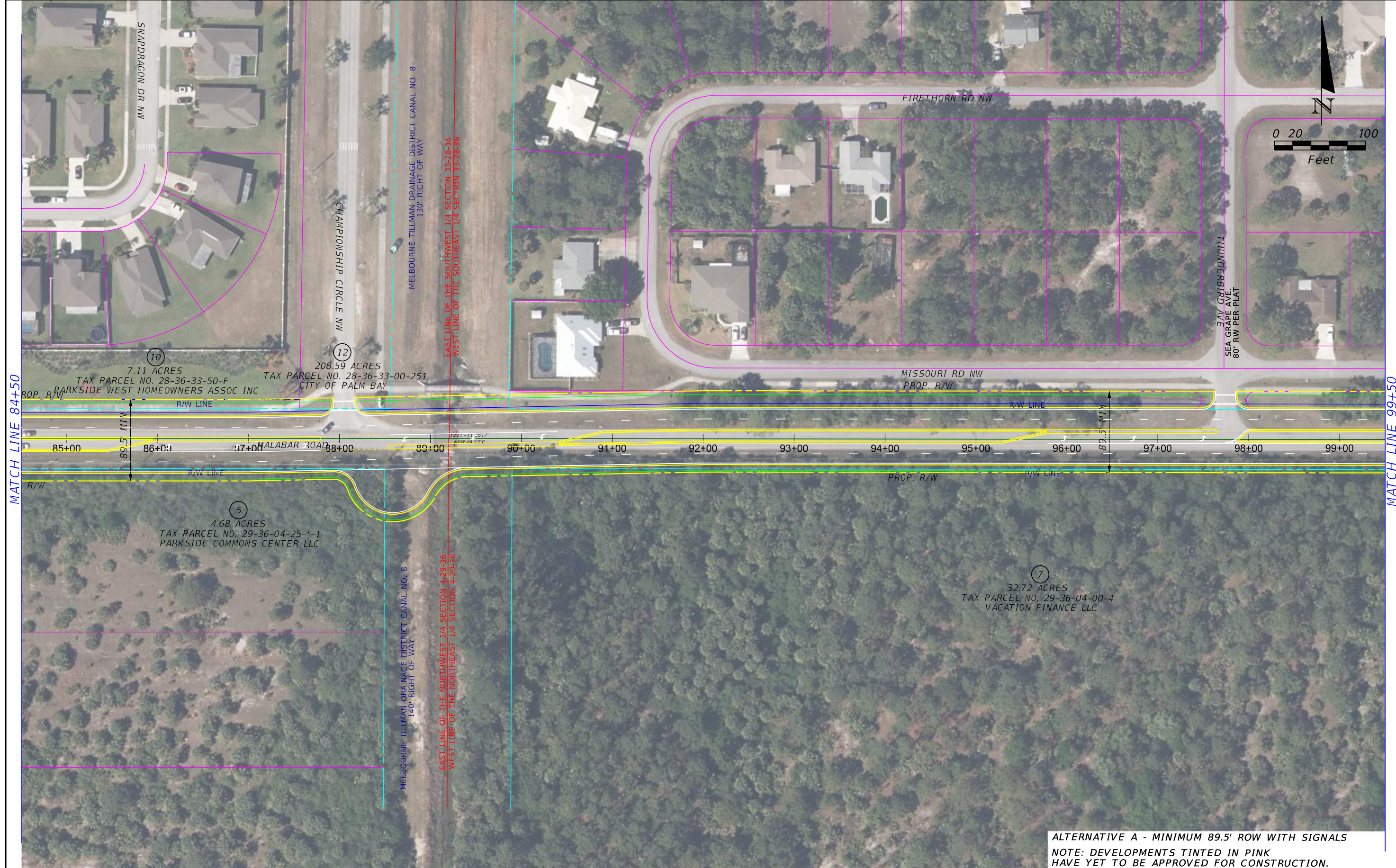
ALTERNATIVE A - MINIMUM 89.5' ROW WITH SIGNALS
NOTE: DEVELOPMENTS TINTED IN PINK
HAVE YET TO BE APPROVED FOR CONSTRUCTION.

LEGEND	
	EXISTING PARCEL LINE
	SUBDIVISION PARCEL LINES
	EXISTING RIGHT OF WAY
	BUS STOP LOCATIONS
	PROPOSED RIGHT OF WAY
	CITY ACQUIRED PARCELS

CITY OF PALM BAY		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
	BREVARD	

MALABAR ROAD PD&E STUDY
PLANSHEET

SHEET NO.
S-4
2



MATCH LINE 84+50

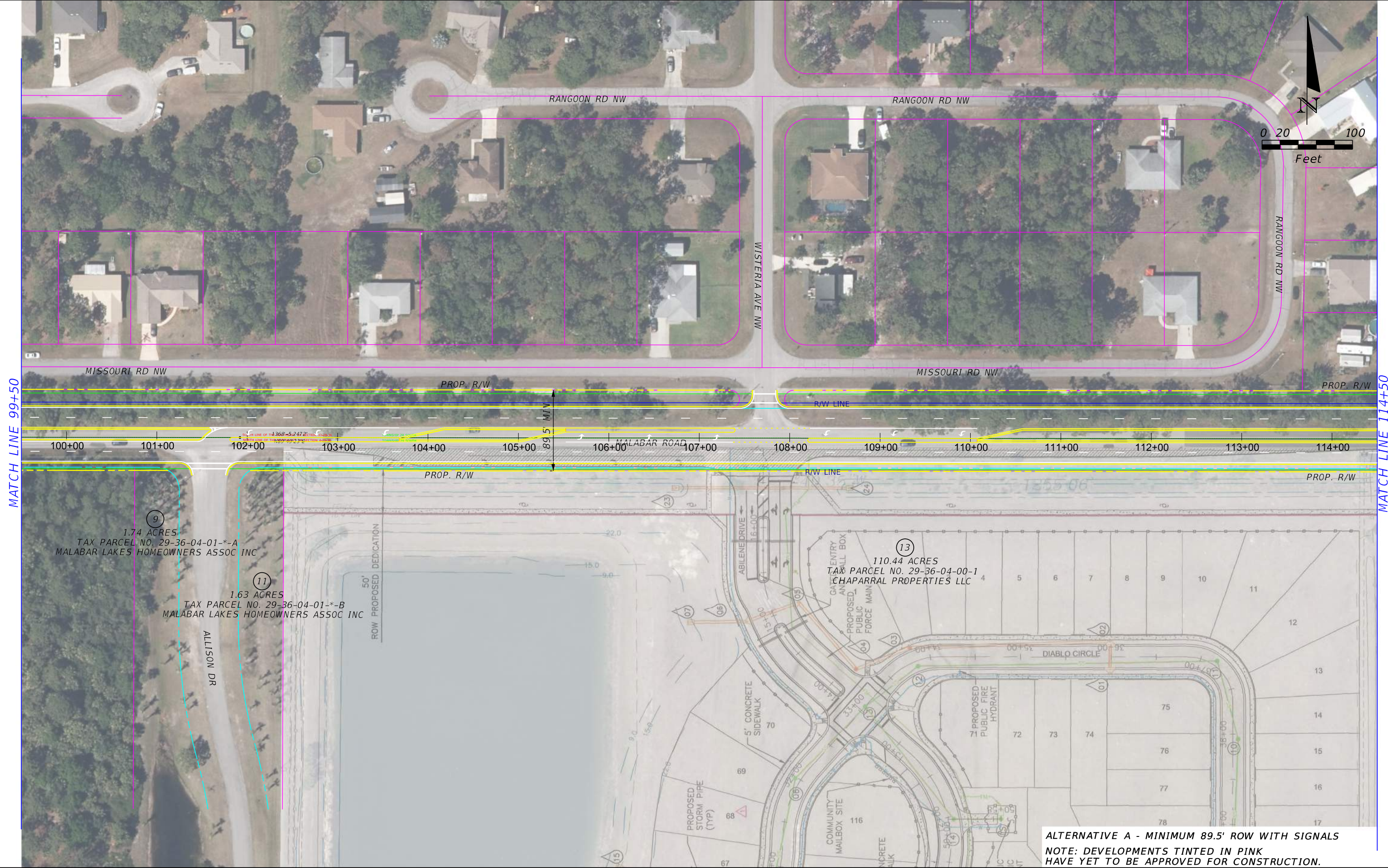
MATCH LINE 99+50

ALTERNATIVE A - MINIMUM 89.5' ROW WITH SIGNALS
 NOTE: DEVELOPMENTS TINTED IN PINK
 HAVE YET TO BE APPROVED FOR CONSTRUCTION.

LEGEND	
	EXISTING PARCEL LINE
	SUBDIVISION PARCEL LINES
	EXISTING RIGHT OF WAY
	BUS STOP LOCATIONS
	PROPOSED RIGHT OF WAY
	CITY ACQUIRED PARCELS

CITY OF PALM BAY		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
	BREVARD	

MALABAR ROAD PD&E STUDY	
PLANSHEET	
SHEET NO.	3



MATCH LINE 99+50

MATCH LINE 114+50

9
1.74 ACRES
TAX PARCEL NO. 29-36-04-01-*A
MALABAR LAKES HOMEOWNERS ASSOC INC

11
1.63 ACRES
TAX PARCEL NO. 29-36-04-01-*B
MALABAR LAKES HOMEOWNERS ASSOC INC

13
110.44 ACRES
TAX PARCEL NO. 29-36-04-00-1
CHAPARRAL PROPERTIES LLC

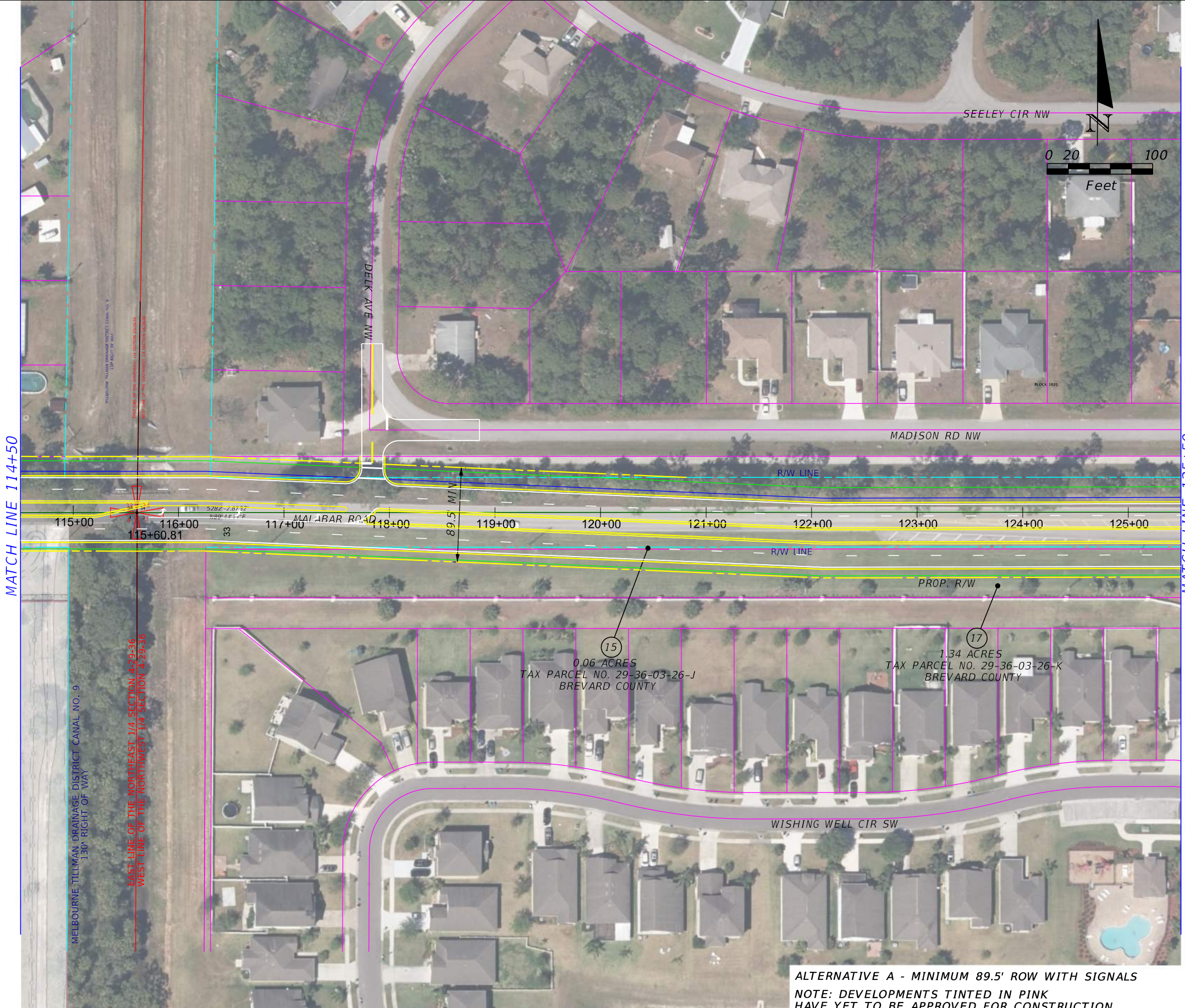
ALTERNATIVE A - MINIMUM 89.5' ROW WITH SIGNALS
NOTE: DEVELOPMENTS TINTED IN PINK
HAVE YET TO BE APPROVED FOR CONSTRUCTION.

LEGEND	
	EXISTING PARCEL LINE
	SUBDIVISION PARCEL LINES
	EXISTING RIGHT OF WAY
	BUS STOP LOCATIONS
	PROPOSED RIGHT OF WAY
	CITY ACQUIRED PARCELS

CITY OF PALM BAY		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
	BREVARD	

MALABAR ROAD PD&E STUDY
PLANSHEET

SHEET NO.	
S-6	4

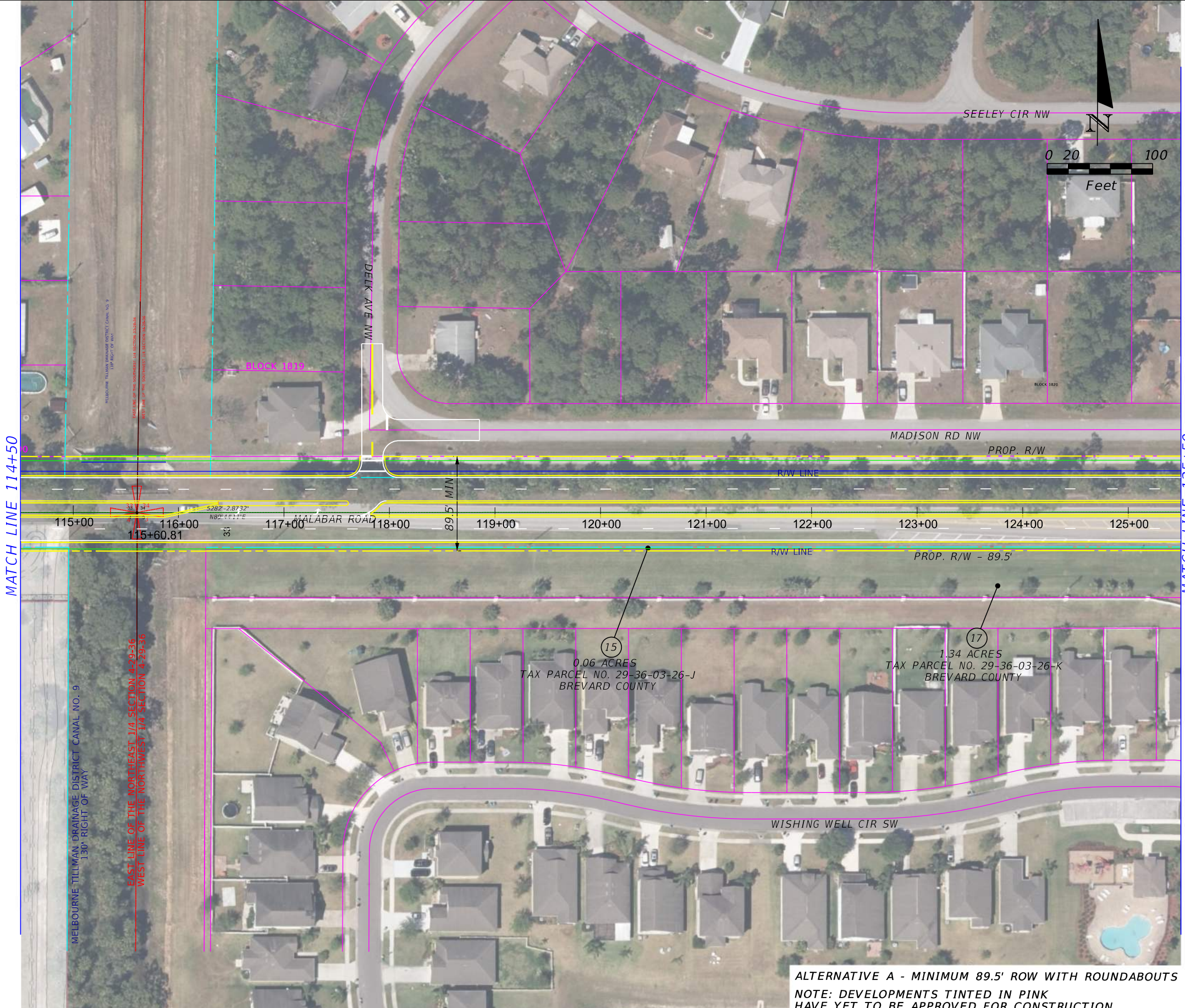


LEGEND	
	EXISTING PARCEL LINE
	SUBDIVISION PARCEL LINES
	EXISTING RIGHT OF WAY
	BUS STOP LOCATIONS
	PROPOSED RIGHT OF WAY
	CITY ACQUIRED PARCELS

CITY OF PALM BAY		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
	BREVARD	

MALABAR ROAD PD&E STUDY
PLANSHEET

SHEET NO.
S-7
5

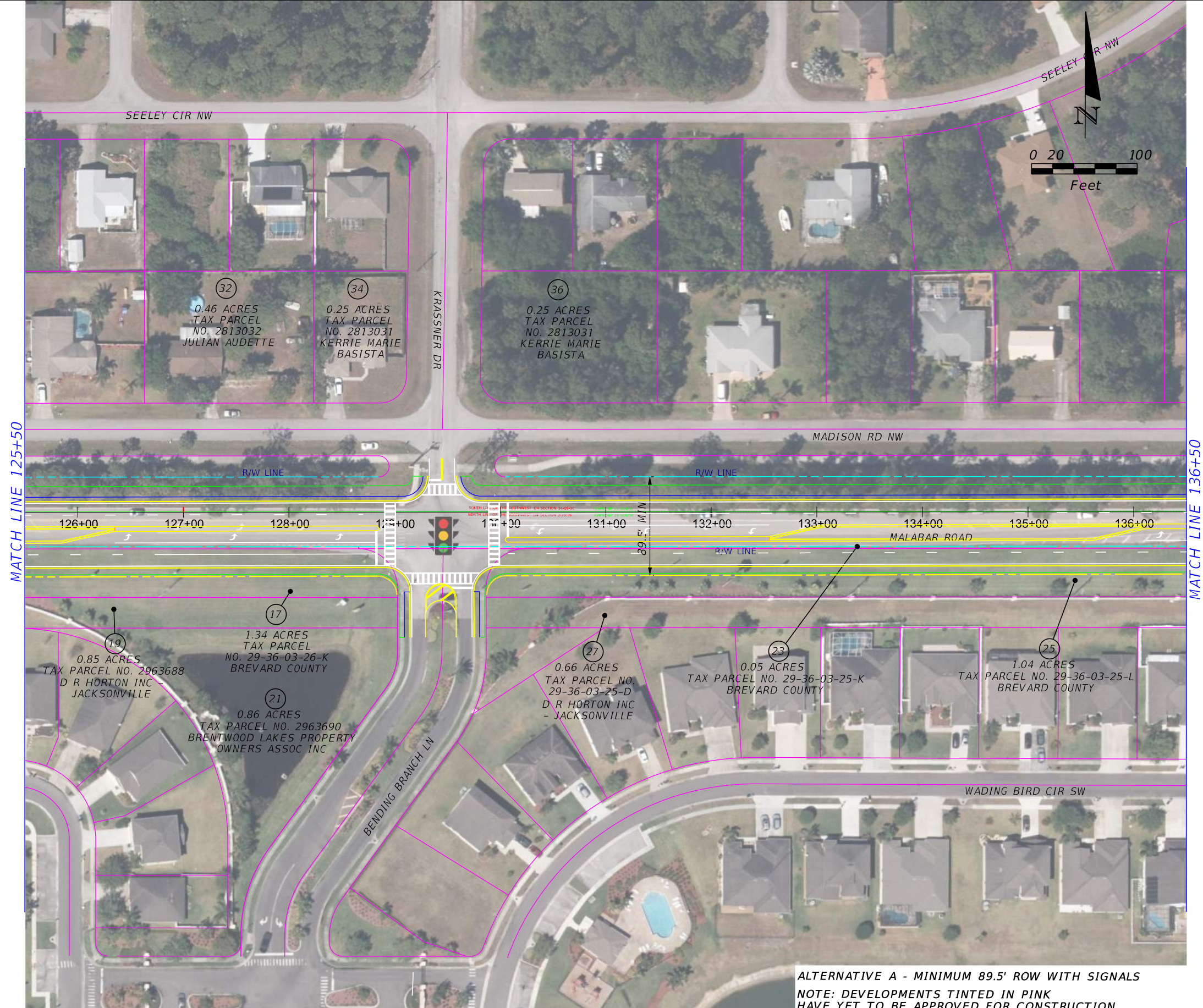


LEGEND	
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	SUBDIVISION PARCEL LINES
	EXISTING RIGHT OF WAY
	PROPOSED RIGHT OF WAY
	CITY ACQUIRED PARCELS
	BUS STOP LOCATIONS

CITY OF PALM BAY		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
	BREVARD	

MALABAR ROAD PD&E STUDY
PLANSHEET

SHEET NO.
S-8
5A

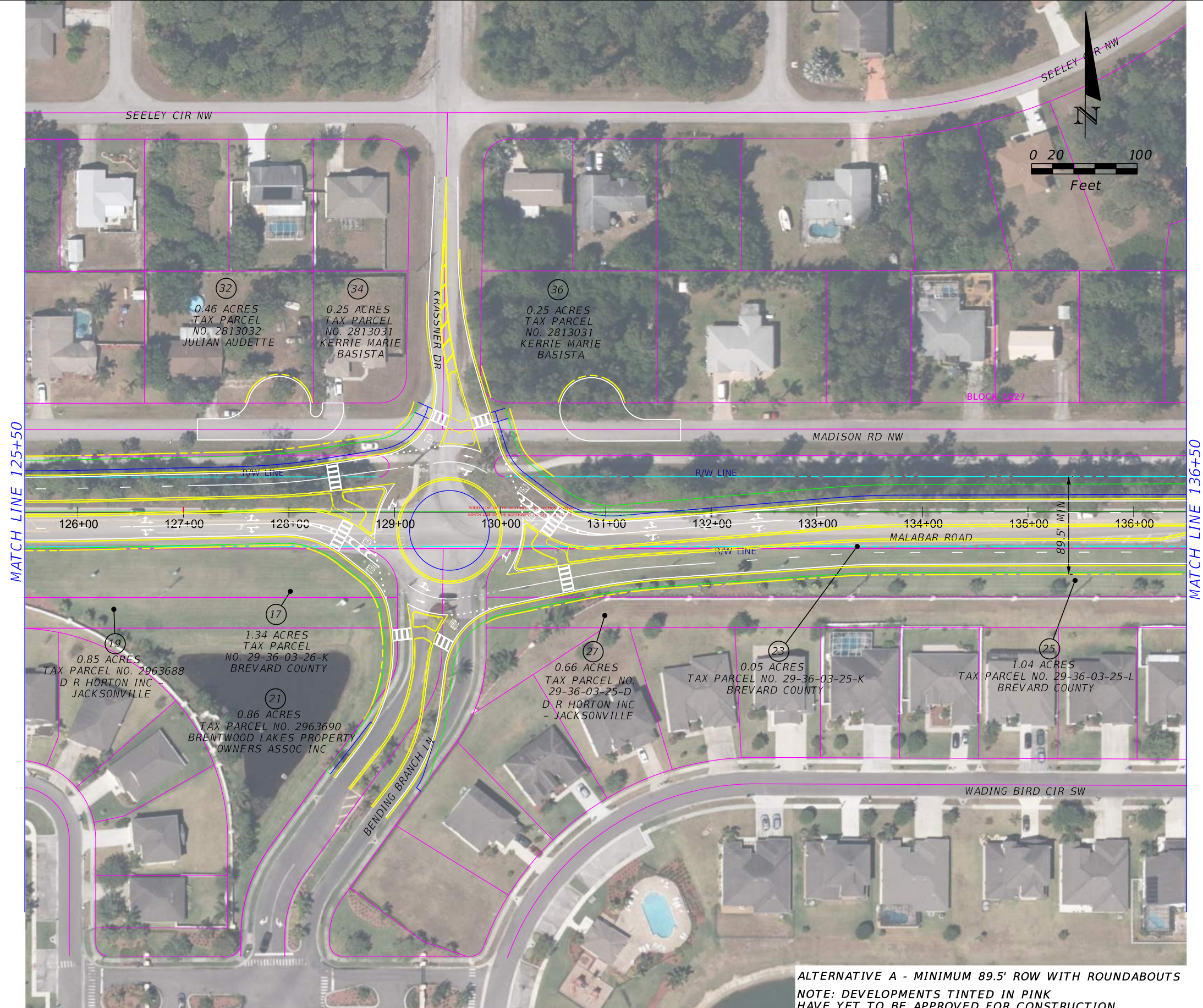


LEGEND	
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	SUBDIVISION PARCEL LINES
	EXISTING RIGHT OF WAY
	BUS STOP LOCATIONS
	PROPOSED RIGHT OF WAY
	CITY ACQUIRED PARCELS

CITY OF PALM BAY		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
	BREVARD	

MALABAR ROAD PD&E STUDY
PLANSHEET

SHEET NO.
S-9
6



ALTERNATIVE A - MINIMUM 89.5' ROW WITH ROUNDABOUTS
 NOTE: DEVELOPMENTS TINTED IN PINK
 HAVE YET TO BE APPROVED FOR CONSTRUCTION.

LEGEND	
	EXISTING PARCEL LINE
	SUBDIVISION PARCEL LINES
	EXISTING RIGHT OF WAY
	BUS STOP LOCATIONS
	PROPOSED RIGHT OF WAY
	CITY ACQUIRED PARCELS

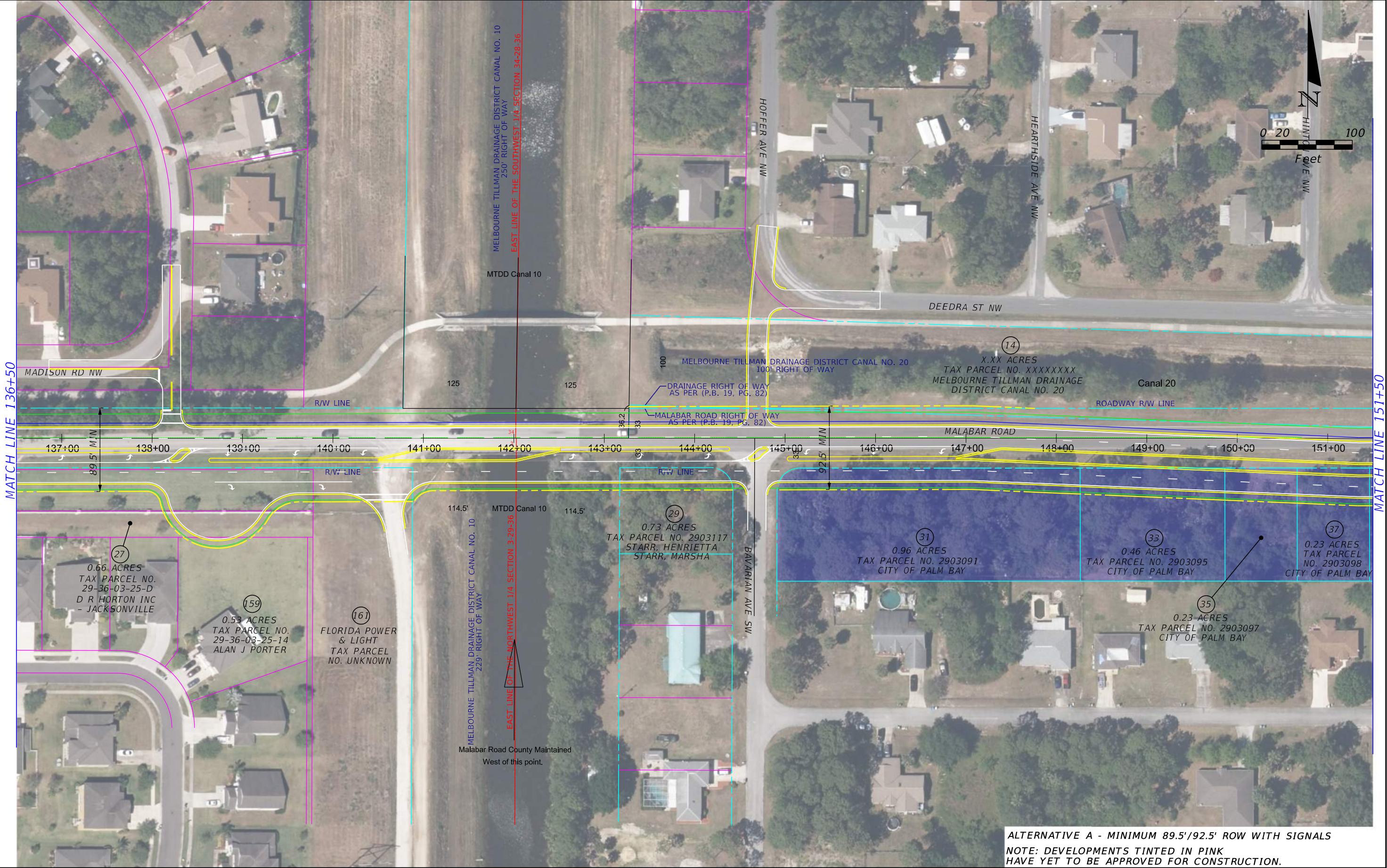
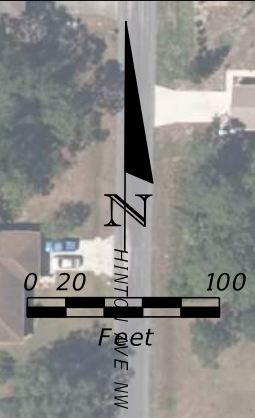
CITY OF PALM BAY		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
	BREVARD	

MALABAR ROAD PD&E STUDY
PLANSHEET

SHEET NO.
 S-10
 6A

MATCH LINE 136+50

MATCH LINE 151+50



ALTERNATIVE A - MINIMUM 89.5'/92.5' ROW WITH SIGNALS
NOTE: DEVELOPMENTS TINTED IN PINK
HAVE YET TO BE APPROVED FOR CONSTRUCTION.

LEGEND	
	EXISTING PARCEL LINE
	SUBDIVISION PARCEL LINES
	EXISTING RIGHT OF WAY
	BUS STOP LOCATIONS
	PROPOSED RIGHT OF WAY
	CITY ACQUIRED PARCELS

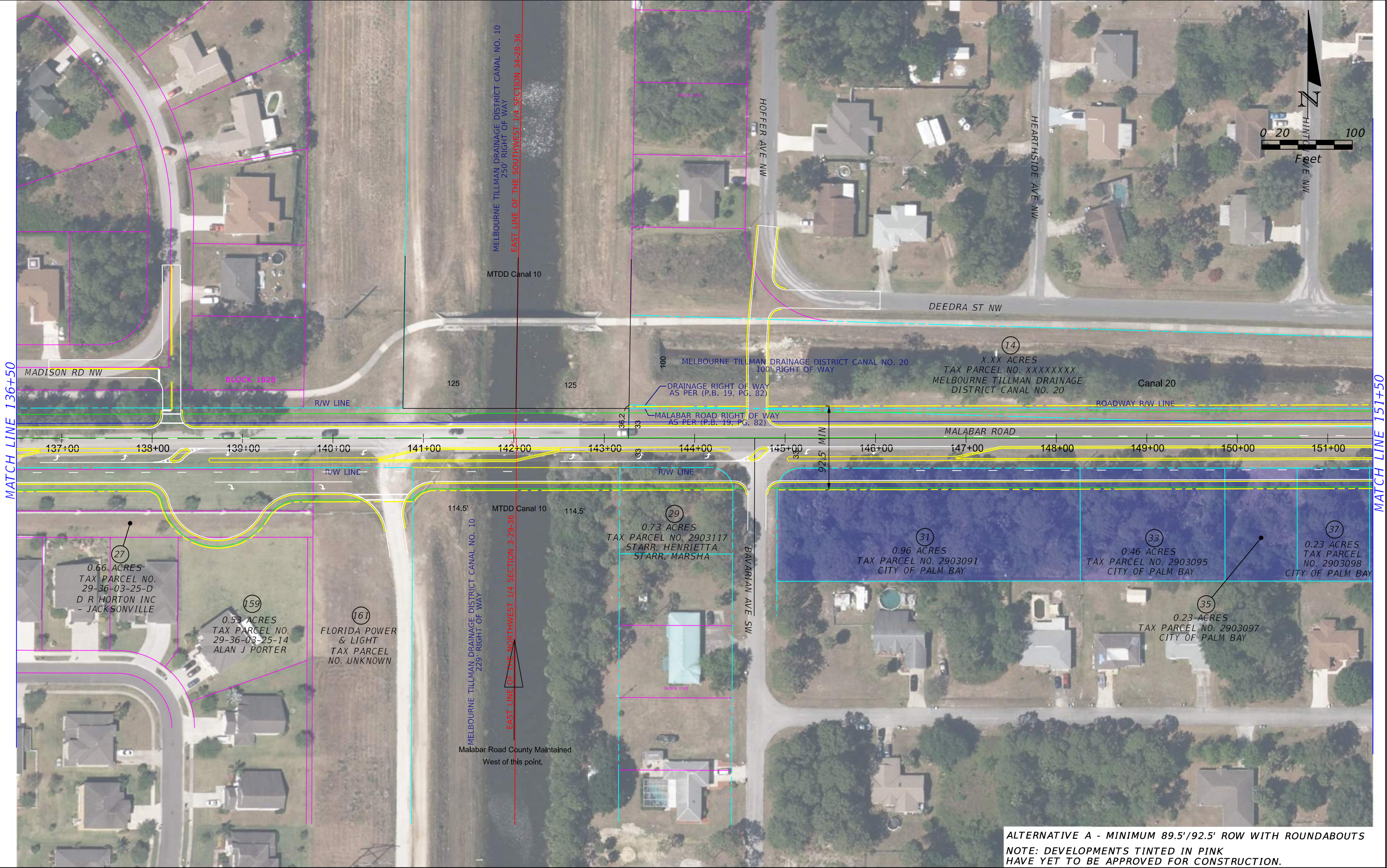
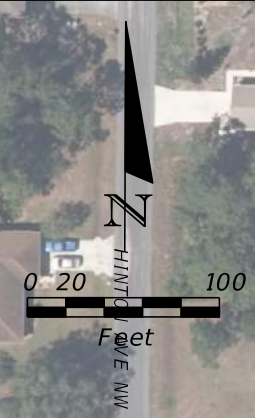
CITY OF PALM BAY		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
	BREVARD	

MALABAR ROAD PD&E STUDY
PLANSHEET

SHEET NO.
S-11 7

MATCH LINE 136+50

MATCH LINE 151+50



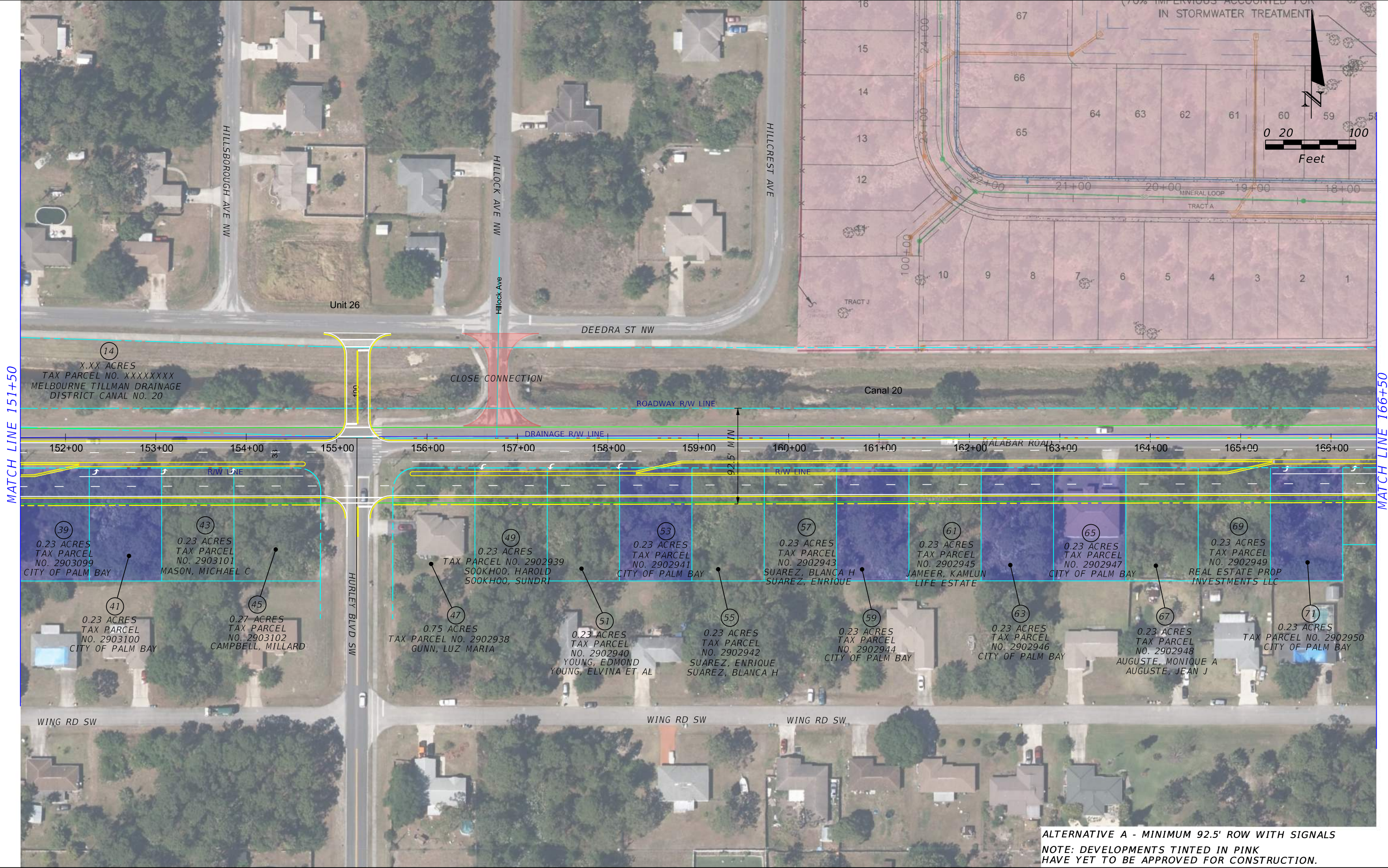
ALTERNATIVE A - MINIMUM 89.5'/92.5' ROW WITH ROUNDABOUTS
 NOTE: DEVELOPMENTS TINTED IN PINK
 HAVE YET TO BE APPROVED FOR CONSTRUCTION.

LEGEND	
	EXISTING PARCEL LINE
	SUBDIVISION PARCEL LINES
	EXISTING RIGHT OF WAY
	BUS STOP LOCATIONS
	PROPOSED RIGHT OF WAY
	CITY ACQUIRED PARCELS

CITY OF PALM BAY		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
	BREVARD	

MALABAR ROAD PD&E STUDY
PLANSHEET

SHEET NO.
 S-12
 7A

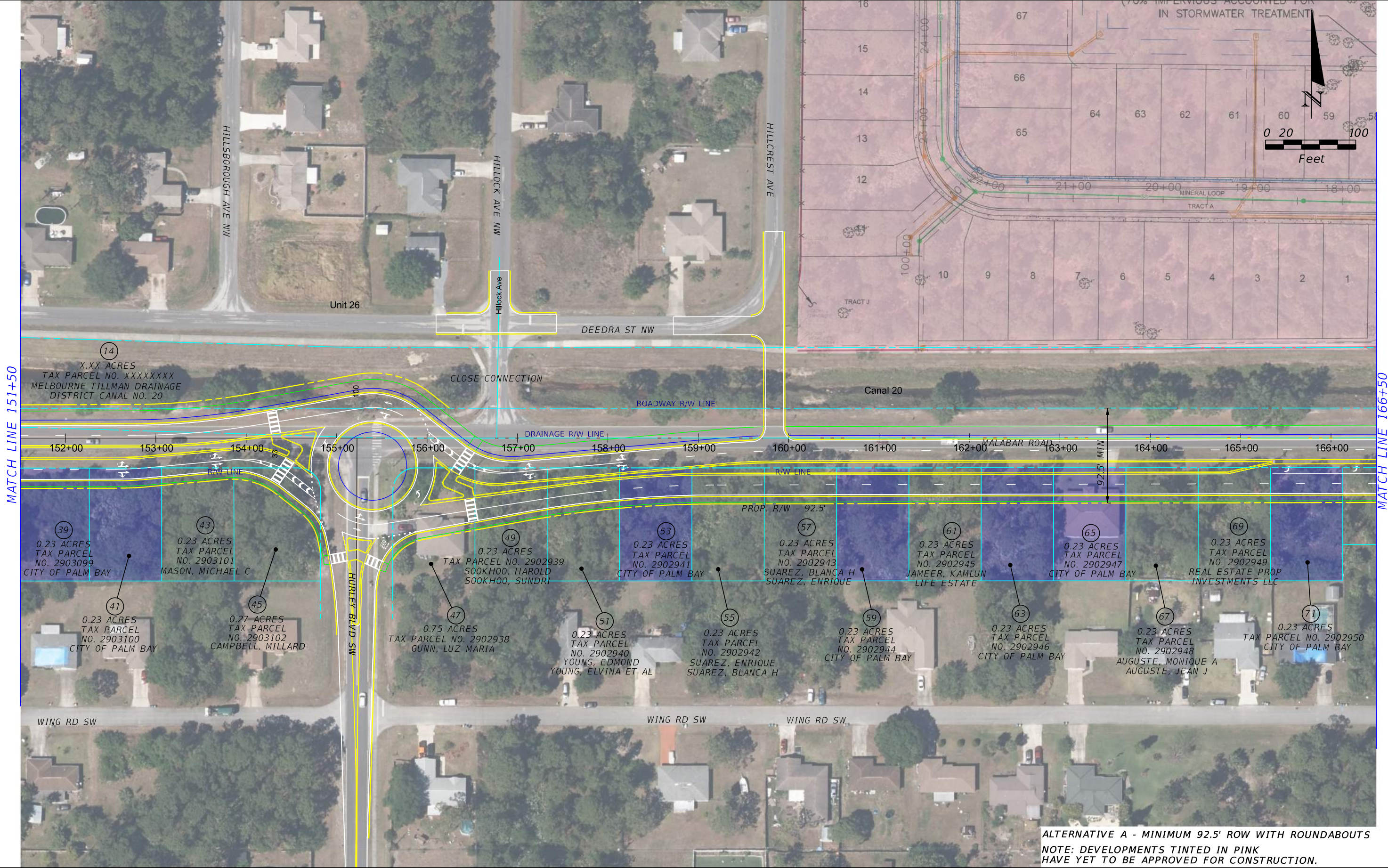


ALTERNATIVE A - MINIMUM 92.5' ROW WITH SIGNALS
 NOTE: DEVELOPMENTS TINTED IN PINK
 HAVE YET TO BE APPROVED FOR CONSTRUCTION.

LEGEND	
	EXISTING PARCEL LINE
	SUBDIVISION PARCEL LINES
	EXISTING RIGHT OF WAY
	BUS STOP LOCATIONS
	PROPOSED RIGHT OF WAY
	CITY ACQUIRED PARCELS

CITY OF PALM BAY		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
	BREVARD	

MALABAR ROAD PD&E STUDY	
PLANSHEET	
SHEET NO.	S-13
	8



MATCH LINE 151+50

MATCH LINE 166+50

LEGEND	
	EXISTING PARCEL LINE
	SUBDIVISION PARCEL LINES
	EXISTING RIGHT OF WAY
	BUS STOP LOCATIONS
	PROPOSED RIGHT OF WAY
	CITY ACQUIRED PARCELS

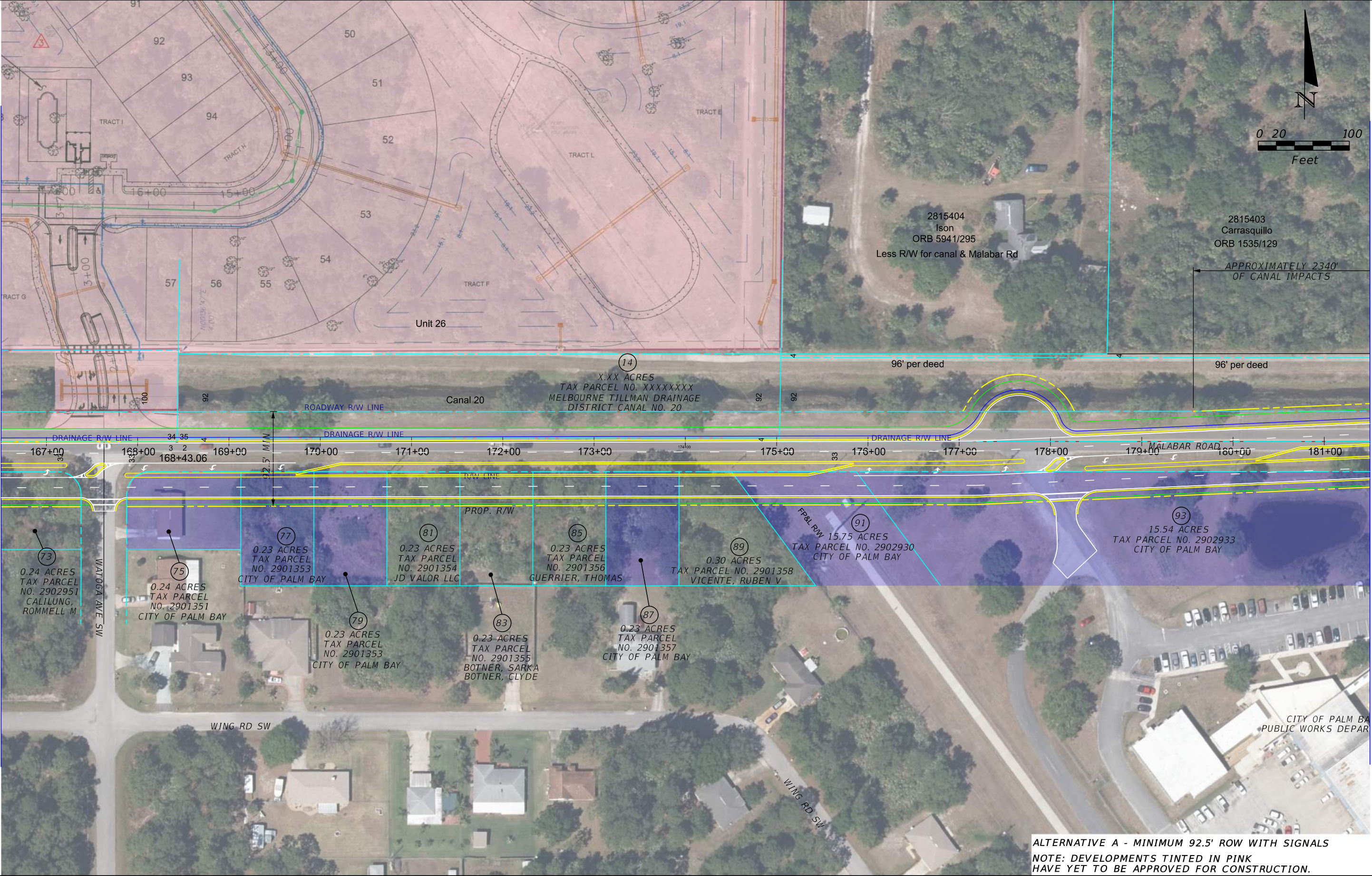
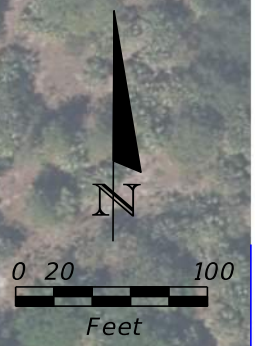
CITY OF PALM BAY		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
	BREVARD	

MALABAR ROAD PD&E STUDY
PLANSHEET

SHEET NO.
S-14
8A

MATCH LINE 166+50

MATCH LINE 181+50



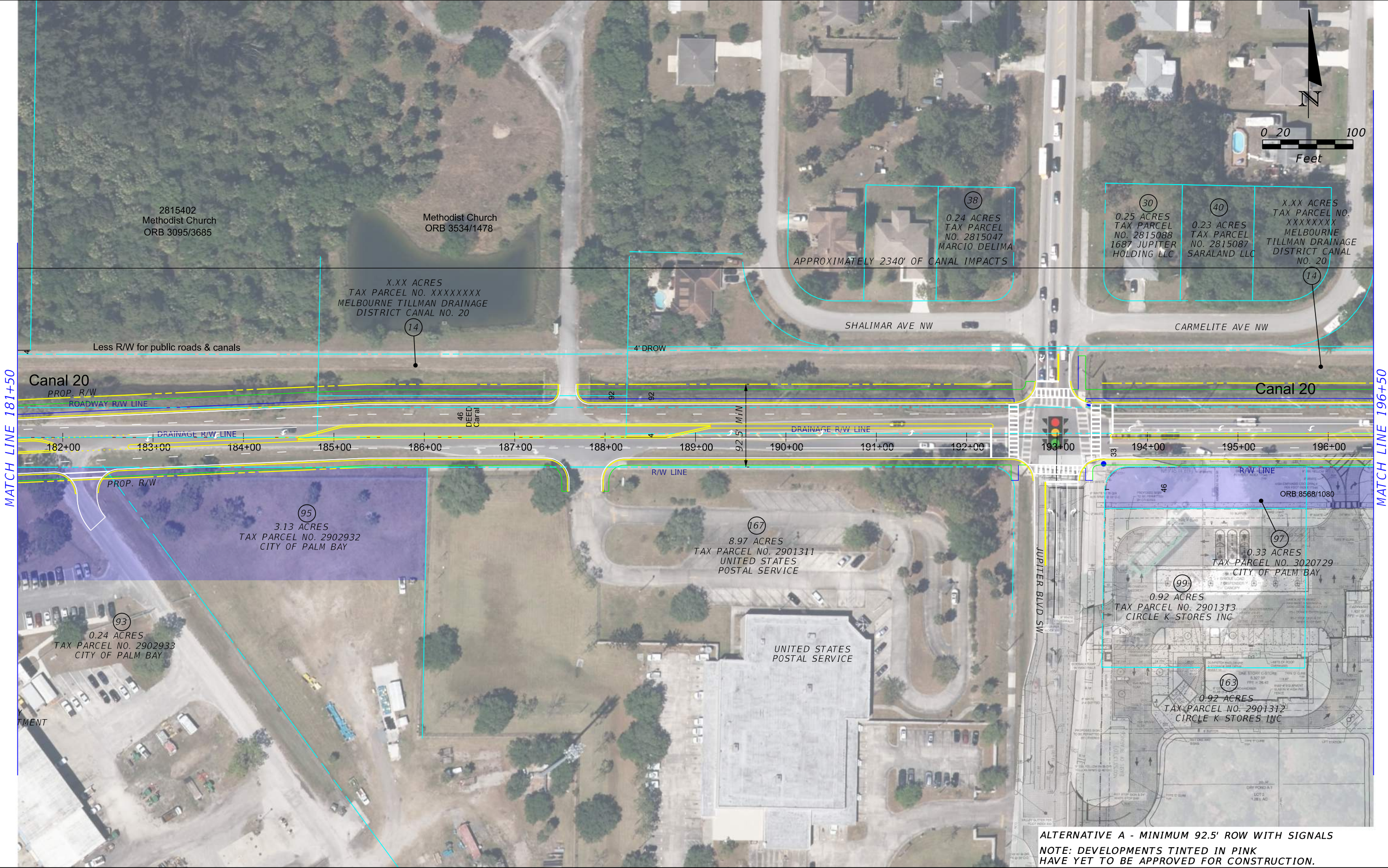
ALTERNATIVE A - MINIMUM 92.5' ROW WITH SIGNALS
 NOTE: DEVELOPMENTS TINTED IN PINK
 HAVE YET TO BE APPROVED FOR CONSTRUCTION.

LEGEND	
	EXISTING PARCEL LINE
	SUBDIVISION PARCEL LINES
	EXISTING RIGHT OF WAY
	BUS STOP LOCATIONS
	PROPOSED RIGHT OF WAY
	CITY ACQUIRED PARCELS

CITY OF PALM BAY		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
	BREVARD	

MALABAR ROAD PD&E STUDY
PLANSHEET

SHEET NO.
S-15 9



MATCH LINE 181+50

MATCH LINE 196+50

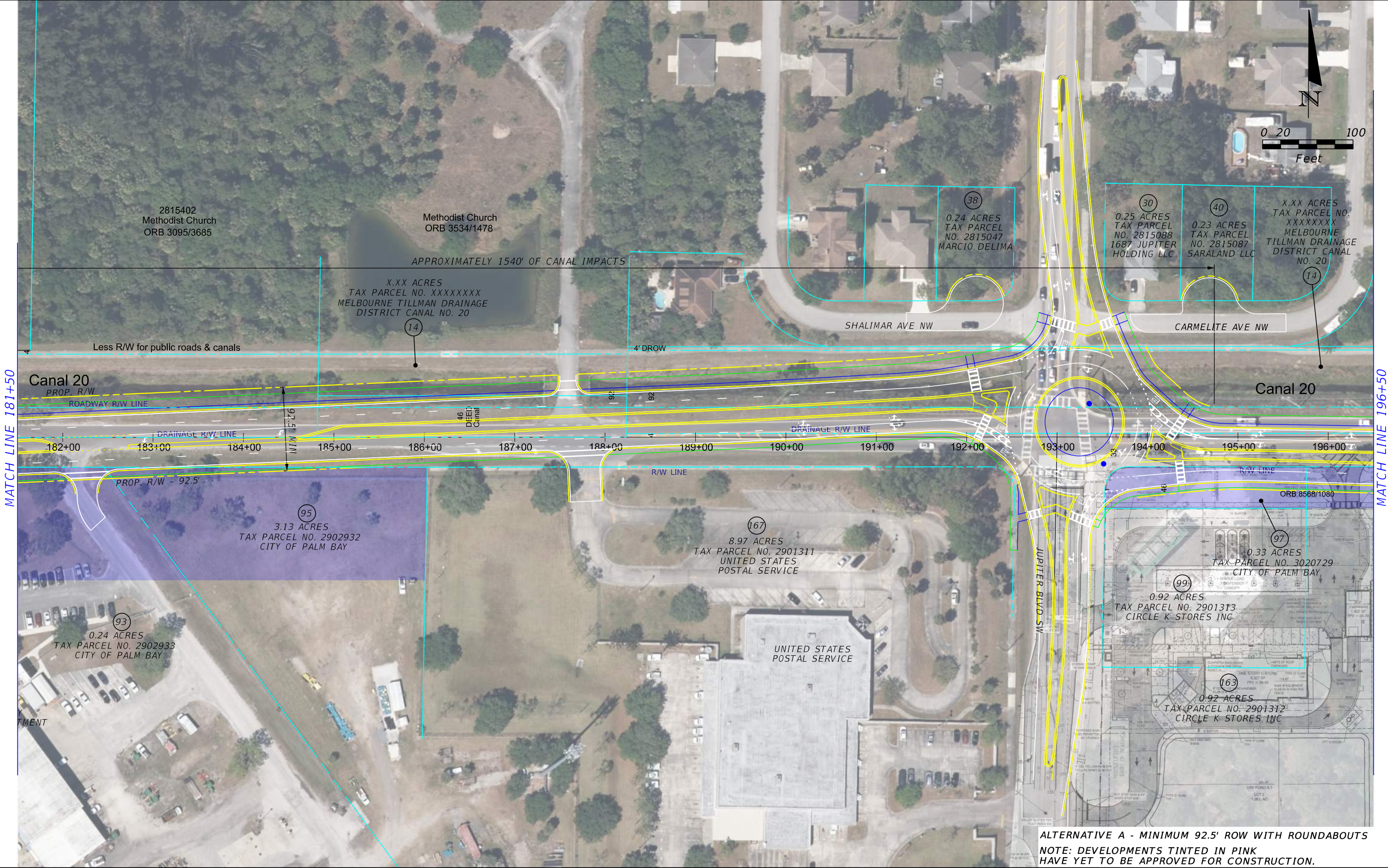
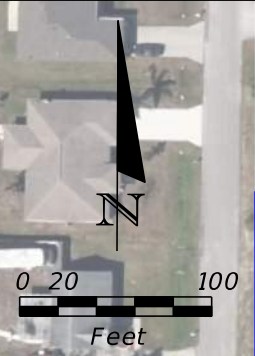
ALTERNATIVE A - MINIMUM 92.5' ROW WITH SIGNALS
 NOTE: DEVELOPMENTS TINTED IN PINK
 HAVE YET TO BE APPROVED FOR CONSTRUCTION.

LEGEND	
	EXISTING PARCEL LINE
	SUBDIVISION PARCEL LINES
	EXISTING RIGHT OF WAY
	BUS STOP LOCATIONS
	PROPOSED RIGHT OF WAY
	CITY ACQUIRED PARCELS

CITY OF PALM BAY		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
	BREVARD	

MALABAR ROAD PD&E STUDY
PLANSHEET

SHEET NO.
S-16 10



MATCH LINE 181+50

MATCH LINE 196+50

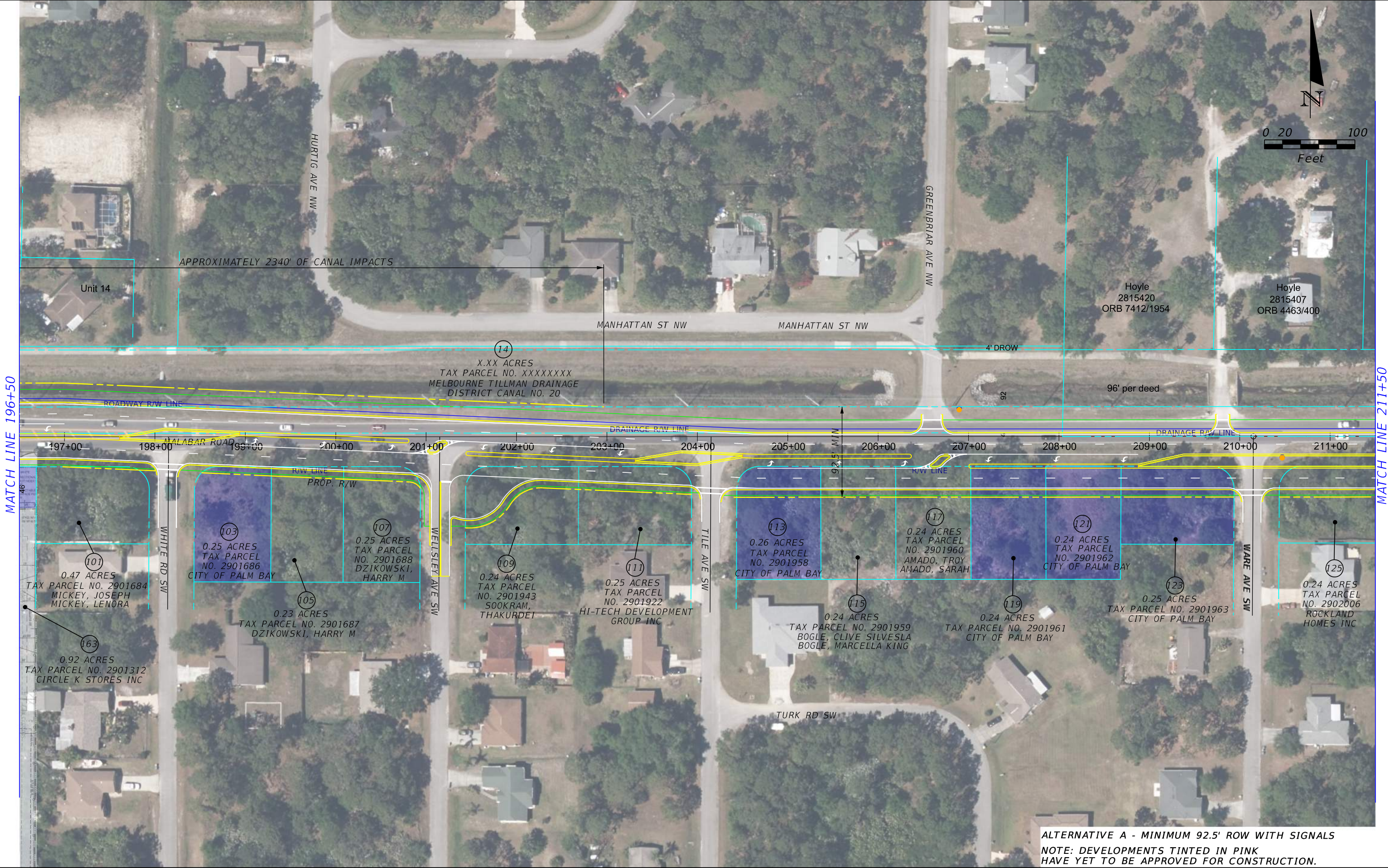
ALTERNATIVE A - MINIMUM 92.5' ROW WITH ROUNDABOUTS
 NOTE: DEVELOPMENTS TINTED IN PINK
 HAVE YET TO BE APPROVED FOR CONSTRUCTION.

LEGEND	
	EXISTING PARCEL LINE
	SUBDIVISION PARCEL LINES
	EXISTING RIGHT OF WAY
	BUS STOP LOCATIONS
	PROPOSED RIGHT OF WAY
	CITY ACQUIRED PARCELS

CITY OF PALM BAY		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
	BREVARD	

MALABAR ROAD PD&E STUDY
PLANSHEET

SHEET NO.
S-17 10A

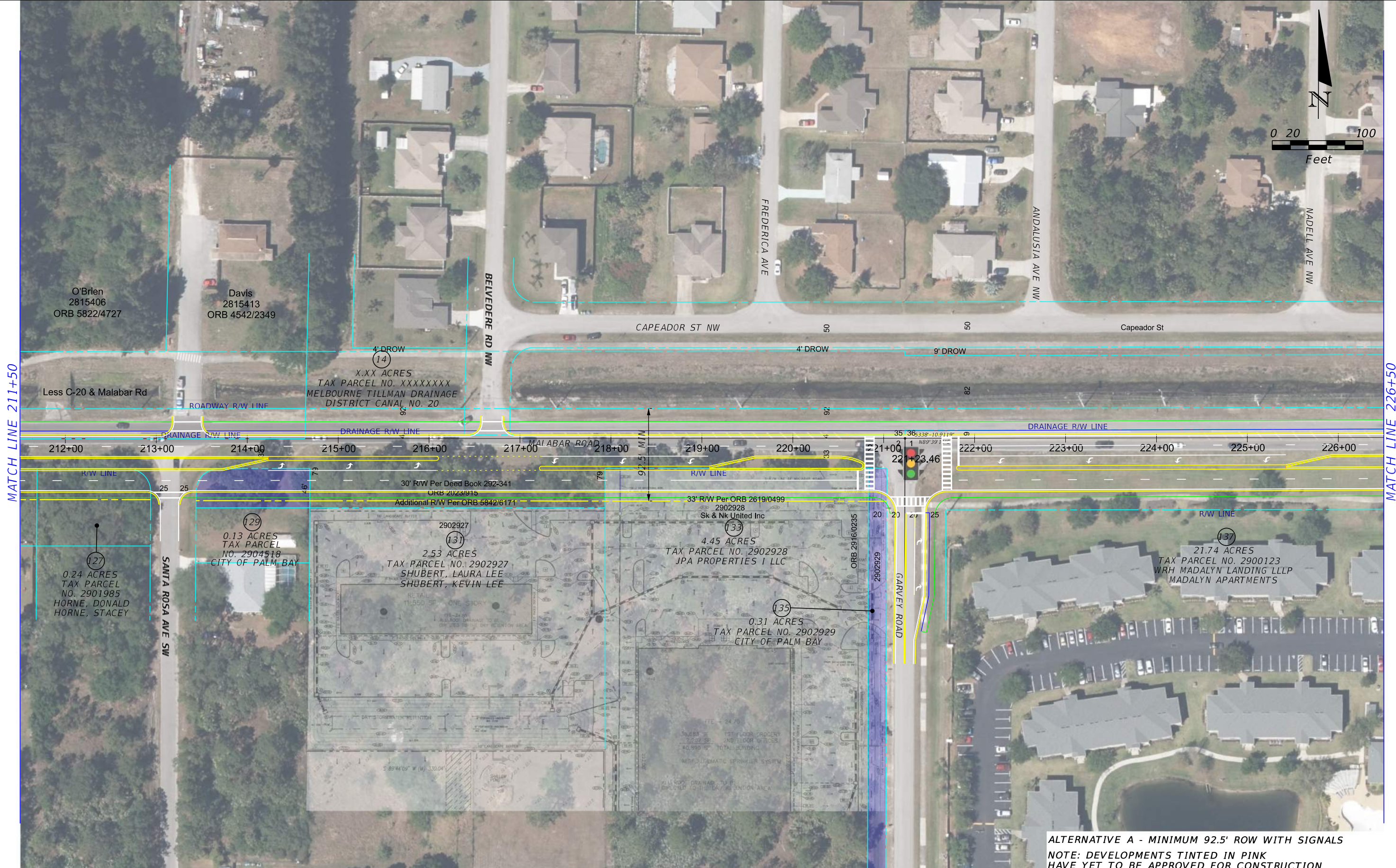
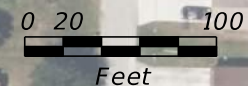


LEGEND	
	EXISTING PARCEL LINE
	SUBDIVISION PARCEL LINES
	EXISTING RIGHT OF WAY
	PROPOSED RIGHT OF WAY
	BUS STOP LOCATIONS
	CITY ACQUIRED PARCELS

CITY OF PALM BAY		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
	BREVARD	

MALABAR ROAD PD&E STUDY
PLANSHEET

SHEET NO.
S-18
11



MATCH LINE 211+50

MATCH LINE 226+50

ALTERNATIVE A - MINIMUM 92.5' ROW WITH SIGNALS
 NOTE: DEVELOPMENTS TINTED IN PINK
 HAVE YET TO BE APPROVED FOR CONSTRUCTION.

LEGEND	
	EXISTING PARCEL LINE
	SUBDIVISION PARCEL LINES
	EXISTING RIGHT OF WAY
	BUS STOP LOCATIONS
	PROPOSED RIGHT OF WAY
	CITY ACQUIRED PARCELS

CITY OF PALM BAY		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
	BREVARD	

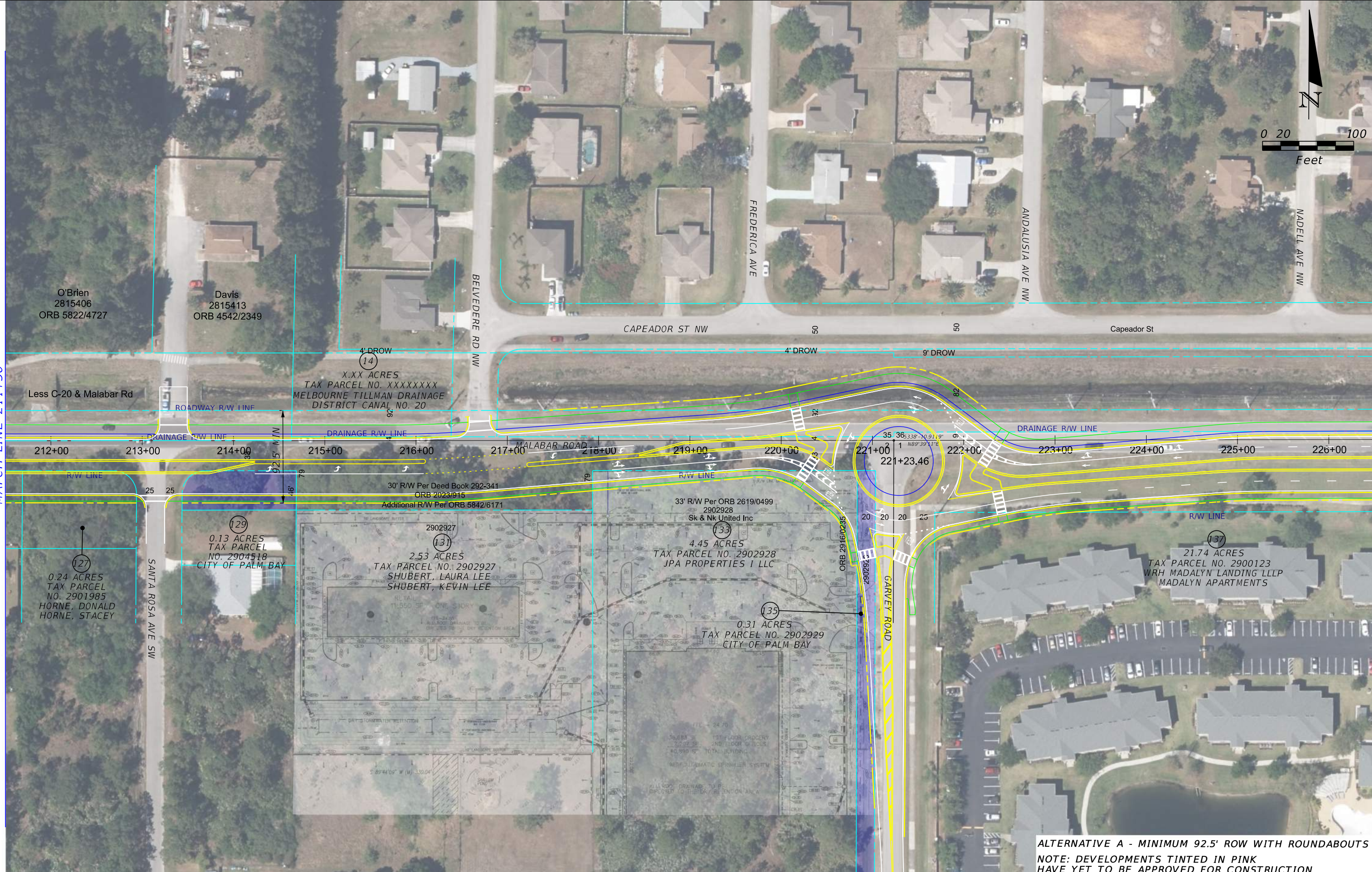
MALABAR ROAD PD&E STUDY
PLANSHEET

SHEET NO.
S-19 12



MATCH LINE 211+50

MATCH LINE 226+50



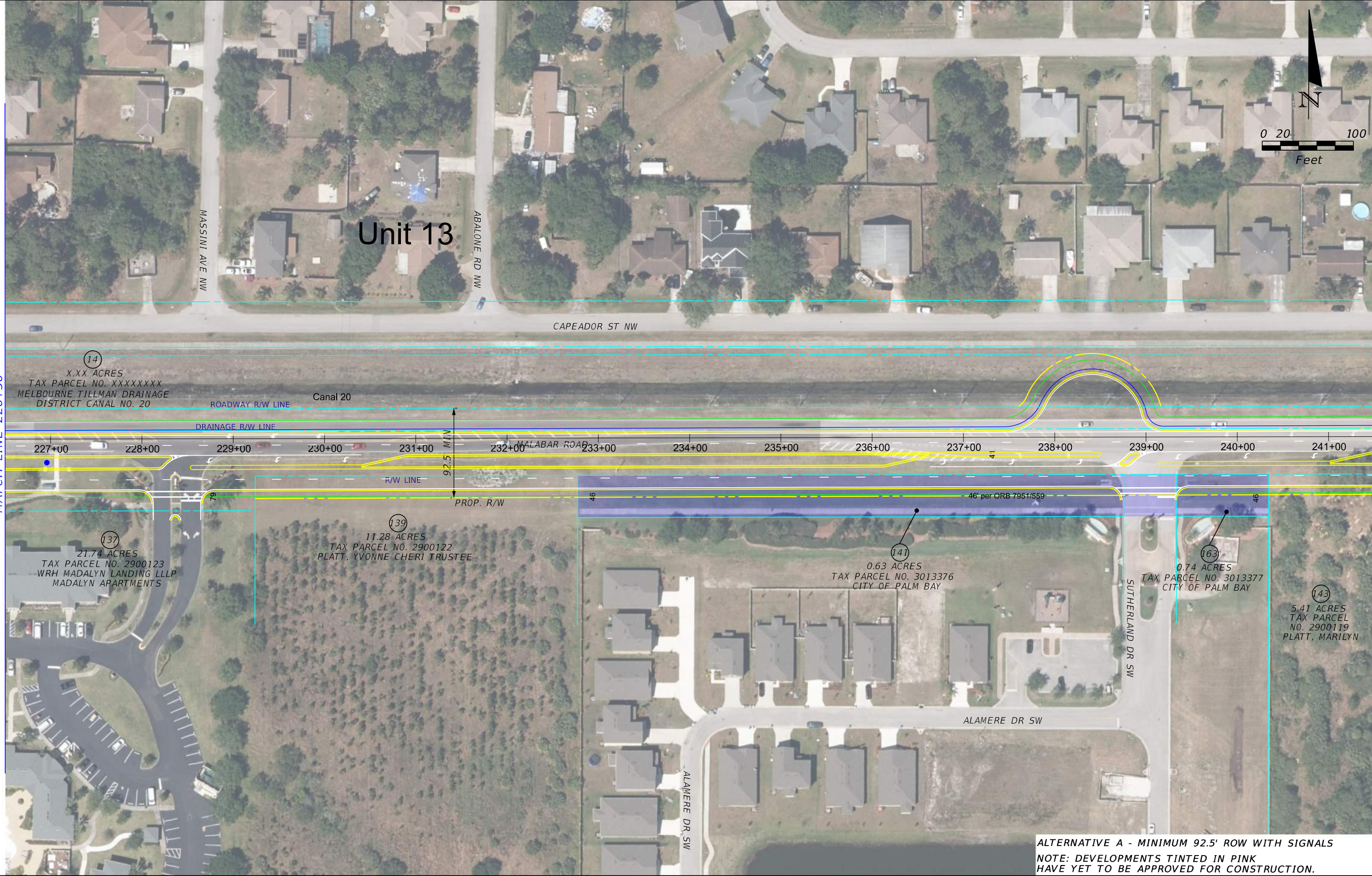
ALTERNATIVE A - MINIMUM 92.5' ROW WITH ROUNDABOUTS
 NOTE: DEVELOPMENTS TINTED IN PINK
 HAVE YET TO BE APPROVED FOR CONSTRUCTION.

LEGEND	
	EXISTING PARCEL LINE
	SUBDIVISION PARCEL LINES
	EXISTING RIGHT OF WAY
	BUS STOP LOCATIONS
	PROPOSED RIGHT OF WAY
	CITY ACQUIRED PARCELS

CITY OF PALM BAY		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
	BREVARD	

MALABAR ROAD PD&E STUDY
PLANSHEET

SHEET NO.
 S-20
 12A



MATCH LINE 226+50

MATCH LINE 241+50

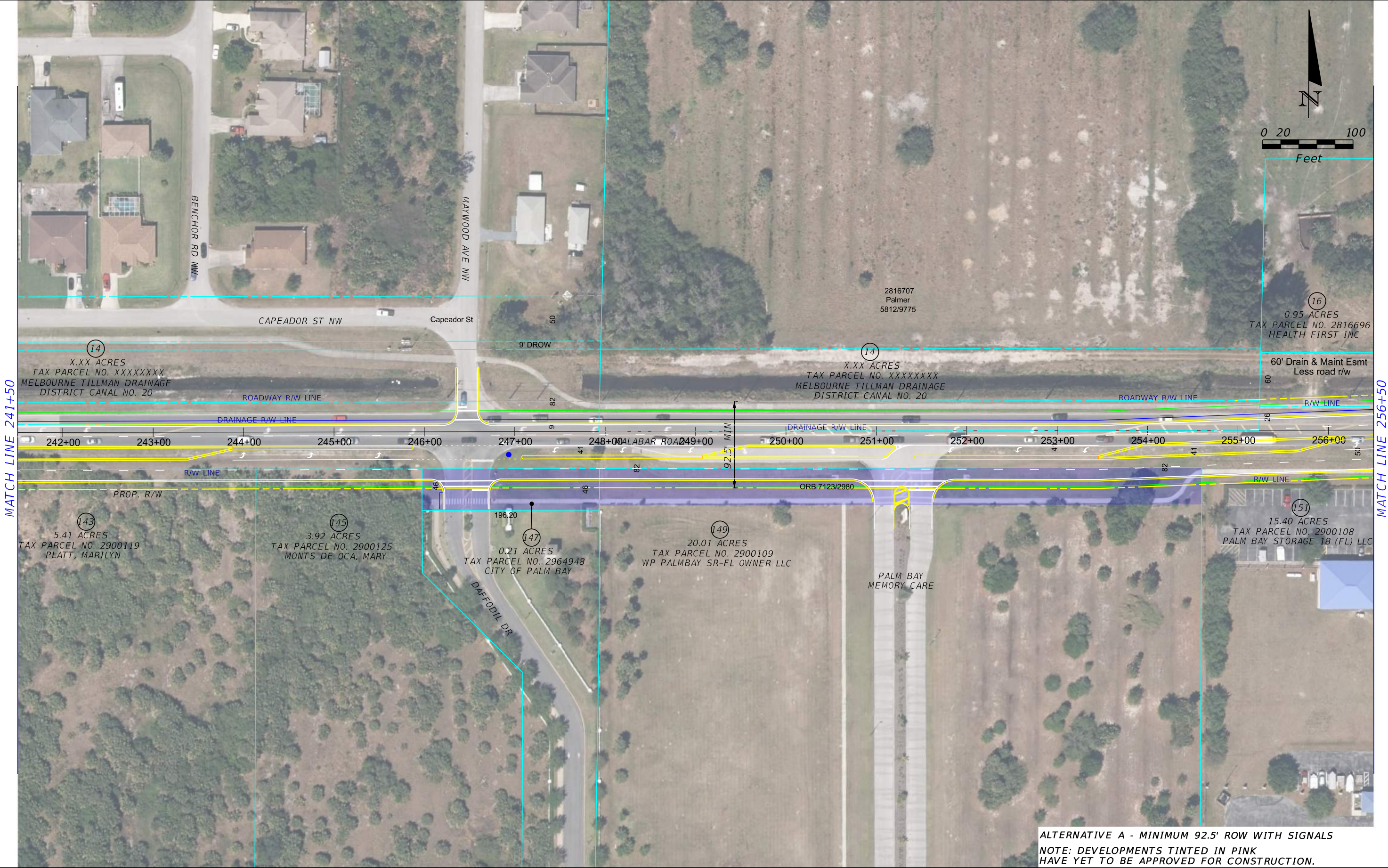
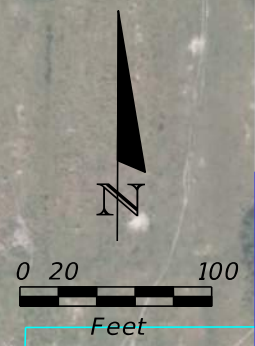
ALTERNATIVE A - MINIMUM 92.5' ROW WITH SIGNALS
 NOTE: DEVELOPMENTS TINTED IN PINK
 HAVE YET TO BE APPROVED FOR CONSTRUCTION.

LEGEND	
	EXISTING PARCEL LINE
	SUBDIVISION PARCEL LINES
	EXISTING RIGHT OF WAY
	BUS STOP LOCATIONS
	PROPOSED RIGHT OF WAY
	CITY ACQUIRED PARCELS

CITY OF PALM BAY		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
	BREVARD	

MALABAR ROAD PD&E STUDY
PLANSHEET

SHEET NO.
 S-21
 13



ALTERNATIVE A - MINIMUM 92.5' ROW WITH SIGNALS
 NOTE: DEVELOPMENTS TINTED IN PINK
 HAVE YET TO BE APPROVED FOR CONSTRUCTION.

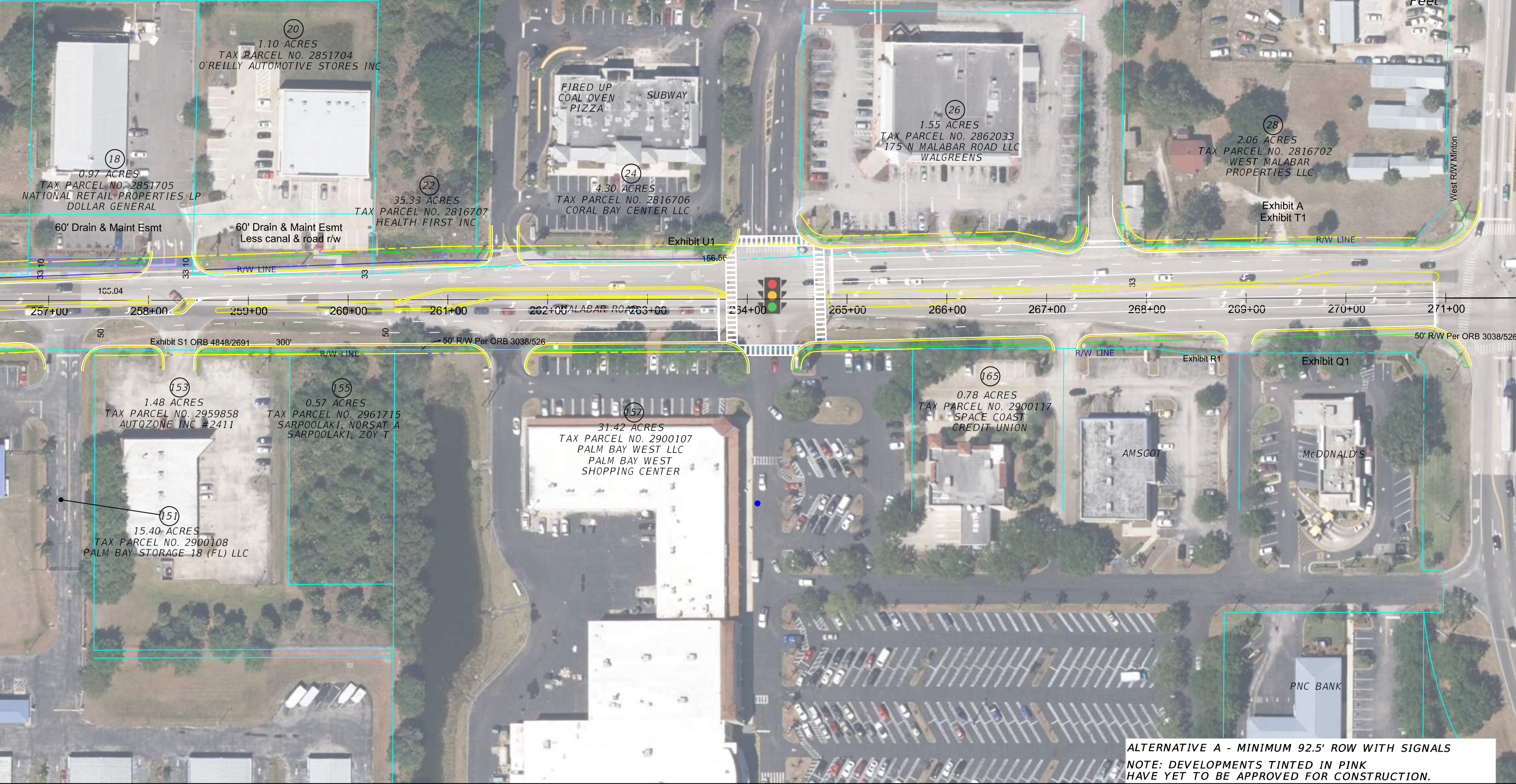
LEGEND	
	EXISTING PARCEL LINE
	SUBDIVISION PARCEL LINES
	EXISTING RIGHT OF WAY
	BUS STOP LOCATIONS
	PROPOSED RIGHT OF WAY
	CITY ACQUIRED PARCELS

CITY OF PALM BAY		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
	BREVARD	

MALABAR ROAD PD&E STUDY
PLANSHEET

SHEET NO.
S-22 14

MATCH LINE 256+50



ALTERNATIVE A - MINIMUM 92.5' ROW WITH SIGNALS
NOTE: DEVELOPMENTS TINTED IN PINK
HAVE YET TO BE APPROVED FOR CONSTRUCTION.

LEGEND	
	EXISTING PARCEL LINE
	SUBDIVISION PARCEL LINES
	EXISTING RIGHT OF WAY
	BUS STOP LOCATIONS
	PROPOSED RIGHT OF WAY
	CITY ACQUIRED PARCELS

CITY OF PALM BAY		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
	BREVARD	

MALABAR ROAD PD&E STUDY
PLANSHEET

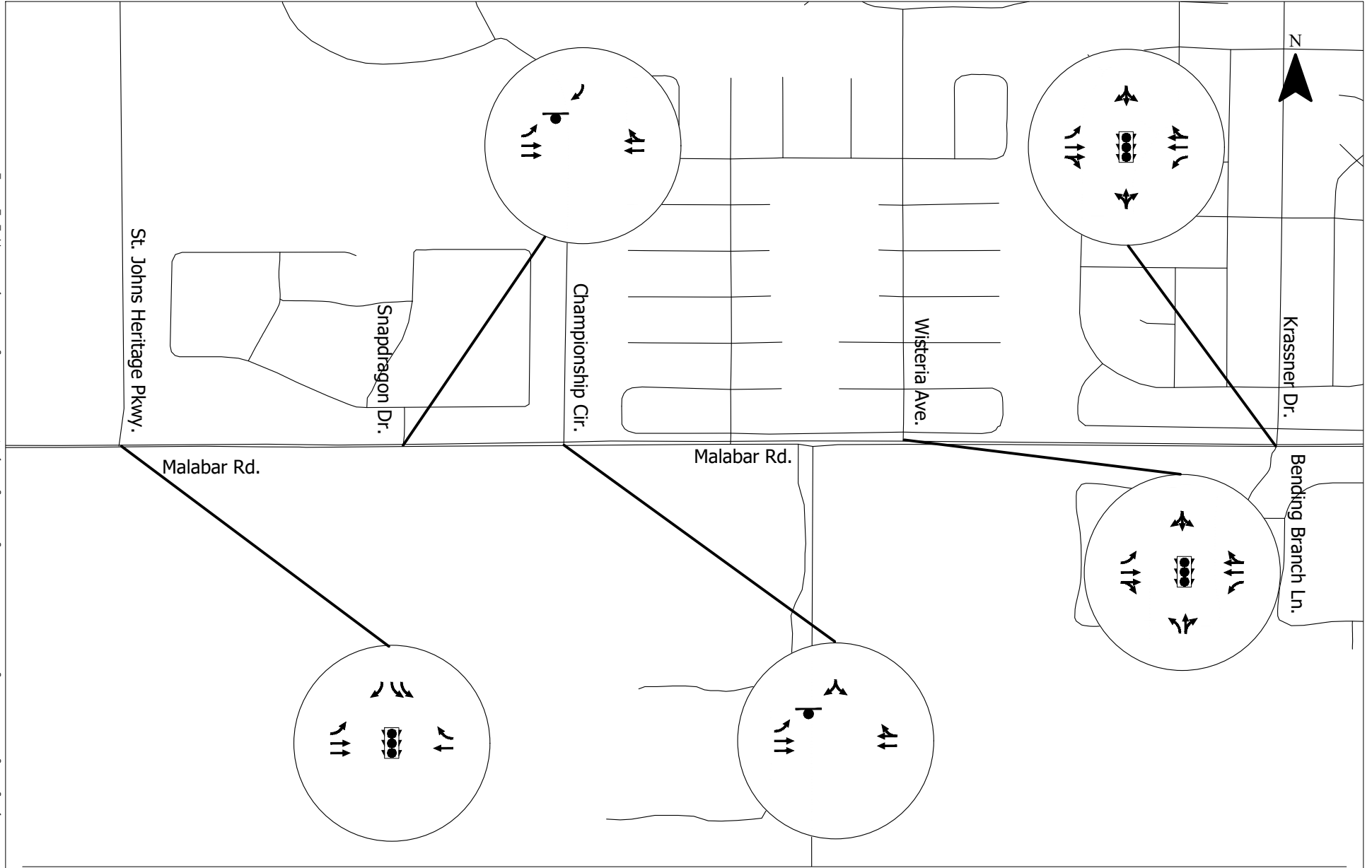
SHEET NO.
S-23 15

APPENDIX T – 2030 BUILD LANE CONFIGURATIONS, TURNING MOVEMENT VOLUMES, AND OPERATIONAL PERFORMANCE

Contained in this Appendix –

- 2030 Build Lane Configurations
- 2030 Build Turning Movement Volumes and Operational Performance

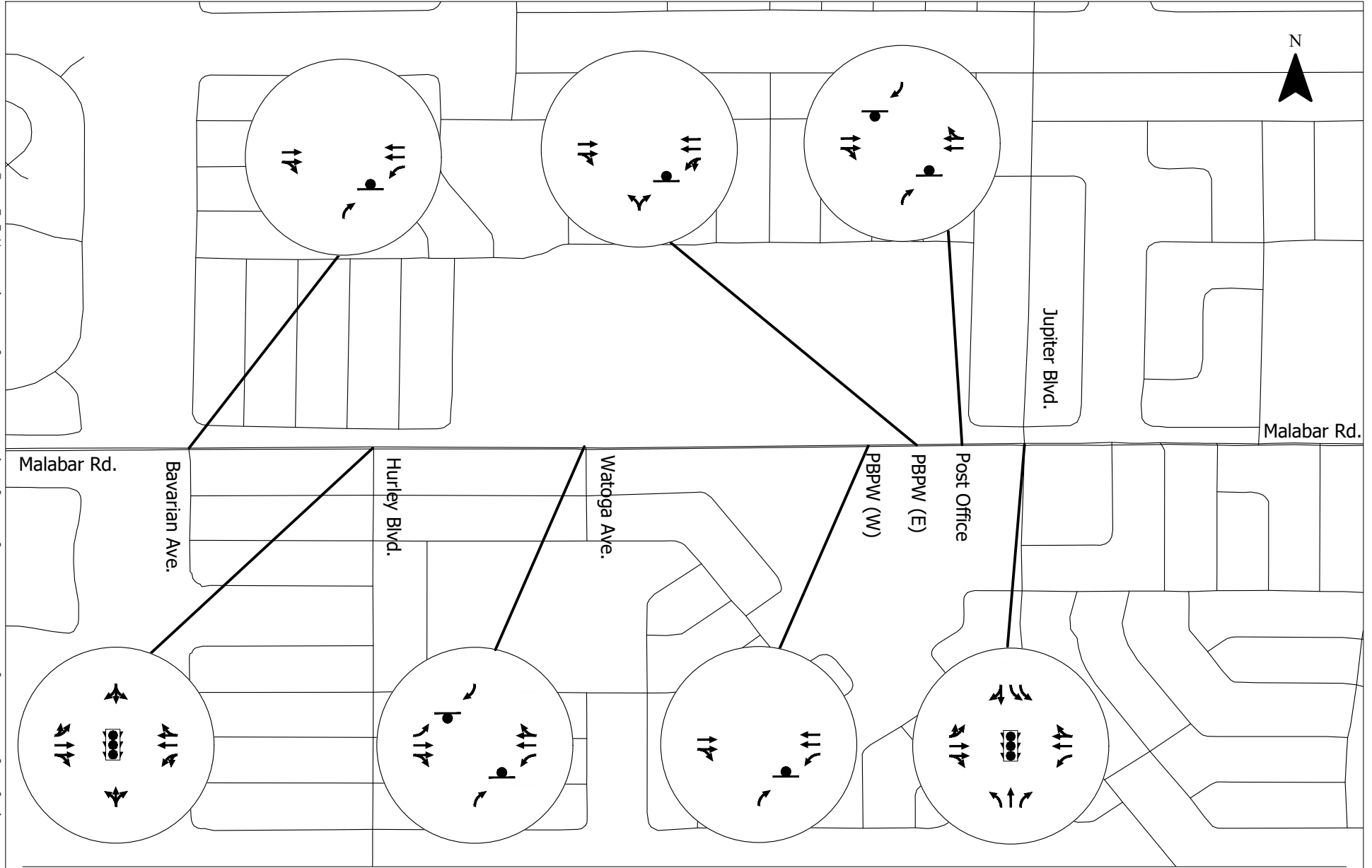
2030 BUILD LANE CONFIGURATIONS



2030 Build Lane Configurations

Not to Scale

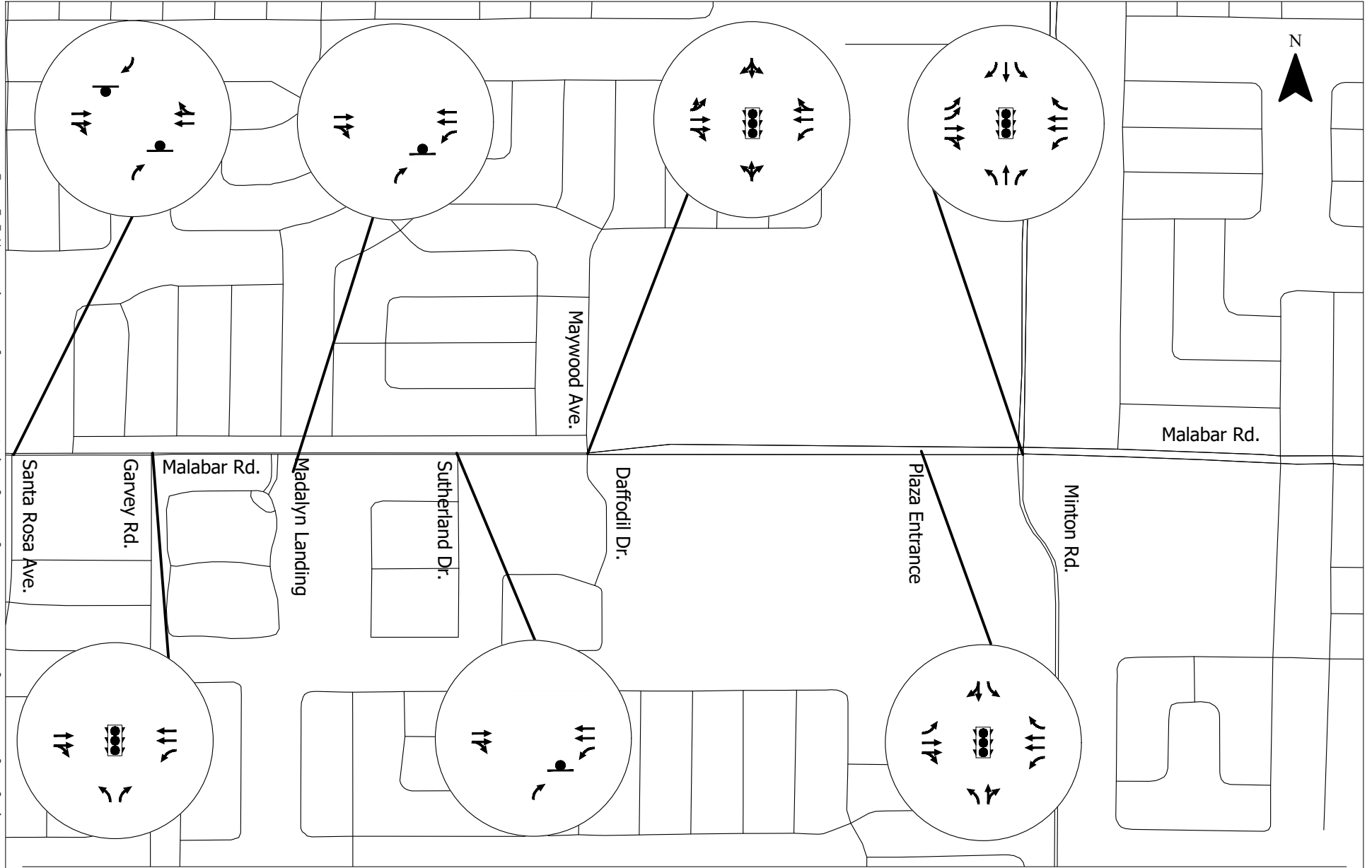
Figure
X_A



2030 Build Lane Configurations

Not to Scale

Figure X_B



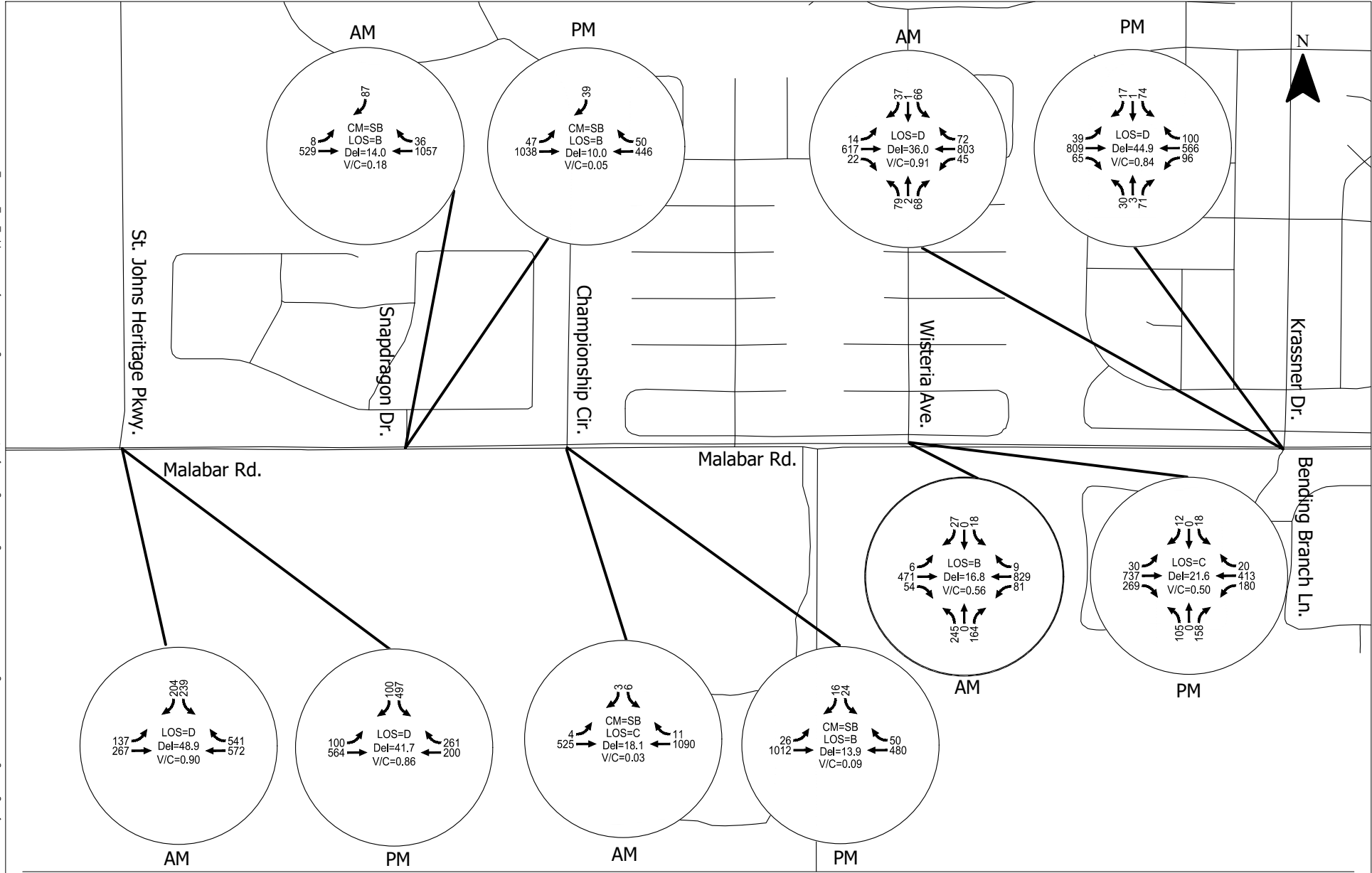
2030 Build Lane Configurations

Not to Scale

Figure X_C

2030 BUILD TURNING MOVEMENT VOLUMES AND OPERATIONAL
PERFORMANCE

H:\23\23773 - Malabar Road PD&E Study\Engineering\Traffic\AutoCAD Figures\23773-Malabar-PD&E-Figures V9.dwg May 12, 2021 - 10:13am - agrarrison Layout Tab: AppT_Vol_PTARa.L

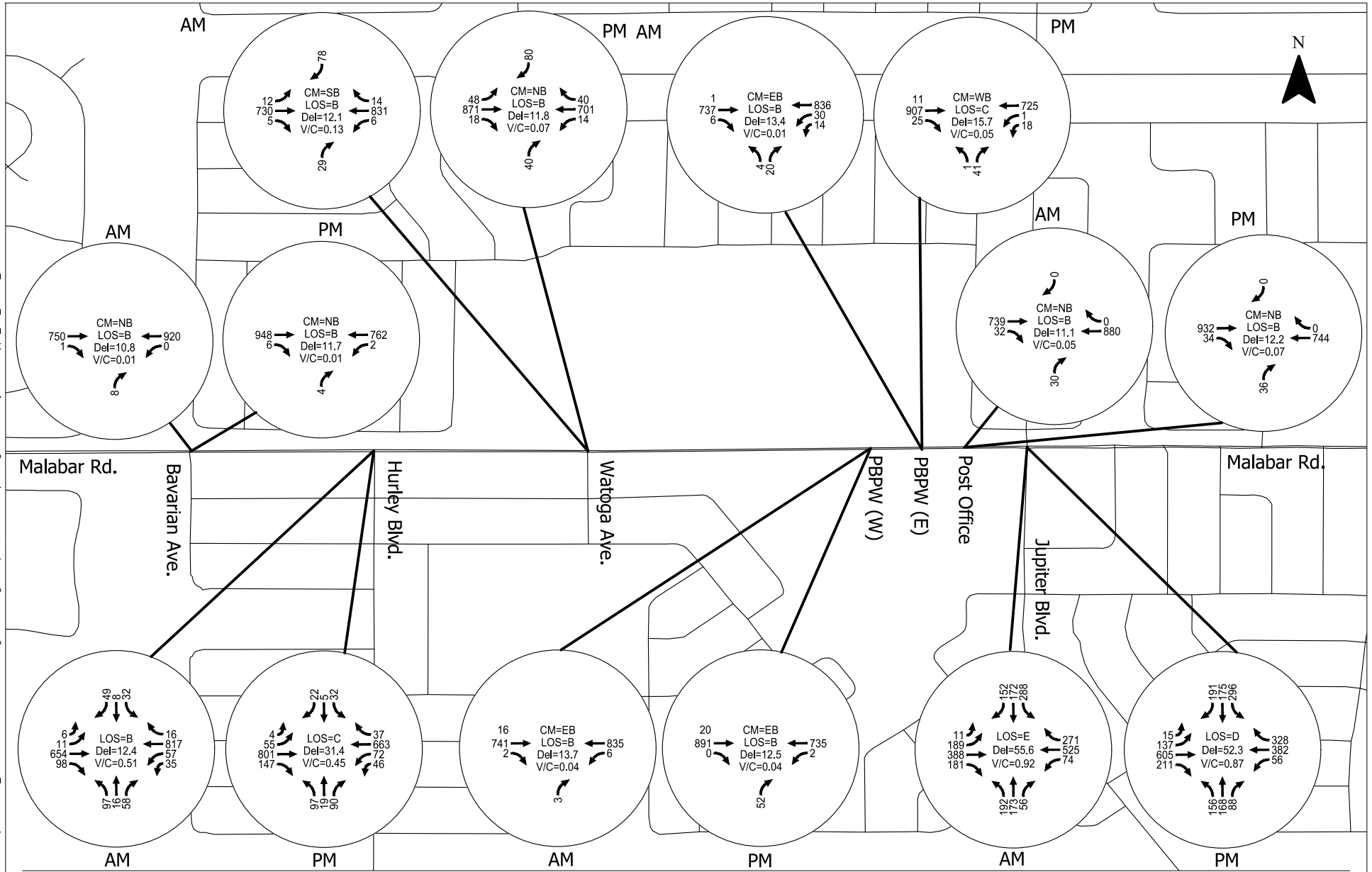


2030 Build Traffic Volumes and Operational Performance

Not to Scale

Figure X_A

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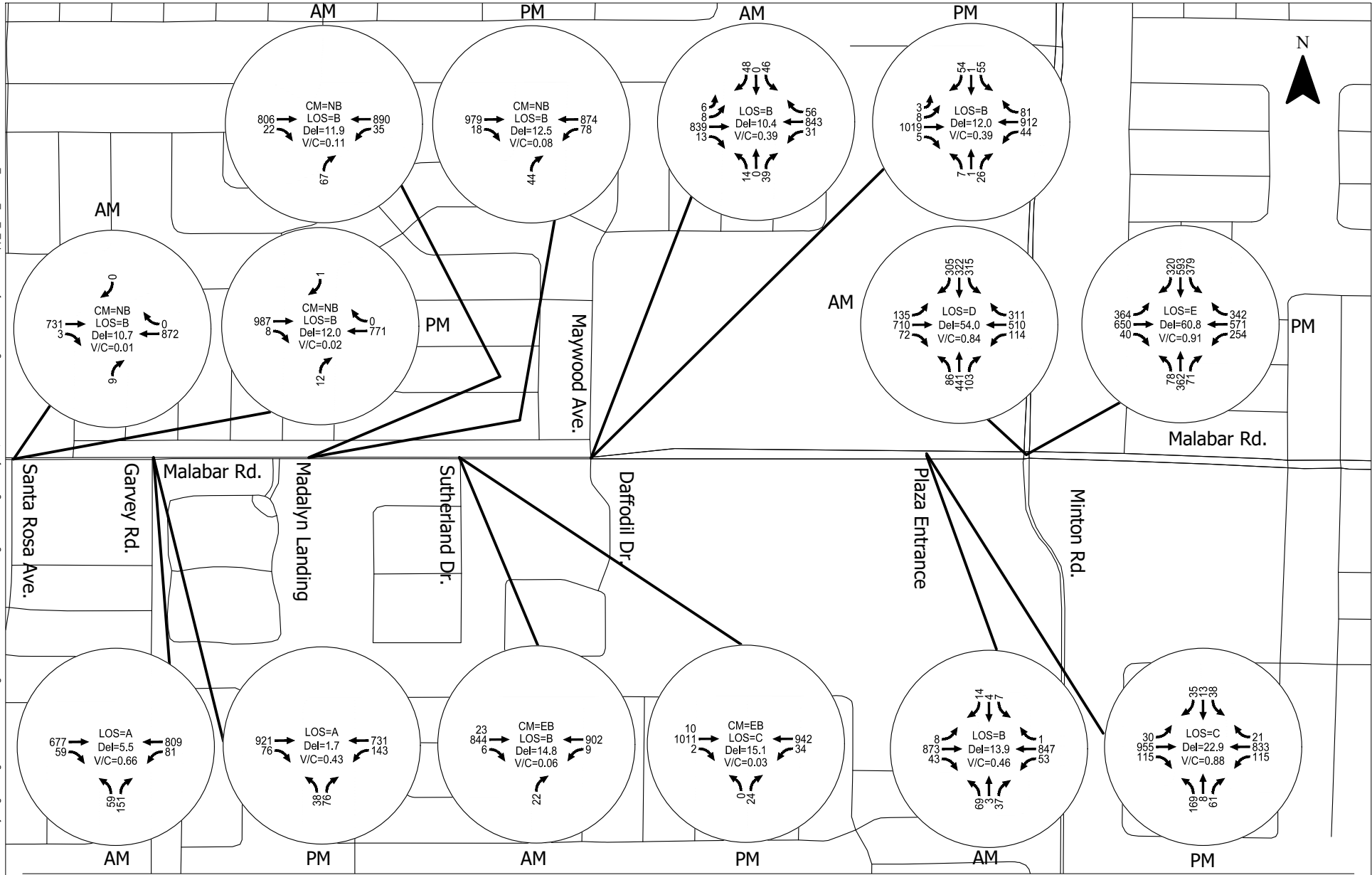


2030 Build Traffic Volumes and Operational Performance

Not to Scale

Figure X_B

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2030 Build Traffic Volumes and Operational Performance

Not to Scale

Figure X_C

APPENDIX U – FUTURE BUILD INTERSECTION OPERATIONS REPORTS

Contained in this Appendix –

- 2030 Build AM Peak Hour Intersection Measures of Effectiveness (MOE) Tables
- 2030 Build AM Peak Hour Intersection Operations Synchro Reports
- 2030 Build PM Peak Hour Intersection Measures of Effectiveness (MOE) Tables
- 2030 Build PM Peak Hour Intersection Operations Synchro Reports
- 2050 Build AM Peak Hour Intersection Measures of Effectiveness (MOE) Tables
- 2050 Build AM Peak Hour Intersection Operations Synchro Reports
- 2050 Build PM Peak Hour Intersection Measures of Effectiveness (MOE) Tables
- 2050 Build PM Peak Hour Intersection Operations Synchro Reports

2030 AM BUILD MOE TABLES

2030 AM Build Unsignalized Network												
Malabar Rd. & Snapdragon Dr.											Intersection ID: 2	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	-	-	-	0.01	-	-	-	-	-	-	-	0.18
HCM Control Delay (s)	-	-	-	10.6	-	-	-	-	-	-	-	14.0
HCM Lane LOS	-	-	-	B	-	-	-	-	-	-	-	B
HCM 95th Percentile Queue (veh/In)	-	-	-	0.0	-	-	-	-	-	-	-	0.6
Malabar Rd. & Championship Cir.											Intersection ID: 3	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	-	-	-	0.01	-	-	-	-	-	-	-	0.03
HCM Control Delay (s)	-	-	-	10.6	-	-	-	-	-	-	-	18.1
HCM Lane LOS	-	-	-	B	-	-	-	-	-	-	-	C
HCM 95th Percentile Queue (veh/In)	-	-	-	0.0	-	-	-	-	-	-	-	0.1
Malabar Rd. & Bavarian Ave.											Intersection ID: 5	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	-	0.01	-	-	-	-	-	-	-	-	-	-
HCM Control Delay (s)	-	10.8	-	-	-	-	0.0	-	-	-	-	-
HCM Lane LOS	-	B	-	-	-	-	A	-	-	-	-	-
HCM 95th Percentile Queue (veh/In)	-	0.0	-	-	-	-	0.0	-	-	-	-	-
Malabar Rd. & Watoga Ave.											Intersection ID: 19	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	-	0.05	-	0.02	-	-	0.01	-	-	-	-	0.13
HCM Control Delay (s)	-	10.9	-	9.6	-	-	9.1	-	-	-	-	12.1
HCM Lane LOS	-	B	-	A	-	-	A	-	-	-	-	B
HCM 95th Percentile Queue (veh/In)	-	0.1	-	0.0	-	-	0.0	-	-	-	-	0.5
Malabar Rd. & Palm Bay Public Works (W)											Intersection ID: 7	
Movement	NBL	NBT	NBR	EBU	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	-	0.01	-	0.04	-	-	0.01	-	-	-	-	-
HCM Control Delay (s)	-	10.7	-	13.7	-	-	9.2	-	-	-	-	-
HCM Lane LOS	-	B	-	B	-	-	A	-	-	-	-	-
HCM 95th Percentile Queue (veh/In)	-	0.0	-	0.1	-	-	0.0	-	-	-	-	-
Malabar Rd. & Palm Bay Public Works (E)											Intersection ID: 8	
Movement	NBL	NBT	NBR	EBU	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	-	0.05	-	0.00	-	-	0.07	-	-	-	-	-
HCM Control Delay (s)	-	12.1	-	13.4	-	-	10.7	-	-	-	-	-
HCM Lane LOS	-	B	-	B	-	-	B	-	-	-	-	-
HCM 95th Percentile Queue (veh/In)	-	0.1	-	0.0	-	-	0.2	-	-	-	-	-
Malabar Rd. & Post Office											Intersection ID: 9	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	-	0.05	-	-	-	-	-	-	-	-	-	-
HCM Control Delay (s)	-	11.1	-	-	-	-	-	-	-	-	-	0.0
HCM Lane LOS	-	B	-	-	-	-	-	-	-	-	-	A
HCM 95th Percentile Queue (veh/In)	-	0.2	-	-	-	-	-	-	-	-	-	-
Malabar Rd. & Santa Rosa Ave.											Intersection ID: 11	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	-	0.01	-	-	-	-	-	-	-	-	-	-
HCM Control Delay (s)	-	10.7	-	-	-	-	-	-	-	-	-	0.0
HCM Lane LOS	-	B	-	-	-	-	-	-	-	-	-	A
HCM 95th Percentile Queue (veh/In)	-	0.0	-	-	-	-	-	-	-	-	-	-
Malabar Rd. & Madalyn Landing											Intersection ID: 13	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	-	0.11	-	-	-	-	0.04	-	-	-	-	-
HCM Control Delay (s)	-	11.9	-	-	-	-	9.6	-	-	-	-	-
HCM Lane LOS	-	B	-	-	-	-	A	-	-	-	-	-
HCM 95th Percentile Queue (veh/In)	-	0.4	-	-	-	-	0.1	-	-	-	-	-
Malabar Rd. & Sutherland Dr.											Intersection ID: 14	
Movement	NBL	NBT	NBR	EBU	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	-	0.04	-	0.06	-	-	0.01	-	-	-	-	-
HCM Control Delay (s)	-	11.4	-	14.8	-	-	9.6	-	-	-	-	-
HCM Lane LOS	-	B	-	B	-	-	A	-	-	-	-	-
HCM 95th Percentile Queue (veh/In)	-	0.1	-	0.2	-	-	0.0	-	-	-	-	-

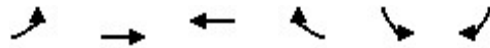
2030 AM Build Signalized Network												
Malabar Rd. & St. Johns Heritage Pkwy.											Intersection ID: 1	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	-	-	-	0.18	0.10	-	-	0.90	0.56	0.54	-	0.86
HCM Lane Group Delay (s)	-	-	-	26.1	3.7	-	-	65.2	44.1	61.3	-	73.3
HCM Lane LOS	-	-	-	C	A	-	-	E	D	E	-	E
HCM 95th Percentile Queue (veh/In)	-	-	-	5.4	1.5	-	-	31.3	14.9	7.6	-	11.6
HCM6 Intersection Ctrl Delay	48.9											
HCM6 Intersection LOS	D											
Malabar Rd. & Wisteria Avenue/Abilene Drive											Intersection ID: 18	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	0.56	0.00	0.34	0.01	0.25	0.25	0.15	0.38	0.38	0.12	0.00	0.00
HCM Lane Group Delay (s)	52.2	0.0	42.4	13.2	16.4	16.5	11.9	1.0	0.9	38.3	0.0	0.0
HCM Lane LOS	D	A	D	B	B	B	B	A	A	D	A	A
HCM 95th Percentile Queue (veh/In)	13.6	0.0	8.7	0.2	7.9	8.1	1.9	0.5	0.5	2.3	0.0	0.0
HCM6 Intersection Ctrl Delay	16.8											
HCM6 Intersection LOS	B											
Malabar Rd. & Krassner Dr./ Bending Branch Ln.											Intersection ID: 4	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	0.69	0.00	0.00	0.02	0.26	0.26	0.17	0.91	0.91	0.36	0.00	0.00
HCM Lane Group Delay (s)	68.5	0.0	0.0	3.6	0.5	0.5	42.1	55.3	54.9	59.7	0.0	0.0
HCM Lane LOS	E	A	A	A	A	A	D	E	D	E	A	A
HCM 95th Percentile Queue (veh/In)	8.5	0.0	0.0	0.1	0.3	0.3	2.3	19.0	19.3	5.6	0.0	0.0
HCM6 Intersection Ctrl Delay	36.0											
HCM6 Intersection LOS	D											
Malabar Rd. & Hurley Blvd.											Intersection ID: 6	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	0.51	0.00	0.00	0.02	0.31	0.31	0.10	0.33	0.33	0.26	0.00	0.00
HCM Lane Group Delay (s)	59.6	0.0	0.0	7.3	0.7	0.7	6.4	9.5	9.5	53.0	0.0	0.0
HCM Lane LOS	E	A	A	A	A	A	A	A	A	D	A	A
HCM 95th Percentile Queue (veh/In)	10.4	0.0	0.0	0.2	0.4	0.4	0.9	8.6	8.9	5.5	0.0	0.0
HCM6 Intersection Ctrl Delay	12.4											
HCM6 Intersection LOS	B											
Malabar Rd. & Jupiter Blvd.											Intersection ID: 10	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	0.92	0.43	0.07	0.59	0.37	0.37	0.19	0.56	0.56	0.84	0.00	0.92
HCM Lane Group Delay (s)	106.0	51.0	46.5	28.8	29.2	29.4	25.6	55.5	55.8	73.4	0.0	82.0
HCM Lane LOS	F	D	D	C	C	C	C	E	E	E	A	F
HCM 95th Percentile Queue (veh/In)	14.6	9.5	1.4	7.1	11.4	11.1	2.8	21.9	21.0	9.7	0.0	19.7
HCM6 Intersection Ctrl Delay	55.6											
HCM6 Intersection LOS	E											
Malabar Rd. & Garvey Rd.											Intersection ID: 12	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	0.55	-	0.66	-	0.24	0.24	0.12	0.26	-	-	-	-
HCM Lane Group Delay (s)	72.2	-	75.1	-	0.1	0.1	0.4	0.2	-	-	-	-
HCM Lane LOS	E	-	E	-	A	A	A	A	-	-	-	-
HCM 95th Percentile Queue (veh/In)	4.2	-	5.0	-	0.1	0.1	0.1	0.2	-	-	-	-
HCM6 Intersection Ctrl Delay	5.5											
HCM6 Intersection LOS	A											
Malabar Rd. & Maywood Ave./Daffodil Dr.											Intersection ID: 15	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	0.22	0.00	0.00	0.02	0.31	0.31	0.06	0.32	0.32	0.39	0.00	0.00
HCM Lane Group Delay (s)	60.7	0.0	0.0	4.5	6.4	6.4	4.2	5.9	5.9	64.8	0.0	0.0
HCM Lane LOS	E	A	A	A	A	A	A	A	A	E	A	A
HCM 95th Percentile Queue (veh/In)	3.6	0.0	0.0	0.1	6.9	7.2	0.3	6.8	7.0	6.6	0.0	0.0
HCM6 Intersection Ctrl Delay	10.4											
HCM6 Intersection LOS	B											
Malabar Rd. & Plaza Entrance											Intersection ID: 16	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	0.01	0.35	0.35	0.01	0.35	0.35	0.17	0.46	0.00	0.08	0.00	0.16
HCM Lane Group Delay (s)	69.1	0.0	67.0	10.4	8.5	8.4	20.8	13.7	6.6	72.1	0.0	74.8
HCM Lane LOS	E	A	E	B	A	A	C	B	A	E	A	E
HCM 95th Percentile Queue (veh/In)	4.8	0.0	0.4	0.2	9.1	9.4	1.8	9.1	0.0	0.5	0.0	0.4
HCM6 Intersection Ctrl Delay	13.9											
HCM6 Intersection LOS	B											
Malabar Rd. & Minton Rd.											Intersection ID: 17	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	0.23	0.78	0.06	0.59	0.79	0.79	0.84	0.50	0.30	0.85	0.43	0.16
HCM Lane Group Delay (s)	35.2	54.4	37.3	74.9	72.5	72.5	97.8	46.4	20.7	49.1	34.4	14.7
HCM Lane LOS	D	D	D	E	E	E	F	D	C	D	C	B
HCM 95th Percentile Queue (veh/In)	4.0	22.6	1.4	5.0	22.9	23.3	9.2	12.9	7.3	13.9	13.6	4.3
HCM6 Intersection Ctrl Delay	54.0											
HCM6 Intersection LOS	D											

2030 BUILD AM PEAK HOUR INTERSECTION OPERATIONS SYNCHRO
REPORTS

HCM 6th Signalized Intersection Summary

1: Malabar Rd. & St. Johns Heritage Pkwy.

05/11/2021



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	137	267	572	541	239	204
Future Volume (veh/h)	137	267	572	541	239	204
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1737	1811	1841	1856	1722	1796
Adj Flow Rate, veh/h	137	267	572	304	239	181
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	11	6	4	3	12	7
Cap, veh/h	743	2714	634	542	439	210
Arrive On Green	0.41	0.79	0.34	0.34	0.14	0.14
Sat Flow, veh/h	1654	3532	1841	1572	3182	1522
Grp Volume(v), veh/h	137	267	572	304	239	181
Grp Sat Flow(s),veh/h/ln	1654	1721	1841	1572	1591	1522
Q Serve(g_s), s	1.2	2.7	44.3	23.6	10.5	17.4
Cycle Q Clear(g_c), s	1.2	2.7	44.3	23.6	10.5	17.4
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	743	2714	634	542	439	210
V/C Ratio(X)	0.18	0.10	0.90	0.56	0.54	0.86
Avail Cap(c_a), veh/h	743	2714	1025	875	753	360
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.0	3.6	46.8	39.9	60.2	63.2
Incr Delay (d2), s/veh	0.1	0.1	18.4	4.2	1.1	10.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	5.4	1.5	31.3	14.9	7.6	11.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	26.1	3.7	65.2	44.1	61.3	73.3
LnGrp LOS	C	A	E	D	E	E
Approach Vol, veh/h		404	876		420	
Approach Delay, s/veh		11.3	57.9		66.5	
Approach LOS		B	E		E	
Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	66.6	57.2		26.2		123.8
Change Period (Y+Rc), s	5.5	* 5.5		5.5		5.5
Max Green Setting (Gmax), s	15.5	* 84		35.5		103.5
Max Q Clear Time (g_c+I1), s	3.2	46.3		19.4		4.7
Green Ext Time (p_c), s	0.3	5.3		1.3		1.9

Intersection Summary

HCM 6th Ctrl Delay	48.9
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection						
Int Delay, s/veh	0.8					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	8	529	1057	36	0	87
Future Vol, veh/h	8	529	1057	36	0	87
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	7	4	0	0	0
Mvmt Flow	8	529	1057	36	0	87

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	1093	0	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	4.1	-	6.9
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	2.2	-	3.3
Pot Cap-1 Maneuver	646	-	486
Stage 1	-	-	0
Stage 2	-	-	0
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	646	-	486
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

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

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	646	-	-	-	486
HCM Lane V/C Ratio	0.012	-	-	-	0.179
HCM Control Delay (s)	10.6	-	-	-	14
HCM Lane LOS	B	-	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.6

HCM 6th TWSC
 3: Malabar Rd. & Championship Cir.

05/11/2021

Intersection						
Int Delay, s/veh	0.1					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	4	525	1090	11	6	3
Future Vol, veh/h	4	525	1090	11	6	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	7	4	0	0	0
Mvmt Flow	4	525	1090	11	6	3

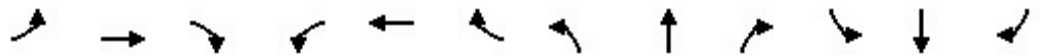
Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	1101	0	-	0	1367 551
Stage 1	-	-	-	-	1096 -
Stage 2	-	-	-	-	271 -
Critical Hdwy	4.1	-	-	-	6.8 6.9
Critical Hdwy Stg 1	-	-	-	-	5.8 -
Critical Hdwy Stg 2	-	-	-	-	5.8 -
Follow-up Hdwy	2.2	-	-	-	3.5 3.3
Pot Cap-1 Maneuver	642	-	-	-	141 483
Stage 1	-	-	-	-	286 -
Stage 2	-	-	-	-	756 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	642	-	-	-	140 483
Mov Cap-2 Maneuver	-	-	-	-	234 -
Stage 1	-	-	-	-	284 -
Stage 2	-	-	-	-	756 -

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	18.1
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	642	-	-	-	283
HCM Lane V/C Ratio	0.006	-	-	-	0.032
HCM Control Delay (s)	10.6	-	-	-	18.1
HCM Lane LOS	B	-	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	0.1

HCM 6th Signalized Intersection Summary
 4: Krassner Dr./ Bending Branch Ln & Malabar Rd.

05/11/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↕		↖	↕			↕			↕	
Traffic Volume (veh/h)	14	617	22	45	803	72	79	2	68	66	1	37
Future Volume (veh/h)	14	617	22	45	803	72	79	2	68	66	1	37
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	1796	1811	1589	1811	1826	1856	1841	1159	1870	1885	1900	1856
Adj Flow Rate, veh/h	14	617	16	45	803	71	79	2	40	66	1	21
Peak Hour 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
Percent Heavy Veh, %	7	6	21	6	5	3	4	50	2	1	0	3
Cap, veh/h	841	2418	63	259	887	78	123	7	45	186	8	48
Arrive On Green	0.90	1.00	1.00	0.06	0.55	0.55	0.14	0.14	0.14	0.14	0.14	0.14
Sat Flow, veh/h	1711	3427	89	1725	3224	285	580	51	311	999	58	331
Grp Volume(v), veh/h	14	310	323	45	432	442	121	0	0	88	0	0
Grp Sat Flow(s),veh/h/ln	1711	1721	1795	1725	1735	1775	942	0	0	1388	0	0
Q Serve(g_s), s	0.0	0.0	0.0	3.0	33.5	33.5	10.2	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	3.0	33.5	33.5	18.8	0.0	0.0	8.6	0.0	0.0
Prop In Lane	1.00		0.05	1.00		0.16	0.65		0.33	0.75		0.24
Lane Grp Cap(c), veh/h	841	1214	1267	259	477	488	175	0	0	242	0	0
V/C Ratio(X)	0.02	0.26	0.26	0.17	0.91	0.91	0.69	0.00	0.00	0.36	0.00	0.00
Avail Cap(c_a), veh/h	841	1214	1267	343	904	925	309	0	0	457	0	0
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	0.97	0.97	0.97	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	3.6	0.0	0.0	41.8	32.0	32.0	62.7	0.0	0.0	58.6	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.5	0.5	0.3	23.3	22.9	5.7	0.0	0.0	1.1	0.0	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(95%),veh/ln	0.1	0.3	0.3	2.3	19.0	19.3	8.5	0.0	0.0	5.6	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	3.6	0.5	0.5	42.1	55.3	54.9	68.5	0.0	0.0	59.7	0.0	0.0
LnGrp LOS	A	A	A	D	E	D	E	A	A	E	A	A
Approach Vol, veh/h		647			919			121				88
Approach Delay, s/veh		0.5			54.4			68.5				59.7
Approach LOS		A			D			E				E
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.7	112.6		27.7	74.2	48.1		27.7				
Change Period (Y+Rc), s	5.4	6.8		* 6.1	6.8	* 6.8		6.1				
Max Green Setting (Gmax), s	11.6	76.2		* 44	9.0	* 78		43.9				
Max Q Clear Time (g_c+I1), s	5.0	2.0		10.6	2.0	35.5		20.8				
Green Ext Time (p_c), s	0.0	3.8		0.6	0.0	5.8		0.8				

Intersection Summary

HCM 6th Ctrl Delay	36.0
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection						
Int Delay, s/veh	0.1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑		↖	↑↑		↗
Traffic Vol, veh/h	750	1	0	920	0	8
Future Vol, veh/h	750	1	0	920	0	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	200	-	-	0
Veh in Median Storage, #	0	-	-	0	1	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	5	0	0	4	17	0
Mvmt Flow	750	1	0	920	0	8

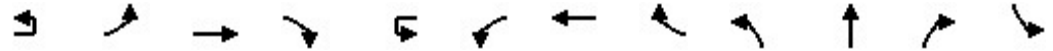
Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	751	0	- 376
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	-	4.1	-	- 6.9
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	-	2.2	-	- 3.3
Pot Cap-1 Maneuver	-	-	868	-	0 627
Stage 1	-	-	-	-	0 -
Stage 2	-	-	-	-	0 -
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	868	-	- 627
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	10.8
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	627	-	-	868	-
HCM Lane V/C Ratio	0.013	-	-	-	-
HCM Control Delay (s)	10.8	-	-	0	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

HCM 6th Signalized Intersection Summary
6: Hurley Blvd. & Malabar Rd.

05/11/2021



Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations		↔	↕			↔	↕			↕		
Traffic Volume (veh/h)	6	11	654	98	35	57	817	16	97	16	58	32
Future Volume (veh/h)	6	11	654	98	35	57	817	16	97	16	58	32
Initial Q (Qb), veh		0	0	0		0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		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
Work Zone On Approach			No				No			No		
Adj Sat Flow, veh/h/ln		1900	1841	1856		1856	1826	1900	1885	1900	1900	1900
Adj Flow Rate, veh/h		11	654	98		57	817	16	97	16	58	32
Peak Hour Factor		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %		0	4	3		3	5	0	1	0	0	0
Cap, veh/h		478	2084	312		583	2440	48	196	38	101	128
Arrive On Green		0.02	1.00	1.00		0.03	0.70	0.70	0.20	0.20	0.20	0.20
Sat Flow, veh/h		1810	3051	457		1767	3480	68	808	194	514	485
Grp Volume(v), veh/h		11	375	377		57	407	426	171	0	0	89
Grp Sat Flow(s),veh/h/ln		1810	1749	1759		1767	1735	1814	1516	0	0	1557
Q Serve(g_s), s		0.3	0.0	0.0		1.4	13.8	13.8	8.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s		0.3	0.0	0.0		1.4	13.8	13.8	14.9	0.0	0.0	6.9
Prop In Lane		1.00		0.26		1.00		0.04	0.57		0.34	0.36
Lane Grp Cap(c), veh/h		478	1195	1201		583	1216	1271	336	0	0	339
V/C Ratio(X)		0.02	0.31	0.31		0.10	0.33	0.33	0.51	0.00	0.00	0.26
Avail Cap(c_a), veh/h		558	1195	1201		736	1216	1271	336	0	0	339
HCM Platoon Ratio		2.00	2.00	2.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)		1.00	1.00	1.00		1.00	1.00	1.00	1.00	0.00	0.00	1.00
Uniform Delay (d), s/veh		7.3	0.0	0.0		6.3	8.8	8.8	54.2	0.0	0.0	51.1
Incr Delay (d2), s/veh		0.0	0.7	0.7		0.1	0.7	0.7	5.4	0.0	0.0	1.9
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
%ile BackOfQ(95%),veh/ln		0.2	0.4	0.4		0.9	8.6	8.9	10.4	0.0	0.0	5.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh		7.3	0.7	0.7		6.4	9.5	9.5	59.6	0.0	0.0	53.0
LnGrp LOS		A	A	A		A	A	A	E	A	A	D
Approach Vol, veh/h			763				890			171		
Approach Delay, s/veh			0.8				9.3			59.6		
Approach LOS			A				A			E		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.3	109.7		34.0	9.0	107.0		34.0				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	8.5	98.5		29.5	17.5	89.5		29.5				
Max Q Clear Time (g_c+I1), s	2.3	15.8		16.9	3.4	2.0		8.9				
Green Ext Time (p_c), s	0.0	5.4		0.7	0.1	4.8		0.4				

Intersection Summary

HCM 6th Ctrl Delay	12.4
HCM 6th LOS	B

Notes

User approved ignoring U-Turning movement.

HCM 6th Signalized Intersection Summary
 6: Hurley Blvd. & Malabar Rd.

05/11/2021



Movement	SBT	SBR
Lane Configurations	↕	
Traffic Volume (veh/h)	8	49
Future Volume (veh/h)	8	49
Initial Q (Qb), veh	0	0
Ped-Bike Adj(A_pbT)		1.00
Parking Bus, Adj	1.00	1.00
Work Zone On Approach	No	
Adj Sat Flow, veh/h/ln	1900	1900
Adj Flow Rate, veh/h	8	49
Peak Hour Factor	1.00	1.00
Percent Heavy Veh, %	0	0
Cap, veh/h	42	169
Arrive On Green	0.20	0.20
Sat Flow, veh/h	215	857
Grp Volume(v), veh/h	0	0
Grp Sat Flow(s),veh/h/ln	0	0
Q Serve(g_s), s	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0
Prop In Lane		0.55
Lane Grp Cap(c), veh/h	0	0
V/C Ratio(X)	0.00	0.00
Avail Cap(c_a), veh/h	0	0
HCM Platoon Ratio	1.00	1.00
Upstream Filter(l)	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	0.0
Unsig. Movement Delay, s/veh		
LnGrp Delay(d),s/veh	0.0	0.0
LnGrp LOS	A	A
Approach Vol, veh/h	89	
Approach Delay, s/veh	53.0	
Approach LOS	D	
Timer - Assigned Phs		

Intersection							
Int Delay, s/veh	0.2						
Movement	EBU	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	⇄	⇄		⇄	⇄		⇄
Traffic Vol, veh/h	16	741	2	6	835	0	3
Future Vol, veh/h	16	741	2	6	835	0	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	-	None	-	None	-	None
Storage Length	200	-	-	200	-	-	0
Veh in Median Storage, #	-	0	-	-	0	1	-
Grade, %	-	0	-	-	0	0	-
Peak Hour Factor	92	100	100	100	100	100	100
Heavy Vehicles, %	0	3	0	0	5	0	0
Mvmt Flow	17	741	2	6	835	0	3

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	835	0	0	743	0	372
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	6.4	-	-	4.1	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	2.5	-	-	2.2	-	3.3
Pot Cap-1 Maneuver	430	-	-	873	0	631
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	430	-	-	873	-	631
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0.3	0.1	10.7
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBU	EBT	EBR	WBL	WBT
Capacity (veh/h)	631	430	-	-	873	-
HCM Lane V/C Ratio	0.005	0.04	-	-	0.007	-
HCM Control Delay (s)	10.7	13.7	-	-	9.2	-
HCM Lane LOS	B	B	-	-	A	-
HCM 95th %tile Q(veh)	0	0.1	-	-	0	-

Intersection								
Int Delay, s/veh	0.4							
Movement	EBU	EBT	EBR	WBU	WBL	WBT	NBL	NBR
Lane Configurations	↔	↕↔			↕	↕↕	↕	
Traffic Vol, veh/h	1	737	6	14	30	836	4	20
Future Vol, veh/h	1	737	6	14	30	836	4	20
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	None
Storage Length	200	-	-	-	175	-	0	-
Veh in Median Storage, #	-	0	-	-	-	0	1	-
Grade, %	-	0	-	-	-	0	0	-
Peak Hour Factor	92	100	100	92	100	100	100	100
Heavy Vehicles, %	0	3	0	0	0	5	0	0
Mvmt Flow	1	737	6	15	30	836	4	20

Major/Minor	Major1		Major2		Minor1			
Conflicting Flow All	836	0	0	743	743	0	1250	372
Stage 1	-	-	-	-	-	-	742	-
Stage 2	-	-	-	-	-	-	508	-
Critical Hdwy	6.4	-	-	6.4	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.8	-
Follow-up Hdwy	2.5	-	-	2.5	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	429	-	-	492	873	-	168	631
Stage 1	-	-	-	-	-	-	437	-
Stage 2	-	-	-	-	-	-	575	-
Platoon blocked, %	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	429	-	-	682	682	-	157	631
Mov Cap-2 Maneuver	-	-	-	-	-	-	290	-
Stage 1	-	-	-	-	-	-	436	-
Stage 2	-	-	-	-	-	-	537	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.5	12.1
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBU	EBT	EBR	WBL	WBT
Capacity (veh/h)	528	429	-	-	682	-
HCM Lane V/C Ratio	0.045	0.003	-	-	0.066	-
HCM Control Delay (s)	12.1	13.4	-	-	10.7	-
HCM Lane LOS	B	B	-	-	B	-
HCM 95th %tile Q(veh)	0.1	0	-	-	0.2	-

Intersection												
Int Delay, s/veh	0.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑				↑			↑
Traffic Vol, veh/h	0	739	32	0	880	0	0	0	30	0	0	0
Future Vol, veh/h	0	739	32	0	880	0	0	0	30	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	4	0	0	5	0	0	0	0	0	0	0
Mvmt Flow	0	739	32	0	880	0	0	0	30	0	0	0

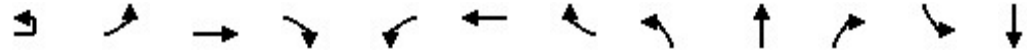
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	-	-	0	-	-	386	-	-	440
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-	-	-	6.9	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-	-	-	3.3	-	-	3.3
Pot Cap-1 Maneuver	0	-	-	0	-	-	0	0	618	0	0	570
Stage 1	0	-	-	0	-	-	0	0	-	0	0	-
Stage 2	0	-	-	0	-	-	0	0	-	0	0	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	-	-	-	-	-	618	-	-	570
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0			11.1			0		
HCM LOS							B			A		

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT	WBR	SBLn1
Capacity (veh/h)	618	-	-	-	-	-
HCM Lane V/C Ratio	0.049	-	-	-	-	-
HCM Control Delay (s)	11.1	-	-	-	-	0
HCM Lane LOS	B	-	-	-	-	A
HCM 95th %tile Q(veh)	0.2	-	-	-	-	-

HCM 6th Signalized Intersection Summary
 10: Jupiter Blvd. & Malabar Rd.

05/11/2021



Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (veh/h)	11	189	388	181	74	525	271	192	173	56	288	172
Future Volume (veh/h)	11	189	388	181	74	525	271	192	173	56	288	172
Initial Q (Qb), veh		0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		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
Work Zone On Approach			No		No			No				No
Adj Sat Flow, veh/h/ln		1885	1870	1737	1811	1841	1856	1826	1841	1870	1870	1826
Adj Flow Rate, veh/h		189	388	175	74	525	242	192	173	26	288	172
Peak Hour Factor		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %		1	2	11	6	4	3	5	4	2	2	5
Cap, veh/h		320	1057	470	386	942	433	209	405	349	344	187
Arrive On Green		0.08	0.44	0.44	0.01	0.13	0.13	0.12	0.22	0.22	0.10	0.20
Sat Flow, veh/h		1795	2392	1064	1725	2328	1069	1739	1841	1585	3456	938
Grp Volume(v), veh/h		189	287	276	74	394	373	192	173	26	288	0
Grp Sat Flow(s),veh/h/ln		1795	1777	1679	1725	1749	1648	1739	1841	1585	1728	0
Q Serve(g_s), s		9.1	16.1	16.5	3.7	31.6	31.8	16.4	12.1	2.0	12.3	0.0
Cycle Q Clear(g_c), s		9.1	16.1	16.5	3.7	31.6	31.8	16.4	12.1	2.0	12.3	0.0
Prop In Lane		1.00		0.63	1.00		0.65	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h		320	786	742	386	708	667	209	405	349	344	0
V/C Ratio(X)		0.59	0.37	0.37	0.19	0.56	0.56	0.92	0.43	0.07	0.84	0.00
Avail Cap(c_a), veh/h		388	786	742	390	708	667	209	405	349	530	0
HCM Platoon Ratio		1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh		27.1	27.8	27.9	25.4	52.4	52.5	65.3	50.3	46.4	66.3	0.0
Incr Delay (d2), s/veh		1.7	1.3	1.4	0.2	3.1	3.4	40.7	0.7	0.1	7.0	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
%ile BackOfQ(95%),veh/ln		7.1	11.4	11.1	2.8	21.9	21.0	14.6	9.5	1.4	9.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh		28.8	29.2	29.4	25.6	55.5	55.8	106.0	51.0	46.5	73.4	0.0
LnGrp LOS		C	C	C	C	E	E	F	D	D	E	A
Approach Vol, veh/h			752			841			391			598
Approach Delay, s/veh			29.1			53.0			77.7			77.8
Approach LOS			C			D			E			E
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	18.3	68.7	21.9	41.0	12.7	74.3	25.0	38.0				
Change Period (Y+Rc), s	7.0	8.0	7.0	8.0	7.0	8.0	7.0	8.0				
Max Green Setting (Gmax), s	17.0	49.0	23.0	31.0	6.0	60.0	18.0	36.0				
Max Q Clear Time (g_c+I1), s	11.1	33.8	14.3	14.1	5.7	18.5	18.4	29.0				
Green Ext Time (p_c), s	0.2	4.0	0.6	0.8	0.0	3.4	0.0	1.0				

Intersection Summary

HCM 6th Ctrl Delay	55.6
HCM 6th LOS	E

Notes

User approved ignoring U-Turning movement.

HCM 6th Signalized Intersection Summary
 10: Jupiter Blvd. & Malabar Rd.

05/11/2021

Movement	SBR
Lane Configurations	
Traffic Volume (veh/h)	152
Future Volume (veh/h)	152
Initial Q (Qb), veh	0
Ped-Bike Adj(A_pbT)	1.00
Parking Bus, Adj	1.00
Work Zone On Approach	
Adj Sat Flow, veh/h/ln	1796
Adj Flow Rate, veh/h	138
Peak Hour Factor	1.00
Percent Heavy Veh, %	7
Cap, veh/h	150
Arrive On Green	0.20
Sat Flow, veh/h	753
Grp Volume(v), veh/h	310
Grp Sat Flow(s),veh/h/ln	1690
Q Serve(g_s), s	27.0
Cycle Q Clear(g_c), s	27.0
Prop In Lane	0.45
Lane Grp Cap(c), veh/h	338
V/C Ratio(X)	0.92
Avail Cap(c_a), veh/h	406
HCM Platoon Ratio	1.00
Upstream Filter(l)	1.00
Uniform Delay (d), s/veh	58.8
Incr Delay (d2), s/veh	23.1
Initial Q Delay(d3),s/veh	0.0
%ile BackOfQ(95%),veh/ln	19.7
Unsig. Movement Delay, s/veh	
LnGrp Delay(d),s/veh	82.0
LnGrp LOS	F
Approach Vol, veh/h	
Approach Delay, s/veh	
Approach LOS	
Timer - Assigned Phs	

Intersection												
Int Delay, s/veh	0.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑				↑			↑
Traffic Vol, veh/h	0	731	3	0	872	0	0	0	9	0	0	0
Future Vol, veh/h	0	731	3	0	872	0	0	0	9	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	2	0	0	3	0	0	0	0	0	0	0
Mvmt Flow	0	731	3	0	872	0	0	0	9	0	0	0

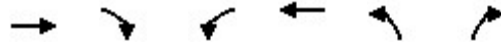
Major/Minor	Major1		Major2		Minor1		Minor2					
Conflicting Flow All	-	0	0	-	-	0	-	-	367	-	-	436
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-	-	-	6.9	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-	-	-	3.3	-	-	3.3
Pot Cap-1 Maneuver	0	-	-	0	-	-	0	0	636	0	0	574
Stage 1	0	-	-	0	-	-	0	0	-	0	0	-
Stage 2	0	-	-	0	-	-	0	0	-	0	0	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	-	-	-	-	-	636	-	-	574
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT	WBR	SBLn1
Capacity (veh/h)	636	-	-	-	-	-
HCM Lane V/C Ratio	0.014	-	-	-	-	-
HCM Control Delay (s)	10.7	-	-	-	-	0
HCM Lane LOS	B	-	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	-	-

HCM 6th Signalized Intersection Summary
 12: Garvey Rd. & Malabar Rd.

05/11/2021



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑		↙	↑↑	↙	↗
Traffic Volume (veh/h)	677	59	81	809	59	151
Future Volume (veh/h)	677	59	81	809	59	151
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1826	1870	1870	1693	1870
Adj Flow Rate, veh/h	677	55	81	809	59	69
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	5	2	2	14	2
Cap, veh/h	2863	232	671	3057	107	105
Arrive On Green	1.00	1.00	1.00	1.00	0.07	0.07
Sat Flow, veh/h	3422	270	724	3647	1612	1585
Grp Volume(v), veh/h	361	371	81	809	59	69
Grp Sat Flow(s),veh/h/ln	1777	1822	724	1777	1612	1585
Q Serve(g_s), s	0.0	0.0	0.0	0.0	5.3	6.4
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.0	5.3	6.4
Prop In Lane		0.15	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1529	1567	671	3057	107	105
V/C Ratio(X)	0.24	0.24	0.12	0.26	0.55	0.66
Avail Cap(c_a), veh/h	1529	1567	671	3057	510	502
HCM Platoon Ratio	2.00	2.00	2.00	2.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	0.0	67.9	68.4
Incr Delay (d2), s/veh	0.1	0.1	0.4	0.2	4.4	6.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.1	0.1	0.1	0.2	4.2	5.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	0.1	0.1	0.4	0.2	72.2	75.1
LnGrp LOS	A	A	A	A	E	E
Approach Vol, veh/h	732			890	128	
Approach Delay, s/veh	0.1			0.2	73.8	
Approach LOS	A			A	E	
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		134.5		15.5		134.5
Change Period (Y+Rc), s		5.5		5.5		5.5
Max Green Setting (Gmax), s		91.5		47.5		91.5
Max Q Clear Time (g_c+I1), s		2.0		8.4		2.0
Green Ext Time (p_c), s		7.0		0.4		4.6
Intersection Summary						
HCM 6th Ctrl Delay			5.5			
HCM 6th LOS			A			
Notes						
User approved ignoring U-Turning movement.						

HCM 6th TWSC
 13: Madalyn Landing & Malabar Rd.

05/11/2021

Intersection						
Int Delay, s/veh	0.6					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑		↖	↑↑		↗
Traffic Vol, veh/h	806	22	35	890	0	67
Future Vol, veh/h	806	22	35	890	0	67
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	275	-	-	-
Veh in Median Storage, #	0	-	-	0	1	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	2	4	0	3	0	2
Mvmt Flow	806	22	35	890	0	67

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	828	0	414
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	-	4.1	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	-	2.2	-	3.32
Pot Cap-1 Maneuver	-	-	812	-	587
Stage 1	-	-	-	0	-
Stage 2	-	-	-	0	-
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	812	-	587
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.4	11.9
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	587	-	-	812	-
HCM Lane V/C Ratio	0.114	-	-	0.043	-
HCM Control Delay (s)	11.9	-	-	9.6	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0.4	-	-	0.1	-

Intersection							
Int Delay, s/veh	0.4						
Movement	EBU	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	⇄	⇄		⇄	⇄		⇄
Traffic Vol, veh/h	23	844	6	9	902	0	22
Future Vol, veh/h	23	844	6	9	902	0	22
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	-	None	-	None	-	None
Storage Length	150	-	-	375	-	-	0
Veh in Median Storage, #	-	0	-	-	0	1	-
Grade, %	-	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100	100
Heavy Vehicles, %	0	2	0	0	2	0	0
Mvmt Flow	23	844	6	9	902	0	22

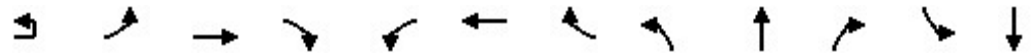
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	902	0	0	850	0	425
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	6.4	-	-	4.1	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	2.5	-	-	2.2	-	3.3
Pot Cap-1 Maneuver	390	-	-	797	0	583
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	390	-	-	797	-	583
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0.4	0.1	11.4
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBU	EBT	EBR	WBL	WBT
Capacity (veh/h)	583	390	-	-	797	-
HCM Lane V/C Ratio	0.038	0.059	-	-	0.011	-
HCM Control Delay (s)	11.4	14.8	-	-	9.6	-
HCM Lane LOS	B	B	-	-	A	-
HCM 95th %tile Q(veh)	0.1	0.2	-	-	0	-

HCM 6th Signalized Intersection Summary
 15: Maywood Ave./Daffodil Dr. & Malabar Rd.

05/11/2021



Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations		↔	↕		↔	↕			↕			↕
Traffic Volume (veh/h)	6	8	839	13	31	843	56	14	0	39	46	0
Future Volume (veh/h)	6	8	839	13	31	843	56	14	0	39	46	0
Initial Q (Qb), veh		0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		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
Work Zone On Approach			No			No			No			No
Adj Sat Flow, veh/h/ln		1530	1885	1781	1900	1870	1826	1796	1900	1900	1900	1900
Adj Flow Rate, veh/h		8	839	13	31	843	56	14	0	39	46	0
Peak Hour Factor		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %		25	1	8	0	2	5	7	0	0	0	0
Cap, veh/h		414	2729	42	540	2606	173	70	16	155	123	12
Arrive On Green		0.01	0.76	0.76	0.02	0.77	0.77	0.13	0.00	0.13	0.13	0.00
Sat Flow, veh/h		1457	3610	56	1810	3382	225	308	120	1194	673	91
Grp Volume(v), veh/h		8	416	436	31	443	456	53	0	0	94	0
Grp Sat Flow(s),veh/h/ln		1457	1791	1875	1810	1777	1830	1622	0	0	1561	0
Q Serve(g_s), s		0.2	11.1	11.1	0.6	11.4	11.4	0.0	0.0	0.0	3.6	0.0
Cycle Q Clear(g_c), s		0.2	11.1	11.1	0.6	11.4	11.4	4.3	0.0	0.0	7.8	0.0
Prop In Lane		1.00		0.03	1.00		0.12	0.26		0.74	0.49	
Lane Grp Cap(c), veh/h		414	1354	1417	540	1369	1410	241	0	0	239	0
V/C Ratio(X)		0.02	0.31	0.31	0.06	0.32	0.32	0.22	0.00	0.00	0.39	0.00
Avail Cap(c_a), veh/h		492	1354	1417	635	1369	1410	241	0	0	239	0
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
Upstream Filter(l)		1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh		4.4	5.8	5.8	4.1	5.3	5.3	58.6	0.0	0.0	60.0	0.0
Incr Delay (d2), s/veh		0.0	0.6	0.6	0.0	0.6	0.6	2.1	0.0	0.0	4.8	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
%ile BackOfQ(95%),veh/ln		0.1	6.9	7.2	0.3	6.8	7.0	3.6	0.0	0.0	6.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh		4.5	6.4	6.4	4.2	5.9	5.9	60.7	0.0	0.0	64.8	0.0
LnGrp LOS		A	A	A	A	A	A	E	A	A	E	A
Approach Vol, veh/h			860			930			53			94
Approach Delay, s/veh			6.4			5.8			60.7			64.8
Approach LOS			A			A			E			E
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.9	120.1		24.0	8.1	117.9		24.0				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	9.5	107.5		19.5	11.5	105.5		19.5				
Max Q Clear Time (g_c+I1), s	2.2	13.4		6.3	2.6	13.1		9.8				
Green Ext Time (p_c), s	0.0	6.1		0.2	0.0	5.6		0.3				

Intersection Summary

HCM 6th Ctrl Delay	10.4
HCM 6th LOS	B

Notes

User approved ignoring U-Turning movement.

HCM 6th Signalized Intersection Summary
 15: Maywood Ave./Daffodil Dr. & Malabar Rd.

05/11/2021

Movement	SBR
Lane Configurations	
Traffic Volume (veh/h)	48
Future Volume (veh/h)	48
Initial Q (Qb), veh	0
Ped-Bike Adj(A_pbT)	1.00
Parking Bus, Adj	1.00
Work Zone On Approach	
Adj Sat Flow, veh/h/ln	1841
Adj Flow Rate, veh/h	48
Peak Hour Factor	1.00
Percent Heavy Veh, %	4
Cap, veh/h	104
Arrive On Green	0.13
Sat Flow, veh/h	797
Grp Volume(v), veh/h	0
Grp Sat Flow(s),veh/h/ln	0
Q Serve(g_s), s	0.0
Cycle Q Clear(g_c), s	0.0
Prop In Lane	0.51
Lane Grp Cap(c), veh/h	0
V/C Ratio(X)	0.00
Avail Cap(c_a), veh/h	0
HCM Platoon Ratio	1.00
Upstream Filter(l)	0.00
Uniform Delay (d), s/veh	0.0
Incr Delay (d2), s/veh	0.0
Initial Q Delay(d3),s/veh	0.0
%ile BackOfQ(95%),veh/ln	0.0
Unsig. Movement Delay, s/veh	
LnGrp Delay(d),s/veh	0.0
LnGrp LOS	A
Approach Vol, veh/h	
Approach Delay, s/veh	
Approach LOS	
Timer - Assigned Phs	

HCM 6th Signalized Intersection Summary

16: Plaza Entrance & Malabar Rd.

05/11/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	8	873	43	53	847	1	69	3	37	7	4	14
Future Volume (veh/h)	8	873	43	53	847	1	69	3	37	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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		No		No
Adj Sat Flow, veh/h/ln	1900	1870	1900	1900	1856	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	8	873	42	53	847	1	69	3	3	7	4	1
Peak Hour 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
Percent Heavy Veh, %	0	2	0	0	3	0	0	0	0	0	0	0
Cap, veh/h	718	2494	120	318	1857	848	155	51	51	85	26	6
Arrive On Green	0.22	0.72	0.72	0.03	0.70	0.70	0.05	0.06	0.06	0.01	0.02	0.02
Sat Flow, veh/h	1810	3451	166	1810	3526	1610	1810	872	872	1810	1467	367
Grp Volume(v), veh/h	8	449	466	53	847	1	69	0	6	7	0	5
Grp Sat Flow(s),veh/h/ln	1810	1777	1840	1810	1763	1610	1810	0	1743	1810	0	1834
Q Serve(g_s), s	0.0	14.1	14.1	2.3	15.9	0.0	5.5	0.0	0.5	0.6	0.0	0.4
Cycle Q Clear(g_c), s	0.0	14.1	14.1	2.3	15.9	0.0	5.5	0.0	0.5	0.6	0.0	0.4
Prop In Lane	1.00		0.09	1.00		1.00	1.00		0.50	1.00		0.20
Lane Grp Cap(c), veh/h	718	1284	1330	318	1857	848	155	0	101	85	0	32
V/C Ratio(X)	0.01	0.35	0.35	0.17	0.46	0.00	0.44	0.00	0.06	0.08	0.00	0.16
Avail Cap(c_a), veh/h	718	1284	1330	380	1857	848	178	0	360	146	0	342
HCM Platoon Ratio	1.00	1.00	1.00	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	0.90	0.90	0.90	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	10.4	7.7	7.7	20.6	13.0	6.6	67.1	0.0	66.8	71.7	0.0	72.6
Incr Delay (d2), s/veh	0.0	0.8	0.7	0.2	0.7	0.0	2.0	0.0	0.2	0.4	0.0	2.2
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(95%),veh/lr	0.2	9.1	9.4	1.8	9.1	0.0	4.8	0.0	0.4	0.5	0.0	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	10.4	8.5	8.4	20.8	13.7	6.6	69.1	0.0	67.0	72.1	0.0	74.8
LnGrp LOS	B	A	A	C	B	A	E	A	E	E	A	E
Approach Vol, veh/h		923			901			75				12
Approach Delay, s/veh		8.5			14.1			68.9				73.2
Approach LOS		A			B			E				E
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	40.3	86.0	8.0	15.7	10.8	115.4	14.1	9.6				
Change Period (Y+Rc), s	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0				
Max Green Setting (Gmax), s	60.0	79.0	6.0	31.0	9.0	76.0	9.0	28.0				
Max Q Clear Time (g_c+I), s	12.0	17.9	2.6	2.5	4.3	16.1	7.5	2.4				
Green Ext Time (p_c), s	0.0	7.1	0.0	0.0	0.0	6.9	0.0	0.0				
Intersection Summary												
HCM 6th Ctrl Delay												13.9
HCM 6th LOS												B

HCM 6th Signalized Intersection Summary

17: Minton Rd. & Malabar Rd.

05/11/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔	↕↕		↔	↕↕	↔	↔	↕	↔	↔	↔	↕
Traffic Volume (veh/h)	135	710	72	114	510	311	86	441	103	315	322	305
Future Volume (veh/h)	135	710	72	114	510	311	86	441	103	315	322	305
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	1870	1885	1870	1870	1856	1900	1900	1885	1900	1900	1870	1826
Adj Flow Rate, veh/h	135	710	67	114	510	138	86	441	30	315	322	102
Peak Hour 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
Percent Heavy Veh, %	2	1	2	2	3	0	0	1	0	0	2	5
Cap, veh/h	230	895	84	136	1011	462	378	569	486	369	748	619
Arrive On Green	0.02	0.09	0.09	0.08	0.29	0.29	0.03	0.30	0.30	0.13	0.40	0.40
Sat Flow, veh/h	3456	3308	312	1781	3526	1610	1810	1885	1610	1810	1870	1547
Grp Volume(v), veh/h	135	384	393	114	510	138	86	441	30	315	322	102
Grp Sat Flow(s),veh/h/ln	1728	1791	1829	1781	1763	1610	1810	1885	1610	1810	1870	1547
Q Serve(g_s), s	5.8	31.5	31.6	9.5	18.1	6.8	5.0	32.0	2.0	17.5	18.7	4.4
Cycle Q Clear(g_c), s	5.8	31.5	31.6	9.5	18.1	6.8	5.0	32.0	2.0	17.5	18.7	4.4
Prop In Lane	1.00		0.17	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	230	485	495	136	1011	462	378	569	486	369	748	619
V/C Ratio(X)	0.59	0.79	0.79	0.84	0.50	0.30	0.23	0.78	0.06	0.85	0.43	0.16
Avail Cap(c_a), veh/h	230	485	495	154	1011	462	378	569	486	396	748	619
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	71.3	64.2	64.2	68.4	44.6	19.0	34.9	47.7	37.3	33.5	32.6	14.2
Incr Delay (d2), s/veh	3.6	8.4	8.3	29.4	1.8	1.7	0.3	6.6	0.1	15.6	1.8	0.6
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(95%),veh/ln	5.0	22.9	23.3	9.2	12.9	7.3	4.0	22.6	1.4	13.9	13.6	4.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	74.9	72.5	72.5	97.8	46.4	20.7	35.2	54.4	37.3	49.1	34.4	14.7
LnGrp LOS	E	E	E	F	D	C	D	D	D	D	C	B
Approach Vol, veh/h		912			762			557			739	
Approach Delay, s/veh		72.9			49.4			50.5			38.0	
Approach LOS		E			D			D			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.0	50.0	27.7	54.3	19.4	48.6	13.0	69.0				
Change Period (Y+Rc), s	8.0	7.0	8.0	9.0	8.0	* 8	8.0	9.0				
Max Green Setting (Gmax), s	40.0	43.0	22.0	43.0	13.0	* 40	5.0	60.0				
Max Q Clear Time (g_c+1), s	17.0	20.1	19.5	34.0	11.5	33.6	7.0	20.7				
Green Ext Time (p_c), s	0.1	3.8	0.2	1.8	0.0	2.5	0.0	2.1				

Intersection Summary

HCM 6th Ctrl Delay	54.0
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary
 18: Wisteria Ave. & Malabar Rd.

05/11/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	471	54	81	829	9	245	0	164	18	0	27
Future Volume (veh/h)	6	471	54	81	829	9	245	0	164	18	0	27
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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		No		No
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	6	471	54	81	829	9	245	0	164	18	0	27
Peak Hour 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
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	444	1876	214	554	2192	24	435	0	488	163	14	214
Arrive On Green	0.01	0.57	0.57	0.06	1.00	1.00	0.30	0.00	0.30	0.30	0.00	0.30
Sat Flow, veh/h	1810	3265	373	1810	3658	40	1405	0	1610	426	45	706
Grp Volume(v), veh/h	6	260	265	81	409	429	245	0	164	45	0	0
Grp Sat Flow(s),veh/h/ln	1810	1805	1833	1810	1805	1893	1405	0	1610	1177	0	0
Q Serve(g_s), s	0.2	10.7	10.8	2.7	0.0	0.0	14.9	0.0	11.9	0.3	0.0	0.0
Cycle Q Clear(g_c), s	0.2	10.7	10.8	2.7	0.0	0.0	27.1	0.0	11.9	12.1	0.0	0.0
Prop In Lane	1.00		0.20	1.00		0.02	1.00		1.00	0.40		0.60
Lane Grp Cap(c), veh/h	444	1037	1053	554	1082	1134	435	0	488	391	0	0
V/C Ratio(X)	0.01	0.25	0.25	0.15	0.38	0.38	0.56	0.00	0.34	0.12	0.00	0.00
Avail Cap(c_a), veh/h	521	1037	1053	647	1082	1134	435	0	488	391	0	0
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.95	0.95	0.95	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	13.2	15.9	15.9	11.8	0.0	0.0	47.0	0.0	40.5	37.7	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.6	0.6	0.1	1.0	0.9	5.2	0.0	1.9	0.6	0.0	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(95%),veh/ln	0.2	7.9	8.1	1.9	0.5	0.5	13.6	0.0	8.7	2.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.2	16.4	16.5	11.9	1.0	0.9	52.2	0.0	42.4	38.3	0.0	0.0
LnGrp LOS	B	B	B	B	A	A	D	A	D	D	A	A
Approach Vol, veh/h		531			919			409				45
Approach Delay, s/veh		16.4			1.9			48.3				38.3
Approach LOS		B			A			D				D
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.3	90.7		50.0	5.6	94.4		50.0				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	12.5	78.5		45.5	7.5	83.5		45.5				
Max Q Clear Time (g_c+14), s	14.7	12.8		14.1	2.2	2.0		29.1				
Green Ext Time (p_c), s	0.1	3.1		0.2	0.0	6.1		1.6				

Intersection Summary

HCM 6th Ctrl Delay		16.8										
HCM 6th LOS			B									

Intersection												
Int Delay, s/veh	0.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↕		↖	↕				↖			↖
Traffic Vol, veh/h	12	730	5	6	831	14	0	0	29	0	0	78
Future Vol, veh/h	12	730	5	6	831	14	0	0	29	0	0	78
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	200	-	-	200	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	12	730	5	6	831	14	0	0	29	0	0	78

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	845	0	0	735	0	0	-	-	368	-	-	423
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	4.1	-	-	4.1	-	-	-	-	6.9	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	-	-	3.3	-	-	3.3
Pot Cap-1 Maneuver	800	-	-	879	-	-	0	0	635	0	0	585
Stage 1	-	-	-	-	-	-	0	0	-	0	0	-
Stage 2	-	-	-	-	-	-	0	0	-	0	0	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	800	-	-	879	-	-	-	-	635	-	-	585
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.2			0.1			10.9			12.1		
HCM LOS							B			B		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	635	800	-	-	879	-	-	585
HCM Lane V/C Ratio	0.046	0.015	-	-	0.007	-	-	0.133
HCM Control Delay (s)	10.9	9.6	-	-	9.1	-	-	12.1
HCM Lane LOS	B	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.5

2030 PM BUILD MOE TABLES

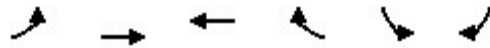
2030 PM Build Unsignalized Network												
Malabar Rd. & Snapdragon Dr.											Intersection ID: 2	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	-	-	-	0.04	-	-	-	-	-	-	0.05	-
HCM Control Delay (s)	-	-	-	8.5	-	-	-	-	-	-	10.0	-
HCM Lane LOS	-	-	-	A	-	-	-	-	-	-	B	-
HCM 95th Percentile Queue (veh/In)	-	-	-	0.1	-	-	-	-	-	-	0.2	-
Malabar Rd. & Championship Cir.											Intersection ID: 3	
HCM Lane V/C Ratio	-	-	-	0.03	-	-	-	-	-	-	0.09	-
HCM Control Delay (s)	-	-	-	8.5	-	-	-	-	-	-	13.9	-
HCM Lane LOS	-	-	-	A	-	-	-	-	-	-	B	-
HCM 95th Percentile Queue (veh/In)	-	-	-	0.1	-	-	-	-	-	-	0.3	-
Malabar Rd. & Bavarian Ave.											Intersection ID: 5	
HCM Lane V/C Ratio	-	0.01	-	-	-	-	0.00	-	-	-	-	-
HCM Control Delay (s)	-	11.7	-	-	-	-	10.0	-	-	-	-	-
HCM Lane LOS	-	B	-	-	-	-	A	-	-	-	-	-
HCM 95th Percentile Queue (veh/In)	-	0.0	-	-	-	-	0.0	-	-	-	-	-
Malabar Rd. & Watoga Ave.											Intersection ID: 19	
HCM Lane V/C Ratio	-	0.07	-	0.06	-	-	0.02	-	-	-	0.13	-
HCM Control Delay (s)	-	11.8	-	9.4	-	-	9.8	-	-	-	11.5	-
HCM Lane LOS	-	B	-	A	-	-	A	-	-	-	B	-
HCM 95th Percentile Queue (veh/In)	-	0.2	-	0.2	-	-	0.1	-	-	-	0.4	-
Malabar Rd. & Palm Bay Public Works (W)											Intersection ID: 7	
HCM Lane V/C Ratio	-	0.09	-	0.04	-	-	0.00	-	-	-	-	-
HCM Control Delay (s)	-	12.0	-	12.5	-	-	9.7	-	-	-	-	-
HCM Lane LOS	-	B	-	B	-	-	A	-	-	-	-	-
HCM 95th Percentile Queue (veh/In)	-	0.3	-	0.1	-	-	0.0	-	-	-	-	-
Malabar Rd. & Palm Bay Public Works (E)											Intersection ID: 8	
HCM Lane V/C Ratio	-	0.08	-	0.02	-	-	0.05	-	-	-	-	-
HCM Control Delay (s)	-	12.3	-	12.3	-	-	15.7	-	-	-	-	-
HCM Lane LOS	-	B	-	B	-	-	C	-	-	-	-	-
HCM 95th Percentile Queue (veh/In)	-	0.3	-	0.1	-	-	0.2	-	-	-	-	-
Malabar Rd. & Post Office											Intersection ID: 9	
HCM Lane V/C Ratio	-	0.07	-	-	-	-	-	-	-	-	-	-
HCM Control Delay (s)	-	12.2	-	-	-	-	-	-	-	-	0.0	-
HCM Lane LOS	-	B	-	-	-	-	-	-	-	-	A	-
HCM 95th Percentile Queue (veh/In)	-	0.2	-	-	-	-	-	-	-	-	-	-
Malabar Rd. & Santa Rosa Ave.											Intersection ID: 11	
HCM Lane V/C Ratio	-	0.02	-	-	-	-	-	-	-	-	0.00	-
HCM Control Delay (s)	-	12.0	-	-	-	-	-	-	-	-	10.8	-
HCM Lane LOS	-	B	-	-	-	-	-	-	-	-	B	-
HCM 95th Percentile Queue (veh/In)	-	0.1	-	-	-	-	-	-	-	-	0.0	-
Malabar Rd. & Madalyn Landing											Intersection ID: 13	
HCM Lane V/C Ratio	-	0.08	-	-	-	-	0.11	-	-	-	-	-
HCM Control Delay (s)	-	12.5	-	-	-	-	10.8	-	-	-	-	-
HCM Lane LOS	-	B	-	-	-	-	B	-	-	-	-	-
HCM 95th Percentile Queue (veh/In)	-	0.3	-	-	-	-	0.4	-	-	-	-	-
Malabar Rd. & Sutherland Dr.											Intersection ID: 14	
HCM Lane V/C Ratio	-	0.05	-	0.03	-	-	0.05	-	-	-	-	-
HCM Control Delay (s)	-	12.3	-	15.1	-	-	10.5	-	-	-	-	-
HCM Lane LOS	-	B	-	C	-	-	B	-	-	-	-	-
HCM 95th Percentile Queue (veh/In)	-	0.1	-	0.1	-	-	0.2	-	-	-	-	-

2030 PM Build Signalized Network												
Malabar Rd. & St. Johns Heritage Pkwy.											Intersection ID: 1	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	-	-	-	0.09	0.21	-	-	0.85	0.12	0.86	-	0.31
HCM Lane Group Delay (s)	-	-	-	12.1	5.2	-	-	94.6	59.2	64.8	-	55.8
HCM Lane LOS	-	-	-	B	A	-	-	F	E	E	-	E
HCM 95th Percentile Queue (veh/In)	-	-	-	2.5	4.2	-	-	14.5	1.6	14.4	-	4.6
HCM6 Intersection Ctrl Delay	41.7											
HCM6 Intersection LOS	D											
Malabar Rd. & Wisteria Avenue/Abilene Drive											Intersection ID: 18	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	0.35	0.00	0.50	0.04	0.43	0.43	0.41	0.17	0.17	0.15	0.00	0.00
HCM Lane Group Delay (s)	56.3	0.0	59.2	7.7	12.7	12.8	9.6	23.7	23.8	54.7	0.0	0.0
HCM Lane LOS	E	A	E	A	B	B	A	C	C	D	A	A
HCM 95th Percentile Queue (veh/In)	6.8	0.0	9.8	0.5	12.3	11.9	3.3	11.3	11.6	2.0	0.0	0.0
HCM6 Intersection Ctrl Delay	21.6											
HCM6 Intersection LOS	C											
Malabar Rd. & Krassner Dr./ Bending Branch Ln.											Intersection ID: 4	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	0.55	0.00	0.00	0.15	0.84	0.84	0.10	0.25	0.25	0.53	0.00	0.00
HCM Lane Group Delay (s)	71.2	0.0	0.0	43.1	78.2	77.9	11.7	0.4	0.4	71.5	0.0	0.0
HCM Lane LOS	E	A	A	D	E	E	B	A	A	E	A	A
HCM 95th Percentile Queue (veh/In)	5.4	0.0	0.0	2.0	25.7	26.3	2.0	0.3	0.3	5.4	0.0	0.0
HCM6 Intersection Ctrl Delay	44.9											
HCM6 Intersection LOS	D											
Malabar Rd. & Hurley Blvd.											Intersection ID: 6	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	0.41	0.00	0.00	0.12	0.45	0.45	0.23	0.33	0.33	0.13	0.00	0.00
HCM Lane Group Delay (s)	44.9	0.0	0.0	12.8	40.9	40.9	16.7	17.0	16.9	39.1	0.0	0.0
HCM Lane LOS	D	A	A	B	D	D	B	B	B	D	A	A
HCM 95th Percentile Queue (veh/In)	10.6	0.0	0.0	1.3	24.1	24.1	1.8	10.2	10.5	3.1	0.0	0.0
HCM6 Intersection Ctrl Delay	31.4											
HCM6 Intersection LOS	C											
Malabar Rd. & Jupiter Blvd.											Intersection ID: 10	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	0.87	0.40	-0.04	0.41	0.52	0.52	0.19	0.47	0.48	0.85	0.00	0.92
HCM Lane Group Delay (s)	88.2	50.7	0.0	26.0	32.7	32.9	25.4	51.2	51.7	76.0	0.0	76.3
HCM Lane LOS	F	D	A	C	C	C	C	D	D	E	A	E
HCM 95th Percentile Queue (veh/In)	11.2	9.3	0.0	5.0	16.5	16.1	2.1	19.7	18.4	10.1	0.0	21.4
HCM6 Intersection Ctrl Delay	52.3											
HCM6 Intersection LOS	D											
Malabar Rd. & Garvey Rd.											Intersection ID: 12	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	0.43	-	-0.08	-	0.31	0.31	0.26	0.23	-	-	-	-
HCM Lane Group Delay (s)	72.5	-	0.0	-	0.1	0.1	1.1	0.2	-	-	-	-
HCM Lane LOS	E	-	A	-	A	A	A	A	-	-	-	-
HCM 95th Percentile Queue (veh/In)	2.7	-	0.0	-	0.1	0.1	0.3	0.1	-	-	-	-
HCM6 Intersection Ctrl Delay	1.7											
HCM6 Intersection LOS	A											
Malabar Rd. & Maywood Ave./Daffodil Dr.											Intersection ID: 16	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	0.11	0.00	0.00	0.02	0.39	0.39	0.10	0.37	0.37	0.37	0.00	0.00
HCM Lane Group Delay (s)	52.9	0.0	0.0	6.4	9.5	9.5	6.3	8.3	8.3	59.0	0.0	0.0
HCM Lane LOS	D	A	A	A	A	A	A	A	A	E	A	A
HCM 95th Percentile Queue (veh/In)	2.0	0.0	0.0	0.1	10.2	10.6	0.6	9.3	9.5	7.3	0.0	0.0
HCM6 Intersection Ctrl Delay	12.0											
HCM6 Intersection LOS	B											
Malabar Rd. & Plaza Entrance											Intersection ID: 16	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	0.05	0.55	0.55	0.05	0.55	0.55	0.21	0.40	0.02	0.20	0.00	0.61
HCM Lane Group Delay (s)	97.6	0.0	81.0	8.2	24.8	24.8	16.9	0.5	0.0	65.2	0.0	81.4
HCM Lane LOS	F	A	F	A	C	C	B	A	A	E	A	F
HCM 95th Percentile Queue (veh/In)	12.7	0.0	2.7	0.6	18.5	18.8	3.4	0.2	0.0	2.5	0.0	2.7
HCM6 Intersection Ctrl Delay	22.9											
HCM6 Intersection LOS	C											
Malabar Rd. & Minton Rd.											Intersection ID: 17	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	0.51	0.83	-0.01	0.88	0.91	0.91	0.76	0.59	0.39	0.98	0.86	0.20
HCM Lane Group Delay (s)	51.8	67.3	0.0	67.8	62.2	61.9	67.9	50.5	47.6	78.3	56.9	33.2
HCM Lane LOS	D	E	A	E	E	E	E	D	D	E	E	C
HCM 95th Percentile Queue (veh/In)	1.7	20.7	0.0	10.5	17.1	17.6	15.2	14.8	9.2	20.8	30.0	0.2
HCM6 Intersection Ctrl Delay	60.8											
HCM6 Intersection LOS	E											

2030 BUILD PM PEAK HOUR INTERSECTION OPERATIONS SYNCHRO
REPORTS

HCM 6th Signalized Intersection Summary
 1: Malabar Rd. & St. Johns Heritage Pkwy.

05/11/2021



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	100	564	200	261	497	100
Future Volume (veh/h)	100	564	200	261	497	100
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1900	1885	1841	1856	1900	1796
Adj Flow Rate, veh/h	100	564	200	24	497	77
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	0	1	4	3	0	7
Cap, veh/h	1139	2729	234	200	578	251
Arrive On Green	0.60	0.76	0.13	0.13	0.16	0.16
Sat Flow, veh/h	1810	3676	1841	1572	3510	1522
Grp Volume(v), veh/h	100	564	200	24	497	77
Grp Sat Flow(s),veh/h/ln	1810	1791	1841	1572	1755	1522
Q Serve(g_s), s	0.0	6.7	16.0	2.0	20.7	6.7
Cycle Q Clear(g_c), s	0.0	6.7	16.0	2.0	20.7	6.7
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	1139	2729	234	200	578	251
V/C Ratio(X)	0.09	0.21	0.85	0.12	0.86	0.31
Avail Cap(c_a), veh/h	1139	2729	534	456	1884	817
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.1	5.0	64.1	58.0	60.9	55.1
Incr Delay (d2), s/veh	0.0	0.2	30.5	1.2	3.9	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.5	4.2	14.5	1.6	14.4	4.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	12.1	5.2	94.6	59.2	64.8	55.8
LnGrp LOS	B	A	F	E	E	E
Approach Vol, veh/h		664	224		574	
Approach Delay, s/veh		6.3	90.8		63.6	
Approach LOS		A	F		E	
Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	95.2	24.6		30.2		119.8
Change Period (Y+Rc), s	5.5	* 5.5		5.5		5.5
Max Green Setting (Gmax), s	10.5	* 44		80.5		58.5
Max Q Clear Time (g_c+I1), s	2.0	18.0		22.7		8.7
Green Ext Time (p_c), s	0.1	1.1		2.1		4.2

Intersection Summary

HCM 6th Ctrl Delay	41.7
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection						
Int Delay, s/veh	0.5					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	47	1038	446	50	0	39
Future Vol, veh/h	47	1038	446	50	0	39
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	47	1038	446	50	0	39

Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	496	0	-	0	-	248
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	4.1	-	-	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	2.2	-	-	-	-	3.3
Pot Cap-1 Maneuver	1078	-	-	-	0	758
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1078	-	-	-	-	758
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0.4	0	10
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1078	-	-	-	758
HCM Lane V/C Ratio	0.044	-	-	-	0.051
HCM Control Delay (s)	8.5	-	-	-	10
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.2

Intersection						
Int Delay, s/veh	0.5					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	26	1012	480	50	24	16
Future Vol, veh/h	26	1012	480	50	24	16
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	3	0	0	0
Mvmt Flow	26	1012	480	50	24	16

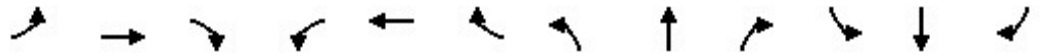
Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	530	0	-	0	1063 265
Stage 1	-	-	-	-	505 -
Stage 2	-	-	-	-	558 -
Critical Hdwy	4.1	-	-	-	6.8 6.9
Critical Hdwy Stg 1	-	-	-	-	5.8 -
Critical Hdwy Stg 2	-	-	-	-	5.8 -
Follow-up Hdwy	2.2	-	-	-	3.5 3.3
Pot Cap-1 Maneuver	1048	-	-	-	222 739
Stage 1	-	-	-	-	577 -
Stage 2	-	-	-	-	542 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1048	-	-	-	216 739
Mov Cap-2 Maneuver	-	-	-	-	351 -
Stage 1	-	-	-	-	563 -
Stage 2	-	-	-	-	542 -

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	13.9
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1048	-	-	-	444
HCM Lane V/C Ratio	0.025	-	-	-	0.09
HCM Control Delay (s)	8.5	-	-	-	13.9
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.3

HCM 6th Signalized Intersection Summary
 4: Krassner Dr./ Bending Branch Ln & Malabar Rd.

05/11/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗			↕			↕	
Traffic Volume (veh/h)	39	809	65	96	566	100	30	3	71	74	1	17
Future Volume (veh/h)	39	809	65	96	566	100	30	3	71	74	1	17
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	1900	1885	1781	1885	1856	1885	1796	1411	1841	1900	1900	1737
Adj Flow Rate, veh/h	39	809	59	96	566	99	30	3	43	74	1	1
Peak Hour 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
Percent Heavy Veh, %	0	1	8	1	3	1	7	33	4	0	0	11
Cap, veh/h	268	967	71	974	2301	401	67	13	60	141	2	1
Arrive On Green	0.01	0.09	0.09	0.67	1.00	1.00	0.08	0.08	0.08	0.08	0.08	0.08
Sat Flow, veh/h	1810	3385	247	1795	3001	523	415	156	744	1167	24	16
Grp Volume(v), veh/h	39	428	440	96	332	333	76	0	0	76	0	0
Grp Sat Flow(s),veh/h/ln	1810	1791	1841	1795	1763	1761	1316	0	0	1207	0	0
Q Serve(g_s), s	2.5	35.2	35.3	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.0	0.0
Cycle Q Clear(g_c), s	2.5	35.2	35.3	0.0	0.0	0.0	8.2	0.0	0.0	9.7	0.0	0.0
Prop In Lane	1.00		0.13	1.00		0.30	0.39		0.57	0.97		0.01
Lane Grp Cap(c), veh/h	268	512	526	974	1352	1351	139	0	0	144	0	0
V/C Ratio(X)	0.15	0.84	0.84	0.10	0.25	0.25	0.55	0.00	0.00	0.53	0.00	0.00
Avail Cap(c_a), veh/h	352	874	898	974	1352	1351	352	0	0	403	0	0
HCM Platoon Ratio	0.33	0.33	0.33	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	0.90	0.90	0.90	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	42.9	64.5	64.5	11.7	0.0	0.0	67.3	0.0	0.0	68.0	0.0	0.0
Incr Delay (d2), s/veh	0.2	13.7	13.4	0.0	0.4	0.4	4.0	0.0	0.0	3.6	0.0	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(95%),veh/ln	2.0	25.7	26.3	2.0	0.3	0.3	5.4	0.0	0.0	5.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	43.1	78.2	77.9	11.7	0.4	0.4	71.2	0.0	0.0	71.5	0.0	0.0
LnGrp LOS	D	E	E	B	A	A	E	A	A	E	A	A
Approach Vol, veh/h		907			761			76			76	
Approach Delay, s/veh		76.5			1.9			71.2			71.5	
Approach LOS		E			A			E			E	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	82.2	49.6		18.2	10.0	121.8		18.2				
Change Period (Y+Rc), s	6.8	* 6.8		* 6.1	6.0	6.8		6.1				
Max Green Setting (Gmax), s	18.6	* 73		* 40	11.0	80.2		39.9				
Max Q Clear Time (g_c+I1), s	2.0	37.3		11.7	4.5	2.0		10.2				
Green Ext Time (p_c), s	0.2	5.6		0.4	0.0	4.1		0.5				

Intersection Summary

HCM 6th Ctrl Delay	44.9
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection						
Int Delay, s/veh	0					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑		↖	↑↑		↗
Traffic Vol, veh/h	948	6	2	762	0	4
Future Vol, veh/h	948	6	2	762	0	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	200	-	-	0
Veh in Median Storage, #	0	-	-	0	1	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	1	0	0
Mvmt Flow	948	6	2	762	0	4

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	954	0	477
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	-	4.1	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	-	2.2	-	3.3
Pot Cap-1 Maneuver	-	-	729	-	540
Stage 1	-	-	-	-	0
Stage 2	-	-	-	-	0
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	729	-	540
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	11.7
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	540	-	-	729	-
HCM Lane V/C Ratio	0.007	-	-	0.003	-
HCM Control Delay (s)	11.7	-	-	10	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

HCM 6th Signalized Intersection Summary
6: Hurley Blvd. & Malabar Rd.

05/11/2021



Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (veh/h)	4	55	801	147	46	72	663	37	97	19	90	32
Future Volume (veh/h)	4	55	801	147	46	72	663	37	97	19	90	32
Initial Q (Qb), veh		0	0	0		0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		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
Work Zone On Approach			No				No			No		
Adj Sat Flow, veh/h/ln		1900	1900	1900		1856	1885	1900	1900	1900	1856	1900
Adj Flow Rate, veh/h		55	801	147		72	663	37	97	19	90	32
Peak Hour Factor		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %		0	0	0		3	1	0	0	0	3	0
Cap, veh/h		469	1771	325		309	2012	112	240	55	202	251
Arrive On Green		0.01	0.19	0.19		0.03	0.58	0.58	0.30	0.30	0.30	0.30
Sat Flow, veh/h		1810	3045	559		1767	3449	192	690	185	679	723
Grp Volume(v), veh/h		55	475	473		72	344	356	206	0	0	59
Grp Sat Flow(s),veh/h/ln		1810	1805	1799		1767	1791	1851	1555	0	0	1400
Q Serve(g_s), s		1.8	34.9	34.9		2.5	14.9	14.9	11.1	0.0	0.0	0.0
Cycle Q Clear(g_c), s		1.8	34.9	34.9		2.5	14.9	14.9	15.5	0.0	0.0	4.5
Prop In Lane		1.00		0.31		1.00		0.10	0.47		0.44	0.54
Lane Grp Cap(c), veh/h		469	1050	1047		309	1045	1080	497	0	0	452
V/C Ratio(X)		0.12	0.45	0.45		0.23	0.33	0.33	0.41	0.00	0.00	0.13
Avail Cap(c_a), veh/h		517	1050	1047		483	1045	1080	497	0	0	452
HCM Platoon Ratio		0.33	0.33	0.33		1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)		1.00	1.00	1.00		1.00	1.00	1.00	1.00	0.00	0.00	1.00
Uniform Delay (d), s/veh		12.7	39.5	39.5		16.3	16.1	16.1	42.3	0.0	0.0	38.5
Incr Delay (d2), s/veh		0.1	1.4	1.4		0.4	0.8	0.8	2.5	0.0	0.0	0.6
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
%ile BackOfQ(95%),veh/ln		1.3	24.1	24.1		1.8	10.2	10.5	10.6	0.0	0.0	3.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh		12.8	40.9	40.9		16.7	17.0	16.9	44.9	0.0	0.0	39.1
LnGrp LOS		B	D	D		B	B	B	D	A	A	D
Approach Vol, veh/h			1003				772			206		
Approach Delay, s/veh			39.3				16.9			44.9		
Approach LOS			D				B			D		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.0	92.0		49.0	9.3	91.7		49.0				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	8.5	83.5		44.5	19.5	72.5		44.5				
Max Q Clear Time (g_c+I1), s	3.8	16.9		17.5	4.5	36.9		6.5				
Green Ext Time (p_c), s	0.0	4.3		1.1	0.1	6.4		0.3				

Intersection Summary

HCM 6th Ctrl Delay	31.4
HCM 6th LOS	C

Notes

User approved ignoring U-Turning movement.

HCM 6th Signalized Intersection Summary
 6: Hurley Blvd. & Malabar Rd.

05/11/2021



Movement	SBT	SBR
Lane Configurations	↕	
Traffic Volume (veh/h)	5	22
Future Volume (veh/h)	5	22
Initial Q (Qb), veh	0	0
Ped-Bike Adj(A_pbT)		1.00
Parking Bus, Adj	1.00	1.00
Work Zone On Approach	No	
Adj Sat Flow, veh/h/ln	1900	1900
Adj Flow Rate, veh/h	5	22
Peak Hour Factor	1.00	1.00
Percent Heavy Veh, %	0	0
Cap, veh/h	46	155
Arrive On Green	0.30	0.30
Sat Flow, veh/h	155	522
Grp Volume(v), veh/h	0	0
Grp Sat Flow(s),veh/h/ln	0	0
Q Serve(g_s), s	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0
Prop In Lane		0.37
Lane Grp Cap(c), veh/h	0	0
V/C Ratio(X)	0.00	0.00
Avail Cap(c_a), veh/h	0	0
HCM Platoon Ratio	1.00	1.00
Upstream Filter(l)	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	0.0
Unsig. Movement Delay, s/veh		
LnGrp Delay(d),s/veh	0.0	0.0
LnGrp LOS	A	A
Approach Vol, veh/h	59	
Approach Delay, s/veh	39.1	
Approach LOS	D	
Timer - Assigned Phs		

Intersection							
Int Delay, s/veh	0.5						
Movement	EBU	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	⇄	⇄		⇄	⇄		⇄
Traffic Vol, veh/h	20	891	0	2	735	0	52
Future Vol, veh/h	20	891	0	2	735	0	52
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	-	None	-	None	-	None
Storage Length	200	-	-	200	-	-	0
Veh in Median Storage, #	-	0	-	-	0	1	-
Grade, %	-	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100	100
Heavy Vehicles, %	0	1	0	0	1	0	0
Mvmt Flow	20	891	0	2	735	0	52

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	735	0	0	891	0	446
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	6.4	-	-	4.1	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	2.5	-	-	2.2	-	3.3
Pot Cap-1 Maneuver	498	-	-	769	0	565
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	498	-	-	769	-	565
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0.3	0	12
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBU	EBT	EBR	WBL	WBT
Capacity (veh/h)	565	498	-	-	769	-
HCM Lane V/C Ratio	0.092	0.04	-	-	0.003	-
HCM Control Delay (s)	12	12.5	-	-	9.7	-
HCM Lane LOS	B	B	-	-	A	-
HCM 95th %tile Q(veh)	0.3	0.1	-	-	0	-

Intersection								
Int Delay, s/veh	0.5							
Movement	EBU	EBT	EBR	WBU	WBL	WBT	NBL	NBR
Lane Configurations	↔	↕↔			↕	↕↕	↕	
Traffic Vol, veh/h	11	907	25	18	1	725	1	41
Future Vol, veh/h	11	907	25	18	1	725	1	41
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	None
Storage Length	200	-	-	-	175	-	0	-
Veh in Median Storage, #	-	0	-	-	-	0	1	-
Grade, %	-	0	-	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	1	0	0	0	1	0	0
Mvmt Flow	11	907	25	18	1	725	1	41

Major/Minor	Major1		Major2		Minor1			
Conflicting Flow All	725	0	0	932	932	0	1343	466
Stage 1	-	-	-	-	-	-	942	-
Stage 2	-	-	-	-	-	-	401	-
Critical Hdwy	6.4	-	-	6.4	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.8	-
Follow-up Hdwy	2.5	-	-	2.5	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	505	-	-	373	743	-	146	549
Stage 1	-	-	-	-	-	-	344	-
Stage 2	-	-	-	-	-	-	651	-
Platoon blocked, %	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	505	-	-	355	355	-	135	549
Mov Cap-2 Maneuver	-	-	-	-	-	-	252	-
Stage 1	-	-	-	-	-	-	336	-
Stage 2	-	-	-	-	-	-	616	-

Approach	EB	WB	NB
HCM Control Delay, s	0.1	0.4	12.3
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBU	EBT	EBR	WBL	WBT
Capacity (veh/h)	534	505	-	-	355	-
HCM Lane V/C Ratio	0.079	0.022	-	-	0.054	-
HCM Control Delay (s)	12.3	12.3	-	-	15.7	-
HCM Lane LOS	B	B	-	-	C	-
HCM 95th %tile Q(veh)	0.3	0.1	-	-	0.2	-

Intersection												
Int Delay, s/veh	0.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑				↑			↑
Traffic Vol, veh/h	0	932	34	0	744	0	0	0	36	0	0	0
Future Vol, veh/h	0	932	34	0	744	0	0	0	36	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	1	0	0	1	0	0	0	0	0	0	0
Mvmt Flow	0	932	34	0	744	0	0	0	36	0	0	0

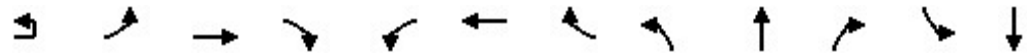
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	-	-	0	-	-	483	-	-	372
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-	-	-	6.9	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-	-	-	3.3	-	-	3.3
Pot Cap-1 Maneuver	0	-	-	0	-	-	0	0	535	0	0	631
Stage 1	0	-	-	0	-	-	0	0	-	0	0	-
Stage 2	0	-	-	0	-	-	0	0	-	0	0	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	-	-	-	-	-	535	-	-	631
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0			12.2			0		
HCM LOS							B			A		

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT	WBR	SBLn1
Capacity (veh/h)	535	-	-	-	-	-
HCM Lane V/C Ratio	0.067	-	-	-	-	-
HCM Control Delay (s)	12.2	-	-	-	-	0
HCM Lane LOS	B	-	-	-	-	A
HCM 95th %tile Q(veh)	0.2	-	-	-	-	-

HCM 6th Signalized Intersection Summary
 10: Jupiter Blvd. & Malabar Rd.

05/11/2021



Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations		↔	↕		↕	↕		↕	↑	↕	↕	↕
Traffic Volume (veh/h)	15	137	605	211	56	382	328	156	168	88	296	175
Future Volume (veh/h)	15	137	605	211	56	382	328	156	168	88	296	175
Initial Q (Qb), veh		0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		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
Work Zone On Approach			No			No			No			No
Adj Sat Flow, veh/h/ln		1900	1885	1885	1900	1885	1900	1900	1885	1870	1870	1885
Adj Flow Rate, veh/h		137	605	205	56	382	299	156	168	-14	296	175
Peak Hour Factor		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %		0	1	1	0	1	0	0	1	2	2	1
Cap, veh/h		333	1162	393	302	811	627	180	415	349	350	191
Arrive On Green		0.06	0.44	0.44	0.01	0.14	0.14	0.10	0.22	0.00	0.10	0.22
Sat Flow, veh/h		1810	2627	889	1810	1922	1487	1810	1885	1585	3456	859
Grp Volume(v), veh/h		137	412	398	56	356	325	156	168	-14	296	0
Grp Sat Flow(s),veh/h/ln		1810	1791	1725	1810	1791	1618	1810	1885	1585	1728	0
Q Serve(g_s), s		6.4	25.0	25.1	2.6	27.4	27.8	12.7	11.4	0.0	12.6	0.0
Cycle Q Clear(g_c), s		6.4	25.0	25.1	2.6	27.4	27.8	12.7	11.4	0.0	12.6	0.0
Prop In Lane		1.00		0.52	1.00		0.92	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h		333	792	763	302	756	682	180	415	349	350	0
V/C Ratio(X)		0.41	0.52	0.52	0.19	0.47	0.48	0.87	0.40	-0.04	0.85	0.00
Avail Cap(c_a), veh/h		387	792	763	309	756	682	241	515	433	484	0
HCM Platoon Ratio		1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh		25.2	30.3	30.3	25.1	49.1	49.3	66.6	50.1	0.0	66.3	0.0
Incr Delay (d2), s/veh		0.8	2.4	2.5	0.3	2.1	2.4	21.6	0.6	0.0	9.7	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
%ile BackOfQ(95%),veh/ln		5.0	16.5	16.1	2.1	19.7	18.4	11.2	9.3	0.0	10.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh		26.0	32.7	32.9	25.4	51.2	51.7	88.2	50.7	0.0	76.0	0.0
LnGrp LOS		C	C	C	C	D	D	F	D	A	E	A
Approach Vol, veh/h			947			737			310			648
Approach Delay, s/veh			31.8			49.5			71.9			76.2
Approach LOS			C			D			E			E
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	15.5	71.3	22.2	41.0	12.4	74.4	21.9	41.3				
Change Period (Y+Rc), s	7.0	8.0	7.0	8.0	7.0	8.0	7.0	8.0				
Max Green Setting (Gmax), s	13.0	45.0	21.0	41.0	6.0	52.0	20.0	42.0				
Max Q Clear Time (g_c+I1), s	8.4	29.8	14.6	13.4	4.6	27.1	14.7	31.8				
Green Ext Time (p_c), s	0.1	3.5	0.5	0.8	0.0	4.9	0.2	1.5				

Intersection Summary

HCM 6th Ctrl Delay	52.3
HCM 6th LOS	D

Notes

User approved ignoring U-Turning movement.

HCM 6th Signalized Intersection Summary
 10: Jupiter Blvd. & Malabar Rd.

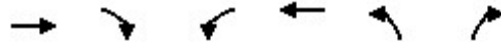
05/11/2021

Movement	SBR
Lane Configurations	
Traffic Volume (veh/h)	191
Future Volume (veh/h)	191
Initial Q (Qb), veh	0
Ped-Bike Adj(A_pbT)	1.00
Parking Bus, Adj	1.00
Work Zone On Approach	
Adj Sat Flow, veh/h/ln	1900
Adj Flow Rate, veh/h	177
Peak Hour Factor	1.00
Percent Heavy Veh, %	0
Cap, veh/h	193
Arrive On Green	0.22
Sat Flow, veh/h	869
Grp Volume(v), veh/h	352
Grp Sat Flow(s),veh/h/ln	1729
Q Serve(g_s), s	29.8
Cycle Q Clear(g_c), s	29.8
Prop In Lane	0.50
Lane Grp Cap(c), veh/h	384
V/C Ratio(X)	0.92
Avail Cap(c_a), veh/h	484
HCM Platoon Ratio	1.00
Upstream Filter(l)	1.00
Uniform Delay (d), s/veh	57.0
Incr Delay (d2), s/veh	19.4
Initial Q Delay(d3),s/veh	0.0
%ile BackOfQ(95%),veh/ln	21.4
Unsig. Movement Delay, s/veh	
LnGrp Delay(d),s/veh	76.3
LnGrp LOS	E
Approach Vol, veh/h	
Approach Delay, s/veh	
Approach LOS	
Timer - Assigned Phs	

Intersection												
Int Delay, s/veh	0.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑				↑			↑
Traffic Vol, veh/h	0	987	8	0	771	0	0	0	12	0	0	1
Future Vol, veh/h	0	987	8	0	771	0	0	0	12	0	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	1	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	987	8	0	771	0	0	0	12	0	0	1
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	-	-	0	-	-	498	-	-	386
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-	-	-	6.9	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-	-	-	3.3	-	-	3.3
Pot Cap-1 Maneuver	0	-	-	0	-	-	0	0	523	0	0	618
Stage 1	0	-	-	0	-	-	0	0	-	0	0	-
Stage 2	0	-	-	0	-	-	0	0	-	0	0	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	-	-	-	-	-	523	-	-	618
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0			12			10.8		
HCM LOS							B			B		
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT	WBR	SBLn1						
Capacity (veh/h)	523	-	-	-	-	618						
HCM Lane V/C Ratio	0.023	-	-	-	-	0.002						
HCM Control Delay (s)	12	-	-	-	-	10.8						
HCM Lane LOS	B	-	-	-	-	B						
HCM 95th %tile Q(veh)	0.1	-	-	-	-	0						

HCM 6th Signalized Intersection Summary
 12: Garvey Rd. & Malabar Rd.

05/11/2021



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑		↵	↑↑	↵	↵
Traffic Volume (veh/h)	921	76	143	731	38	76
Future Volume (veh/h)	921	76	143	731	38	76
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1885	1900	1900	1900	1900	1885
Adj Flow Rate, veh/h	921	72	143	731	38	-6
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	1	0	0	0	0	1
Cap, veh/h	2954	231	554	3168	89	78
Arrive On Green	1.00	1.00	1.00	1.00	0.05	0.00
Sat Flow, veh/h	3460	263	576	3705	1810	1598
Grp Volume(v), veh/h	490	503	143	731	38	-6
Grp Sat Flow(s),veh/h/ln	1791	1838	576	1805	1810	1598
Q Serve(g_s), s	0.0	0.0	0.0	0.0	3.1	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.0	3.1	0.0
Prop In Lane		0.14	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1572	1613	554	3168	89	78
V/C Ratio(X)	0.31	0.31	0.26	0.23	0.43	-0.08
Avail Cap(c_a), veh/h	1572	1613	554	3168	380	335
HCM Platoon Ratio	2.00	2.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	0.0	69.3	0.0
Incr Delay (d2), s/veh	0.1	0.1	1.1	0.2	3.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.1	0.1	0.3	0.1	2.7	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	0.1	0.1	1.1	0.2	72.5	0.0
LnGrp LOS	A	A	A	A	E	A
Approach Vol, veh/h	993			874	32	
Approach Delay, s/veh	0.1			0.3	86.1	
Approach LOS	A			A	F	
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		137.1		12.9		137.1
Change Period (Y+Rc), s		5.5		5.5		5.5
Max Green Setting (Gmax), s		107.5		31.5		107.5
Max Q Clear Time (g_c+I1), s		2.0		5.1		2.0
Green Ext Time (p_c), s		7.6		0.1		7.0
Intersection Summary						
HCM 6th Ctrl Delay			1.7			
HCM 6th LOS			A			
Notes						
User approved ignoring U-Turning movement.						

HCM 6th TWSC
13: Madalyn Landing & Malabar Rd.

05/11/2021

Intersection						
Int Delay, s/veh	0.7					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑		↖	↑↑		↖
Traffic Vol, veh/h	979	18	78	874	0	44
Future Vol, veh/h	979	18	78	874	0	44
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	275	-	-	-
Veh in Median Storage, #	0	-	-	0	1	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	1	0	0	1	0	0
Mvmt Flow	979	18	78	874	0	44

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	997	0	499
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	-	4.1	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	-	2.2	-	3.3
Pot Cap-1 Maneuver	-	-	702	-	522
Stage 1	-	-	-	-	0
Stage 2	-	-	-	-	0
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	702	-	522
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.9	12.5
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	522	-	-	702	-
HCM Lane V/C Ratio	0.084	-	-	0.111	-
HCM Control Delay (s)	12.5	-	-	10.8	-
HCM Lane LOS	B	-	-	B	-
HCM 95th %tile Q(veh)	0.3	-	-	0.4	-

Intersection							
Int Delay, s/veh	0.4						
Movement	EBU	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	⇐	⇕		⇐	⇕		⇐
Traffic Vol, veh/h	10	1011	2	34	942	0	24
Future Vol, veh/h	10	1011	2	34	942	0	24
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	-	None	-	None	-	None
Storage Length	150	-	-	375	-	-	0
Veh in Median Storage, #	-	0	-	-	0	1	-
Grade, %	-	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100	100
Heavy Vehicles, %	0	1	0	0	0	0	0
Mvmt Flow	10	1011	2	34	942	0	24

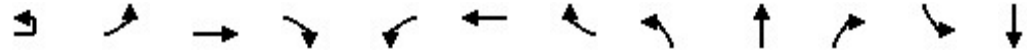
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	942	0	0	1013	0	507
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	6.4	-	-	4.1	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	2.5	-	-	2.2	-	3.3
Pot Cap-1 Maneuver	368	-	-	692	0	516
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	368	-	-	692	-	516
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0.1	0.4	12.3
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBU	EBT	EBR	WBL	WBT
Capacity (veh/h)	516	368	-	-	692	-
HCM Lane V/C Ratio	0.047	0.027	-	-	0.049	-
HCM Control Delay (s)	12.3	15.1	-	-	10.5	-
HCM Lane LOS	B	C	-	-	B	-
HCM 95th %tile Q(veh)	0.1	0.1	-	-	0.2	-

HCM 6th Signalized Intersection Summary
 15: Maywood Ave./Daffodil Dr. & Malabar Rd.

05/11/2021



Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations		↔	↕		↕	↕			↕			↕
Traffic Volume (veh/h)	3	8	1019	5	44	912	81	7	1	26	55	1
Future Volume (veh/h)	3	8	1019	5	44	912	81	7	1	26	55	1
Initial Q (Qb), veh		0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		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
Work Zone On Approach			No			No			No			No
Adj Sat Flow, veh/h/ln		1707	1885	1900	1900	1900	1900	1900	1900	1900	1870	1900
Adj Flow Rate, veh/h		8	1019	5	44	912	81	7	1	26	55	1
Peak Hour Factor		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %		13	1	0	0	0	0	0	0	0	2	0
Cap, veh/h		389	2602	13	435	2450	218	69	25	210	154	14
Arrive On Green		0.01	0.71	0.71	0.03	0.73	0.73	0.17	0.17	0.17	0.17	0.17
Sat Flow, veh/h		1626	3655	18	1810	3354	298	235	146	1237	696	82
Grp Volume(v), veh/h		8	499	525	44	491	502	34	0	0	110	0
Grp Sat Flow(s),veh/h/ln		1626	1791	1882	1810	1805	1846	1618	0	0	1530	0
Q Serve(g_s), s		0.2	16.7	16.7	1.0	15.1	15.1	0.0	0.0	0.0	6.7	0.0
Cycle Q Clear(g_c), s		0.2	16.7	16.7	1.0	15.1	15.1	2.6	0.0	0.0	9.3	0.0
Prop In Lane		1.00		0.01	1.00		0.16	0.21		0.76	0.50	
Lane Grp Cap(c), veh/h		389	1275	1340	435	1319	1349	304	0	0	296	0
V/C Ratio(X)		0.02	0.39	0.39	0.10	0.37	0.37	0.11	0.00	0.00	0.37	0.00
Avail Cap(c_a), veh/h		466	1275	1340	511	1319	1349	304	0	0	296	0
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
Upstream Filter(l)		1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh		6.4	8.6	8.6	6.2	7.5	7.5	52.7	0.0	0.0	55.4	0.0
Incr Delay (d2), s/veh		0.0	0.9	0.9	0.1	0.8	0.8	0.2	0.0	0.0	3.5	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
%ile BackOfQ(95%),veh/ln		0.1	10.2	10.6	0.6	9.3	9.5	2.0	0.0	0.0	7.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh		6.4	9.5	9.5	6.3	8.3	8.3	52.9	0.0	0.0	59.0	0.0
LnGrp LOS		A	A	A	A	A	A	D	A	A	E	A
Approach Vol, veh/h			1032			1037			34			110
Approach Delay, s/veh			9.5			8.2			52.9			59.0
Approach LOS			A			A			D			E
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.9	114.1		30.0	8.7	111.3		30.0				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	8.5	102.5		25.5	10.5	100.5		25.5				
Max Q Clear Time (g_c+I1), s	2.2	17.1		4.6	3.0	18.7		11.3				
Green Ext Time (p_c), s	0.0	7.0		0.1	0.0	7.3		0.4				

Intersection Summary

HCM 6th Ctrl Delay	12.0
HCM 6th LOS	B

Notes

User approved ignoring U-Turning movement.

HCM 6th Signalized Intersection Summary
 15: Maywood Ave./Daffodil Dr. & Malabar Rd.

05/11/2021

Movement	SBR
Lane Configurations	
Traffic Volume (veh/h)	54
Future Volume (veh/h)	54
Initial Q (Qb), veh	0
Ped-Bike Adj(A_pbT)	1.00
Parking Bus, Adj	1.00
Work Zone On Approach	
Adj Sat Flow, veh/h/ln	1900
Adj Flow Rate, veh/h	54
Peak Hour Factor	1.00
Percent Heavy Veh, %	0
Cap, veh/h	128
Arrive On Green	0.17
Sat Flow, veh/h	751
Grp Volume(v), veh/h	0
Grp Sat Flow(s),veh/h/ln	0
Q Serve(g_s), s	0.0
Cycle Q Clear(g_c), s	0.0
Prop In Lane	0.49
Lane Grp Cap(c), veh/h	0
V/C Ratio(X)	0.00
Avail Cap(c_a), veh/h	0
HCM Platoon Ratio	1.00
Upstream Filter(l)	0.00
Uniform Delay (d), s/veh	0.0
Incr Delay (d2), s/veh	0.0
Initial Q Delay(d3),s/veh	0.0
%ile BackOfQ(95%),veh/ln	0.0
Unsig. Movement Delay, s/veh	
LnGrp Delay(d),s/veh	0.0
LnGrp LOS	A
Approach Vol, veh/h	
Approach Delay, s/veh	
Approach LOS	
Timer - Assigned Phs	

HCM 6th Signalized Intersection Summary
16: Plaza Entrance & Malabar Rd.

05/11/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	955	115	115	833	21	169	8	61	38	13	35
Future Volume (veh/h)	30	955	115	115	833	21	169	8	61	38	13	35
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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		No		No
Adj Sat Flow, veh/h/ln	1900	1885	1900	1900	1900	1826	1900	1900	1900	1856	1900	1900
Adj Flow Rate, veh/h	30	955	114	115	833	21	169	8	27	38	13	22
Peak Hour 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
Percent Heavy Veh, %	0	1	0	0	0	5	0	0	0	3	0	0
Cap, veh/h	651	1740	208	542	2070	887	192	13	45	186	21	36
Arrive On Green	0.14	0.54	0.54	0.34	1.00	1.00	0.07	0.03	0.03	0.07	0.03	0.03
Sat Flow, veh/h	1810	3222	385	1810	3610	1547	1810	381	1287	1767	634	1073
Grp Volume(v), veh/h	30	531	538	115	833	21	169	0	35	38	0	35
Grp Sat Flow(s),veh/h/ln	1810	1791	1816	1810	1805	1547	1810	0	1668	1767	0	1707
Q Serve(g_s), s	0.0	29.1	29.1	0.0	0.0	0.0	8.3	0.0	3.1	0.0	0.0	3.0
Cycle Q Clear(g_c), s	0.0	29.1	29.1	0.0	0.0	0.0	8.3	0.0	3.1	0.0	0.0	3.0
Prop In Lane	1.00		0.21	1.00		1.00	1.00		0.77	1.00		0.63
Lane Grp Cap(c), veh/h	651	967	981	542	2070	887	192	0	58	186	0	58
V/C Ratio(X)	0.05	0.55	0.55	0.21	0.40	0.02	0.88	0.00	0.60	0.20	0.00	0.61
Avail Cap(c_a), veh/h	651	967	981	542	2070	887	212	0	311	186	0	228
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	0.81	0.81	0.81	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	8.2	22.6	22.6	16.8	0.0	0.0	67.1	0.0	71.4	64.7	0.0	71.5
Incr Delay (d2), s/veh	0.0	2.2	2.2	0.2	0.5	0.0	30.5	0.0	9.6	0.5	0.0	9.9
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(95%),veh/lr	0.6	18.5	18.8	3.4	0.2	0.0	12.7	0.0	2.7	2.5	0.0	2.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	8.2	24.8	24.8	16.9	0.5	0.0	97.6	0.0	81.0	65.2	0.0	81.4
LnGrp LOS	A	C	C	B	A	A	F	A	F	E	A	F
Approach Vol, veh/h		1099			969			204				73
Approach Delay, s/veh		24.3			2.4			94.8				73.0
Approach LOS		C			A			F				E
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	7.6	93.0	17.2	12.2	32.6	88.0	17.3	12.1				
Change Period (Y+Rc), s	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0				
Max Green Setting (Gmax), s	4.0	86.0	4.0	28.0	9.0	81.0	12.0	20.0				
Max Q Clear Time (g_c+1), s	1.0	2.0	2.0	5.1	2.0	31.1	10.3	5.0				
Green Ext Time (p_c), s	0.0	7.0	0.0	0.1	0.1	8.7	0.1	0.1				
Intersection Summary												
HCM 6th Ctrl Delay					22.9							
HCM 6th LOS					C							

HCM 6th Signalized Intersection Summary
 17: Minton Rd. & Malabar Rd.

05/11/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖↗	↖↗		↖	↖↗	↖	↖	↖	↖	↖	↖	↖
Traffic Volume (veh/h)	364	650	40	254	571	342	78	362	71	379	593	320
Future Volume (veh/h)	364	650	40	254	571	342	78	362	71	379	593	320
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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		No		No
Adj Sat Flow, veh/h/ln	1885	1870	1826	1885	1885	1885	1900	1870	1856	1885	1885	1885
Adj Flow Rate, veh/h	364	650	35	254	571	169	78	362	-2	379	593	117
Peak Hour 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
Percent Heavy Veh, %	1	2	5	1	1	1	0	2	3	1	1	1
Cap, veh/h	413	712	38	333	960	428	153	436	367	386	691	586
Arrive On Green	0.24	0.42	0.42	0.19	0.27	0.27	0.03	0.23	0.00	0.16	0.37	0.37
Sat Flow, veh/h	3483	3429	185	1795	3582	1598	1810	1870	1572	1795	1885	1598
Grp Volume(v), veh/h	364	337	348	254	571	169	78	362	-2	379	593	117
Grp Sat Flow(s),veh/h/ln	1742	1777	1837	1795	1791	1598	1810	1870	1572	1795	1885	1598
Q Serve(g_s), s	15.1	26.7	26.8	20.1	20.8	13.0	4.0	27.6	0.0	23.8	43.6	7.5
Cycle Q Clear(g_c), s	15.1	26.7	26.8	20.1	20.8	13.0	4.0	27.6	0.0	23.8	43.6	7.5
Prop In Lane	1.00		0.10	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	413	369	382	333	960	428	153	436	367	386	691	586
V/C Ratio(X)	0.88	0.91	0.91	0.76	0.59	0.39	0.51	0.83	-0.01	0.98	0.86	0.20
Avail Cap(c_a), veh/h	534	426	441	333	960	428	153	436	367	386	691	586
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.88	0.88	0.88	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.2	42.5	42.6	57.9	47.8	44.9	49.0	54.7	0.0	37.5	43.9	32.5
Incr Delay (d2), s/veh	11.7	19.8	19.5	9.9	2.7	2.7	2.8	12.6	0.0	40.8	13.1	0.8
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(95%),veh/ln	0.5	17.2	17.6	15.2	14.8	9.2	1.7	20.7	0.0	20.8	30.0	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	67.9	62.3	62.1	67.9	50.5	47.6	51.8	67.3	0.0	78.3	56.9	33.2
LnGrp LOS	E	E	E	E	D	D	D	E	A	E	E	C
Approach Vol, veh/h		1049			994			438			1089	
Approach Delay, s/veh		64.2			54.5			64.8			61.8	
Approach LOS		E			D			E			E	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	25.8	48.2	32.0	44.0	35.8	38.2	12.0	64.0				
Change Period (Y+Rc), s	8.0	* 8	8.0	9.0	8.0	7.0	8.0	9.0				
Max Green Setting (Gmax), s	23.0	* 36	24.0	35.0	23.0	36.0	4.0	55.0				
Max Q Clear Time (g_c+11), s	11.7	22.8	25.8	29.6	22.1	28.8	6.0	45.6				
Green Ext Time (p_c), s	0.7	3.6	0.0	1.0	0.1	2.4	0.0	2.7				

Intersection Summary

HCM 6th Ctrl Delay	60.8
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary
 18: Wisteria Ave. & Malabar Rd.

05/11/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗		↖	↗			↕	
Traffic Volume (veh/h)	30	737	269	180	413	20	105	0	158	18	0	12
Future Volume (veh/h)	30	737	269	180	413	20	105	0	158	18	0	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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		No		No
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	30	737	269	180	413	20	105	0	158	18	0	12
Peak Hour 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
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	668	1728	631	436	2417	117	304	0	317	128	9	66
Arrive On Green	0.02	0.67	0.67	0.02	0.23	0.23	0.20	0.00	0.20	0.20	0.00	0.20
Sat Flow, veh/h	1810	2590	945	1810	3505	169	1424	0	1610	457	48	337
Grp Volume(v), veh/h	30	514	492	180	212	221	105	0	158	30	0	0
Grp Sat Flow(s),veh/h/ln	1810	1805	1730	1810	1805	1870	1424	0	1610	842	0	0
Q Serve(g_s), s	0.8	19.9	19.9	4.5	14.2	14.2	0.0	0.0	13.1	1.2	0.0	0.0
Cycle Q Clear(g_c), s	0.8	19.9	19.9	4.5	14.2	14.2	11.9	0.0	13.1	14.3	0.0	0.0
Prop In Lane	1.00		0.55	1.00		0.09	1.00		1.00	0.60		0.40
Lane Grp Cap(c), veh/h	668	1204	1154	436	1245	1289	304	0	317	204	0	0
V/C Ratio(X)	0.04	0.43	0.43	0.41	0.17	0.17	0.35	0.00	0.50	0.15	0.00	0.00
Avail Cap(c_a), veh/h	715	1204	1154	672	1245	1289	304	0	317	204	0	0
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.98	0.98	0.98	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	7.7	11.6	11.6	9.0	23.5	23.5	53.2	0.0	53.7	53.2	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.1	1.2	0.6	0.3	0.3	3.1	0.0	5.5	1.5	0.0	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(95%),veh/lr	0.5	12.3	11.9	3.3	11.3	11.6	6.8	0.0	9.8	2.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	7.7	12.7	12.8	9.6	23.7	23.8	56.3	0.0	59.2	54.7	0.0	0.0
LnGrp LOS	A	B	B	A	C	C	E	A	E	D	A	A
Approach Vol, veh/h		1036			613			263				30
Approach Delay, s/veh		12.6			19.6			58.0				54.7
Approach LOS		B			B			E				D
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	1.4	104.6		34.0	8.1	107.9		34.0				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	26.5	80.5		29.5	7.5	99.5		29.5				
Max Q Clear Time (g_c+1), s	10.5	21.9		16.3	2.8	16.2		15.1				
Green Ext Time (p_c), s	0.4	7.4		0.1	0.0	2.7		1.0				
Intersection Summary												
HCM 6th Ctrl Delay												21.6
HCM 6th LOS												C

Intersection												
Int Delay, s/veh	1.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↖↗		↖	↖↗				↖			↖
Traffic Vol, veh/h	48	871	18	14	701	40	0	0	40	0	0	80
Future Vol, veh/h	48	871	18	14	701	40	0	0	40	0	0	80
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	200	-	-	200	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	48	871	18	14	701	40	0	0	40	0	0	80

Major/Minor	Major1		Major2		Minor1			Minor2				
Conflicting Flow All	741	0	0	889	0	0	-	-	445	-	-	371
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	4.1	-	-	4.1	-	-	-	-	6.9	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	-	-	3.3	-	-	3.3
Pot Cap-1 Maneuver	875	-	-	771	-	-	0	0	566	0	0	632
Stage 1	-	-	-	-	-	-	0	0	-	0	0	-
Stage 2	-	-	-	-	-	-	0	0	-	0	0	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	875	-	-	771	-	-	-	-	566	-	-	632
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB		WB		NB			SB		
HCM Control Delay, s	0.5		0.2		11.8			11.5		
HCM LOS					B			B		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	566	875	-	-	771	-	-	632
HCM Lane V/C Ratio	0.071	0.055	-	-	0.018	-	-	0.127
HCM Control Delay (s)	11.8	9.4	-	-	9.8	-	-	11.5
HCM Lane LOS	B	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.2	0.2	-	-	0.1	-	-	0.4

2050 AM BUILD MOE TABLES

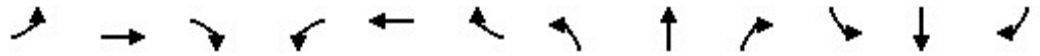
2050 AM Build Unsignalized Network												
Malabar Rd. & Snapdragon Dr.											Intersection ID: 2	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	-	-	-	0.02	-	-	-	-	-	-	-	0.23
HCM Control Delay (s)	-	-	-	12.7	-	-	-	-	-	-	-	17.5
HCM Lane LOS	-	-	-	B	-	-	-	-	-	-	-	C
HCM 95th Percentile Queue (veh/In)	-	-	-	0.1	-	-	-	-	-	-	-	0.9
Malabar Rd. & Championship Cir.											Intersection ID: 3	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	-	-	-	0.01	-	-	-	-	-	-	-	0.05
HCM Control Delay (s)	-	-	-	12.7	-	-	-	-	-	-	-	25.5
HCM Lane LOS	-	-	-	B	-	-	-	-	-	-	-	D
HCM 95th Percentile Queue (veh/In)	-	-	-	0.0	-	-	-	-	-	-	-	0.2
Malabar Rd. & Bavarian Ave.											Intersection ID: 5	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	-	0.02	-	-	-	-	-	-	-	-	-	-
HCM Control Delay (s)	-	12.9	-	-	-	-	0.0	-	-	-	-	-
HCM Lane LOS	-	B	-	-	-	-	A	-	-	-	-	-
HCM 95th Percentile Queue (veh/In)	-	0.1	-	-	-	-	0.0	-	-	-	-	-
Malabar Rd. & Watoga Ave.											Intersection ID: 19	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	-	0.06	-	0.02	-	-	0.01	-	-	-	-	0.17
HCM Control Delay (s)	-	13.2	-	11.1	-	-	10.9	-	-	-	-	14.5
HCM Lane LOS	-	B	-	B	-	-	B	-	-	-	-	B
HCM 95th Percentile Queue (veh/In)	-	0.2	-	0.1	-	-	0.0	-	-	-	-	0.6
Malabar Rd. & Palm Bay Public Works (W)											Intersection ID: 7	
Movement	NBL	NBT	NBR	EBU	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	-	0.01	-	0.06	-	-	0.01	-	-	-	-	-
HCM Control Delay (s)	-	12.8	-	19.5	-	-	10.9	-	-	-	-	-
HCM Lane LOS	-	B	-	C	-	-	B	-	-	-	-	-
HCM 95th Percentile Queue (veh/In)	-	0.0	-	0.2	-	-	0.0	-	-	-	-	-
Malabar Rd. & Palm Bay Public Works (E)											Intersection ID: 8	
Movement	NBL	NBT	NBR	EBU	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	-	0.07	-	0.00	-	-	0.10	-	-	-	-	-
HCM Control Delay (s)	-	15.6	-	18.7	-	-	14.5	-	-	-	-	-
HCM Lane LOS	-	C	-	C	-	-	B	-	-	-	-	-
HCM 95th Percentile Queue (veh/In)	-	0.2	-	0.0	-	-	0.3	-	-	-	-	-
Malabar Rd. & Post Office											Intersection ID: 9	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	-	0.07	-	-	-	-	-	-	-	-	-	-
HCM Control Delay (s)	-	13.5	-	-	-	-	-	-	-	-	-	0.0
HCM Lane LOS	-	B	-	-	-	-	-	-	-	-	-	A
HCM 95th Percentile Queue (veh/In)	-	0.2	-	-	-	-	-	-	-	-	-	-
Malabar Rd. & Santa Rosa Ave.											Intersection ID: 11	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	-	0.02	-	-	-	-	-	-	-	-	-	-
HCM Control Delay (s)	-	14.0	-	-	-	-	-	-	-	-	-	0.0
HCM Lane LOS	-	B	-	-	-	-	-	-	-	-	-	A
HCM 95th Percentile Queue (veh/In)	-	0.1	-	-	-	-	-	-	-	-	-	-
Malabar Rd. & Madalyn Landing											Intersection ID: 13	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	-	0.18	-	-	-	-	0.07	-	-	-	-	-
HCM Control Delay (s)	-	17.0	-	-	-	-	13.2	-	-	-	-	-
HCM Lane LOS	-	C	-	-	-	-	B	-	-	-	-	-
HCM 95th Percentile Queue (veh/In)	-	0.7	-	-	-	-	0.2	-	-	-	-	-
Malabar Rd. & Sutherland Dr.											Intersection ID: 14	
Movement	NBL	NBT	NBR	EBU	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	-	0.06	-	0.13	-	-	0.02	-	-	-	-	-
HCM Control Delay (s)	-	15.5	-	27.3	-	-	12.9	-	-	-	-	-
HCM Lane LOS	-	C	-	D	-	-	B	-	-	-	-	-
HCM 95th Percentile Queue (veh/In)	-	0.2	-	0.4	-	-	0.1	-	-	-	-	-

2050 AM Build Signalized Network												
Malabar Rd. & St. Johns Heritage Pkwy.											Intersection ID: 1	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	0.80	0.00	0.99	0.68	0.24	0.24	0.44	0.82	0.43	0.86	0.00	0.89
HCM Lane Group Delay (s)	108.3	0.0	110.6	43.8	30.4	30.4	28.9	51.3	22.5	88.6	0.0	76.5
HCM Lane LOS	F	A	F	D	C	C	C	D	C	F	A	E
HCM 95th Percentile Queue (veh/In)	7.7	0.0	31.3	6.5	8.9	9.1	4.3	37.0	11.8	14.7	0.0	31.9
HCM6 Intersection Ctrl Delay	61.8											
HCM6 Intersection LOS	E											
Malabar Rd. & Wisteria Avenue/Abilene Drive											Intersection ID: 18	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	0.75	0.00	0.42	0.02	0.39	0.39	0.19	0.47	0.47	0.16	0.00	0.00
HCM Lane Group Delay (s)	82.5	0.0	61.0	10.3	15.2	15.2	10.6	1.2	1.1	56.6	0.0	0.0
HCM Lane LOS	F	A	E	B	B	B	B	A	A	E	A	A
HCM 95th Percentile Queue (veh/In)	18.0	0.0	11.0	0.1	13.5	13.9	1.9	0.7	0.7	3.4	0.0	0.0
HCM6 Intersection Ctrl Delay	18.5											
HCM6 Intersection LOS	B											
Malabar Rd. & Krassner Dr./ Bending Branch Ln.											Intersection ID: 4	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	0.73	0.00	0.00	0.08	0.93	0.93	0.06	0.47	0.47	0.38	0.00	0.00
HCM Lane Group Delay (s)	82.9	0.0	0.0	44.8	54.9	54.1	6.1	1.2	1.2	71.8	0.0	0.0
HCM Lane LOS	F	A	A	D	D	D	A	A	A	E	A	A
HCM 95th Percentile Queue (veh/In)	9.9	0.0	0.0	0.8	24.0	24.9	0.5	0.8	0.8	6.9	0.0	0.0
HCM6 Intersection Ctrl Delay	29.8											
HCM6 Intersection LOS	C											
Malabar Rd. & Hurley Blvd.											Intersection ID: 6	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	0.43	0.00	0.00	0.04	0.60	0.60	0.18	0.57	0.57	0.19	0.00	0.00
HCM Lane Group Delay (s)	30.7	0.0	0.0	10.3	16.5	16.5	10.6	14.4	14.3	26.8	0.0	0.0
HCM Lane LOS	C	A	A	B	B	B	B	B	B	C	A	A
HCM 95th Percentile Queue (veh/In)	6.8	0.0	0.0	0.2	11.8	12.0	0.8	10.9	11.2	2.8	0.0	0.0
HCM6 Intersection Ctrl Delay	16.8											
HCM6 Intersection LOS	B											
Malabar Rd. & Jupiter Blvd.											Intersection ID: 10	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	0.91	0.47	0.22	0.87	0.62	0.62	0.62	0.78	0.78	0.89	0.00	0.94
HCM Lane Group Delay (s)	113.1	64.7	60.7	59.8	41.1	41.2	33.0	75.3	75.9	93.4	0.0	104.6
HCM Lane LOS	F	E	E	E	D	D	C	E	E	F	A	F
HCM 95th Percentile Queue (veh/In)	16.2	11.5	4.8	9.5	23.9	23.6	8.1	39.1	37.8	13.9	0.0	23.9
HCM6 Intersection Ctrl Delay	68.8											
HCM6 Intersection LOS	E											
Malabar Rd. & Garvey Rd.											Intersection ID: 12	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	0.91	-	0.56	-	0.45	0.46	0.59	0.42	-	-	-	-
HCM Lane Group Delay (s)	107.0	-	75.6	-	5.5	5.5	10.7	0.5	-	-	-	-
HCM Lane LOS	F	-	E	-	A	A	B	A	-	-	-	-
HCM 95th Percentile Queue (veh/In)	15.9	-	8.9	-	10.5	10.8	3.3	0.3	-	-	-	-
HCM6 Intersection Ctrl Delay	12.9											
HCM6 Intersection LOS	B											
Malabar Rd. & Maywood Ave./Daffodil Dr.											Intersection ID: 15	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	0.20	0.00	0.00	0.03	0.54	0.54	0.11	0.51	0.51	0.35	0.00	0.00
HCM Lane Group Delay (s)	68.3	0.0	0.0	7.1	10.9	10.9	7.7	9.6	9.6	71.9	0.0	0.0
HCM Lane LOS	E	A	A	A	B	B	A	A	A	E	A	A
HCM 95th Percentile Queue (veh/In)	4.1	0.0	0.0	0.1	16.8	17.5	0.5	15.0	15.5	7.6	0.0	0.0
HCM6 Intersection Ctrl Delay	13.1											
HCM6 Intersection LOS	B											
Malabar Rd. & Plaza Entrance											Intersection ID: 16	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	0.63	0.00	0.13	0.03	0.38	0.38	0.17	0.49	0.00	0.08	0.00	0.17
HCM Lane Group Delay (s)	96.9	0.0	86.6	6.0	7.3	7.6	5.3	7.4	1.1	85.4	0.0	89.8
HCM Lane LOS	F	A	F	A	A	A	A	A	A	F	A	F
HCM 95th Percentile Queue (veh/In)	6.4	0.0	0.5	0.1	10.2	11.1	0.8	12.7	0.0	0.6	0.0	0.5
HCM6 Intersection Ctrl Delay	9.8											
HCM6 Intersection LOS	A											
Malabar Rd. & Minton Rd.											Intersection ID: 17	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	0.45	0.96	0.18	0.84	0.93	0.93	0.96	0.70	0.33	0.97	0.47	0.76
HCM Lane Group Delay (s)	46.9	94.9	51.1	95.0	96.9	96.7	153.6	64.5	27.2	98.8	46.0	28.7
HCM Lane LOS	D	F	D	F	F	F	F	E	C	F	D	C
HCM 95th Percentile Queue (veh/In)	8.0	34.2	4.9	16.2	38.5	39.3	12.1	20.0	6.3	19.3	17.0	16.6
HCM6 Intersection Ctrl Delay	77.5											
HCM6 Intersection LOS	E											

2050 BUILD AM PEAK HOUR INTERSECTION OPERATIONS SYNCHRO
REPORTS

HCM 6th Signalized Intersection Summary
 1: St. Johns Heritage Pkwy. & Malabar Rd.

05/11/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗	↗	↖	↗		↗	↗	
Traffic Volume (veh/h)	137	345	45	236	682	541	79	241	173	393	259	259
Future Volume (veh/h)	137	345	45	236	682	541	79	241	173	393	259	259
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	1737	1811	1900	1900	1841	1856	1900	1900	1900	1722	1900	1796
Adj Flow Rate, veh/h	137	345	34	236	682	304	79	241	163	393	259	236
Peak Hour 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
Percent Heavy Veh, %	11	6	0	0	4	3	0	0	0	12	0	7
Cap, veh/h	202	1449	142	532	835	714	99	244	165	456	292	267
Arrive On Green	0.06	0.46	0.46	0.05	0.45	0.45	0.05	0.23	0.23	0.14	0.32	0.32
Sat Flow, veh/h	1654	3166	310	1810	1841	1572	1810	1057	715	3182	916	834
Grp Volume(v), veh/h	137	187	192	236	682	304	79	0	404	393	0	495
Grp Sat Flow(s),veh/h/ln	1654	1721	1755	1810	1841	1572	1810	0	1771	1591	0	1750
Q Serve(g_s), s	8.0	11.9	12.0	9.3	57.9	18.6	7.8	0.0	40.9	21.7	0.0	48.3
Cycle Q Clear(g_c), s	8.0	11.9	12.0	9.3	57.9	18.6	7.8	0.0	40.9	21.7	0.0	48.3
Prop In Lane	1.00		0.18	1.00		1.00	1.00		0.40	1.00		0.48
Lane Grp Cap(c), veh/h	202	788	803	532	835	714	99	0	408	456	0	559
V/C Ratio(X)	0.68	0.24	0.24	0.44	0.82	0.43	0.80	0.00	0.99	0.86	0.00	0.89
Avail Cap(c_a), veh/h	216	788	803	532	835	714	126	0	408	504	0	559
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(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	36.2	29.7	29.7	28.3	42.7	20.7	84.1	0.0	69.0	75.3	0.0	58.1
Incr Delay (d2), s/veh	7.6	0.7	0.7	0.6	8.7	1.9	24.2	0.0	41.6	13.3	0.0	18.4
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(95%),veh/ln	6.5	8.9	9.1	4.3	37.0	11.8	7.7	0.0	31.3	14.7	0.0	31.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	43.8	30.4	30.4	28.9	51.3	22.5	108.3	0.0	110.6	88.6	0.0	76.5
LnGrp LOS	D	C	C	C	D	C	F	A	F	F	A	E
Approach Vol, veh/h		516			1222			483				888
Approach Delay, s/veh		34.0			39.8			110.2				81.9
Approach LOS		C			D			F				F
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	14.5	87.2	15.3	63.0	13.8	87.9	31.3	47.0				
Change Period (Y+Rc), s	4.5	5.5	5.5	5.5	4.5	5.5	5.5	5.5				
Max Green Setting (Gmax), s	11.5	77.5	12.5	57.5	9.3	79.7	28.5	41.5				
Max Q Clear Time (g_c+I1), s	10.0	59.9	9.8	50.3	11.3	14.0	23.7	42.9				
Green Ext Time (p_c), s	0.0	5.4	0.0	1.7	0.0	2.4	0.6	0.0				

Intersection Summary

HCM 6th Ctrl Delay	61.8
HCM 6th LOS	E

Intersection						
Int Delay, s/veh	0.7					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	8	934	1403	36	0	87
Future Vol, veh/h	8	934	1403	36	0	87
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	7	4	0	0	0
Mvmt Flow	8	934	1403	36	0	87

Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	1439	0	-	0	-	720
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	4.1	-	-	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	2.2	-	-	-	-	3.3
Pot Cap-1 Maneuver	478	-	-	-	0	375
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	478	-	-	-	-	375
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	17.5
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	478	-	-	-	375
HCM Lane V/C Ratio	0.017	-	-	-	0.232
HCM Control Delay (s)	12.7	-	-	-	17.5
HCM Lane LOS	B	-	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	0.9

HCM 6th TWSC
3: Malabar Rd. & Championship Cir.

05/11/2021

Intersection						
Int Delay, s/veh	0.1					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	4	930	1436	11	6	3
Future Vol, veh/h	4	930	1436	11	6	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	7	4	0	0	0
Mvmt Flow	4	930	1436	11	6	3

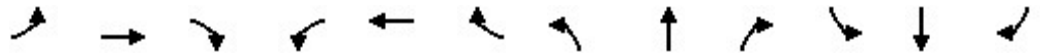
Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	1447	0	-	0	1915 724
Stage 1	-	-	-	-	1442 -
Stage 2	-	-	-	-	473 -
Critical Hdwy	4.1	-	-	-	6.8 6.9
Critical Hdwy Stg 1	-	-	-	-	5.8 -
Critical Hdwy Stg 2	-	-	-	-	5.8 -
Follow-up Hdwy	2.2	-	-	-	3.5 3.3
Pot Cap-1 Maneuver	474	-	-	-	61 373
Stage 1	-	-	-	-	187 -
Stage 2	-	-	-	-	599 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	474	-	-	-	61 373
Mov Cap-2 Maneuver	-	-	-	-	148 -
Stage 1	-	-	-	-	186 -
Stage 2	-	-	-	-	599 -

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	25.5
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	474	-	-	-	185
HCM Lane V/C Ratio	0.008	-	-	-	0.049
HCM Control Delay (s)	12.7	-	-	-	25.5
HCM Lane LOS	B	-	-	-	D
HCM 95th %tile Q(veh)	0	-	-	-	0.2

HCM 6th Signalized Intersection Summary
 4: Krassner Dr./ Bending Branch Ln & Malabar Rd.

05/11/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	14	1022	22	45	1149	72	79	2	68	66	1	37
Future Volume (veh/h)	14	1022	22	45	1149	72	79	2	68	66	1	37
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	1796	1811	1589	1811	1826	1856	1841	1159	1870	1885	1900	1856
Adj Flow Rate, veh/h	14	1022	16	45	1149	71	79	2	40	66	1	21
Peak Hour 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
Percent Heavy Veh, %	7	6	21	6	5	3	4	50	2	1	0	3
Cap, veh/h	182	1097	17	807	2451	151	116	6	44	177	7	47
Arrive On Green	0.03	0.63	0.63	0.86	1.00	1.00	0.14	0.14	0.14	0.14	0.14	0.14
Sat Flow, veh/h	1711	3468	54	1725	3319	205	581	45	309	1000	51	329
Grp Volume(v), veh/h	14	507	531	45	600	620	121	0	0	88	0	0
Grp Sat Flow(s),veh/h/ln	1711	1721	1801	1725	1735	1789	935	0	0	1381	0	0
Q Serve(g_s), s	1.0	47.5	47.5	0.0	0.0	0.0	12.4	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	1.0	47.5	47.5	0.0	0.0	0.0	22.8	0.0	0.0	10.4	0.0	0.0
Prop In Lane	1.00		0.03	1.00		0.11	0.65		0.33	0.75		0.24
Lane Grp Cap(c), veh/h	182	544	570	807	1281	1321	166	0	0	232	0	0
V/C Ratio(X)	0.08	0.93	0.93	0.06	0.47	0.47	0.73	0.00	0.00	0.38	0.00	0.00
Avail Cap(c_a), veh/h	225	996	1043	807	1281	1321	273	0	0	402	0	0
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	0.92	0.92	0.92	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	44.6	31.3	31.3	6.1	0.0	0.0	75.7	0.0	0.0	70.6	0.0	0.0
Incr Delay (d2), s/veh	0.2	23.5	22.8	0.0	1.2	1.2	7.1	0.0	0.0	1.2	0.0	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(95%),veh/ln	0.8	24.0	24.9	0.5	0.8	0.8	9.9	0.0	0.0	6.9	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	44.8	54.9	54.1	6.1	1.2	1.2	82.9	0.0	0.0	71.8	0.0	0.0
LnGrp LOS	D	D	D	A	A	A	F	A	A	E	A	A
Approach Vol, veh/h		1052			1265			121			88	
Approach Delay, s/veh		54.3			1.4			82.9			71.8	
Approach LOS		D			A			F			E	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	84.5	63.7		31.7	8.5	139.7		31.7				
Change Period (Y+Rc), s	6.8	* 6.8		* 6.1	6.0	6.8		6.1				
Max Green Setting (Gmax), s	10.6	* 1E2		* 47	7.0	107.2		46.9				
Max Q Clear Time (g_c+I1), s	2.0	49.5		12.4	3.0	2.0		24.8				
Green Ext Time (p_c), s	0.0	7.5		0.6	0.0	9.9		0.8				

Intersection Summary

HCM 6th Ctrl Delay	29.8
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection						
Int Delay, s/veh	0					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑		↘	↑↑		↘
Traffic Vol, veh/h	1155	1	0	1266	0	8
Future Vol, veh/h	1155	1	0	1266	0	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	200	-	-	0
Veh in Median Storage, #	0	-	-	0	1	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	5	0	0	4	17	0
Mvmt Flow	1155	1	0	1266	0	8

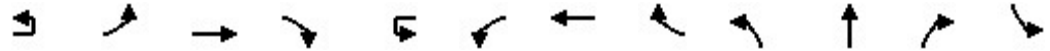
Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	1156	0	- 578
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	-	4.1	-	- 6.9
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	-	2.2	-	- 3.3
Pot Cap-1 Maneuver	-	-	612	-	0 464
Stage 1	-	-	-	-	0 -
Stage 2	-	-	-	-	0 -
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	612	-	- 464
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	12.9
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	464	-	-	612	-
HCM Lane V/C Ratio	0.017	-	-	-	-
HCM Control Delay (s)	12.9	-	-	0	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0	-

HCM 6th Signalized Intersection Summary
6: Hurley Blvd. & Malabar Rd.

05/11/2021



Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations		↔	↕			↔	↕			↕		
Traffic Volume (veh/h)	6	11	1059	98	35	57	1148	16	112	18	68	32
Future Volume (veh/h)	6	11	1059	98	35	57	1148	16	112	18	68	32
Initial Q (Qb), veh		0	0	0		0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		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
Work Zone On Approach			No				No			No		
Adj Sat Flow, veh/h/ln		1900	1841	1856		1856	1826	1900	1885	1900	1900	1900
Adj Flow Rate, veh/h		11	1059	98		57	1148	16	112	18	68	32
Peak Hour Factor		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %		0	4	3		3	5	0	1	0	0	0
Cap, veh/h		285	1769	164		312	2016	28	272	54	138	180
Arrive On Green		0.01	0.55	0.55		0.04	0.58	0.58	0.26	0.26	0.26	0.26
Sat Flow, veh/h		1810	3236	299		1767	3503	49	802	206	527	481
Grp Volume(v), veh/h		11	572	585		57	568	596	198	0	0	89
Grp Sat Flow(s),veh/h/ln		1810	1749	1787		1767	1735	1817	1534	0	0	1597
Q Serve(g_s), s		0.2	19.8	19.9		1.2	18.6	18.6	5.7	0.0	0.0	0.0
Cycle Q Clear(g_c), s		0.2	19.8	19.9		1.2	18.6	18.6	9.3	0.0	0.0	3.6
Prop In Lane		1.00		0.17		1.00		0.03	0.57		0.34	0.36
Lane Grp Cap(c), veh/h		285	956	977		312	998	1046	463	0	0	471
V/C Ratio(X)		0.04	0.60	0.60		0.18	0.57	0.57	0.43	0.00	0.00	0.19
Avail Cap(c_a), veh/h		371	956	977		384	998	1046	463	0	0	471
HCM Platoon Ratio		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)		1.00	1.00	1.00		1.00	1.00	1.00	1.00	0.00	0.00	1.00
Uniform Delay (d), s/veh		10.2	13.7	13.7		10.3	12.1	12.1	27.8	0.0	0.0	25.9
Incr Delay (d2), s/veh		0.1	2.8	2.7		0.3	2.4	2.3	2.9	0.0	0.0	0.9
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
%ile BackOfQ(95%),veh/ln		0.2	11.8	12.0		0.8	10.9	11.2	6.8	0.0	0.0	2.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh		10.3	16.5	16.5		10.6	14.4	14.3	30.7	0.0	0.0	26.8
LnGrp LOS		B	B	B		B	B	B	C	A	A	C
Approach Vol, veh/h			1168				1221			198		
Approach Delay, s/veh			16.4				14.2			30.7		
Approach LOS			B				B			C		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.7	56.3		28.0	8.3	53.7		28.0				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5.5	47.5		23.5	7.5	45.5		23.5				
Max Q Clear Time (g_c+I1), s	2.2	20.6		11.3	3.2	21.9		5.6				
Green Ext Time (p_c), s	0.0	7.9		0.8	0.0	7.6		0.4				

Intersection Summary

HCM 6th Ctrl Delay	16.8
HCM 6th LOS	B

Notes

User approved ignoring U-Turning movement.

HCM 6th Signalized Intersection Summary
 6: Hurley Blvd. & Malabar Rd.

05/11/2021



Movement	SBT	SBR
Lane Configurations	↕	
Traffic Volume (veh/h)	8	49
Future Volume (veh/h)	8	49
Initial Q (Qb), veh	0	0
Ped-Bike Adj(A_pbT)		1.00
Parking Bus, Adj	1.00	1.00
Work Zone On Approach	No	
Adj Sat Flow, veh/h/ln	1900	1900
Adj Flow Rate, veh/h	8	49
Peak Hour Factor	1.00	1.00
Percent Heavy Veh, %	0	0
Cap, veh/h	62	230
Arrive On Green	0.26	0.26
Sat Flow, veh/h	237	879
Grp Volume(v), veh/h	0	0
Grp Sat Flow(s),veh/h/ln	0	0
Q Serve(g_s), s	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0
Prop In Lane		0.55
Lane Grp Cap(c), veh/h	0	0
V/C Ratio(X)	0.00	0.00
Avail Cap(c_a), veh/h	0	0
HCM Platoon Ratio	1.00	1.00
Upstream Filter(l)	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	0.0
Unsig. Movement Delay, s/veh		
LnGrp Delay(d),s/veh	0.0	0.0
LnGrp LOS	A	A
Approach Vol, veh/h	89	
Approach Delay, s/veh	26.8	
Approach LOS	C	
Timer - Assigned Phs		

HCM 6th TWSC
 7: Palm Bay Public Works (W) & Malabar Rd.

05/11/2021

Intersection							
Int Delay, s/veh	0.2						
Movement	EBU	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	⇐	⇐⇐		⇐	⇐⇐		⇐
Traffic Vol, veh/h	16	1156	2	6	1166	0	3
Future Vol, veh/h	16	1156	2	6	1166	0	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	-	None	-	None	-	None
Storage Length	0	-	-	200	-	-	0
Veh in Median Storage, #	-	0	-	-	0	1	-
Grade, %	-	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100	100
Heavy Vehicles, %	0	3	0	0	5	0	0
Mvmt Flow	16	1156	2	6	1166	0	3

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	1166	0	0	1158	0	579
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	6.4	-	-	4.1	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	2.5	-	-	2.2	-	3.3
Pot Cap-1 Maneuver	264	-	-	611	-	463
Stage 1	-	-	-	-	-	0
Stage 2	-	-	-	-	-	0
Platoon blocked, %		-	-		-	
Mov Cap-1 Maneuver	264	-	-	611	-	463
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0.3	0.1	12.8
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBU	EBT	EBR	WBL	WBT
Capacity (veh/h)	463	264	-	-	611	-
HCM Lane V/C Ratio	0.006	0.061	-	-	0.01	-
HCM Control Delay (s)	12.8	19.5	-	-	10.9	-
HCM Lane LOS	B	C	-	-	B	-
HCM 95th %tile Q(veh)	0	0.2	-	-	0	-

Intersection								
Int Delay, s/veh	0.4							
Movement	EBU	EBT	EBR	WBU	WBL	WBT	NBL	NBR
Lane Configurations	↔	↕↔			↕	↕↕	↕	
Traffic Vol, veh/h	1	1152	6	14	30	1167	4	20
Future Vol, veh/h	1	1152	6	14	30	1167	4	20
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	None
Storage Length	200	-	-	-	175	-	0	-
Veh in Median Storage, #	-	0	-	-	-	0	1	-
Grade, %	-	0	-	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	3	0	0	0	5	0	0
Mvmt Flow	1	1152	6	14	30	1167	4	20

Major/Minor	Major1		Major2		Minor1			
Conflicting Flow All	1167	0	0	1158	1158	0	1829	579
Stage 1	-	-	-	-	-	-	1157	-
Stage 2	-	-	-	-	-	-	672	-
Critical Hdwy	6.4	-	-	6.4	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.8	-
Follow-up Hdwy	2.5	-	-	2.5	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	264	-	-	267	611	-	70	463
Stage 1	-	-	-	-	-	-	266	-
Stage 2	-	-	-	-	-	-	474	-
Platoon blocked, %		-	-			-		
Mov Cap-1 Maneuver	264	-	-	423	423	-	62	463
Mov Cap-2 Maneuver	-	-	-	-	-	-	175	-
Stage 1	-	-	-	-	-	-	265	-
Stage 2	-	-	-	-	-	-	425	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.5	15.6
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBU	EBT	EBR	WBL	WBT
Capacity (veh/h)	363	264	-	-	423	-
HCM Lane V/C Ratio	0.066	0.004	-	-	0.104	-
HCM Control Delay (s)	15.6	18.7	-	-	14.5	-
HCM Lane LOS	C	C	-	-	B	-
HCM 95th %tile Q(veh)	0.2	0	-	-	0.3	-

Intersection												
Int Delay, s/veh	0.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑				↑			↑
Traffic Vol, veh/h	0	1154	32	0	1211	0	0	0	30	0	0	0
Future Vol, veh/h	0	1154	32	0	1211	0	0	0	30	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	4	0	0	5	0	0	0	0	0	0	0
Mvmt Flow	0	1154	32	0	1211	0	0	0	30	0	0	0

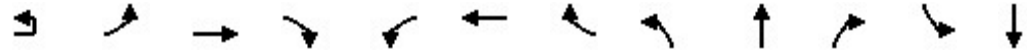
Major/Minor	Major1		Major2		Minor1		Minor2					
Conflicting Flow All	-	0	0	-	-	0	-	-	593	-	-	606
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-	-	-	6.9	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-	-	-	3.3	-	-	3.3
Pot Cap-1 Maneuver	0	-	-	0	-	-	0	0	454	0	0	445
Stage 1	0	-	-	0	-	-	0	0	-	0	0	-
Stage 2	0	-	-	0	-	-	0	0	-	0	0	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	-	-	-	-	-	454	-	-	445
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0	13.5	0
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT	WBR	SBLn1
Capacity (veh/h)	454	-	-	-	-	-
HCM Lane V/C Ratio	0.066	-	-	-	-	-
HCM Control Delay (s)	13.5	-	-	-	-	0
HCM Lane LOS	B	-	-	-	-	A
HCM 95th %tile Q(veh)	0.2	-	-	-	-	-

HCM 6th Signalized Intersection Summary
 10: Jupiter Blvd. & Malabar Rd.

05/11/2021



Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations		↔	↕		↕	↕		↕	↑	↕	↕	↕
Traffic Volume (veh/h)	11	189	799	185	181	856	365	192	173	170	357	172
Future Volume (veh/h)	11	189	799	185	181	856	365	192	173	170	357	172
Initial Q (Qb), veh		0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		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
Work Zone On Approach			No			No			No			No
Adj Sat Flow, veh/h/ln		1885	1870	1737	1811	1841	1856	1826	1841	1870	1870	1826
Adj Flow Rate, veh/h		189	799	179	181	856	336	192	173	68	357	172
Peak Hour Factor		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %		1	2	11	6	4	3	5	4	2	2	5
Cap, veh/h		217	1299	291	290	1103	431	210	366	315	402	182
Arrive On Green		0.07	0.45	0.45	0.02	0.15	0.15	0.12	0.20	0.20	0.12	0.19
Sat Flow, veh/h		1795	2885	646	1725	2456	961	1739	1841	1585	3456	938
Grp Volume(v), veh/h		189	492	486	181	609	583	192	173	68	357	0
Grp Sat Flow(s),veh/h/ln		1795	1777	1754	1725	1749	1668	1739	1841	1585	1728	0
Q Serve(g_s), s		10.2	37.9	37.9	9.9	60.3	60.6	19.6	15.0	6.5	18.3	0.0
Cycle Q Clear(g_c), s		10.2	37.9	37.9	9.9	60.3	60.6	19.6	15.0	6.5	18.3	0.0
Prop In Lane		1.00		0.37	1.00		0.58	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h		217	800	790	290	785	749	210	366	315	402	0
V/C Ratio(X)		0.87	0.62	0.62	0.62	0.78	0.78	0.91	0.47	0.22	0.89	0.00
Avail Cap(c_a), veh/h		273	800	790	375	785	749	232	366	315	499	0
HCM Platoon Ratio		1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh		38.7	37.6	37.6	30.8	67.9	68.1	78.2	63.8	60.4	78.4	0.0
Incr Delay (d2), s/veh		21.2	3.5	3.6	2.2	7.4	7.8	34.9	0.9	0.3	15.0	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
%ile BackOfQ(95%),veh/ln		9.5	23.9	23.6	8.1	39.1	37.8	16.2	11.5	4.8	13.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh		59.8	41.1	41.2	33.0	75.3	75.9	113.1	64.7	60.7	93.4	0.0
LnGrp LOS		E	D	D	C	E	E	F	E	E	F	A
Approach Vol, veh/h			1167			1373			433			667
Approach Delay, s/veh			44.2			70.0			85.5			98.6
Approach LOS			D			E			F			F
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	19.4	88.8	28.0	43.8	19.2	89.0	28.8	43.0				
Change Period (Y+Rc), s	7.0	8.0	7.0	8.0	7.0	8.0	7.0	8.0				
Max Green Setting (Gmax), s	18.0	71.0	26.0	35.0	21.0	68.0	24.0	37.0				
Max Q Clear Time (g_c+I1), s	12.2	62.6	20.3	17.0	11.9	39.9	21.6	34.6				
Green Ext Time (p_c), s	0.2	4.5	0.6	1.0	0.3	6.4	0.1	0.4				

Intersection Summary

HCM 6th Ctrl Delay	68.8
HCM 6th LOS	E

Notes

- User approved pedestrian interval to be less than phase max green.
- User approved ignoring U-Turning movement.

HCM 6th Signalized Intersection Summary
 10: Jupiter Blvd. & Malabar Rd.

05/11/2021

Movement	SBR
Lane Configurations	
Traffic Volume (veh/h)	152
Future Volume (veh/h)	152
Initial Q (Qb), veh	0
Ped-Bike Adj(A_pbT)	1.00
Parking Bus, Adj	1.00
Work Zone On Approach	
Adj Sat Flow, veh/h/ln	1796
Adj Flow Rate, veh/h	138
Peak Hour Factor	1.00
Percent Heavy Veh, %	7
Cap, veh/h	146
Arrive On Green	0.19
Sat Flow, veh/h	753
Grp Volume(v), veh/h	310
Grp Sat Flow(s),veh/h/ln	1690
Q Serve(g_s), s	32.6
Cycle Q Clear(g_c), s	32.6
Prop In Lane	0.45
Lane Grp Cap(c), veh/h	329
V/C Ratio(X)	0.94
Avail Cap(c_a), veh/h	347
HCM Platoon Ratio	1.00
Upstream Filter(l)	1.00
Uniform Delay (d), s/veh	71.5
Incr Delay (d2), s/veh	33.0
Initial Q Delay(d3),s/veh	0.0
%ile BackOfQ(95%),veh/ln	23.9
Unsig. Movement Delay, s/veh	
LnGrp Delay(d),s/veh	104.6
LnGrp LOS	F
Approach Vol, veh/h	
Approach Delay, s/veh	
Approach LOS	
Timer - Assigned Phs	

Intersection												
Int Delay, s/veh	0											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑				↑			↑
Traffic Vol, veh/h	0	1325	3	0	1404	0	0	0	9	0	0	0
Future Vol, veh/h	0	1325	3	0	1404	0	0	0	9	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	2	0	0	3	0	0	0	0	0	0	0
Mvmt Flow	0	1325	3	0	1404	0	0	0	9	0	0	0

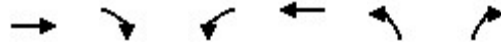
Major/Minor	Major1		Major2		Minor1		Minor2					
Conflicting Flow All	-	0	0	-	-	0	-	-	664	-	-	702
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-	-	-	6.9	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-	-	-	3.3	-	-	3.3
Pot Cap-1 Maneuver	0	-	-	0	-	-	0	0	408	0	0	385
Stage 1	0	-	-	0	-	-	0	0	-	0	0	-
Stage 2	0	-	-	0	-	-	0	0	-	0	0	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	-	-	-	-	-	408	-	-	385
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0	14	0
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT	WBR	SBLn1
Capacity (veh/h)	408	-	-	-	-	-
HCM Lane V/C Ratio	0.022	-	-	-	-	-
HCM Control Delay (s)	14	-	-	-	-	0
HCM Lane LOS	B	-	-	-	-	A
HCM 95th %tile Q(veh)	0.1	-	-	-	-	-

HCM 6th Signalized Intersection Summary
 12: Garvey Rd. & Malabar Rd.

05/11/2021



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑		↙	↑↑	↙	↗
Traffic Volume (veh/h)	1254	76	192	1208	192	198
Future Volume (veh/h)	1254	76	192	1208	192	198
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1826	1870	1870	1693	1870
Adj Flow Rate, veh/h	1254	72	192	1208	192	116
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	5	2	2	14	2
Cap, veh/h	2759	158	328	2870	211	208
Arrive On Green	0.81	0.81	1.00	1.00	0.13	0.13
Sat Flow, veh/h	3510	196	413	3647	1612	1585
Grp Volume(v), veh/h	651	675	192	1208	192	116
Grp Sat Flow(s),veh/h/ln	1777	1835	413	1777	1612	1585
Q Serve(g_s), s	20.0	20.1	27.2	0.0	21.1	12.3
Cycle Q Clear(g_c), s	20.0	20.1	47.3	0.0	21.1	12.3
Prop In Lane		0.11	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1435	1482	328	2870	211	208
V/C Ratio(X)	0.45	0.46	0.59	0.42	0.91	0.56
Avail Cap(c_a), veh/h	1435	1482	328	2870	255	251
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	5.3	5.3	3.3	0.0	77.1	73.3
Incr Delay (d2), s/veh	0.2	0.2	7.5	0.5	29.9	2.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	10.5	10.8	3.3	0.3	15.9	8.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	5.5	5.5	10.7	0.5	107.0	75.6
LnGrp LOS	A	A	B	A	F	E
Approach Vol, veh/h	1326			1400	308	
Approach Delay, s/veh	5.5			1.9	95.2	
Approach LOS	A			A	F	
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		150.9		29.1		150.9
Change Period (Y+Rc), s		5.5		5.5		5.5
Max Green Setting (Gmax), s		140.5		28.5		140.5
Max Q Clear Time (g_c+I1), s		49.3		23.1		22.1
Green Ext Time (p_c), s		18.6		0.5		11.5

Intersection Summary

HCM 6th Ctrl Delay	12.9
HCM 6th LOS	B

Notes

User approved ignoring U-Turning movement.

Intersection						
Int Delay, s/veh	0.5					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑		↖	↑↑		↖
Traffic Vol, veh/h	1430	22	35	1400	0	67
Future Vol, veh/h	1430	22	35	1400	0	67
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	275	-	-	-
Veh in Median Storage, #	0	-	-	0	1	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	2	4	0	3	0	2
Mvmt Flow	1430	22	35	1400	0	67

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	1452	0	- 726
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	-	4.1	-	- 6.94
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	-	2.2	-	- 3.32
Pot Cap-1 Maneuver	-	-	472	-	0 367
Stage 1	-	-	-	-	0 -
Stage 2	-	-	-	-	0 -
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	472	-	- 367
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.3	17
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	367	-	-	472	-
HCM Lane V/C Ratio	0.183	-	-	0.074	-
HCM Control Delay (s)	17	-	-	13.2	-
HCM Lane LOS	C	-	-	B	-
HCM 95th %tile Q(veh)	0.7	-	-	0.2	-

Intersection

Int Delay, s/veh 0.4

Movement	EBU	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	⇄	⇄		⇄	⇄		⇄
Traffic Vol, veh/h	23	1468	6	9	1412	0	22
Future Vol, veh/h	23	1468	6	9	1412	0	22
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	-	None	-	None	-	None
Storage Length	150	-	-	375	-	-	0
Veh in Median Storage, #	-	0	-	-	0	1	-
Grade, %	-	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100	100
Heavy Vehicles, %	0	2	0	0	2	0	0
Mvmt Flow	23	1468	6	9	1412	0	22

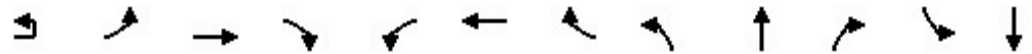
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	1412	0	0	1474	0	737
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	6.4	-	-	4.1	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	2.5	-	-	2.2	-	3.3
Pot Cap-1 Maneuver	184	-	-	463	0	365
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %		-	-		-	
Mov Cap-1 Maneuver	184	-	-	463	-	365
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0.4	0.1	15.5
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBU	EBT	EBR	WBL	WBT
Capacity (veh/h)	365	184	-	-	463	-
HCM Lane V/C Ratio	0.06	0.125	-	-	0.019	-
HCM Control Delay (s)	15.5	27.3	-	-	12.9	-
HCM Lane LOS	C	D	-	-	B	-
HCM 95th %tile Q(veh)	0.2	0.4	-	-	0.1	-

HCM 6th Signalized Intersection Summary
 15: Maywood Ave./Daffodil Dr. & Malabar Rd.

05/11/2021



Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (veh/h)	6	8	1463	13	31	1353	56	14	0	39	46	0
Future Volume (veh/h)	6	8	1463	13	31	1353	56	14	0	39	46	0
Initial Q (Qb), veh		0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		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
Work Zone On Approach			No			No			No			No
Adj Sat Flow, veh/h/ln		1530	1885	1781	1900	1870	1826	1796	1900	1900	1900	1900
Adj Flow Rate, veh/h		8	1463	13	31	1353	56	14	0	39	46	0
Peak Hour Factor		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %		25	1	8	0	2	5	7	0	0	0	0
Cap, veh/h		244	2730	24	291	2654	110	77	14	181	136	10
Arrive On Green		0.01	0.75	0.75	0.02	0.76	0.76	0.15	0.00	0.15	0.15	0.00
Sat Flow, veh/h		1457	3638	32	1810	3478	144	338	88	1187	694	65
Grp Volume(v), veh/h		8	720	756	31	690	719	53	0	0	94	0
Grp Sat Flow(s),veh/h/ln		1457	1791	1879	1810	1777	1844	1613	0	0	1551	0
Q Serve(g_s), s		0.2	30.2	30.2	0.7	27.1	27.2	0.0	0.0	0.0	4.2	0.0
Cycle Q Clear(g_c), s		0.2	30.2	30.2	0.7	27.1	27.2	5.0	0.0	0.0	9.1	0.0
Prop In Lane		1.00		0.02	1.00		0.08	0.26		0.74	0.49	
Lane Grp Cap(c), veh/h		244	1344	1410	291	1356	1407	272	0	0	267	0
V/C Ratio(X)		0.03	0.54	0.54	0.11	0.51	0.51	0.20	0.00	0.00	0.35	0.00
Avail Cap(c_a), veh/h		292	1344	1410	327	1356	1407	272	0	0	267	0
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
Upstream Filter(l)		1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh		7.0	9.4	9.4	7.5	8.3	8.3	66.7	0.0	0.0	68.3	0.0
Incr Delay (d2), s/veh		0.1	1.5	1.5	0.2	1.4	1.3	1.6	0.0	0.0	3.6	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
%ile BackOfQ(95%),veh/ln		0.1	16.8	17.5	0.5	15.0	15.5	4.1	0.0	0.0	7.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh		7.1	10.9	10.9	7.7	9.6	9.6	68.3	0.0	0.0	71.9	0.0
LnGrp LOS		A	B	B	A	A	A	E	A	A	E	A
Approach Vol, veh/h			1484			1440			53			94
Approach Delay, s/veh			10.9			9.6			68.3			71.9
Approach LOS			B			A			E			E
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.1	141.9		32.0	8.4	139.6		32.0				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	7.5	131.5		27.5	7.5	131.5		27.5				
Max Q Clear Time (g_c+I1), s	2.2	29.2		7.0	2.7	32.2		11.1				
Green Ext Time (p_c), s	0.0	13.0		0.2	0.0	14.2		0.4				

Intersection Summary

HCM 6th Ctrl Delay	13.1
HCM 6th LOS	B

Notes

User approved ignoring U-Turning movement.

HCM 6th Signalized Intersection Summary
 15: Maywood Ave./Daffodil Dr. & Malabar Rd.

05/11/2021

Movement	SBR
Lane Configurations	
Traffic Volume (veh/h)	48
Future Volume (veh/h)	48
Initial Q (Qb), veh	0
Ped-Bike Adj(A_pbT)	1.00
Parking Bus, Adj	1.00
Work Zone On Approach	
Adj Sat Flow, veh/h/ln	1841
Adj Flow Rate, veh/h	48
Peak Hour Factor	1.00
Percent Heavy Veh, %	4
Cap, veh/h	121
Arrive On Green	0.15
Sat Flow, veh/h	792
Grp Volume(v), veh/h	0
Grp Sat Flow(s),veh/h/ln	0
Q Serve(g_s), s	0.0
Cycle Q Clear(g_c), s	0.0
Prop In Lane	0.51
Lane Grp Cap(c), veh/h	0
V/C Ratio(X)	0.00
Avail Cap(c_a), veh/h	0
HCM Platoon Ratio	1.00
Upstream Filter(l)	0.00
Uniform Delay (d), s/veh	0.0
Incr Delay (d2), s/veh	0.0
Initial Q Delay(d3),s/veh	0.0
%ile BackOfQ(95%),veh/ln	0.0
Unsig. Movement Delay, s/veh	
LnGrp Delay(d),s/veh	0.0
LnGrp LOS	A
Approach Vol, veh/h	
Approach Delay, s/veh	
Approach LOS	
Timer - Assigned Phs	

HCM 6th Signalized Intersection Summary
 16: Plaza Entrance & Malabar Rd.

05/11/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖ ↗			↖ ↗		↖	↖	↖		↖	↖	
Traffic Volume (veh/h)	8	1497	43	53	1357	1	69	3	37	7	4	14
Future Volume (veh/h)	8	1497	43	53	1357	1	69	3	37	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	1900	1870	1900	1900	1856	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	8	1497	42	53	1357	1	69	3	3	7	4	1
Peak Hour 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
Percent Heavy Veh, %	0	2	0	0	3	0	0	0	0	0	0	0
Cap, veh/h	316	3923	110	308	2756	1259	110	24	24	91	24	6
Arrive On Green	0.01	0.77	0.77	0.02	0.78	0.78	0.04	0.03	0.03	0.03	0.02	0.02
Sat Flow, veh/h	1810	5105	143	1810	3526	1610	1810	872	872	1810	1467	367
Grp Volume(v), veh/h	8	998	541	53	1357	1	69	0	6	7	0	5
Grp Sat Flow(s),veh/h/ln	1810	1702	1845	1810	1763	1610	1810	0	1743	1810	0	1834
Q Serve(g_s), s	0.2	17.3	17.3	1.1	24.6	0.0	6.9	0.0	0.6	0.0	0.0	0.5
Cycle Q Clear(g_c), s	0.2	17.3	17.3	1.1	24.6	0.0	6.9	0.0	0.6	0.0	0.0	0.5
Prop In Lane	1.00		0.08	1.00		1.00	1.00		0.50	1.00		0.20
Lane Grp Cap(c), veh/h	316	2616	1417	308	2756	1259	110	0	48	91	0	30
V/C Ratio(X)	0.03	0.38	0.38	0.17	0.49	0.00	0.63	0.00	0.13	0.08	0.00	0.17
Avail Cap(c_a), veh/h	343	2616	1417	351	2756	1259	110	0	271	91	0	255
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	0.67	0.67	0.67	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	5.9	6.8	6.8	5.1	7.0	1.1	86.3	0.0	85.5	85.0	0.0	87.3
Incr Delay (d2), s/veh	0.0	0.4	0.8	0.2	0.4	0.0	10.6	0.0	1.2	0.4	0.0	2.5
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(95%),veh/ln	0.1	10.2	11.1	0.8	12.7	0.0	6.4	0.0	0.5	0.6	0.0	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	6.0	7.3	7.6	5.3	7.4	1.1	96.9	0.0	86.6	85.4	0.0	89.8
LnGrp LOS	A	A	A	A	A	A	F	A	F	F	A	F
Approach Vol, veh/h	1547		1411		75		12					
Approach Delay, s/veh	7.4		7.3		96.1		87.2					
Approach LOS	A		A		F		F					
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.3	147.7	12.1	11.9	10.7	145.3	14.0	10.0				
Change Period (Y+Rc), s	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0				
Max Green Setting (Gmax), s	116.0	4.0	28.0	8.0	112.0	7.0	25.0					
Max Q Clear Time (g_c+1/2), s	26.6	2.0	2.6	3.1	19.3	8.9	2.5					
Green Ext Time (p_c), s	0.0	15.4	0.0	0.0	0.0	16.7	0.0	0.0				
Intersection Summary												
HCM 6th Ctrl Delay	9.8											
HCM 6th LOS	A											

HCM 6th Signalized Intersection Summary

17: Minton Rd. & Malabar Rd.

05/11/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖↗	↖↗		↖	↖↗	↖	↖	↖	↖	↖	↖	↖
Traffic Volume (veh/h)	419	1022	100	114	643	311	133	482	151	315	324	635
Future Volume (veh/h)	419	1022	100	114	643	311	133	482	151	315	324	635
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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		No		No
Adj Sat Flow, veh/h/ln	1870	1885	1870	1870	1856	1900	1900	1885	1900	1900	1870	1826
Adj Flow Rate, veh/h	419	1022	95	114	643	138	133	482	78	315	324	432
Peak Hour 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
Percent Heavy Veh, %	2	1	2	2	3	0	0	1	0	0	2	5
Cap, veh/h	499	1104	103	119	921	420	299	503	429	324	686	567
Arrive On Green	0.05	0.11	0.11	0.07	0.26	0.26	0.05	0.27	0.27	0.15	0.37	0.37
Sat Flow, veh/h	3456	3313	308	1781	3526	1610	1810	1885	1610	1810	1870	1547
Grp Volume(v), veh/h	419	552	565	114	643	138	133	482	78	315	324	432
Grp Sat Flow(s),veh/h/ln	1728	1791	1830	1781	1763	1610	1810	1885	1610	1810	1870	1547
Q Serve(g_s), s	21.7	55.0	55.0	11.5	29.7	8.5	9.0	45.3	6.7	25.9	23.9	27.5
Cycle Q Clear(g_c), s	21.7	55.0	55.0	11.5	29.7	8.5	9.0	45.3	6.7	25.9	23.9	27.5
Prop In Lane	1.00		0.17	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	499	597	610	119	921	420	299	503	429	324	686	567
V/C Ratio(X)	0.84	0.93	0.93	0.96	0.70	0.33	0.45	0.96	0.18	0.97	0.47	0.76
Avail Cap(c_a), veh/h	499	607	620	119	921	420	299	503	429	324	686	567
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	0.93	0.93	0.93	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	83.6	77.9	77.9	83.8	60.1	25.2	45.9	65.0	50.9	56.6	43.7	19.4
Incr Delay (d2), s/veh	11.3	19.0	18.8	69.8	4.4	2.1	1.0	29.9	0.2	42.2	2.3	9.3
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(95%),veh/ln	6.2	38.5	39.3	12.1	20.0	6.3	8.0	34.2	4.9	19.3	17.0	16.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	95.0	96.9	96.7	153.6	64.5	27.2	46.9	94.9	51.1	98.8	46.0	28.7
LnGrp LOS	F	F	F	F	E	C	D	F	D	F	D	C
Approach Vol, veh/h		1536			895			693			1071	
Approach Delay, s/veh		96.3			70.1			80.7			54.6	
Approach LOS		F			E			F			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	34.0	54.0	35.0	57.0	20.0	68.0	17.0	75.0				
Change Period (Y+Rc), s	8.0	7.0	8.0	9.0	8.0	* 8	8.0	9.0				
Max Green Setting (Gmax), s	26.0	47.0	27.0	48.0	12.0	* 61	9.0	66.0				
Max Q Clear Time (g_c+Q), s	23.7	31.7	27.9	47.3	13.5	57.0	11.0	29.5				
Green Ext Time (p_c), s	0.4	4.2	0.0	0.2	0.0	2.4	0.0	3.5				

Intersection Summary

HCM 6th Ctrl Delay	77.5
HCM 6th LOS	E

Notes

User approved pedestrian interval to be less than phase max green.
 * HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary
 18: Wisteria Ave. & Malabar Rd.

05/11/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗		↖	↗			↕	
Traffic Volume (veh/h)	6	876	54	81	1175	9	245	0	164	18	0	27
Future Volume (veh/h)	6	876	54	81	1175	9	245	0	164	18	0	27
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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		No		No
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	6	876	54	81	1175	9	245	0	164	18	0	27
Peak Hour 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
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	368	2266	140	419	2483	19	327	0	389	118	11	152
Arrive On Green	0.01	0.66	0.66	0.05	1.00	1.00	0.24	0.00	0.24	0.24	0.00	0.24
Sat Flow, veh/h	1810	3454	213	1810	3672	28	1405	0	1610	371	47	627
Grp Volume(v), veh/h	6	458	472	81	578	606	245	0	164	45	0	0
Grp Sat Flow(s),veh/h/ln	1810	1805	1862	1810	1805	1895	1405	0	1610	1045	0	0
Q Serve(g_s), s	0.2	21.0	21.0	2.7	0.0	0.0	20.3	0.0	15.5	1.2	0.0	0.0
Cycle Q Clear(g_c), s	0.2	21.0	21.0	2.7	0.0	0.0	37.0	0.0	15.5	16.7	0.0	0.0
Prop In Lane	1.00		0.11	1.00		0.01	1.00		1.00	0.40		0.60
Lane Grp Cap(c), veh/h	368	1184	1221	419	1220	1281	327	0	389	281	0	0
V/C Ratio(X)	0.02	0.39	0.39	0.19	0.47	0.47	0.75	0.00	0.42	0.16	0.00	0.00
Avail Cap(c_a), veh/h	421	1184	1221	505	1220	1281	327	0	389	281	0	0
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.88	0.88	0.88	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	10.2	14.3	14.3	10.4	0.0	0.0	68.0	0.0	57.6	55.4	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.0	0.9	0.2	1.2	1.1	14.6	0.0	3.3	1.2	0.0	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(95%),veh/ln	0.1	13.5	13.9	1.9	0.7	0.7	18.0	0.0	11.0	3.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	10.3	15.2	15.2	10.6	1.2	1.1	82.5	0.0	61.0	56.6	0.0	0.0
LnGrp LOS	B	B	B	B	A	A	F	A	E	E	A	A
Approach Vol, veh/h		936			1265			409				45
Approach Delay, s/veh		15.2			1.7			73.9				56.6
Approach LOS		B			A			E				E
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.4	122.6		48.0	5.8	126.2		48.0				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	13.5	109.5		43.5	6.5	116.5		43.5				
Max Q Clear Time (g_c+14), s	14.7	23.0		18.7	2.2	2.0		39.0				
Green Ext Time (p_c), s	0.1	6.4		0.2	0.0	10.4		0.7				

Intersection Summary

HCM 6th Ctrl Delay	18.5
HCM 6th LOS	B

Intersection												
Int Delay, s/veh	0.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↕		↖	↕				↗			↗
Traffic Vol, veh/h	12	1145	5	6	1162	14	0	0	29	0	0	78
Future Vol, veh/h	12	1145	5	6	1162	14	0	0	29	0	0	78
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	200	-	-	200	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	12	1145	5	6	1162	14	0	0	29	0	0	78

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1176	0	0	1150	0	0	-	-	575	-	-	588
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	4.1	-	-	4.1	-	-	-	-	6.9	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	-	-	3.3	-	-	3.3
Pot Cap-1 Maneuver	601	-	-	615	-	-	0	0	466	0	0	457
Stage 1	-	-	-	-	-	-	0	0	-	0	0	-
Stage 2	-	-	-	-	-	-	0	0	-	0	0	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	601	-	-	615	-	-	-	-	466	-	-	457
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.1			0.1			13.2			14.5		
HCM LOS							B			B		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	466	601	-	-	615	-	-	457
HCM Lane V/C Ratio	0.062	0.02	-	-	0.01	-	-	0.171
HCM Control Delay (s)	13.2	11.1	-	-	10.9	-	-	14.5
HCM Lane LOS	B	B	-	-	B	-	-	B
HCM 95th %tile Q(veh)	0.2	0.1	-	-	0	-	-	0.6

2050 PM BUILD MOE TABLES

2050 PM Build Unsignalized Network												
Malabar Rd. & Snapdragon Dr.											Intersection ID: 2	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	-	-	-	0.05	-	-	-	-	-	-	-	0.06
HCM Control Delay (s)	-	-	-	8.9	-	-	-	-	-	-	-	10.5
HCM Lane LOS	-	-	-	A	-	-	-	-	-	-	-	B
HCM 95th Percentile Queue (veh/In)	-	-	-	0.2	-	-	-	-	-	-	-	0.2
Malabar Rd. & Championship Cir.											Intersection ID: 3	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	-	-	-	0.03	-	-	-	-	-	-	-	0.11
HCM Control Delay (s)	-	-	-	8.9	-	-	-	-	-	-	-	16.3
HCM Lane LOS	-	-	-	A	-	-	-	-	-	-	-	C
HCM 95th Percentile Queue (veh/In)	-	-	-	0.1	-	-	-	-	-	-	-	0.4
Malabar Rd. & Bavarian Ave.											Intersection ID: 5	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	0.01	-	-	-	-	-	0.00	-	-	-	-	-
HCM Control Delay (s)	13.8	-	-	-	-	-	11.8	-	-	-	-	-
HCM Lane LOS	B	-	-	-	-	-	B	-	-	-	-	-
HCM 95th Percentile Queue (veh/In)	0.0	-	-	-	-	-	0.0	-	-	-	-	-
Malabar Rd. & Watoga Ave.											Intersection ID: 19	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	0.095	-	-	0.06	-	-	0.03	-	-	-	-	0.14
HCM Control Delay (s)	14.5	-	-	9.9	-	-	11.8	-	-	-	-	12.3
HCM Lane LOS	B	-	-	A	-	-	B	-	-	-	-	B
HCM 95th Percentile Queue (veh/In)	0.3	-	-	0.2	-	-	0.1	-	-	-	-	0.5
Malabar Rd. & Palm Bay Public Works (W)											Intersection ID: 7	
Movement	NBL	NBT	NBR	EBU	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	0.12	-	-	0.05	-	-	0.00	-	-	-	-	-
HCM Control Delay (s)	14.8	-	-	14.2	-	-	11.7	-	-	-	-	-
HCM Lane LOS	B	-	-	B	-	-	B	-	-	-	-	-
HCM 95th Percentile Queue (veh/In)	0.4	-	-	0.2	-	-	0.0	-	-	-	-	-
Malabar Rd. & Palm Bay Public Works (E)											Intersection ID: 8	
Movement	NBL	NBT	NBR	EBU	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	0.11	-	-	0.03	-	-	0.10	-	-	-	-	-
HCM Control Delay (s)	15.3	-	-	13.8	-	-	25.9	-	-	-	-	-
HCM Lane LOS	C	-	-	B	-	-	D	-	-	-	-	-
HCM 95th Percentile Queue (veh/In)	0.4	-	-	0.1	-	-	0.3	-	-	-	-	-
Malabar Rd. & Post Office											Intersection ID: 9	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	0.09	-	-	-	-	-	-	-	-	-	-	-
HCM Control Delay (s)	15.0	-	-	-	-	-	-	-	-	-	-	0.0
HCM Lane LOS	C	-	-	-	-	-	-	-	-	-	-	A
HCM 95th Percentile Queue (veh/In)	0.3	-	-	-	-	-	-	-	-	-	-	-
Malabar Rd. & Santa Rosa Ave.											Intersection ID: 11	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	0.04	-	-	-	-	-	-	-	-	-	-	0.00
HCM Control Delay (s)	16.5	-	-	-	-	-	-	-	-	-	-	12.8
HCM Lane LOS	C	-	-	-	-	-	-	-	-	-	-	B
HCM 95th Percentile Queue (veh/In)	0.1	-	-	-	-	-	-	-	-	-	-	0.0
Malabar Rd. & Madalyn Landing											Intersection ID: 13	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	0.12	-	-	-	-	-	0.17	-	-	-	-	-
HCM Control Delay (s)	16.5	-	-	-	-	-	14.6	-	-	-	-	-
HCM Lane LOS	C	-	-	-	-	-	B	-	-	-	-	-
HCM 95th Percentile Queue (veh/In)	0.4	-	-	-	-	-	0.6	-	-	-	-	-
Malabar Rd. & Sutherland Dr.											Intersection ID: 14	
Movement	NBL	NBT	NBR	EBU	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	0.07	-	-	0.06	-	-	0.08	-	-	-	-	-
HCM Control Delay (s)	15.9	-	-	26.6	-	-	13.7	-	-	-	-	-
HCM Lane LOS	C	-	-	D	-	-	B	-	-	-	-	-
HCM 95th Percentile Queue (veh/In)	0.2	-	-	0.2	-	-	0.2	-	-	-	-	-

2050 PM Build Signalized Network												
Malabar Rd. & St. Johns Heritage Pkwy.											Intersection ID: 1	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	0.65	0.00	0.68	0.55	0.63	0.63	0.45	0.46	0.06	0.91	0.00	0.46
HCM Lane Group Delay (s)	85.4	0.0	50.1	43.1	59.3	59.2	47.5	59.0	50.4	79.0	0.0	31.2
HCM Lane LOS	F	A	D	D	E	E	D	E	D	E	A	C
HCM 95th Percentile Queue (veh/In)	5.5	0.0	22.0	11.2	18.5	19.0	6.6	12.4	1.3	19.7	0.0	16.3
HCM6 Intersection Ctrl Delay	56.9											
HCM6 Intersection LOS	E											
Malabar Rd. & Wisteria Ave./Abilene Dr.											Intersection ID: 18	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	0.27	0.00	0.46	0.05	0.67	0.68	0.56	0.25	0.26	0.11	0.00	0.00
HCM Lane Group Delay (s)	30.1	0.0	33.3	7.4	16.9	17.2	12.5	0.5	0.5	27.6	0.0	0.0
HCM Lane LOS	C	A	C	A	B	B	B	A	A	C	A	A
HCM 95th Percentile Queue (veh/In)	3.5	0.0	5.7	0.3	13.3	13.3	2.0	0.3	0.3	1.0	0.0	0.0
HCM6 Intersection Ctrl Delay	14.5											
HCM6 Intersection LOS	B											
Malabar Rd. & Krassner Dr./ Bending Branch Ln.											Intersection ID: 4	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	0.24	0.00	0.00	0.15	0.88	0.88	0.14	0.33	0.33	0.42	0.00	0.00
HCM Lane Group Delay (s)	38.0	0.0	0.0	20.6	35.2	35.0	19.6	6.9	6.9	39.7	0.0	0.0
HCM Lane LOS	D	A	A	C	D	C	B	A	A	D	A	A
HCM 95th Percentile Queue (veh/In)	1.5	0.0	0.0	0.9	16.2	16.7	2.2	4.4	4.4	3.3	0.0	0.0
HCM6 Intersection Ctrl Delay	24.6											
HCM6 Intersection LOS	C											
Malabar Rd. & Hurley Blvd.											Intersection ID: 6	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	0.82	0.00	0.00	0.11	0.50	0.50	0.18	0.32	0.32	0.26	0.00	0.00
HCM Lane Group Delay (s)	75.8	0.0	0.0	6.2	1.4	1.4	5.9	9.3	9.3	61.2	0.0	0.0
HCM Lane LOS	E	A	A	A	A	A	A	A	A	E	A	A
HCM 95th Percentile Queue (veh/In)	16.7	0.0	0.0	0.9	0.9	0.9	1.2	9.1	9.4	4.1	0.0	0.0
HCM6 Intersection Ctrl Delay	12.8											
HCM6 Intersection LOS	B											
Malabar Rd. & Jupiter Blvd.											Intersection ID: 10	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	0.70	0.70	0.25	0.43	0.90	0.90	0.31	0.53	0.53	0.84	0.00	0.91
HCM Lane Group Delay (s)	72.3	74.8	28.7	40.1	67.1	67.7	38.2	2.1	2.2	71.1	0.0	90.1
HCM Lane LOS	E	E	C	D	E	E	D	A	A	E	A	F
HCM 95th Percentile Queue (veh/In)	9.1	11.6	3.6	7.4	35.4	35.5	6.3	1.0	1.0	3.9	0.0	18.7
HCM6 Intersection Ctrl Delay	49.3											
HCM6 Intersection LOS	D											
Malabar Rd. & Garvey Rd.											Intersection ID: 12	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	0.16	-	0.80	-	0.61	0.63	1.00	0.42	-	-	-	-
HCM Lane Group Delay (s)	32.8	-	42.6	-	6.1	6.4	73.6	0.5	-	-	-	-
HCM Lane LOS	C	-	D	-	A	A	E	A	-	-	-	-
HCM 95th Percentile Queue (veh/In)	1.2	-	6.7	-	7.5	7.8	13.3	0.3	-	-	-	-
HCM6 Intersection Ctrl Delay	11.8											
HCM6 Intersection LOS	B											
Malabar Rd. & Maywood Ave./Daffodil Dr.											Intersection ID: 15	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	0.21	0.00	0.00	0.03	0.51	0.51	0.14	0.49	0.49	0.68	0.00	0.00
HCM Lane Group Delay (s)	73.7	0.0	0.0	3.6	6.4	6.3	4.2	5.3	5.3	81.6	0.0	0.0
HCM Lane LOS	E	A	A	A	A	A	A	A	A	F	A	A
HCM 95th Percentile Queue (veh/In)	2.6	0.0	0.0	0.1	11.7	12.2	0.4	10.0	10.3	8.7	0.0	0.0
HCM6 Intersection Ctrl Delay	9.1											
HCM6 Intersection LOS	A											
Malabar Rd. & Plaza Entrance											Intersection ID: 16	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	0.76	0.00	0.10	0.06	0.69	0.70	0.34	0.60	0.01	0.31	0.00	0.26
HCM Lane Group Delay (s)	87.2	0.0	71.7	7.0	24.7	24.8	35.8	0.5	0.0	79.5	0.0	83.5
HCM Lane LOS	F	A	E	A	C	C	D	A	A	E	A	F
HCM 95th Percentile Queue (veh/In)	13.0	0.0	1.1	0.6	28.5	29.5	5.6	0.3	0.0	3.0	0.0	1.2
HCM6 Intersection Ctrl Delay	19.4											
HCM6 Intersection LOS	B											
Malabar Rd. & Minton Rd.											Intersection ID: 17	
Movement	NBL	NBT	NBR	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
HCM Lane V/C Ratio	0.80	0.98	0.08	0.99	0.86	0.86	0.93	0.98	0.28	1.00	0.91	0.47
HCM Lane Group Delay (s)	89.5	109.9	37.1	88.2	62.2	61.9	104.0	93.0	13.1	100.6	71.4	10.8
HCM Lane LOS	F	F	D	F	E	E	F	F	B	F	E	B
HCM 95th Percentile Queue (veh/In)	4.8	27.2	2.2	22.9	22.8	23.5	19.4	27.6	4.8	23.6	35.4	9.3
HCM6 Intersection Ctrl Delay	75.5											
HCM6 Intersection LOS	E											

2050 BUILD PM PEAK HOUR INTERSECTION OPERATIONS SYNCHRO
REPORTS

HCM 6th Signalized Intersection Summary
 1: St. Johns Heritage Pkwy. & Malabar Rd.

05/11/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↖↗		↖	↖	↖	↖	↖	↖	↖↗	↖	
Traffic Volume (veh/h)	217	593	66	111	200	277	66	217	215	601	203	203
Future Volume (veh/h)	217	593	66	111	200	277	66	217	215	601	203	203
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	1900	1885	1900	1900	1841	1856	1900	1900	1900	1900	1900	1796
Adj Flow Rate, veh/h	217	593	49	111	200	21	66	217	196	601	203	186
Peak Hour 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
Percent Heavy Veh, %	0	1	0	0	4	3	0	0	0	0	0	7
Cap, veh/h	396	940	78	247	436	373	102	321	290	663	440	403
Arrive On Green	0.10	0.28	0.28	0.06	0.24	0.24	0.06	0.35	0.35	0.19	0.48	0.48
Sat Flow, veh/h	1810	3350	276	1810	1841	1572	1810	920	831	3510	913	836
Grp Volume(v), veh/h	217	317	325	111	200	21	66	0	413	601	0	389
Grp Sat Flow(s),veh/h/ln	1810	1791	1835	1810	1841	1572	1810	0	1750	1755	0	1749
Q Serve(g_s), s	15.1	26.3	26.4	7.8	15.8	1.8	6.1	0.0	34.2	28.5	0.0	25.2
Cycle Q Clear(g_c), s	15.1	26.3	26.4	7.8	15.8	1.8	6.1	0.0	34.2	28.5	0.0	25.2
Prop In Lane	1.00		0.15	1.00		1.00	1.00		0.47	1.00		0.48
Lane Grp Cap(c), veh/h	396	503	515	247	436	373	102	0	611	663	0	843
V/C Ratio(X)	0.55	0.63	0.63	0.45	0.46	0.06	0.65	0.00	0.68	0.91	0.00	0.46
Avail Cap(c_a), veh/h	430	503	515	267	436	373	139	0	611	836	0	843
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(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	41.9	53.4	53.5	46.3	55.5	50.1	78.6	0.0	47.1	67.5	0.0	29.4
Incr Delay (d2), s/veh	1.2	5.9	5.8	1.3	3.4	0.3	6.8	0.0	3.0	11.5	0.0	1.8
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(95%),veh/ln	11.2	18.5	19.0	6.6	12.4	1.3	5.5	0.0	22.0	19.7	0.0	16.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	43.1	59.3	59.2	47.5	59.0	50.4	85.4	0.0	50.1	79.0	0.0	31.2
LnGrp LOS	D	E	E	D	E	D	F	A	D	E	A	C
Approach Vol, veh/h		859			332			479				990
Approach Delay, s/veh		55.2			54.6			55.0				60.2
Approach LOS		E			D			D				E
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	21.7	45.8	15.1	87.4	14.3	53.2	37.6	64.8				
Change Period (Y+Rc), s	4.5	5.5	5.5	5.5	4.5	5.5	5.5	5.5				
Max Green Setting (Gmax), s	20.5	33.5	13.1	81.9	11.7	42.3	40.5	54.5				
Max Q Clear Time (g_c+I1), s	17.1	17.8	8.1	27.2	9.8	28.4	30.5	36.2				
Green Ext Time (p_c), s	0.2	0.9	0.0	2.5	0.0	3.2	1.6	2.6				
Intersection Summary												
HCM 6th Ctrl Delay				56.9								
HCM 6th LOS				E								

HCM 6th TWSC
2: Malabar Rd. & Snapdragon Dr.

05/11/2021

Intersection						
Int Delay, s/veh	0.4					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	47	1386	573	50	0	39
Future Vol, veh/h	47	1386	573	50	0	39
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	47	1386	573	50	0	39

Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	623	0	-	0	-	312
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	4.1	-	-	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	2.2	-	-	-	-	3.3
Pot Cap-1 Maneuver	968	-	-	-	0	690
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	968	-	-	-	-	690
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0.3	0	10.5
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	968	-	-	-	690
HCM Lane V/C Ratio	0.049	-	-	-	0.057
HCM Control Delay (s)	8.9	-	-	-	10.5
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0.2	-	-	-	0.2

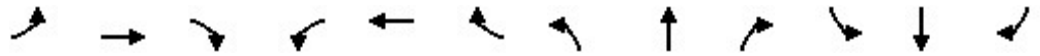
HCM 6th TWSC
3: Malabar Rd. & Championship Cir.

05/11/2021

Intersection						
Int Delay, s/veh	0.4					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	26	1360	607	50	24	16
Future Vol, veh/h	26	1360	607	50	24	16
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	3	0	0	0
Mvmt Flow	26	1360	607	50	24	16
Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	657	0	-	0	1364	329
Stage 1	-	-	-	-	632	-
Stage 2	-	-	-	-	732	-
Critical Hdwy	4.1	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	940	-	-	-	141	673
Stage 1	-	-	-	-	497	-
Stage 2	-	-	-	-	442	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	940	-	-	-	137	673
Mov Cap-2 Maneuver	-	-	-	-	273	-
Stage 1	-	-	-	-	483	-
Stage 2	-	-	-	-	442	-
Approach	EB	WB	SB			
HCM Control Delay, s	0.2	0	16.3			
HCM LOS						C
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	940	-	-	-	358	
HCM Lane V/C Ratio	0.028	-	-	-	0.112	
HCM Control Delay (s)	8.9	-	-	-	16.3	
HCM Lane LOS	A	-	-	-	C	
HCM 95th %tile Q(veh)	0.1	-	-	-	0.4	

HCM 6th Signalized Intersection Summary
 4: Krassner Dr./ Bending Branch Ln & Malabar Rd.

05/11/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↕		↖	↕			↕			↕	
Traffic Volume (veh/h)	39	1157	65	96	693	100	30	3	71	87	1	17
Future Volume (veh/h)	39	1157	65	96	693	100	30	3	71	87	1	17
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	1900	1885	1781	1885	1856	1885	1796	1411	1841	1900	1900	1737
Adj Flow Rate, veh/h	39	1157	45	96	693	90	30	3	8	87	1	0
Peak Hour 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
Percent Heavy Veh, %	0	1	8	1	3	1	7	33	4	0	0	11
Cap, veh/h	269	1309	51	674	2083	270	138	16	20	206	1	0
Arrive On Green	0.04	0.37	0.37	0.32	0.66	0.66	0.08	0.08	0.08	0.08	0.08	0.00
Sat Flow, veh/h	1810	3515	137	1795	3138	407	827	202	249	1551	18	0
Grp Volume(v), veh/h	39	589	613	96	389	394	41	0	0	88	0	0
Grp Sat Flow(s),veh/h/ln	1810	1791	1861	1795	1763	1782	1278	0	0	1569	0	0
Q Serve(g_s), s	1.3	26.2	26.2	0.0	8.1	8.1	0.0	0.0	0.0	2.0	0.0	0.0
Cycle Q Clear(g_c), s	1.3	26.2	26.2	0.0	8.1	8.1	2.4	0.0	0.0	4.4	0.0	0.0
Prop In Lane	1.00		0.07	1.00		0.23	0.73		0.20	0.99		0.00
Lane Grp Cap(c), veh/h	269	667	693	674	1170	1183	174	0	0	207	0	0
V/C Ratio(X)	0.15	0.88	0.88	0.14	0.33	0.33	0.24	0.00	0.00	0.42	0.00	0.00
Avail Cap(c_a), veh/h	311	721	749	674	1170	1183	438	0	0	549	0	0
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(l)	0.60	0.60	0.60	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	20.4	25.0	25.0	19.5	6.2	6.2	37.2	0.0	0.0	38.0	0.0	0.0
Incr Delay (d2), s/veh	0.1	10.3	10.0	0.1	0.8	0.8	0.8	0.0	0.0	1.7	0.0	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(95%),veh/ln	0.9	16.2	16.7	2.2	4.4	4.4	1.5	0.0	0.0	3.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.6	35.2	35.0	19.6	6.9	6.9	38.0	0.0	0.0	39.7	0.0	0.0
LnGrp LOS	C	D	C	B	A	A	D	A	A	D	A	A
Approach Vol, veh/h		1241			879			41			88	
Approach Delay, s/veh		34.6			8.3			38.0			39.7	
Approach LOS		C			A			D			D	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	33.8	38.4		12.8	9.0	63.2		12.8				
Change Period (Y+Rc), s	6.8	* 6.8		* 6.1	6.0	6.8		6.1				
Max Green Setting (Gmax), s	5.6	* 34		* 27	5.0	34.2		26.9				
Max Q Clear Time (g_c+I1), s	2.0	28.2		6.4	3.3	10.1		4.4				
Green Ext Time (p_c), s	0.1	3.5		0.4	0.0	4.6		0.2				

Intersection Summary

HCM 6th Ctrl Delay	24.6
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection						
Int Delay, s/veh	0					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑		↖	↑↑		↗
Traffic Vol, veh/h	1309	6	2	889	0	4
Future Vol, veh/h	1309	6	2	889	0	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	200	-	-	0
Veh in Median Storage, #	0	-	-	0	1	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	1	0	0
Mvmt Flow	1309	6	2	889	0	4

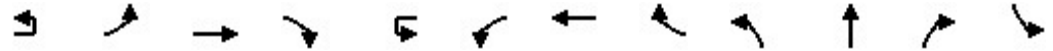
Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	1315	0	658
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	-	4.1	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	-	2.2	-	3.3
Pot Cap-1 Maneuver	-	-	533	0	412
Stage 1	-	-	-	0	-
Stage 2	-	-	-	0	-
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	533	-	412
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	13.8
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	412	-	-	533	-
HCM Lane V/C Ratio	0.01	-	-	0.004	-
HCM Control Delay (s)	13.8	-	-	11.8	-
HCM Lane LOS	B	-	-	B	-
HCM 95th %tile Q(veh)	0	-	-	0	-

HCM 6th Signalized Intersection Summary
6: Hurley Blvd. & Malabar Rd.

05/11/2021



Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (veh/h)	4	55	1162	147	46	72	790	37	97	23	130	32
Future Volume (veh/h)	4	55	1162	147	46	72	790	37	97	23	130	32
Initial Q (Qb), veh		0	0	0		0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		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
Work Zone On Approach			No				No			No		
Adj Sat Flow, veh/h/ln		1900	1900	1900		1856	1885	1900	1900	1900	1856	1900
Adj Flow Rate, veh/h		55	1162	147		72	790	37	97	23	130	32
Peak Hour Factor		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %		0	0	0		3	1	0	0	0	3	0
Cap, veh/h		520	2316	292		392	2506	117	132	30	143	130
Arrive On Green		0.05	1.00	1.00		0.03	0.72	0.72	0.17	0.17	0.17	0.17
Sat Flow, veh/h		1810	3225	407		1767	3484	163	587	172	821	559
Grp Volume(v), veh/h		55	649	660		72	406	421	250	0	0	59
Grp Sat Flow(s),veh/h/ln		1810	1805	1827		1767	1791	1856	1579	0	0	1133
Q Serve(g_s), s		1.4	0.0	0.0		1.8	14.0	14.0	19.2	0.0	0.0	0.0
Cycle Q Clear(g_c), s		1.4	0.0	0.0		1.8	14.0	14.0	26.3	0.0	0.0	7.1
Prop In Lane		1.00		0.22		1.00		0.09	0.39		0.52	0.54
Lane Grp Cap(c), veh/h		520	1296	1312		392	1288	1335	304	0	0	230
V/C Ratio(X)		0.11	0.50	0.50		0.18	0.32	0.32	0.82	0.00	0.00	0.26
Avail Cap(c_a), veh/h		540	1296	1312		534	1288	1335	458	0	0	370
HCM Platoon Ratio		2.00	2.00	2.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)		1.00	1.00	1.00		1.00	1.00	1.00	1.00	0.00	0.00	1.00
Uniform Delay (d), s/veh		6.1	0.0	0.0		5.7	8.7	8.7	68.6	0.0	0.0	60.6
Incr Delay (d2), s/veh		0.1	1.4	1.4		0.2	0.6	0.6	7.2	0.0	0.0	0.6
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
%ile BackOfQ(95%),veh/ln		0.9	0.9	0.9		1.2	9.1	9.4	16.7	0.0	0.0	4.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh		6.2	1.4	1.4		5.9	9.3	9.3	75.8	0.0	0.0	61.2
LnGrp LOS		A	A	A		A	A	A	E	A	A	E
Approach Vol, veh/h			1364				899			250		
Approach Delay, s/veh			1.6				9.0			75.8		
Approach LOS			A				A			E		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.1	126.8		34.1	9.3	126.6		34.1				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	6.5	103.5		46.5	18.5	91.5		46.5				
Max Q Clear Time (g_c+I1), s	3.4	16.0		28.3	3.8	2.0		9.1				
Green Ext Time (p_c), s	0.0	5.4		1.3	0.1	11.3		0.3				

Intersection Summary

HCM 6th Ctrl Delay	12.8
HCM 6th LOS	B

Notes

User approved ignoring U-Turning movement.

HCM 6th Signalized Intersection Summary
 6: Hurley Blvd. & Malabar Rd.

05/11/2021



Movement	SBT	SBR
Lane Configurations	↕	
Traffic Volume (veh/h)	5	22
Future Volume (veh/h)	5	22
Initial Q (Qb), veh	0	0
Ped-Bike Adj(A_pbT)		1.00
Parking Bus, Adj	1.00	1.00
Work Zone On Approach	No	
Adj Sat Flow, veh/h/ln	1900	1900
Adj Flow Rate, veh/h	5	22
Peak Hour Factor	1.00	1.00
Percent Heavy Veh, %	0	0
Cap, veh/h	26	74
Arrive On Green	0.17	0.17
Sat Flow, veh/h	151	422
Grp Volume(v), veh/h	0	0
Grp Sat Flow(s),veh/h/ln	0	0
Q Serve(g_s), s	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0
Prop In Lane		0.37
Lane Grp Cap(c), veh/h	0	0
V/C Ratio(X)	0.00	0.00
Avail Cap(c_a), veh/h	0	0
HCM Platoon Ratio	1.00	1.00
Upstream Filter(l)	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	0.0
Unsig. Movement Delay, s/veh		
LnGrp Delay(d),s/veh	0.0	0.0
LnGrp LOS	A	A
Approach Vol, veh/h	59	
Approach Delay, s/veh	61.2	
Approach LOS	E	
Timer - Assigned Phs		

HCM 6th TWSC
7: Palm Bay Public Works (W) & Malabar Rd.

05/11/2021

Intersection							
Int Delay, s/veh	0.5						
Movement	EBU	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	⇐	⇐⇐		⇐	⇐⇐		⇐
Traffic Vol, veh/h	20	1292	0	2	862	0	52
Future Vol, veh/h	20	1292	0	2	862	0	52
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	-	None	-	None	-	None
Storage Length	200	-	-	200	-	-	0
Veh in Median Storage, #	-	0	-	-	0	1	-
Grade, %	-	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100	100
Heavy Vehicles, %	0	1	0	0	1	0	0
Mvmt Flow	20	1292	0	2	862	0	52

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	862	0	0	1292	0	646
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	6.4	-	-	4.1	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	2.5	-	-	2.2	-	3.3
Pot Cap-1 Maneuver	413	-	-	543	0	419
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	413	-	-	543	-	419
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0.2	0	14.8
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBU	EBT	EBR	WBL	WBT
Capacity (veh/h)	419	413	-	-	543	-
HCM Lane V/C Ratio	0.124	0.048	-	-	0.004	-
HCM Control Delay (s)	14.8	14.2	-	-	11.7	-
HCM Lane LOS	B	B	-	-	B	-
HCM 95th %tile Q(veh)	0.4	0.2	-	-	0	-

Intersection								
Int Delay, s/veh	0.6							
Movement	EBU	EBT	EBR	WBU	WBL	WBT	NBL	NBR
Lane Configurations	⬆	⬆			⬆	⬆	⬆	
Traffic Vol, veh/h	11	1308	25	18	1	852	1	41
Future Vol, veh/h	11	1308	25	18	1	852	1	41
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	None
Storage Length	200	-	-	-	175	-	0	-
Veh in Median Storage, #	-	0	-	-	-	0	1	-
Grade, %	-	0	-	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	1	0	0	0	1	0	0
Mvmt Flow	11	1308	25	18	1	852	1	41

Major/Minor	Major1		Major2		Minor1			
Conflicting Flow All	852	0	0	1333	1333	0	1807	667
Stage 1	-	-	-	-	-	-	1343	-
Stage 2	-	-	-	-	-	-	464	-
Critical Hdwy	6.4	-	-	6.4	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.8	-
Follow-up Hdwy	2.5	-	-	2.5	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	419	-	-	206	524	-	72	406
Stage 1	-	-	-	-	-	-	212	-
Stage 2	-	-	-	-	-	-	605	-
Platoon blocked, %	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	419	-	-	192	192	-	63	406
Mov Cap-2 Maneuver	-	-	-	-	-	-	158	-
Stage 1	-	-	-	-	-	-	206	-
Stage 2	-	-	-	-	-	-	545	-

Approach	EB	WB	NB
HCM Control Delay, s	0.1	0.6	15.3
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBU	EBT	EBR	WBL	WBT
Capacity (veh/h)	391	419	-	-	192	-
HCM Lane V/C Ratio	0.107	0.026	-	-	0.099	-
HCM Control Delay (s)	15.3	13.8	-	-	25.9	-
HCM Lane LOS	C	B	-	-	D	-
HCM 95th %tile Q(veh)	0.4	0.1	-	-	0.3	-

Intersection												
Int Delay, s/veh	0.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑				↑			↑
Traffic Vol, veh/h	0	1333	34	0	871	0	0	0	36	0	0	0
Future Vol, veh/h	0	1333	34	0	871	0	0	0	36	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	1	0	0	1	0	0	0	0	0	0	0
Mvmt Flow	0	1333	34	0	871	0	0	0	36	0	0	0

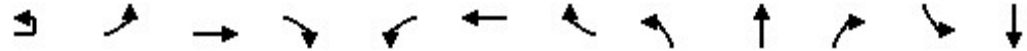
Major/Minor	Major1		Major2		Minor1		Minor2					
Conflicting Flow All	-	0	0	-	-	0	-	-	684	-	-	436
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-	-	-	6.9	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-	-	-	3.3	-	-	3.3
Pot Cap-1 Maneuver	0	-	-	0	-	-	0	0	396	0	0	574
Stage 1	0	-	-	0	-	-	0	0	-	0	0	-
Stage 2	0	-	-	0	-	-	0	0	-	0	0	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	-	-	-	-	-	396	-	-	574
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0	15	0
HCM LOS			C	A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT	WBR	SBLn1
Capacity (veh/h)	396	-	-	-	-	-
HCM Lane V/C Ratio	0.091	-	-	-	-	-
HCM Control Delay (s)	15	-	-	-	-	0
HCM Lane LOS	C	-	-	-	-	A
HCM 95th %tile Q(veh)	0.3	-	-	-	-	-

HCM 6th Signalized Intersection Summary
 10: Jupiter Blvd. & Malabar Rd.

05/11/2021



Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations		↔	↕		↔	↕		↔	↕		↔	↕
Traffic Volume (veh/h)	15	137	1006	211	140	629	388	126	168	178	439	175
Future Volume (veh/h)	15	137	1006	211	140	629	388	126	168	178	439	175
Initial Q (Qb), veh		0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		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
Work Zone On Approach			No			No			No			No
Adj Sat Flow, veh/h/ln		1900	1885	1885	1900	1885	1900	1900	1885	1870	1870	1885
Adj Flow Rate, veh/h		137	1006	204	140	629	339	126	168	51	439	175
Peak Hour Factor		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %		0	1	1	0	1	0	0	1	2	2	1
Cap, veh/h		319	1118	226	450	1195	644	180	240	202	524	193
Arrive On Green		0.06	0.38	0.38	0.43	1.00	1.00	0.06	0.13	0.13	0.10	0.16
Sat Flow, veh/h		1810	2967	601	1810	2247	1211	1810	1885	1585	3456	1188
Grp Volume(v), veh/h		137	606	604	140	501	467	126	168	51	439	0
Grp Sat Flow(s),veh/h/ln		1810	1791	1777	1810	1791	1667	1810	1885	1585	1728	0
Q Serve(g_s), s		9.1	54.2	54.5	1.9	0.0	0.0	10.3	14.5	3.2	17.0	0.0
Cycle Q Clear(g_c), s		9.1	54.2	54.5	1.9	0.0	0.0	10.3	14.5	3.2	17.0	0.0
Prop In Lane		1.00		0.34	1.00		0.73	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h		319	675	669	450	952	886	180	240	202	524	0
V/C Ratio(X)		0.43	0.90	0.90	0.31	0.53	0.53	0.70	0.70	0.25	0.84	0.00
Avail Cap(c_a), veh/h		319	801	794	450	952	886	180	344	289	524	0
HCM Platoon Ratio		1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh		39.2	49.9	50.0	37.8	0.0	0.0	60.8	71.1	28.0	59.7	0.0
Incr Delay (d2), s/veh		0.9	17.2	17.6	0.4	2.1	2.2	11.5	3.7	0.7	11.4	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
%ile BackOfQ(95%),veh/ln		7.4	35.4	35.5	6.3	1.0	1.0	9.1	11.6	3.6	3.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh		40.1	67.1	67.7	38.2	2.1	2.2	72.3	74.8	28.7	71.1	0.0
LnGrp LOS		D	E	E	D	A	A	E	E	C	E	A
Approach Vol, veh/h			1347			1108			345			701
Approach Delay, s/veh			64.6			6.7			67.1			78.2
Approach LOS			E			A			E			E
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	18.0	98.4	24.0	29.6	44.3	72.0	18.0	35.6				
Change Period (Y+Rc), s	7.0	8.0	7.0	8.0	8.0	* 8	7.0	8.0				
Max Green Setting (Gmax), s	11.0	81.0	17.0	31.0	16.0	* 76	11.0	37.0				
Max Q Clear Time (g_c+I1), s	11.1	2.0	19.0	16.5	3.9	56.5	12.3	26.6				
Green Ext Time (p_c), s	0.0	7.1	0.0	0.8	0.2	7.5	0.0	1.0				

Intersection Summary

HCM 6th Ctrl Delay	49.3
HCM 6th LOS	D

Notes

User approved ignoring U-Turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary
 10: Jupiter Blvd. & Malabar Rd.

05/11/2021

Movement	SBR
Lane Configurations	
Traffic Volume (veh/h)	101
Future Volume (veh/h)	101
Initial Q (Qb), veh	0
Ped-Bike Adj(A_pbT)	1.00
Parking Bus, Adj	1.00
Work Zone On Approach	
Adj Sat Flow, veh/h/ln	1900
Adj Flow Rate, veh/h	87
Peak Hour Factor	1.00
Percent Heavy Veh, %	0
Cap, veh/h	96
Arrive On Green	0.16
Sat Flow, veh/h	591
Grp Volume(v), veh/h	262
Grp Sat Flow(s),veh/h/ln	1779
Q Serve(g_s), s	24.6
Cycle Q Clear(g_c), s	24.6
Prop In Lane	0.33
Lane Grp Cap(c), veh/h	289
V/C Ratio(X)	0.91
Avail Cap(c_a), veh/h	387
HCM Platoon Ratio	1.00
Upstream Filter(l)	1.00
Uniform Delay (d), s/veh	69.9
Incr Delay (d2), s/veh	20.1
Initial Q Delay(d3),s/veh	0.0
%ile BackOfQ(95%),veh/ln	18.7
Unsig. Movement Delay, s/veh	
LnGrp Delay(d),s/veh	90.1
LnGrp LOS	F
Approach Vol, veh/h	
Approach Delay, s/veh	
Approach LOS	
Timer - Assigned Phs	

Intersection												
Int Delay, s/veh	0.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↓			↑↓				↑			↑
Traffic Vol, veh/h	0	1621	8	0	1162	0	0	0	12	0	0	1
Future Vol, veh/h	0	1621	8	0	1162	0	0	0	12	0	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	1	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	1621	8	0	1162	0	0	0	12	0	0	1

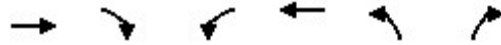
Major/Minor	Major1		Major2		Minor1		Minor2					
Conflicting Flow All	-	0	0	-	-	0	-	-	815	-	-	581
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-	-	-	6.9	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-	-	-	3.3	-	-	3.3
Pot Cap-1 Maneuver	0	-	-	0	-	-	0	0	325	0	0	462
Stage 1	0	-	-	0	-	-	0	0	-	0	0	-
Stage 2	0	-	-	0	-	-	0	0	-	0	0	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	-	-	-	-	-	325	-	-	462
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0	16.5	12.8
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT	WBR	SBLn1
Capacity (veh/h)	325	-	-	-	-	462
HCM Lane V/C Ratio	0.037	-	-	-	-	0.002
HCM Control Delay (s)	16.5	-	-	-	-	12.8
HCM Lane LOS	C	-	-	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	-	0

HCM 6th Signalized Intersection Summary
 12: Garvey Rd. & Malabar Rd.

05/11/2021



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑		↵	↑↑	↵	↵
Traffic Volume (veh/h)	1279	352	248	1122	38	222
Future Volume (veh/h)	1279	352	248	1122	38	222
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1885	1900	1900	1900	1900	1885
Adj Flow Rate, veh/h	1279	330	248	1122	38	172
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	1	0	0	0	0	1
Cap, veh/h	2084	528	248	2659	243	214
Arrive On Green	0.74	0.74	1.00	1.00	0.13	0.13
Sat Flow, veh/h	2925	717	320	3705	1810	1598
Grp Volume(v), veh/h	800	809	248	1122	38	172
Grp Sat Flow(s),veh/h/ln	1791	1756	320	1805	1810	1598
Q Serve(g_s), s	18.1	19.1	43.5	0.0	1.6	8.9
Cycle Q Clear(g_c), s	18.1	19.1	62.6	0.0	1.6	8.9
Prop In Lane		0.41	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1319	1293	248	2659	243	214
V/C Ratio(X)	0.61	0.63	1.00	0.42	0.16	0.80
Avail Cap(c_a), veh/h	1319	1293	248	2659	671	592
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	5.3	5.5	16.9	0.0	32.5	35.7
Incr Delay (d2), s/veh	0.8	1.0	56.7	0.5	0.3	6.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	7.5	7.8	13.3	0.3	1.2	6.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	6.1	6.4	73.6	0.5	32.8	42.6
LnGrp LOS	A	A	E	A	C	D
Approach Vol, veh/h	1609			1370	210	
Approach Delay, s/veh	6.3			13.7	40.8	
Approach LOS	A			B	D	
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		68.1		16.9		68.1
Change Period (Y+Rc), s		5.5		5.5		5.5
Max Green Setting (Gmax), s		42.5		31.5		42.5
Max Q Clear Time (g_c+I1), s		64.6		10.9		21.1
Green Ext Time (p_c), s		0.0		0.6		11.6
Intersection Summary						
HCM 6th Ctrl Delay			11.8			
HCM 6th LOS			B			
Notes						
User approved ignoring U-Turning movement.						

HCM 6th TWSC
 13: Madalyn Landing & Malabar Rd.

05/11/2021

Intersection						
Int Delay, s/veh	0.6					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑		↖	↑↑		↗
Traffic Vol, veh/h	1483	18	78	1370	0	44
Future Vol, veh/h	1483	18	78	1370	0	44
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	275	-	-	-
Veh in Median Storage, #	0	-	-	0	1	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	1	0	0	1	0	0
Mvmt Flow	1483	18	78	1370	0	44

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	1501	0	- 751
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	-	4.1	-	- 6.9
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	-	2.2	-	- 3.3
Pot Cap-1 Maneuver	-	-	452	-	0 358
Stage 1	-	-	-	-	0 -
Stage 2	-	-	-	-	0 -
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	452	-	- 358
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.8	16.5
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	358	-	-	452	-
HCM Lane V/C Ratio	0.123	-	-	0.173	-
HCM Control Delay (s)	16.5	-	-	14.6	-
HCM Lane LOS	C	-	-	B	-
HCM 95th %tile Q(veh)	0.4	-	-	0.6	-

HCM 6th TWSC
14: Sutherland Dr. & Malabar Rd.

05/11/2021

Intersection							
Int Delay, s/veh	0.4						
Movement	EBU	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	⇄	⇄		⇄	⇄		⇄
Traffic Vol, veh/h	10	1515	2	34	1438	0	24
Future Vol, veh/h	10	1515	2	34	1438	0	24
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	-	None	-	None	-	None
Storage Length	150	-	-	375	-	-	0
Veh in Median Storage, #	-	0	-	-	0	1	-
Grade, %	-	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100	100
Heavy Vehicles, %	0	1	0	0	0	0	0
Mvmt Flow	10	1515	2	34	1438	0	24

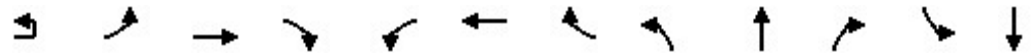
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	1438	0	0	1517	0	759
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	6.4	-	-	4.1	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	2.5	-	-	2.2	-	3.3
Pot Cap-1 Maneuver	177	-	-	446	0	353
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	177	-	-	446	-	353
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0.2	0.3	15.9
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBU	EBT	EBR	WBL	WBT
Capacity (veh/h)	353	177	-	-	446	-
HCM Lane V/C Ratio	0.068	0.056	-	-	0.076	-
HCM Control Delay (s)	15.9	26.6	-	-	13.7	-
HCM Lane LOS	C	D	-	-	B	-
HCM 95th %tile Q(veh)	0.2	0.2	-	-	0.2	-

HCM 6th Signalized Intersection Summary
 15: Maywood Ave./Daffodil Dr. & Malabar Rd.

05/11/2021



Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations		↔	↕		↕	↕			↕			↕
Traffic Volume (veh/h)	3	8	1523	5	44	1408	81	7	1	26	55	1
Future Volume (veh/h)	3	8	1523	5	44	1408	81	7	1	26	55	1
Initial Q (Qb), veh		0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		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
Work Zone On Approach			No			No			No			No
Adj Sat Flow, veh/h/ln		1707	1885	1900	1900	1900	1900	1900	1900	1900	1870	1900
Adj Flow Rate, veh/h		8	1523	5	44	1408	81	7	1	26	55	1
Peak Hour Factor		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %		13	1	0	0	0	0	0	0	0	2	0
Cap, veh/h		287	2975	10	324	2876	165	42	17	107	92	6
Arrive On Green		0.01	0.81	0.81	0.03	0.83	0.83	0.08	0.08	0.08	0.08	0.08
Sat Flow, veh/h		1626	3662	12	1810	3470	199	198	202	1299	731	72
Grp Volume(v), veh/h		8	745	783	44	731	758	34	0	0	110	0
Grp Sat Flow(s),veh/h/ln		1626	1791	1883	1810	1805	1864	1698	0	0	1577	0
Q Serve(g_s), s		0.1	22.7	22.7	0.7	19.8	20.0	0.0	0.0	0.0	8.3	0.0
Cycle Q Clear(g_c), s		0.1	22.7	22.7	0.7	19.8	20.0	3.2	0.0	0.0	11.6	0.0
Prop In Lane		1.00		0.01	1.00		0.11	0.21		0.76	0.50	
Lane Grp Cap(c), veh/h		287	1455	1530	324	1496	1545	166	0	0	162	0
V/C Ratio(X)		0.03	0.51	0.51	0.14	0.49	0.49	0.21	0.00	0.00	0.68	0.00
Avail Cap(c_a), veh/h		334	1455	1530	378	1496	1545	308	0	0	299	0
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
Upstream Filter(l)		1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh		3.6	5.1	5.1	4.0	4.2	4.2	73.1	0.0	0.0	76.6	0.0
Incr Delay (d2), s/veh		0.0	1.3	1.2	0.2	1.1	1.1	0.6	0.0	0.0	4.9	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
%ile BackOfQ(95%),veh/ln		0.1	11.7	12.2	0.4	10.0	10.3	2.6	0.0	0.0	8.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh		3.6	6.4	6.3	4.2	5.3	5.3	73.7	0.0	0.0	81.6	0.0
LnGrp LOS		A	A	A	A	A	A	E	A	A	F	A
Approach Vol, veh/h			1536			1533			34			110
Approach Delay, s/veh			6.4			5.3			73.7			81.6
Approach LOS			A			A			E			F
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.1	145.4		18.5	8.9	142.6		18.5				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	6.5	120.5		29.5	9.5	117.5		29.5				
Max Q Clear Time (g_c+I1), s	2.1	22.0		5.2	2.7	24.7		13.6				
Green Ext Time (p_c), s	0.0	14.6		0.1	0.0	15.3		0.5				

Intersection Summary

HCM 6th Ctrl Delay	9.1
HCM 6th LOS	A

Notes

User approved ignoring U-Turning movement.

HCM 6th Signalized Intersection Summary
 15: Maywood Ave./Daffodil Dr. & Malabar Rd.

05/11/2021

Movement	SBR
Lane Configurations	
Traffic Volume (veh/h)	54
Future Volume (veh/h)	54
Initial Q (Qb), veh	0
Ped-Bike Adj(A_pbT)	1.00
Parking Bus, Adj	1.00
Work Zone On Approach	
Adj Sat Flow, veh/h/ln	1900
Adj Flow Rate, veh/h	54
Peak Hour Factor	1.00
Percent Heavy Veh, %	0
Cap, veh/h	64
Arrive On Green	0.08
Sat Flow, veh/h	774
Grp Volume(v), veh/h	0
Grp Sat Flow(s),veh/h/ln	0
Q Serve(g_s), s	0.0
Cycle Q Clear(g_c), s	0.0
Prop In Lane	0.49
Lane Grp Cap(c), veh/h	0
V/C Ratio(X)	0.00
Avail Cap(c_a), veh/h	0
HCM Platoon Ratio	1.00
Upstream Filter(l)	0.00
Uniform Delay (d), s/veh	0.0
Incr Delay (d2), s/veh	0.0
Initial Q Delay(d3),s/veh	0.0
%ile BackOfQ(95%),veh/ln	0.0
Unsig. Movement Delay, s/veh	
LnGrp Delay(d),s/veh	0.0
LnGrp LOS	A
Approach Vol, veh/h	
Approach Delay, s/veh	
Approach LOS	
Timer - Assigned Phs	

HCM 6th Signalized Intersection Summary

16: Plaza Entrance & Malabar Rd.

05/11/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	1459	115	115	1329	21	169	8	61	38	13	35
Future Volume (veh/h)	30	1459	115	115	1329	21	169	8	61	38	13	35
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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		No		No
Adj Sat Flow, veh/h/ln	1900	1885	1900	1900	1900	1826	1900	1900	1900	1856	1900	1900
Adj Flow Rate, veh/h	30	1459	112	115	1329	14	169	8	7	38	13	1
Peak Hour 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
Percent Heavy Veh, %	0	1	0	0	0	5	0	0	0	3	0	0
Cap, veh/h	491	2103	161	334	2230	956	221	81	71	123	49	4
Arrive On Green	0.11	0.62	0.62	0.20	1.00	1.00	0.08	0.09	0.09	0.02	0.03	0.03
Sat Flow, veh/h	1810	3372	258	1810	3610	1547	1810	935	818	1767	1742	134
Grp Volume(v), veh/h	30	771	800	115	1329	14	169	0	15	38	0	14
Grp Sat Flow(s),veh/h/ln	1810	1791	1839	1810	1805	1547	1810	0	1753	1767	0	1876
Q Serve(g_s), s	0.0	48.4	49.2	0.0	0.0	0.0	14.0	0.0	1.3	3.5	0.0	1.2
Cycle Q Clear(g_c), s	0.0	48.4	49.2	0.0	0.0	0.0	14.0	0.0	1.3	3.5	0.0	1.2
Prop In Lane	1.00		0.14	1.00		1.00	1.00		0.47	1.00		0.07
Lane Grp Cap(c), veh/h	491	1117	1147	334	2230	956	221	0	152	123	0	53
V/C Ratio(X)	0.06	0.69	0.70	0.34	0.60	0.01	0.76	0.00	0.10	0.31	0.00	0.26
Avail Cap(c_a), veh/h	491	1117	1147	334	2230	956	221	0	289	123	0	199
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	0.46	0.46	0.46	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	6.9	21.2	21.3	35.5	0.0	0.0	72.6	0.0	71.5	78.1	0.0	80.9
Incr Delay (d2), s/veh	0.1	3.5	3.5	0.3	0.5	0.0	14.7	0.0	0.3	1.4	0.0	2.6
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(95%),veh/lr	0.6	28.5	29.5	5.6	0.3	0.0	13.0	0.0	1.1	3.0	0.0	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	7.0	24.7	24.8	35.8	0.5	0.0	87.2	0.0	71.7	79.5	0.0	83.5
LnGrp LOS	A	C	C	D	A	A	F	A	E	E	A	F
Approach Vol, veh/h		1601			1458			184				52
Approach Delay, s/veh		24.4			3.3			86.0				80.6
Approach LOS		C			A			F				F
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	25.2	112.0	11.0	21.8	24.2	113.0	21.0	11.8				
Change Period (Y+Rc), s	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0				
Max Green Setting (Gmax), s	5.0	105.0	4.0	28.0	4.0	106.0	14.0	18.0				
Max Q Clear Time (g_c+1), s	12.0	2.0	5.5	3.3	2.0	51.2	16.0	3.2				
Green Ext Time (p_c), s	0.0	14.9	0.0	0.0	0.0	17.5	0.0	0.0				
Intersection Summary												
HCM 6th Ctrl Delay					19.4							
HCM 6th LOS					B							

HCM 6th Signalized Intersection Summary

17: Minton Rd. & Malabar Rd.

05/11/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖↗	↖↗		↖	↖↗	↖	↖	↖	↖	↖	↖	↖
Traffic Volume (veh/h)	699	796	63	254	797	342	106	362	91	379	593	562
Future Volume (veh/h)	699	796	63	254	797	342	106	362	91	379	593	562
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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		No		No
Adj Sat Flow, veh/h/ln	1885	1870	1826	1885	1885	1885	1900	1870	1856	1885	1885	1885
Adj Flow Rate, veh/h	699	796	43	254	797	185	106	362	44	379	593	412
Peak Hour 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
Percent Heavy Veh, %	1	2	5	1	1	1	0	2	3	1	1	1
Cap, veh/h	707	930	50	274	811	658	133	369	550	379	654	879
Arrive On Green	0.27	0.36	0.36	0.15	0.23	0.23	0.04	0.20	0.20	0.19	0.35	0.35
Sat Flow, veh/h	3483	3429	185	1795	3582	1598	1810	1870	1572	1795	1885	1598
Grp Volume(v), veh/h	699	412	427	254	797	185	106	362	44	379	593	412
Grp Sat Flow(s),veh/h/ln	1742	1777	1837	1795	1791	1598	1810	1870	1572	1795	1885	1598
Q Serve(g_s), s	34.0	36.5	36.5	23.7	37.6	5.6	6.0	32.8	3.2	31.5	50.9	4.9
Cycle Q Clear(g_c), s	34.0	36.5	36.5	23.7	37.6	5.6	6.0	32.8	3.2	31.5	50.9	4.9
Prop In Lane	1.00		0.10	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	707	482	498	274	811	658	133	369	550	379	654	879
V/C Ratio(X)	0.99	0.86	0.86	0.93	0.98	0.28	0.80	0.98	0.08	1.00	0.91	0.47
Avail Cap(c_a), veh/h	707	482	498	296	811	658	133	369	550	379	654	879
HCM Platoon Ratio	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.74	0.74	0.74	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	61.9	51.3	51.3	71.1	65.4	12.0	62.0	68.0	37.0	54.6	52.9	9.0
Incr Delay (d2), s/veh	26.3	10.9	10.6	32.8	27.6	1.1	27.5	42.0	0.1	46.0	18.5	1.8
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(95%),veh/ln	22.9	22.8	23.5	19.4	27.6	4.8	4.8	27.2	2.2	23.6	35.4	9.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	88.2	62.2	61.9	104.0	93.0	13.1	89.5	109.9	37.1	100.6	71.4	10.8
LnGrp LOS	F	E	E	F	F	B	F	F	D	F	E	B
Approach Vol, veh/h		1538			1236			512			1384	
Approach Delay, s/veh		73.9			83.3			99.4			61.3	
Approach LOS		E			F			F			E	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	42.5	45.5	39.5	42.5	33.9	54.1	14.0	68.0				
Change Period (Y+Rc), s	8.0	7.0	8.0	9.0	8.0	* 8	8.0	9.0				
Max Green Setting (Gmax), s	34.5	38.5	31.5	33.5	28.0	* 45	6.0	59.0				
Max Q Clear Time (g_c+Q), s	36.0	39.6	33.5	34.8	25.7	38.5	8.0	52.9				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.2	2.7	0.0	2.6				

Intersection Summary

HCM 6th Ctrl Delay	75.5
HCM 6th LOS	E

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary
 18: Wisteria Ave. & Malabar Rd.

05/11/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗		↖	↗			↕	
Traffic Volume (veh/h)	30	1085	269	180	540	20	105	0	158	18	0	12
Future Volume (veh/h)	30	1085	269	180	540	20	105	0	158	18	0	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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		No		No
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	30	1085	269	180	540	20	105	0	158	18	0	12
Peak Hour 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
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	621	1603	395	324	2116	78	384	0	347	175	17	82
Arrive On Green	0.03	0.56	0.56	0.13	1.00	1.00	0.22	0.00	0.22	0.22	0.00	0.22
Sat Flow, veh/h	1810	2871	707	1810	3550	131	1424	0	1610	497	77	383
Grp Volume(v), veh/h	30	680	674	180	274	286	105	0	158	30	0	0
Grp Sat Flow(s),veh/h/ln	1810	1805	1773	1810	1805	1876	1424	0	1610	957	0	0
Q Serve(g_s), s	0.6	22.7	23.0	3.6	0.0	0.0	0.0	0.0	7.3	0.1	0.0	0.0
Cycle Q Clear(g_c), s	0.6	22.7	23.0	3.6	0.0	0.0	5.6	0.0	7.3	7.4	0.0	0.0
Prop In Lane	1.00		0.40	1.00		0.07	1.00		1.00	0.60		0.40
Lane Grp Cap(c), veh/h	621	1008	990	324	1076	1118	384	0	347	274	0	0
V/C Ratio(X)	0.05	0.67	0.68	0.56	0.25	0.26	0.27	0.00	0.46	0.11	0.00	0.00
Avail Cap(c_a), veh/h	675	1008	990	447	1076	1118	384	0	347	274	0	0
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	0.95	0.95	0.95	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	7.3	13.3	13.4	11.1	0.0	0.0	28.4	0.0	29.0	26.8	0.0	0.0
Incr Delay (d2), s/veh	0.0	3.6	3.8	1.4	0.5	0.5	1.7	0.0	4.3	0.8	0.0	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(95%),veh/lr	0.3	13.3	13.3	2.0	0.3	0.3	3.5	0.0	5.7	1.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	7.4	16.9	17.2	12.5	0.5	0.5	30.1	0.0	33.3	27.6	0.0	0.0
LnGrp LOS	A	B	B	B	A	A	C	A	C	C	A	A
Approach Vol, veh/h		1384			740			263				30
Approach Delay, s/veh		16.8			3.4			32.0				27.6
Approach LOS		B			A			C				C
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	0.2	52.0		22.8	7.0	55.2		22.8				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	1.5	41.7		18.3	5.1	48.1		18.3				
Max Q Clear Time (g_c+1), s	15.6	25.0		9.4	2.6	2.0		9.3				
Green Ext Time (p_c), s	0.2	8.0		0.0	0.0	3.6		0.8				

Intersection Summary

HCM 6th Ctrl Delay		14.5										
HCM 6th LOS			B									

Intersection												
Int Delay, s/veh	1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↕		↖	↕				↖			↖
Traffic Vol, veh/h	48	1272	18	14	828	40	0	0	40	0	0	80
Future Vol, veh/h	48	1272	18	14	828	40	0	0	40	0	0	80
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	200	-	-	200	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	48	1272	18	14	828	40	0	0	40	0	0	80

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	868	0	0	1290	0	0	-	-	645	-	-	434
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	4.1	-	-	4.1	-	-	-	-	6.9	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	-	-	3.3	-	-	3.3
Pot Cap-1 Maneuver	785	-	-	544	-	-	0	0	420	0	0	576
Stage 1	-	-	-	-	-	-	0	0	-	0	0	-
Stage 2	-	-	-	-	-	-	0	0	-	0	0	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	785	-	-	544	-	-	-	-	420	-	-	576
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.4			0.2			14.5			12.3		
HCM LOS							B			B		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	420	785	-	-	544	-	-	576
HCM Lane V/C Ratio	0.095	0.061	-	-	0.026	-	-	0.139
HCM Control Delay (s)	14.5	9.9	-	-	11.8	-	-	12.3
HCM Lane LOS	B	A	-	-	B	-	-	B
HCM 95th %tile Q(veh)	0.3	0.2	-	-	0.1	-	-	0.5

APPENDIX V – SIGNAL WARRANT SCREENING

Contained in this Appendix –

- 2050 St. Johns Heritage Parkway Signal Warrant Screening
- 2050 Wisteria Avenue/Abilene Drive Signal Warrant Screening
- 2050 Hurley Boulevard Signal Warrant Screening
- 2050 Garvey Road Signal Warrant Screening
- 2050 Maywood Avenue/Daffodil Drive Signal Warrant Screening

2050 ST. JOHNS HERITAGE PARKWAY SIGNAL WARRANT
SCREENING

Hourly Distribution of Entering and Exiting Vehicle Trips by Land Use

Source: ITE *Trip Generation Manual*, 10th Edition

Land Use Code	210	
Land Use	Single-Family Detached Housing	
Setting	General Urban/Suburban	
Time Period	Weekday	
Trip Type	Vehicle	
# Data Sites	6	
	% of 24-Hour Traffic	
Time	Entering	Exiting
12-1 AM	0.5	0.2
1-2 AM	0.2	0.2
2-3 AM	0.2	0
3-4 AM	0.2	0.2
4-5 AM	0.3	0.8
5-6 AM	0.5	2.0
6-7 AM	1.6	5.9
7-8 AM	3.2	10.2
8-9 AM	3.7	8.6
9-10 AM	3.2	5.4
10-11 AM	4.2	5.4
11-12 PM	5.4	5.1
12-1 PM	5.5	5.6
1-2 PM	6.0	5.9
2-3 PM	7.0	6.2
3-4 PM	8.5	6.0
4-5 PM	10.5	7.5
5-6 PM	10.3	7.4
6-7 PM	8.6	5.9
7-8 PM	6.2	4.3
8-9 PM	6.3	3.1
9-10 PM	4.5	2.4
10-11 PM	2.2	1.1
11-12 AM	1.3	0.7

SIGNAL WARRANT ANALYSIS

Introduction

- The Signal Warrant Analysis Spreadsheets are a tool for assisting traffic engineers when evaluating the need for a traffic signal installation
 - The filled spreadsheets can be used as part of the supporting documents for the signal warrant evaluation
- Note: This templates are a useful resource, but it remains necessary to apply engineering judgment and to consider specific environmental, traffic, geometric, and operational conditions

Instructions

Fill in "Orange" areas only

Automated cells based on in Input Data in "orange" cells

General Information

Fill in below the general information including:

District, County (drop-down menu)

City, Engineer, Date

Major and Minor Street with corresponding number of lanes and speed limits

Enter Eight Hour Volumes

Any 8 hours of an average day. Major-street and minor-street volumes shall be for the same 8 hours; however, the 8 hours satisfied in Condition A shall not be required to be the same 8 hours satisfied in Condition B for 80% columns only. On the minor street, the higher volume shall not be required to be on the same approach during each of the 8 hours.

Enter Four Hour Volumes

Any 4 hours of an average day. Vehicles per hour on the major street (total of both approaches) and the corresponding vehicles per hour on the higher-volume minor-street approach (one direction only, not required to be on the same approach during each of the 4 hours)

Enter Pedestrian Volumes (4-hr)

Pedestrians per hour crossing the major street (total of all crossings)

Enter Peak Hour Volumes

Vehicular: Any four consecutive 15-minute periods of an average day

Pedestrian: Any four consecutive 15-minute periods of an average day representing the vehicles per hour on the major street (total of both approaches) and the corresponding pedestrians per hour crossing the major street (total of all crossings)

Input Data

City: **Palm Bay**
County: **70 – Brevard**
District: **Five**

Engineer: **Adam Burghdoff**
Date: **August 11, 2020**

Major Street: **Malabar Road** # Lanes: **2** Major Approach Speed: **35**
Minor Street: **St. Johns H Pkwy.** # Lanes: **1** Minor Approach Speed: **45**

Eight Hour Volumes (Condition A)		
Hours	Major Street (total of both approaches)	Minor Street (one direction only)
8:00 AM - 9:00 AM	1986	911
5:00 PM - 6:00 PM	1464	1007
3:00 PM - 4:00 PM	1757	806
7:00 AM - 8:00 AM	1696	778
4:00 PM - 5:00 PM	1573	722
6:00 PM - 7:00 PM	1573	722
6:00 AM - 7:00 AM	1096	503
7:00 PM - 8:00 PM	1054	484

Eight Hour Volumes (Condition B)		
Hours	Major Street (total of both approaches)	Minor Street (one direction only)
8:00 AM - 9:00	1986	911
5:00 PM - 6:00	1464	1007
3:00 PM - 4:00	1757	806
7:00 AM - 8:00	1696	778
4:00 PM - 5:00	1573	722
6:00 PM - 7:00	1573	722
6:00 AM - 7:00	1096	503
7:00 PM - 8:00	1054	484

Highest Four Hour Vehicular Volumes		
Hours	Major Street (total of both approaches)	Minor Street (one direction only)
8:00 AM - 9:00 AM	1986	911
5:00 PM - 6:00 PM	1464	1007
3:00 PM - 4:00 PM	1757	806
7:00 AM - 8:00 AM	1696	778

Highest Four Hour Pedestrian Volumes		
Hours	Major Street (total of both approaches)	Pedestrian Crossings on Major Street

Vehicular Peak Hour Volumes			
Peak Hour	Major Street (total of both approaches)	Minor Street (one direction only)	Total Entering Volume
8:00 AM - 9:00 AM	1986	911	3390

Pedestrian Peak Hour Volumes		
Peak Hour	Major Street (total of both approaches)	Pedestrian Crossing Volumes on Major Street

TRAFFIC SIGNAL WARRANT SUMMARY

City: **Palm Bay**
County: **70 – Brevard**
District: **Five**

Engineer: **Adam Burghdoff**
Date: **August 11, 2020**

Major Street: **Malabar Road** Lanes: **2** Major Approach Speed: **35**
Minor Street: **St. Johns H Pkwy.** Lanes: **1** Minor Approach Speed: **45**

MUTCD Electronic Reference to Chapter 4: <http://mutcd.fhwa.dot.gov/pdfs/2009r1r2/part4.pdf>

Volume Level Criteria

1. Is the posted speed or 85th-percentile of major street > 40 mph (70 km/h)? Yes No
 2. Is the intersection in a built-up area of an isolated community with a population < 10,000? Yes No
- "70%" volume level **may** be used if Question 1 **or** 2 above is answered "Yes" 70% 100%

WARRANT 1 - EIGHT-HOUR VEHICULAR VOLUME

Warrant 1 is satisfied if Condition A or Condition B is "100%" satisfied for eight hours. Yes No

Warrant 1 is also satisfied if both Condition A and Condition B are "80%" satisfied (should only be applied after an adequate trial of other alternatives that could cause less delay and inconvenience to traffic has failed to solve the traffic problems). Yes No

Condition A - Minimum Vehicular Volume

Condition A is intended for application at locations where a large volume of intersecting traffic is the principal reason to consider installing a traffic control signal.

100% Satisfied: Yes No
80% Satisfied: Yes No
70% Satisfied: Yes No

Number of Lanes for moving traffic on each approach		Vehicles per hour on major-street (total of both approaches)			Vehicles per hour on minor-street (one direction only)		
Major	Minor	100% ^a	80% ^b	70% ^c	100% ^a	80% ^b	70% ^c
1	1	500	400	350	150	120	105
2 or more	1	600	480	420	150	120	105
2 or more	2 or more	600	480	420	200	160	140
1	2 or more	500	400	350	200	160	140

^a Basic Minimum hourly volume
^b Used for combination of Conditions A and B after adequate trial of other remedial measures
^c May be used when the major-street speed exceeds 40 mph or in an isolated community with a population of less than 10,000

Record 8 highest hours and the corresponding major-street and minor-street volumes in the Instructions Sheet.

Street	Eight Highest Hours							
	8:00 AM - 9:00	5:00 PM - 6:00	3:00 PM - 4:00	7:00 AM - 8:00	4:00 PM - 5:00	6:00 PM - 7:00	6:00 AM - 7:00	7:00 PM - 8:00
Major	1,986	1,464	1,757	1,696	1,573	1,573	1,096	1,054
Minor	911	1,007	806	778	722	722	503	484

Existing Volumes

State of Florida Department of Transportation
TRAFFIC SIGNAL WARRANT SUMMARY

Condition B - Interruption of Continuous Traffic

Condition B is intended for application where Condition A is not satisfied and the traffic volume on a major street is so heavy that traffic on the minor intersecting street suffers excessive delay or conflict in entering or crossing the major street.

Applicable:	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
100% Satisfied:	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
80% Satisfied:	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
70% Satisfied:	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No

Number of Lanes for moving traffic on each approach		Vehicles per hour on major-street (total of both approaches)			Vehicles per hour on minor-street (one direction only)		
Major	Minor	100% ^a	80% ^b	70% ^c	100% ^a	80% ^b	70% ^c
1	1	750	600	525	75	60	53
2 or more	1	900	720	630	75	60	53
2 or more	2 or more	900	720	630	100	80	70
1	2 or more	750	600	525	100	80	70

^a Basic Minimum hourly volume

^b Used for combination of Conditions A and B after adequate trial of other remedial measures

^c May be used when the major-street speed exceeds 40 mph or in an isolated community with a population of less than 10,000

Record 8 highest hours and the corresponding major-street and minor-street volumes in the Instructions Sheet.

Eight Highest Hours								
Street	8:00 AM - 9:00	5:00 PM - 6:00	3:00 PM - 4:00	7:00 AM - 8:00	4:00 PM - 5:00	6:00 PM - 7:00	6:00 AM - 7:00	7:00 PM - 8:00
Major	1,986	1,464	1,757	1,696	1,573	1,573	1,096	1,054
Minor	911	1,007	806	778	722	722	503	484

Existing Volumes

State of Florida Department of Transportation
TRAFFIC SIGNAL WARRANT SUMMARY

Form 750-020-01
TRAFFIC ENGINEERING
10/15

City: **Palm Bay**
County: **70 – Brevard**
District: **Five**

Engineer: **Adam Burghdoff**
Date: **August 11, 2020**

Major Street: **Malabar Road** Lanes: **2** Major Approach Speed: **35**
Minor Street: **St. Johns H Pkwy.** Lanes: **1** Minor Approach Speed: **45**

MUTCD Electronic Reference to Chapter 4: <http://mutcd.fhwa.dot.gov/pdfs/2009r1r2/part4.pdf>

Volume Level Criteria

1. Is the posted speed or 85th-percentile of major street > 40 mph (70 km/h)? Yes No
 2. Is the intersection in a built-up area of an isolated community with a population < 10,000? Yes No
- "70%" volume level **may** be used if Question 1 or 2 above is answered "Yes" Yes No

WARRANT 2 - FOUR-HOUR VEHICULAR VOLUME

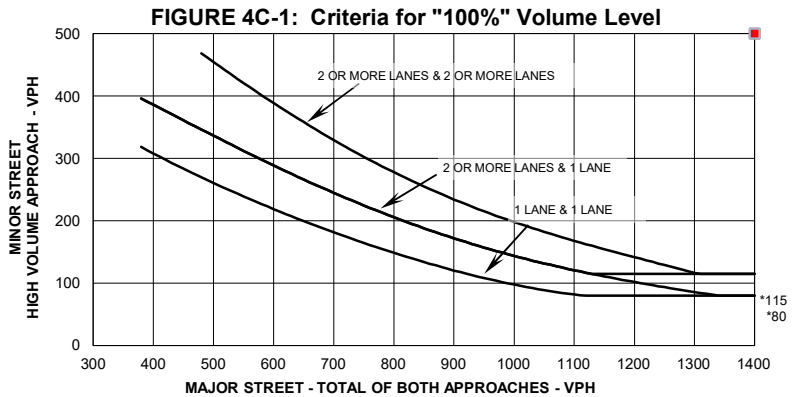
If all four points lie above the appropriate line, then the warrant is satisfied.

Applicable: Yes No
Satisfied: Yes No

Plot four volume combinations on the applicable figure below.

100% Volume Level

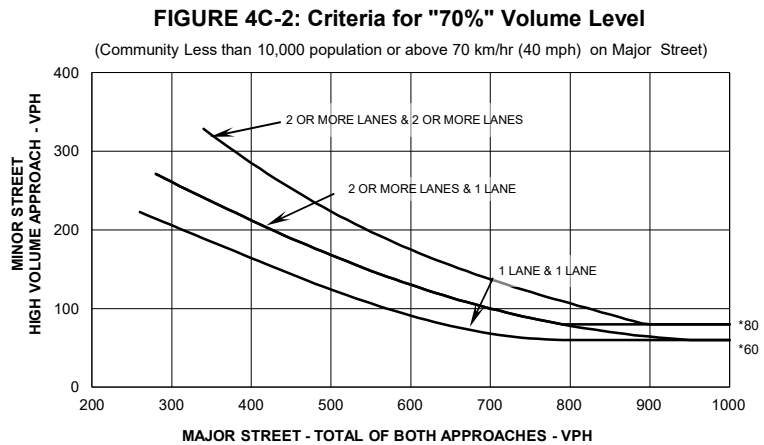
Four Highest Hours	Volumes	
	Major Street	Minor Street
00 AM - 9:00 A	1986	911
00 PM - 6:00 P	1464	1007
00 PM - 4:00 P	1757	806
00 AM - 8:00 A	1696	778



* Note: 115 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 80 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

70% Volume Level

Four Highest Hours	Volumes	
	Major Street	Minor Street



* Note: 80 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 60 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

2050 WISTERIA AVENUE/ABILENE DRIVE SIGNAL WARRANT
SCREENING

Hourly Distribution of Entering and Exiting Vehicle Trips by Land Use

Source: ITE *Trip Generation Manual*, 10th Edition

Land Use Code	210	
Land Use	Single-Family Detached Housing	
Setting	General Urban/Suburban	
Time Period	Weekday	
Trip Type	Vehicle	
# Data Sites	6	
	% of 24-Hour Traffic	
Time	Entering	Exiting
12-1 AM	0.5	0.2
1-2 AM	0.2	0.2
2-3 AM	0.2	0
3-4 AM	0.2	0.2
4-5 AM	0.3	0.8
5-6 AM	0.5	2.0
6-7 AM	1.6	5.9
7-8 AM	3.2	10.2
8-9 AM	3.7	8.6
9-10 AM	3.2	5.4
10-11 AM	4.2	5.4
11-12 PM	5.4	5.1
12-1 PM	5.5	5.6
1-2 PM	6.0	5.9
2-3 PM	7.0	6.2
3-4 PM	8.5	6.0
4-5 PM	10.5	7.5
5-6 PM	10.3	7.4
6-7 PM	8.6	5.9
7-8 PM	6.2	4.3
8-9 PM	6.3	3.1
9-10 PM	4.5	2.4
10-11 PM	2.2	1.1
11-12 AM	1.3	0.7

SIGNAL WARRANT ANALYSIS

Introduction

- The Signal Warrant Analysis Spreadsheets are a tool for assisting traffic engineers when evaluating the need for a traffic signal installation
- The filled spreadsheets can be used as part of the supporting documents for the signal warrant evaluation

Note: This templates are a useful resource, but it remains necessary to apply engineering judgment and to consider specific environmental, traffic, geometric, and operational conditions

Instructions

Fill in "Orange" areas only

Automated cells based on in Input Data in "orange" cells

General Information

Fill in below the general information including:

District, County (drop-down menu)

City, Engineer, Date

Major and Minor Street with corresponding number of lanes and speed limits

Enter Eight Hour Volumes

Any 8 hours of an average day. Major-street and minor-street volumes shall be for the same 8 hours; however, the 8 hours satisfied in Condition A shall not be required to be the same 8 hours satisfied in Condition B for 80% columns only. On the minor street, the higher volume shall not be required to be on the same approach during each of the 8 hours.

Enter Four Hour Volumes

Any 4 hours of an average day. Vehicles per hour on the major street (total of both approaches) and the corresponding vehicles per hour on the higher-volume minor-street approach (one direction only, not required to be on the same approach during each of the 4 hours)

Enter Pedestrian Volumes (4-hr)

Pedestrians per hour crossing the major street (total of all crossings)

Enter Peak Hour Volumes

Vehicular: Any four consecutive 15-minute periods of an average day

Pedestrian: Any four consecutive 15-minute periods of an average day representing the vehicles per hour on the major street (total of both approaches) and the corresponding pedestrians per hour crossing the major street (total of all crossings)

Input Data

City: **Palm Bay**
County: **70 – Brevard**
District: **Five**

Engineer: **Adam Burghdoff**
Date: **August 11, 2020**

Major Street: **Malabar Road** # Lanes: **2** Major Approach Speed: **45**
Minor Street: **Wisteria Ave/Abilene Dr** # Lanes: **1** Minor Approach Speed: **25**

Eight Hour Volumes (Condition A)		
Hours	Major Street (total of both approaches)	Minor Street (one direction only)
8:00 AM - 9:00 AM	2201	245
5:00 PM - 6:00 PM	2124	105
3:00 PM - 4:00 PM	1948	171
7:00 AM - 8:00 AM	1880	291
4:00 PM -5:00 PM	1743	214
6:00 PM - 7:00 PM	1743	168
6:00 AM - 7:00 AM	1215	168
7:00 PM - 8:00 PM	1169	123

Eight Hour Volumes (Condition B)		
Hours	Major Street (total of both approaches)	Minor Street (one direction only)
8:00 AM - 9:00	2201	245
5:00 PM - 6:00	2124	105
3:00 PM - 4:00	1948	171
7:00 AM - 8:00	1880	291
4:00 PM -5:00	1743	214
6:00 PM - 7:00	1743	168
6:00 AM - 7:00	1215	168
7:00 PM - 8:00	1169	123

Highest Four Hour Vehicular Volumes		
Hours	Major Street (total of both approaches)	Minor Street (one direction only)
8:00 AM - 9:00 AM	2201	245
3:00 PM - 4:00 PM	1948	171
7:00 AM - 8:00 AM	1880	291
4:00 PM -5:00 PM	1743	214

Highest Four Hour Pedestrian Volumes		
Hours	Major Street (total of both approaches)	Pedestrian Crossings on Major Street

Vehicular Peak Hour Volumes			
Peak Hour	Major Street (total of both approaches)	Minor Street (one direction only)	Total Entering Volume
8:00 AM - 9:00 AM	2201	245	2655

Pedestrian Peak Hour Volumes		
Peak Hour	Major Street (total of both approaches)	Pedestrian Crossing Volumes on Major Street

TRAFFIC SIGNAL WARRANT SUMMARY

City: **Palm Bay**
 County: **70 – Brevard**
 District: **Five**

Engineer: **Adam Burghdoff**
 Date: **August 11, 2020**

Major Street: **Malabar Road** Lanes: **2** Major Approach Speed: **45**
 Minor Street: **Wisteria Ave/Abilene Dr** Lanes: **1** Minor Approach Speed: **25**

MUTCD Electronic Reference to Chapter 4: <http://mutcd.fhwa.dot.gov/pdfs/2009r1r2/part4.pdf>

Volume Level Criteria

1. Is the posted speed or 85th-percentile of major street > 40 mph (70 km/h)? Yes No
 2. Is the intersection in a built-up area of an isolated community with a population < 10,000? Yes No
- "70%" volume level **may** be used if Question 1 **or** 2 above is answered "Yes" 70% 100%

WARRANT 1 - EIGHT-HOUR VEHICULAR VOLUME

Warrant 1 is satisfied if Condition A or Condition B is "100%" satisfied for eight hours. Yes No

Warrant 1 is also satisfied if both Condition A and Condition B are "80%" satisfied (should only be applied after an adequate trial of other alternatives that could cause less delay and inconvenience to traffic has failed to solve the traffic problems). Yes No

Condition A - Minimum Vehicular Volume

Condition A is intended for application at locations where a large volume of intersecting traffic is the principal reason to consider installing a traffic control signal.

100% Satisfied: Yes No
 80% Satisfied: Yes No
 70% Satisfied: Yes No

Number of Lanes for moving traffic on each approach		Vehicles per hour on major-street (total of both approaches)			Vehicles per hour on minor-street (one direction only)		
Major	Minor	100% ^a	80% ^b	70% ^c	100% ^a	80% ^b	70% ^c
1	1	500	400	350	150	120	105
2 or more	1	600	480	420	150	120	105
2 or more	2 or more	600	480	420	200	160	140
1	2 or more	500	400	350	200	160	140

^a Basic Minimum hourly volume
^b Used for combination of Conditions A and B after adequate trial of other remedial measures
^c May be used when the major-street speed exceeds 40 mph or in an isolated community with a population of less than 10,000

Record 8 highest hours and the corresponding major-street and minor-street volumes in the Instructions Sheet.

Street	Eight Highest Hours							
	8:00 AM - 9:00	5:00 PM - 6:00	3:00 PM - 4:00	7:00 AM - 8:00	4:00 PM - 5:00	6:00 PM - 7:00	6:00 AM - 7:00	7:00 PM - 8:00
Major	2,201	2,124	1,948	1,880	1,743	1,743	1,215	1,169
Minor	245	105	171	291	214	168	168	123

Existing Volumes

State of Florida Department of Transportation
TRAFFIC SIGNAL WARRANT SUMMARY

Condition B - Interruption of Continuous Traffic

Condition B is intended for application where Condition A is not satisfied and the traffic volume on a major street is so heavy that traffic on the minor intersecting street suffers excessive delay or conflict in entering or crossing the major street.

Applicable:	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
100% Satisfied:	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
80% Satisfied:	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
70% Satisfied:	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No

Number of Lanes for moving traffic on each approach		Vehicles per hour on major-street (total of both approaches)			Vehicles per hour on minor-street (one direction only)		
Major	Minor	100% ^a	80% ^b	70% ^c	100% ^a	80% ^b	70% ^c
1	1	750	600	525	75	60	53
2 or more	1	900	720	630	75	60	53
2 or more	2 or more	900	720	630	100	80	70
1	2 or more	750	600	525	100	80	70

^a Basic Minimum hourly volume

^b Used for combination of Conditions A and B after adequate trial of other remedial measures

^c May be used when the major-street speed exceeds 40 mph or in an isolated community with a population of less than 10,000

Record 8 highest hours and the corresponding major-street and minor-street volumes in the Instructions Sheet.

Eight Highest Hours								
Street	8:00 AM - 9:00	5:00 PM - 6:00	3:00 PM - 4:00	7:00 AM - 8:00	4:00 PM - 5:00	6:00 PM - 7:00	6:00 AM - 7:00	7:00 PM - 8:00
Major	2,201	2,124	1,948	1,880	1,743	1,743	1,215	1,169
Minor	245	105	171	291	214	168	168	123

Existing Volumes

TRAFFIC SIGNAL WARRANT SUMMARY

City: **Palm Bay**
County: **70 – Brevard**
District: **Five**

Engineer: **Adam Burghdoff**
Date: **August 11, 2020**

Major Street: **Malabar Road** Lanes: **2** Major Approach Speed: **45**
Minor Street: **Wisteria Ave/Abilene Dr** Lanes: **1** Minor Approach Speed: **25**

MUTCD Electronic Reference to Chapter 4: <http://mutcd.fhwa.dot.gov/pdfs/2009r1r2/part4.pdf>

Volume Level Criteria

1. Is the posted speed or 85th-percentile of major street > 40 mph (70 km/h)? Yes No
 2. Is the intersection in a built-up area of an isolated community with a population < 10,000? Yes No
- "70%" volume level **may** be used if Question 1 or 2 above is answered "Yes" Yes No

WARRANT 2 - FOUR-HOUR VEHICULAR VOLUME

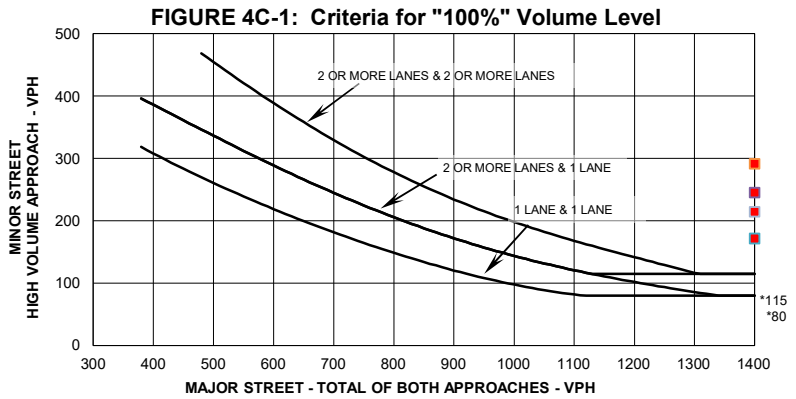
If all four points lie above the appropriate line, then the warrant is satisfied.

Applicable: Yes No
Satisfied: Yes No

Plot four volume combinations on the applicable figure below.

100% Volume Level

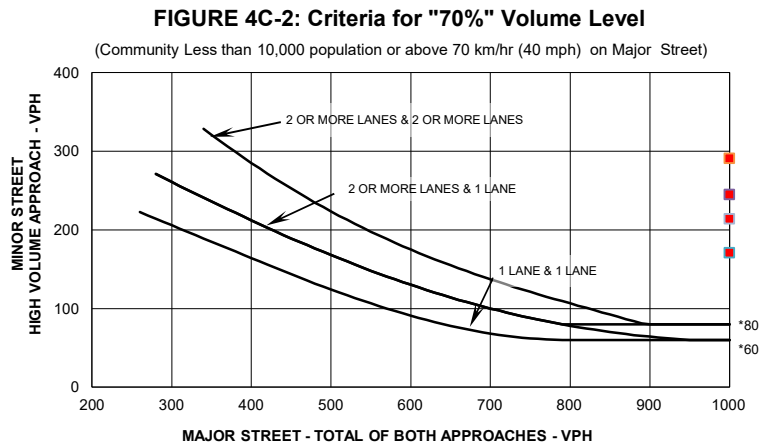
Four Highest Hours	Volumes	
	Major Street	Minor Street
00 AM - 9:00 A	2201	245
00 PM - 4:00 P	1948	171
00 AM - 8:00 A	1880	291
00 PM -5:00 P	1743	214



* Note: 115 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 80 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

70% Volume Level

Four Highest Hours	Volumes	
	Major Street	Minor Street
00 AM - 9:00 A	2201	245
00 PM - 4:00 P	1948	171
00 AM - 8:00 A	1880	291
00 PM -5:00 P	1743	214



* Note: 80 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 60 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

2050 HURLEY BOULEVARD SIGNAL WARRANT SCREENING

Hourly Distribution of Entering and Exiting Vehicle Trips by Land Use

Source: ITE *Trip Generation Manual*, 10th Edition

Land Use Code	210	
Land Use	Single-Family Detached Housing	
Setting	General Urban/Suburban	
Time Period	Weekday	
Trip Type	Vehicle	
# Data Sites	6	
	% of 24-Hour Traffic	
Time	Entering	Exiting
12-1 AM	0.5	0.2
1-2 AM	0.2	0.2
2-3 AM	0.2	0
3-4 AM	0.2	0.2
4-5 AM	0.3	0.8
5-6 AM	0.5	2.0
6-7 AM	1.6	5.9
7-8 AM	3.2	10.2
8-9 AM	3.7	8.6
9-10 AM	3.2	5.4
10-11 AM	4.2	5.4
11-12 PM	5.4	5.1
12-1 PM	5.5	5.6
1-2 PM	6.0	5.9
2-3 PM	7.0	6.2
3-4 PM	8.5	6.0
4-5 PM	10.5	7.5
5-6 PM	10.3	7.4
6-7 PM	8.6	5.9
7-8 PM	6.2	4.3
8-9 PM	6.3	3.1
9-10 PM	4.5	2.4
10-11 PM	2.2	1.1
11-12 AM	1.3	0.7

SIGNAL WARRANT ANALYSIS

Introduction

- The Signal Warrant Analysis Spreadsheets are a tool for assisting traffic engineers when evaluating the need for a traffic signal installation
- The filled spreadsheets can be used as part of the supporting documents for the signal warrant evaluation

Note: This templates are a useful resource, but it remains necessary to apply engineering judgment and to consider specific environmental, traffic, geometric, and operational conditions

Instructions

Fill in "Orange" areas only

Automated cells based on in Input Data in "orange" cells

General Information

Fill in below the general information including:

District, County (drop-down menu)

City, Engineer, Date

Major and Minor Street with corresponding number of lanes and speed limits

Enter Eight Hour Volumes

Any 8 hours of an average day. Major-street and minor-street volumes shall be for the same 8 hours; however, the 8 hours satisfied in Condition A shall not be required to be the same 8 hours satisfied in Condition B for 80% columns only. On the minor street, the higher volume shall not be required to be on the same approach during each of the 8 hours.

Enter Four Hour Volumes

Any 4 hours of an average day. Vehicles per hour on the major street (total of both approaches) and the corresponding vehicles per hour on the higher-volume minor-street approach (one direction only, not required to be on the same approach during each of the 4 hours)

Enter Pedestrian Volumes (4-hr)

Pedestrians per hour crossing the major street (total of all crossings)

Enter Peak Hour Volumes

Vehicular: Any four consecutive 15-minute periods of an average day

Pedestrian: Any four consecutive 15-minute periods of an average day representing the vehicles per hour on the major street (total of both approaches) and the corresponding pedestrians per hour crossing the major street (total of all crossings)

Input Data

City: **Palm Bay**
County: **70 – Brevard**
District: **Five**

Engineer: **Adam Burghdoff**
Date: **August 11, 2020**

Major Street: **Malabar Road** # Lanes: **2** Major Approach Speed: **45**
Minor Street: **Hurley Boulevard** # Lanes: **1** Minor Approach Speed: **40**

Eight Hour Volumes (Condition A)		
Hours	Major Street (total of both approaches)	Minor Street (one direction only)
8:00 AM - 9:00 AM	2430	198
5:00 PM - 6:00 PM	2313	250
3:00 PM - 4:00 PM	2161	138
6:00 PM -7:00 PM	2101	136
4:00 PM -5:00 PM	2089	173
7:00 AM - 8:00 AM	1805	235
2:00 PM - 3:00 PM	1644	143
1:00 PM - 2:00 PM	1516	136

Eight Hour Volumes (Condition B)		
Hours	Major Street (total of both approaches)	Minor Street (one direction only)
8:00 AM - 9:00	2430	198
5:00 PM - 6:00	2313	250
3:00 PM - 4:00	2161	138
6:00 PM -7:00	2101	136
4:00 PM -5:00	2089	173
7:00 AM - 8:00	1805	235
2:00 PM - 3:00	1644	143
1:00 PM - 2:00	1516	136

Highest Four Hour Vehicular Volumes		
Hours	Major Street (total of both approaches)	Minor Street (one direction only)
8:00 AM - 9:00 AM	2430	198
5:00 PM - 6:00 PM	2313	250
4:00 PM -5:00 PM	2089	173
7:00 AM - 8:00 AM	1805	235

Highest Four Hour Pedestrian Volumes		
Hours	Major Street (total of both approaches)	Pedestrian Crossings on Major Street

Vehicular Peak Hour Volumes			
Peak Hour	Major Street (total of both approaches)	Minor Street (one direction only)	Total Entering Volume
5:00 PM - 6:00 PM	2313	250	2572

Pedestrian Peak Hour Volumes		
Peak Hour	Major Street (total of both approaches)	Pedestrian Crossing Volumes on Major Street

TRAFFIC SIGNAL WARRANT SUMMARY

City: **Palm Bay**
 County: **70 – Brevard**
 District: **Five**

Engineer: **Adam Burghdoff**
 Date: **August 11, 2020**

Major Street: **Malabar Road** Lanes: **2** Major Approach Speed: **45**
 Minor Street: **Hurley Boulevard** Lanes: **1** Minor Approach Speed: **40**

MUTCD Electronic Reference to Chapter 4: <http://mutcd.fhwa.dot.gov/pdfs/2009r1r2/part4.pdf>

Volume Level Criteria

1. Is the posted speed or 85th-percentile of major street > 40 mph (70 km/h)? Yes No
 2. Is the intersection in a built-up area of an isolated community with a population < 10,000? Yes No
- "70%" volume level **may** be used if Question 1 **or** 2 above is answered "Yes" 70% 100%

WARRANT 1 - EIGHT-HOUR VEHICULAR VOLUME

Warrant 1 is satisfied if Condition A or Condition B is "100%" satisfied for eight hours. Yes No

Warrant 1 is also satisfied if both Condition A and Condition B are "80%" satisfied (should only be applied after an adequate trial of other alternatives that could cause less delay and inconvenience to traffic has failed to solve the traffic problems). Yes No

Condition A - Minimum Vehicular Volume

Condition A is intended for application at locations where a large volume of intersecting traffic is the principal reason to consider installing a traffic control signal.

100% Satisfied: Yes No
 80% Satisfied: Yes No
 70% Satisfied: Yes No

Number of Lanes for moving traffic on each approach		Vehicles per hour on major-street (total of both approaches)			Vehicles per hour on minor-street (one direction only)		
Major	Minor	100% ^a	80% ^b	70% ^c	100% ^a	80% ^b	70% ^c
1	1	500	400	350	150	120	105
2 or more	1	600	480	420	150	120	105
2 or more	2 or more	600	480	420	200	160	140
1	2 or more	500	400	350	200	160	140

^a Basic Minimum hourly volume

^b Used for combination of Conditions A and B after adequate trial of other remedial measures

^c May be used when the major-street speed exceeds 40 mph or in an isolated community with a population of less than 10,000

Record 8 highest hours and the corresponding major-street and minor-street volumes in the Instructions Sheet.

Street	Eight Highest Hours							
	8:00 AM - 9:00	5:00 PM - 6:00	3:00 PM - 4:00	6:00 PM - 7:00	4:00 PM - 5:00	7:00 AM - 8:00	2:00 PM - 3:00	1:00 PM - 2:00
Major	2,430	2,313	2,161	2,101	2,089	1,805	1,644	1,516
Minor	198	250	138	136	173	235	143	136

Existing Volumes

State of Florida Department of Transportation
TRAFFIC SIGNAL WARRANT SUMMARY

Condition B - Interruption of Continuous Traffic

Condition B is intended for application where Condition A is not satisfied and the traffic volume on a major street is so heavy that traffic on the minor intersecting street suffers excessive delay or conflict in entering or crossing the major street.

Applicable:	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
100% Satisfied:	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
80% Satisfied:	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
70% Satisfied:	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No

Number of Lanes for moving traffic on each approach		Vehicles per hour on major-street (total of both approaches)			Vehicles per hour on minor-street (one direction only)		
Major	Minor	100% ^a	80% ^b	70% ^c	100% ^a	80% ^b	70% ^c
1	1	750	600	525	75	60	53
2 or more	1	900	720	630	75	60	53
2 or more	2 or more	900	720	630	100	80	70
1	2 or more	750	600	525	100	80	70

^a Basic Minimum hourly volume

^b Used for combination of Conditions A and B after adequate trial of other remedial measures

^c May be used when the major-street speed exceeds 40 mph or in an isolated community with a population of less than 10,000

Record 8 highest hours and the corresponding major-street and minor-street volumes in the Instructions Sheet.

Eight Highest Hours								
Street	8:00 AM - 9:00	5:00 PM - 6:00	3:00 PM - 4:00	6:00 PM - 7:00	4:00 PM - 5:00	7:00 AM - 8:00	2:00 PM - 3:00	1:00 PM - 2:00
Major	2,430	2,313	2,161	2,101	2,089	1,805	1,644	1,516
Minor	198	250	138	136	173	235	143	136

Existing Volumes

TRAFFIC SIGNAL WARRANT SUMMARY

City: **Palm Bay**
County: **70 – Brevard**
District: **Five**

Engineer: **Adam Burghdoff**
Date: **August 11, 2020**

Major Street: **Malabar Road** Lanes: **2** Major Approach Speed: **45**
Minor Street: **Hurley Boulevard** Lanes: **1** Minor Approach Speed: **40**

MUTCD Electronic Reference to Chapter 4: <http://mutcd.fhwa.dot.gov/pdfs/2009r1r2/part4.pdf>

Volume Level Criteria

1. Is the posted speed or 85th-percentile of major street > 40 mph (70 km/h)? Yes No
 2. Is the intersection in a built-up area of an isolated community with a population < 10,000? Yes No
- "70%" volume level **may** be used if Question 1 or 2 above is answered "Yes" Yes No

WARRANT 2 - FOUR-HOUR VEHICULAR VOLUME

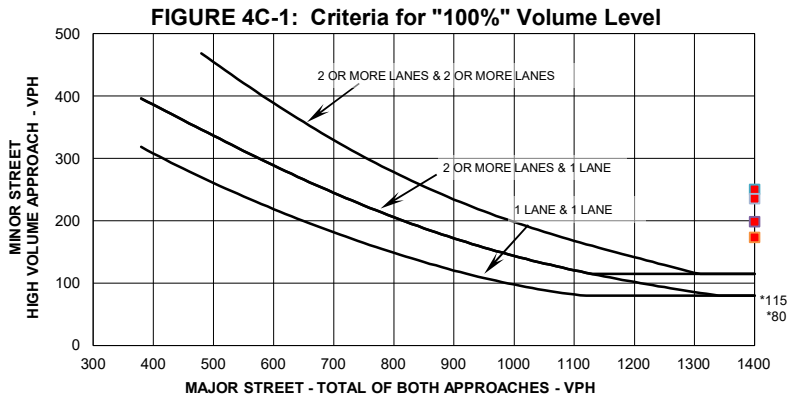
If all four points lie above the appropriate line, then the warrant is satisfied.

Applicable: Yes No
Satisfied: Yes No

Plot four volume combinations on the applicable figure below.

100% Volume Level

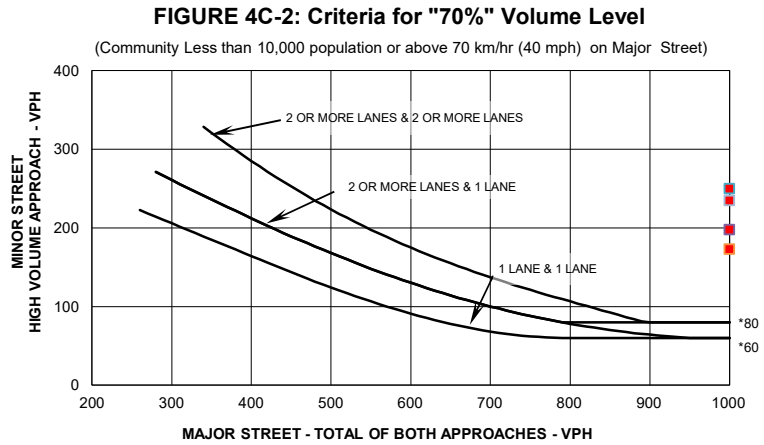
Four Highest Hours	Volumes	
	Major Street	Minor Street
00 AM - 9:00 A	2430	198
00 PM - 6:00 P	2313	250
00 PM - 5:00 P	2089	173
00 AM - 8:00 A	1805	235



* Note: 115 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 80 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

70% Volume Level

Four Highest Hours	Volumes	
	Major Street	Minor Street
00 AM - 9:00 A	2430	198
00 PM - 6:00 P	2313	250
00 PM - 5:00 P	2089	173
00 AM - 8:00 A	1805	235



* Note: 80 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 60 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

2050 GARVEY ROAD SIGNAL WARRANT SCREENING

Hourly Distribution of Entering and Exiting Vehicle Trips by Land Use

Source: ITE *Trip Generation Manual*, 10th Edition

Land Use Code	210	
Land Use	Single-Family Detached Housing	
Setting	General Urban/Suburban	
Time Period	Weekday	
Trip Type	Vehicle	
# Data Sites	6	
	% of 24-Hour Traffic	
Time	Entering	Exiting
12-1 AM	0.5	0.2
1-2 AM	0.2	0.2
2-3 AM	0.2	0
3-4 AM	0.2	0.2
4-5 AM	0.3	0.8
5-6 AM	0.5	2.0
6-7 AM	1.6	5.9
7-8 AM	3.2	10.2
8-9 AM	3.7	8.6
9-10 AM	3.2	5.4
10-11 AM	4.2	5.4
11-12 PM	5.4	5.1
12-1 PM	5.5	5.6
1-2 PM	6.0	5.9
2-3 PM	7.0	6.2
3-4 PM	8.5	6.0
4-5 PM	10.5	7.5
5-6 PM	10.3	7.4
6-7 PM	8.6	5.9
7-8 PM	6.2	4.3
8-9 PM	6.3	3.1
9-10 PM	4.5	2.4
10-11 PM	2.2	1.1
11-12 AM	1.3	0.7

SIGNAL WARRANT ANALYSIS

Introduction

- The Signal Warrant Analysis Spreadsheets are a tool for assisting traffic engineers when evaluating the need for a traffic signal installation
 - The filled spreadsheets can be used as part of the supporting documents for the signal warrant evaluation
- Note: This templates are a useful resource, but it remains necessary to apply engineering judgment and to consider specific environmental, traffic, geometric, and operational conditions

Instructions

Fill in "Orange" areas only

Automated cells based on in Input Data in "orange" cells

General Information

Fill in below the general information including:

District, County (drop-down menu)

City, Engineer, Date

Major and Minor Street with corresponding number of lanes and speed limits

Enter Eight Hour Volumes

Any 8 hours of an average day. Major-street and minor-street volumes shall be for the same 8 hours; however, the 8 hours satisfied in Condition A shall not be required to be the same 8 hours satisfied in Condition B for 80% columns only. On the minor street, the higher volume shall not be required to be on the same approach during each of the 8 hours.

Enter Four Hour Volumes

Any 4 hours of an average day. Vehicles per hour on the major street (total of both approaches) and the corresponding vehicles per hour on the higher-volume minor-street approach (one direction only, not required to be on the same approach during each of the 4 hours)

Enter Pedestrian Volumes (4-hr)

Pedestrians per hour crossing the major street (total of all crossings)

Enter Peak Hour Volumes

Vehicular: Any four consecutive 15-minute periods of an average day

Pedestrian: Any four consecutive 15-minute periods of an average day representing the vehicles per hour on the major street (total of both approaches) and the corresponding pedestrians per hour crossing the major street (total of all crossings)

Input Data

City: **Palm Bay**
County: **70 – Brevard**
District: **Five**

Engineer: **Adam Burghdoff**
Date: **August 11, 2020**

Major Street: **Malabar Road** # Lanes: **2** Major Approach Speed: **45**
Minor Street: **Garvey Rd.** # Lanes: **1** Minor Approach Speed: **30**

Eight Hour Volumes (Condition A)		
Hours	Major Street (total of both approaches)	Minor Street (one direction only)
8:00 AM - 9:00 AM	2730	192
7:00 AM - 8:00 AM	2268	228
4:00 PM -5:00 PM	2696	167
2:00 PM -3:00 PM	2309	138
3:00 PM -4:00 PM	2448	134
6:00 PM - 7:00 PM	2751	132
1:00 PM -2:00 PM	2022	132
12:00 PM -1:00 PM	2061	125

Eight Hour Volumes (Condition B)		
Hours	Major Street (total of both approaches)	Minor Street (one direction only)
8:00 AM - 9:00	2730	192
7:00 AM - 8:00	2268	228
4:00 PM -5:00	2696	167
2:00 PM -3:00	2309	138
3:00 PM -4:00	2448	134
6:00 PM - 7:00	2751	132
1:00 PM -2:00	2022	132
12:00 PM -1:00	2061	125

Highest Four Hour Vehicular Volumes		
Hours	Major Street (total of both approaches)	Minor Street (one direction only)
8:00 AM - 9:00 AM	2730	192
7:00 AM - 8:00 AM	2268	228
4:00 PM -5:00 PM	2696	167
2:00 PM -3:00 PM	2309	138

Highest Four Hour Pedestrian Volumes		
Hours	Major Street (total of both approaches)	Pedestrian Crossings on Major Street

Vehicular Peak Hour Volumes			
Peak Hour	Major Street (total of both approaches)	Minor Street (one direction only)	Total Entering Volume
8:00 AM - 9:00 AM	2730	192	3120

Pedestrian Peak Hour Volumes		
Peak Hour	Major Street (total of both approaches)	Pedestrian Crossing Volumes on Major Street

TRAFFIC SIGNAL WARRANT SUMMARY

City: **Palm Bay**
County: **70 – Brevard**
District: **Five**

Engineer: **Adam Burghdoff**
Date: **August 11, 2020**

Major Street: **Malabar Road** Lanes: **2** Major Approach Speed: **45**
Minor Street: **Garvey Rd.** Lanes: **1** Minor Approach Speed: **30**

MUTCD Electronic Reference to Chapter 4: <http://mutcd.fhwa.dot.gov/pdfs/2009r1r2/part4.pdf>

Volume Level Criteria

- 1. Is the posted speed or 85th-percentile of major street > 40 mph (70 km/h)? Yes No
 - 2. Is the intersection in a built-up area of an isolated community with a population < 10,000? Yes No
- "70%" volume level **may** be used if Question 1 **or** 2 above is answered "Yes" 70% 100%

WARRANT 1 - EIGHT-HOUR VEHICULAR VOLUME

Warrant 1 is satisfied if Condition A or Condition B is "100%" satisfied for eight hours. Yes No

Warrant 1 is also satisfied if both Condition A and Condition B are "80%" satisfied (should only be applied after an adequate trial of other alternatives that could cause less delay and inconvenience to traffic has failed to solve the traffic problems). Yes No

Condition A - Minimum Vehicular Volume

Condition A is intended for application at locations where a large volume of intersecting traffic is the principal reason to consider installing a traffic control signal.

100% Satisfied: Yes No
80% Satisfied: Yes No
70% Satisfied: Yes No

Number of Lanes for moving traffic on each approach		Vehicles per hour on major-street (total of both approaches)			Vehicles per hour on minor-street (one direction only)		
Major	Minor	100% ^a	80% ^b	70% ^c	100% ^a	80% ^b	70% ^c
1	1	500	400	350	150	120	105
2 or more	1	600	480	420	150	120	105
2 or more	2 or more	600	480	420	200	160	140
1	2 or more	500	400	350	200	160	140

^a Basic Minimum hourly volume
^b Used for combination of Conditions A and B after adequate trial of other remedial measures
^c May be used when the major-street speed exceeds 40 mph or in an isolated community with a population of less than 10,000

Record 8 highest hours and the corresponding major-street and minor-street volumes in the Instructions Sheet.

Street	Eight Highest Hours							
	8:00 AM - 9:00	7:00 AM - 8:00	4:00 PM - 5:00	2:00 PM - 3:00	3:00 PM - 4:00	6:00 PM - 7:00	1:00 PM - 2:00	12:00 PM - 1:00
Major	2,730	2,268	2,696	2,309	2,448	2,751	2,022	2,061
Minor	192	228	167	138	134	132	132	125

Existing Volumes

State of Florida Department of Transportation
TRAFFIC SIGNAL WARRANT SUMMARY

Condition B - Interruption of Continuous Traffic

Condition B is intended for application where Condition A is not satisfied and the traffic volume on a major street is so heavy that traffic on the minor intersecting street suffers excessive delay or conflict in entering or crossing the major street.

Applicable:	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
100% Satisfied:	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
80% Satisfied:	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
70% Satisfied:	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No

Number of Lanes for moving traffic on each approach		Vehicles per hour on major-street (total of both approaches)			Vehicles per hour on minor-street (one direction only)		
Major	Minor	100% ^a	80% ^b	70% ^c	100% ^a	80% ^b	70% ^c
1	1	750	600	525	75	60	53
2 or more	1	900	720	630	75	60	53
2 or more	2 or more	900	720	630	100	80	70
1	2 or more	750	600	525	100	80	70

^a Basic Minimum hourly volume

^b Used for combination of Conditions A and B after adequate trial of other remedial measures

^c May be used when the major-street speed exceeds 40 mph or in an isolated community with a population of less than 10,000

Record 8 highest hours and the corresponding major-street and minor-street volumes in the Instructions Sheet.

Eight Highest Hours								
Street	8:00 AM - 9:00	7:00 AM - 8:00	4:00 PM - 5:00	2:00 PM - 3:00	3:00 PM - 4:00	6:00 PM - 7:00	1:00 PM - 2:00	12:00 PM - 1:00
Major	2,730	2,268	2,696	2,309	2,448	2,751	2,022	2,061
Minor	192	228	167	138	134	132	132	125

Existing Volumes

State of Florida Department of Transportation
TRAFFIC SIGNAL WARRANT SUMMARY

Form 750-020-01
TRAFFIC ENGINEERING
10/15

City: **Palm Bay**
County: **70 – Brevard**
District: **Five**

Engineer: **Adam Burghdoff**
Date: **August 11, 2020**

Major Street: **Malabar Road** Lanes: **2** Major Approach Speed: **45**
Minor Street: **Garvey Rd.** Lanes: **1** Minor Approach Speed: **30**

MUTCD Electronic Reference to Chapter 4: <http://mutcd.fhwa.dot.gov/pdfs/2009r1r2/part4.pdf>

Volume Level Criteria

1. Is the posted speed or 85th-percentile of major street > 40 mph (70 km/h)? Yes No
 2. Is the intersection in a built-up area of an isolated community with a population < 10,000? Yes No
- "70%" volume level **may** be used if Question 1 or 2 above is answered "Yes" Yes No

WARRANT 2 - FOUR-HOUR VEHICULAR VOLUME

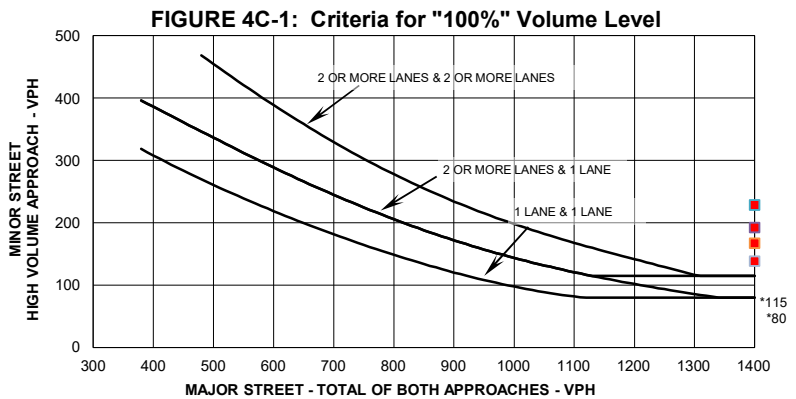
If all four points lie above the appropriate line, then the warrant is satisfied.

Applicable: Yes No
Satisfied: Yes No

Plot four volume combinations on the applicable figure below.

100% Volume Level

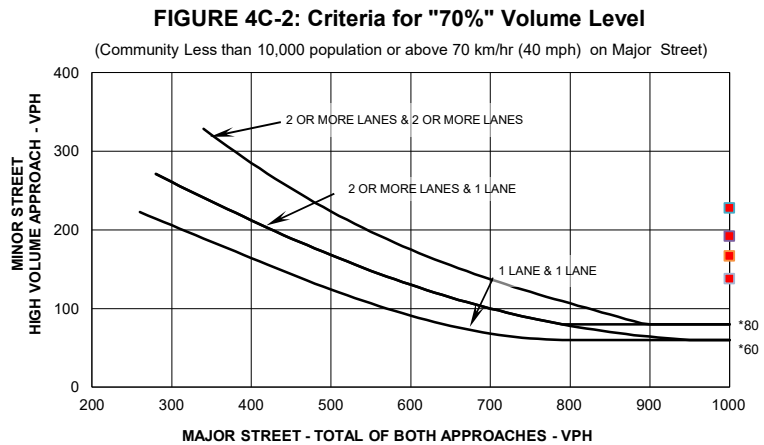
Four Highest Hours	Volumes	
	Major Street	Minor Street
00 AM - 9:00 A	2730	192
00 AM - 8:00 A	2268	228
00 PM - 5:00 P	2696	167
00 PM - 3:00 P	2309	138



* Note: 115 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 80 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

70% Volume Level

Four Highest Hours	Volumes	
	Major Street	Minor Street
00 AM - 9:00 A	2730	192
00 AM - 8:00 A	2268	228
00 PM - 5:00 P	2696	167
00 PM - 3:00 P	2309	138



* Note: 80 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 60 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

2050 MAYWOOD AVENUE/DAFFODIL DRIVE SIGNAL WARRANT
SCREENING

Hourly Distribution of Entering and Exiting Vehicle Trips by Land Use

Source: ITE *Trip Generation Manual*, 10th Edition

Land Use Code	210	
Land Use	Single-Family Detached Housing	
Setting	General Urban/Suburban	
Time Period	Weekday	
Trip Type	Vehicle	
# Data Sites	6	
	% of 24-Hour Traffic	
Time	Entering	Exiting
12-1 AM	0.5	0.2
1-2 AM	0.2	0.2
2-3 AM	0.2	0
3-4 AM	0.2	0.2
4-5 AM	0.3	0.8
5-6 AM	0.5	2.0
6-7 AM	1.6	5.9
7-8 AM	3.2	10.2
8-9 AM	3.7	8.6
9-10 AM	3.2	5.4
10-11 AM	4.2	5.4
11-12 PM	5.4	5.1
12-1 PM	5.5	5.6
1-2 PM	6.0	5.9
2-3 PM	7.0	6.2
3-4 PM	8.5	6.0
4-5 PM	10.5	7.5
5-6 PM	10.3	7.4
6-7 PM	8.6	5.9
7-8 PM	6.2	4.3
8-9 PM	6.3	3.1
9-10 PM	4.5	2.4
10-11 PM	2.2	1.1
11-12 AM	1.3	0.7

SIGNAL WARRANT ANALYSIS

Introduction

- The Signal Warrant Analysis Spreadsheets are a tool for assisting traffic engineers when evaluating the need for a traffic signal installation
 - The filled spreadsheets can be used as part of the supporting documents for the signal warrant evaluation
- Note: This templates are a useful resource, but it remains necessary to apply engineering judgment and to consider specific environmental, traffic, geometric, and operational conditions

Instructions

Fill in "Orange" areas only

Automated cells based on in Input Data in "orange" cells

General Information

Fill in below the general information including:

District, County (drop-down menu)

City, Engineer, Date

Major and Minor Street with corresponding number of lanes and speed limits

Enter Eight Hour Volumes

Any 8 hours of an average day. Major-street and minor-street volumes shall be for the same 8 hours; however, the 8 hours satisfied in Condition A shall not be required to be the same 8 hours satisfied in Condition B for 80% columns only. On the minor street, the higher volume shall not be required to be on the same approach during each of the 8 hours.

Enter Four Hour Volumes

Any 4 hours of an average day. Vehicles per hour on the major street (total of both approaches) and the corresponding vehicles per hour on the higher-volume minor-street approach (one direction only, not required to be on the same approach during each of the 4 hours)

Enter Pedestrian Volumes (4-hr)

Pedestrians per hour crossing the major street (total of all crossings)

Enter Peak Hour Volumes

Vehicular: Any four consecutive 15-minute periods of an average day

Pedestrian: Any four consecutive 15-minute periods of an average day representing the vehicles per hour on the major street (total of both approaches) and the corresponding pedestrians per hour crossing the major street (total of all crossings)

Input Data

City: **Palm Bay**
County: **70 – Brevard**
District: **Five**

Engineer: **Adam Burghdoff**
Date: **July 7, 2020**

Major Street: **Malabar Road** # Lanes: **2** Major Approach Speed: **45**
Minor Street: **Maywood Ave/Daffodil D** # Lanes: **1** Minor Approach Speed: **30**

Eight Hour Volumes (Condition A)		
Hours	Major Street (total of both approaches)	Minor Street (one direction only)
5:00 PM - 6:00 PM	3072	110
8:00 AM - 9:00 AM	2930	94
6:00 PM - 7:00 PM	2816	88
4:00 PM -5:00 PM	2760	111
3:00 PM - 4:00 PM	2506	89
2:00 PM - 3:00 PM	2364	92
7:00 AM - 8:00 AM	2321	152
1:00 PM - 2:00 PM	2070	88

Eight Hour Volumes (Condition B)		
Hours	Major Street (total of both approaches)	Minor Street (one direction only)
5:00 PM - 6:00	3072	110
8:00 AM - 9:00	2930	94
6:00 PM - 7:00	2816	88
4:00 PM -5:00	2760	111
3:00 PM - 4:00	2506	89
2:00 PM - 3:00	2364	92
7:00 AM - 8:00	2321	152
1:00 PM - 2:00	2070	88

Highest Four Hour Vehicular Volumes		
Hours	Major Street (total of both approaches)	Minor Street (one direction only)
5:00 PM - 6:00 PM	3072	110
8:00 AM - 9:00 AM	2930	94
6:00 PM - 7:00 PM	2816	88
4:00 PM -5:00 PM	2760	111

Highest Four Hour Pedestrian Volumes		
Hours	Major Street (total of both approaches)	Pedestrian Crossings on Major Street

Vehicular Peak Hour Volumes			
Peak Hour	Major Street (total of both approaches)	Minor Street (one direction only)	Total Entering Volume
5:00 PM - 6:00 PM	3072	110	3213

Pedestrian Peak Hour Volumes		
Peak Hour	Major Street (total of both approaches)	Pedestrian Crossing Volumes on Major Street

TRAFFIC SIGNAL WARRANT SUMMARY

City: **Palm Bay**
County: **70 – Brevard**
District: **Five**

Engineer: **Adam Burghdoff**
Date: **July 7, 2020**

Major Street: **Malabar Road** Lanes: **2** Major Approach Speed: **45**
Minor Street: **Maywood Ave/Daffodil Dr** Lanes: **1** Minor Approach Speed: **30**

MUTCD Electronic Reference to Chapter 4: <http://mutcd.fhwa.dot.gov/pdfs/2009r1r2/part4.pdf>

Volume Level Criteria

1. Is the posted speed or 85th-percentile of major street > 40 mph (70 km/h)? Yes No
 2. Is the intersection in a built-up area of an isolated community with a population < 10,000? Yes No
- "70%" volume level **may** be used if Question 1 **or** 2 above is answered "Yes" 70% 100%

WARRANT 1 - EIGHT-HOUR VEHICULAR VOLUME

Warrant 1 is satisfied if Condition A or Condition B is "100%" satisfied for eight hours. Yes No

Warrant 1 is also satisfied if both Condition A and Condition B are "80%" satisfied (should only be applied after an adequate trial of other alternatives that could cause less delay and inconvenience to traffic has failed to solve the traffic problems). Yes No

Condition A - Minimum Vehicular Volume

Condition A is intended for application at locations where a large volume of intersecting traffic is the principal reason to consider installing a traffic control signal.

100% Satisfied: Yes No
80% Satisfied: Yes No
70% Satisfied: Yes No

Number of Lanes for moving traffic on each approach		Vehicles per hour on major-street (total of both approaches)			Vehicles per hour on minor-street (one direction only)		
Major	Minor	100% ^a	80% ^b	70% ^c	100% ^a	80% ^b	70% ^c
1	1	500	400	350	150	120	105
2 or more	1	600	480	420	150	120	105
2 or more	2 or more	600	480	420	200	160	140
1	2 or more	500	400	350	200	160	140

^a Basic Minimum hourly volume
^b Used for combination of Conditions A and B after adequate trial of other remedial measures
^c May be used when the major-street speed exceeds 40 mph or in an isolated community with a population of less than 10,000

Record 8 highest hours and the corresponding major-street and minor-street volumes in the Instructions Sheet.

Street	Eight Highest Hours							
	5:00 PM - 6:00	8:00 AM - 9:00	6:00 PM - 7:00	4:00 PM - 5:00	3:00 PM - 4:00	2:00 PM - 3:00	7:00 AM - 8:00	1:00 PM - 2:00
Major	3,072	2,930	2,816	2,760	2,506	2,364	2,321	2,070
Minor	110	94	88	111	89	92	152	88

Existing Volumes

State of Florida Department of Transportation
TRAFFIC SIGNAL WARRANT SUMMARY

Condition B - Interruption of Continuous Traffic

Condition B is intended for application where Condition A is not satisfied and the traffic volume on a major street is so heavy that traffic on the minor intersecting street suffers excessive delay or conflict in entering or crossing the major street.

Applicable:	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
100% Satisfied:	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
80% Satisfied:	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
70% Satisfied:	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No

Number of Lanes for moving traffic on each approach		Vehicles per hour on major-street (total of both approaches)			Vehicles per hour on minor-street (one direction only)		
Major	Minor	100% ^a	80% ^b	70% ^c	100% ^a	80% ^b	70% ^c
1	1	750	600	525	75	60	53
2 or more	1	900	720	630	75	60	53
2 or more	2 or more	900	720	630	100	80	70
1	2 or more	750	600	525	100	80	70

^a Basic Minimum hourly volume

^b Used for combination of Conditions A and B after adequate trial of other remedial measures

^c May be used when the major-street speed exceeds 40 mph or in an isolated community with a population of less than 10,000

Record 8 highest hours and the corresponding major-street and minor-street volumes in the Instructions Sheet.

Eight Highest Hours								
Street	5:00 PM - 6:00	8:00 AM - 9:00	6:00 PM - 7:00	4:00 PM - 5:00	3:00 PM - 4:00	2:00 PM - 3:00	7:00 AM - 8:00	1:00 PM - 2:00
Major	3,072	2,930	2,816	2,760	2,506	2,364	2,321	2,070
Minor	110	94	88	111	89	92	152	88

Existing Volumes

State of Florida Department of Transportation
TRAFFIC SIGNAL WARRANT SUMMARY

City: **Palm Bay**
County: **70 – Brevard**
District: **Five**

Engineer: **Adam Burghdoff**
Date: **July 7, 2020**

Major Street: **Malabar Road** Lanes: **2** Major Approach Speed: **45**
Minor Street: **Maywood Ave/Daffodil Dr** Lanes: **1** Minor Approach Speed: **30**

MUTCD Electronic Reference to Chapter 4: <http://mutcd.fhwa.dot.gov/pdfs/2009r1r2/part4.pdf>

Volume Level Criteria

1. Is the posted speed or 85th-percentile of major street > 40 mph (70 km/h)? Yes No
 2. Is the intersection in a built-up area of an isolated community with a population < 10,000? Yes No
- "70%" volume level **may** be used if Question 1 or 2 above is answered "Yes" Yes No

WARRANT 2 - FOUR-HOUR VEHICULAR VOLUME

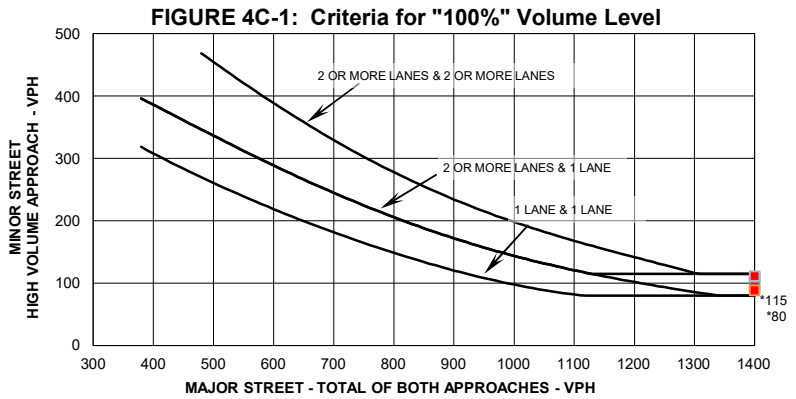
If all four points lie above the appropriate line, then the warrant is satisfied.

Applicable: Yes No
Satisfied: Yes No

Plot four volume combinations on the applicable figure below.

100% Volume Level

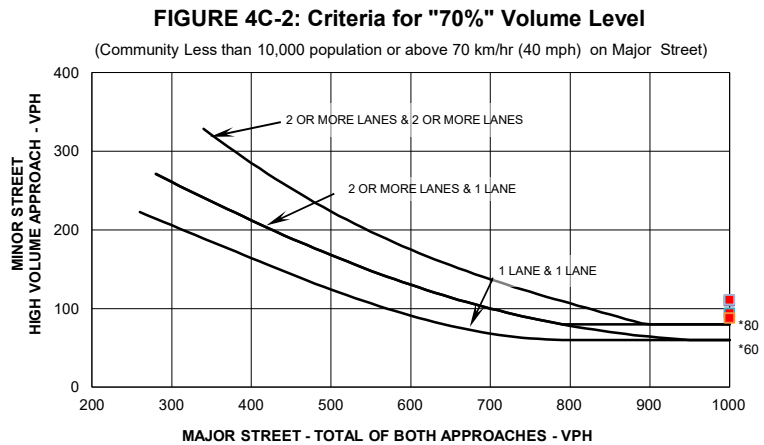
Four Highest Hours	Volumes	
	Major Street	Minor Street
00 PM - 6:00 P	3072	110
00 AM - 9:00 A	2930	94
00 PM - 7:00 P	2816	88
00 PM -5:00 P	2760	111



* Note: 115 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 80 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

70% Volume Level

Four Highest Hours	Volumes	
	Major Street	Minor Street
00 PM - 6:00 P	3072	110
00 AM - 9:00 A	2930	94
00 PM - 7:00 P	2816	88
00 PM -5:00 P	2760	111



* Note: 80 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 60 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

APPENDIX W – BUILD ROUNDABOUT OPERATIONS

Contained in this Appendix –

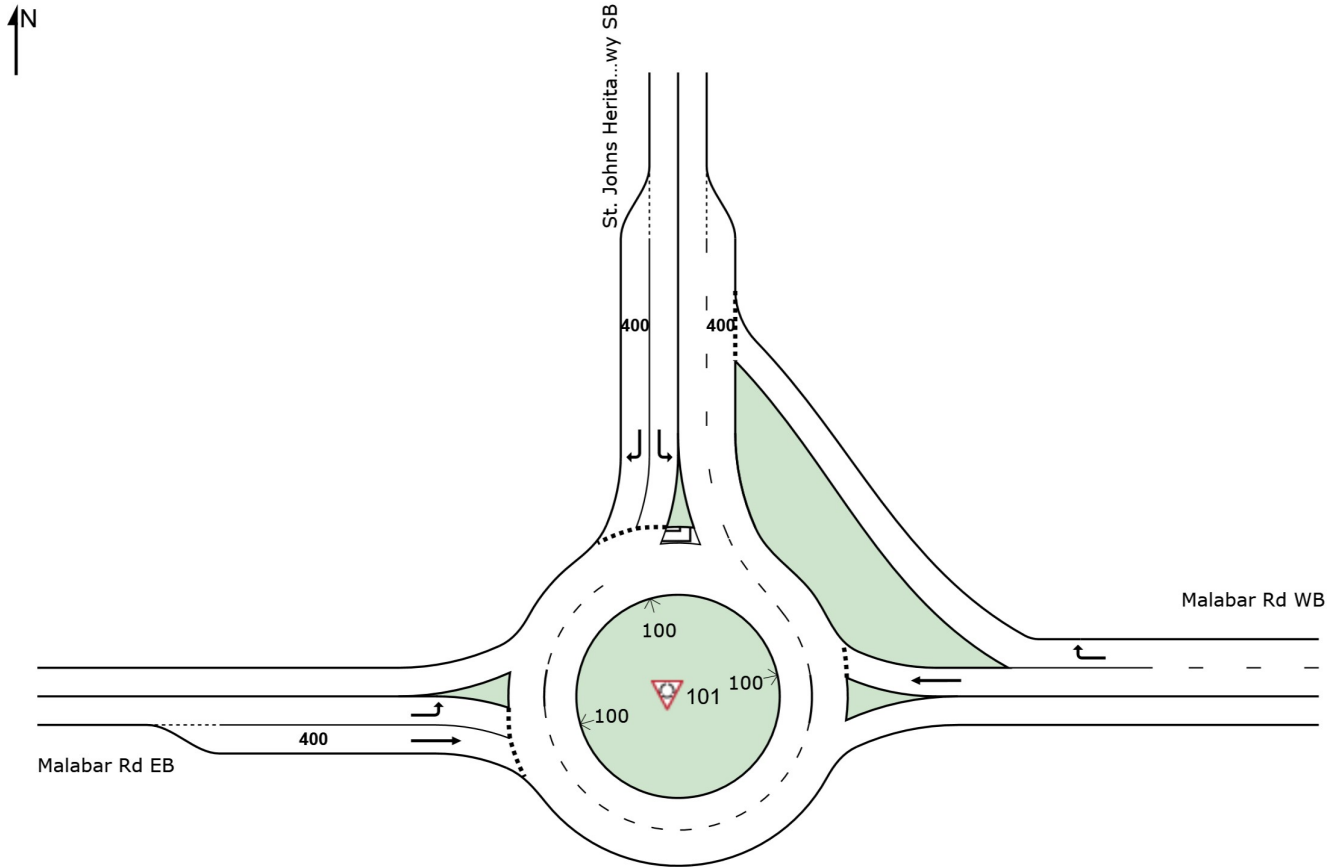
- 2030 Roundabout Operational Reports
- 2050 Roundabout Operational Reports

2030 ROUNDABOUT OPERATIONAL REPORTS

SITE LAYOUT

 Site: 101 [Malabar Road and St. Johns Heritage Parkway 2030 AM - 2x2]

2030 AM
2x2
HCM 6
Site Category: (None)
Roundabout



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Organisation: KITTELSON AND ASSOCIATES INC | Created: Thursday, January 14, 2021 6:49:35 AM

Project: H:\23\23773 - Malabar Road PD&E Study\Engineering\Traffic\SIDRA\St. Johns Heritage Parkway\Malabar Road and St. Johns Heritage Parkway v2.sip8

MOVEMENT SUMMARY

 Site: 101 [Malabar Road and St. Johns Heritage Parkway 2030 AM - 2x2]

2030 AM
 2x2
 HCM 6
 Site Category: (None)
 Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back Vehicles veh	of Queue Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
East: Malabar Rd WB												
6	T1	572	4.0	0.477	8.1	LOS A	2.7	70.5	0.40	0.25	0.40	30.8
16	R2	541	3.0	0.447	7.6	LOS A	2.5	63.8	0.38	0.24	0.38	30.1
Approach		1113	3.5	0.477	7.8	LOS A	2.7	70.5	0.39	0.25	0.39	30.5
North: St. Johns Heritage Pkwy SB												
7	L2	239	12.0	0.324	8.8	LOS A	1.3	34.3	0.60	0.60	0.60	30.7
14	R2	204	7.0	0.264	7.6	LOS A	1.0	27.4	0.58	0.57	0.58	32.5
Approach		443	9.7	0.324	8.3	LOS A	1.3	34.3	0.59	0.59	0.59	31.5
West: Malabar Rd EB												
5	L2	137	11.0	0.144	5.1	LOS A	0.5	14.2	0.38	0.27	0.38	30.0
2	T1	267	6.0	0.250	5.7	LOS A	1.0	26.8	0.40	0.29	0.40	31.9
Approach		404	7.7	0.250	5.5	LOS A	1.0	26.8	0.39	0.28	0.39	31.2
All Vehicles		1960	5.8	0.477	7.5	LOS A	2.7	70.5	0.43	0.33	0.43	30.9

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Roundabout LOS Method: Same as Sign Control.

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: US HCM 6.

HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.

Gap-Acceptance Capacity: Traditional M1.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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Project: H:\23\23773 - Malabar Road PD&E Study\Engineering\Traffic\SIDRA\St. Johns Heritage Parkway\Malabar Road and St. Johns Heritage Parkway v2.sip8

MOVEMENT SUMMARY

 Site: 101 [Malabar Road and St. Johns Heritage Parkway 2030 PM - 2x2]

2030 PM
2x2
HCM 6
Site Category: (None)
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
East: Malabar Rd WB												
6	T1	200	4.0	0.159	4.2	LOS A	0.6	16.5	0.22	0.11	0.22	32.5
16	R2	261	3.0	0.206	4.6	LOS A	0.9	22.4	0.23	0.11	0.23	31.4
Approach		461	3.4	0.206	4.4	LOS A	0.9	22.4	0.22	0.11	0.22	31.9
North: St. Johns Heritage Pkwy SB												
7	L2	497	0.0	0.423	7.4	LOS A	2.5	61.3	0.46	0.33	0.46	31.6
14	R2	100	7.0	0.091	4.1	LOS A	0.3	9.1	0.32	0.20	0.32	34.3
Approach		597	1.2	0.423	6.8	LOS A	2.5	61.3	0.44	0.30	0.44	32.0
West: Malabar Rd EB												
5	L2	100	0.0	0.117	5.4	LOS A	0.4	11.1	0.49	0.43	0.49	30.1
2	T1	564	1.0	0.612	12.9	LOS B	5.7	144.5	0.72	0.92	1.20	29.0
Approach		664	0.8	0.612	11.8	LOS B	5.7	144.5	0.69	0.85	1.10	29.2
All Vehicles		1722	1.7	0.612	8.1	LOS A	5.7	144.5	0.48	0.46	0.63	30.8

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Roundabout LOS Method: Same as Sign Control.

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: US HCM 6.

HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.

Gap-Acceptance Capacity: Traditional M1.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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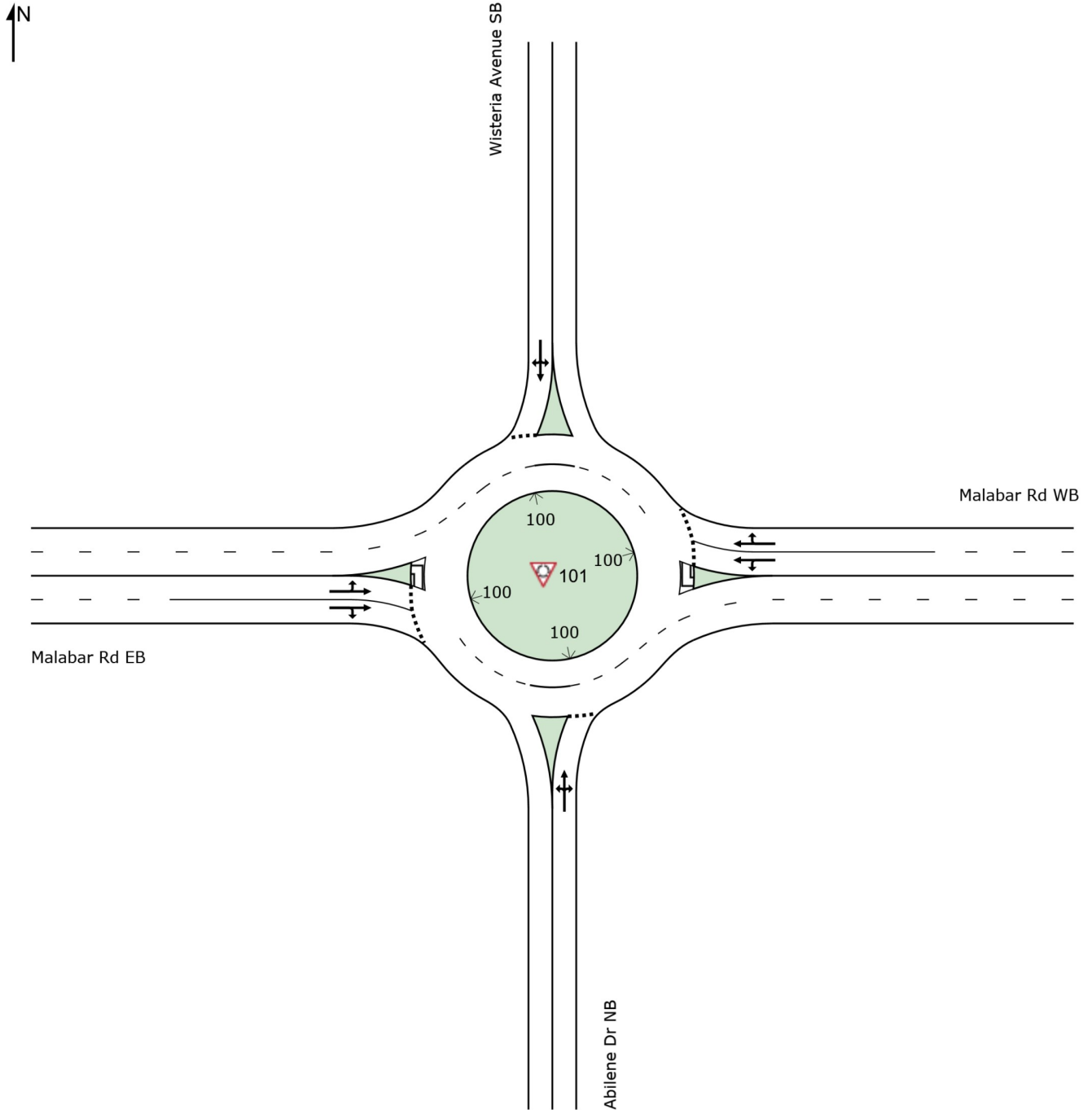
Organisation: KITTELSON AND ASSOCIATES INC | Processed: Tuesday, January 12, 2021 9:12:14 AM

Project: H:\23\23773 - Malabar Road PD&E Study\Engineering\Traffic\SIDRA\St. Johns Heritage Parkway\Malabar Road and St. Johns Heritage Parkway v2.sip8

SITE LAYOUT

Site: 101 [Malabar Road and Wisteria Avenue/Abilene Drive 2050 AM - 2x1]

2050 AM
2x1
HCM 6
Site Category: (None)
Roundabout



MOVEMENT SUMMARY

 Site: 101 [Malabar Road and Wisteria Avenue/Abilene Drive 2030 AM - 2x1]

2030 AM
2x1
HCM 6
Site Category: (None)
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back Vehicles veh	of Queue Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
South: Abilene Dr NB												
3	L2	245	0.0	0.440	9.1	LOS A	2.5	63.2	0.61	0.65	0.74	31.8
8	T1	1	0.0	0.440	9.1	LOS A	2.5	63.2	0.61	0.65	0.74	31.7
18	R2	164	0.0	0.440	9.1	LOS A	2.5	63.2	0.61	0.65	0.74	30.9
Approach		410	0.0	0.440	9.1	LOS A	2.5	63.2	0.61	0.65	0.74	31.4
East: Malabar Rd WB												
1	L2	81	0.0	0.407	7.4	LOS A	2.3	56.4	0.49	0.37	0.49	31.0
6	T1	829	0.0	0.407	7.4	LOS A	2.3	56.4	0.49	0.37	0.49	31.0
16	R2	9	0.0	0.407	7.4	LOS A	2.3	56.4	0.49	0.37	0.49	30.2
Approach		919	0.0	0.407	7.4	LOS A	2.3	56.4	0.49	0.37	0.49	31.0
North: Wisteria Avenue SB												
7	L2	18	0.0	0.086	7.8	LOS A	0.3	7.2	0.65	0.65	0.65	32.9
4	T1	1	0.0	0.086	7.8	LOS A	0.3	7.2	0.65	0.65	0.65	32.7
14	R2	27	0.0	0.086	7.8	LOS A	0.3	7.2	0.65	0.65	0.65	31.9
Approach		46	0.0	0.086	7.8	LOS A	0.3	7.2	0.65	0.65	0.65	32.3
West: Malabar Rd EB												
5	L2	6	0.0	0.205	4.5	LOS A	1.0	24.0	0.24	0.12	0.24	32.6
2	T1	471	0.0	0.205	4.5	LOS A	1.0	24.0	0.24	0.12	0.24	32.4
12	R2	54	0.0	0.205	4.5	LOS A	1.0	24.0	0.24	0.12	0.24	31.3
Approach		531	0.0	0.205	4.5	LOS A	1.0	24.0	0.24	0.12	0.24	32.3
All Vehicles		1906	0.0	0.440	7.0	LOS A	2.5	63.2	0.45	0.37	0.48	31.4

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Roundabout LOS Method: Same as Sign Control.

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: US HCM 6.

HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.

Gap-Acceptance Capacity: Traditional M1.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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Project: H:\23\23773 - Malabar Road PD&E Study\Engineering\Traffic\SIDRA\Wisteria Avenue-Abilene Drive\Malabar Road and Wisteria Avenue-Abilene Drive.sip8

MOVEMENT SUMMARY

 Site: 101 [Malabar Road and Wisteria Avenue/Abilene Drive 2030 PM - 2x1]

2030 PM
2x1
HCM 6
Site Category: (None)
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back Vehicles veh	of Queue Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
South: Abilene Dr NB												
3	L2	105	0.0	0.362	9.5	LOS A	1.7	41.5	0.65	0.69	0.78	32.1
8	T1	1	0.0	0.362	9.5	LOS A	1.7	41.5	0.65	0.69	0.78	31.9
18	R2	158	0.0	0.362	9.5	LOS A	1.7	41.5	0.65	0.69	0.78	31.1
Approach		264	0.0	0.362	9.5	LOS A	1.7	41.5	0.65	0.69	0.78	31.5
East: Malabar Rd WB												
1	L2	180	0.0	0.244	5.0	LOS A	1.2	29.6	0.30	0.17	0.30	31.0
6	T1	413	0.0	0.244	5.0	LOS A	1.2	29.6	0.30	0.17	0.30	31.7
16	R2	20	0.0	0.244	5.0	LOS A	1.2	29.6	0.30	0.17	0.30	31.2
Approach		613	0.0	0.244	5.0	LOS A	1.2	29.6	0.30	0.17	0.30	31.5
North: Wisteria Avenue SB												
7	L2	18	0.0	0.040	5.0	LOS A	0.1	3.4	0.52	0.44	0.52	33.8
4	T1	1	0.0	0.040	5.0	LOS A	0.1	3.4	0.52	0.44	0.52	33.6
14	R2	12	0.0	0.040	5.0	LOS A	0.1	3.4	0.52	0.44	0.52	32.7
Approach		31	0.0	0.040	5.0	LOS A	0.1	3.4	0.52	0.44	0.52	33.3
West: Malabar Rd EB												
5	L2	30	0.0	0.437	7.6	LOS A	2.6	64.9	0.46	0.32	0.46	31.2
2	T1	737	0.0	0.437	7.6	LOS A	2.6	64.9	0.46	0.32	0.46	30.9
12	R2	269	0.0	0.437	7.6	LOS A	2.6	64.9	0.46	0.32	0.46	30.0
Approach		1036	0.0	0.437	7.6	LOS A	2.6	64.9	0.46	0.32	0.46	30.7
All Vehicles		1944	0.0	0.437	7.0	LOS A	2.6	64.9	0.44	0.33	0.45	31.1

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Roundabout LOS Method: Same as Sign Control.

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: US HCM 6.

HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.

Gap-Acceptance Capacity: Traditional M1.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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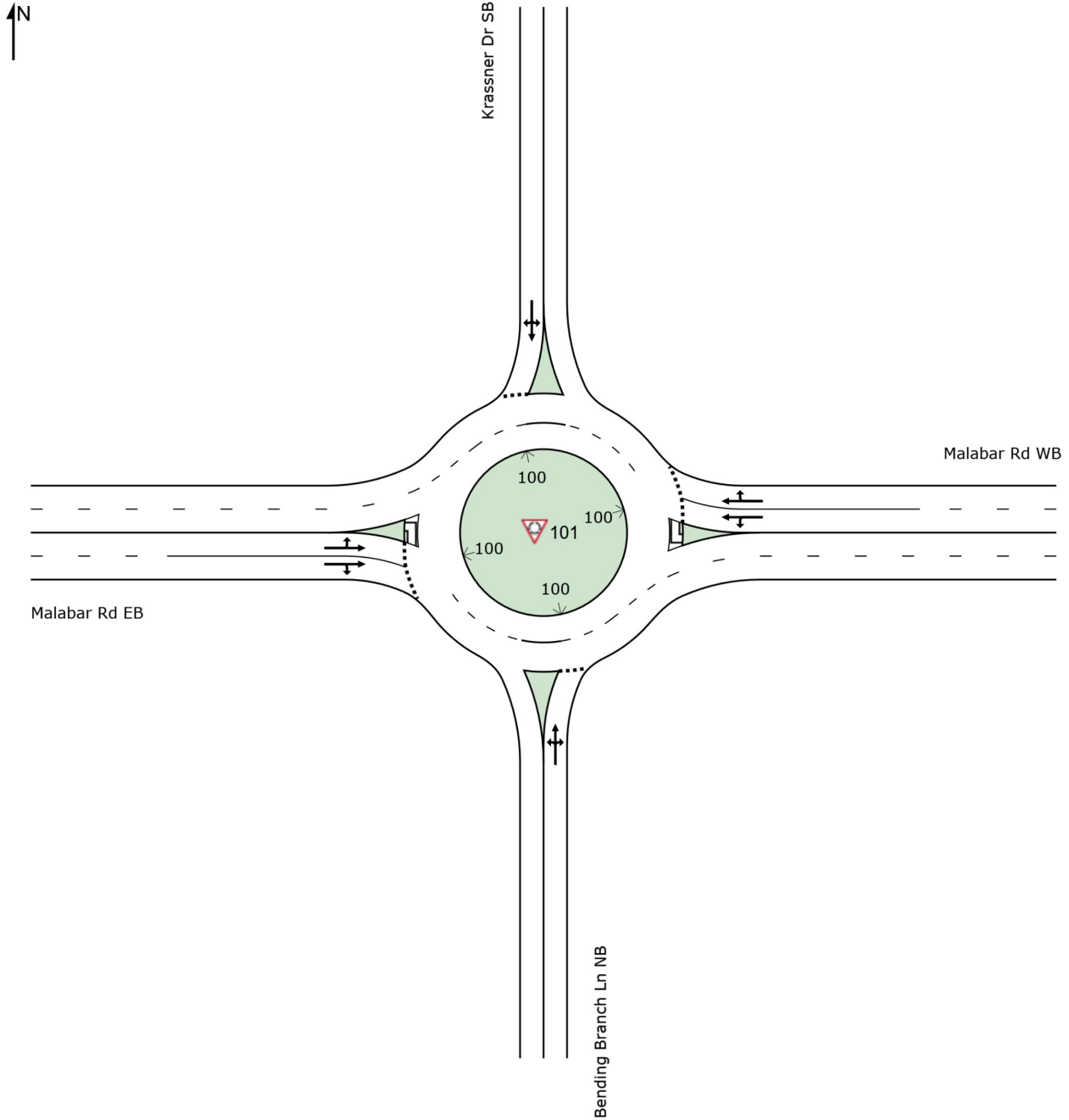
Organisation: KITTELSON AND ASSOCIATES INC | Processed: Tuesday, January 12, 2021 8:14:10 AM

Project: H:\23\23773 - Malabar Road PD&E Study\Engineering\Traffic\SIDRA\Wisteria Avenue-Abilene Drive\Malabar Road and Wisteria Avenue-Abilene Drive.sip8

SITE LAYOUT

Site: 101 [Malabar Road and Krassner Drive/Bending Branch Lane 2050 AM - 2x1]

2050 AM
2x1
HCM 6
Site Category: (None)
Roundabout



MOVEMENT SUMMARY

 Site: 101 [Malabar Road and Krassner Drive/Bending Branch Lane 2030 AM - 2x1]

2030 AM
2x1
HCM 6
Site Category: (None)
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
South: Bending Branch Ln NB												
3	L2	79	4.0	0.203	7.2	LOS A	0.7	19.0	0.58	0.58	0.58	32.7
8	T1	2	50.0	0.203	9.4	LOS A	0.7	19.0	0.58	0.58	0.58	31.9
18	R2	68	2.0	0.203	7.1	LOS A	0.7	19.0	0.58	0.58	0.58	31.8
Approach		149	3.7	0.203	7.2	LOS A	0.7	19.0	0.58	0.58	0.58	32.3
East: Malabar Rd WB												
1	L2	45	6.0	0.372	6.5	LOS A	2.0	51.9	0.29	0.16	0.29	31.5
6	T1	803	5.0	0.372	6.5	LOS A	2.0	52.1	0.29	0.16	0.29	31.4
16	R2	72	3.0	0.372	6.4	LOS A	2.0	52.1	0.29	0.16	0.29	30.5
Approach		920	4.9	0.372	6.5	LOS A	2.0	52.1	0.29	0.16	0.29	31.3
North: Krassner Dr SB												
7	L2	66	1.0	0.170	7.9	LOS A	0.6	15.1	0.62	0.62	0.62	32.2
4	T1	1	0.0	0.170	7.9	LOS A	0.6	15.1	0.62	0.62	0.62	32.1
14	R2	37	3.0	0.170	8.0	LOS A	0.6	15.1	0.62	0.62	0.62	31.2
Approach		104	1.7	0.170	8.0	LOS A	0.6	15.1	0.62	0.62	0.62	31.8
West: Malabar Rd EB												
5	L2	14	7.0	0.272	5.5	LOS A	1.3	33.3	0.28	0.15	0.28	32.0
2	T1	617	6.0	0.272	5.5	LOS A	1.3	33.3	0.28	0.15	0.28	31.9
12	R2	22	21.0	0.272	5.9	LOS A	1.3	33.1	0.28	0.15	0.28	30.8
Approach		653	6.5	0.272	5.5	LOS A	1.3	33.3	0.28	0.15	0.28	31.9
All Vehicles		1826	5.2	0.372	6.3	LOS A	2.0	52.1	0.33	0.22	0.33	31.6

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Roundabout LOS Method: Same as Sign Control.

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: US HCM 6.

HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.

Gap-Acceptance Capacity: Traditional M1.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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Project: H:\23\23773 - Malabar Road PD&E Study\Engineering\Traffic\SIDRA\Krassner Drive\Malabar Road and Krassner Drive v3.sip8

MOVEMENT SUMMARY

 Site: 101 [Malabar Road and Krassner Drive/Bending Branch Lane 2030 PM - 2x1]

2030 PM
2x1
HCM 6
Site Category: (None)
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back Vehicles veh	of Queue Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
South: Bending Branch Ln NB												
3	L2	30	7.0	0.171	8.0	LOS A	0.6	15.0	0.61	0.61	0.61	32.9
8	T1	3	33.0	0.171	9.5	LOS A	0.6	15.0	0.61	0.61	0.61	32.4
18	R2	71	4.0	0.171	7.9	LOS A	0.6	15.0	0.61	0.61	0.61	32.0
Approach		104	5.7	0.171	8.0	LOS A	0.6	15.0	0.61	0.61	0.61	32.2
East: Malabar Rd WB												
1	L2	96	1.0	0.294	5.4	LOS A	1.5	38.3	0.23	0.11	0.23	31.6
6	T1	566	3.0	0.294	5.4	LOS A	1.5	38.3	0.23	0.11	0.23	31.7
16	R2	100	1.0	0.294	5.4	LOS A	1.5	38.3	0.23	0.11	0.23	30.9
Approach		762	2.5	0.294	5.4	LOS A	1.5	38.3	0.23	0.11	0.23	31.6
North: Krassner Dr SB												
7	L2	74	0.0	0.121	5.9	LOS A	0.4	10.9	0.55	0.53	0.55	32.7
4	T1	1	0.0	0.121	5.9	LOS A	0.4	10.9	0.55	0.53	0.55	32.5
14	R2	17	11.0	0.121	6.4	LOS A	0.4	10.9	0.55	0.53	0.55	31.5
Approach		92	2.0	0.121	6.0	LOS A	0.4	10.9	0.55	0.53	0.55	32.4
West: Malabar Rd EB												
5	L2	39	0.0	0.381	6.7	LOS A	2.1	53.2	0.40	0.26	0.40	31.5
2	T1	809	1.0	0.381	6.7	LOS A	2.1	53.2	0.40	0.26	0.40	31.3
12	R2	65	8.0	0.381	7.0	LOS A	2.1	52.8	0.40	0.26	0.40	30.3
Approach		913	1.5	0.381	6.8	LOS A	2.1	53.2	0.40	0.26	0.40	31.2
All Vehicles		1871	2.1	0.381	6.2	LOS A	2.1	53.2	0.35	0.23	0.35	31.5

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Roundabout LOS Method: Same as Sign Control.

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: US HCM 6.

HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.

Gap-Acceptance Capacity: Traditional M1.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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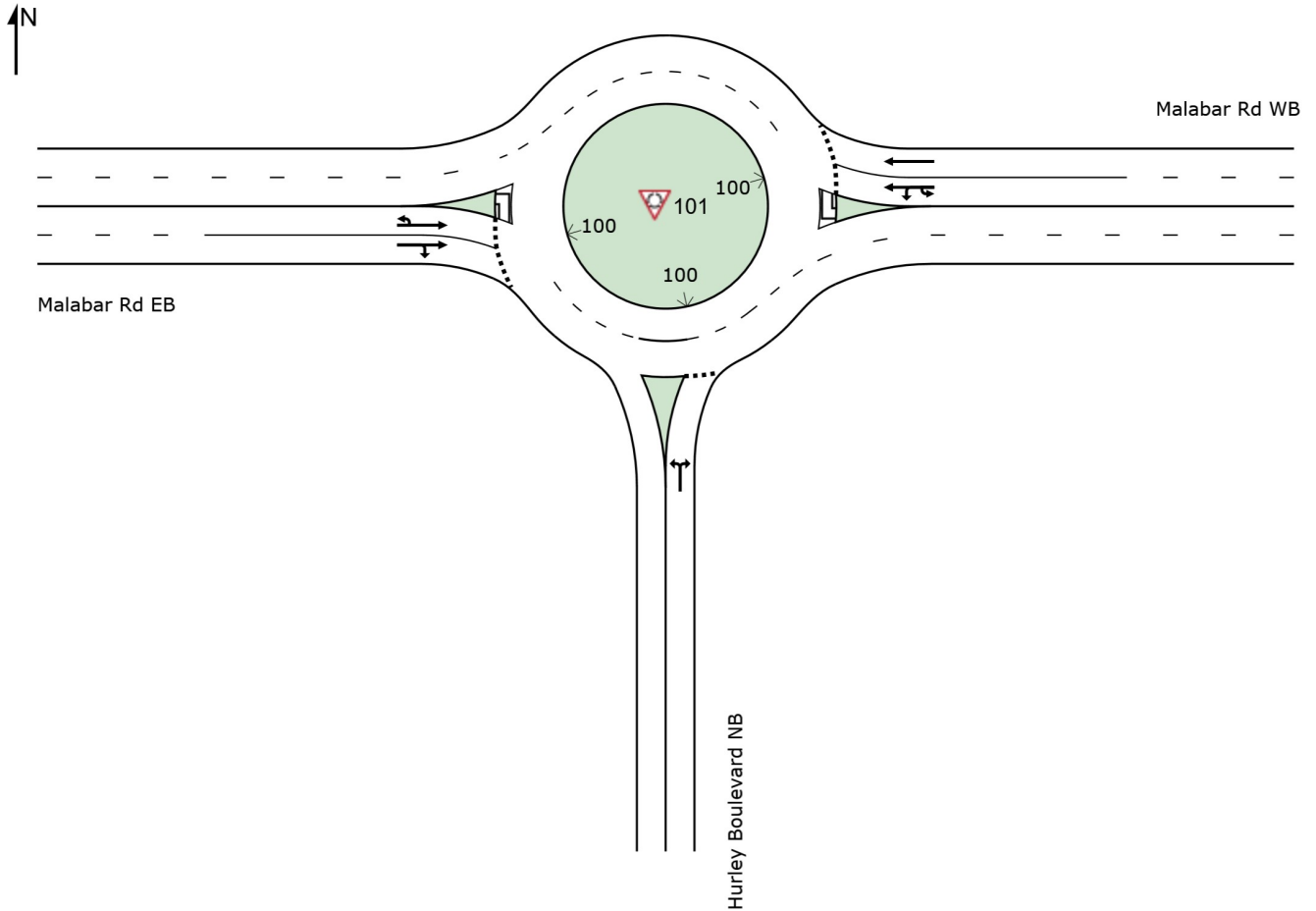
Organisation: KITTELSON AND ASSOCIATES INC | Processed: Tuesday, January 12, 2021 9:19:36 AM

Project: H:\23\23773 - Malabar Road PD&E Study\Engineering\Traffic\SIDRA\Krassner Drive\Malabar Road and Krassner Drive v3.sip8

SITE LAYOUT

Site: 101 [Malabar Road and Hurley Boulevard 2050 PM - 2x1]

2050 PM
2x1
HCM 6
Site Category: (None)
Roundabout



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Organisation: KITTELSON AND ASSOCIATES INC | Created: Thursday, August 6, 2020 8:26:56 AM
Project: H:\23\23773 - Malabar Road PD&E Study\Engineering\Traffic\SIDRA\Hurley Boulevard\Malabar Road and Hurley Boulevard v2.sip8

MOVEMENT SUMMARY

 Site: 101 [Malabar Road and Hurley Boulevard 2030 AM - 2x1]

2030 AM
2x1
HCM 6
Site Category: (None)
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
South: Hurley Boulevard NB												
3	L2	77	1.0	0.177	6.6	LOS A	0.7	16.5	0.57	0.57	0.57	32.9
18	R2	58	0.0	0.177	6.6	LOS A	0.7	16.5	0.57	0.57	0.57	32.0
Approach		135	0.6	0.177	6.6	LOS A	0.7	16.5	0.57	0.57	0.57	32.5
East: Malabar Rd WB												
1u	U	38	0.0	0.363	6.2	LOS A	2.0	50.7	0.27	0.13	0.27	33.4
1	L2	57	3.0	0.363	6.2	LOS A	2.0	50.7	0.27	0.13	0.27	31.3
6	T1	817	5.0	0.363	6.3	LOS A	2.0	50.7	0.26	0.13	0.26	31.4
Approach		912	4.7	0.363	6.3	LOS A	2.0	50.7	0.26	0.13	0.26	31.4
West: Malabar Rd EB												
5u	U	6	0.0	0.279	5.3	LOS A	1.4	35.0	0.26	0.13	0.26	34.3
2	T1	654	4.0	0.279	5.4	LOS A	1.4	35.0	0.26	0.13	0.26	32.0
12	R2	38	3.0	0.279	5.4	LOS A	1.4	35.0	0.26	0.13	0.26	31.0
Approach		698	3.9	0.279	5.4	LOS A	1.4	35.0	0.26	0.13	0.26	31.9
All Vehicles		1745	4.0	0.363	6.0	LOS A	2.0	50.7	0.29	0.17	0.29	31.7

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Roundabout LOS Method: Same as Sign Control.

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: US HCM 6.

HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.

Gap-Acceptance Capacity: Traditional M1.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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Organisation: KITTELSON AND ASSOCIATES INC | Processed: Tuesday, January 12, 2021 1:56:41 PM

Project: H:\23\23773 - Malabar Road PD&E Study\Engineering\Traffic\SIDRA\Hurley Boulevard\Malabar Road and Hurley Boulevard v3.sip8

MOVEMENT SUMMARY

 Site: 101 [Malabar Road and Hurley Boulevard 2030 PM - 2x1]

2030 PM
2x1
HCM 6
Site Category: (None)
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	of Queue Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
South: Hurley Boulevard NB												
3	L2	47	0.0	0.203	7.6	LOS A	0.7	18.6	0.61	0.61	0.61	33.0
18	R2	90	3.0	0.203	7.7	LOS A	0.7	18.6	0.61	0.61	0.61	32.0
Approach		137	2.0	0.203	7.7	LOS A	0.7	18.6	0.61	0.61	0.61	32.3
East: Malabar Rd WB												
1u	U	50	0.0	0.292	5.2	LOS A	1.5	38.5	0.18	0.07	0.18	33.7
1	L2	72	3.0	0.292	5.3	LOS A	1.5	38.5	0.18	0.07	0.18	31.6
6	T1	663	1.0	0.292	5.2	LOS A	1.5	38.6	0.18	0.07	0.18	31.8
Approach		785	1.1	0.292	5.2	LOS A	1.5	38.6	0.18	0.07	0.18	31.9
West: Malabar Rd EB												
2	T1	801	0.0	0.354	6.2	LOS A	2.0	49.2	0.33	0.19	0.33	31.7
12	R2	97	0.0	0.354	6.2	LOS A	2.0	49.2	0.33	0.19	0.33	30.6
Approach		898	0.0	0.354	6.2	LOS A	2.0	49.2	0.33	0.19	0.33	31.6
All Vehicles		1820	0.6	0.354	5.9	LOS A	2.0	49.2	0.28	0.17	0.28	31.8

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Roundabout LOS Method: Same as Sign Control.

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: US HCM 6.

HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.

Gap-Acceptance Capacity: Traditional M1.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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Organisation: KITTELSON AND ASSOCIATES INC | Processed: Tuesday, January 12, 2021 1:57:50 PM

Project: H:\23\23773 - Malabar Road PD&E Study\Engineering\Traffic\SIDRA\Hurley Boulevard\Malabar Road and Hurley Boulevard v3.sip8

MOVEMENT SUMMARY

 Site: 101 [Malabar Road and Jupiter Boulevard 2030 AM - 2x2]

2030 AM

2x2

HCM 6

Site Category: (None)

Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back Vehicles veh	of Queue Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
South: Jupiter Blvd NB												
3	L2	192	5.0	0.339	11.3	LOS B	1.4	36.0	0.67	0.72	0.81	30.0
8	T1	173	4.0	0.356	10.5	LOS B	1.5	39.0	0.66	0.71	0.82	32.5
18	R2	56	2.0	0.356	10.4	LOS B	1.5	39.0	0.66	0.71	0.82	31.6
Approach		421	4.2	0.356	10.8	LOS B	1.5	39.0	0.67	0.71	0.81	31.2
East: Malabar Rd WB												
1	L2	74	6.0	0.546	13.1	LOS B	3.8	99.4	0.71	0.87	1.12	28.8
6	T1	525	4.0	0.546	12.7	LOS B	3.9	100.8	0.70	0.86	1.10	28.8
16	R2	271	3.0	0.546	12.1	LOS B	3.9	100.8	0.69	0.85	1.08	28.3
Approach		870	3.9	0.546	12.6	LOS B	3.9	100.8	0.70	0.86	1.10	28.6
North: Jupiter Blvd SB												
7	L2	288	2.0	0.470	13.3	LOS B	2.5	64.0	0.72	0.82	1.06	29.3
4	T1	172	5.0	0.492	13.1	LOS B	2.7	69.9	0.70	0.83	1.09	31.2
14	R2	152	7.0	0.492	13.2	LOS B	2.7	69.9	0.70	0.83	1.09	30.3
Approach		612	4.1	0.492	13.2	LOS B	2.7	69.9	0.71	0.83	1.08	30.0
West: Malabar Rd EB												
5u	U	11	0.0	0.470	10.7	LOS B	2.9	73.0	0.66	0.76	0.90	30.7
5	L2	189	1.0	0.470	10.8	LOS B	2.9	73.0	0.66	0.76	0.90	29.0
2	T1	388	2.0	0.470	10.5	LOS B	2.9	73.0	0.65	0.74	0.88	29.3
12	R2	181	11.0	0.470	10.6	LOS B	2.7	71.6	0.63	0.73	0.87	28.9
Approach		769	3.8	0.470	10.6	LOS B	2.9	73.0	0.65	0.74	0.89	29.2
All Vehicles		2672	4.0	0.546	11.9	LOS B	3.9	100.8	0.68	0.80	0.99	29.5

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Roundabout LOS Method: Same as Sign Control.

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: US HCM 6.

HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.

Gap-Acceptance Capacity: Traditional M1.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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Organisation: KITTELSON AND ASSOCIATES INC | Processed: Thursday, January 14, 2021 7:21:17 AM

Project: H:\23\23773 - Malabar Road PD&E Study\Engineering\Traffic\SIDRA\Jupiter Boulevard\Malabar Road and Jupiter Boulevard v3.sip8

MOVEMENT SUMMARY

 Site: 101 [Malabar Road and Jupiter Boulevard 2030 PM - 2x2]

2030 PM

2x2

HCM 6

Site Category: (None)

Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
South: Jupiter Blvd NB												
3	L2	156	0.0	0.308	11.8	LOS B	1.2	30.5	0.71	0.74	0.82	29.9
8	T1	168	1.0	0.452	13.7	LOS B	2.2	55.1	0.73	0.83	1.07	31.1
18	R2	88	2.0	0.452	13.8	LOS B	2.2	55.1	0.73	0.83	1.07	30.2
Approach		412	0.8	0.452	13.0	LOS B	2.2	55.1	0.72	0.79	0.97	30.4
East: Malabar Rd WB												
1	L2	56	0.0	0.424	9.3	LOS A	2.3	58.6	0.62	0.64	0.72	30.3
6	T1	382	1.0	0.424	9.2	LOS A	2.3	58.6	0.61	0.64	0.71	30.1
16	R2	328	0.0	0.424	8.7	LOS A	2.3	57.5	0.60	0.61	0.68	29.6
Approach		766	0.5	0.424	9.0	LOS A	2.3	58.6	0.61	0.63	0.70	29.9
North: Jupiter Blvd SB												
7	L2	296	2.0	0.393	9.8	LOS A	2.0	49.6	0.64	0.69	0.77	30.6
4	T1	175	1.0	0.436	9.8	LOS A	2.4	61.1	0.65	0.71	0.84	32.8
14	R2	191	0.0	0.436	9.7	LOS A	2.4	61.1	0.65	0.71	0.84	31.9
Approach		662	1.2	0.436	9.8	LOS A	2.4	61.1	0.64	0.70	0.81	31.5
West: Malabar Rd EB												
5u	U	15	0.0	0.565	12.7	LOS B	4.5	112.9	0.72	0.88	1.13	30.3
5	L2	137	0.0	0.565	12.7	LOS B	4.5	112.9	0.72	0.88	1.13	28.7
2	T1	605	1.0	0.565	12.4	LOS B	4.5	114.0	0.71	0.87	1.11	28.8
12	R2	211	1.0	0.565	12.0	LOS B	4.5	114.0	0.70	0.86	1.10	28.4
Approach		968	0.8	0.565	12.4	LOS B	4.5	114.0	0.71	0.87	1.11	28.7
All Vehicles		2808	0.8	0.565	10.9	LOS B	4.5	114.0	0.67	0.75	0.91	29.9

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Roundabout LOS Method: Same as Sign Control.

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: US HCM 6.

HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.

Gap-Acceptance Capacity: Traditional M1.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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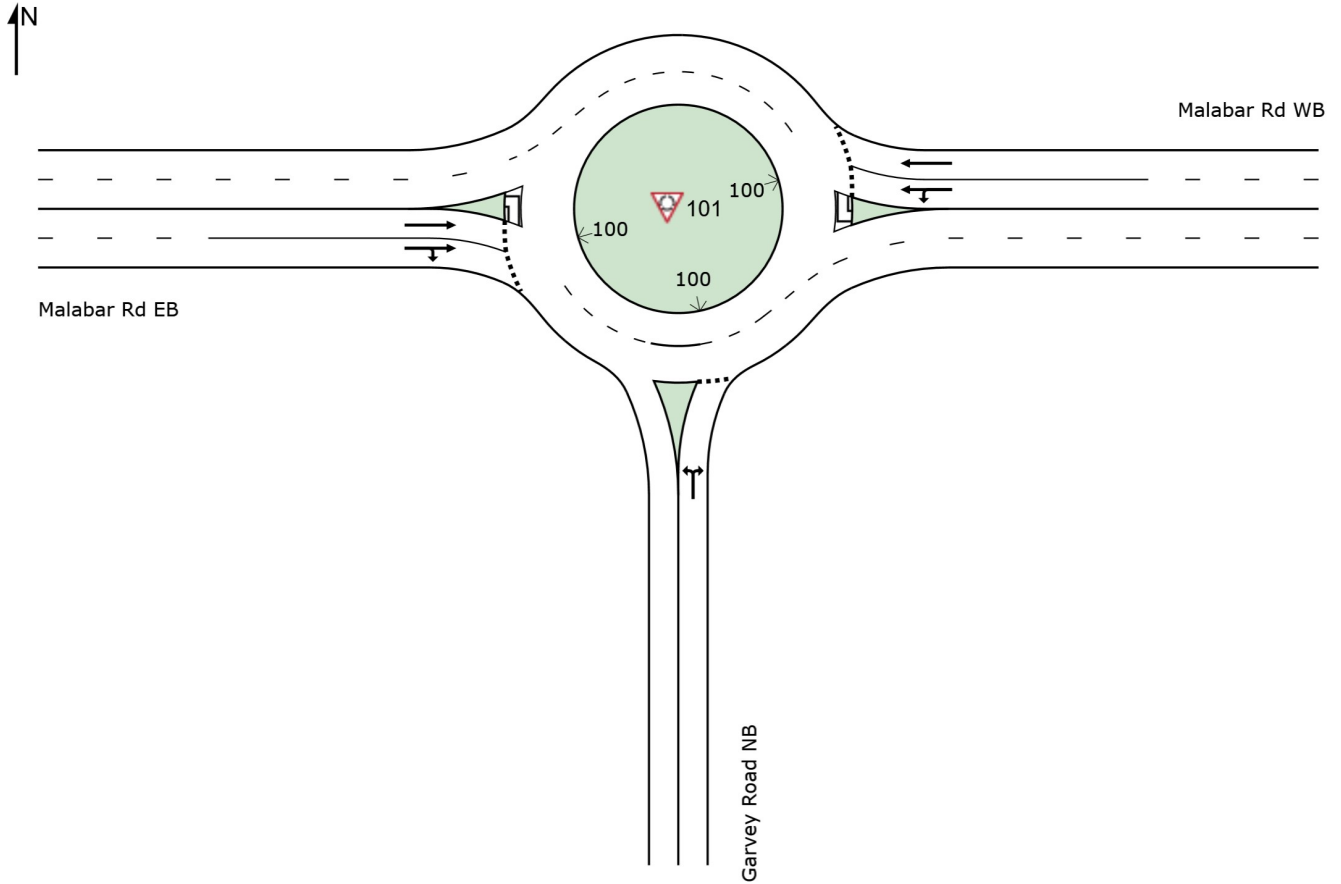
Organisation: KITTELSON AND ASSOCIATES INC | Processed: Thursday, January 14, 2021 7:19:26 AM

Project: H:\23\23773 - Malabar Road PD&E Study\Engineering\Traffic\SIDRA\Jupiter Boulevard\Malabar Road and Jupiter Boulevard v3.sip8

SITE LAYOUT

Site: 101 [Malabar Road and Garvey Road 2050 AM - 2x1]

2050 AM
2x1
HCM 6
Site Category: (None)
Roundabout



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Organisation: KITTELSON AND ASSOCIATES INC | Created: Wednesday, August 5, 2020 3:38:17 PM
Project: H:\23\23773 - Malabar Road PD&E Study\Engineering\Traffic\SIDRA\Garvey Road\Malabar Road and Garvey Road v2.sip8

MOVEMENT SUMMARY

 Site: 101 [Malabar Road and Garvey Road 2030 AM - 2x1]

2030 AM
2x1
HCM 6
Site Category: (None)
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back Vehicles veh	of Queue Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
South: Garvey Road NB												
3	L2	59	14.0	0.280	8.5	LOS A	1.1	27.5	0.59	0.59	0.59	32.6
18	R2	151	2.0	0.280	7.9	LOS A	1.1	27.5	0.59	0.59	0.59	32.0
Approach		210	5.4	0.280	8.1	LOS A	1.1	27.5	0.59	0.59	0.59	32.2
East: Malabar Rd WB												
1	L2	81	2.0	0.340	5.9	LOS A	1.9	47.2	0.23	0.10	0.23	31.6
6	T1	809	2.0	0.340	5.9	LOS A	1.9	47.2	0.23	0.10	0.23	31.6
Approach		890	2.0	0.340	5.9	LOS A	1.9	47.2	0.23	0.10	0.23	31.6
West: Malabar Rd EB												
2	T1	677	2.0	0.286	5.3	LOS A	1.4	36.7	0.24	0.12	0.24	32.0
12	R2	59	5.0	0.286	5.4	LOS A	1.4	36.6	0.24	0.12	0.24	31.0
Approach		736	2.2	0.286	5.3	LOS A	1.4	36.7	0.24	0.12	0.24	31.9
All Vehicles		1836	2.5	0.340	5.9	LOS A	1.9	47.2	0.28	0.16	0.28	31.8

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Roundabout LOS Method: Same as Sign Control.

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: US HCM 6.

HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.

Gap-Acceptance Capacity: Traditional M1.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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Organisation: KITTELSON AND ASSOCIATES INC | Processed: Thursday, August 6, 2020 11:52:49 AM

Project: H:\23\23773 - Malabar Road PD&E Study\Engineering\Traffic\SIDRA\Garvey Road\Malabar Road and Garvey Road v2.sip8

MOVEMENT SUMMARY

 Site: 101 [Malabar Road and Garvey Road 2030 PM - 2x1]

2030 PM
2x1
HCM 6
Site Category: (None)
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
South: Garvey Road NB												
3	L2	38	0.0	0.178	7.7	LOS A	0.6	16.0	0.61	0.61	0.61	33.0
18	R2	76	1.0	0.178	7.8	LOS A	0.6	16.0	0.61	0.61	0.61	32.0
Approach		114	0.7	0.178	7.7	LOS A	0.6	16.0	0.61	0.61	0.61	32.4
East: Malabar Rd WB												
1	L2	143	0.0	0.319	5.4	LOS A	1.8	44.2	0.16	0.06	0.16	31.4
6	T1	731	0.0	0.319	5.4	LOS A	1.8	44.2	0.16	0.06	0.16	31.7
Approach		874	0.0	0.319	5.4	LOS A	1.8	44.2	0.16	0.06	0.16	31.6
West: Malabar Rd EB												
2	T1	921	1.0	0.404	6.9	LOS A	2.3	58.9	0.37	0.23	0.37	31.3
12	R2	76	0.0	0.404	6.9	LOS A	2.3	58.9	0.37	0.23	0.37	30.4
Approach		997	0.9	0.404	6.9	LOS A	2.3	58.9	0.37	0.23	0.37	31.3
All Vehicles		1985	0.5	0.404	6.3	LOS A	2.3	58.9	0.30	0.18	0.30	31.5

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Roundabout LOS Method: Same as Sign Control.

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: US HCM 6.

HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.

Gap-Acceptance Capacity: Traditional M1.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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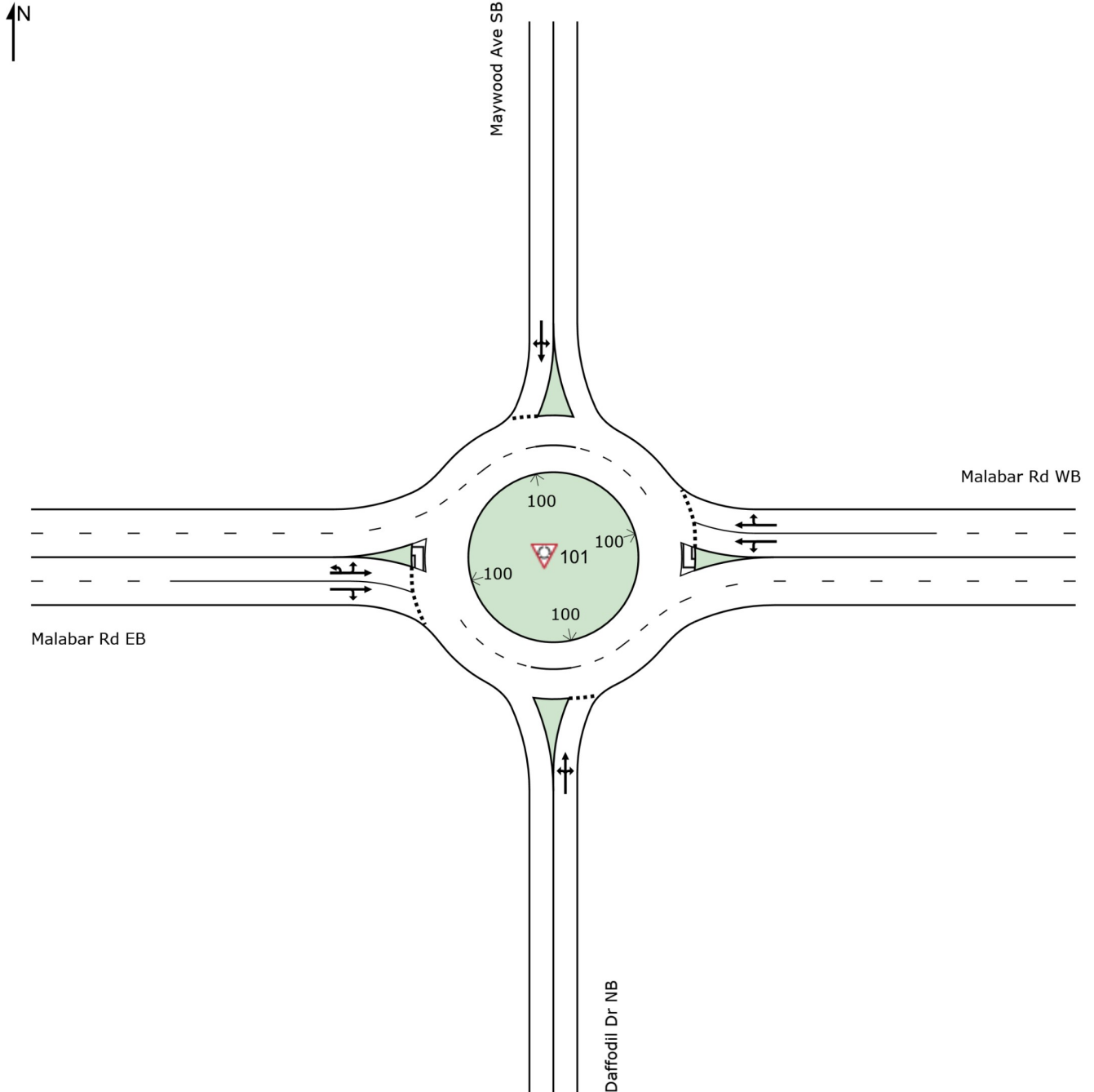
Organisation: KITTELSON AND ASSOCIATES INC | Processed: Thursday, August 6, 2020 11:51:22 AM

Project: H:\23\23773 - Malabar Road PD&E Study\Engineering\Traffic\SIDRA\Garvey Road\Malabar Road and Garvey Road v2.sip8

SITE LAYOUT

Site: 101 [Malabar Road and Maywood Avenue/Daffodil Drive 2050 PM - 2x1]

2050 PM
2x1
HCM 6
Site Category: (None)
Roundabout



MOVEMENT SUMMARY

 Site: 101 [Malabar Road and Maywood Avenue/Daffodil Drive 2030 AM - 2x1]

2030 AM

2x1

HCM 6

Site Category: (None)

Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back Vehicles veh	of Queue Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
South: Daffodil Dr NB												
3	L2	14	7.0	0.084	6.8	LOS A	0.3	7.2	0.58	0.58	0.58	33.7
8	T1	1	0.0	0.084	6.4	LOS A	0.3	7.2	0.58	0.58	0.58	33.7
18	R2	39	0.0	0.084	6.4	LOS A	0.3	7.2	0.58	0.58	0.58	32.8
Approach		54	1.8	0.084	6.5	LOS A	0.3	7.2	0.58	0.58	0.58	33.1
East: Malabar Rd WB												
1	L2	31	0.0	0.344	5.7	LOS A	1.9	49.1	0.15	0.05	0.15	31.9
6	T1	843	2.0	0.344	5.8	LOS A	1.9	49.1	0.15	0.05	0.15	31.7
16	R2	56	5.0	0.344	5.9	LOS A	1.9	48.9	0.15	0.05	0.15	30.8
Approach		930	2.1	0.344	5.8	LOS A	1.9	49.1	0.15	0.05	0.15	31.7
North: Maywood Ave SB												
7	L2	46	0.0	0.148	7.2	LOS A	0.5	13.1	0.60	0.60	0.60	32.8
4	T1	1	0.0	0.148	7.2	LOS A	0.5	13.1	0.60	0.60	0.60	32.7
14	R2	48	4.0	0.148	7.4	LOS A	0.5	13.1	0.60	0.60	0.60	31.8
Approach		95	2.0	0.148	7.3	LOS A	0.5	13.1	0.60	0.60	0.60	32.3
West: Malabar Rd EB												
5u	U	7	0.0	0.332	5.7	LOS A	1.8	45.5	0.25	0.12	0.25	34.1
5	L2	8	25.0	0.332	6.4	LOS A	1.8	45.5	0.25	0.12	0.25	31.7
2	T1	839	1.0	0.332	5.8	LOS A	1.8	45.6	0.25	0.12	0.25	31.8
12	R2	13	8.0	0.332	6.0	LOS A	1.8	45.6	0.25	0.12	0.25	30.8
Approach		867	1.3	0.332	5.8	LOS A	1.8	45.6	0.25	0.12	0.25	31.8
All Vehicles		1946	1.7	0.344	5.9	LOS A	1.9	49.1	0.23	0.12	0.23	31.8

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Roundabout LOS Method: Same as Sign Control.

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: US HCM 6.

HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.

Gap-Acceptance Capacity: Traditional M1.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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Organisation: KITTELSON AND ASSOCIATES INC | Processed: Monday, February 1, 2021 10:29:25 AM

Project: H:\23\23773 - Malabar Road PD&E Study\Engineering\Traffic\SIDRA\Maywood Avenue-Daffodil Drive\Malabar Road and Maywood Avenue-Daffodil Drive.sip8

MOVEMENT SUMMARY

 Site: 101 [Malabar Road and Maywood Avenue/Daffodil Drive 2030 PM - 2x1]

2030 PM

2x1

HCM 6

Site Category: (None)

Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back Vehicles veh	Queue Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
South: Daffodil Dr NB												
3	L2	7	0.0	0.061	7.2	LOS A	0.2	5.1	0.62	0.62	0.62	33.7
8	T1	1	0.0	0.061	7.2	LOS A	0.2	5.1	0.62	0.62	0.62	33.5
18	R2	26	0.0	0.061	7.2	LOS A	0.2	5.1	0.62	0.62	0.62	32.6
Approach		34	0.0	0.061	7.2	LOS A	0.2	5.1	0.62	0.62	0.62	32.9
East: Malabar Rd WB												
1	L2	44	0.0	0.372	6.0	LOS A	2.3	56.3	0.12	0.04	0.12	31.8
6	T1	912	0.0	0.372	6.0	LOS A	2.3	56.3	0.12	0.04	0.12	31.6
16	R2	81	0.0	0.372	6.0	LOS A	2.3	56.3	0.12	0.04	0.12	30.7
Approach		1037	0.0	0.372	6.0	LOS A	2.3	56.3	0.12	0.04	0.12	31.6
North: Maywood Ave SB												
7	L2	55	2.0	0.178	8.0	LOS A	0.6	15.8	0.62	0.62	0.62	32.5
4	T1	1	0.0	0.178	7.9	LOS A	0.6	15.8	0.62	0.62	0.62	32.4
14	R2	54	0.0	0.178	7.9	LOS A	0.6	15.8	0.62	0.62	0.62	31.6
Approach		110	1.0	0.178	8.0	LOS A	0.6	15.8	0.62	0.62	0.62	32.0
West: Malabar Rd EB												
5u	U	3	0.0	0.404	6.7	LOS A	2.4	60.4	0.31	0.17	0.31	33.7
5	L2	8	13.0	0.404	7.1	LOS A	2.4	60.4	0.31	0.17	0.31	31.4
2	T1	1019	1.0	0.404	6.7	LOS A	2.4	60.5	0.31	0.17	0.31	31.4
12	R2	5	0.0	0.404	6.7	LOS A	2.4	60.5	0.31	0.17	0.31	30.5
Approach		1035	1.1	0.404	6.7	LOS A	2.4	60.5	0.31	0.17	0.31	31.4
All Vehicles		2216	0.6	0.404	6.4	LOS A	2.4	60.5	0.25	0.14	0.25	31.5

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Roundabout LOS Method: Same as Sign Control.

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: US HCM 6.

HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.

Gap-Acceptance Capacity: Traditional M1.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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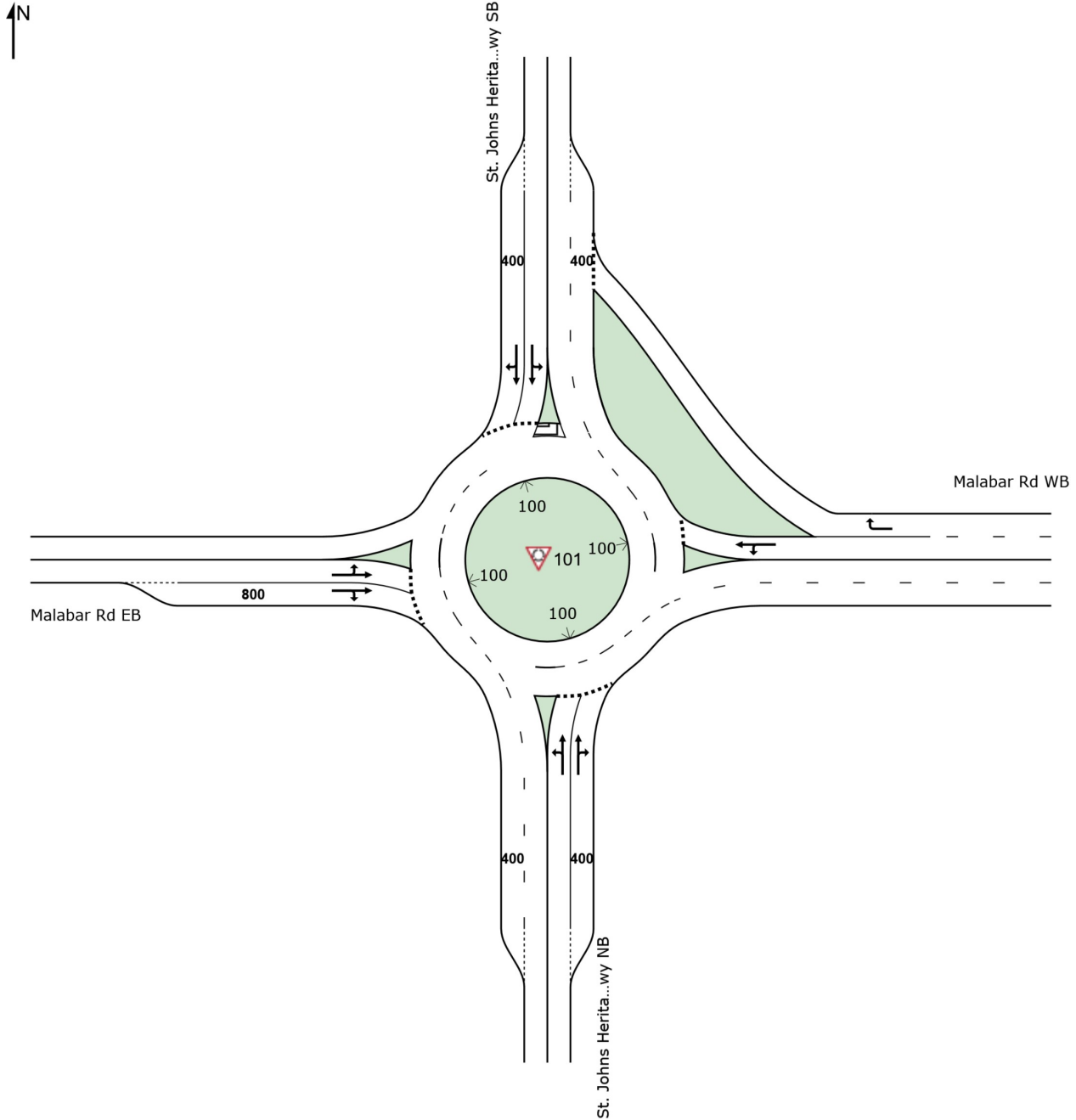
Project: H:\23\23773 - Malabar Road PD&E Study\Engineering\Traffic\SIDRA\Maywood Avenue-Daffodil Drive\Malabar Road and Maywood Avenue-Daffodil Drive.sip8

2050 ROUNDABOUT OPERATIONAL REPORTS

SITE LAYOUT

Site: 101 [Malabar Road and St. Johns Heritage Parkway 2050 AM - 2x2]

2050 AM
2x2
HCM 6
Site Category: (None)
Roundabout



MOVEMENT SUMMARY

 Site: 101 [Malabar Road and St. Johns Heritage Parkway 2050 AM - 2x2]

2050 AM
2x2
HCM 6
Site Category: (None)
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back Vehicles veh	of Queue Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
South: St. Johns Heritage Pkwy NB												
3	L2	79	0.0	0.456	12.7	LOS B	2.3	58.5	0.72	0.81	1.04	31.0
8	T1	241	0.0	0.456	12.6	LOS B	2.3	58.5	0.71	0.81	1.02	31.0
18	R2	173	0.0	0.369	12.0	LOS B	1.6	41.1	0.70	0.76	0.89	30.7
Approach		493	0.0	0.456	12.4	LOS B	2.3	58.5	0.71	0.79	0.98	30.9
East: Malabar Rd WB												
1	L2	236	0.0	0.994	49.3	LOS E	37.8	967.3	1.00	2.35	4.13	19.8
6	T1	682	4.0	0.994	49.4	LOS E	37.8	967.3	1.00	2.35	4.13	19.6
16	R2	541	3.0	0.548	10.7	LOS B	4.4	111.7	0.63	0.70	0.89	28.9
Approach		1459	3.0	0.994	35.0	LOS E	37.8	967.3	0.86	1.74	2.93	22.2
North: St. Johns Heritage Pkwy SB												
7	L2	393	12.0	0.963	59.7	LOS F	15.3	410.9	0.93	1.85	3.97	18.6
4	T1	259	0.0	0.963	41.3	LOS E	15.3	410.9	0.89	1.47	2.82	22.2
14	R2	259	7.0	0.782	30.9	LOS D	6.9	177.7	0.86	1.24	2.11	24.5
Approach		911	7.2	0.963	46.3	LOS E	15.3	410.9	0.90	1.57	3.11	21.0
West: Malabar Rd EB												
5	L2	137	11.0	0.464	15.1	LOS C	2.2	59.0	0.72	0.84	1.09	27.3
2	T1	345	6.0	0.464	13.7	LOS B	2.3	60.1	0.71	0.83	1.07	28.2
12	R2	45	0.0	0.464	12.9	LOS B	2.3	60.1	0.71	0.83	1.06	28.0
Approach		527	6.8	0.464	14.0	LOS B	2.3	60.1	0.71	0.84	1.07	28.0
All Vehicles		3390	4.3	0.994	31.5	LOS D	37.8	967.3	0.83	1.42	2.41	23.6

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Roundabout LOS Method: Same as Sign Control.

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: US HCM 6.

HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.

Gap-Acceptance Capacity: Traditional M1.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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Organisation: KITTELSON AND ASSOCIATES INC | Processed: Wednesday, January 13, 2021 5:19:35 PM

Project: H:\23\23773 - Malabar Road PD&E Study\Engineering\Traffic\SIDRA\St. Johns Heritage Parkway\Malabar Road and St. Johns Heritage Parkway v2.sip8

MOVEMENT SUMMARY

 Site: 101 [Malabar Road and St. Johns Heritage Parkway 2050 PM - 2x2]

2050 PM
2x2
HCM 6
Site Category: (None)
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back Vehicles veh	of Queue Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
South: St. Johns Heritage Pkwy NB												
3	L2	66	0.0	0.665	27.0	LOS D	3.8	94.2	0.87	1.09	1.67	26.0
8	T1	217	0.0	0.665	27.0	LOS D	3.8	94.2	0.87	1.09	1.67	25.9
18	R2	215	0.0	0.586	25.8	LOS D	2.9	72.3	0.87	1.03	1.48	25.7
Approach		498	0.0	0.665	26.5	LOS D	3.8	94.2	0.87	1.06	1.59	25.9
East: Malabar Rd WB												
1	L2	111	0.0	0.344	7.7	LOS A	1.5	37.7	0.56	0.53	0.56	30.5
6	T1	200	4.0	0.344	7.8	LOS A	1.5	37.7	0.56	0.53	0.56	30.2
16	R2	277	3.0	0.291	6.8	LOS A	1.2	31.1	0.51	0.45	0.51	30.4
Approach		588	2.8	0.344	7.3	LOS A	1.5	37.7	0.54	0.50	0.54	30.4
North: St. Johns Heritage Pkwy SB												
7	L2	601	0.0	0.601	11.9	LOS B	6.1	152.7	0.71	0.80	1.07	29.8
4	T1	203	0.0	0.420	8.4	LOS A	2.1	53.9	0.57	0.51	0.57	33.5
14	R2	203	7.0	0.420	8.6	LOS A	2.1	53.9	0.57	0.51	0.57	32.4
Approach		1007	1.4	0.601	10.5	LOS B	6.1	152.7	0.65	0.68	0.87	31.0
West: Malabar Rd EB												
5	L2	217	0.0	0.715	23.8	LOS C	5.8	146.2	0.84	1.15	1.75	24.9
2	T1	593	1.0	0.715	22.5	LOS C	6.0	151.6	0.84	1.14	1.75	25.5
12	R2	66	0.0	0.715	21.8	LOS C	6.0	151.6	0.83	1.14	1.75	25.3
Approach		876	0.7	0.715	22.8	LOS C	6.0	151.6	0.84	1.14	1.75	25.3
All Vehicles		2969	1.2	0.715	16.2	LOS C	6.1	152.7	0.72	0.85	1.18	28.1

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Roundabout LOS Method: Same as Sign Control.

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: US HCM 6.

HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.

Gap-Acceptance Capacity: Traditional M1.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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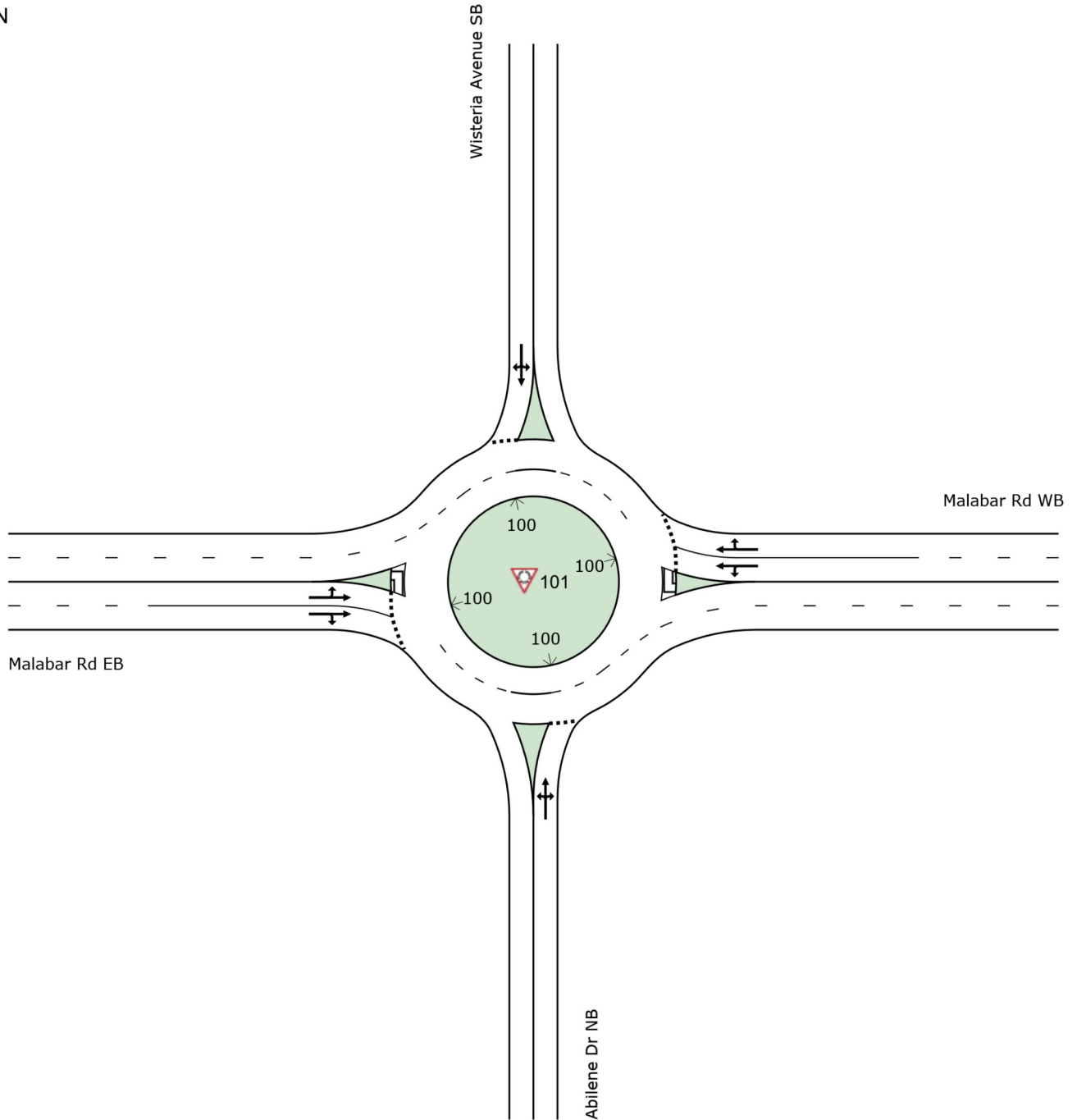
Organisation: KITTELSON AND ASSOCIATES INC | Processed: Thursday, January 14, 2021 7:04:27 AM

Project: H:\23\23773 - Malabar Road PD&E Study\Engineering\Traffic\SIDRA\St. Johns Heritage Parkway\Malabar Road and St. Johns Heritage Parkway v2.sip8

SITE LAYOUT

Site: 101 [Malabar Road and Wisteria Avenue/Abilene Drive 2050 AM - 2x1]

2050 AM
2x1
HCM 6
Site Category: (None)
Roundabout



MOVEMENT SUMMARY

 Site: 101 [Malabar Road and Wisteria Avenue/Abilene Drive 2050 AM - 2x1]

2050 AM

2x1

HCM 6

Site Category: (None)

Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
South: Abilene Dr NB												
3	L2	245	0.0	0.620	17.0	LOS C	4.4	109.4	0.79	0.98	1.42	28.6
8	T1	1	0.0	0.620	17.0	LOS C	4.4	109.4	0.79	0.98	1.42	28.5
18	R2	164	0.0	0.620	17.0	LOS C	4.4	109.4	0.79	0.98	1.42	27.9
Approach		410	0.0	0.620	17.0	LOS C	4.4	109.4	0.79	0.98	1.42	28.3
East: Malabar Rd WB												
1	L2	81	0.0	0.560	10.0	LOS A	4.3	108.0	0.60	0.50	0.65	30.0
6	T1	1175	0.0	0.560	10.0	LOS A	4.3	108.0	0.60	0.50	0.65	30.0
16	R2	9	0.0	0.560	10.0	LOS A	4.3	108.0	0.60	0.50	0.65	29.2
Approach		1265	0.0	0.560	10.0	LOS A	4.3	108.0	0.60	0.50	0.65	30.0
North: Wisteria Avenue SB												
7	L2	18	0.0	0.116	10.8	LOS B	0.4	9.3	0.74	0.74	0.74	31.5
4	T1	1	0.0	0.116	10.8	LOS B	0.4	9.3	0.74	0.74	0.74	31.4
14	R2	27	0.0	0.116	10.8	LOS B	0.4	9.3	0.74	0.74	0.74	30.6
Approach		46	0.0	0.116	10.8	LOS B	0.4	9.3	0.74	0.74	0.74	30.9
West: Malabar Rd EB												
5	L2	6	0.0	0.361	6.1	LOS A	2.1	51.3	0.30	0.16	0.30	31.9
2	T1	876	0.0	0.361	6.1	LOS A	2.1	51.3	0.30	0.16	0.30	31.7
12	R2	54	0.0	0.361	6.1	LOS A	2.1	51.3	0.30	0.16	0.30	30.7
Approach		936	0.0	0.361	6.1	LOS A	2.1	51.3	0.30	0.16	0.30	31.6
All Vehicles		2657	0.0	0.620	9.7	LOS A	4.4	109.4	0.52	0.46	0.65	30.3

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Roundabout LOS Method: Same as Sign Control.

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: US HCM 6.

HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.

Gap-Acceptance Capacity: Traditional M1.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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Project: H:\23\23773 - Malabar Road PD&E Study\Engineering\Traffic\SIDRA\Wisteria Avenue-Abilene Drive\Malabar Road and Wisteria Avenue-Abilene Drive.sip8

MOVEMENT SUMMARY

 Site: 101 [Malabar Road and Wisteria Avenue/Abilene Drive 2050 PM - 2x1]

2050 PM
2x1
HCM 6
Site Category: (None)
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
South: Abilene Dr NB												
3	L2	105	0.0	0.487	15.2	LOS C	2.4	61.0	0.76	0.87	1.16	29.7
8	T1	1	0.0	0.487	15.2	LOS C	2.4	61.0	0.76	0.87	1.16	29.6
18	R2	158	0.0	0.487	15.2	LOS C	2.4	61.0	0.76	0.87	1.16	28.9
Approach		264	0.0	0.487	15.2	LOS C	2.4	61.0	0.76	0.87	1.16	29.2
East: Malabar Rd WB												
1	L2	180	0.0	0.295	5.5	LOS A	1.5	37.9	0.32	0.19	0.32	31.0
6	T1	540	0.0	0.295	5.5	LOS A	1.5	37.9	0.32	0.19	0.32	31.5
16	R2	20	0.0	0.295	5.5	LOS A	1.5	37.9	0.32	0.19	0.32	30.9
Approach		740	0.0	0.295	5.5	LOS A	1.5	37.9	0.32	0.19	0.32	31.4
North: Wisteria Avenue SB												
7	L2	18	0.0	0.044	5.6	LOS A	0.2	3.8	0.55	0.51	0.55	33.5
4	T1	1	0.0	0.044	5.6	LOS A	0.2	3.8	0.55	0.51	0.55	33.3
14	R2	12	0.0	0.044	5.6	LOS A	0.2	3.8	0.55	0.51	0.55	32.4
Approach		31	0.0	0.044	5.6	LOS A	0.2	3.8	0.55	0.51	0.55	33.1
West: Malabar Rd EB												
5	L2	30	0.0	0.584	10.1	LOS B	4.3	107.4	0.57	0.41	0.57	30.2
2	T1	1085	0.0	0.584	10.1	LOS B	4.3	107.4	0.57	0.41	0.57	29.9
12	R2	269	0.0	0.584	10.1	LOS B	4.3	107.4	0.57	0.41	0.57	29.0
Approach		1384	0.0	0.584	10.1	LOS B	4.3	107.4	0.57	0.41	0.57	29.8
All Vehicles		2419	0.0	0.584	9.2	LOS A	4.3	107.4	0.51	0.39	0.56	30.2

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Roundabout LOS Method: Same as Sign Control.

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: US HCM 6.

HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.

Gap-Acceptance Capacity: Traditional M1.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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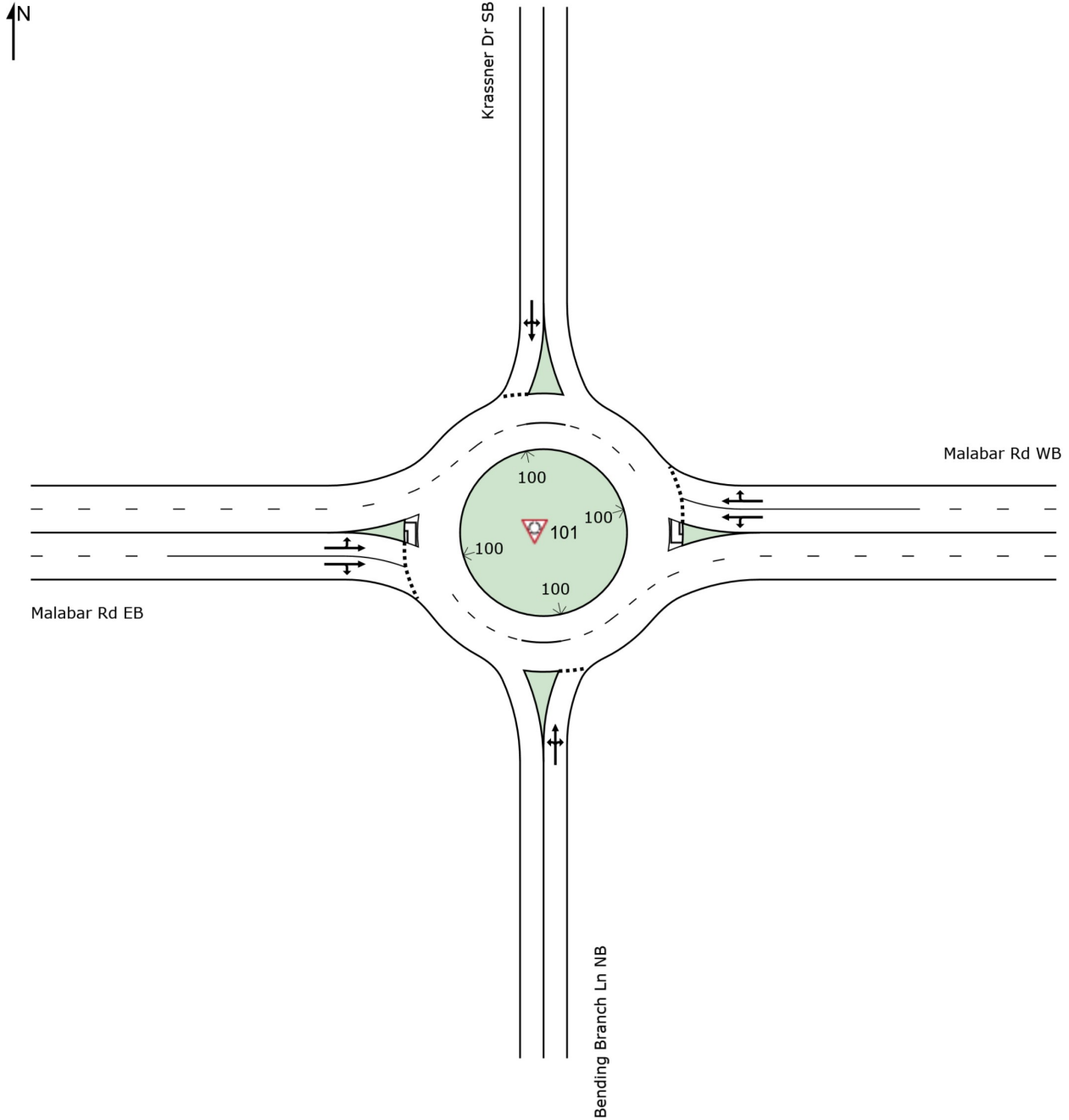
Organisation: KITTELSON AND ASSOCIATES INC | Processed: Tuesday, January 12, 2021 8:16:44 AM

Project: H:\23\23773 - Malabar Road PD&E Study\Engineering\Traffic\SIDRA\Wisteria Avenue-Abilene Drive\Malabar Road and Wisteria Avenue-Abilene Drive.sip8

SITE LAYOUT

Site: 101 [Malabar Road and Krassner Drive/Bending Branch Lane 2050 AM - 2x1]

2050 AM
2x1
HCM 6
Site Category: (None)
Roundabout



MOVEMENT SUMMARY

 Site: 101 [Malabar Road and Krassner Drive/Bending Branch Lane 2050 AM - 2x1]

2050 AM

2x1

HCM 6

Site Category: (None)

Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back Vehicles veh	of Queue Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
South: Bending Branch Ln NB												
3	L2	79	4.0	0.293	11.5	LOS B	1.1	27.5	0.70	0.73	0.80	30.8
8	T1	2	50.0	0.293	14.6	LOS B	1.1	27.5	0.70	0.73	0.80	30.1
18	R2	68	2.0	0.293	11.3	LOS B	1.1	27.5	0.70	0.73	0.80	30.0
Approach		149	3.7	0.293	11.4	LOS B	1.1	27.5	0.70	0.73	0.80	30.4
East: Malabar Rd WB												
1	L2	45	6.0	0.512	8.5	LOS A	3.4	87.2	0.36	0.20	0.36	30.7
6	T1	1149	5.0	0.512	8.5	LOS A	3.4	87.4	0.36	0.20	0.36	30.6
16	R2	72	3.0	0.512	8.4	LOS A	3.4	87.4	0.36	0.20	0.36	29.7
Approach		1266	4.9	0.512	8.5	LOS A	3.4	87.4	0.36	0.20	0.36	30.5
North: Krassner Dr SB												
7	L2	66	1.0	0.232	11.5	LOS B	0.8	19.7	0.73	0.73	0.73	30.6
4	T1	1	0.0	0.232	11.5	LOS B	0.8	19.7	0.73	0.73	0.73	30.5
14	R2	37	3.0	0.232	11.7	LOS B	0.8	19.7	0.73	0.73	0.73	29.7
Approach		104	1.7	0.232	11.6	LOS B	0.8	19.7	0.73	0.73	0.73	30.3
West: Malabar Rd EB												
5	L2	14	7.0	0.440	7.5	LOS A	2.5	66.1	0.34	0.20	0.34	31.2
2	T1	1022	6.0	0.440	7.5	LOS A	2.5	66.1	0.34	0.20	0.34	31.0
12	R2	22	21.0	0.440	7.9	LOS A	2.5	65.8	0.34	0.20	0.34	29.9
Approach		1058	6.3	0.440	7.5	LOS A	2.5	66.1	0.34	0.20	0.34	31.0
All Vehicles		2577	5.3	0.512	8.4	LOS A	3.4	87.4	0.39	0.25	0.39	30.7

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Roundabout LOS Method: Same as Sign Control.

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: US HCM 6.

HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.

Gap-Acceptance Capacity: Traditional M1.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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Organisation: KITTELSON AND ASSOCIATES INC | Processed: Tuesday, January 12, 2021 9:18:53 AM

Project: H:\23\23773 - Malabar Road PD&E Study\Engineering\Traffic\SIDRA\Krassner Drive\Malabar Road and Krassner Drive v3.sip8

MOVEMENT SUMMARY

 Site: 101 [Malabar Road and Krassner Drive/Bending Branch Lane 2050 PM - 2x1]

2050 PM
2x1
HCM 6
Site Category: (None)
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back Vehicles veh	of Queue Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
South: Bending Branch Ln NB												
3	L2	30	7.0	0.233	11.7	LOS B	0.8	19.7	0.72	0.72	0.72	31.2
8	T1	3	33.0	0.233	13.7	LOS B	0.8	19.7	0.72	0.72	0.72	30.8
18	R2	71	4.0	0.233	11.5	LOS B	0.8	19.7	0.72	0.72	0.72	30.4
Approach		104	5.7	0.233	11.6	LOS B	0.8	19.7	0.72	0.72	0.72	30.6
East: Malabar Rd WB												
1	L2	96	1.0	0.344	5.9	LOS A	1.9	47.6	0.25	0.12	0.25	31.5
6	T1	693	3.0	0.344	6.0	LOS A	1.9	47.6	0.25	0.12	0.25	31.5
16	R2	100	1.0	0.344	5.9	LOS A	1.9	47.6	0.25	0.12	0.25	30.7
Approach		889	2.6	0.344	6.0	LOS A	1.9	47.6	0.25	0.12	0.25	31.4
North: Krassner Dr SB												
7	L2	87	0.0	0.154	6.9	LOS A	0.5	13.8	0.59	0.59	0.59	32.1
4	T1	1	0.0	0.154	6.9	LOS A	0.5	13.8	0.59	0.59	0.59	32.0
14	R2	17	11.0	0.154	7.5	LOS A	0.5	13.8	0.59	0.59	0.59	31.0
Approach		105	1.8	0.154	7.0	LOS A	0.5	13.8	0.59	0.59	0.59	32.0
West: Malabar Rd EB												
5	L2	39	0.0	0.532	9.1	LOS A	3.6	90.6	0.51	0.35	0.51	30.5
2	T1	1157	1.0	0.532	9.1	LOS A	3.6	90.6	0.50	0.35	0.50	30.3
12	R2	65	8.0	0.532	9.3	LOS A	3.5	89.9	0.50	0.35	0.50	29.4
Approach		1261	1.3	0.532	9.1	LOS A	3.6	90.6	0.50	0.35	0.50	30.3
All Vehicles		2359	2.0	0.532	7.9	LOS A	3.6	90.6	0.42	0.29	0.42	30.8

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Roundabout LOS Method: Same as Sign Control.

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: US HCM 6.

HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.

Gap-Acceptance Capacity: Traditional M1.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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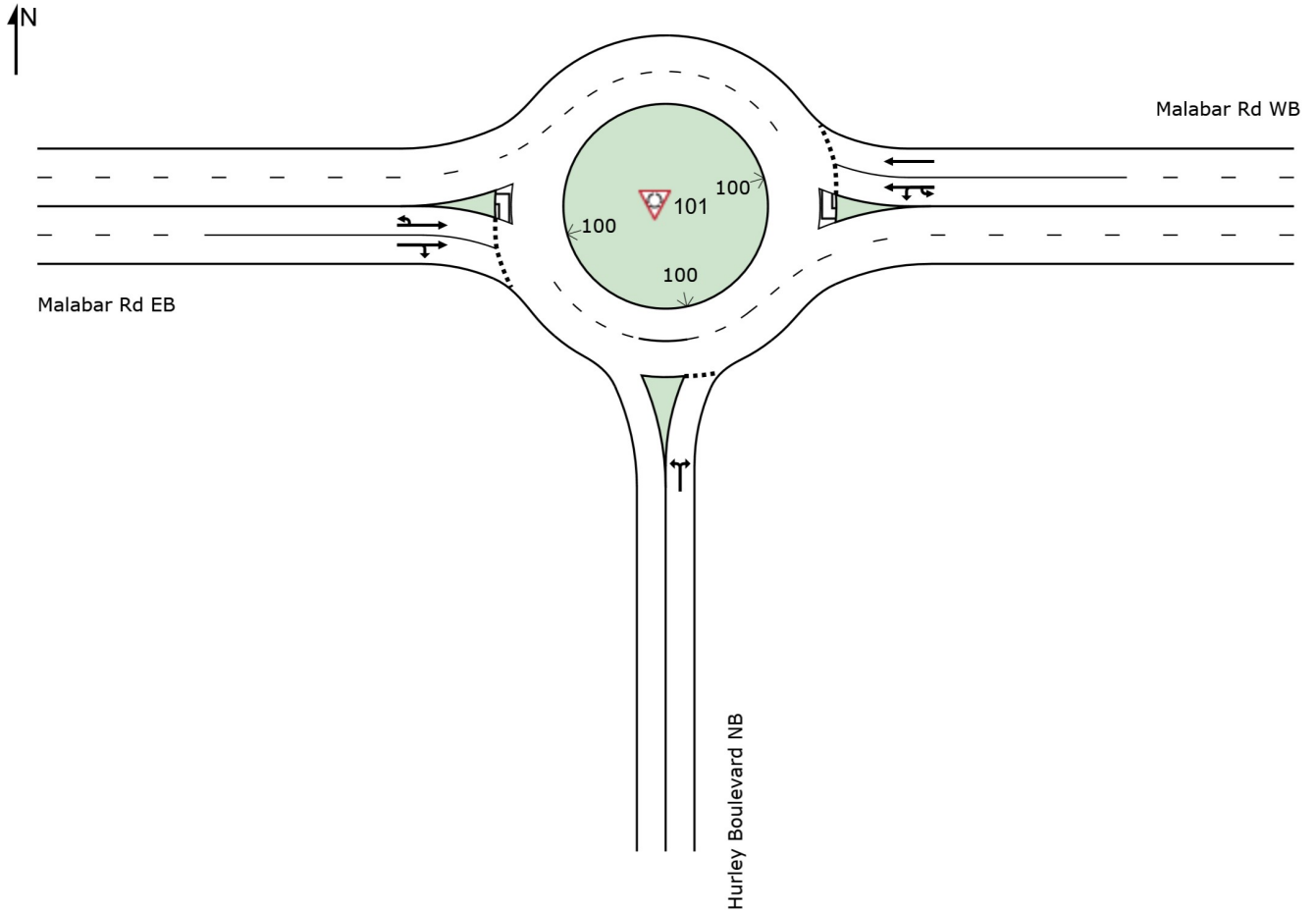
Organisation: KITTELSON AND ASSOCIATES INC | Processed: Tuesday, January 12, 2021 9:20:25 AM

Project: H:\23\23773 - Malabar Road PD&E Study\Engineering\Traffic\SIDRA\Krassner Drive\Malabar Road and Krassner Drive v3.sip8

SITE LAYOUT

Site: 101 [Malabar Road and Hurley Boulevard 2050 PM - 2x1]

2050 PM
2x1
HCM 6
Site Category: (None)
Roundabout



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Organisation: KITTELSON AND ASSOCIATES INC | Created: Thursday, August 6, 2020 8:26:56 AM
Project: H:\23\23773 - Malabar Road PD&E Study\Engineering\Traffic\SIDRA\Hurley Boulevard\Malabar Road and Hurley Boulevard v2.sip8

MOVEMENT SUMMARY

 Site: 101 [Malabar Road and Hurley Boulevard 2050 AM - 2x1]

2050 AM
2x1
HCM 6
Site Category: (None)
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
South: Hurley Boulevard NB												
3	L2	92	1.0	0.300	11.1	LOS B	1.1	28.8	0.70	0.73	0.80	30.9
18	R2	68	0.0	0.300	11.1	LOS B	1.1	28.8	0.70	0.73	0.80	30.1
Approach		160	0.6	0.300	11.1	LOS B	1.1	28.8	0.70	0.73	0.80	30.6
East: Malabar Rd WB												
1u	U	38	0.0	0.502	8.2	LOS A	3.3	84.5	0.35	0.19	0.35	32.6
1	L2	57	3.0	0.502	8.2	LOS A	3.3	84.5	0.35	0.19	0.35	30.6
6	T1	1148	5.0	0.502	8.3	LOS A	3.3	84.5	0.35	0.19	0.35	30.6
Approach		1243	4.8	0.502	8.3	LOS A	3.3	84.5	0.35	0.19	0.35	30.6
West: Malabar Rd EB												
5u	U	6	0.0	0.441	7.2	LOS A	2.6	68.2	0.32	0.17	0.32	33.4
2	T1	1059	4.0	0.441	7.3	LOS A	2.6	68.2	0.32	0.17	0.32	31.1
12	R2	38	3.0	0.441	7.3	LOS A	2.6	68.2	0.32	0.17	0.32	30.2
Approach		1103	3.9	0.441	7.3	LOS A	2.6	68.2	0.32	0.17	0.32	31.1
All Vehicles		2506	4.1	0.502	8.1	LOS A	3.3	84.5	0.36	0.22	0.37	30.8

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Roundabout LOS Method: Same as Sign Control.

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: US HCM 6.

HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.

Gap-Acceptance Capacity: Traditional M1.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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Organisation: KITTELSON AND ASSOCIATES INC | Processed: Tuesday, January 12, 2021 1:55:19 PM

Project: H:\23\23773 - Malabar Road PD&E Study\Engineering\Traffic\SIDRA\Hurley Boulevard\Malabar Road and Hurley Boulevard v3.sip8

MOVEMENT SUMMARY

 Site: 101 [Malabar Road and Hurley Boulevard 2050 PM - 2x1]

2050 PM
2x1
HCM 6
Site Category: (None)
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
South: Hurley Boulevard NB												
3	L2	47	0.0	0.277	11.3	LOS B	1.0	25.3	0.71	0.73	0.78	31.3
18	R2	90	3.0	0.277	11.5	LOS B	1.0	25.3	0.71	0.73	0.78	30.4
Approach		137	2.0	0.277	11.4	LOS B	1.0	25.3	0.71	0.73	0.78	30.7
East: Malabar Rd WB												
1u	U	50	0.0	0.340	5.7	LOS A	1.9	47.9	0.20	0.08	0.20	33.5
1	L2	72	3.0	0.340	5.8	LOS A	1.9	47.9	0.20	0.08	0.20	31.5
6	T1	790	1.0	0.340	5.8	LOS A	1.9	47.9	0.20	0.08	0.20	31.6
Approach		912	1.1	0.340	5.8	LOS A	1.9	47.9	0.20	0.08	0.20	31.7
West: Malabar Rd EB												
5u	U	4	0.0	0.498	8.1	LOS A	3.4	85.3	0.40	0.24	0.40	33.0
2	T1	1162	0.0	0.498	8.1	LOS A	3.4	85.3	0.40	0.24	0.40	30.8
12	R2	97	0.0	0.498	8.1	LOS A	3.4	85.3	0.40	0.24	0.40	29.9
Approach		1263	0.0	0.498	8.1	LOS A	3.4	85.3	0.40	0.24	0.40	30.8
All Vehicles		2312	0.6	0.498	7.4	LOS A	3.4	85.3	0.34	0.21	0.35	31.1

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Roundabout LOS Method: Same as Sign Control.

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: US HCM 6.

HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.

Gap-Acceptance Capacity: Traditional M1.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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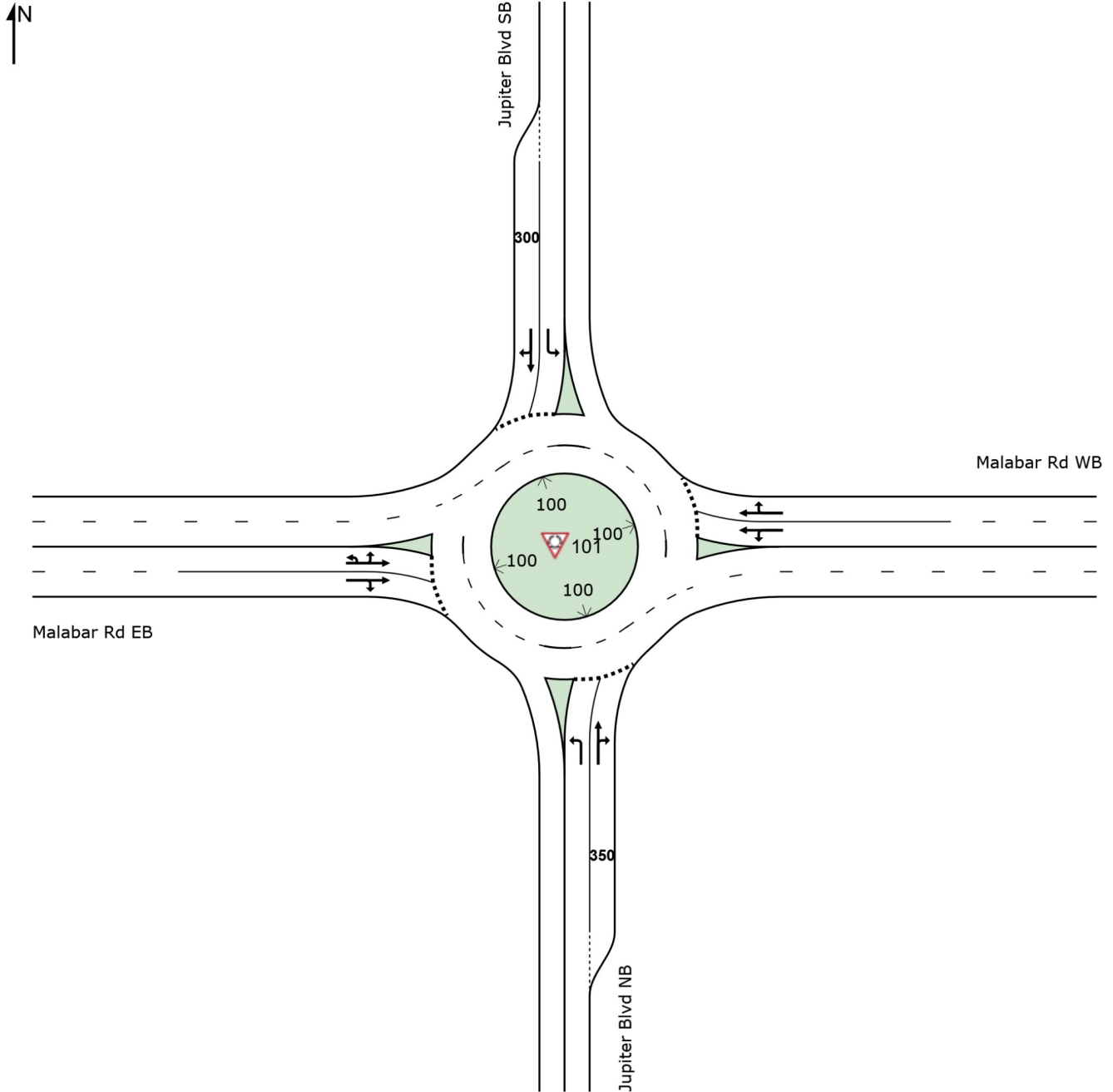
Organisation: KITTELSON AND ASSOCIATES INC | Processed: Tuesday, January 12, 2021 9:22:23 AM

Project: H:\23\23773 - Malabar Road PD&E Study\Engineering\Traffic\SIDRA\Hurley Boulevard\Malabar Road and Hurley Boulevard v3.sip8

SITE LAYOUT

 Site: 101 [Malabar Road and Jupiter Boulevard 2050 PM - 2x2]

2050 PM
2x2
HCM 6
Site Category: (None)
Roundabout



MOVEMENT SUMMARY

 **Site: 101 [Malabar Road and Jupiter Boulevard 2050 AM - 2x2]**

2050 AM
2x2
HCM 6
Site Category: (None)
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Vehicles veh	Queue Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
South: Jupiter Blvd NB												
3	L2	192	5.0	0.532	23.4	LOS C	2.4	61.9	0.84	0.98	1.37	25.9
8	T1	173	4.0	0.805	39.3	LOS E	6.0	152.4	0.91	1.29	2.29	23.0
18	R2	170	2.0	0.805	39.1	LOS E	6.0	152.4	0.91	1.29	2.29	22.5
Approach		535	3.7	0.805	33.5	LOS D	6.0	152.4	0.88	1.18	1.96	23.8
East: Malabar Rd WB												
1	L2	181	6.0	0.881	33.6	LOS D	16.4	425.6	0.97	1.69	2.80	22.8
6	T1	856	4.0	0.881	32.5	LOS D	17.5	449.0	0.97	1.70	2.80	23.0
16	R2	365	3.0	0.881	31.2	LOS D	17.5	449.0	0.97	1.71	2.80	22.8
Approach		1402	4.0	0.881	32.3	LOS D	17.5	449.0	0.97	1.70	2.80	22.9
North: Jupiter Blvd SB												
7	L2	357	2.0	0.771	33.2	LOS D	5.6	142.1	0.89	1.22	2.08	23.5
4	T1	172	5.0	0.837	46.3	LOS E	6.6	172.7	0.92	1.36	2.52	21.4
14	R2	152	7.0	0.837	46.5	LOS E	6.6	172.7	0.92	1.36	2.52	20.9
Approach		681	3.9	0.837	39.5	LOS E	6.6	172.7	0.90	1.28	2.29	22.3
West: Malabar Rd EB												
5u	U	11	0.0	0.846	31.7	LOS D	11.7	296.7	0.93	1.50	2.50	24.2
5	L2	189	1.0	0.846	31.8	LOS D	11.7	296.7	0.93	1.50	2.50	23.2
2	T1	799	2.0	0.846	30.9	LOS D	11.9	309.8	0.92	1.50	2.52	23.4
12	R2	185	11.0	0.846	30.5	LOS D	11.9	309.8	0.91	1.51	2.53	23.1
Approach		1184	3.2	0.846	31.0	LOS D	11.9	309.8	0.92	1.50	2.52	23.3
All Vehicles		3802	3.7	0.881	33.3	LOS D	17.5	449.0	0.93	1.49	2.50	23.1

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Roundabout LOS Method: Same as Sign Control.

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: US HCM 6.

HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.

Gap-Acceptance Capacity: Traditional M1.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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Organisation: KITTELSON AND ASSOCIATES INC | Processed: Thursday, January 14, 2021 7:12:58 AM

Project: H:\23\23773 - Malabar Road PD&E Study\Engineering\Traffic\SIDRA\Jupiter Boulevard\Malabar Road and Jupiter Boulevard v3.sip8

MOVEMENT SUMMARY

 Site: 101 [Malabar Road and Jupiter Boulevard 2050 PM - 2x2]

2050 PM
2x2
HCM 6
Site Category: (None)
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back Vehicles veh	of Queue Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
South: Jupiter Blvd NB												
3	L2	126	0.0	0.413	21.9	LOS C	1.6	39.9	0.85	0.94	1.19	26.5
8	T1	168	1.0	0.977	76.8	LOS F	11.3	286.5	0.99	1.75	3.95	16.6
18	R2	178	2.0	0.977	76.9	LOS F	11.3	286.5	0.99	1.75	3.95	16.3
Approach		472	1.1	0.977	62.2	LOS F	11.3	286.5	0.95	1.53	3.21	18.4
East: Malabar Rd WB												
1	L2	140	0.0	0.624	13.6	LOS B	6.2	157.1	0.74	0.94	1.23	28.5
6	T1	629	1.0	0.624	13.4	LOS B	6.4	159.5	0.73	0.93	1.21	28.5
16	R2	388	0.0	0.624	12.8	LOS B	6.4	159.5	0.72	0.91	1.19	28.1
Approach		1157	0.5	0.624	13.2	LOS B	6.4	159.5	0.73	0.92	1.21	28.3
North: Jupiter Blvd SB												
7	L2	439	2.0	0.687	20.5	LOS C	5.4	136.6	0.81	1.07	1.64	26.9
4	T1	175	1.0	0.478	14.2	LOS B	2.5	63.8	0.73	0.84	1.10	30.9
14	R2	101	0.0	0.478	14.2	LOS B	2.5	63.8	0.73	0.84	1.10	30.0
Approach		715	1.5	0.687	18.1	LOS C	5.4	136.6	0.78	0.98	1.43	28.1
West: Malabar Rd EB												
5u	U	15	0.0	0.980	54.9	LOS F	22.6	568.3	1.00	2.10	4.11	19.6
5	L2	137	0.0	0.980	54.9	LOS F	22.6	568.3	1.00	2.10	4.11	18.9
2	T1	1006	1.0	0.980	53.5	LOS F	24.2	609.3	1.00	2.13	4.15	19.0
12	R2	211	1.0	0.980	52.0	LOS F	24.2	609.3	1.00	2.15	4.19	18.9
Approach		1369	0.9	0.980	53.4	LOS F	24.2	609.3	1.00	2.13	4.15	19.0
All Vehicles		3713	0.9	0.980	35.2	LOS E	24.2	609.3	0.87	1.46	2.59	22.7

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Roundabout LOS Method: Same as Sign Control.

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: US HCM 6.

HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.

Gap-Acceptance Capacity: Traditional M1.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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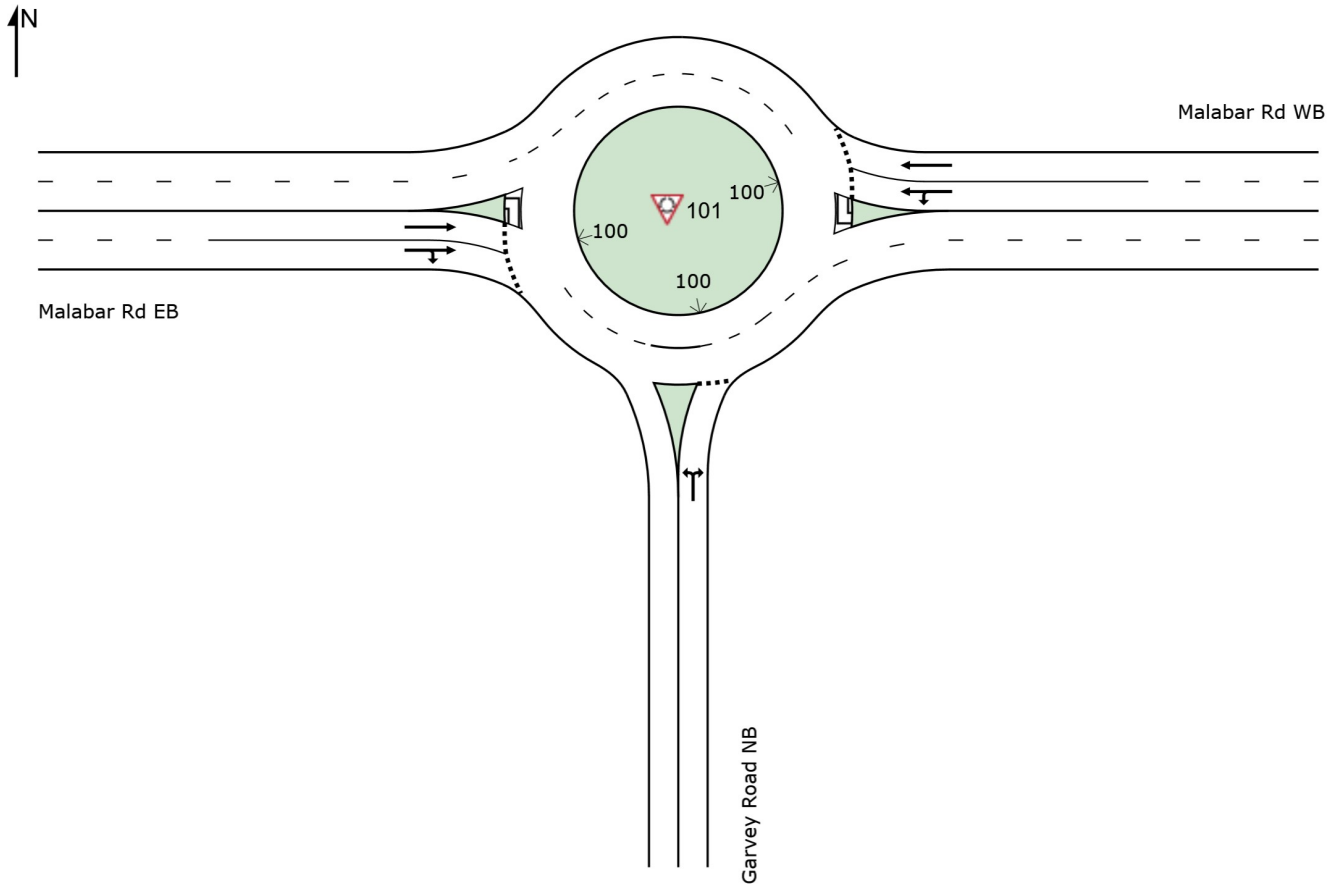
Organisation: KITTELSON AND ASSOCIATES INC | Processed: Thursday, January 14, 2021 7:17:55 AM

Project: H:\23\23773 - Malabar Road PD&E Study\Engineering\Traffic\SIDRA\Jupiter Boulevard\Malabar Road and Jupiter Boulevard v3.sip8

SITE LAYOUT

 Site: 101 [Malabar Road and Garvey Road 2050 AM - 2x1]

2050 AM
2x1
HCM 6
Site Category: (None)
Roundabout



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Organisation: KITTELSON AND ASSOCIATES INC | Created: Wednesday, August 5, 2020 3:38:17 PM
Project: H:\23\23773 - Malabar Road PD&E Study\Engineering\Traffic\SIDRA\Garvey Road\Malabar Road and Garvey Road v2.sip8

MOVEMENT SUMMARY

 Site: 101 [Malabar Road and Garvey Road 2050 AM - 2x1]

2050 AM
2x1
HCM 6
Site Category: (None)
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
South: Garvey Road NB												
3	L2	192	14.0	0.879	48.6	LOS E	8.3	221.3	0.91	1.48	2.92	20.5
18	R2	198	2.0	0.879	47.7	LOS E	8.3	221.3	0.91	1.48	2.92	20.3
Approach		390	7.9	0.879	48.1	LOS E	8.3	221.3	0.91	1.48	2.92	20.4
East: Malabar Rd WB												
1	L2	192	2.0	0.614	11.1	LOS B	5.5	140.0	0.60	0.50	0.69	29.3
6	T1	1208	2.0	0.614	11.1	LOS B	5.5	140.0	0.60	0.50	0.69	29.4
Approach		1400	2.0	0.614	11.1	LOS B	5.5	140.0	0.60	0.50	0.69	29.4
West: Malabar Rd EB												
2	T1	1254	2.0	0.572	10.0	LOS A	4.0	101.2	0.54	0.39	0.54	30.1
12	R2	76	5.0	0.572	10.1	LOS B	4.0	100.8	0.54	0.39	0.54	29.1
Approach		1330	2.2	0.572	10.0	LOS B	4.0	101.2	0.54	0.39	0.54	30.0
All Vehicles		3120	2.8	0.879	15.3	LOS C	8.3	221.3	0.62	0.58	0.90	28.1

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Roundabout LOS Method: Same as Sign Control.

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: US HCM 6.

HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.

Gap-Acceptance Capacity: Traditional M1.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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Project: H:\23\23773 - Malabar Road PD&E Study\Engineering\Traffic\SIDRA\Garvey Road\Malabar Road and Garvey Road v2.sip8

MOVEMENT SUMMARY

 Site: 101 [Malabar Road and Garvey Road 2050 PM - 2x1]

2050 PM
2x1
HCM 6
Site Category: (None)
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
South: Garvey Road NB												
3	L2	38	0.0	0.554	19.5	LOS C	2.8	70.9	0.82	0.96	1.36	28.5
18	R2	222	1.0	0.554	19.5	LOS C	2.8	70.9	0.82	0.96	1.36	27.7
Approach		260	0.9	0.554	19.5	LOS C	2.8	70.9	0.82	0.96	1.36	27.8
East: Malabar Rd WB												
1	L2	248	0.0	0.499	7.7	LOS A	3.7	92.6	0.22	0.08	0.22	30.4
6	T1	1122	0.0	0.499	7.7	LOS A	3.7	92.6	0.22	0.08	0.22	30.7
Approach		1370	0.0	0.499	7.7	LOS A	3.7	92.6	0.22	0.08	0.22	30.6
West: Malabar Rd EB												
2	T1	1279	1.0	0.725	14.8	LOS B	12.9	324.3	0.77	0.87	1.24	28.2
12	R2	352	0.0	0.725	14.7	LOS B	12.9	324.3	0.77	0.87	1.24	27.4
Approach		1631	0.8	0.725	14.8	LOS B	12.9	324.3	0.77	0.87	1.24	28.1
All Vehicles		3261	0.5	0.725	12.2	LOS B	12.9	324.3	0.54	0.55	0.82	29.1

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Roundabout LOS Method: Same as Sign Control.

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: US HCM 6.

HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.

Gap-Acceptance Capacity: Traditional M1.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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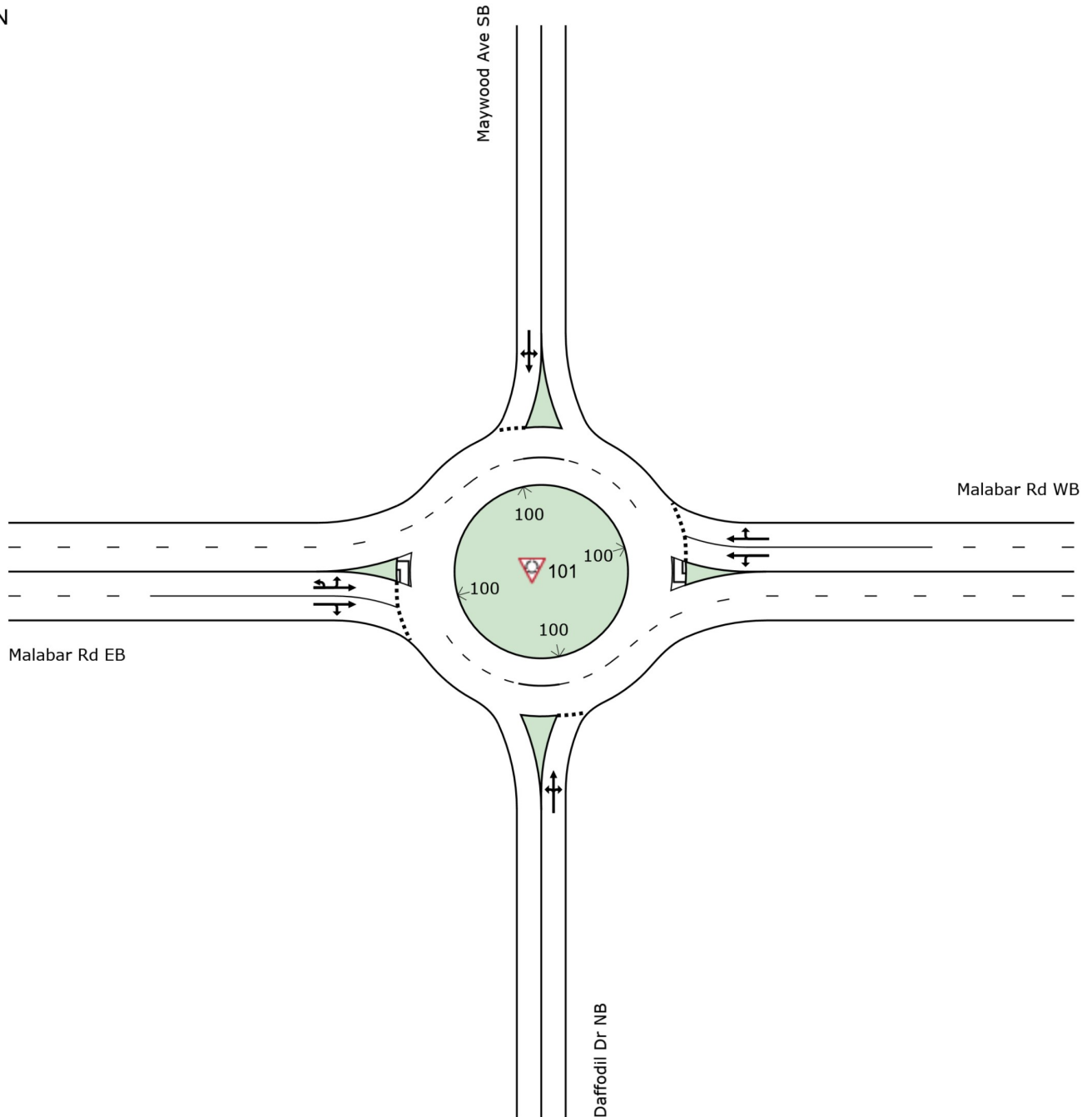
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Project: H:\23\23773 - Malabar Road PD&E Study\Engineering\Traffic\SIDRA\Garvey Road\Malabar Road and Garvey Road v2.sip8

SITE LAYOUT

Site: 101 [Malabar Road and Maywood Avenue/Daffodil Drive 2050 PM - 2x1]

2050 PM
2x1
HCM 6
Site Category: (None)
Roundabout



MOVEMENT SUMMARY

 Site: 101 [Malabar Road and Maywood Avenue/Daffodil Drive 2050 AM - 2x1]

2050 AM
2x1
HCM 6
Site Category: (None)
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back Vehicles veh	of Queue Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
South: Daffodil Dr NB												
3	L2	14	7.0	0.143	12.4	LOS B	0.5	11.5	0.76	0.76	0.76	31.2
8	T1	1	0.0	0.143	11.7	LOS B	0.5	11.5	0.76	0.76	0.76	31.2
18	R2	39	0.0	0.143	11.7	LOS B	0.5	11.5	0.76	0.76	0.76	30.5
Approach		54	1.8	0.143	11.9	LOS B	0.5	11.5	0.76	0.76	0.76	30.7
East: Malabar Rd WB												
1	L2	31	0.0	0.533	8.3	LOS A	4.1	103.6	0.21	0.07	0.21	30.9
6	T1	1353	2.0	0.533	8.3	LOS A	4.1	103.6	0.21	0.07	0.21	30.7
16	R2	56	5.0	0.533	8.4	LOS A	4.1	103.2	0.21	0.07	0.21	29.8
Approach		1440	2.1	0.533	8.3	LOS A	4.1	103.6	0.21	0.07	0.21	30.7
North: Maywood Ave SB												
7	L2	46	0.0	0.231	12.3	LOS B	0.8	19.3	0.75	0.76	0.76	30.6
4	T1	1	0.0	0.231	12.3	LOS B	0.8	19.3	0.75	0.76	0.76	30.4
14	R2	48	4.0	0.231	12.7	LOS B	0.8	19.3	0.75	0.76	0.76	29.6
Approach		95	2.0	0.231	12.5	LOS B	0.8	19.3	0.75	0.76	0.76	30.1
West: Malabar Rd EB												
5u	U	7	0.0	0.570	9.2	LOS A	4.5	114.1	0.36	0.18	0.36	32.5
5	L2	8	25.0	0.570	9.8	LOS A	4.5	114.1	0.36	0.18	0.36	30.3
2	T1	1463	1.0	0.570	9.2	LOS A	4.5	114.5	0.36	0.18	0.36	30.4
12	R2	13	0.0	0.570	9.1	LOS A	4.5	114.5	0.36	0.18	0.36	29.5
Approach		1491	1.1	0.570	9.2	LOS A	4.5	114.5	0.36	0.18	0.36	30.4
All Vehicles		3080	1.6	0.570	8.9	LOS A	4.5	114.5	0.31	0.16	0.31	30.5

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Roundabout LOS Method: Same as Sign Control.

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: US HCM 6.

HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.

Gap-Acceptance Capacity: Traditional M1.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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Project: H:\23\23773 - Malabar Road PD&E Study\Engineering\Traffic\SIDRA\Maywood Avenue-Daffodil Drive\Malabar Road and Maywood Avenue-Daffodil Drive.sip8

MOVEMENT SUMMARY

 Site: 101 [Malabar Road and Maywood Avenue/Daffodil Drive 2050 PM - 2x1]

2050 PM

2x1

HCM 6

Site Category: (None)

Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
South: Daffodil Dr NB												
3	L2	7	0.0	0.094	11.4	LOS B	0.3	7.4	0.76	0.76	0.76	31.7
8	T1	1	0.0	0.094	11.4	LOS B	0.3	7.4	0.76	0.76	0.76	31.5
18	R2	26	0.0	0.094	11.4	LOS B	0.3	7.4	0.76	0.76	0.76	30.7
Approach		34	0.0	0.094	11.4	LOS B	0.3	7.4	0.76	0.76	0.76	30.9
East: Malabar Rd WB												
1	L2	44	0.0	0.550	8.4	LOS A	4.6	114.9	0.17	0.05	0.17	30.8
6	T1	1408	0.0	0.550	8.4	LOS A	4.6	114.9	0.17	0.05	0.17	30.6
16	R2	81	0.0	0.550	8.4	LOS A	4.6	114.9	0.17	0.05	0.17	29.8
Approach		1533	0.0	0.550	8.4	LOS A	4.6	114.9	0.17	0.05	0.17	30.6
North: Maywood Ave SB												
7	L2	55	2.0	0.271	13.6	LOS B	0.9	23.8	0.77	0.80	0.87	30.1
4	T1	1	0.0	0.271	13.4	LOS B	0.9	23.8	0.77	0.80	0.87	30.0
14	R2	54	0.0	0.271	13.4	LOS B	0.9	23.8	0.77	0.80	0.87	29.3
Approach		110	1.0	0.271	13.5	LOS B	0.9	23.8	0.77	0.80	0.87	29.7
West: Malabar Rd EB												
5u	U	3	0.0	0.601	9.9	LOS A	4.9	124.6	0.44	0.24	0.44	32.2
5	L2	8	13.0	0.601	10.3	LOS B	4.9	124.6	0.44	0.24	0.44	30.1
2	T1	1523	1.0	0.601	9.9	LOS A	5.0	124.8	0.44	0.24	0.44	30.1
12	R2	5	0.0	0.601	9.9	LOS A	5.0	124.8	0.44	0.24	0.44	29.2
Approach		1539	1.1	0.601	9.9	LOS A	5.0	124.8	0.44	0.24	0.44	30.1
All Vehicles		3216	0.5	0.601	9.4	LOS A	5.0	124.8	0.32	0.18	0.33	30.3

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Roundabout LOS Method: Same as Sign Control.

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: US HCM 6.

HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.

Gap-Acceptance Capacity: Traditional M1.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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Project: H:\23\23773 - Malabar Road PD&E Study\Engineering\Traffic\SIDRA\Maywood Avenue-Daffodil Drive\Malabar Road and Maywood Avenue-Daffodil Drive.sip8

APPENDIX X – FUTURE BUILD SEGMENT OPERATIONS REPORTS

Contained in this Appendix –

- 2030 Build Interrupted Segment Analysis
- 2050 Build Interrupted Segment Analysis

2030 BUILD INTERRUPTED SEGMENT ANALYSIS

Arterial Level of Service: EB Malabar Rd.

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
St. Johns Heritage P	II	39	25.9	3.1	29.0	0.22	27.9	C
Wisteria Ave.	II	39	81.0	33.9	114.9	0.87	27.2	C
Krassner Dr./ Bendin	II	45	38.8	24.2	63.0	0.41	23.6	C
Hurley Blvd.	II	45	43.3	21.3	64.6	0.49	27.4	C
Jupiter Blvd.	II	45	57.1	50.3	107.4	0.71	23.9	C
Garvey Rd.	II	45	46.1	1.4	47.5	0.52	39.7	A
Maywood Ave./Daffodi	II	45	42.6	6.4	49.0	0.48	35.5	A
Plaza Entrance	II	31	41.9	15.9	57.8	0.33	20.6	D
Minton Rd.	II	35	18.3	56.9	75.2	0.15	7.0	F
Total	II		395.0	213.4	608.4	4.20	24.8	C

Arterial Level of Service: WB Malabar Rd.

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Minton Rd.	II	35	19.5	46.8	66.3	0.16	8.5	F
Plaza Entrance	II	35	18.3	4.9	23.2	0.15	22.7	C
Maywood Ave./Daffodi	II	45	31.7	4.2	35.9	0.33	33.1	B
Garvey Rd.	II	45	42.6	1.0	43.6	0.48	39.9	A
Jupiter Blvd.	II	45	46.1	33.8	79.9	0.52	23.6	C
Hurley Blvd.	II	45	57.1	10.2	67.3	0.71	38.2	A
Krassner Dr./ Bendin	II	45	43.3	11.9	55.2	0.49	32.1	B
Wisteria Ave.	II	35	43.3	23.9	67.2	0.41	22.1	C
St. Johns Heritage P	II	35	89.3	3.6	92.9	0.87	33.6	B
Total	II		391.2	140.3	531.5	4.13	28.0	C

Arterial Level of Service: EB Malabar Rd.

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
St. Johns Heritage P	II	39	25.6	6.7	32.3	0.22	24.8	C
Wisteria Ave.	II	39	81.3	13.5	94.8	0.87	33.1	B
Krassner Dr./ Bendin	II	45	38.3	8.5	46.8	0.41	31.3	B
Hurley Blvd.	II	45	43.1	15.1	58.2	0.49	30.3	B
Jupiter Blvd.	II	45	57.1	28.1	85.2	0.71	30.2	B
Garvey Rd.	II	45	42.2	0.8	43.0	0.53	44.2	A
Maywood Ave./Daffodi	II	45	42.3	4.3	46.6	0.48	37.1	A
Plaza Entrance	II	31	42.3	6.6	48.9	0.33	24.5	C
Minton Rd.	II	35	17.3	60.6	77.9	0.14	6.4	F
Total	II		389.5	144.2	533.7	4.19	28.2	B

Arterial Level of Service: WB Malabar Rd.

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Minton Rd.	II	35	19.5	53.1	72.6	0.16	7.7	F
Plaza Entrance	II	35	17.3	7.3	24.6	0.14	20.2	D
Maywood Ave./Daffodi	II	45	32.0	13.2	45.2	0.33	26.5	C
Garvey Rd.	II	45	42.3	1.8	44.1	0.48	39.2	A
Jupiter Blvd.	II	45	42.2	29.3	71.5	0.53	26.6	C
Hurley Blvd.	II	45	57.1	15.0	72.1	0.71	35.7	A
Krassner Dr./ Bendin	II	45	43.1	6.8	49.9	0.49	35.4	A
Wisteria Ave.	II	35	42.8	10.6	53.4	0.41	27.5	C
St. Johns Heritage P	II	35	89.7	5.7	95.4	0.87	32.9	B
Total	II		386.0	142.8	528.8	4.12	28.1	B

Malabar 2050 Build Signalized Segment Analysis

Eastbound AM										
Base Free Flow Speed Calculation						Travel Speed as Percent of BFFS				
Link	S_0	S_{min}	f_{cs}	f_a	f_{pk}	S_{10}	Using Synchro Travel Speed			
$S_0 = S_0 + S_{caltb} + f_{cs} + f_a + f_{pk}$							S_{10}	Synchro Speed	P_{arrs}	LOS
St. Johns Heritage Pkwy. - Wisteria Ave./Abilene Dr	46.8	0.0	-2.7	-0.2	0.0	43.9	43.9	27.2	62.0%	C
Wisteria Ave./Abilene Dr. - Krassner Dr./Bending Branch Ln.	46.8	0.0	-2.7	0.0	0.0	44.1	44.1	23.6	53.5%	C
Krassner Dr./Bending Branch Ln. - Hurley Blvd.	46.8	0.0	-2.7	-0.2	0.0	43.9	43.9	27.4	62.4%	C
Hurley Blvd. - Jupiter Blvd.	46.8	0.0	-2.7	-0.3	0.0	43.8	43.8	23.9	54.6%	C
Jupiter Blvd. - Garvey Rd.	46.8	0.0	-2.7	-0.8	0.0	43.4	43.4	39.7	91.5%	A
Garvey Rd. - Maywood Ave./Daffodil Dr.	46.8	0.0	-2.7	-0.2	0.0	44.0	44.0	35.5	80.8%	A
Maywood Ave./Daffodil Dr. - Plaza Entrance	43.9	0.0	-2.7	-0.9	0.0	40.4	40.4	20.6	51.0%	C
Plaza Entrance - Minton Rd.	42.1	0.0	-2.7	-1.3	0.0	38.1	38.1	7.0	18.4%	F
Facility Segment LOS										
Extra Calculations										
Link	Posted Speed	Length	Travel Direction Access Points	Opposing Direction Access Points	Center Median Length	P w/ CM	Curb	P w/ Curb	On Street Parking	P w/ OSP
St. Johns Heritage Pkwy. - Wisteria Ave./Abilene Dr	45	0.87	2	3	0.87	1.00	0.87	1.00	0.00	0.00
Wisteria Ave./Abilene Dr. - Krassner Dr./Bending Branch Ln.	45	0.42	0	0	0.42	1.00	0.42	1.00	0.00	0.00
Krassner Dr./Bending Branch Ln. - Hurley Blvd.	45	0.49	2	1	0.49	1.00	0.49	1.00	0.00	0.00
Hurley Blvd. - Jupiter Blvd.	45	0.71	2	4	0.71	1.00	0.71	1.00	0.00	0.00
Jupiter Blvd. - Garvey Rd.	45	0.53	6	6	0.53	1.00	0.53	1.00	0.00	0.00
Garvey Rd. - Maywood Ave./Daffodil Dr.	45	0.48	2	0	0.48	1.00	0.48	1.00	0.00	0.00
Maywood Ave./Daffodil Dr. - Plaza Entrance	35/45	0.33	4	3	0.33	1.00	0.33	1.00	0.00	0.00
Plaza Entrance - Minton Rd.	35	0.14	2	2	0.14	1.00	0.14	1.00	0.00	0.00

Westbound AM										
Base Free Flow Speed Calculation						Travel Speed as Percent of BFFS				
Link	S_0	S_{min}	f_{cs}	f_a	f_{pk}	S_{10}	Using Synchro Travel Speed			
$S_0 = S_0 + S_{caltb} + f_{cs} + f_a + f_{pk}$							S_{10}	Synchro Speed	P_{arrs}	LOS
St. Johns Heritage Pkwy. - Wisteria Ave./Abilene Dr	46.8	0.0	-2.7	-0.2	0.0	43.9	43.9	22.1	50.3%	C
Wisteria Ave./Abilene Dr. - Krassner Dr./Bending Branch Ln.	46.8	0.0	-2.7	0.0	0.0	44.1	44.1	32.1	72.7%	B
Krassner Dr./Bending Branch Ln. - Hurley Blvd.	46.8	0.0	-2.7	-0.2	0.0	43.9	43.9	38.7	87.1%	A
Hurley Blvd. - Jupiter Blvd.	46.8	0.0	-2.7	-0.3	0.0	43.8	43.8	23.6	53.9%	C
Jupiter Blvd. - Garvey Rd.	46.8	0.0	-2.7	-0.8	0.0	43.4	43.4	39.9	92.0%	A
Garvey Rd. - Maywood Ave./Daffodil Dr.	46.8	0.0	-2.7	-0.2	0.0	44.0	44.0	33.1	75.3%	B
Maywood Ave./Daffodil Dr. - Plaza Entrance	43.9	0.0	-2.7	-0.9	0.0	40.4	40.4	22.7	56.2%	C
Plaza Entrance - Minton Rd.	42.1	0.0	-2.7	-1.3	0.0	38.1	38.1	8.5	22.3%	F
Facility Segment LOS										
Extra Calculations										
Link	Posted Speed	Length	Travel Direction Access Points	Opposing Direction Access Points	Center Median Length	P w/ CM	Curb	P w/ Curb	On Street Parking	P w/ OSP
St. Johns Heritage Pkwy. - Wisteria Ave./Abilene Dr	45	0.87	2	3	0.87	1.00	0.87	1.00	0.00	0.00
Wisteria Ave./Abilene Dr. - Krassner Dr./Bending Branch Ln.	45	0.42	0	0	0.42	1.00	0.42	1.00	0.00	0.00
Krassner Dr./Bending Branch Ln. - Hurley Blvd.	45	0.49	1	2	0.49	1.00	0.49	1.00	0.00	0.00
Hurley Blvd. - Jupiter Blvd.	45	0.71	2	4	0.71	1.00	0.71	1.00	0.00	0.00
Jupiter Blvd. - Garvey Rd.	45	0.53	6	6	0.53	1.00	0.53	1.00	0.00	0.00
Garvey Rd. - Maywood Ave./Daffodil Dr.	45	0.48	2	0	0.48	1.00	0.48	1.00	0.00	0.00
Maywood Ave./Daffodil Dr. - Plaza Entrance	35/45	0.33	3	4	0.33	1.00	0.33	1.00	0.00	0.00
Plaza Entrance - Minton Rd.	35	0.14	2	2	0.14	1.00	0.14	1.00	0.00	0.00

Eastbound PM										
Base Free Flow Speed Calculation						Travel Speed as Percent of BFFS				
Link	S_0	S_{min}	f_{cs}	f_a	f_{pk}	S_{10}	Using Synchro Travel Speed			
$S_0 = S_0 + S_{caltb} + f_{cs} + f_a + f_{pk}$							S_{10}	Synchro Speed	P_{arrs}	LOS
St. Johns Heritage Pkwy. - Wisteria Ave./Abilene Dr	46.8	0.0	-2.7	-0.2	0.0	43.9	43.9	33.1	75.4%	B
Wisteria Ave./Abilene Dr. - Krassner Dr./Bending Branch Ln.	46.8	0.0	-2.7	0.0	0.0	44.1	44.1	31.3	70.9%	B
Krassner Dr./Bending Branch Ln. - Hurley Blvd.	46.8	0.0	-2.7	-0.2	0.0	43.9	43.9	30.3	69.0%	B
Hurley Blvd. - Jupiter Blvd.	46.8	0.0	-2.7	-0.3	0.0	43.8	43.8	30.2	69.0%	B
Jupiter Blvd. - Garvey Rd.	46.8	0.0	-2.7	-0.8	0.0	43.4	43.4	44.2	101.9%	A
Garvey Rd. - Maywood Ave./Daffodil Dr.	46.8	0.0	-2.7	-0.2	0.0	44.0	44.0	37.1	84.4%	A
Maywood Ave./Daffodil Dr. - Plaza Entrance	43.9	0.0	-2.7	-0.9	0.0	40.4	40.4	24.5	60.7%	C
Plaza Entrance - Minton Rd.	42.1	0.0	-2.7	-1.3	0.0	38.1	38.1	6.4	16.8%	F
Facility Segment LOS										
Extra Calculations										
Link	Posted Speed	Length	Travel Direction Access Points	Opposing Direction Access Points	Center Median Length	P w/ CM	Curb	P w/ Curb	On Street Parking	P w/ OSP
St. Johns Heritage Pkwy. - Wisteria Ave./Abilene Dr	45	0.87	2	3	0.87	1.00	0.87	1.00	0.00	0.00
Wisteria Ave./Abilene Dr. - Krassner Dr./Bending Branch Ln.	45	0.42	0	0	0.42	1.00	0.42	1.00	0.00	0.00
Krassner Dr./Bending Branch Ln. - Hurley Blvd.	45	0.49	2	1	0.49	1.00	0.49	1.00	0.00	0.00
Hurley Blvd. - Jupiter Blvd.	45	0.71	2	4	0.71	1.00	0.71	1.00	0.00	0.00
Jupiter Blvd. - Garvey Rd.	45	0.53	6	6	0.53	1.00	0.53	1.00	0.00	0.00
Garvey Rd. - Maywood Ave./Daffodil Dr.	45	0.48	2	0	0.48	1.00	0.48	1.00	0.00	0.00
Maywood Ave./Daffodil Dr. - Plaza Entrance	35/45	0.33	4	3	0.33	1.00	0.33	1.00	0.00	0.00
Plaza Entrance - Minton Rd.	35	0.14	2	2	0.14	1.00	0.14	1.00	0.00	0.00

Westbound PM										
Base Free Flow Speed Calculation						Travel Speed as Percent of BFFS				
Link	S_0	S_{min}	f_{cs}	f_a	f_{pk}	S_{10}	Using Synchro Travel Speed			
$S_0 = S_0 + S_{caltb} + f_{cs} + f_a + f_{pk}$							S_{10}	Synchro Speed	P_{arrs}	LOS
St. Johns Heritage Pkwy. - Wisteria Ave./Abilene Dr	46.8	0.0	-2.7	-0.2	0.0	43.9	43.9	27.5	62.6%	C
Wisteria Ave./Abilene Dr. - Krassner Dr./Bending Branch Ln.	46.8	0.0	-2.7	0.0	0.0	44.1	44.1	35.4	80.2%	A
Krassner Dr./Bending Branch Ln. - Hurley Blvd.	46.8	0.0	-2.7	-0.2	0.0	43.9	43.9	35.7	81.4%	A
Hurley Blvd. - Jupiter Blvd.	46.8	0.0	-2.7	-0.3	0.0	43.8	43.8	26.6	60.7%	C
Jupiter Blvd. - Garvey Rd.	46.8	0.0	-2.7	-0.8	0.0	43.4	43.4	39.2	90.4%	A
Garvey Rd. - Maywood Ave./Daffodil Dr.	46.8	0.0	-2.7	-0.2	0.0	44.0	44.0	26.5	60.3%	C
Maywood Ave./Daffodil Dr. - Plaza Entrance	43.9	0.0	-2.7	-0.9	0.0	40.4	40.4	20.2	50.1%	C
Plaza Entrance - Minton Rd.	42.1	0.0	-2.7	-1.3	0.0	38.1	38.1	7.7	20.2%	F
Facility Segment LOS										
Extra Calculations										
Link	Posted Speed	Length	Travel Direction Access Points	Opposing Direction Access Points	Center Median Length	P w/ CM	Curb	P w/ Curb	On Street Parking	P w/ OSP
St. Johns Heritage Pkwy. - Wisteria Ave./Abilene Dr	45	0.87	3	2	0.87	1.00	0.87	1.00	0.00	0.00
Wisteria Ave./Abilene Dr. - Krassner Dr./Bending Branch Ln.	45	0.42	0	0	0.42	1.00	0.42	1.00	0.00	0.00
Krassner Dr./Bending Branch Ln. - Hurley Blvd.	45	0.49	1	2	0.49	1.00	0.49	1.00	0.00	0.00
Hurley Blvd. - Jupiter Blvd.	45	0.71	2	4	0.71	1.00	0.71	1.00	0.00	0.00
Jupiter Blvd. - Garvey Rd.	45	0.53	4	6	0.53	1.00	0.53	1.00	0.00	0.00
Garvey Rd. - Maywood Ave./Daffodil Dr.	45	0.48	0	2	0.48	1.00	0.48	1.00	0.00	0.00
Maywood Ave./Daffodil Dr. - Plaza Entrance	35/45	0.33	3	4	0.33	1.00	0.33	1.00	0.00	0.00
Plaza Entrance - Minton Rd.	35	0.14	2	2	0.14	1.00	0.14	1.00	0.00	0.00

2050 BUILD INTERRUPTED SEGMENT ANALYSIS

Arterial Level of Service: EB Malabar Rd.

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
St. Johns Heritage P	II	39	25.6	33.5	59.1	0.22	13.6	E
Wisteria Ave.	II	39	81.1	18.8	99.9	0.87	31.4	B
Krassner Dr./ Bendin	II	45	38.8	21.9	60.7	0.41	24.5	C
Hurley Blvd.	II	45	42.9	23.9	66.8	0.49	26.2	C
Jupiter Blvd.	II	45	57.0	50.2	107.2	0.71	23.9	C
Garvey Rd.	II	45	42.7	16.6	59.3	0.53	32.4	B
Maywood Ave./Daffodi	II	45	41.8	4.7	46.5	0.48	36.8	A
Plaza Entrance	II	31	42.8	10.9	53.7	0.34	22.6	C
Minton Rd.	II	35	18.3	76.5	94.8	0.15	5.6	F
Total	II		391.0	257.0	648.0	4.20	23.3	C

Arterial Level of Service: WB Malabar Rd.

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Minton Rd.	II	35	19.5	65.0	84.5	0.16	6.6	F
Plaza Entrance	II	35	18.3	2.8	21.1	0.15	24.9	C
Maywood Ave./Daffodi	II	45	32.4	10.5	42.9	0.34	28.3	B
Garvey Rd.	II	45	41.8	2.7	44.5	0.48	38.4	A
Jupiter Blvd.	II	45	42.7	42.0	84.7	0.53	22.7	C
Hurley Blvd.	II	45	57.0	12.6	69.6	0.71	36.9	A
Krassner Dr./ Bendin	II	45	42.9	22.6	65.5	0.49	26.8	C
Wisteria Ave.	II	35	43.4	22.4	65.8	0.41	22.6	C
St. Johns Heritage P	II	35	89.6	50.1	139.7	0.87	22.5	C
Total	II		387.6	230.7	618.3	4.13	24.1	C

Arterial Level of Service: EB Malabar Rd.

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
St. Johns Heritage P	II	39	25.4	72.8	98.2	0.22	8.1	F
Wisteria Ave.	II	39	81.4	18.1	99.5	0.87	31.6	B
Krassner Dr./ Bendin	II	45	38.7	11.1	49.8	0.41	29.7	B
Hurley Blvd.	II	45	42.9	12.3	55.2	0.49	31.8	B
Jupiter Blvd.	II	45	57.0	37.0	94.0	0.71	27.3	C
Garvey Rd.	II	45	42.6	12.4	55.0	0.53	34.9	B
Maywood Ave./Daffodi	II	45	42.0	5.4	47.4	0.48	36.2	A
Plaza Entrance	II	31	42.0	12.2	54.2	0.33	22.0	D
Minton Rd.	II	35	17.8	51.7	69.5	0.14	7.4	F
Total	II		389.8	233.0	622.8	4.19	24.2	C

Arterial Level of Service: WB Malabar Rd.

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Minton Rd.	II	35	19.5	92.6	112.1	0.16	5.0	F
Plaza Entrance	II	35	17.8	5.7	23.5	0.14	21.8	D
Maywood Ave./Daffodi	II	45	31.8	1.6	33.4	0.33	35.7	A
Garvey Rd.	II	45	42.0	9.5	51.5	0.48	33.4	B
Jupiter Blvd.	II	45	42.6	16.0	58.6	0.53	32.7	B
Hurley Blvd.	II	45	57.0	7.5	64.5	0.71	39.7	A
Krassner Dr./ Bendin	II	45	42.9	12.1	55.0	0.49	31.9	B
Wisteria Ave.	II	35	43.2	7.8	51.0	0.41	29.0	B
St. Johns Heritage P	II	35	89.9	80.9	170.8	0.87	18.4	D
Total	II		386.7	233.7	620.4	4.12	23.9	C

Malabar 2050 Build Signalized Segment Analysis

Eastbound AM											
Base Free Flow Speed Calculation					Travel Speed as Percent of BFFS						
Link	S_0	S_{min}	f_{cs}	f_a	f_{pk}	S_{10}	Link	S_{10}	Synchro Speed	P_{arrs}	LOS
$S_{10} = S_0 + S_{caltib} + f_{cs} + f_a + f_{pk}$					Using Synchro Travel Speed						
St. Johns Heritage Pkwy. - Wisteria Ave./Abilene Dr	46.8	0.0	-2.7	-0.2	0.0	43.9	St. Johns Heritage Pkwy. - Wisteria Ave./Abilene Dr	43.9	31.4	71.5%	B
Wisteria Ave./Abilene Dr. - Krassner Dr./Bending Branch Ln.	46.8	0.0	-2.7	0.0	0.0	44.1	Wisteria Ave./Abilene Dr. - Krassner Dr./Bending Branch Ln.	44.1	24.5	55.5%	C
Krassner Dr./Bending Branch Ln. - Hurley Blvd.	46.8	0.0	-2.7	-0.2	0.0	43.9	Krassner Dr./Bending Branch Ln. - Hurley Blvd.	43.9	26.2	59.7%	C
Hurley Blvd. - Jupiter Blvd.	46.8	0.0	-2.7	-0.3	0.0	43.8	Hurley Blvd. - Jupiter Blvd.	43.8	23.9	54.6%	C
Jupiter Blvd. - Garvey Rd.	46.8	0.0	-2.7	-0.8	0.0	43.4	Jupiter Blvd. - Garvey Rd.	43.4	32.4	74.7%	B
Garvey Rd. - Maywood Ave./Daffodil Dr.	46.8	0.0	-2.7	-0.2	0.0	44.0	Garvey Rd. - Maywood Ave./Daffodil Dr.	44.0	36.8	83.7%	A
Maywood Ave./Daffodil Dr. - Plaza Entrance	43.9	0.0	-2.7	-0.9	0.0	40.4	Maywood Ave./Daffodil Dr. - Plaza Entrance	40.4	22.6	56.0%	C
Plaza Entrance - Minton Rd.	42.1	0.0	-2.7	-1.3	0.0	38.1	Plaza Entrance - Minton Rd.	38.1	5.6	14.7%	F
Facility Segment LOS											
58.8% C											
Extra Calculations											
Link	Posted Speed	Length	Travel Direction Access Points	Opposing Direction Access Points	Center Median Length	P w/ CM	Curb	P w/ Curb	On Street Parking	P w/ OSP	
St. Johns Heritage Pkwy. - Wisteria Ave./Abilene Dr	45	0.87	2	3	0.87	1.00	0.87	1.00	0.00	0.00	
Wisteria Ave./Abilene Dr. - Krassner Dr./Bending Branch Ln.	45	0.42	0	0	0.42	1.00	0.42	1.00	0.00	0.00	
Krassner Dr./Bending Branch Ln. - Hurley Blvd.	45	0.49	2	1	0.49	1.00	0.49	1.00	0.00	0.00	
Hurley Blvd. - Jupiter Blvd.	45	0.71	2	4	0.71	1.00	0.71	1.00	0.00	0.00	
Jupiter Blvd. - Garvey Rd.	45	0.53	6	6	0.53	1.00	0.53	1.00	0.00	0.00	
Garvey Rd. - Maywood Ave./Daffodil Dr.	45	0.48	2	0	0.48	1.00	0.48	1.00	0.00	0.00	
Maywood Ave./Daffodil Dr. - Plaza Entrance	35/45	0.33	4	3	0.33	1.00	0.33	1.00	0.00	0.00	
Plaza Entrance - Minton Rd.	35	0.14	2	2	0.14	1.00	0.14	1.00	0.00	0.00	

Westbound AM											
Base Free Flow Speed Calculation					Travel Speed as Percent of BFFS						
Link	S_0	S_{min}	f_{cs}	f_a	f_{pk}	S_{10}	Link	S_{10}	Synchro Speed	P_{arrs}	LOS
$S_{10} = S_0 + S_{caltib} + f_{cs} + f_a + f_{pk}$					Using Synchro Travel Speed						
St. Johns Heritage Pkwy. - Wisteria Ave./Abilene Dr	46.8	0.0	-2.7	-0.2	0.0	43.9	St. Johns Heritage Pkwy. - Wisteria Ave./Abilene Dr	43.9	22.6	51.5%	C
Wisteria Ave./Abilene Dr. - Krassner Dr./Bending Branch Ln.	46.8	0.0	-2.7	0.0	0.0	44.1	Wisteria Ave./Abilene Dr. - Krassner Dr./Bending Branch Ln.	44.1	26.8	60.7%	C
Krassner Dr./Bending Branch Ln. - Hurley Blvd.	46.8	0.0	-2.7	-0.2	0.0	43.9	Krassner Dr./Bending Branch Ln. - Hurley Blvd.	43.9	26.9	84.1%	A
Hurley Blvd. - Jupiter Blvd.	46.8	0.0	-2.7	-0.3	0.0	43.8	Hurley Blvd. - Jupiter Blvd.	43.8	22.7	51.8%	C
Jupiter Blvd. - Garvey Rd.	46.8	0.0	-2.7	-0.8	0.0	43.4	Jupiter Blvd. - Garvey Rd.	43.4	38.4	88.5%	A
Garvey Rd. - Maywood Ave./Daffodil Dr.	46.8	0.0	-2.7	-0.2	0.0	44.0	Garvey Rd. - Maywood Ave./Daffodil Dr.	44.0	28.3	64.4%	C
Maywood Ave./Daffodil Dr. - Plaza Entrance	43.9	0.0	-2.7	-0.9	0.0	40.4	Maywood Ave./Daffodil Dr. - Plaza Entrance	40.4	24.9	61.7%	C
Plaza Entrance - Minton Rd.	42.1	0.0	-2.7	-1.3	0.0	38.1	Plaza Entrance - Minton Rd.	38.1	6.6	17.3%	F
Facility Segment LOS											
60.0% C											
Extra Calculations											
Link	Posted Speed	Length	Travel Direction Access Points	Opposing Direction Access Points	Center Median Length	P w/ CM	Curb	P w/ Curb	On Street Parking	P w/ OSP	
St. Johns Heritage Pkwy. - Wisteria Ave./Abilene Dr	45	0.87	2	3	0.87	1.00	0.87	1.00	0.00	0.00	
Wisteria Ave./Abilene Dr. - Krassner Dr./Bending Branch Ln.	45	0.42	0	0	0.42	1.00	0.42	1.00	0.00	0.00	
Krassner Dr./Bending Branch Ln. - Hurley Blvd.	45	0.49	1	2	0.49	1.00	0.49	1.00	0.00	0.00	
Hurley Blvd. - Jupiter Blvd.	45	0.71	2	4	0.71	1.00	0.71	1.00	0.00	0.00	
Jupiter Blvd. - Garvey Rd.	45	0.53	6	6	0.53	1.00	0.53	1.00	0.00	0.00	
Garvey Rd. - Maywood Ave./Daffodil Dr.	45	0.48	2	0	0.48	1.00	0.48	1.00	0.00	0.00	
Maywood Ave./Daffodil Dr. - Plaza Entrance	35/45	0.33	3	4	0.33	1.00	0.33	1.00	0.00	0.00	
Plaza Entrance - Minton Rd.	35	0.14	2	2	0.14	1.00	0.14	1.00	0.00	0.00	

Eastbound PM											
Base Free Flow Speed Calculation					Travel Speed as Percent of BFFS						
Link	S_0	S_{min}	f_{cs}	f_a	f_{pk}	S_{10}	Link	S_{10}	Synchro Speed	P_{arrs}	LOS
$S_{10} = S_0 + S_{caltib} + f_{cs} + f_a + f_{pk}$					Using Synchro Travel Speed						
St. Johns Heritage Pkwy. - Wisteria Ave./Abilene Dr	46.8	0.0	-2.7	-0.2	0.0	43.9	St. Johns Heritage Pkwy. - Wisteria Ave./Abilene Dr	43.9	31.6	72.0%	B
Wisteria Ave./Abilene Dr. - Krassner Dr./Bending Branch Ln.	46.8	0.0	-2.7	0.0	0.0	44.1	Wisteria Ave./Abilene Dr. - Krassner Dr./Bending Branch Ln.	44.1	29.7	67.3%	B
Krassner Dr./Bending Branch Ln. - Hurley Blvd.	46.8	0.0	-2.7	-0.2	0.0	43.9	Krassner Dr./Bending Branch Ln. - Hurley Blvd.	43.9	31.8	72.5%	B
Hurley Blvd. - Jupiter Blvd.	46.8	0.0	-2.7	-0.3	0.0	43.8	Hurley Blvd. - Jupiter Blvd.	43.8	27.3	62.3%	C
Jupiter Blvd. - Garvey Rd.	46.8	0.0	-2.7	-0.8	0.0	43.4	Jupiter Blvd. - Garvey Rd.	43.4	34.9	80.5%	A
Garvey Rd. - Maywood Ave./Daffodil Dr.	46.8	0.0	-2.7	-0.2	0.0	44.0	Garvey Rd. - Maywood Ave./Daffodil Dr.	44.0	36.2	82.3%	A
Maywood Ave./Daffodil Dr. - Plaza Entrance	43.9	0.0	-2.7	-0.9	0.0	40.4	Maywood Ave./Daffodil Dr. - Plaza Entrance	40.4	22.0	54.5%	C
Plaza Entrance - Minton Rd.	42.1	0.0	-2.7	-1.3	0.0	38.1	Plaza Entrance - Minton Rd.	38.1	7.4	19.4%	F
Facility Segment LOS											
63.9% C											
Extra Calculations											
Link	Posted Speed	Length	Travel Direction Access Points	Opposing Direction Access Points	Center Median Length	P w/ CM	Curb	P w/ Curb	On Street Parking	P w/ OSP	
St. Johns Heritage Pkwy. - Wisteria Ave./Abilene Dr	45	0.87	2	3	0.87	1.00	0.87	1.00	0.00	0.00	
Wisteria Ave./Abilene Dr. - Krassner Dr./Bending Branch Ln.	45	0.42	0	0	0.42	1.00	0.42	1.00	0.00	0.00	
Krassner Dr./Bending Branch Ln. - Hurley Blvd.	45	0.49	2	1	0.49	1.00	0.49	1.00	0.00	0.00	
Hurley Blvd. - Jupiter Blvd.	45	0.71	2	4	0.71	1.00	0.71	1.00	0.00	0.00	
Jupiter Blvd. - Garvey Rd.	45	0.53	6	6	0.53	1.00	0.53	1.00	0.00	0.00	
Garvey Rd. - Maywood Ave./Daffodil Dr.	45	0.48	2	0	0.48	1.00	0.48	1.00	0.00	0.00	
Maywood Ave./Daffodil Dr. - Plaza Entrance	35/45	0.33	4	3	0.33	1.00	0.33	1.00	0.00	0.00	
Plaza Entrance - Minton Rd.	35	0.14	2	2	0.14	1.00	0.14	1.00	0.00	0.00	

Westbound PM											
Base Free Flow Speed Calculation					Travel Speed as Percent of BFFS						
Link	S_0	S_{min}	f_{cs}	f_a	f_{pk}	S_{10}	Link	S_{10}	Synchro Speed	P_{arrs}	LOS
$S_{10} = S_0 + S_{caltib} + f_{cs} + f_a + f_{pk}$					Using Synchro Travel Speed						
St. Johns Heritage Pkwy. - Wisteria Ave./Abilene Dr	46.8	0.0	-2.7	-0.2	0.0	43.9	St. Johns Heritage Pkwy. - Wisteria Ave./Abilene Dr	43.9	29.0	66.1%	C
Wisteria Ave./Abilene Dr. - Krassner Dr./Bending Branch Ln.	46.8	0.0	-2.7	0.0	0.0	44.1	Wisteria Ave./Abilene Dr. - Krassner Dr./Bending Branch Ln.	44.1	31.9	72.3%	B
Krassner Dr./Bending Branch Ln. - Hurley Blvd.	46.8	0.0	-2.7	-0.2	0.0	43.9	Krassner Dr./Bending Branch Ln. - Hurley Blvd.	43.9	39.7	90.5%	A
Hurley Blvd. - Jupiter Blvd.	46.8	0.0	-2.7	-0.3	0.0	43.8	Hurley Blvd. - Jupiter Blvd.	43.8	32.7	74.7%	B
Jupiter Blvd. - Garvey Rd.	46.8	0.0	-2.7	-0.8	0.0	43.4	Jupiter Blvd. - Garvey Rd.	43.4	33.4	77.0%	B
Garvey Rd. - Maywood Ave./Daffodil Dr.	46.8	0.0	-2.7	-0.2	0.0	44.0	Garvey Rd. - Maywood Ave./Daffodil Dr.	44.0	35.7	81.2%	A
Maywood Ave./Daffodil Dr. - Plaza Entrance	43.9	0.0	-2.7	-0.9	0.0	40.4	Maywood Ave./Daffodil Dr. - Plaza Entrance	40.4	21.8	54.0%	C
Plaza Entrance - Minton Rd.	42.1	0.0	-2.7	-1.3	0.0	38.1	Plaza Entrance - Minton Rd.	38.1	5.0	13.1%	F
Facility Segment LOS											
66.1% C											
Extra Calculations											
Link	Posted Speed	Length	Travel Direction Access Points	Opposing Direction Access Points	Center Median Length	P w/ CM	Curb	P w/ Curb	On Street Parking	P w/ OSP	
St. Johns Heritage Pkwy. - Wisteria Ave./Abilene Dr	45	0.87	3	2	0.87	1.00	0.87	1.00	0.00	0.00	
Wisteria Ave./Abilene Dr. - Krassner Dr./Bending Branch Ln.	45	0.42	0	0	0.42	1.00	0.42	1.00	0.00	0.00	
Krassner Dr./Bending Branch Ln. - Hurley Blvd.	45	0.49	1	2	0.49	1.00	0.49	1.00	0.00	0.00	
Hurley Blvd. - Jupiter Blvd.	45	0.71	2	4	0.71	1.00	0.71	1.00	0.00	0.00	
Jupiter Blvd. - Garvey Rd.	45	0.53	4	6	0.53	1.00	0.53	1.00	0.00	0.00	
Garvey Rd. - Maywood Ave./Daffodil Dr.	45	0.48	0	2	0.48	1.00	0.48	1.00	0.00	0.00	
Maywood Ave./Daffodil Dr. - Plaza Entrance	35/45	0.33	3	4	0.33	1.00	0.33	1.00	0.00	0.00	
Plaza Entrance - Minton Rd.	35	0.14	2	2	0.14	1.00	0.14	1.00	0.00	0.00	