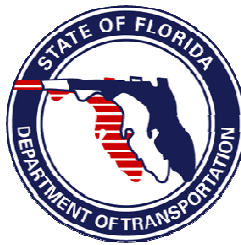


FINAL
TRAFFIC TECHNICAL MEMORANDUM

SR 55 (US 19)
(Pinellas County Line To Hernando County Line)

PD&E STUDY

Pasco County, Florida



Prepared for:

Florida Department of Transportation
11201 North McKinley Drive
Tampa, Florida 33612

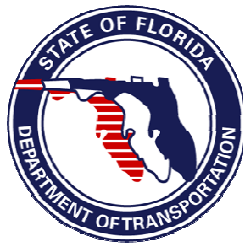
January 2007

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Prepared By



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January 2007

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SECTION 1.0

INTRODUCTION

1.1 INTRODUCTION

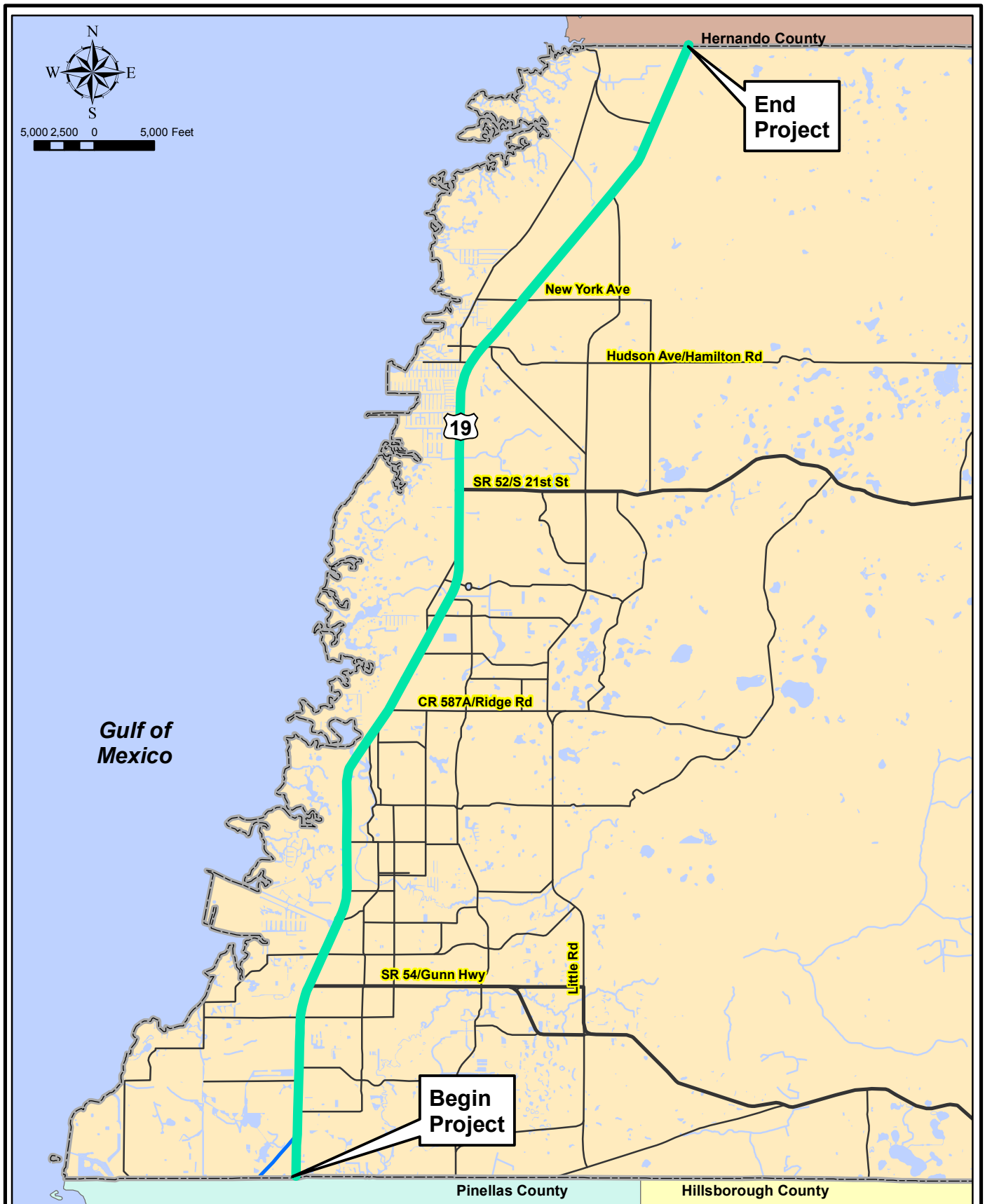
The Florida Department of Transportation (FDOT) is conducting a Project Development and Environment (PD&E) Study to evaluate capacity alternative improvements along SR 55 (US 19) in Pasco County. The project limits are from the Pinellas County Line (south project limits) to the Hernando County Line (north project limits). The project location map as shown on **Exhibit 1**, illustrates the location and limits of the PD&E Study.

1.2 PURPOSE AND NEED

This Traffic Technical Memorandum (TTM) has been prepared as part of a FDOT PD&E Study for the proposed Continuous Right Turn Lane (CRTL) improvements to SR 55 (US 19) in Pasco County. The objective of the PD&E Study is to provide documented environmental and engineering analyses that will assist the FDOT and Federal Highway Administration (FHWA) in reaching a decision on the location and conceptual design for improvements to SR 55 (US 19). This particular report documents the following items:

- The existing year (2006) and design year (2030) traffic conditions
- The development of traffic parameters for the estimation of annual average daily traffic (AADT) and design hour volumes (DHV)
- Capacity and Level of Service (LOS) analysis of the design alternatives for this project

The PD&E Study also satisfies the requirements of the National Environmental Policy Act (NEPA) and FHWA, in order for this project to qualify for federal-aid funding of its subsequent phases (design, right-of-way [R/W] acquisition and construction). This TTM is one component of the overall SR 55 (US 19) PD&E Study.



 SR 55 (US 19) from Pinellas County Line to Hernando County Line	PROJECT LOCATION MAP	EXHIBIT 1
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1.3 PROJECT DESCRIPTION

SR 55 (US 19) is a federal highway that initially served regional travel throughout the west coast of Florida. Due to the tremendous residential and commercial growth along the corridor over the past twenty years, the role of SR 55 (US 19) in Pasco County has expanded. SR 55 (US 19) has evolved into a commuter corridor and a roadway for local traffic destined to commercial establishments along the corridor. The high speed, high volume commuter traffic competes with tourist and local traffic entering and exiting the roadway creating mobility and safety concerns.

This project involves evaluating various capacity improvements and documenting the proposed access management plan to the existing SR 55 (US 19) corridor. SR 55 (US 19) currently exists as a six-lane facility and there are significant right-of-way constraints along the corridor. Therefore, the various capacity evaluation improvements do not include any additional through lanes but do include evaluating a Continuous Right-Turn Lane (CRTL) in both directions throughout the entire length of the project corridor. Additional capacity evaluations include Transportation System Management (TSM) improvements and potential interchanges at the SR 55 (US 19) intersections of SR 54, Ridge Road, SR 52 and County Line Road.

The project study limits are from the Pinellas County Line (southern limits) to the Hernando County Line (northern limits). The entire project study area is within Pasco County. SR 55 (US 19) in Pasco County is a 19.7 mile long controlled access facility and is part of the Florida Intrastate Highway System (FIHS) and Strategic Intermodal System (SIS). Along this facility there are currently 29 signalized intersections and approximately 820 driveways and unsignalized cross streets, 102 full median openings and 22 directional median openings.

The SR 55 (US 19) study area in Pasco County is considered to be a part of the Tampa-St. Petersburg Urbanized Area. This urbanized area had a year 2002 estimated population of over 2.1 million. Therefore, the SR 55 (US 19) study facility is designated as being in an urbanized area with over 500,000 population. The importance of this

designation is that the FIHS minimum LOS standards are based on facility type, area type and population.

Existing (2006) traffic volumes on SR 55 (US 19) in Pasco County range from 58,800 to 78,100 AADT from the Pinellas County line to SR 52 and from 33,300 to 51,100 AADT from SR 52 to the Hernando County line. Future increases in travel demand for SR 55 (US 19) in Pasco County anticipated in the latest version of the Tampa Bay Regional Planning Model (TBRPM 5.1) are expected to be moderate compared to historical trends due to the land uses approaching buildout, particularly in the southern portion of the project limits. In addition, in recent years, north-south parallel facilities like CR 1 have been improved (2 to 6 lanes) and a new facility, the Suncoast Expressway has come online to provide increase capacity for the north-south travel through western Pasco County. The northern portion of SR 55 (US 19) will more than likely see more aggressive growth due to potential developable vacant land. It is anticipated that the existing traffic volumes in the northern section, which are significantly lower than in the southern section will approach the magnitude of traffic volumes that currently exist in the southern portion of the project.

Safety issues for motorists and pedestrians have been a concern along SR 55 (US 19) in Pasco County. The crash rate along this facility has been consistently higher than the statewide average for similar facility types. Ongoing projects designed to improve safety include the installation of additional street lighting, sidewalks, pedestrian push buttons and cross walks, block number sign program and the continuation of education and enforcement activities.

Access management issues documented in this study have implications for safety and traffic operations as well. Potential solutions that address access management issues include conversion of existing full median openings to directional median openings, closure of median openings and reduction of curb cuts (driveways) through the implementation of joint and cross access for adjacent commercial developments.

Upcoming Projects

Current and scheduled projects along SR 55 (US 19) in Pasco County that will improve safety and traffic operations include:

Advanced Traffic Management System (ATMS) and Closed Circuit Television (CCTV) Project

- Stage I
Limits: Flora Avenue to Main Street
Status: Completed (07/22/2005)
- Stage II
Limits: Main Street to Beacon Woods Drive
Status: May 2006 letting date
- Stage III
Limits: Beacon Woods Drive to County Line Road
Status: May 2006 letting date

Sidewalk Project

- Existing Sidewalk
Limits: Marine Parkway to Stone Road
Status: Existing
- New Sidewalk - Programmed
Limits: Pinellas County Line to Sunray Drive
Status: Construction completed (06/13/2006)

Limits: Sunray Drive to SR 54 (Sunray Drive to Marine Parkway to be constructed with CRTL project)
Status: Programmed for construction in 2008

Limits: SR 54 to Marine Parkway
Status: Programmed for construction in 2008
- New Sidewalk - Programmed
Limits: Stone Road to County Line Road
Status: Proposed Only

Access Management Study

Limits: Pinellas County Line to Hernando County Line
Status: Completed

Lighting Project

- Upgrade Existing Lighting
Limits: Charlene Lane to Ridge Road
Status: FDOT design in progress
- New Lighting - Programmed
Limits: Pinellas County Line to Charlene Road
Status: Completed (08/01/2005)
- New Lighting - Programmed
Limits: Springer Road to SR 52
Status: Completed (08/01/2005)
- New Lighting - Programmed
Limits: SR 52 to Denton Avenue
Status: Completed (08/01/2005)

Block Number Signing Program

Limits: Entire Length
Status: Completed

Pedestrian Push Button and Cross Walks at Signalized Intersections

Locations: Continental Drive, Darlington Road, Sunray Drive, Floramar Terrace, Scenic Drive, Ranch Road/Hammock Road and Hudson Avenue

Status: Installation of pedestrian equipment at these locations is part of four separate SR 55 (US 19) improvement contracts.

Other

Location: Adding westbound left-turn lane on Marine Parkway
Status: Under review

SECTION 2.0

EXISTING CONDITIONS

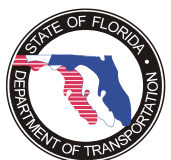
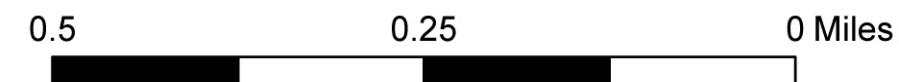
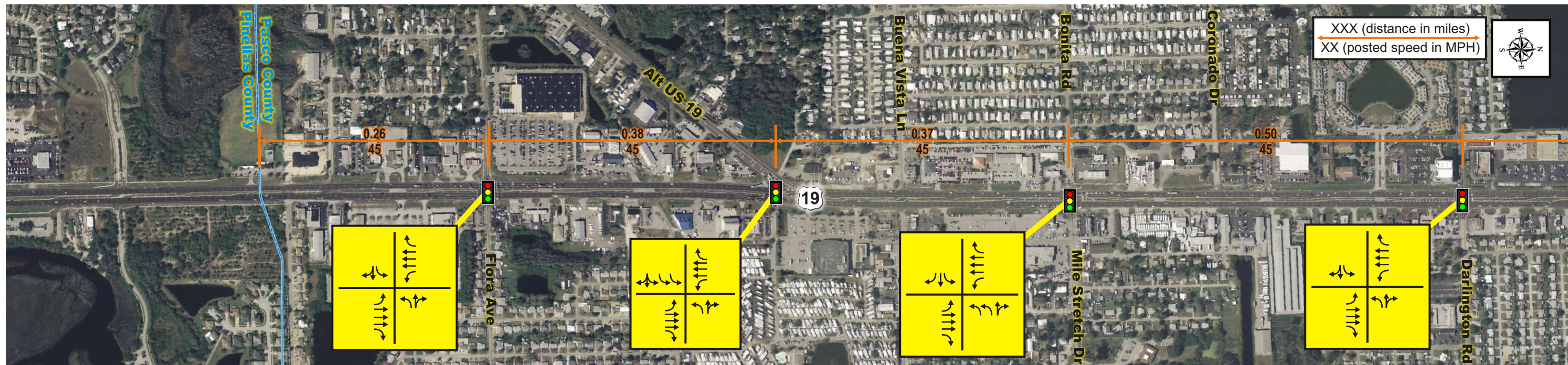
2.1 ROADWAY AND INTERSECTION CHARACTERISTICS

The existing SR 55 (US 19) arterial between the Pinellas County Line and the Hernando County Line is a six-lane arterial. The total length of the SR 55 (US 19) study corridor is 19.7 miles. The posted speed limit on SR 55 (US 19) is 45 miles per hour (mph) between the Pinellas County Line and SR 52, 50 mph between SR 52 and Hudson Avenue and 55 mph from Hudson Avenue to County Line Road. The existing year (2006) SR 55 (US 19) arterial signalized intersection locations, arterial segment distances, posted speed limits and intersection lane geometry are shown on **Exhibits 2A-2F**.

2.2 COLLECTION OF TRAFFIC DATA

Field traffic counts collected for this project include 72-hour intersection approach tube counts and 8-hour manual turning movement counts at signalized intersections. All the 72-hour intersection approach tube counts and most of the 8-hour manual turning movement traffic counts were conducted all in the same week, Tuesday through Thursday, March 14-16, 2006. The manual turning movement counts were not collected at eight signalized intersections where previously collected 8-hour manual turning movement counts were available. The 8-hour manual turning movement counts were conducted for the AM, PM and Mid-Day peak hours. Traffic count data collected was used in evaluating the existing corridor level of service (LOS), design year Tampa Bay Regional Planning Model (TBRPM 5.1) traffic projections and developing existing and design year design hour intersection turning movement volumes. The collected field traffic count sheets are included in separate traffic count documents previously submitted to the FDOT for their review and approval.

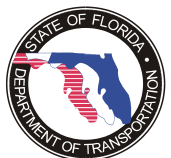
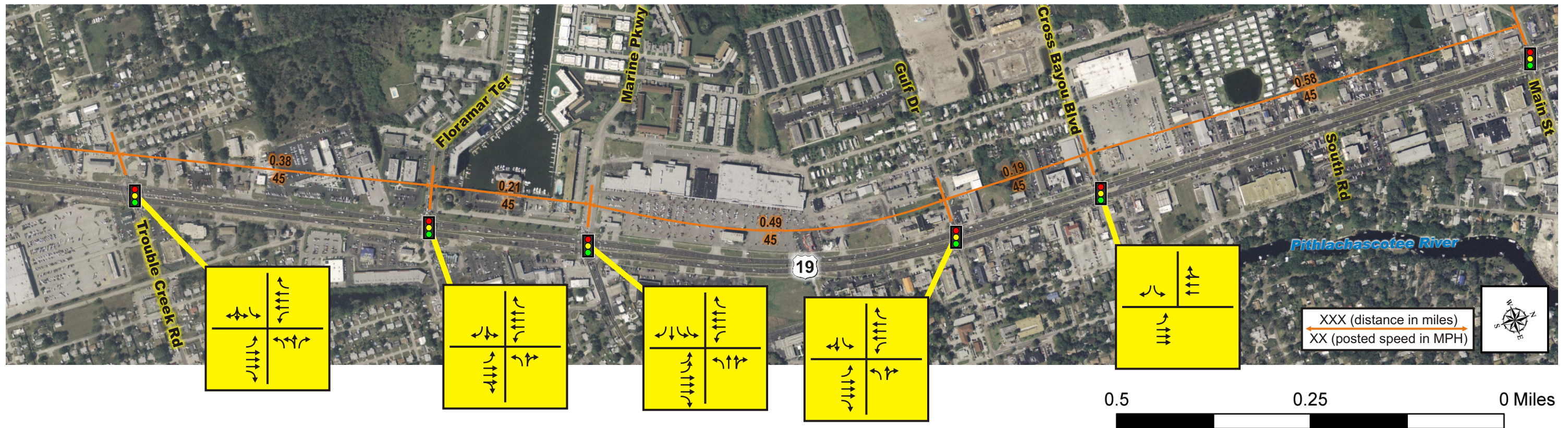
In addition to the traffic counts, existing intersection signal timing information was obtained from Pasco County and used for the traffic analyses. Signal timing and



SR 55 (US 19)
from Pinellas County Line
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EXISTING YEAR (2006) CORRIDOR LANE GEOMETRY

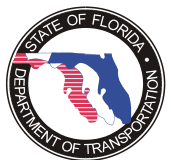
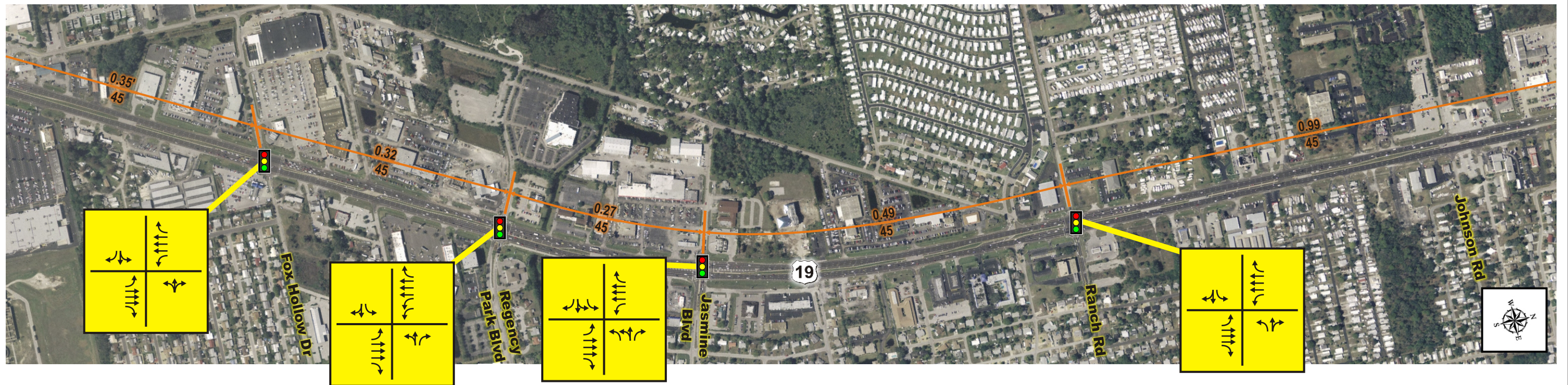
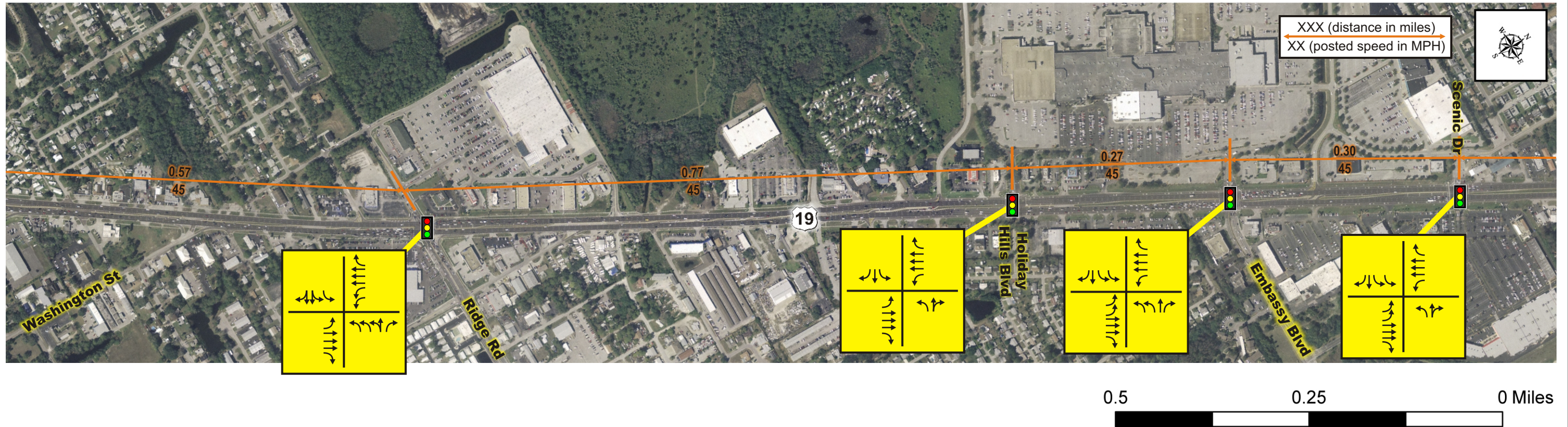
EXHIBIT 2A



SR 55 (US 19)
from Pinellas County Line
to Hernando County Line

EXISTING YEAR (2006) CORRIDOR LANE GEOMETRY

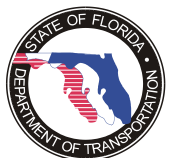
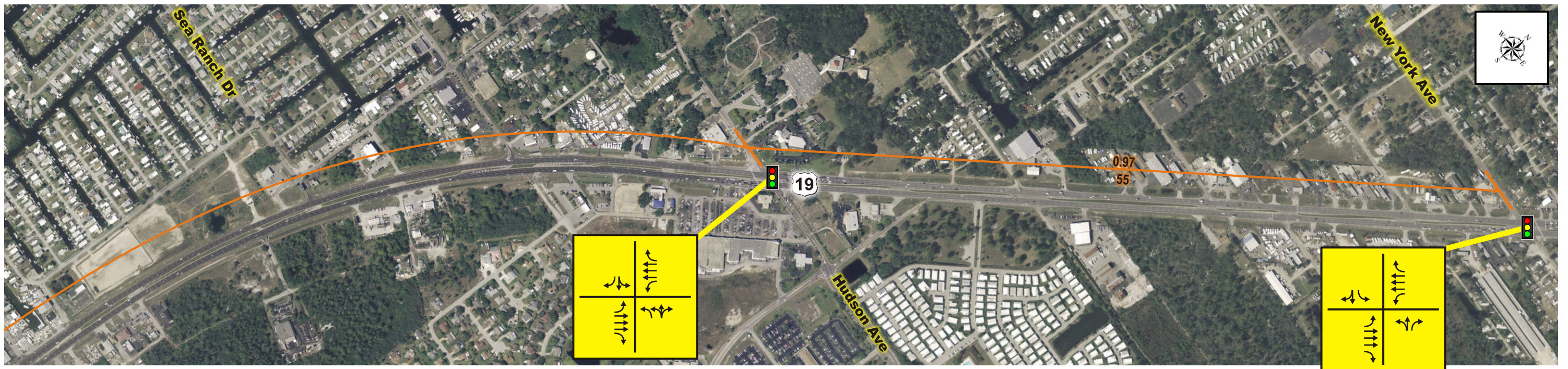
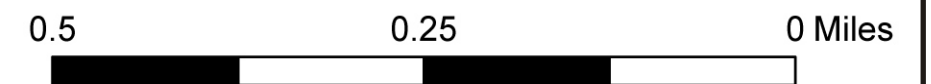
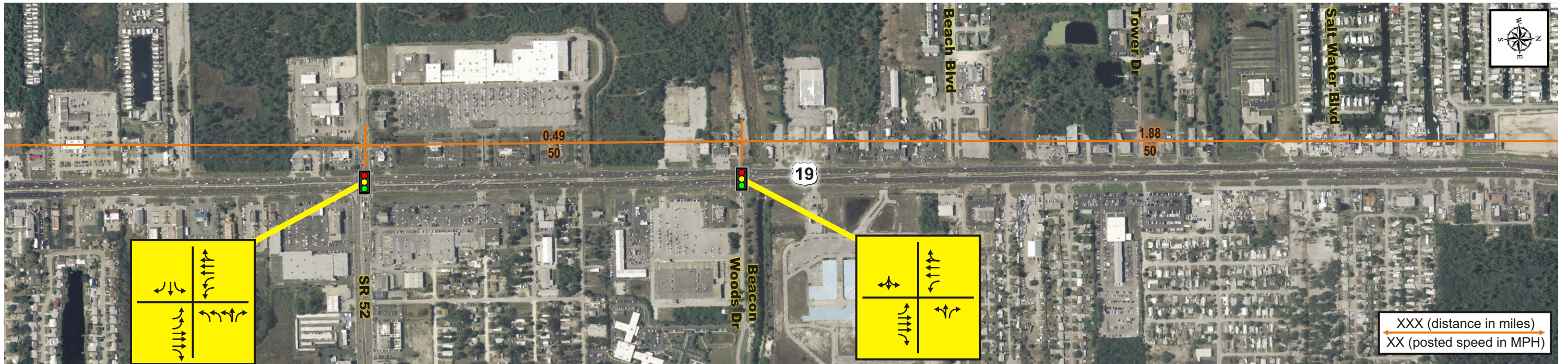
EXHIBIT 2B



SR 55 (US 19)
from Pinellas County Line
to Hernando County Line

EXISTING YEAR (2006) CORRIDOR LANE GEOMETRY

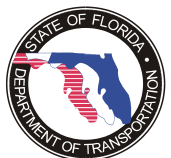
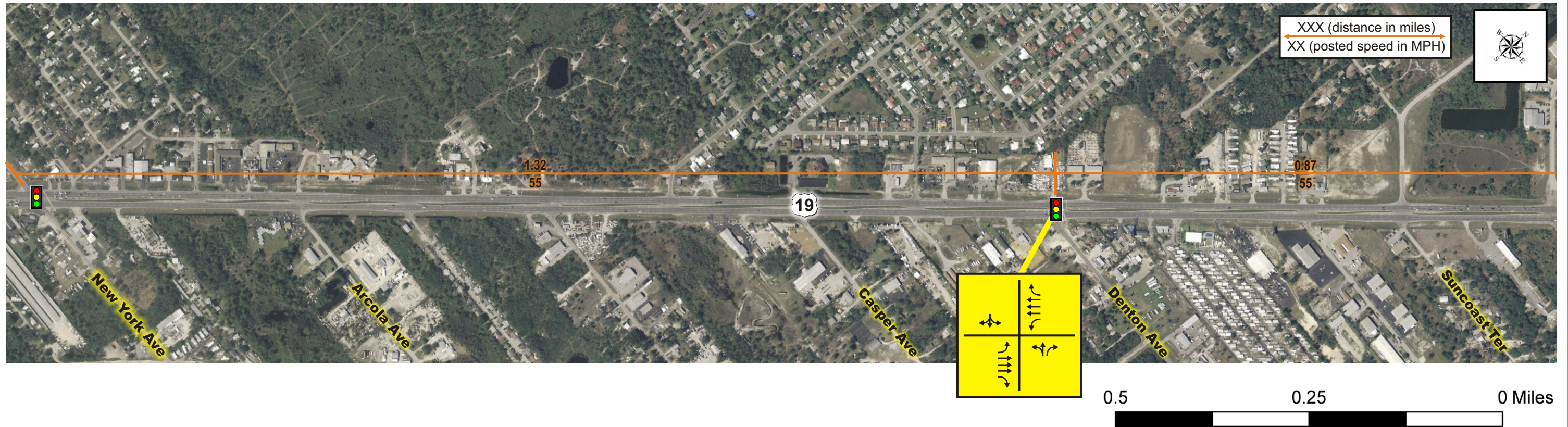
EXHIBIT 2C



SR 55 (US 19)
from Pinellas County Line
to Hernando County Line

EXISTING YEAR (2006) CORRIDOR LANE GEOMETRY

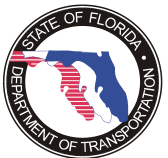
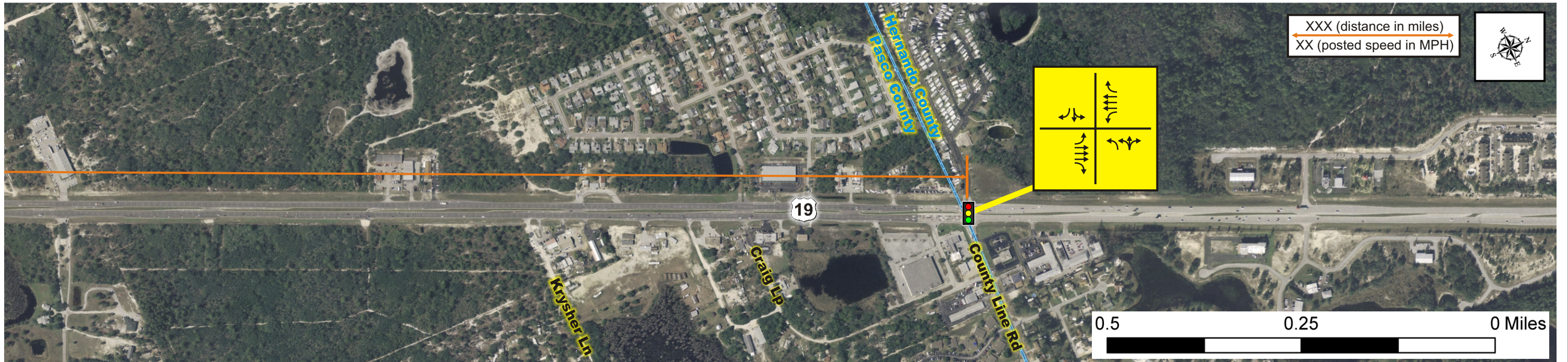
EXHIBIT 2D



SR 55 (US 19)
from Pinellas County Line
to Hernando County Line

EXISTING YEAR (2006) CORRIDOR LANE GEOMETRY

EXHIBIT 2E



SR 55 (US 19)
from Pinellas County Line
to Hernando County Line

EXISTING YEAR (2006) CORRIDOR LANE GEOMETRY

EXHIBIT 2F

coordination from Flora Avenue to Main Street is performed through the adaptive signal control software known as Sidney Coordinated Adaptive Traffic System (SCATS).

Signal cycle lengths change continuously in this system. The coordination from Main Street to Beacon Woods Drive with the exception of SR 52, which runs free, is based on time of day (TOD) coordination per Smartways software from Peek Traffic. All signals north of Beacon Woods Drive to County Line Road run free without any coordination. The collected signal timing information is included in **Appendix A** (under separate cover).

Other data that was used, were weekly seasonal adjustment factors and axle conversion factors to develop Annual Average Daily Traffic (AADT) volumes from field collected tube counts. These factors were obtained from the year 2004 Florida Department of Transportation (FDOT) Traffic Information CD. For the week (March 14, 2006 – March 16, 2006) the tube counts were collected, the seasonal adjustment factor and axle conversion factors obtained are as follows:

Seasonal Adjustment Factor = 0.93

Axle Conversion Factor -

Pinellas County Line to SR 52 = 0.99

SR 52 to Hernando County Line = 0.98

2.3 TRAFFIC PARAMETERS

The existing year (2006) and design year (2030) design hour volumes were estimated using the 30th highest hour K and D (K_{30} and D_{30}) factors. The recommended K, D, and T (Truck) factors were provided by FDOT District Seven. These factors were found reasonable for the corridor study area and are as follows:

$K_{30} = 9.52\%$

$D_{30} = 57.43\%$

T-Daily = 5.0%

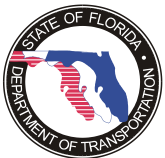
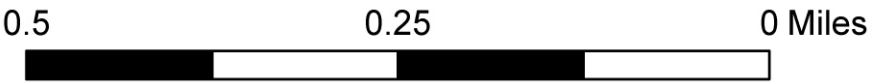
T-Design Hour = 2.5%

2.4 DEVELOPMENT OF EXISTING YEAR (2006) DESIGN HOUR VOLUMES

The existing year (2006) AADT volumes were estimated from the field collected 72-hour tube counts. From the average daily counts (ADT) obtained from the field collected 3-day tube counts, the AADT volumes were estimated by applying the seasonal adjustment factor and axle conversion factors obtained from the Year 2004 FDOT traffic Information CD. The estimated existing year (2006) AADT volumes are shown in **Exhibits 3A-3F**. The existing year (2006) directional design hour volumes (DDHV) were obtained by multiplying the AADT volumes first by the K_{30} factor of 9.52 percent and then by the D_{30} factor of 57.43 percent (peak direction). At signalized intersections, the AM and PM design peak hour intersection turning movement volumes were estimated by multiplying the directional design hour volumes by the AM and PM field collected manual turning movement percentages, respectively. The SR 55 (US 19) arterial and cross streets peak hour traffic peak directions were determined based on the collected field traffic count data. The developed existing year (2006), AM and PM design peak hour turning movement traffic volumes are shown on **Exhibits 4A-4F**.

2.5 EXISTING YEAR (2006) INTERSECTION LEVEL OF SERVICE ANALYSIS

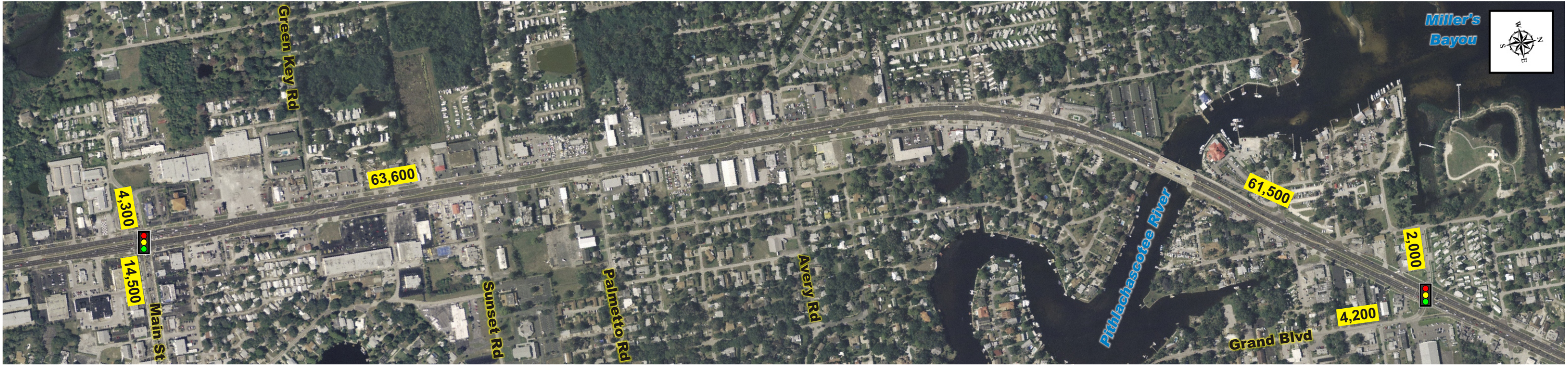
Signalized intersection LOS was estimated using the Highway Capacity Manual (HCM) methodology module of the Synchro software. In the analysis, existing year (2006) geometric conditions and design hour turning movement traffic volumes with respect to individual intersections were used. Existing signal timing information obtained from Pasco County was also used in the analysis. The analysis results for the signalized intersections are summarized in **Table 2-1** and shown on **Exhibits 5A-5F**. The existing year (2006) Synchro intersection analysis sheets are included in **Appendix B** (under separate cover).

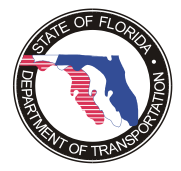


SR 55 (US 19)
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EXISTING YEAR (2006) AADT

EXHIBIT 3A

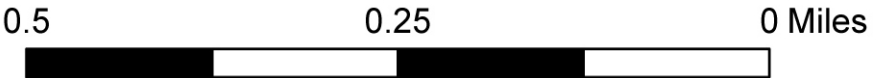




SR 55 (US 19)
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to Hernando County Line

EXISTING YEAR (2006) AADT

EXHIBIT 3C





SR 55 (US 19)
from Pinellas County Line
to Hernando County Line

EXISTING YEAR (2006) AADT

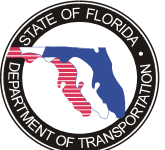
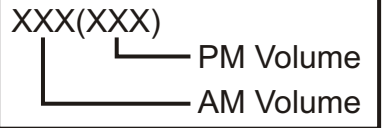
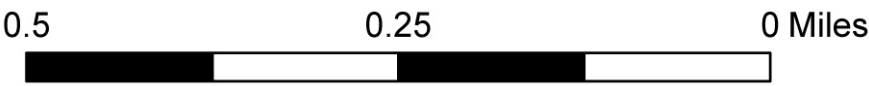
EXHIBIT 3E



SR 55 (US 19)
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to Hernando County Line

EXISTING YEAR (2006) AADT

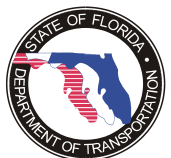
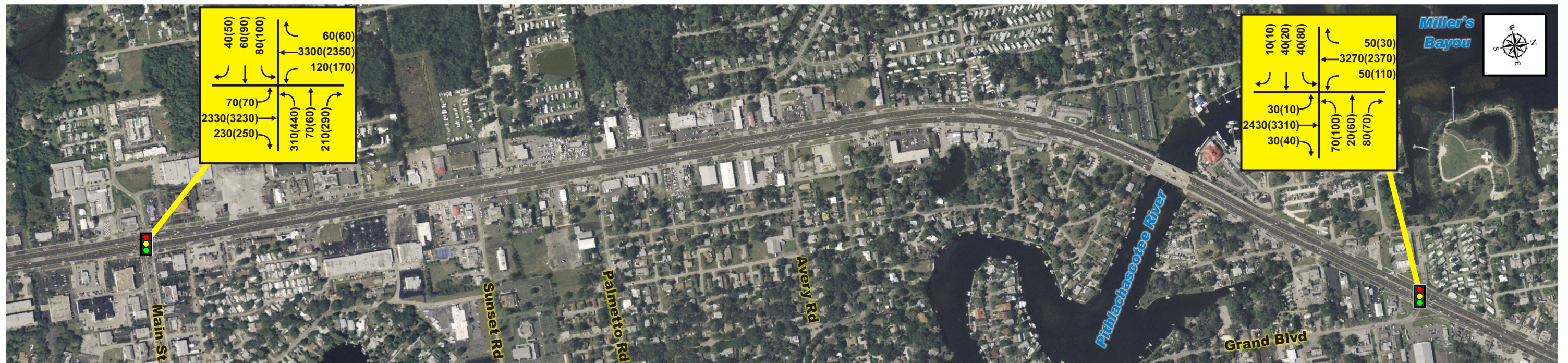
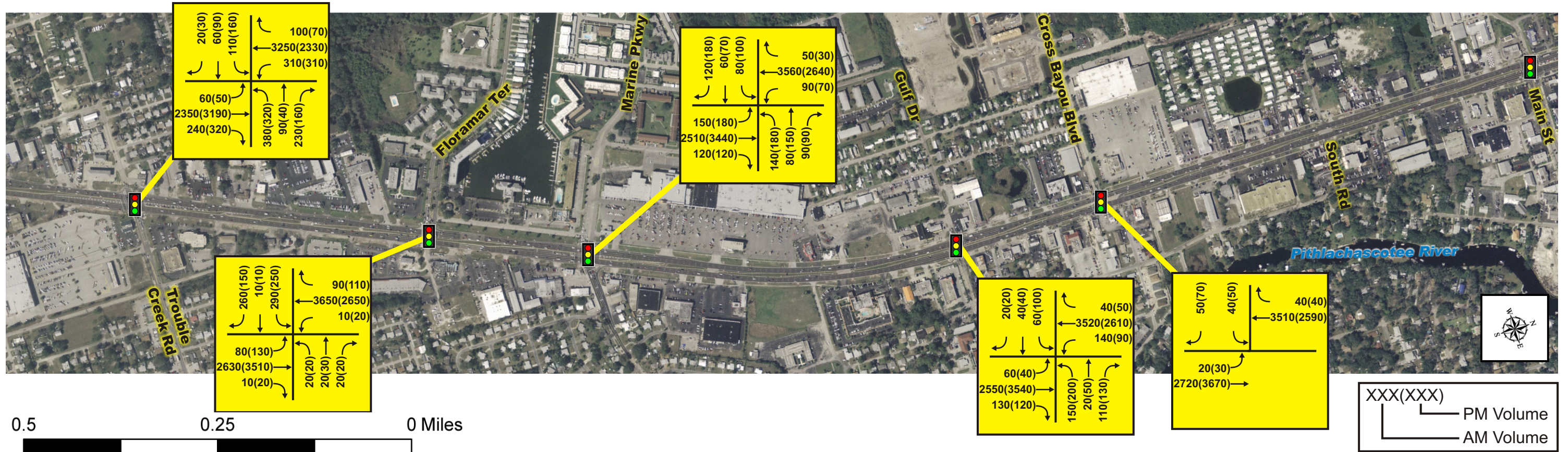
EXHIBIT 3F



SR 55 (US 19)
from Pinellas County Line
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EXISTING YEAR (2006) TURNING MOVEMENT VOLUMES

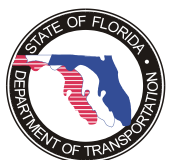
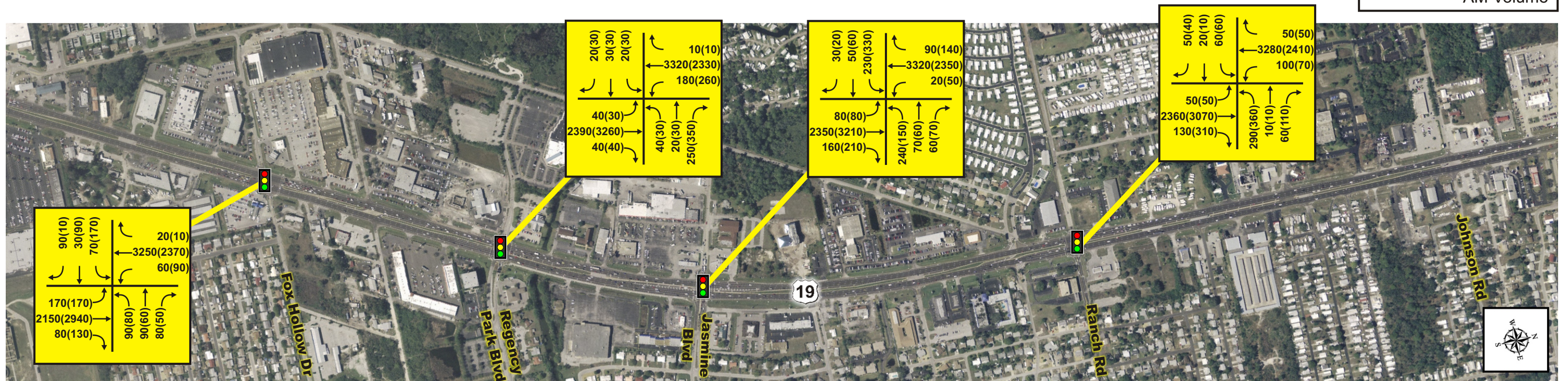
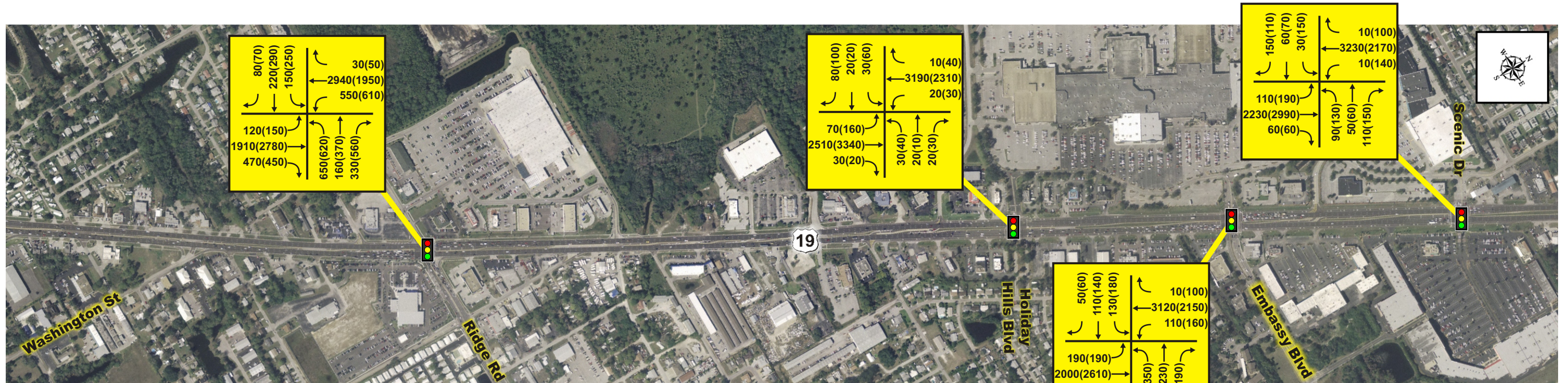
EXHIBIT 4A



SR 55 (US 19)
from Pinellas County Line
to Hernando County Line

EXISTING YEAR (2006) TURNING MOVEMENT VOLUMES

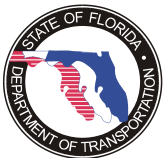
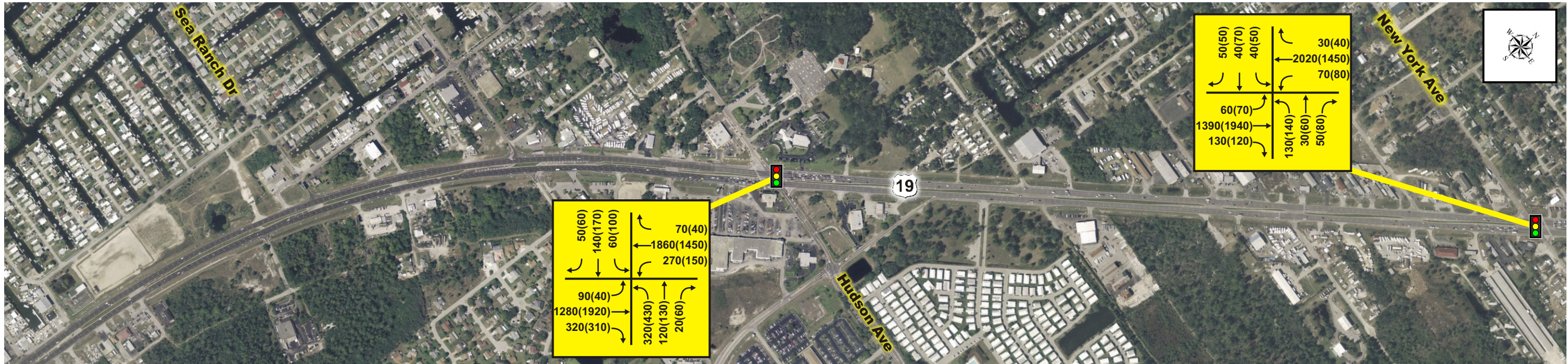
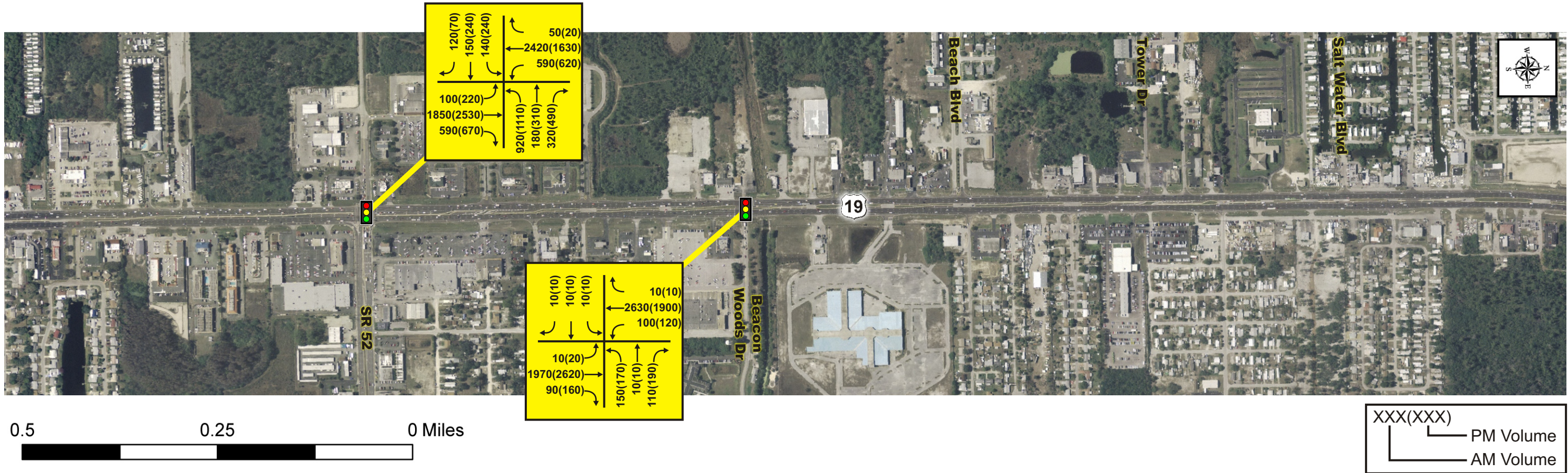
EXHIBIT 4B



SR 55 (US 19)
 from Pinellas County Line
 to Hernando County Line

EXISTING YEAR (2006) TURNING MOVEMENT VOLUMES

EXHIBIT 4C



SR 55 (US 19)
from Pinellas County Line
to Hernando County Line

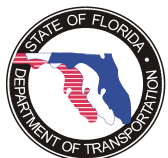
EXISTING YEAR (2006) TURNING MOVEMENT VOLUMES

EXHIBIT 4D



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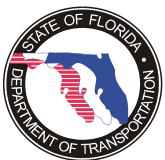
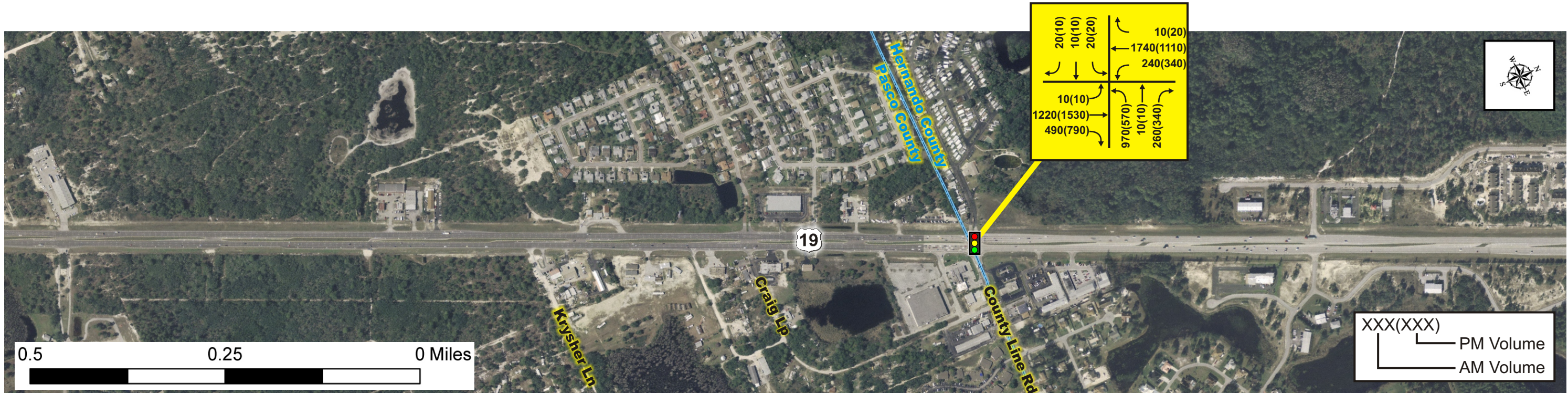
XXX(XXX)
PM Volume
AM Volume



SR 55 (US 19)
from Pinellas County Line
to Hernando County Line

EXISTING YEAR (2006) TURNING MOVEMENT VOLUMES

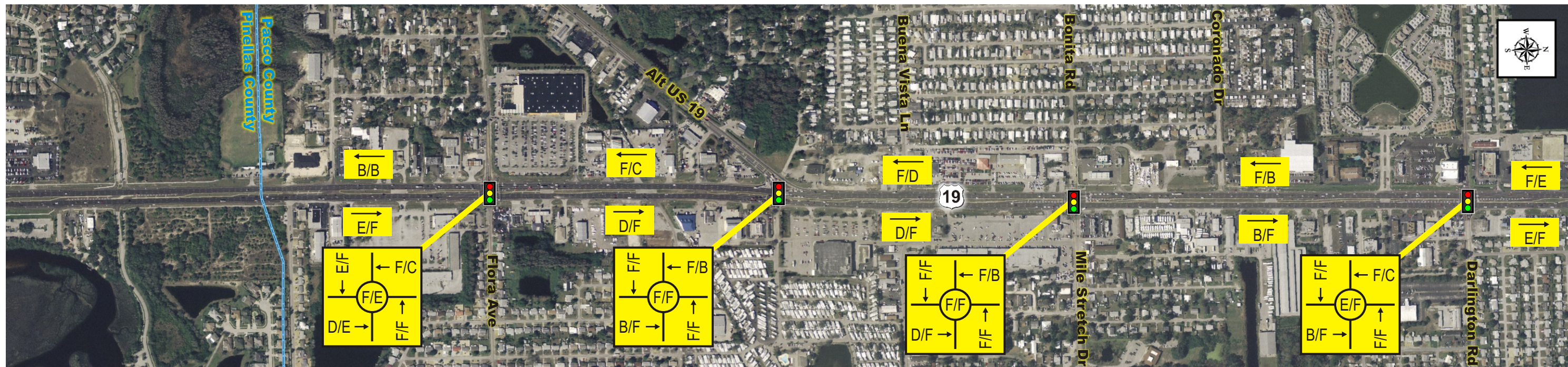
EXHIBIT 4E



SR 55 (US 19)
from Pinellas County Line
to Hernando County Line

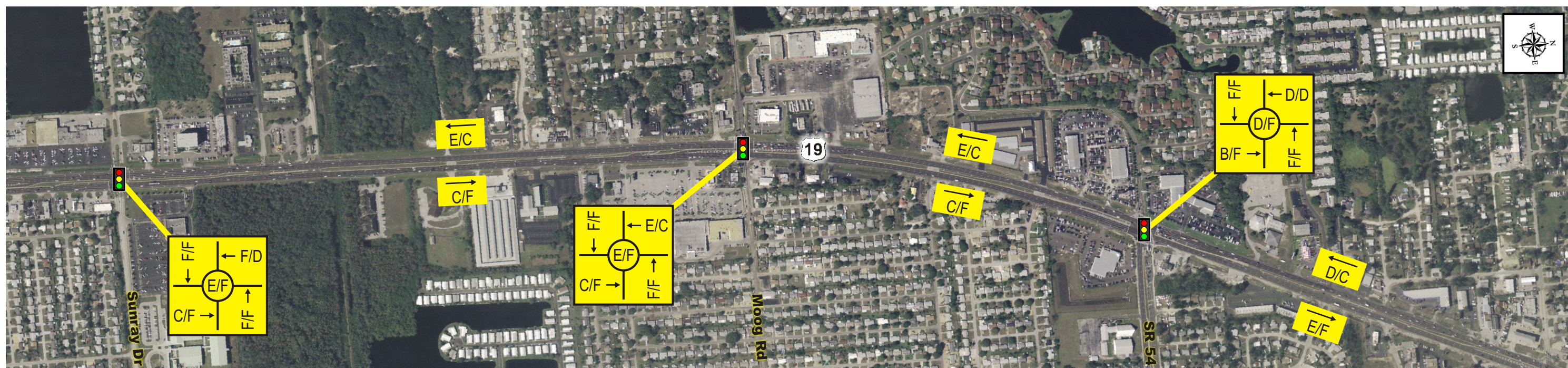
EXISTING YEAR (2006) TURNING MOVEMENT VOLUMES

EXHIBIT 4F



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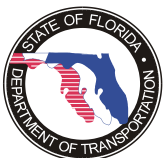
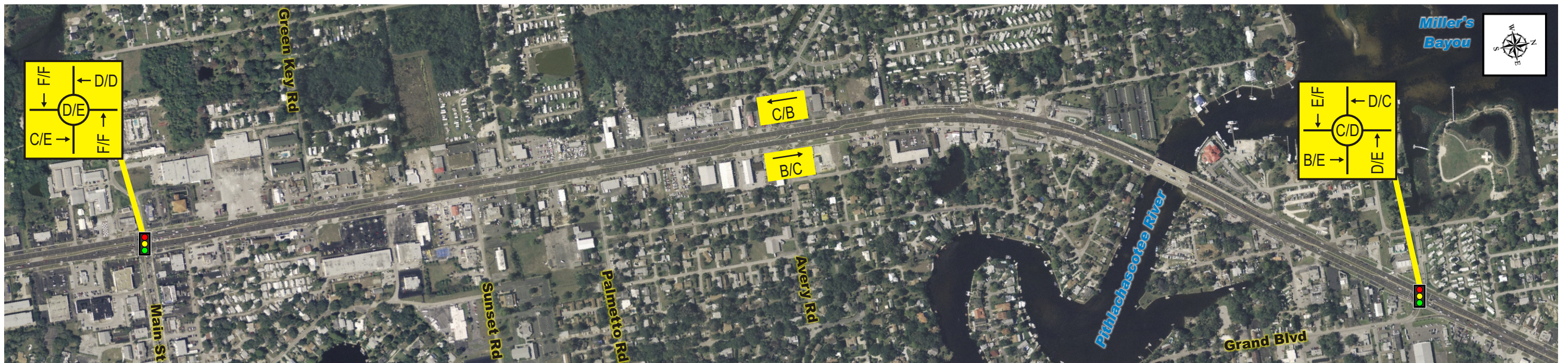
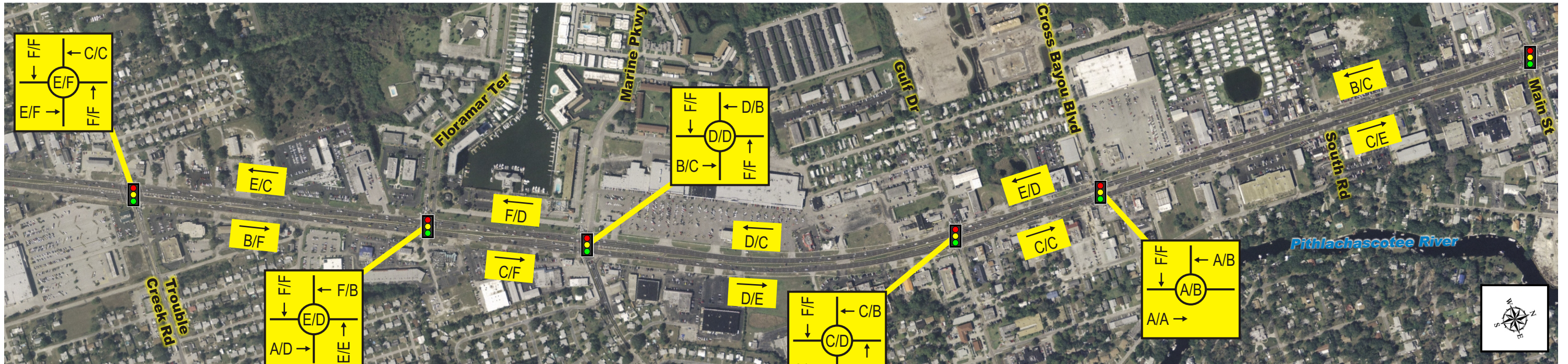
X/X
PM LOS
AM LOS



SR 55 (US 19)
from Pinellas County Line
to Hernando County Line

EXISTING YEAR (2006) LEVEL OF SERVICE

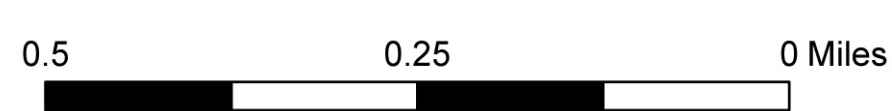
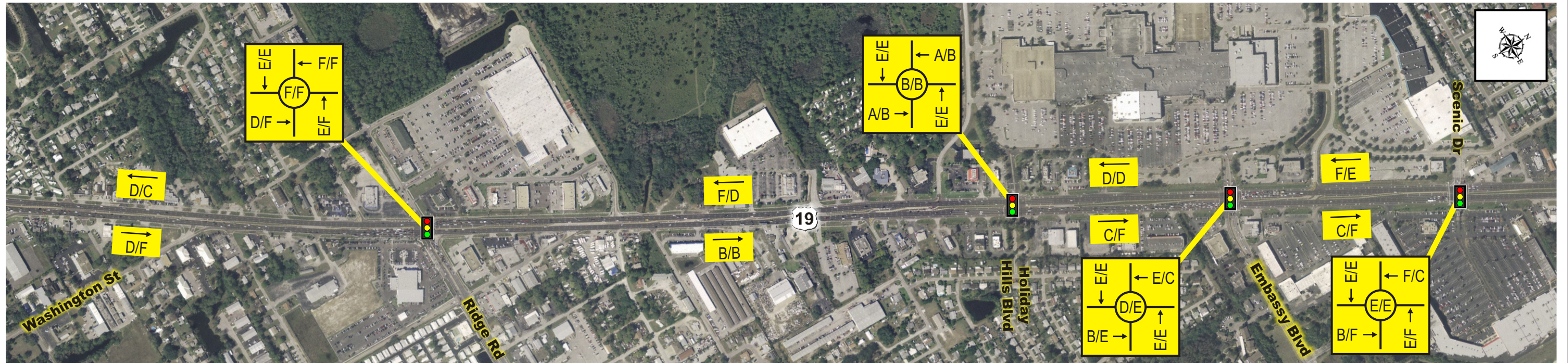
EXHIBIT 5A



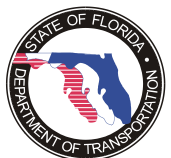
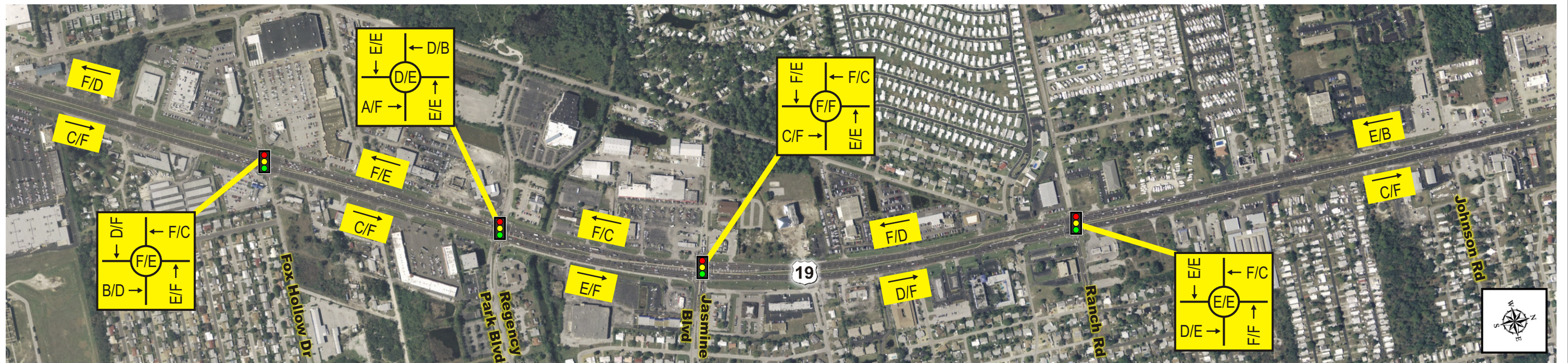
SR 55 (US 19)
from Pinellas County Line
to Hernando County Line

EXISTING YEAR (2006) LEVEL OF SERVICE

EXHIBIT 5B



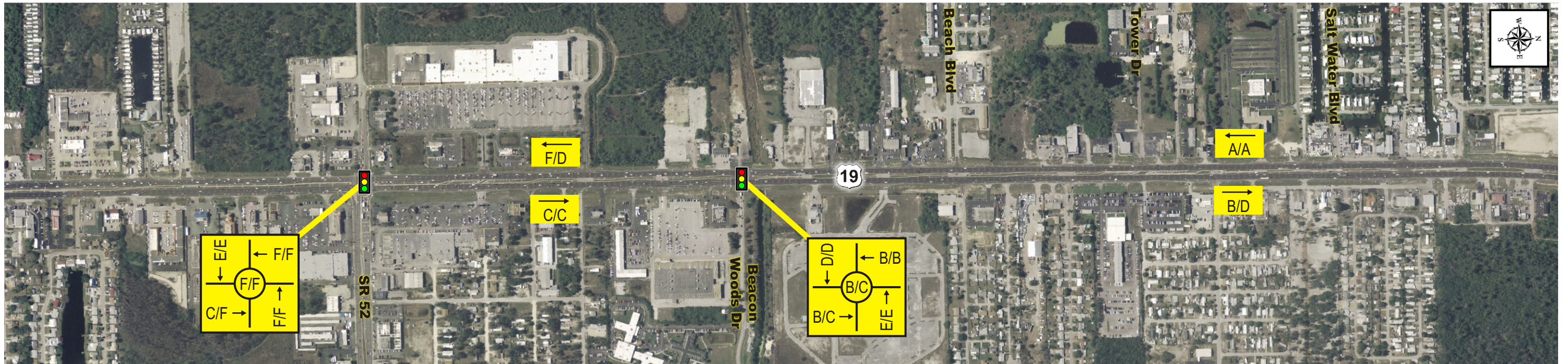
X/X
— PM LOS
— AM LOS



SR 55 (US 19)
from Pinellas County Line
to Hernando County Line

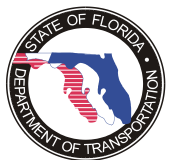
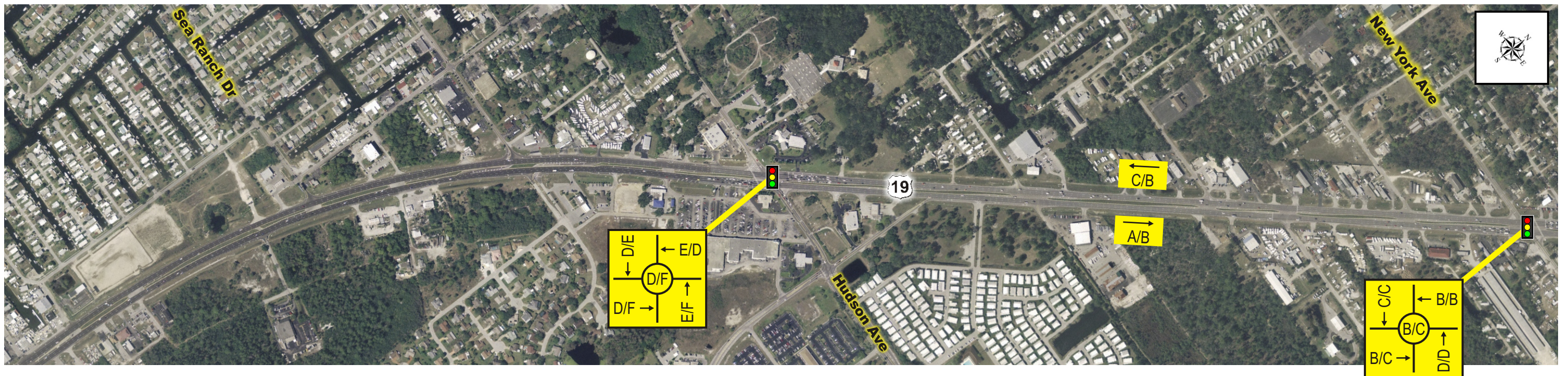
EXISTING YEAR (2006) LEVEL OF SERVICE

EXHIBIT 5C



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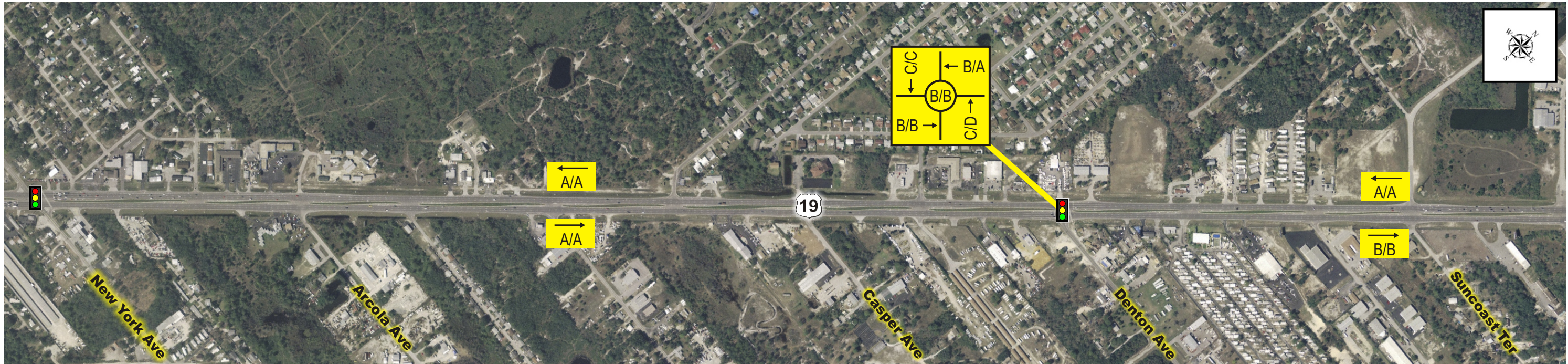
X/X
PM LOS
AM LOS



SR 55 (US 19)
from Pinellas County Line
to Hernando County Line

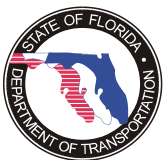
EXISTING YEAR (2006) LEVEL OF SERVICE

EXHIBIT 5D



0.5 0.25 0 Miles

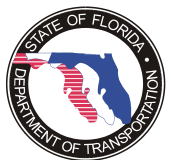
X/X
PM LOS
AM LOS



SR 55 (US 19)
from Pinellas County Line
to Hernando County Line

EXISTING YEAR (2006) LEVEL OF SERVICE

EXHIBIT 5E



SR 55 (US 19)
from Pinellas County Line
to Hernando County Line

EXISTING YEAR (2006) LEVEL OF SERVICE

EXHIBIT 5F

Table 2-1
Existing Year (2006) SR 55 (US 19) Intersection Level of Service Summary

Cross Street	SR 55 (US 19) Mainline NB AM / PM	SR 55 (US 19) Mainline SB AM / PM	EB AM / PM	WB AM / PM	Overall LOS AM / PM	Overall Delay (sec / veh) AM / PM
Flora Avenue	D / E	F / C	E / F	F / F	F / E	106 / 55
Alt. 19	B / F	F / B	F / F	F / F	F / F	100 / 143
Mile Stretch Drive	D / F	F / B	F / F	F / F	F / F	125 / 87
Darlington Road	B / F	F / C	F / F	F / F	E / F	67 / 98
Sunray Drive	C / F	F / D	F / F	F / F	E / F	69 / 112
Moog Road	C / F	E / C	F / F	F / F	E / F	59 / 89
SR 54	B / F	D / D	F / F	F / F	D / F	47 / 109
Trouble Creek Road	E / F	C / C	F / F	F / F	E / F	57 / 82
Floramar Terrace	A / D	F / B	F / F	E / E	E / D	63 / 41
Marine Parkway	B / C	D / B	F / F	F / F	D / D	36 / 35
Gulf Drive	C / D	C / B	F / F	F / F	C / D	30 / 43
Cross Bayou Boulevard	A / A	A / B	F / F	--	A / B	4 / 11
Main Street	C / E	D / D	F / F	F / F	D / E	55 / 67
Grand Boulevard	B / E	D / C	E / F	D / E	C / D	28 / 46
Ridge Road	D / F	F / F	E / E	E / F	F / F	122 / 167
Holiday Hills Boulevard	A / B	A / B	E / E	E / E	B / B	12 / 18
Embassy Boulevard	B / E	E / C	E / E	E / E	D / E	48 / 60
Scenic Drive	B / F	F / C	E / E	E / F	E / E	62 / 60
Fox Hollow Drive	B / D	F / C	D / F	E / F	F / E	86 / 59
Regency Park Drive	A / F	D / B	E / E	E / E	D / E	36 / 64
Jasmine Boulevard	C / F	F / C	F / E	E / E	F / F	81 / 99
Ranch Road	D / E	F / C	E / E	F / F	E / E	73 / 56
SR 52	C / F	F / F	E / E	F / F	F / F	120 / 189
Beacon Woods Drive	B / C	B / B	D / D	E / E	B / C	17 / 23
Hudson Avenue	D / F	E / D	D / E	E / F	D / F	55 / 94
New York Avenue	B / C	B / B	C / C	D / D	B / C	19 / 21
Denton Avenue	B / B	B / A	C / C	C / D	B / B	14 / 11
Little Road	C / C	F / E	D / D	C / D	F / D	89 / 43
County Line Road	D / D	D / F	E / E	F / E	E / E	63 / 63

2.6 EXISTING YEAR (2006) ARTERIAL ANALYSIS

The existing year (2006) SR 55 (US 19) arterial segment LOS analyses were conducted using the estimated existing year (2006) design hour volumes. The arterial segment LOS analysis was conducted according to the HCM methodology. For the arterial analysis, the posted speed limit was assumed as free flow speed. The SR 55 (US 19) arterial functional category and design category were determined as Primary Arterial and High-Speed (posted speed limit 45-55 mph), respectively, based on Exhibit 10-4 of the HCM. Based on functional and design categories, the class of SR 55 (US 19) arterial was established as Urban Street Class I using Exhibit 10-3 of the HCM.

According to the HCM urban street LOS analysis methodology, the SR 55 (US 19) arterial segments running time were estimated using Exhibit 15-3 of the HCM. The arterial segments through movement signal delay were obtained from the signalized intersection LOS analyses. From the arterial segment running time and signal delay time, the arterial segment travel time and travel speed were calculated. Arterial segment travel speed is the criteria for urban street LOS analysis. The arterial segment LOS was determined using Exhibit 15-2 of the HCM. The SR 55 (US 19) northbound and southbound arterial segment LOS results for the existing conditions are summarized in **Table 2-2** and **Table 2-3**, respectively and shown on **Exhibits 5A-5F**.

Table 2-2
Existing Year (2006) SR 55 (US 19) Arterial
Northbound Level of Service Summary

SR 55 (US 19) Segment	Arterial Class	Segment Length (miles)	Free Flow Speed (mph)	Running Time (sec)	Signal Delay (sec)		Travel Time (sec)		Arterial Speed (mph)		LOS		
					AM	PM	AM	PM	AM	PM	AM	PM	
Pinellas County Line to SR 54													
Pinellas County Line to Flora Avenue	I	3.03		272.9	134.6	932.6	407.5	1205.5	26.8	9.0	D	F	
Flora Avenue to Alt. 19		0.26	45	26.8	29.0	73.5	55.8	100.3	16.8	9.3	E	F	
Alt. 19 to Mile Stretch Drive		0.38	45	35.4	16.6	195.3	52.0	230.7	26.3	5.9	D	F	
Mile Stretch Drive to Darlington Road		0.37	45	36.2	25.8	121.7	62.0	157.9	21.5	8.4	D	F	
Darlington Road to Sunray Drive		0.50	45	44.1	4.5	142.2	48.6	186.3	37.0	9.7	B	F	
Sunray Drive to Moog Road		0.20	45	20.5	18.5	151.2	39.0	171.7	18.5	4.2	E	F	
Moog Road to SR 54		0.80	45	64.4	27.5	118.5	91.9	182.9	31.3	15.7	C	F	
SR 54 to Main Street		0.52	45	45.5	12.7	130.2	58.2	175.7	32.2	10.7	C	F	
SR 54 to Main Street													
SR 54 to Trouble Creek Road	I	2.41		211.2	121.4	312.9	332.6	524.1	26.1	16.5	D	E	
Trouble Creek Road to Floramar Terr.		0.56	45	44.7	56.6	111.1	101.3	155.8	19.9	12.9	E	F	
Floramar Terrace to Marine Parkway		0.38	45	35.6	4.0	50.5	39.6	86.1	34.5	15.9	B	F	
Marine Parkway to Gulf Drive		0.21	45	21.3	6.3	28.1	27.6	49.4	27.4	15.3	C	F	
Gulf Drive to Cross Bayou Blvd.		0.49	45	42.8	24.3	51.9	67.1	94.7	26.3	18.6	D	E	
Cross Bayou Blvd. to Main Street		0.19	45	20.1	0.7	4.5	20.8	24.6	32.9	27.8	C	C	
Main Street to Ridge Road		0.58	45	46.7	29.5	66.8	76.2	113.5	27.4	18.4	C	E	
Ridge Road to Ridge Road													
Main Street to Ridge Road													
Main Street to Grand Blvd.	I	2.28		181.9	48.7	300.5	230.6	482.4	35.6	17.0	B	E	
Grand Blvd. to Ridge Road		1.71	45	136.4	11.5	59.0	147.9	195.4	41.6	31.5	B	C	
Ridge Road to SR 52		0.57	45	45.5	37.2	241.5	82.7	287.0	24.8	7.1	D	F	
Ridge Road to SR 52													
Ridge Road to Holiday Hills Blvd.	I	3.76		335.7	145.4	764.0	481.1	1099.7	28.1	12.3	C	F	
Holiday Hills Blvd. to Embassy Blvd.		0.77	45	61.7	7.8	16.4	69.5	78.1	39.9	35.5	B	B	
Embassy Blvd. to Scenic Drive		0.27	45	27.9	7.9	89.6	35.8	117.5	27.2	8.3	C	F	
Scenic Drive to Fox Hollow Drive		0.30	45	29.8	8.5	85.4	38.3	115.2	28.2	9.4	C	F	
Fox Hollow Drive to Regency Drive		0.35	45	34.2	10.8	53.8	45.0	88.0	28.0	14.3	C	F	
Regency Drive to Jasmine Blvd.		0.32	45	31.6	6.5	107.1	38.1	138.7	30.2	8.3	C	F	
Jasmine Blvd. to Ranch Road		0.27	45	28.1	22.1	164.6	50.2	192.7	19.4	5.0	E	F	
Ranch Road to SR 52		0.49	45	43.2	38.1	70.9	81.3	114.1	21.7	15.5	D	F	
		0.99	45	79.2	43.7	176.2	122.9	255.4	29.0	14.0	C	F	

**Table 2-2 (Cont.)
Existing Year (2006) SR 55 (US 19) Arterial
Northbound Level of Service Summary**

SR 55 (US 19) Segment	Arterial Class	Segment Length (miles)	Free Flow Speed (mph)	Running Time (sec)	Signal Delay (sec)		Travel Time (sec)		Arterial Speed (mph)		LOS	
					AM	PM	AM	PM	AM	PM	AM	PM
SR 52 to County Line Road		8.21		555.1	158.1	297.7	713.2	852.8	41.4	34.7	B	B
SR 52 to Beacon Woods Drive		0.49	50	38.0	17.0	27.0	55.0	65.0	32.1	27.1	C	C
Beacon Woods Drive to Hudson Ave.	I	1.88	50	135.2	44.8	157.2	180.0	292.4	37.6	23.1	B	D
Hudson Avenue to New York Avenue		0.97	55	63.4	13.7	20.2	77.1	83.6	45.3	41.8	A	B
New York Avenue to Denton Avenue		1.32	55	86.3	11.2	11.3	97.5	97.6	48.7	48.7	A	A
Denton Avenue to Little Road		0.87	55	57.0	23.1	27.8	80.1	84.8	39.1	36.9	B	B
Little Road to County Line Road		2.68	55	175.2	48.3	54.2	223.5	229.4	43.2	42.1	A	A
Pinellas County Line to County Line Road	I	19.69		1556.8	608.2	2607.7	2165.0	4164.5	32.7	17.0	C	E

Table 2-3
Existing Year (2006) SR 55 (US 19) Arterial
Southbound Level of Service Summary

SR 55 (US 19) Segment	Arterial Class	Segment Length (miles)	Free Flow Speed (mph)	Running Time (sec)	Signal Delay (sec)		Travel Time (sec)		Arterial Speed (mph)		LOS	
					AM	PM	AM	PM	AM	PM	AM	PM
County Line Road to SR 52		8.21		555.1	238.4	129.8	793.5	684.9	37.2	43.1	B	A
County Line Road to Little Road		2.68	55	175.2	21.9	19.9	197.1	195.1	48.9	49.5	A	A
Little Road to Denton Avenue	I	0.87	55	57.0	13.0	7.7	70.0	64.7	44.7	48.4	A	A
Denton Avenue to New York Avenue		1.32	55	86.3	17.9	15.9	104.2	102.2	45.6	46.5	A	A
New York Avenue to Hudson Avenue		0.97	55	63.4	52.8	38.5	116.2	101.9	30.1	34.3	C	B
Hudson Avenue to Beacon Woods Dr.		1.88	50	135.2	9.9	7.2	145.1	142.4	46.6	47.5	A	A
Beacon Woods Drive to SR 52		0.49	50	38.0	122.9	40.6	160.9	78.6	11.0	22.4	F	D
SR 52 to Ridge Road		3.76		335.7	786.8	202.0	1122.5	537.7	12.1	25.2	F	D
SR 52 to Ranch Road		0.99	45	79.2	96.5	22.1	175.7	101.3	20.3	35.2	E	B
Ranch Road to Jasmine Blvd.	I	0.49	45	43.2	129.5	33.7	172.7	76.9	10.2	22.9	F	D
Jasmine Blvd. to Regency Drive		0.27	45	28.1	51.9	4.8	80.0	32.9	12.2	29.5	F	C
Regency Drive to Fox Hollow Drive		0.32	45	31.6	140.5	33.2	172.1	64.8	6.7	17.8	F	E
Fox Hollow Drive to Scenic Drive		0.35	45	34.2	100.4	24.4	134.6	58.6	9.4	21.5	F	D
Scenic Drive to Embassy Blvd.		0.30	45	29.8	68.0	27.0	97.8	56.8	11.0	19.0	F	E
Embassy Blvd. to Holiday Hills Blvd.		0.27	45	27.9	9.7	11.9	37.6	39.8	25.9	24.4	D	D
Holiday Hills Blvd. to Ridge Road		0.77	45	61.7	190.3	44.9	252.0	106.6	11.0	26.0	F	D
Ridge Road to Main Street		2.28		181.9	88.2	48.9	270.1	230.8	30.4	35.6	C	B
Ridge Road to Grand Blvd.	I	0.57	45	45.5	37.7	18.5	83.2	64.0	24.7	32.1	D	C
Grand Blvd. to Main Street		1.71	45	136.4	50.5	30.4	186.9	166.8	32.9	36.9	C	B
Main Street to SR 54		2.41		211.2	223.3	86.9	434.5	298.1	20.0	29.1	E	C
Main Street to Cross Bayou Blvd.	I	0.58	45	46.7	3.3	15.1	50.0	61.8	41.8	33.8	B	C
Cross Bayou Blvd. to Gulf Drive		0.19	45	20.1	20.4	10.4	40.5	30.5	16.9	22.4	E	D
Gulf Drive to Marine Parkway		0.49	45	42.8	39.4	12.5	82.2	55.3	21.5	31.9	D	C
Marine Parkway to Floramar Terrace		0.21	45	21.3	93.3	13.1	114.6	34.4	6.6	22.0	F	D
Floramar Terr. to Trouble Creek Road		0.38	45	35.6	30.1	9.7	65.7	45.3	20.8	30.2	E	C
Trouble Creek Road to SR 54		0.56	45	44.7	36.8	26.1	81.5	70.8	24.7	28.5	D	C

**Table 2-3 (Cont.)
Existing Year (2006) SR 55 (US 19) Arterial
Southbound Level of Service Summary**

SR 55 (US 19) Segment	Arterial Class	Segment Length (miles)	Free Flow Speed (mph)	Running Time (sec)	Signal Delay (sec)		Travel Time (sec)		Arterial Speed (mph)		LOS		
					AM	PM	AM	PM	AM	PM	AM	PM	
SR 54 to Pinellas County Line													
SR 54 to Moog Road	I	3.03		272.9	696.4	105.4	969.3	378.3	11.2	28.8	F	C	
Moog Road to Sunray Drive		0.52	45	45.5	60.3	19.1	105.8	64.6	17.7	29.0	E	C	
Sunray Drive to Darlington Road		0.80	45	64.4	86.2	26.4	150.6	90.8	19.1	31.7	E	C	
Darlington Road to Mile Stretch Road		0.20	45	20.5	87.2	16.6	107.7	37.1	6.7	19.4	F	E	
Mile Stretch Road to Alt. 19		0.50	45	44.1	183.0	5.3	227.1	49.4	7.9	36.4	F	B	
Alt. 19 to Flora Avenue		0.37	45	36.2	131.3	23.3	167.5	59.5	8.0	22.4	F	D	
Flora Avenue to Pinellas County Line		0.38	45	35.4	148.4	14.7	183.8	50.1	7.4	27.3	F	C	
		0.26	45	26.8	--	--	26.8	26.8	34.9	34.9	B	B	
County Line Road to Pinellas County Line	I	19.69		1556.8	2033.1	573.0	3589.9	2129.8	19.7	33.3	E	C	

2.7 CRASH ANALYSIS

Crash data for the Pasco County SR 55 (US 19) study corridor was collected for the five most recent years (2000 to 2004) from FDOT District Seven. Data collected include crash locations, number and type of crashes, number of fatalities and number of injuries. Collected crash data was analyzed by SR 55 (US 19) segments and for the overall SR 55 (US 19) corridor. Crashes along SR 55 (US 19) mainline in the vicinity of signalized intersections were also identified and the intersections with higher crashes were ranked.

As indicated in **Table 2-4**, the crash records for SR 55 (US 19) indicate that over the period of five years studied, 4,260 crashes occurred along the SR 55 (US 19) mainline in Pasco County (an average of 852 crashes per year). There were 125 fatalities and over 5,000 injuries for this five year period. The average crash rate, crashes per million vehicle miles traveled (VMT), for the entire SR 55 (US 19) corridor was 2.106; however, for the SR 55 (US 19) segment between the Pinellas County Line and SR 54 the average crash rate was 3.136.

Table 2-4
SR 55 (US 19) Crash History Overview

Segment	2000	2001	2002	2003	2004	Total	Average
Pinellas County Line to SR 54							
Fatal Crashes (Fatalities)	8 (8)	9 (9)	5 (5)	3 (3)	5 (5)	30 (30)	6 (6)
Injury Crashes (Injuries)	129 (284)	117 (274)	130 (220)	135 (263)	221 (436)	732 (1477)	146 (296)
Property Damage Only	45	49	52	57	143	346	69
Total Crashes	182	175	187	195	369	1108	222
AADT	59,500	66,300	63,800	66,500	64,000	-	64,000
Distance (miles)	3.03	3.03	3.03	3.03	3.03	-	3.03
VMT (million vehicle miles)	65.80	73.32	70.56	73.55	70.78	354.01	70.80
Crash Rate	2.766	2.387	2.650	2.651	5.213	-	3.136
Statewide Avg. Crash Rate	3.685	3.749	3.590	3.290	3.344	-	3.279
Critical Crash Rate	4.424	4.455	4.294	3.950	4.023	-	3.951
Safety Ratio	0.625	0.536	0.617	0.671	1.296	-	0.794
SR 54 to Main Street							
Fatal Crashes (Fatalities)	1 (1)	4 (4)	4 (4)	4 (4)	1 (1)	14 (14)	3 (3)
Injury Crashes (Injuries)	87 (149)	85 (119)	92 (139)	81 (140)	107 (185)	452 (732)	90 (146)
Property Damage Only	40	30	58	42	45	215	43
Total Crashes	128	119	154	127	153	681	136

Table 2-4 (Cont.)
SR 55 (US 19) Crash History Overview

Segment	2000	2001	2002	2003	2004	Total	Average
AADT	62,600	65,600	66,500	68,000	65,600	-	65,700
Distance (miles)	2.41	2.41	2.41	2.41	2.41	-	2.41
VMT (million vehicle miles)	55.07	57.71	58.50	59.82	57.71	288.79	57.76
Crash Rate	2.324	2.062	2.633	2.123	2.651	-	2.353
Statewide Avg. Crash Rate	3.685	3.749	3.590	3.290	3.344	-	3.279
Critical Crash Rate	4.493	4.545	4.364	4.023	4.097	-	4.024
Safety Ratio	0.517	0.454	0.603	0.528	0.647	-	0.585
Main Street to Ridge Road							
Fatal Crashes (Fatalities)	4 (6)	8 (8)	2 (2)	2 (2)	4 (4)	20 (22)	4 (4)
Injury Crashes (Injuries)	71 (125)	41 (76)	59 (90)	65 (101)	69 (105)	305 (497)	61 (99)
Property Damage Only	51	56	41	63	42	253	51
Total Crashes	126	105	102	130	115	578	116
AADT	64,000	68,500	69,500	71,500	64,500	-	67,600
Distance (miles)	2.28	2.28	2.28	2.28	2.28	-	2.28
VMT (million vehicle miles)	53.26	57.01	57.84	59.50	53.68	281.28	56.26
Crash Rate	2.366	1.842	1.764	2.185	2.142	-	2.062
Statewide Avg. Crash Rate	3.685	3.749	3.590	3.290	3.344	-	3.279
Critical Crash Rate	4.507	4.550	4.368	4.025	4.125	-	4.034
Safety Ratio	0.525	0.405	0.404	0.543	0.519	-	0.511
Ridge Road to SR 52							
Fatal Crashes (Fatalities)	1 (1)	5 (6)	5 (5)	2 (2)	8 (8)	21 (22)	4 (4)
Injury Crashes (Injuries)	141 (283)	121 (231)	148 (290)	119 (218)	202 (396)	731 (1418)	146 (284)
Property Damage Only	46	57	67	62	124	356	71
Total Crashes	188	183	220	183	334	1108	222
AADT	54,500	63,500	63,000	61,000	62,500	-	60,900
Distance (miles)	3.76	3.76	3.76	3.76	3.76	-	3.76
VMT (million vehicle miles)	74.80	87.15	86.46	83.72	85.78	417.90	83.58
Crash Rate	2.514	2.100	2.544	2.186	3.894	-	2.656
Statewide Avg. Crash Rate	3.685	3.749	3.590	3.290	3.344	-	3.279
Critical Crash Rate	4.378	4.396	4.225	3.909	3.960	-	3.897
Safety Ratio	0.574	0.478	0.602	0.559	0.983	-	0.682
SR 52 to County Line Road							
Fatal Crashes (Fatalities)	8 (9)	9 (12)	7 (7)	4 (4)	4 (5)	32 (37)	6 (7)
Injury Crashes (Injuries)	110 (209)	87 (184)	86 (146)	92 (164)	135 (239)	510 (942)	102 (188)
Property Damage Only	43	52	33	35	84	247	49
Total Crashes	161	148	126	131	219	785	157
AADT	45,700	48,000	43,000	45,800	44,800	-	45,500
Distance (miles)	8.21	8.21	8.21	8.21	8.21	-	8.21
VMT (million vehicle miles)	136.95	143.84	128.86	137.25	134.25	681.14	136.23
Crash Rate	1.176	1.029	0.978	0.954	1.631	-	1.151
Statewide Avg. Crash Rate	3.685	3.749	3.590	3.290	3.344	-	3.279

Table 2-4 (Cont.)
SR 55 (US 19) Crash History Overview

Segment	2000	2001	2002	2003	2004	Total	Average
Critical Crash Rate	4.196	4.251	4.110	3.772	3.835	-	3.762
Safety Ratio	0.280	0.242	0.238	0.253	0.425	-	0.306
Total – Pasco County SR 55 (US 19) Corridor – Pinellas County Line to County Line Road							
Fatal Crashes (Fatalities)	22 (25)	35 (39)	23 (23)	15 (15)	22 (23)	117 (125)	23 (25)
Injury Crashes (Injuries)	538 (1050)	451 (884)	515 (885)	492 (886)	734 (1361)	2730 (5066)	546 (1013)
Property Damage Only	225	244	251	259	438	1417	283
Total Crashes	785	730	789	766	1190	4260	852
Distance (miles)	19.67	19.67	19.67	19.67	19.67	-	19.67
VMT (million vehicle miles)	385.87	419.02	402.21	413.83	402.19	2023.12	404.62
Crash Rate	1.908	1.629	1.796	1.704	2.749	-	2.106
Statewide Avg. Crash Rate	3.685	3.749	3.590	3.290	3.344	-	3.279
Critical Crash Rate	3.988	4.042	3.883	3.567	3.627	-	3.558
Safety Ratio	0.478	0.403	0.463	0.478	0.758	-	0.592

Source: FDOT District Seven, 2000–2004 Crash Data

The types of SR 55 (US 19) crashes are summarized in **Table 2-5**. The analysis indicates that the highest frequency crashes were rear-end and angle crashes. This reflects the fact that as SR 55 (US 19) becomes more congested, the excessive driveways and median openings that do not meet the access management standards, creates speed differentials within traffic flows causing rear-end crashes. The angle crashes represent increased propensity for drivers to run red lights due to increased levels of traffic congestion and associated delays. Increased frequency and reduced spacing associated with driveways and median openings contribute to creating the speed differential and congestion in traffic flow. Therefore, adequate access management and Transportation System Management (TSM) strategies potentially could help reduce the number of crashes.

Table 2-5
SR 55 (US 19) Crash Types

Segment	2000	2001	2002	2003	2004	Total	%	Average
Pinellas County Line to SR 54								
Rear-end	73	70	80	81	181	485	43.8	97
Head-on	3	0	1	1	2	7	0.6	1
Angle	49	34	45	53	107	288	26.0	58
Left-turn	16	28	16	11	16	87	7.8	17
Right-turn	7	4	2	2	6	21	1.9	4
Sideswipe	11	10	14	5	21	61	5.5	12
Collision with Pedestrian	10	11	6	10	7	44	4.0	9
Collision with Bicycle	5	4	4	3	2	18	1.6	4
Other	8	14	19	29	27	97	8.7	19
Total	182	175	187	195	369	1108	100	222
SR 54 to Main Street								
Rear-end	70	64	81	72	80	367	53.9	73
Head-on	3	0	1	2	0	6	0.9	1
Angle	26	24	20	20	23	113	16.6	23
Left-turn	7	2	8	2	15	34	5.0	7
Right-turn	2	1	2	0	2	7	1.0	1
Sideswipe	9	8	6	8	11	42	6.2	8
Collision with Pedestrian	2	8	9	6	6	31	4.5	6
Collision with Bicycle	4	4	2	1	1	12	1.8	2
Other	5	8	25	16	15	69	10.1	14
Total	128	119	154	127	153	681	100	136
Main Street to Ridge Road								
Rear-end	57	50	41	57	51	256	44.3	51
Head-on	1	1	0	2	1	5	0.9	1
Angle	26	14	17	23	21	101	17.5	20
Left-turn	4	8	7	7	5	31	5.4	6
Right-turn	2	1	0	5	5	13	2.2	3
Sideswipe	11	11	10	12	4	48	8.3	10
Collision with Pedestrian	5	7	9	6	10	37	6.4	7
Collision with Bicycle	5	3	1	0	4	13	2.2	3
Other	15	10	17	18	14	74	12.8	15
Total	126	105	102	130	115	578	100	116
Ridge Road to SR 52								
Rear-end	94	102	124	104	179	603	54.4	121
Head-on	2	1	4	1	2	10	0.9	2
Angle	29	30	39	32	66	196	17.7	39
Left-turn	23	16	8	9	27	83	7.5	17
Right-turn	4	4	3	1	5	17	1.5	3
Sideswipe	11	11	15	10	17	64	5.8	13
Collision with Pedestrian	3	5	7	10	13	38	3.4	8
Collision with Bicycle	7	2	2	0	3	14	1.3	3
Other	15	12	18	16	22	83	7.5	17

**Table 2-5 (Cont.)
SR 55 (US 19) Crash Types**

Segment	2000	2001	2002	2003	2004	Total	%	Average
Total	188	183	220	183	334	1108	100	222
SR 52 to County Line Road								
Rear-end	47	59	54	49	96	305	38.8	61
Head-on	3	2	1	2	3	11	1.4	2
Angle	47	31	20	26	49	173	22.0	35
Left-turn	25	19	14	13	12	83	10.6	17
Right-turn	1	1	4	2	3	11	1.4	2
Sideswipe	8	8	5	9	21	51	6.5	10
Collision with Pedestrian	5	7	10	5	6	33	4.2	7
Collision with Bicycle	3	0	2	3	4	12	1.5	2
Other	22	21	16	22	25	106	13.5	21
Total	161	148	126	131	219	785	100	157
Total – Pasco County SR 55 (US 19) Corridor – Pinellas County Line to County Line Road								
Rear-end	341	345	380	363	587	2016	47.3	403
Head-on	12	4	7	8	8	39	0.9	8
Angle	177	133	141	154	266	871	20.4	174
Left-turn	75	73	53	42	75	318	7.5	64
Right-turn	16	11	11	10	21	69	1.6	14
Sideswipe	50	48	50	44	74	266	6.2	53
Collision with Pedestrian	25	38	41	37	42	183	4.3	37
Collision with Bicycle	24	13	11	7	14	69	1.6	14
Other	65	65	95	101	103	429	10.1	86
Total	785	730	789	766	1190	4260	100	852

Source: FDOT District Seven, 2000–2004 Crash Data

Table 2-6 shows the SR 55 (US 19) crashes that occur in close proximity (within 250 feet) to the signalized intersections along the SR 55 (US 19) mainline. Based on the last five year crash average, the following ten ranked signalized intersections had the highest spot crash rate (crashes per million entering vehicles) along the SR 55 (US 19) mainline:

1. Moog Road
2. SR 52
3. Ridge Road
4. Mile Stretch Drive
5. Trouble Creek Road
6. Main Street
7. Hudson Avenue
8. Flora Avenue
9. Jasmine Boulevard
10. Embassy Boulevard

Table 2-6
SR 55 (US 19) Intersection Crashes

Segment	Crashes on SR 55 (US 19) within 250 Feet of the Intersection								
	2000	2001	2002	2003	2004	Average	AADT	Spot Crash Rate	Rank
Flora Avenue	20	14	13	16	25	18	62,750	0.786	8
Alt. 19	16	19	17	13	28	19	72,150	0.721	11
Mile Stretch Drive	13	19	23	17	51	25	74,700	0.917	4
Darlington Road	11	13	15	20	30	18	71,450	0.690	14
Sunray Drive	14	17	14	21	28	19	72,250	0.720	12
Moog Road	18	28	25	26	59	31	71,200	1.193	1
SR 54	10	12	13	10	21	13	67,350	0.529	23
Trouble Creek Road	26	14	21	26	21	22	66,050	0.913	5
Floramar Terrace	13	10	13	11	11	12	67,700	0.486	24
Marine Parkway	14	15	19	10	26	17	68,050	0.684	15
Gulf Drive	11	8	12	10	7	10	67,600	0.405	25
Cross Bayou Boulevard	9	7	10	11	6	9	66,250	0.372	26
Main Street	17	24	23	18	12	19	64,250	0.810	6
Grand Boulevard	12	17	10	16	14	14	61,600	0.623	18
Ridge Road	26	26	25	30	24	26	63,000	1.131	3
Holiday Hills Boulevard	8	9	13	7	23	12	61,550	0.534	22
Embassy Boulevard	10	8	17	11	32	16	59,000	0.743	10
Scenic Drive	5	14	5	13	22	12	59,200	0.555	20
Fox Hollow Drive	9	8	18	11	15	12	59,950	0.548	21
Regency Park Drive	7	9	18	10	23	13	62,350	0.571	19
Jasmine Boulevard	14	12	18	18	26	18	63,350	0.778	9
Ranch Road	10	15	17	11	21	15	62,650	0.656	16
SR 52	21	23	21	27	31	25	59,250	1.156	2
Beacon Woods Drive	14	10	11	9	21	13	50,450	0.706	13

Table 2-6
SR 55 (US 19) Intersection Crashes

Segment	Crashes on SR 55 (US 19) within 250 Feet of the Intersection								
	2000	2001	2002	2003	2004	Average	AADT	Spot Crash Rate	Rank
Hudson Avenue	11	15	11	12	13	12	41,000	0.802	7
New York Avenue	5	18	5	4	13	9	38,850	0.635	17
Denton Avenue	4	2	2	5	2	3	35,250	0.233	29
Little Road	0	0	0	7	15	4	38,250	0.287	27
County Line Road (south leg only)	2	4	4	3	7	4	39,400	0.278	28

Source: FDOT District Seven, 2000–2004 Crash Data

2.8 TRANSIT OPERATIONS

Existing Pasco County Public Transportation (PCPT) operations along SR 55 (US 19) consists of fixed bus routes. The majority of bus routes throughout Pasco County currently run with 60 minute headways. However, the route along SR 55 (US 19) has recently reduced their headways to 30 minutes. Hours of operation are Monday through Friday from 5:30 AM to 8:25 PM. There are 4 vehicles currently serving this route. Route connections consist of 14A, 14B, 16, 18, 23, 25, 27 and Pinellas Suncoast Transit Authority (PSTA). Major destinations serviced by this route are Bayonet Point Plaza, Gulf View Square Mall, Tarpon Mall, Southgate Plaza, Holiday Mall, Super Wal-Mart, Hollywood 18 Theaters, Embassy Crossing, Universal Plaza, Papas Plaza, U.S.A. Flea Market, The Piers and the Social Security Administration.

SECTION 3.0

ACCESS MANAGEMENT

3.1 ACCESS MANAGEMENT

Access management is concerned with the orderly management of ingress to and egress from adjacent land uses along a roadway to help maintain a facility that operates in an efficient, safe and accessible manner. Access management helps a highway facility to operate efficiently and safely by reducing potential vehicle and pedestrian conflict points. The Florida Department of Transportation (FDOT) has developed minimum driveway or connector spacing, median opening spacing, and signalized intersection spacing standards for limited access and controlled access facilities on the state highway system. SR 55 (US 19) in Pasco County is designated as a controlled access facility, Access Class 3. The minimum spacing standards are summarized on **Table 3-1**.

Table 3-1
Access Classification and Standards for Controlled Access Facilities

Access Class	Facility Design Features (Median Treatment and Access Roads)	Minimum Connection Spacing (ft) (>45mph / ≤45mph)	Minimum Median Opening Spacing (ft)		Minimum Signal Spacing (mi)
			Bi-Directional	Full	
2	Restrictive w/Service Roads	1,320 / 660	1,320	2,640	0.5
3	Restrictive	660 / 440	1,320	2,640	0.5
4	Non-Restrictive	660 / 440	N/A	N/A	0.5
5	Restrictive	440 / 245	660	2,640 / 1,320	0.5 / 0.25
6	Non-Restrictive	440 / 245	N/A	N/A	0.25
7	Both	125	330	660	0.25

Source: State Highway System Access Management Classification System and Standards, Florida Administrative Chapter 14-97.

3.2 CONNECTORS

The average spacing for connectors (driveways and unsignalized cross streets) along SR 55 (US 19) in Pasco County does not meet the minimum connection spacing of 660 feet for Access Class 3. **Table 3-2** summarizes the average connector spacing for various sections along SR 55 (US 19). There are approximately 820 connectors along the 19.7 mile length of SR 55 (US 19) in Pasco County. The average connector spacing varies from approximately 150 feet to 400 feet south of Little Road. North of Little Road, the average connector spacing is approximately 600 feet.

Table 3-2
Average Connector Spacing on SR 55 (US 19) in Pasco County

Section on SR 55 (US 19)	Posted Speed Limit	Length (mi)	NB Average Connector Spacing (ft)	SB Average Connector Spacing (ft)
Pinellas County Line to SR 54	45 mph	3.0	189	220
SR 54 to Main Street	45 mph	2.4	192	179
Main Street to Ridge Road	45 mph	2.3	163	227
Ridge Road to Jasmine Road	45 mph	2.3	241	324
Jasmine Road to SR 52	45 mph	1.5	195	296
SR 52 to Hudson Avenue	50 mph	2.4	333	309
Hudson Avenue to Little Road	55 mph	3.1	379	245
Little Road to County Line Road	55 mph	2.7	636	585

3.3 MEDIAN OPENINGS

Median openings consist of full median openings and directional median openings. Full median openings allow all turning movements, but directional median openings allow some turning movements and restrict certain other turning movements. Normally, through and left-out movements from cross streets are restricted at directional median openings. A full median opening can be a signalized or an unsignalized intersection. Normally, in a directional median opening through movements and left-turn movements

from the minor cross streets are restricted. But, in some cases certain other movements are restricted in a directional median opening. The location and type of the existing and recommended median openings along the SR 55 (US 19) corridor in Pasco County are summarized in **Table 3-3** and are shown on **Exhibits 6A-6T**. The recommended median openings / closings are based on the SR 55 (US 19) Pasco County Access Management Study (North and South Segments) which was approved by the FDOT Access Management Review Committee.

Table 3-3
SR 55 (US 19) Corridor Median Openings

Median Opening No.	Cross Street	Mile Post	Existing Median Type	Recommended Median Type
1	Phoenix Avenue	0.006	Full	Close the median opening
2	Louis Avenue	0.081	Full	Bi-Directional
3	New Hope Baptists	0.162	Full	NB-Directional
4	Flora Avenue	0.259	Signal	Signal
5	Sunoco Station	0.330	Full	Close the median opening
6	Panorama Avenue	0.469	Full	Bi-Directional
7	Allied Tires	0.540	Full	Close the median opening
8	Alt. 19	0.636	Signal	Signal
9	Bartelt Road	0.793	Bi-Directional	Bi-Directional
10	Mile Stretch Drive	1.009	Signal	Signal
11	Bank of America	1.119	Full	Close the median opening
12	Salvation Army	1.250	Full	Bi-Directional
13	Tahitian Gardens	1.405	Full	Close the median opening
14	Darlington Road	1.510	Signal	Signal
15	Sunray Drive	1.707	Signal	Signal
16	Plaza Drive	1.897	Bi-Directional	Close the median opening
17	Gulf Trace Boulevard	1.959	Full	NB-Directional
18	Palm Grove Church	2.126	Full	Full / Signal
19	Westwood Drive	2.231	Full	Close the median opening
20	Eastwood Lane	2.299	Full	Bi-Directional
21	Check Cash	2.394	NB-Directional	NB-Directional
22	Moog Road	2.511	Signal	Signal
23	Indoor Flea Market	2.621	Full	Close the median opening
24	Manor Drive	2.751	Full	Bi-Directional

Table 3-3 (Cont.)
SR 55 (US 19) Corridor Median Openings

Median Opening No.	Cross Street	Mile Post	Existing Median Type	Recommended Median Type
25	Beacon Hill Drive	2.890	Full	Close the median opening
26	SR 54	3.028	Signal	Signal
27	Westminister	3.171	Full	Close the median opening
28	Flamingo Drive	3.275	Full	NB-Directional
29	Sam's Club Entrance	3.360	Full	SB-Directional
30	Trouble Creek Road	3.587	Signal	Signal
31	Bank of America	3.730	SB-Directional	Close the median opening
32	Lincoln Dealership	3.773	NA	NB-Directional
33	Shamrock Drive	3.812	Full	SB-Directional
34	Floramar Terrace	3.966	Signal	Signal
35	Marine Parkway	4.171	Signal	Signal
36	Badcock Store	4.262	Bi-Directional	Close the median opening
37	Wachovia Bank	4.323	Full	Bi-Directional
38	Clarion Hotel	4.442	Full	Bi-Directional
39	Gulf Drive	4.658	Signal	Signal
40	Lemon Street	4.790	Full	Close the median opening
41	Cross Bayou Boulevard	4.851	Signal	Signal
42	Linder Place	4.877	Bi-Directional	Close the median opening
43	Imperial Drive	5.019	Full	Bi-Directional
44	South Road	5.160	Full	Bi-Directional
45	Sun Trust Bank	5.293	Full	Close the median opening
46	Main Street	5.435	Signal	Signal
47	Bridge Road	5.488	Full	Close the median opening
48	Wing House	5.598	Full	Close the median opening
49	Green Key Road	5.656	Bi-Directional	Bi-Directional
50	Thomasville Furniture	5.754	Full	Close the median opening
51	Sunset Road	5.866	Full	Close the median opening
52	Beau Lane	5.911	Full	Bi-Directional
53	Palmetto Drive	6.023	Full	Bi-Directional
54	Richey Plaza	6.137	Full	Close the median opening
55	Avery Road	6.271	Bi-Directional	Bi-Directional
56	Luna Vista Drive	6.402	Full	Close the median opening
57	Limit Drive	6.520	Full	NB-Directional
58	Bellview Avenue	6.557	Full	SB-Directional
59	Cedar Lane	6.611	Full	Close the median opening
60	Lark Lane	6.696	Full	Close the median opening

Table 3-3 (Cont.)
SR 55 (US 19) Corridor Median Openings

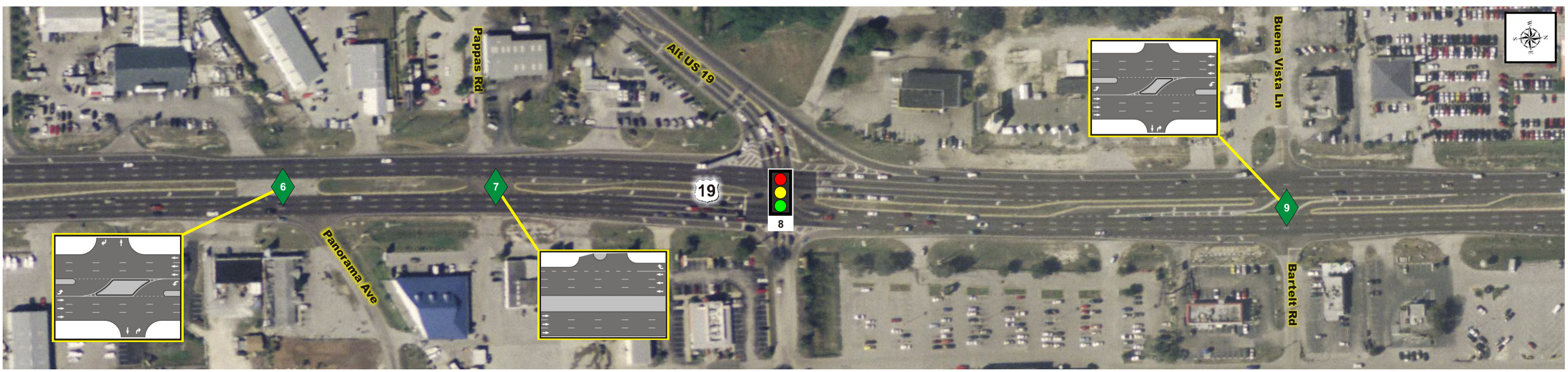
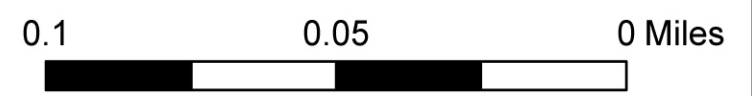
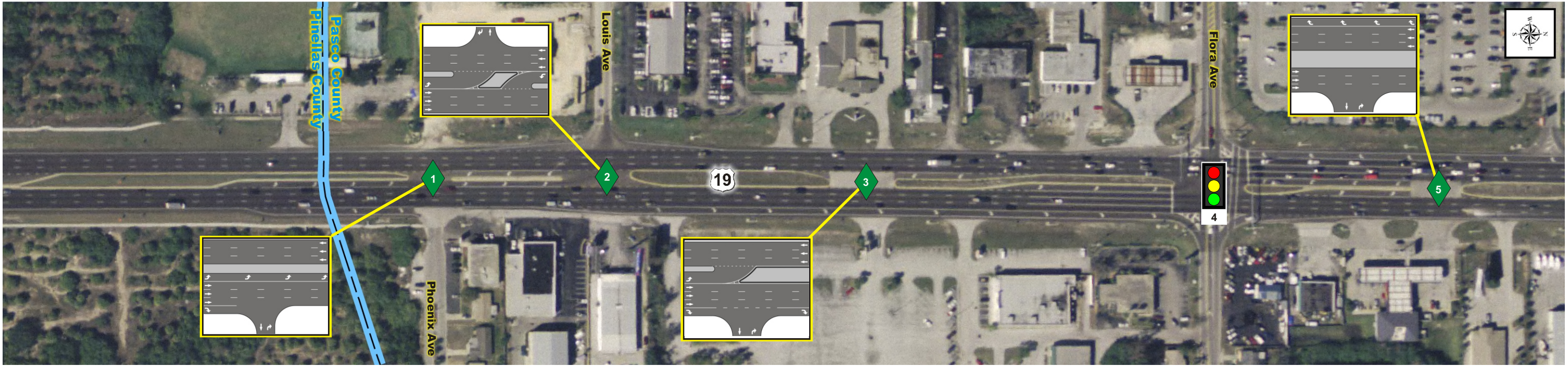
Median Opening No.	Cross Street	Mile Post	Existing Median Type	Recommended Median Type
61	River Gulf Road	6.936	Bi-Directional	Bi-Directional
62	Cottee Street	7.021	Bi-Directional	Close the median opening
63	Grand Boulevard	7.141	Signal	Signal
64	Pasco Way	7.256	Full	Close the median opening
65	Washington Street	7.409	Full	Bi-Directional
66	K of C Drive	7.567	Full	Close the median opening
67	Bay Boulevard	7.632	NB-Directional	NB-Directional
68	Ridge Road	7.710	Signal	Signal
69	Springer Drive	7.960	Full	Bi-Directional
70	Self Storage Driveway	8.055	Bi-Directional	Close the median opening
71	Haverty's Driveway	8.127	Bi-Directional	Close the median opening
72	Golden Corral Drive	8.215	Full	Bi-Directional
73	Stone Road	8.283	Bi-Directional	Close the median opening
74	Salt Springs Road	8.373	Bi-Directional	Close the median opening
75	Holiday Hills Boulevard	8.482	Signal	Signal
76	Mel's Dinner Driveway	8.544	Full	Close the median opening
77	Embassy Boulevard	8.750	Signal	Signal
78	Tacoma Drive	8.857	Bi-Directional	Bi-Directional
79	Scenic Drive	9.051	Signal	Signal
80	Butch Street	9.223	Full	Close the median opening
81	Fox Hollow Drive	9.403	Signal	Signal
82	Graphic Drive	9.549	Bi-Directional	Bi-Directional
83	Regency Park Blvd	9.722	Signal	Signal
84	J & R Carpet Driveway	9.848	Full	Close the median opening
85	Jasmine Boulevard	9.992	Signal	Signal
86	Bougenville Drive	10.134	Full	SB-Directional
87	Coventry Drive	10.267	Full	Bi-Directional
88	Palisade Drive	10.402	NB-Directional	NB-Directional
89	Ranch Road	10.483	Signal	Signal
90	Burr Oaks Circle	10.583	Full	Close the median opening
91	Seward Drive	10.646	Full	Close the median opening
92	Sandra Drive	10.751	Full	NB-Directional
93	Commons Boulevard	10.782	Full	SB-Directional
94	San Marco Drive	10.976	Full	Bi-Directional
95	Colfax Road	11.029	Full	Close the median opening
96	Gulf Highlands Drive	11.105	Full	Bi-Directional

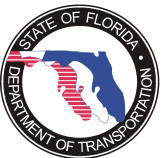
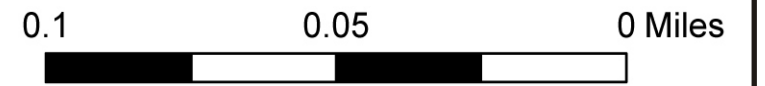
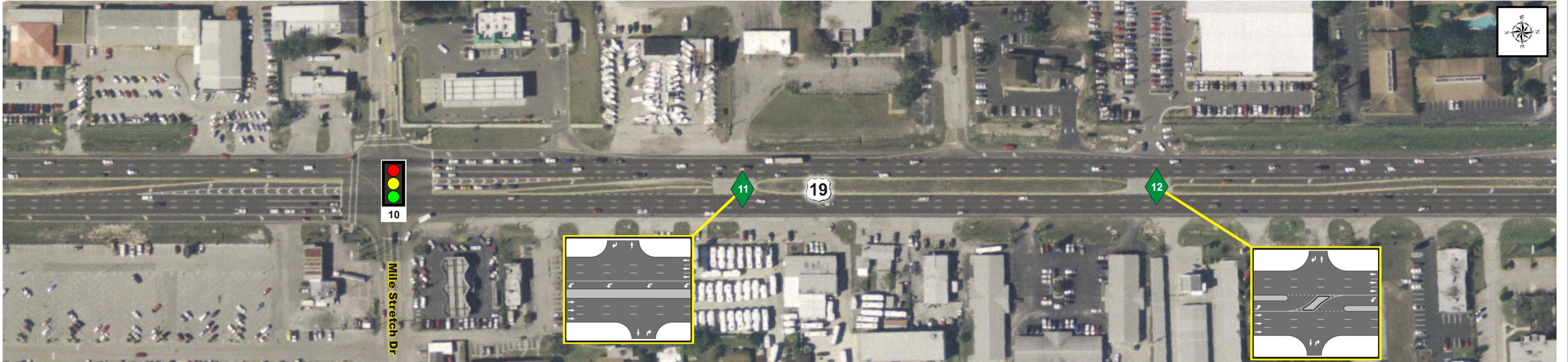
**Table 3-3 (Cont.)
SR 55 (US 19) Corridor Median Openings**

Median Opening No.	Cross Street	Mile Post	Existing Median Type	Recommended Median Type
97	Travelodge Driveway	11.248	Full	Bi-Directional
98	SR 52	11.474	Signal	Signal
99	Point Plaza Driveway	11.630	Bi-Directional	Bi-Directional
100	Edna Avenue	11.756	Full	SB-Directional
101	Big K Entrance	11.861	Full	Close the median opening
102	Beacon Woods Drive	11.961	Signal	Signal
103	Leisure Lanes Driveway	12.047	Full	Close the median opening
104	Peeco Plaza Driveway	12.149	Full	SB-Directional
105	Beach Boulevard	12.238	Full	Bi-Directional
106	Country Club Drive	12.389	Full	SB-Directional
107	Tower Dr. / Clarita Drive	12.480	Bi-Directional	Bi-Directional
108	Terrace Drive	12.572	Full	Close the median opening
109	Methodist Lane	12.634	Full	NB-Directional
110	Signal Cove Drive	12.693	Full	Close the median opening
111	Saltwater Boulevard	12.735	Full	NB-Directional
112	Florestate Drive	12.800	Full	SB-Directional
113	Sanderling Lane	12.818	Full	Close the median opening
114	Puffin Lane	12.895	Full	NB-Directional
115	Division Avenue	12.984	Full	SB-Directional
116	Stahl Drive	13.170	Bi-Directional	Close the median opening
117	Sea Ranch Drive	13.236	Full	Full / Signal
118	Babson Avenue	13.349	Full	Close the median opening
119	Windsor Mill Road	13.519	Bi-Directional	Bi-Directional
120	Citgo Gas Station	13.714	Bi-Directional	Close the median opening
121	Hudson Avenue	13.838	Signal	Signal
122	Sunoco Station Driveway	13.995	Full	Close the median opening
123	Flounder Drive	14.155	Full	Bi-Directional
124	New Jersey Avenue	14.397	Full	NB-Directional
125	Rhodes Road	14.492	Full / Emerg. Signal	Full / Emergency Signal
126	Maryland Avenue	14.660	Full	Bi-Directional
127	New York Avenue	14.807	Signal	Signal
128	Palatine Drive	15.016	Full	Close the median opening
129	Arcola Avenue	15.151	Full	Bi-Directional
130	Sunnydale Drive	15.296	Full	Close the median opening
131	Bolton Avenue	15.474	Full	Full / Signal
132	Sea Pines Drive	15.625	Full	NB-Directional

**Table 3-3 (Cont.)
SR 55 (US 19) Corridor Median Openings**

Median Opening No.	Cross Street	Mile Post	Existing Median Type	Recommended Median Type
133	Casper Avenue	15.802	Full	NB-Directional
134	Viva Via	15.947	Full	NB-Directional
135	Denton Avenue	16.126	Signal	Signal
136	RV Resort Driveway	16.286	Full	Close the median opening
137	Eden Avenue	16.457	Full	SB-Directional
138	Phelps Road	16.577	Full	Bi-Directional
139	Scheer Boulevard	16.773	Full	Bi-Directional
140	Little Road	16.966	Signal	Signal
141	Surplus Sale Driveway	17.268	Full	Close the median opening
142	Houston Avenue	17.423	Full	Full / Signal
143	Ideal Lane	17.614	Full	Close the median opening
144	Jessup Lane	17.842	Full	Full
145	JC Sod & Plants	18.061	Full	Close the median opening
146	Aripeka Road	18.301	Full	Full / Signal
147	Meridian Boulevard	18.511	Full	Bi-Directional
148	Vacant	18.699	Full	Close the median opening
149	Osprey Point	18.902	Full	SB-Directional
150	Discount Beverage	18.956	Full	NB-Directional
151	Landmark Drive	19.371	Full	Bi-Directional
152	Crafters Drive	19.504	Full	Close the median opening
153	County Line Road	19.673	Signal	Signal

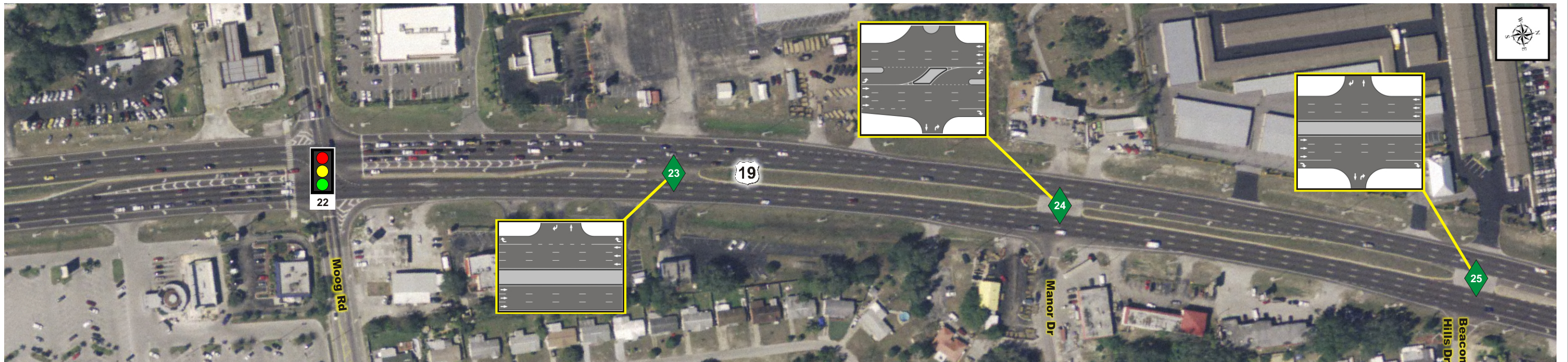
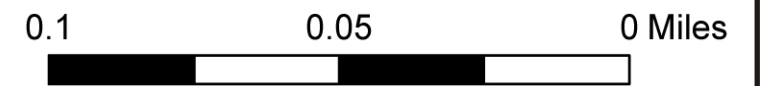
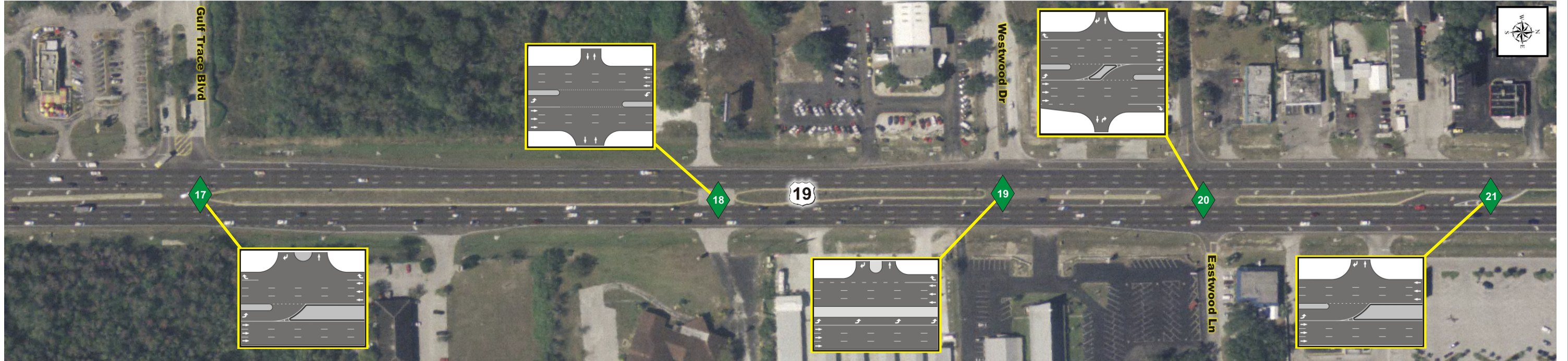




SR 55 (US 19)
from Pinellas County Line
to Hernando County Line

PROPOSED MEDIAN OPENINGS

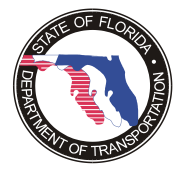
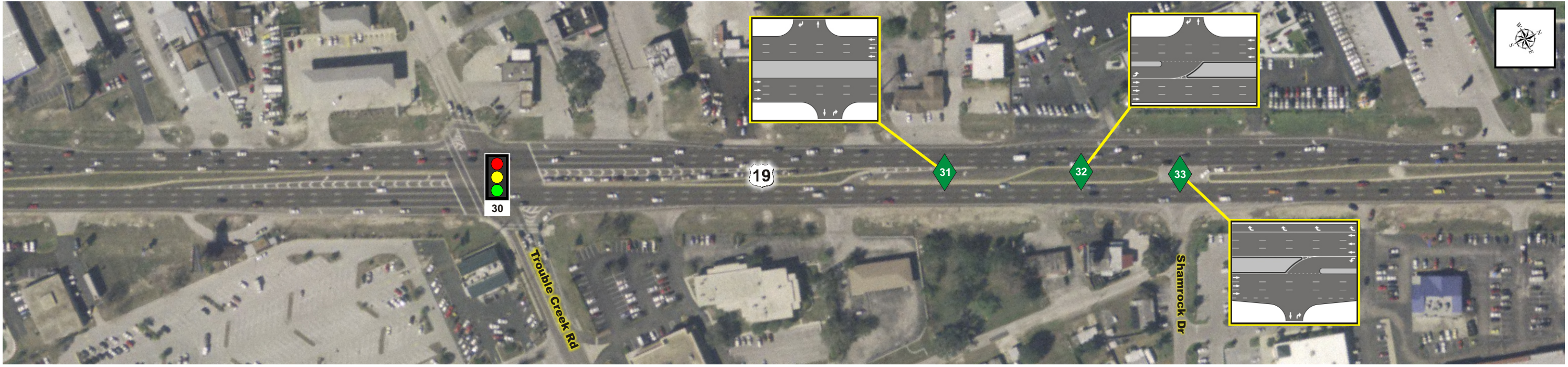
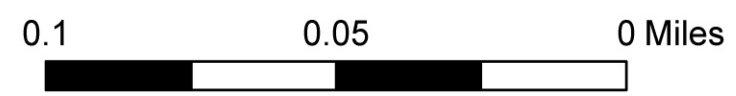
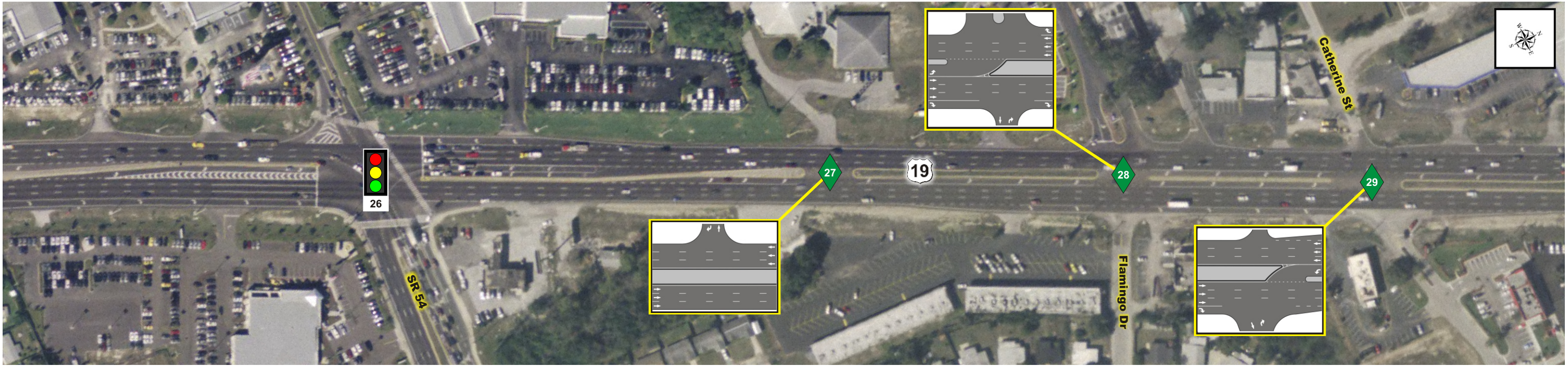
EXHIBIT 6B



SR 55 (US 19)
from Pinellas County Line
to Hernando County Line

PROPOSED MEDIAN OPENINGS

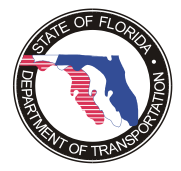
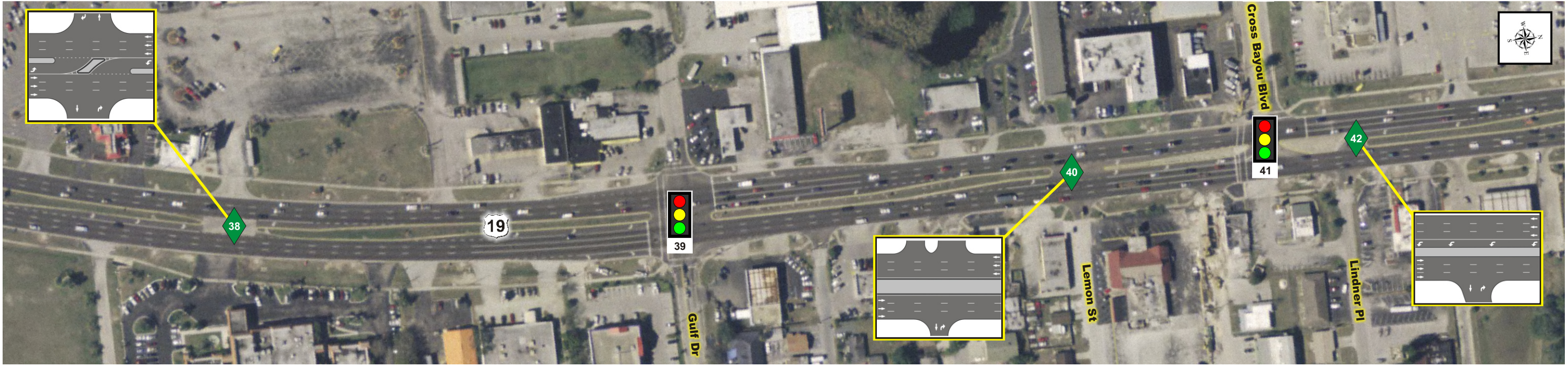
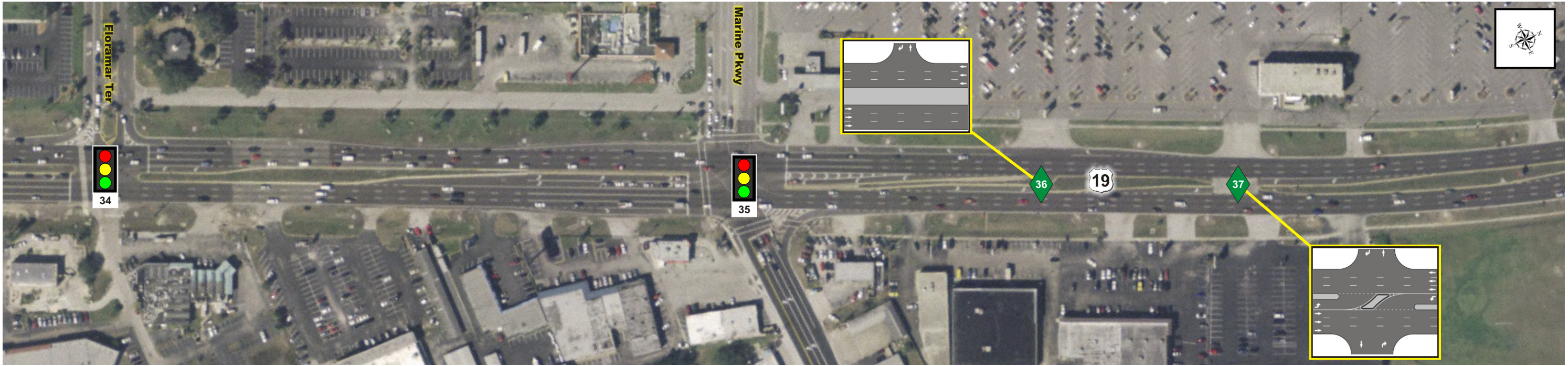
EXHIBIT 6C



SR 55 (US 19)
from Pinellas County Line
to Hernando County Line

PROPOSED MEDIAN OPENINGS

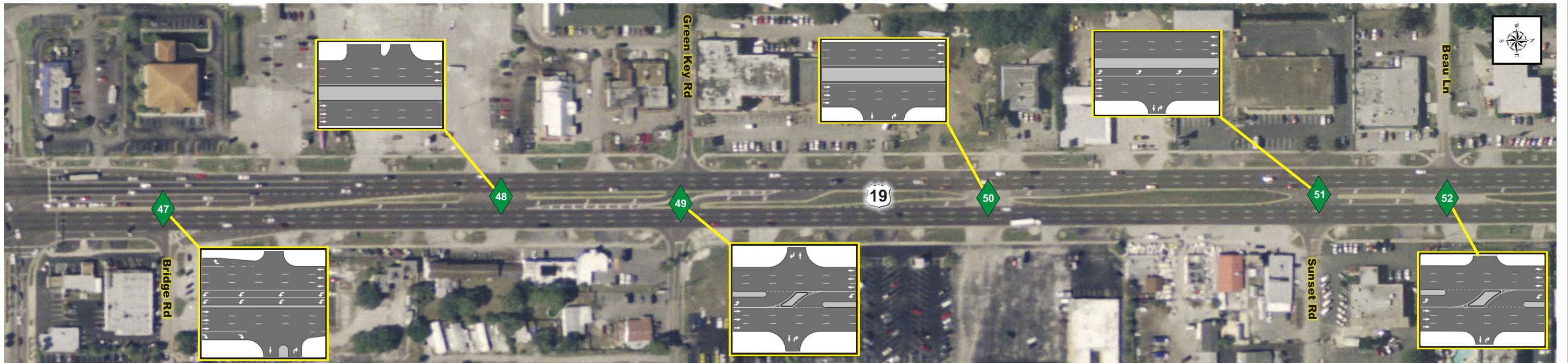
EXHIBIT 6D



SR 55 (US 19)
from Pinellas County Line
to Hernando County Line

PROPOSED MEDIAN OPENINGS

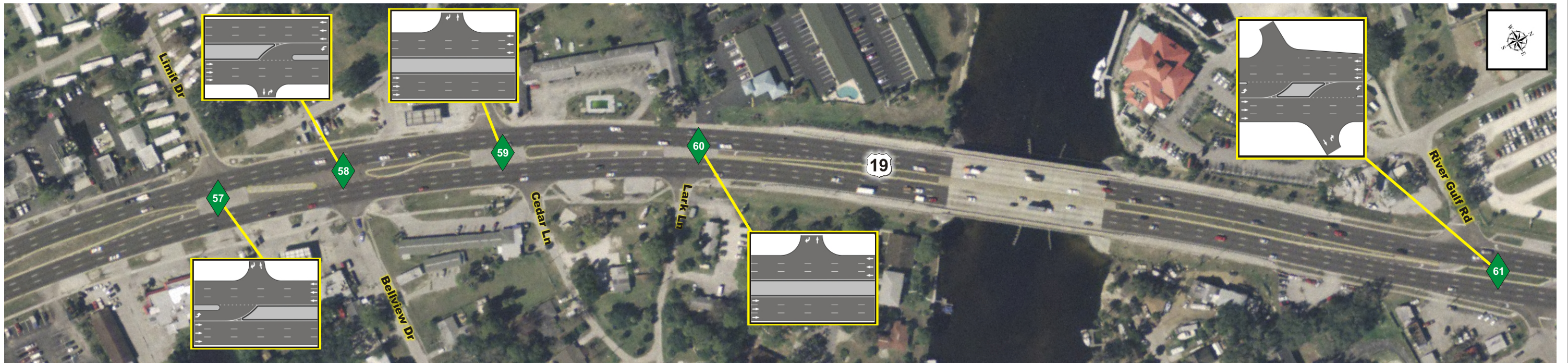
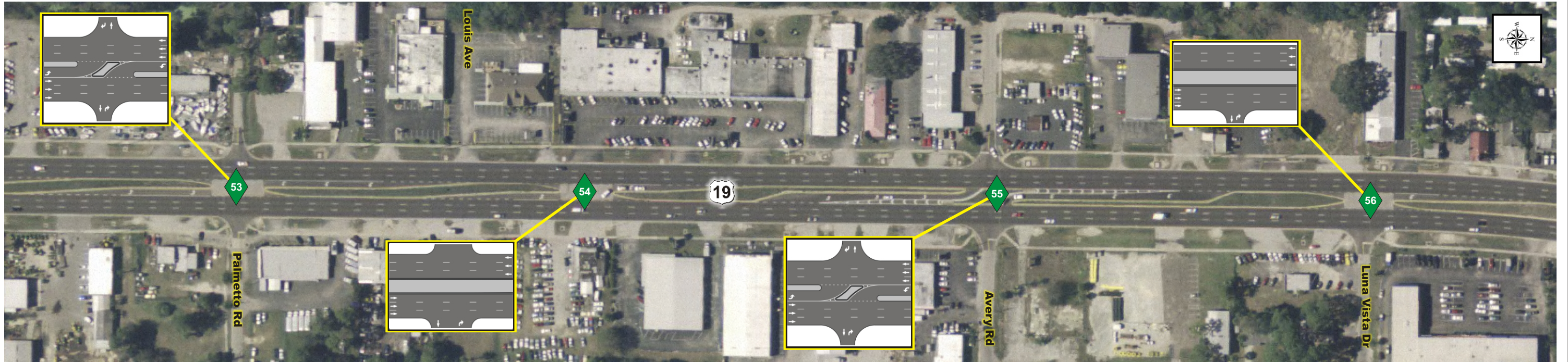
EXHIBIT 6E



SR 55 (US 19)
from Pinellas County Line
to Hernando County Line

PROPOSED MEDIAN OPENINGS

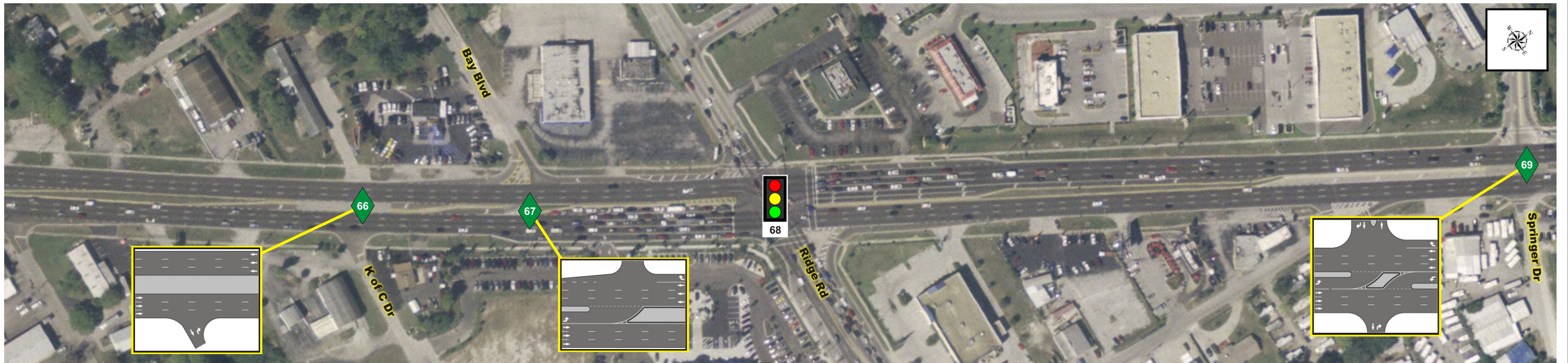
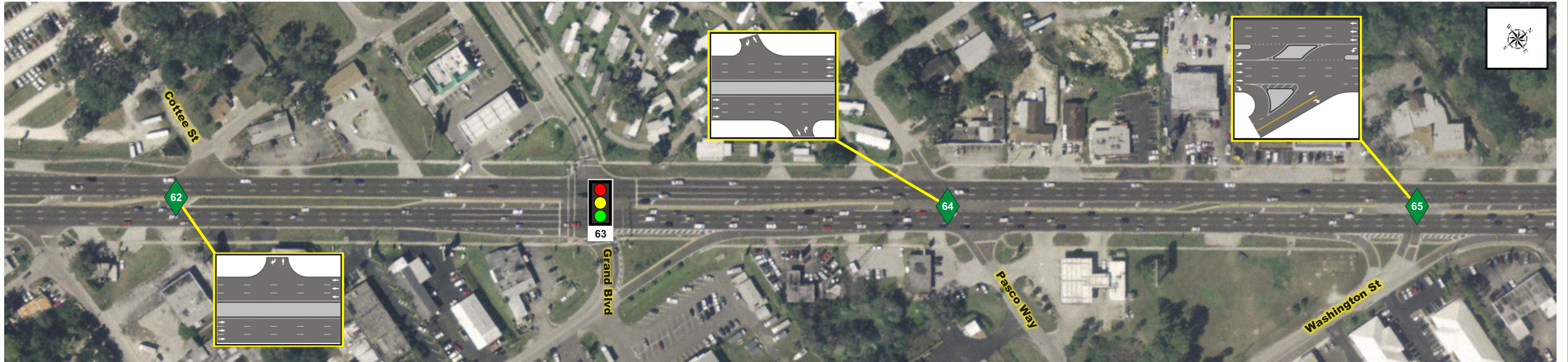
EXHIBIT 6F



SR 55 (US 19)
from Pinellas County Line
to Hernando County Line

PROPOSED MEDIAN OPENINGS

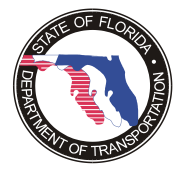
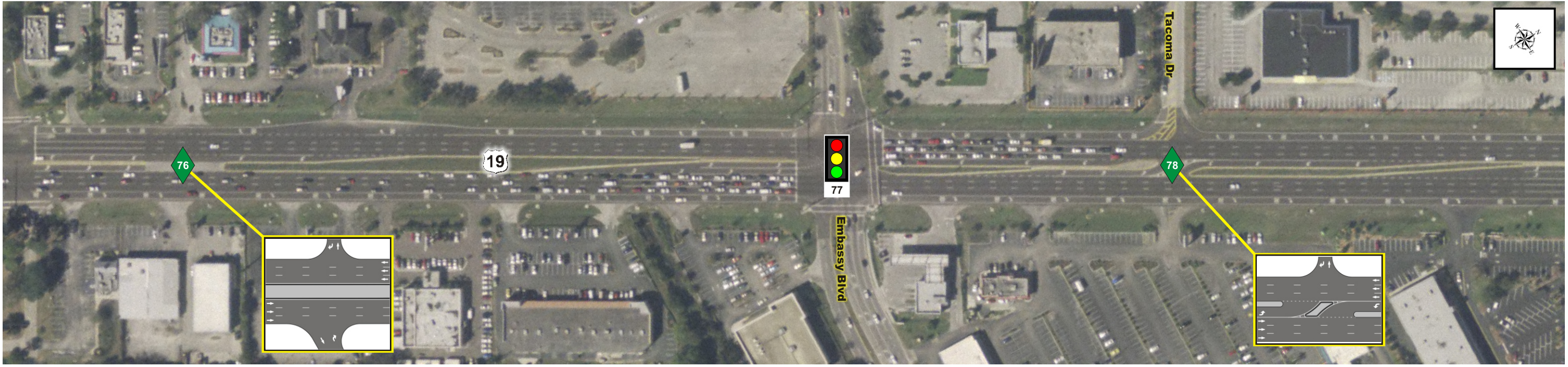
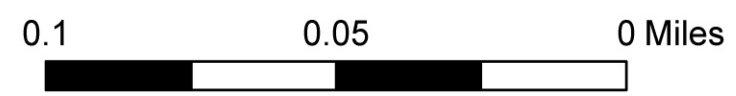
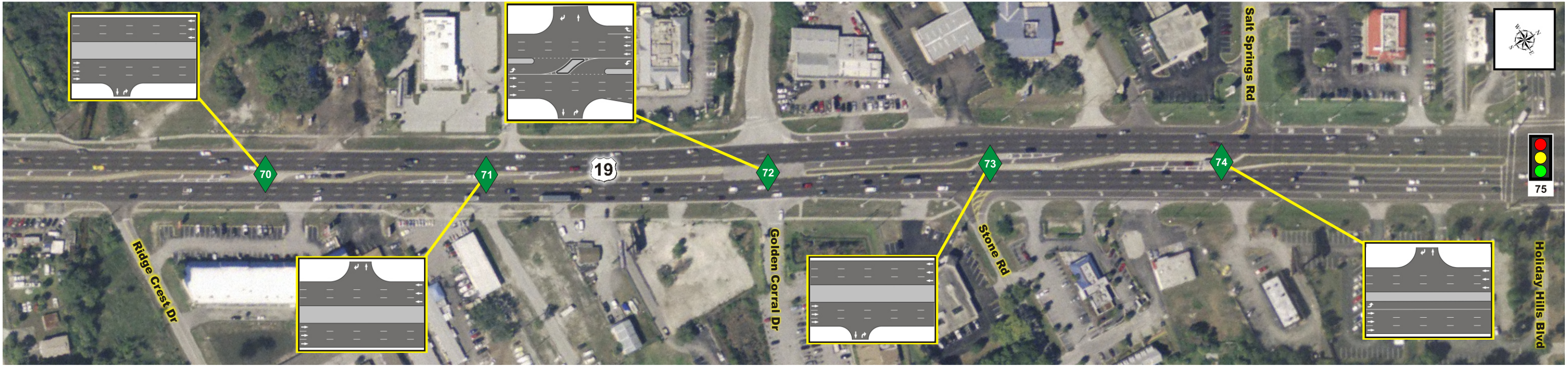
EXHIBIT 6G



SR 55 (US 19)
from Pinellas County Line
to Hernando County Line

PROPOSED MEDIAN OPENINGS

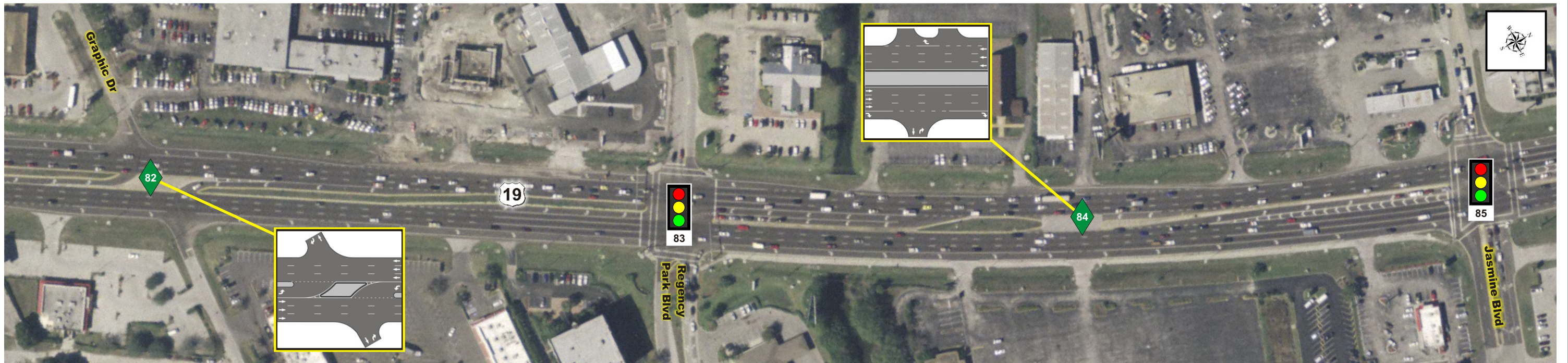
EXHIBIT 6H



SR 55 (US 19)
from Pinellas County Line
to Hernando County Line

PROPOSED MEDIAN OPENINGS

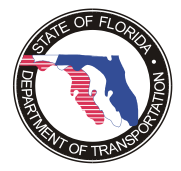
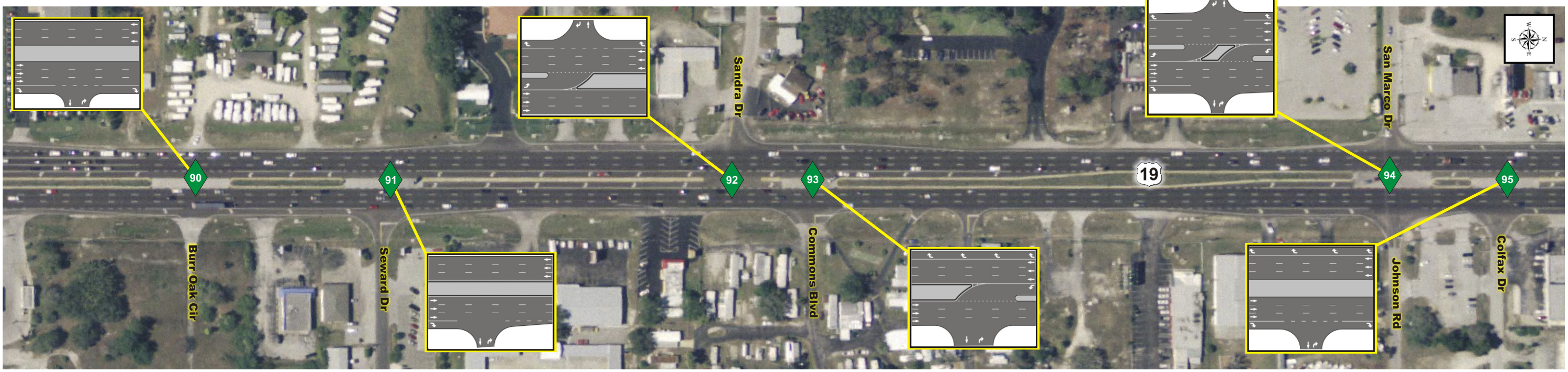
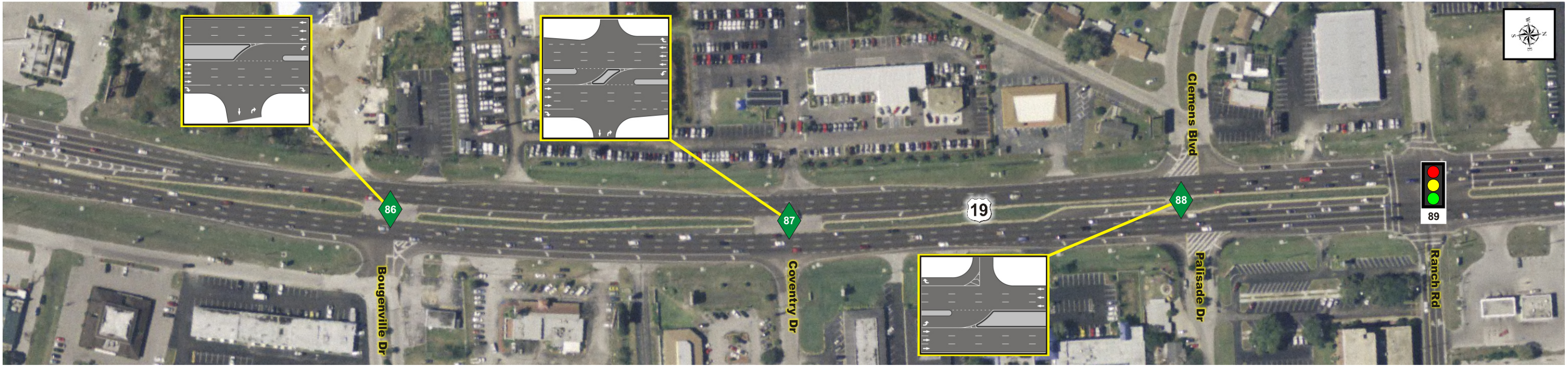
EXHIBIT 6I



SR 55 (US 19)
from Pinellas County Line
to Hernando County Line

PROPOSED MEDIAN OPENINGS

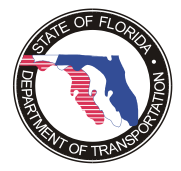
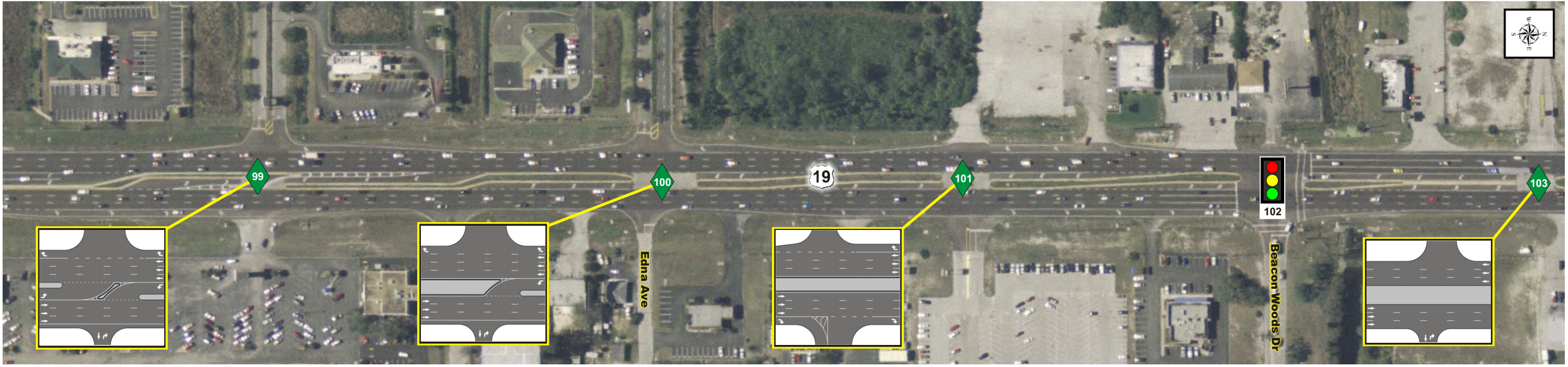
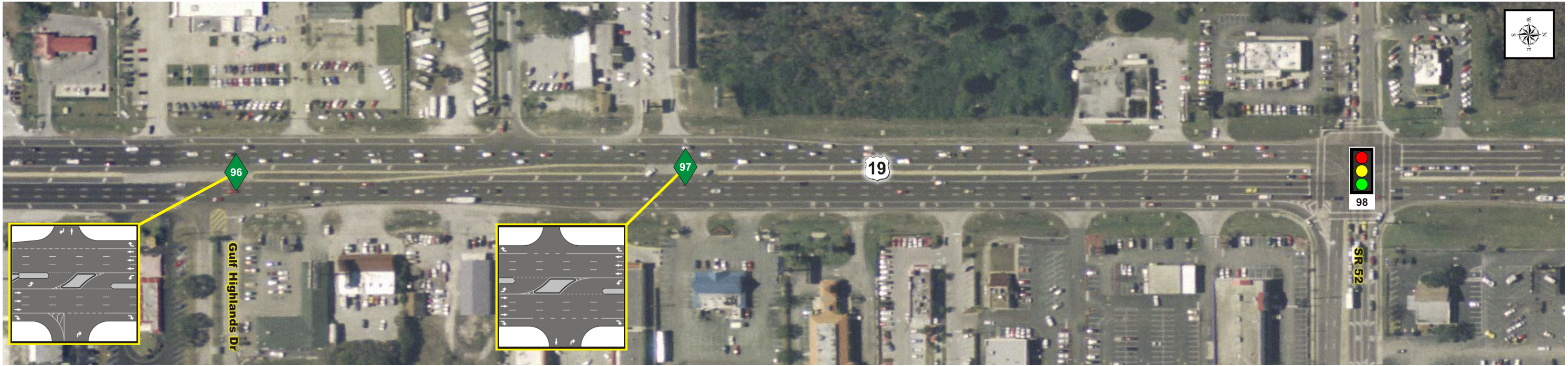
EXHIBIT 6J



SR 55 (US 19)
from Pinellas County Line
to Hernando County Line

PROPOSED MEDIAN OPENINGS

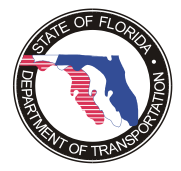
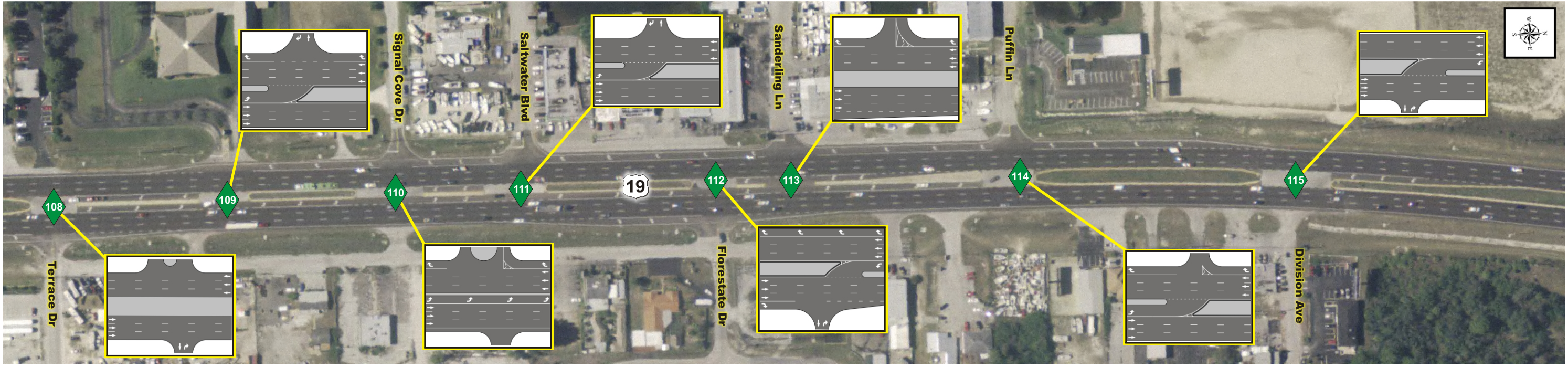
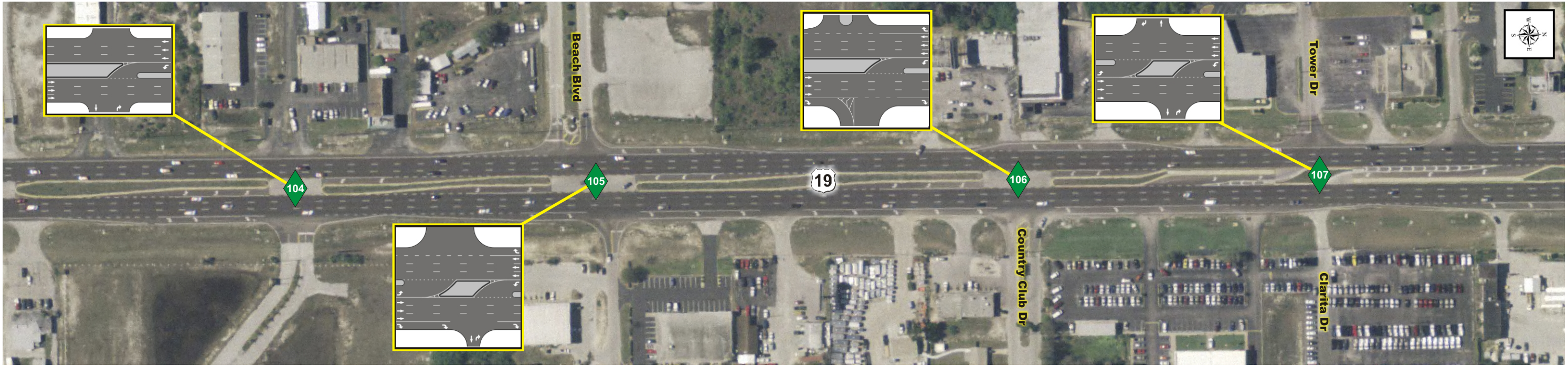
EXHIBIT 6K



SR 55 (US 19)
from Pinellas County Line
to Hernando County Line

PROPOSED MEDIAN OPENINGS

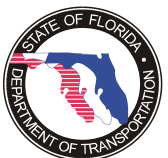
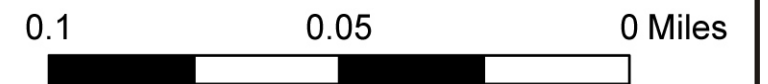
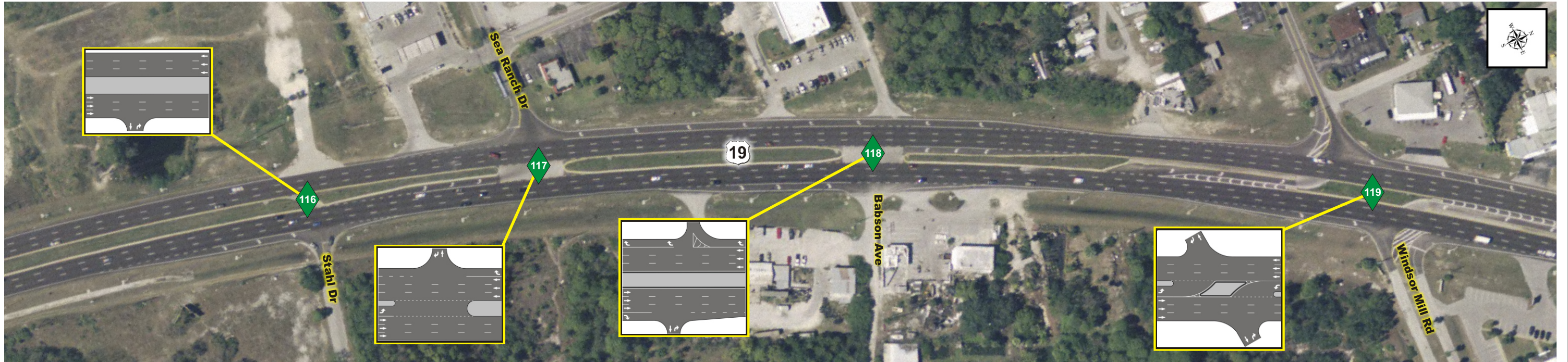
EXHIBIT 6L



SR 55 (US 19)
from Pinellas County Line
to Hernando County Line

PROPOSED MEDIAN OPENINGS

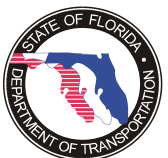
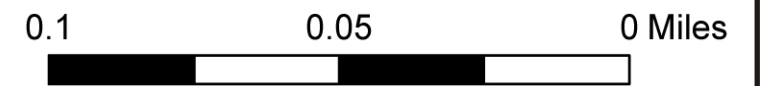
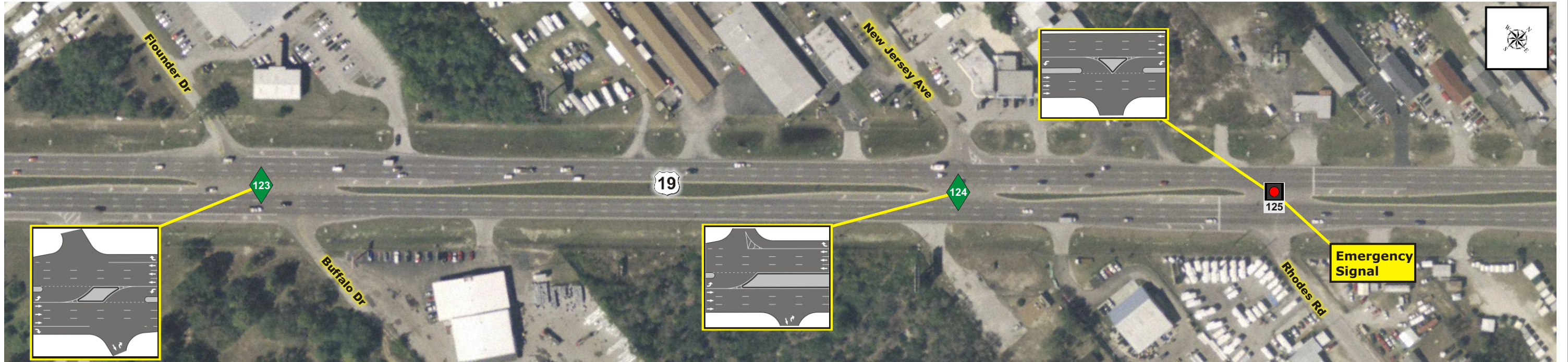
EXHIBIT 6M



SR 55 (US 19)
from Pinellas County Line
to Hernando County Line

PROPOSED MEDIAN OPENINGS

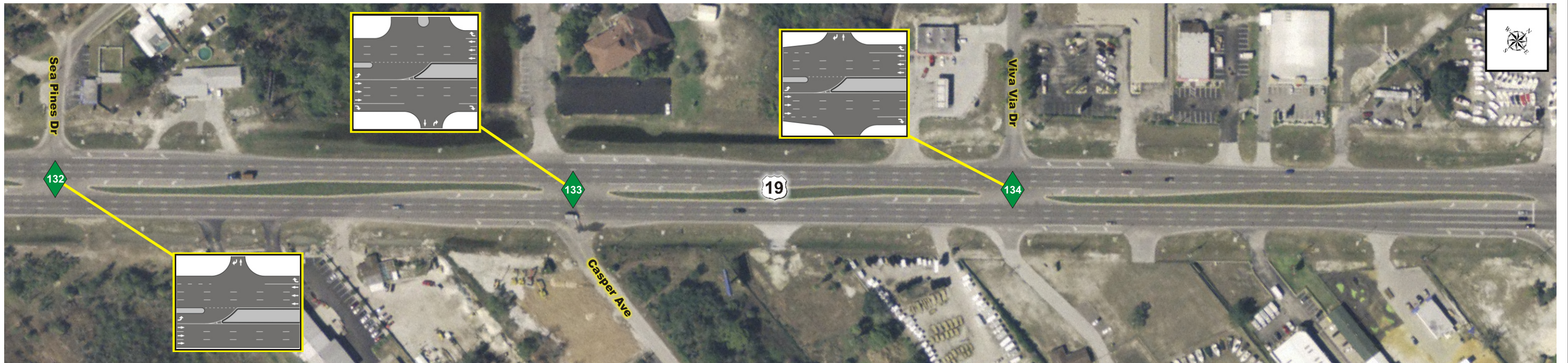
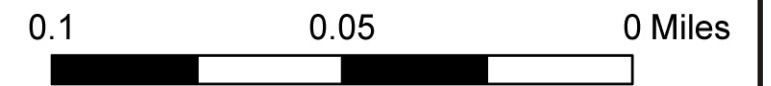
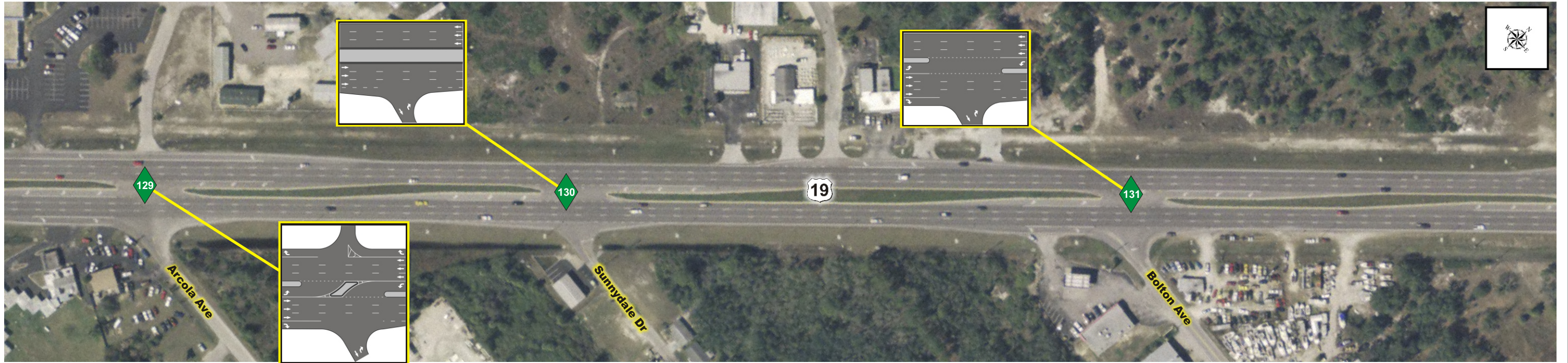
EXHIBIT 6N



SR 55 (US 19)
from Pinellas County Line
to Hernando County Line

PROPOSED MEDIAN OPENINGS

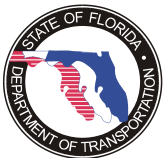
EXHIBIT 60



SR 55 (US 19)
from Pinellas County Line
to Hernando County Line

PROPOSED MEDIAN OPENINGS

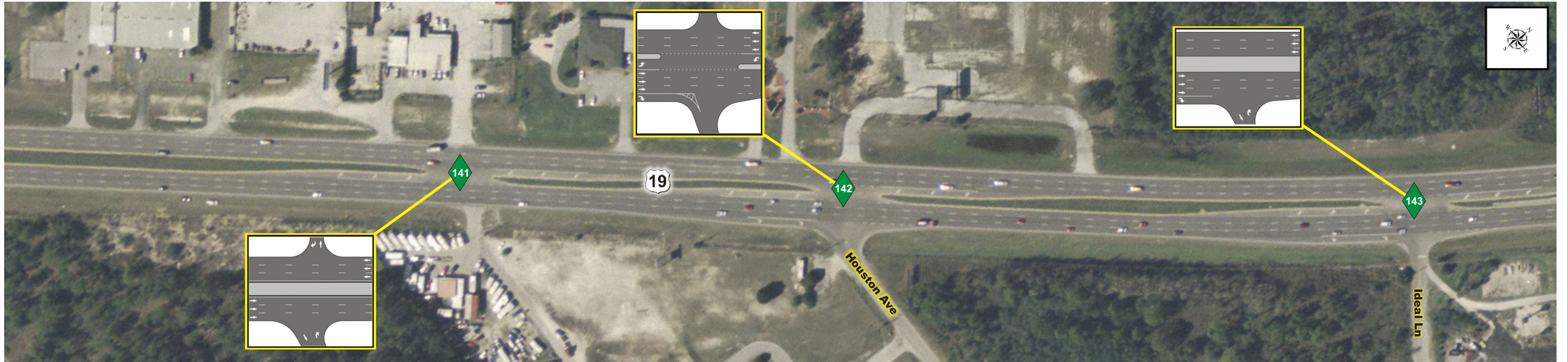
EXHIBIT 6P



SR 55 (US 19)
from Pinellas County Line
to Hernando County Line

PROPOSED MEDIAN OPENINGS

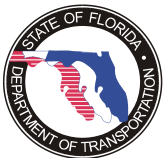
EXHIBIT 6Q



SR 55 (US 19)
from Pinellas County Line
to Hernando County Line

PROPOSED MEDIAN OPENINGS

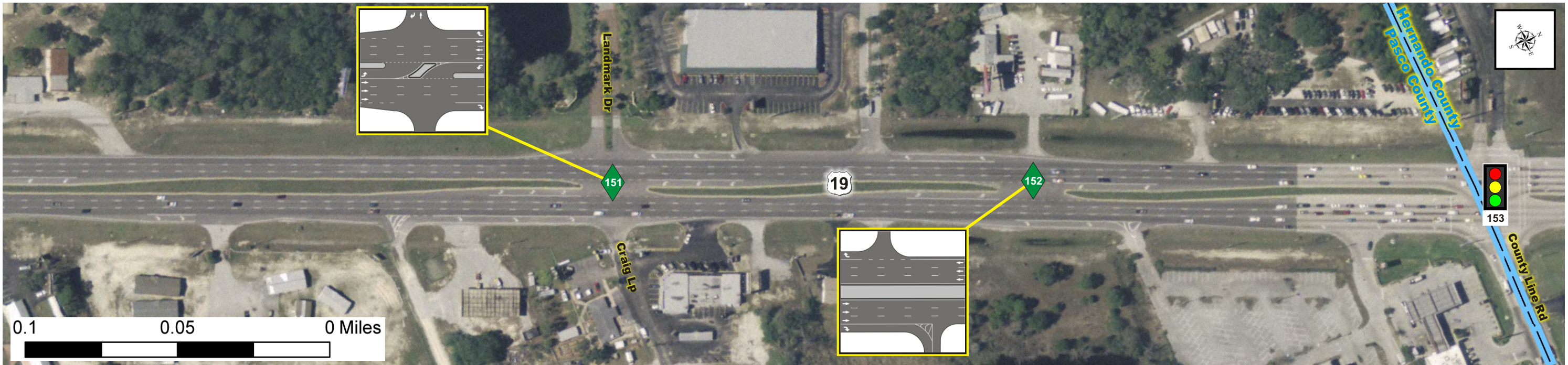
EXHIBIT 6R



SR 55 (US 19)
from Pinellas County Line
to Hernando County Line

PROPOSED MEDIAN OPENINGS

EXHIBIT 6S



SR 55 (US 19)
from Pinellas County Line
to Hernando County Line

PROPOSED MEDIAN OPENINGS

EXHIBIT 6T

SECTION 4.0

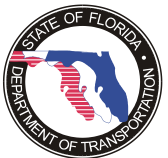
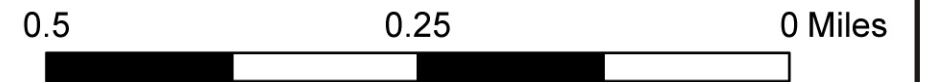
FUTURE CONDITIONS

4.1 DESIGN YEAR (2030) TRAFFIC PROJECTIONS

The Tampa Bay Regional Planning Model (TBRPM) Version 5.1 was utilized to estimate future year traffic volumes on SR 55 (US 19) and the intersecting cross streets. The 2030 Annual Average Daily Traffic (AADT) were developed and provided by the Florida Department of Transportation (FDOT) and are shown on **Exhibits 7A-7F**. The design year (2030) directional design hour volumes (DDHV) were obtained by multiplying the AADT volumes first by the K_{30} factor of 9.52 percent and then by the D_{30} factor of 57.43 percent (peak direction). At intersections, the design hour AM and PM intersection turning movement volumes were estimated by multiplying the directional design hour volumes by AM and PM field collected manual turning movement percentages, respectively. The SR 55 (US 19) arterial and cross streets peak hour traffic peak directions were determined based on the collected field traffic count data. The developed design year (2030), AM and PM turning movement traffic volumes are shown on **Exhibits 8A-8F**.

4.2 DESIGN YEAR (2030) NO-BUILD INTERSECTION LEVEL OF SERVICE ANALYSIS

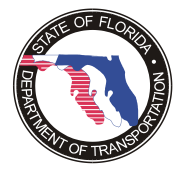
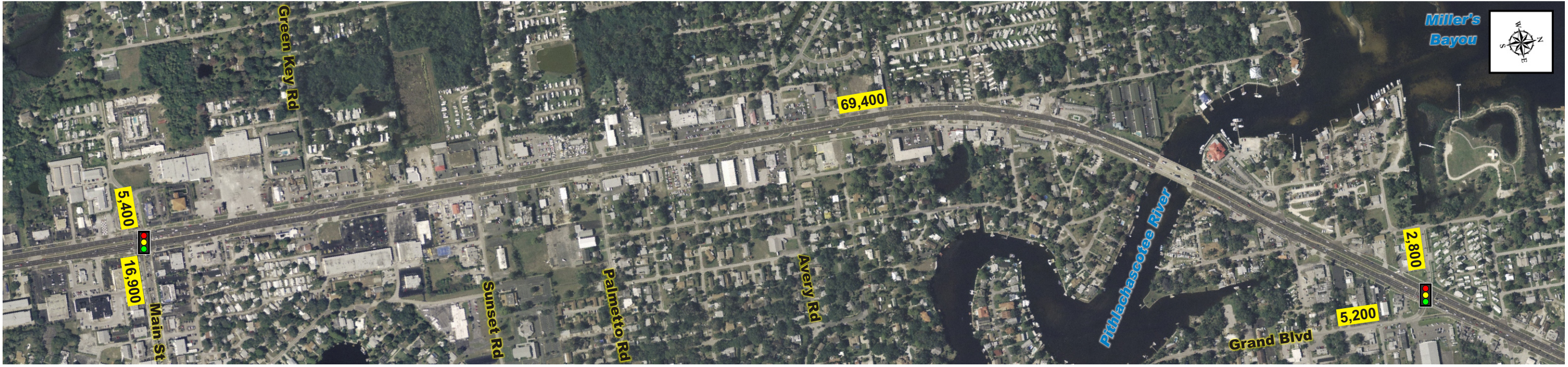
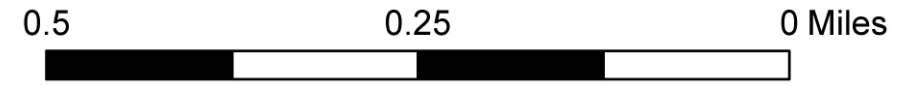
Signalized intersection level of service (LOS) was estimated using the Highway Capacity Manual (HCM) methodology module of Synchro software. In the No-Build intersection LOS analysis, existing year (2006) geometric conditions and design year (2030) design hour turning movement traffic volumes with respect to individual intersections were used. Existing signal timing information obtained from Pasco County was also used in the analysis. The analysis results for signalized intersections are summarized in **Table 4-1** and shown on **Exhibits 9A-9F**. The design year (2030) Synchro intersection analysis sheets for the No-Build conditions are included in **Appendix C** (under separate cover).



SR 55 (US 19)
from Pinellas County Line
to Hernando County Line

DESIGN YEAR (2030) AADT

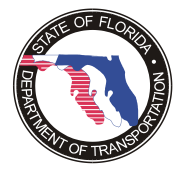
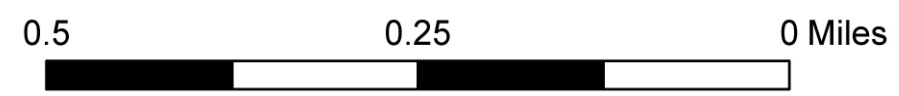
EXHIBIT 7A



SR 55 (US 19)
from Pinellas County Line
to Hernando County Line

DESIGN YEAR (2030) AADT

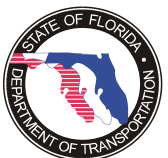
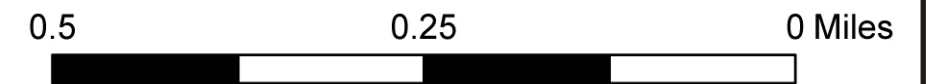
EXHIBIT 7B



SR 55 (US 19)
from Pinellas County Line
to Hernando County Line

DESIGN YEAR (2030) AADT

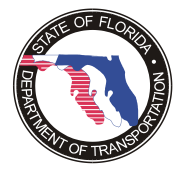
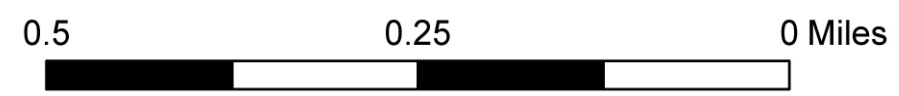
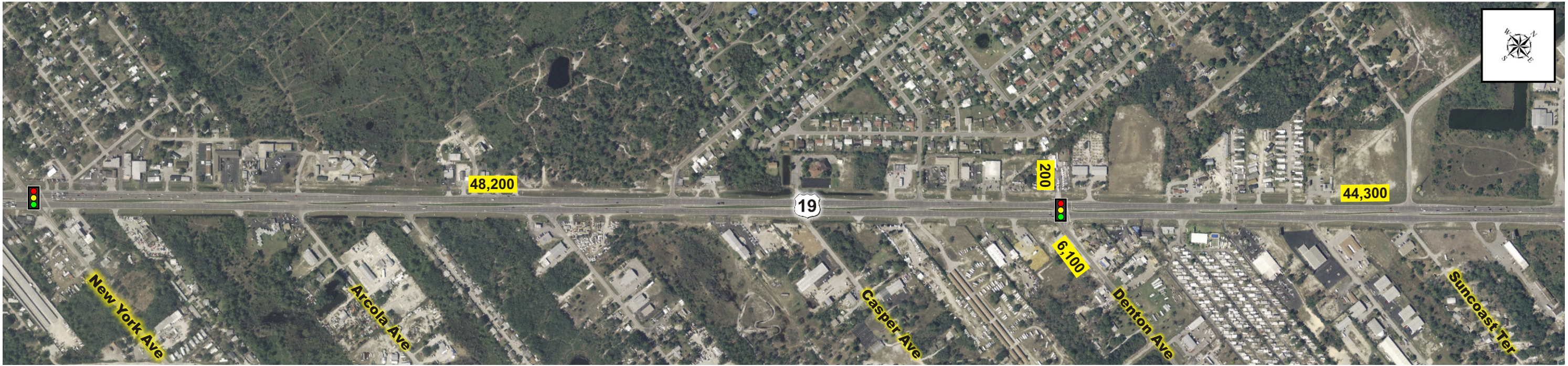
EXHIBIT 7C



SR 52 (US 19)
from Pinellas County Line
to Hernando County Line

DESIGN YEAR (2030) AADT

EXHIBIT 7D



SR 55 (US 19)
from Pinellas County Line
to Hernando County Line

DESIGN YEAR (2030) AADT

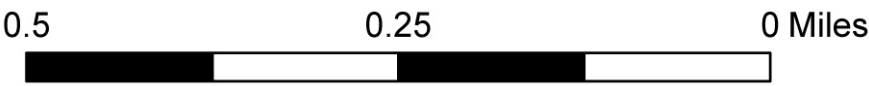
EXHIBIT 7E



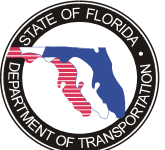
SR 55 (US 19)
from Pinellas County Line
to Hernando County Line

DESIGN YEAR (2030) AADT

EXHIBIT 7F



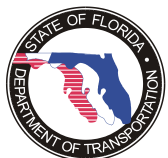
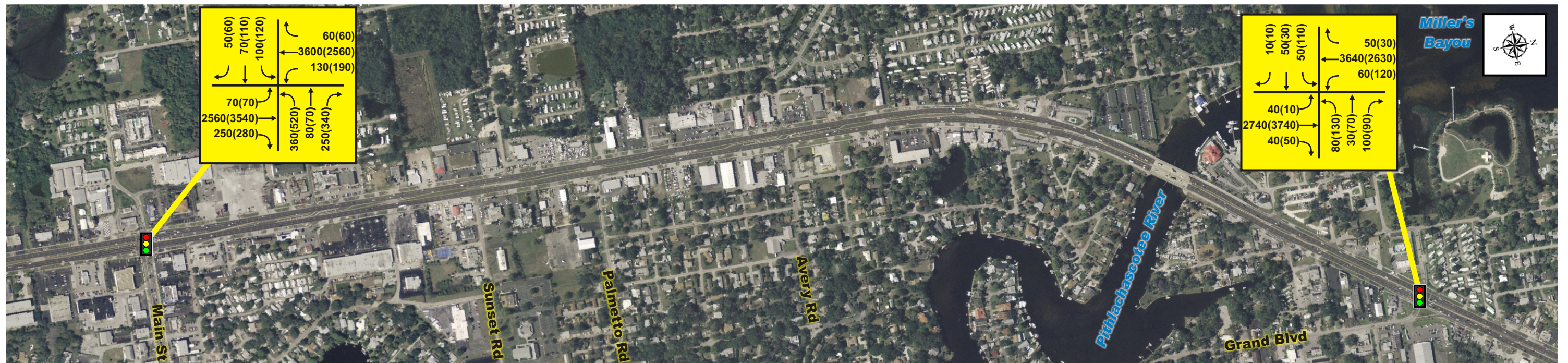
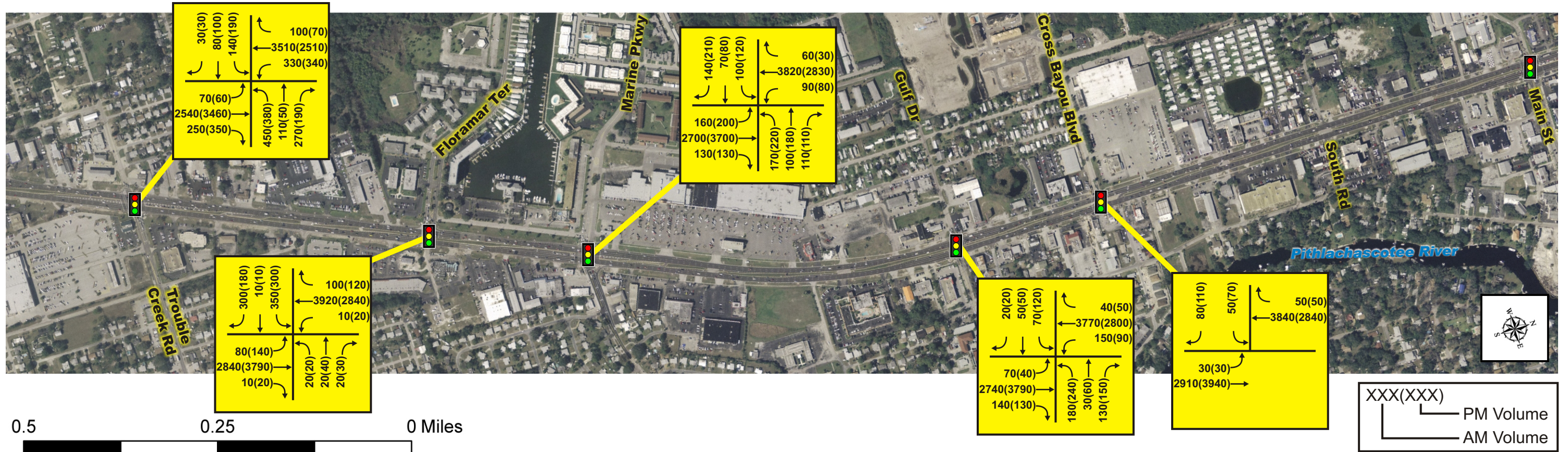
XXX(XXX)
 PM Volume
 AM Volume



SR 55 (US 19)
 from Pinellas County Line
 to Hernando County Line

DESIGN YEAR (2030) TURNING MOVEMENT VOLUMES

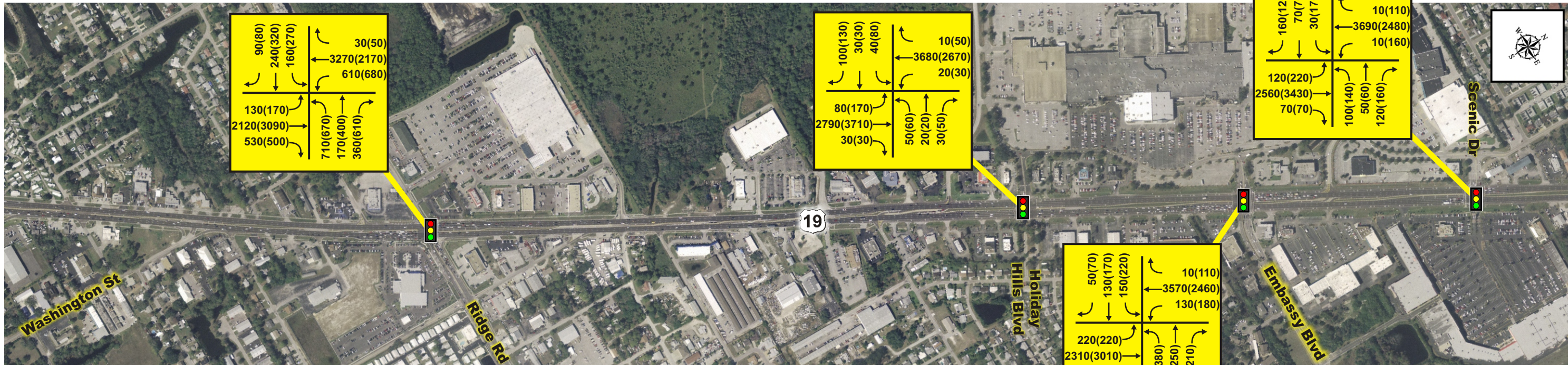
EXHIBIT 8A



SR 55 (US 19)
from Pinellas County Line
to Hernando County Line

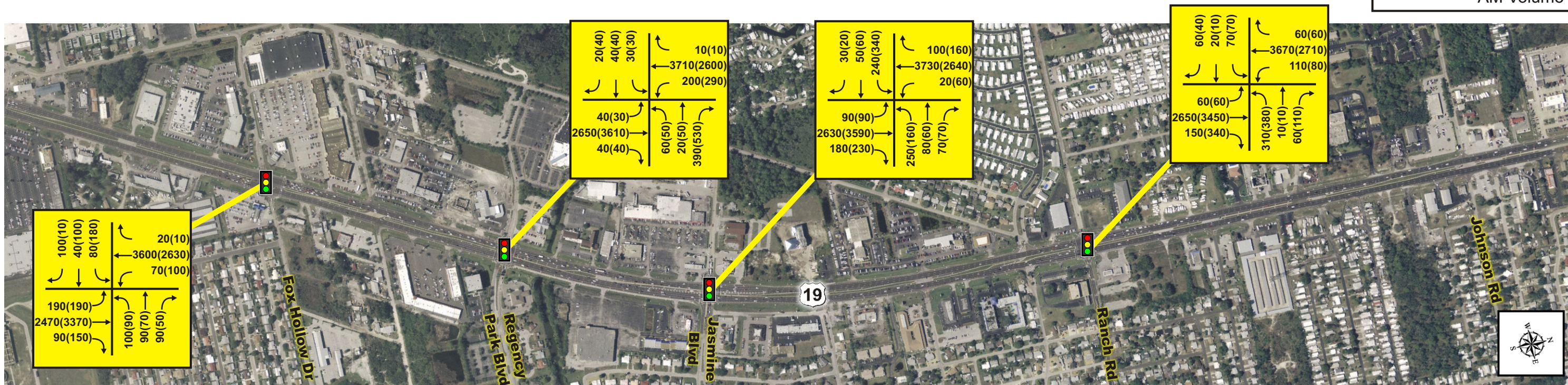
DESIGN YEAR (2030) TURNING MOVEMENT VOLUMES

EXHIBIT 8B



0.5 0.25 0 Miles

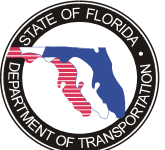
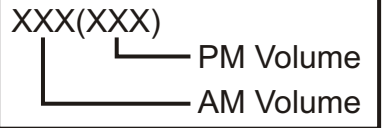
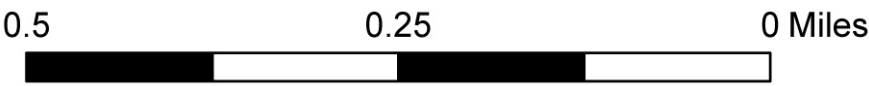
XXX(XXX)
PM Volume
AM Volume



SR 55 (US 19)
from Pinellas County Line
to Hernando County Line

DESIGN YEAR (2030) TURNING MOVEMENT VOLUMES

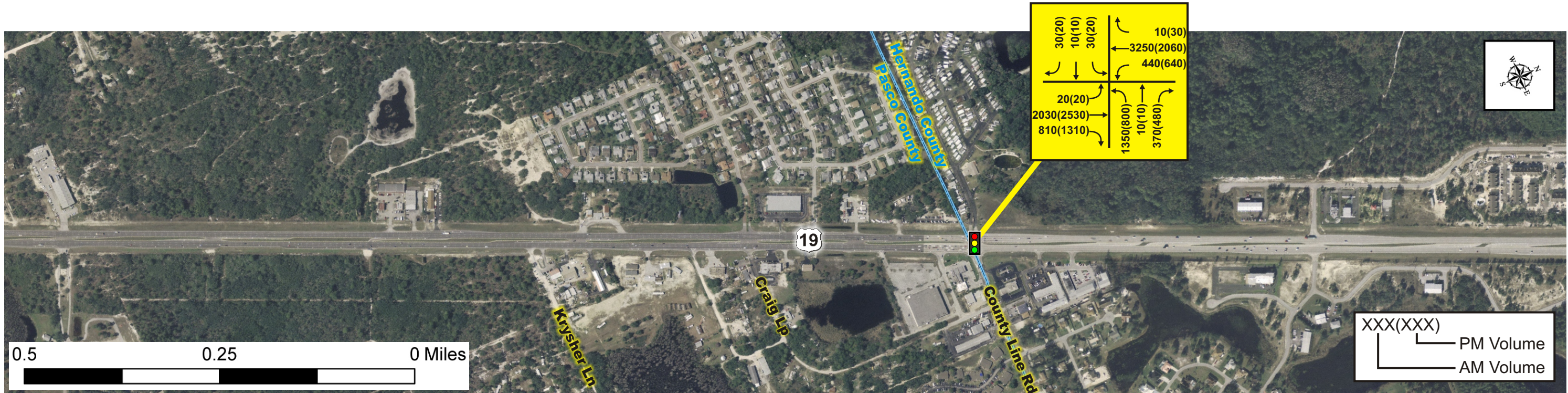
EXHIBIT 8C



SR 55 (US 19)
from Pinellas County Line
to Hernando County Line

DESIGN YEAR (2030) TURNING MOVEMENT VOLUMES

EXHIBIT 8E



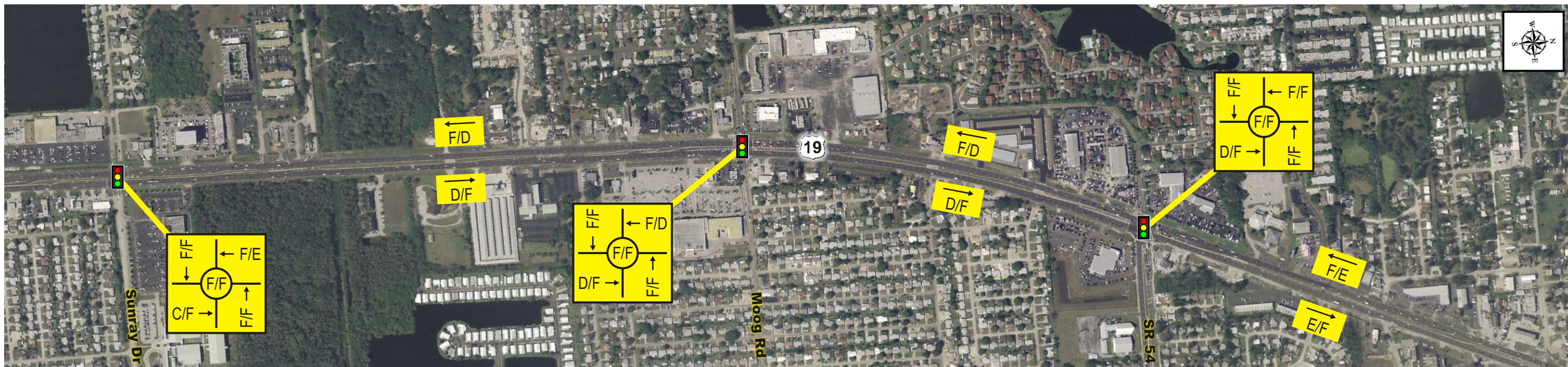
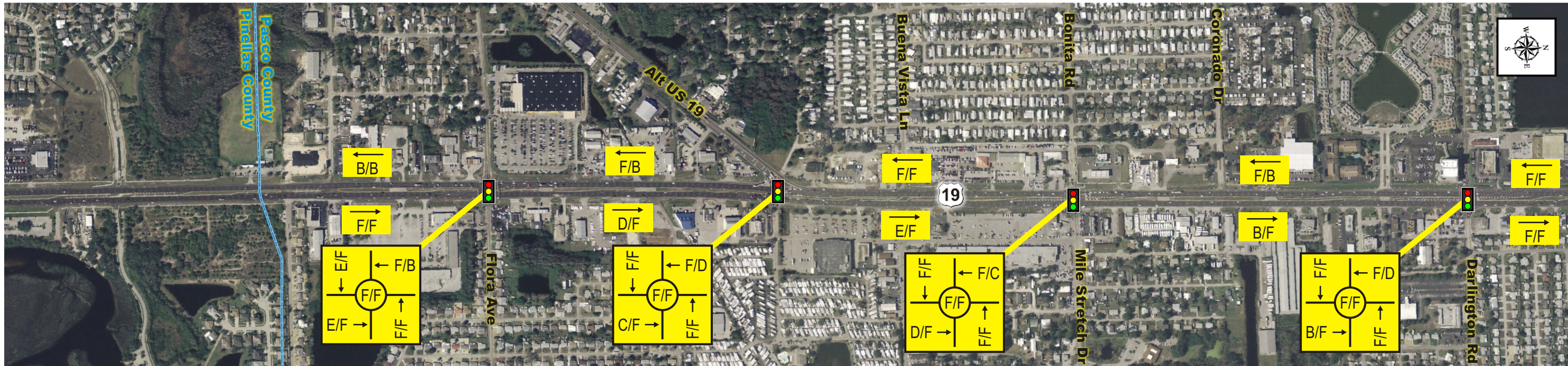
SR 55 (US 19)
from Pinellas County Line
to Hernando County Line

DESIGN YEAR (2030) TURNING MOVEMENT VOLUMES

EXHIBIT 8F

Table 4-1
Design Year (2030) No-Build SR 55 (US 19)
Intersection Level of Service Summary

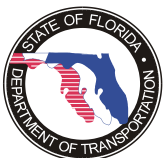
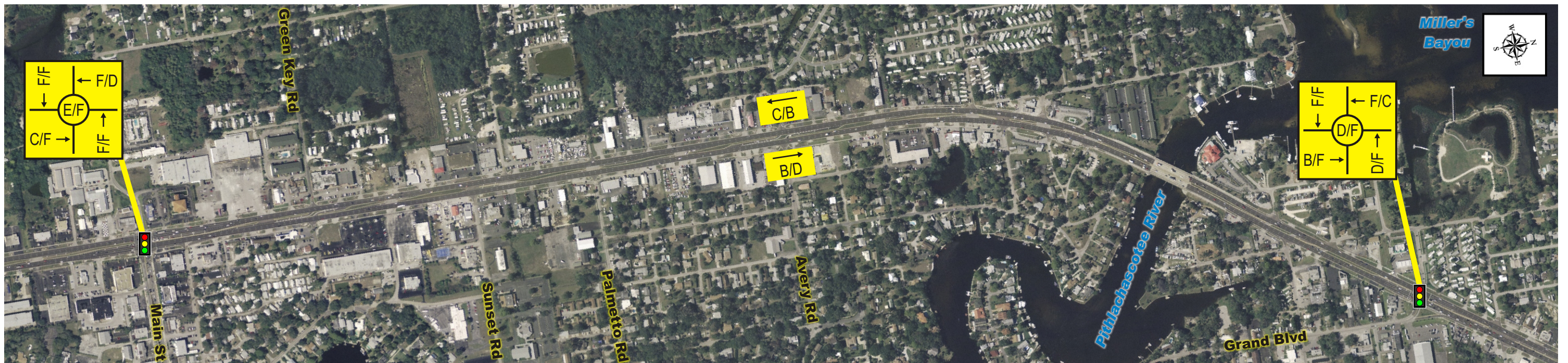
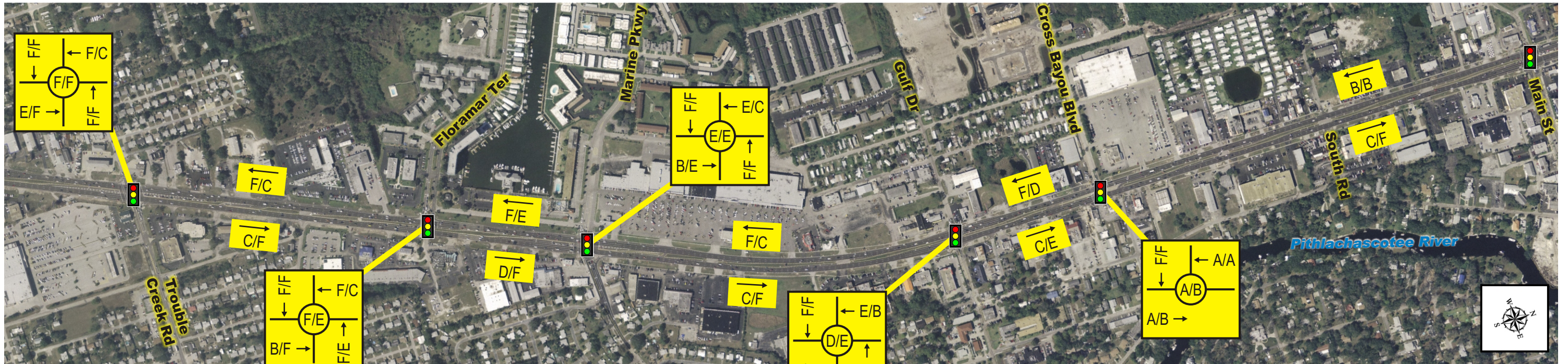
Cross Street	SR 55 (US 19) Mainline NB AM / PM	SR 55 (US 19) Mainline SB AM / PM	EB AM / PM	WB AM / PM	Overall LOS AM / PM	Overall Delay (sec / veh) AM / PM
Flora Avenue	E / F	F / B	E / F	F / F	F / F	153 / 92
Alt. 19	C / F	F / D	F / F	F / F	F / F	126 / 187
Mile Stretch Drive	D / F	F / C	F / F	F / F	F / F	164 / 115
Darlington Road	B / F	F / D	F / F	F / F	F / F	96 / 142
Sunray Drive	C / F	F / E	F / F	F / F	F / F	109 / 155
Moog Road	D / F	F / D	F / F	F / F	F / F	88 / 127
SR 54	D / F	F / F	F / F	F / F	F / F	101 / 161
Trouble Creek Road	E / F	F / C	F / F	F / F	F / F	90 / 110
Floramar Terrace	B / F	F / C	F / F	F / E	F / E	94 / 76
Marine Parkway	B / E	E / C	F / F	F / F	E / E	63 / 65
Gulf Drive	B / F	E / B	F / F	F / F	D / E	49 / 66
Cross Bayou Boulevard	A / B	A / A	F / F	--	A / B	8 / 13
Main Street	C / F	F / D	F / F	F / F	E / F	79 / 117
Grand Boulevard	B / F	F / C	F / F	D / F	D / F	55 / 95
Ridge Road	E / F	F / F	F / F	E / F	F / F	166 / 216
Holiday Hills Boulevard	B / D	D / B	E / E	E / E	C / D	32 / 38
Embassy Boulevard	C / F	F / E	F / E	E / E	F / F	89 / 108
Scenic Drive	B / F	F / C	E / E	E / F	F / F	103 / 103
Fox Hollow Drive	C / F	F / D	D / F	E / F	F / F	134 / 105
Regency Park Drive	D / F	F / B	E / E	E / F	F / F	112 / 136
Jasmine Boulevard	C / F	F / E	F / E	E / E	F / F	120 / 147
Ranch Road	D / F	F / C	E / E	F / F	F / F	121 / 97
SR 52	D / F	F / F	E / E	F / F	F / F	164 / 243
Beacon Woods Drive	C / E	B / B	D / D	F / F	C / E	25 / 58
Hudson Avenue	F / F	F / D	E / E	E / F	F / F	114 / 183
New York Avenue	C / E	D / C	C / D	D / F	D / D	38 / 52
Denton Avenue	B / C	C / B	C / C	F / D	C / C	26 / 24
Little Road	C / F	F / F	D / D	F / F	F / F	288 / 237
County Line Road	F / F	F / F	E / E	F / F	F / F	275 / 303



SR 55 (US 19)
from Pinellas County Line
to Hernando County Line

DESIGN YEAR (2030) NO-BUILD LEVEL OF SERVICE

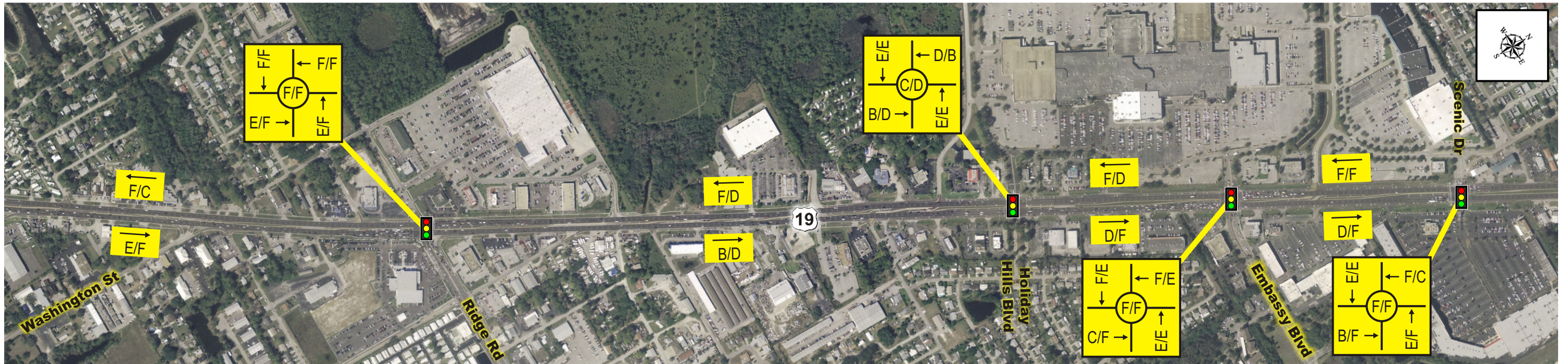
EXHIBIT 9A



SR 55 (US 19)
from Pinellas County Line
to Hernando County Line

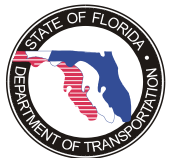
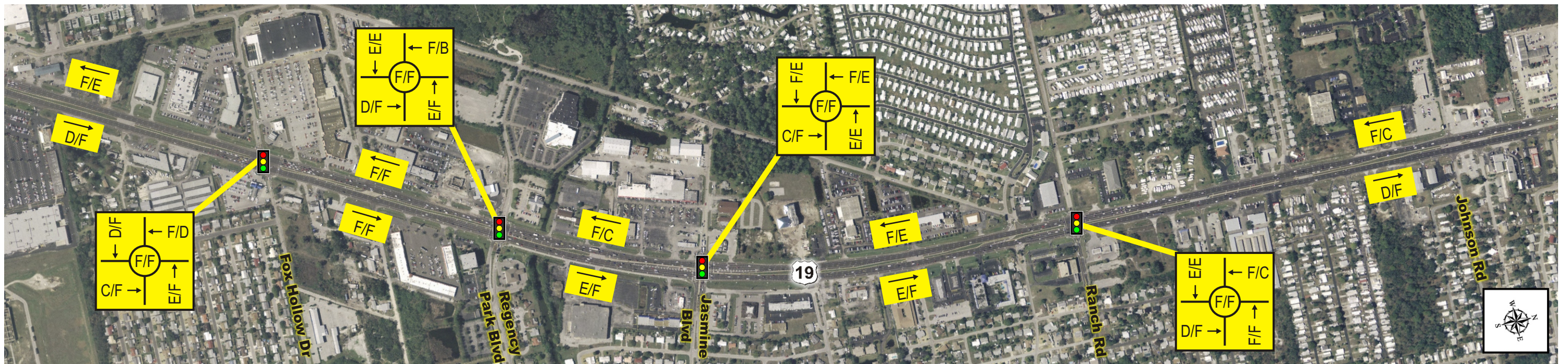
DESIGN YEAR (2030) NO-BUILD LEVEL OF SERVICE

EXHIBIT 9B



0.5 0.25 0 Miles

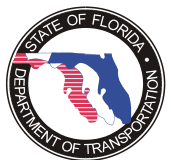
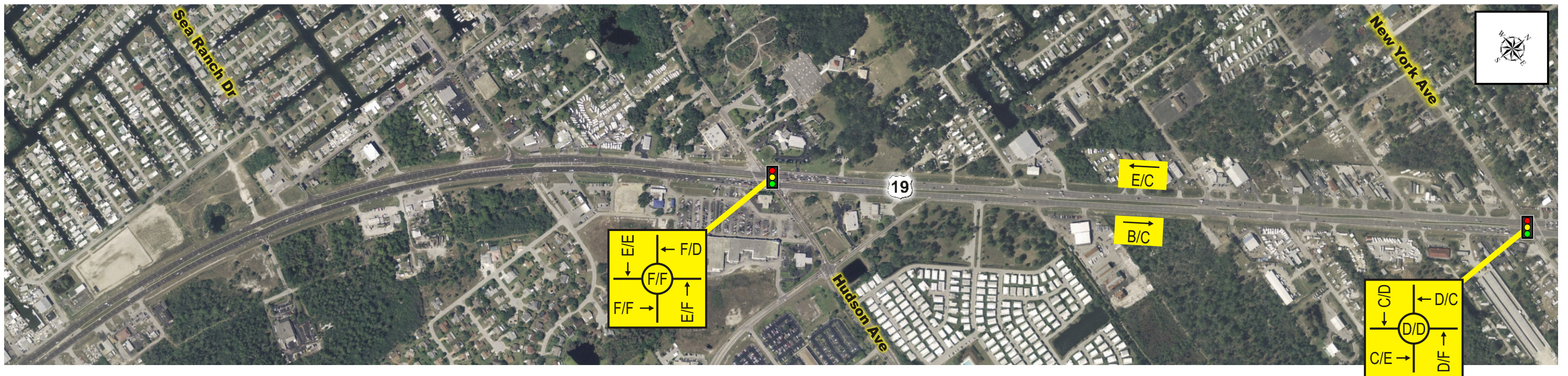
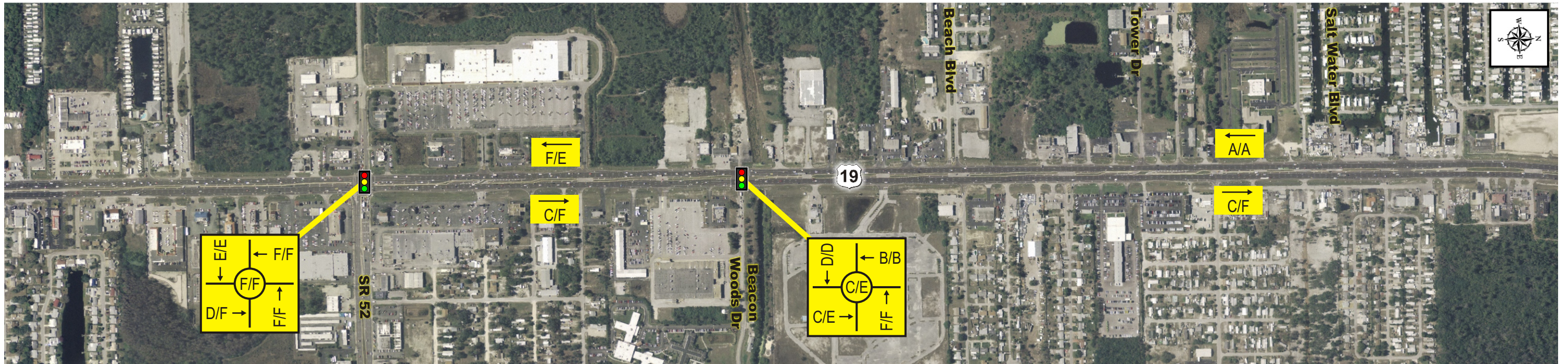
X/X
PM LOS
AM LOS



SR 55 (US 19)
from Pinellas County Line
to Hernando County Line

DESIGN YEAR (2030) NO-BUILD LEVEL OF SERVICE

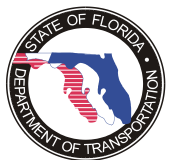
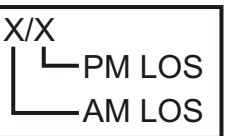
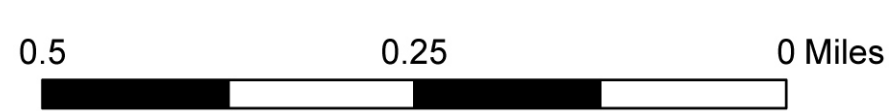
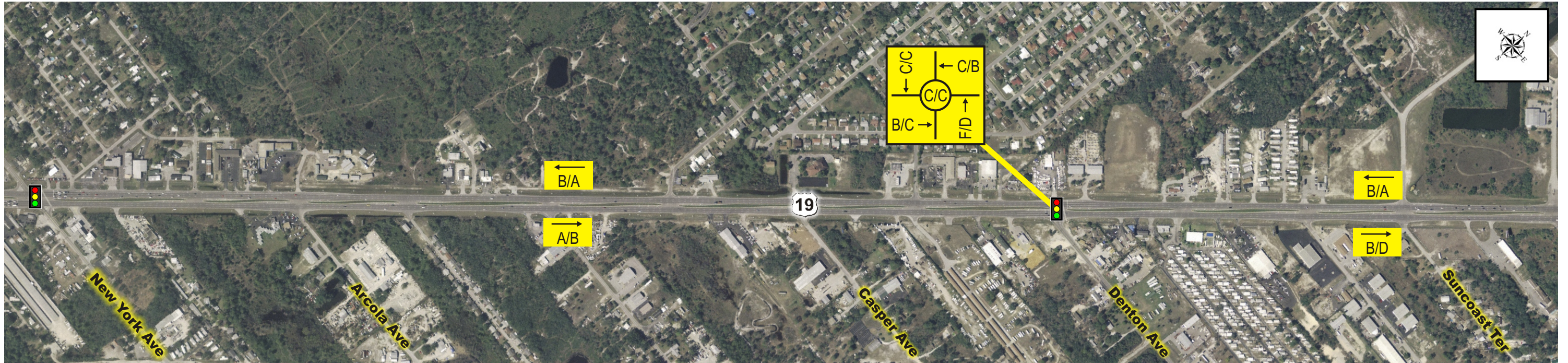
EXHIBIT 9C



SR 55 (US 19)
from Pinellas County Line
to Hernando County Line

DESIGN YEAR (2030) NO-BUILD LEVEL OF SERVICE

EXHIBIT 9D



SR 55 (US 19)
from Pinellas County Line
to Hernando County Line

DESIGN YEAR (2030) NO-BUILD LEVEL OF SERVICE

EXHIBIT 9E



SR 55 (US 19)
from Pinellas County Line
to Hernando County Line

DESIGN YEAR (2030) NO-BUILD LEVEL OF SERVICE

EXHIBIT 9F

4.3 DESIGN YEAR (2030) NO-BUILD ARTERIAL ANALYSIS

The design year (2030) arterial segment LOS analyses for the SR 55 (US 19) roadway segments within the study area were conducted using the estimated design year (2030) design hour volumes. The arterial segment LOS analysis was conducted according to the HCM methodology. For the arterial analysis, the posted speed limit was assumed as free flow speed. The SR 55 (US 19) arterial functional category and design category were determined as Primary Arterial and High-Speed (posted speed limit 45-55 mph), respectively based on Exhibit 10-4 of the HCM. Based on functional and design categories, the urban class of SR 55 (US 19) arterial was established as Urban Street Class I using Exhibit 10-3 of the HCM.

According to the HCM urban street LOS analysis methodology, the SR 55 (US 19) arterial segments running time were estimated using Exhibit 15-3 of the HCM. The arterial segments through movement signal delay were obtained from the signalized intersection LOS analyses. From the arterial segment running time and signal delay time the arterial segment travel time and travel speed were calculated. Arterial segment travel speed is the criteria for urban street LOS analysis. The arterial segment LOS was determined using Exhibit 15-2 of the HCM. The SR 55 (US 19) northbound and southbound arterial segment LOS results for the design year (2030) conditions are summarized in **Table 4-2** and **Table 4-3**, respectively and shown on **Exhibits 9A-9F**.

Table 4-2
Design Year (2030) No-Build SR 55 (US 19) Arterial
Northbound Level of Service Summary

SR 55 (US 19) Segment	Arterial Class	Segment Length (miles)	Flow Speed (mph)	Running Time (sec)	Signal Delay (sec)		Travel Time (sec)		Arterial Speed (mph)		LOS		
					AM	PM	AM	PM	AM	PM	AM	PM	
Pinellas County Line to SR 54													
Pinellas County Line to Flora Avenue	I	3.03		272.9	225.6	1348.1	498.5	1621.0	21.9	6.7	D	F	
Flora Avenue to Alt. 19		0.26	45	26.8	50.4	138.4	77.2	165.2	12.1	5.7	F	F	
Alt. 19 to Mile Stretch Drive		0.38	45	35.4	20.4	255.1	55.8	290.5	24.5	4.7	D	F	
Mile Stretch Drive to Darlington Road		0.37	45	36.2	35.6	173.0	71.8	209.2	18.6	6.4	E	F	
Darlington Road to Sunray Drive		0.50	45	44.1	8.1	200.6	52.2	244.7	34.5	7.4	B	F	
Sunray Drive to Moog Road		0.20	45	20.5	29.8	208.1	50.3	228.6	14.3	3.1	F	F	
Moog Road to SR 54		0.80	45	64.4	43.6	174.0	108.0	238.4	26.7	12.1	D	F	
SR 54 to Main Street													
SR 54 to Trouble Creek Road	I	0.52	45	45.5	37.7	198.9	83.2	244.4	22.5	7.7	D	F	
Trouble Creek Road to Floramar Terr.		2.41		211.2	119.3	570.5	330.5	781.7	26.3	11.1	D	F	
Floramar Terrace to Marine Parkway		0.56	45	44.7	65.5	152.4	110.2	197.1	18.3	10.2	E	F	
Marine Parkway to Gulf Drive		0.38	45	35.6	8.1	101.8	43.7	137.4	31.3	10.0	C	F	
Gulf Drive to Cross Bayou Blvd.		0.21	45	21.3	8.2	69.8	29.5	91.1	25.6	8.3	D	F	
Cross Bayou Blvd. to Main Street		0.49	45	42.8	10.4	89.7	53.2	132.5	33.2	13.3	C	F	
		0.19	45	20.1	0.5	13.0	20.6	33.1	33.2	20.7	C	E	
Main Street to Ridge Road													
Main Street to Grand Blvd.	I	0.58	45	46.7	26.6	143.8	73.3	190.5	28.5	11.0	C	F	
Grand Blvd. to Ridge Road		2.28		181.9	82.9	440.8	264.8	622.7	31.0	13.2	C	F	
		1.71	45	136.4	15.4	121.4	151.8	257.8	40.6	23.9	B	D	
Ridge Road to SR 52													
Ridge Road to Holiday Hills Blvd.	I	0.57	45	45.5	67.5	319.4	113.0	364.9	18.2	5.6	E	F	
Holiday Hills Blvd. to Embassy Blvd.		3.76		335.7	247.7	1392.5	583.4	1728.2	23.2	7.8	D	F	
Embassy Blvd. to Scenic Drive		0.77	45	61.7	11.3	50.8	73.0	112.5	38.0	24.6	B	D	
Scenic Drive to Fox Hollow Drive		0.27	45	27.9	13.6	184.6	41.5	212.5	23.4	4.6	D	F	
Fox Hollow Drive to Regency Drive		0.30	45	29.8	10.8	171.3	40.6	201.1	26.6	5.4	D	F	
Regency Drive to Jasmine Blvd.		0.35	45	34.2	17.9	118.5	52.1	152.7	24.2	8.3	D	F	
Jasmine Blvd. to Ranch Road		0.32	45	31.6	40.9	224.8	72.5	256.4	15.9	4.5	F	F	
Ranch Road to SR 52													
		0.27	45	28.1	31.3	243.0	59.4	271.1	16.4	3.6	E	F	
		0.49	45	43.2	52.0	149.6	95.2	192.8	18.5	9.1	E	F	
		0.99	45	79.2	69.9	249.9	149.1	329.1	23.9	10.8	D	F	

Table 4-2 (Cont.)
Design Year (2030) No-Build SR 55 (US 19) Arterial
Northbound Level of Service Summary

SR 55 (US 19) Segment	Arterial Class	Segment Length (miles)	Flow Speed (mph)	Running Time (sec)	Signal Delay (sec)		Travel Time (sec)		Arterial Speed (mph)		LOS	
					AM	PM	AM	PM	AM	PM	AM	PM
SR 52 to County Line Road		8.21		555.1	392.2	955.3	947.3	1510.4	31.2	19.6	C	E
SR 52 to Beacon Woods Drive		0.49	50	38.0	23.6	81.9	61.6	119.9	28.6	14.7	C	F
Beacon Woods Drive to Hudson Ave.		1.88	50	135.2	95.6	341.8	230.8	477.0	29.3	14.2	C	F
Hudson Avenue to New York Avenue	I	0.97	55	63.4	21.4	65.1	84.8	128.5	41.2	27.2	B	C
New York Avenue to Denton Avenue		1.32	55	86.3	15.0	30.9	101.3	117.2	46.9	40.5	A	B
Denton Avenue to Little Road		0.87	55	57.0	28.7	80.6	85.7	137.6	36.5	22.8	B	D
Little Road to County Line Road		2.68	55	175.2	207.9	355.0	383.1	530.2	25.2	18.2	D	E
Pinellas County Line to County Line Road	I	19.69		1556.8	1067.7	4707.2	2624.5	6264.0	27.0	11.3	D	F

Table 4-3
Design Year (2030) No-Build SR 55 (US 19) Arterial
Southbound Level of Service Summary

SR 55 (US 19) Segment	Arterial Class	Segment Length (miles)	Flow Speed (mph)	Running Time (sec)	Signal Delay (sec)		Travel Time (sec)		Arterial Speed (mph)		LOS			
					AM	PM	AM	PM	AM	PM	AM	PM		
County Line Road to SR 52														
County Line Road to Little Road	I	8.21		555.1	533.5	188.0	1088.6	743.1	27.2	39.8	C	B		
Little Road to Denton Avenue		2.68	55	175.2	114.0	41.9	289.2	217.1	33.4	44.4	C	A		
Denton Avenue to New York Avenue		0.87	55	57.0	26.0	12.7	83.0	69.7	37.7	44.9	B	A		
New York Avenue to Hudson Avenue		1.32	55	86.3	49.9	24.7	136.2	111.0	34.9	42.8	B	A		
Hudson Avenue to Beacon Woods Dr.		0.97	55	63.4	143.4	51.4	206.8	114.8	16.9	30.4	E	C		
Beacon Woods Drive to SR 52		1.88	50	135.2	13.2	8.5	148.4	143.7	45.6	47.1	A	A		
SR 52 to Ridge Road														
SR 52 to Ranch Road	I	3.76		335.7	1416.0	305.3	1751.7	641.0	7.7	21.1	F	D		
Ranch Road to Jasmine Blvd.		0.99	45	79.2	182.9	28.8	262.1	108.0	13.6	33.0	F	C		
Jasmine Blvd. to Regency Drive		0.49	45	43.2	199.2	61.6	242.4	104.8	7.3	16.8	F	E		
Regency Drive to Fox Hollow Drive		0.27	45	28.1	172.4	7.1	200.5	35.2	4.8	27.6	F	C		
Fox Hollow Drive to Scenic Drive		0.32	45	31.6	230.3	46.7	261.9	78.3	4.4	14.7	F	F		
Scenic Drive to Embassy Blvd.		0.35	45	34.2	176.3	29.0	210.5	63.2	6.0	19.9	F	E		
Embassy Blvd. to Holiday Hills Blvd.		0.30	45	29.8	145.3	57.8	175.1	87.6	6.2	12.3	F	F		
Holiday Hills Blvd. to Ridge Road		0.27	45	27.9	45.5	14.9	73.4	42.8	13.2	22.7	F	D		
Ridge Road to Main Street														
Ridge Road to Grand Blvd.		I	2.28		181.9	168.5	59.6	350.4	241.5	23.4	34.0	D	C	
Grand Blvd. to Main Street	0.57		45	45.5	83.0	19.4	128.5	64.9	16.0	31.6	F	C		
Main Street to SR 54														
Main Street to Cross Bayou Blvd.	I	2.41		211.2	491.1	122.3	702.3	333.5	12.4	26.0	F	D		
Cross Bayou Blvd. to Gulf Drive		0.58	45	46.7	7.6	5.2	54.3	51.9	38.5	40.2	B	B		
Gulf Drive to Marine Parkway		0.19	45	20.1	61.5	6.2	81.6	26.3	8.4	26.0	F	D		
Marine Parkway to Floramar Terrace		0.49	45	42.8	76.0	19.8	118.8	62.6	14.8	28.2	F	C		
Floramar Terr. to Trouble Creek Road		0.21	45	21.3	142.8	24.7	164.1	46.0	4.6	16.4	F	E		
Trouble Creek Road to SR 54		0.38	45	35.6	78.7	9.6	114.3	45.2	12.0	30.3	F	C		
SR 54 to SR 55														
SR 54 to SR 55		0.56	45	44.7	124.5	56.8	169.2	101.5	11.9	19.9	F	E		

Table 4-3 (Cont.)
Design Year (2030) No-Build SR 55 (US 19) Arterial
Southbound Level Of Service Summary

SR 55 (US 19) Segment	Arterial Class	Segment Length (miles)	Flow Speed (mph)	Running Time (sec)	Signal Delay (sec)		Travel Time (sec)		Arterial Speed (mph)		LOS		
					AM	PM	AM	PM	AM	PM	AM	PM	
SR 54 to Pinellas County Line													
SR 54 to Moog Road	I	3.03		272.9	993.9	169.9	1266.8	442.8	8.6	24.6	F	D	
Moog Road to Sunray Drive		0.52	45	45.5	95.6	27.2	141.1	72.7	13.3	25.7	F	D	
Sunray Drive to Darlington Road		0.80	45	64.4	145.8	44.0	210.2	108.4	13.7	26.6	F	D	
Darlington Road to Mile Stretch Road		0.20	45	20.5	129.5	40.5	150.0	61.0	4.8	11.8	F	F	
Mile Stretch Road to Alt. 19		0.50	45	44.1	232.5	6.4	276.6	50.5	6.5	35.6	F	B	
Alt. 19 to Flora Avenue		0.37	45	36.2	171.1	47.3	207.3	83.5	6.4	16.0	F	F	
Flora Avenue to Pinellas County Line		0.38	45	35.4	219.4	4.5	254.8	39.9	5.4	34.3	F	B	
		0.26	45	26.8	-	-	26.8	26.8	34.9	34.9	B	B	
County Line Road to Pinellas County Line	I	19.69		1556.8	3603.0	845.1	5159.8	2401.9	13.7	29.5	F	C	

4.4 DESIGN YEAR (2030) CONTINUOUS RIGHT-TURN LANE ALTERNATIVE ANALYSES

The Continuous Right-Turn Lane (CRTL) alternative was considered for the SR 55 (US 19) arterial in Pasco County between the Pinellas County Line and the Hernando County Line. In this alternative the CRTL was proposed to be built in both the northbound and southbound directions of the SR 55 (US 19) arterial by extending and connecting the available existing right-turn lane sections along the arterial. It was proposed to allow through traffic on the CRTL, however, the CRTL would be discontinued at major intersections with channelization of right-turn movements by raised traffic separators. At these major intersections the CRTL would act as an exclusive right-turn lane. In the process of identifying the intersections for CRTL discontinuation, the major cross street intersections, the intersection right-turn volumes and distance between intersections were considered. The FDOT recommended not extending the CRTL for a significantly long distance without discontinuing at certain intersections, because then the roadway would become an eight-lane arterial facility. The FDOT also recommended discontinuing the CRTL for both directions at the selected intersections for consistency and driver expectancy, even though the right-turn volumes were projected to be significantly low for one direction at these intersections. Based on the above mentioned considerations the following intersections were identified for CRTL discontinuation.

1. Alt. 19
2. SR 54
3. Main Street
4. Ridge Road
5. Embassy Boulevard
6. SR 52
7. Hudson Avenue
8. Denton Avenue
9. County Line Road

At these intersections CRTL is dropped as an exclusive right-turn lane at both the northbound and southbound approaches of the intersections. The selected intersections were also reviewed and approved by the FDOT.

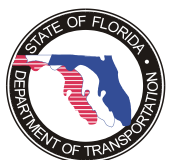
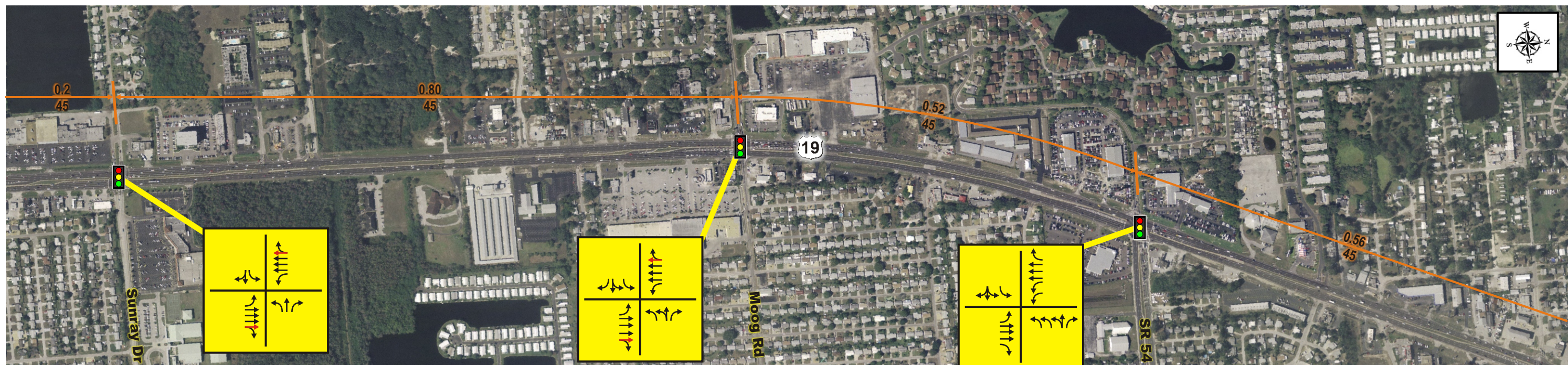
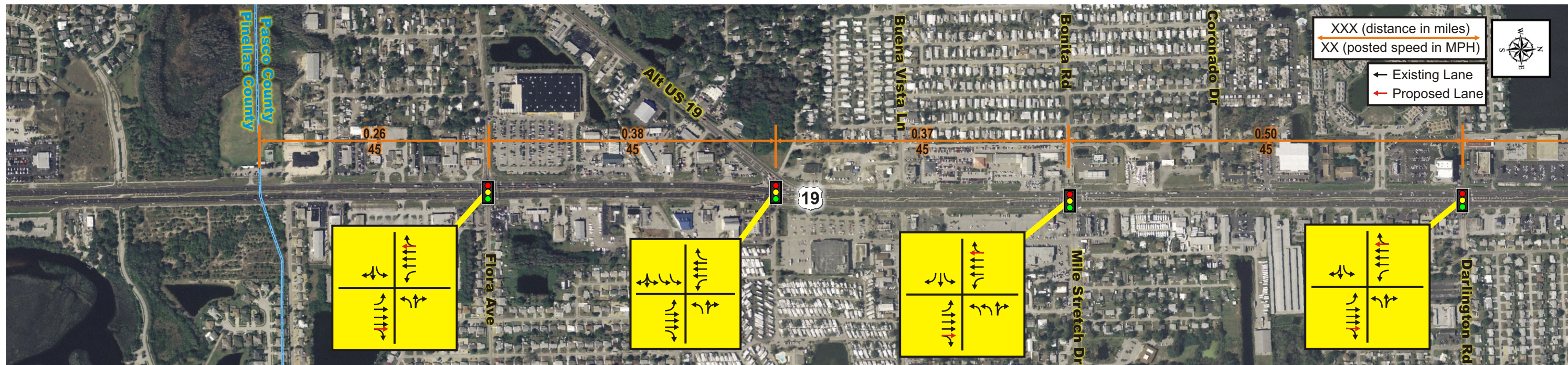
In the design year (2030) CRTL alternative intersection and arterial LOS analysis, the proposed CRTL alternative geometric conditions shown on **Exhibits 10A-10F** and the design year (2030) design hour turning movement traffic volumes were used. The analysis results for signalized intersections are summarized in **Table 4-4** and shown on **Exhibits 11A-11F**. The SR 55 (US 19) northbound and southbound arterial segment LOS results for the design year (2030) CRTL alternative are summarized in **Table 4-5** and **Table 4-6**, respectively and shown on **Exhibits 11A-11F**. The design year (2030) Synchro intersection analysis sheets for the CRTL alternative are included in **Appendix D** (under separate cover).

Table 4-4
Design Year (2030) SR 55 (US 19) Continuous Right -Turn
Lane Alternative Intersection Level of Service Summary

Cross Street	SR 55 (US 19) Mainline NB AM / PM	SR 55 (US 19) Mainline SB AM / PM	EB AM / PM	WB AM / PM	Overall LOS AM / PM	Overall Delay (sec / veh) AM / PM
Flora Avenue	D / E	F / B	E / F	F / F	F / E	85 / 62
Alt. 19	C / F	F / C	F / F	F / F	F / F	128 / 185
Mile Stretch Drive	D / F	F / C	F / F	F / F	F / F	106 / 86
Darlington Road	B / F	B / C	F / F	F / F	D / F	39 / 93
Sunray Drive	B / F	D / D	F / F	F / F	D / F	50 / 104
Moog Road	D / F	B / C	F / F	F / F	D / F	46 / 88
SR 54	D / F	F / F	F / F	F / F	F / F	105 / 163
Trouble Creek Road	D / F	C / C	F / F	F / F	D / F	51 / 83
Floramar Terrace	A / B	D / B	F / F	F / E	D / C	42 / 25
Marine Parkway	B / B	C / C	F / F	F / F	D / D	37 / 35
Gulf Drive	B / C	C / B	F / F	F / F	C / C	25 / 32
Cross Bayou Boulevard	A / A	A / A	F / F	--	A / A	5 / 6
Main Street	C / F	F / D	F / F	F / F	E / F	77 / 121
Grand Boulevard	B / C	C / B	F / F	D / F	C / D	27 / 45
Ridge Road	E / F	F / F	F / F	E / F	F / F	166 / 215
Holiday Hills Boulevard	A / B	A / B	E / E	E / E	B / B	10 / 15
Embassy Boulevard	B / F	F / E	F / E	E / E	F / F	88 / 108
Scenic Drive	B / E	E / C	E / E	E / F	D / D	42 / 49
Fox Hollow Drive	B / D	F / C	D / F	E / F	E / E	65 / 63

Table 4-4
Design Year (2030) SR 55 (US 19) Continuous Right -Turn
Lane Alternative Intersection Level of Service Summary

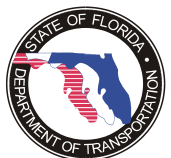
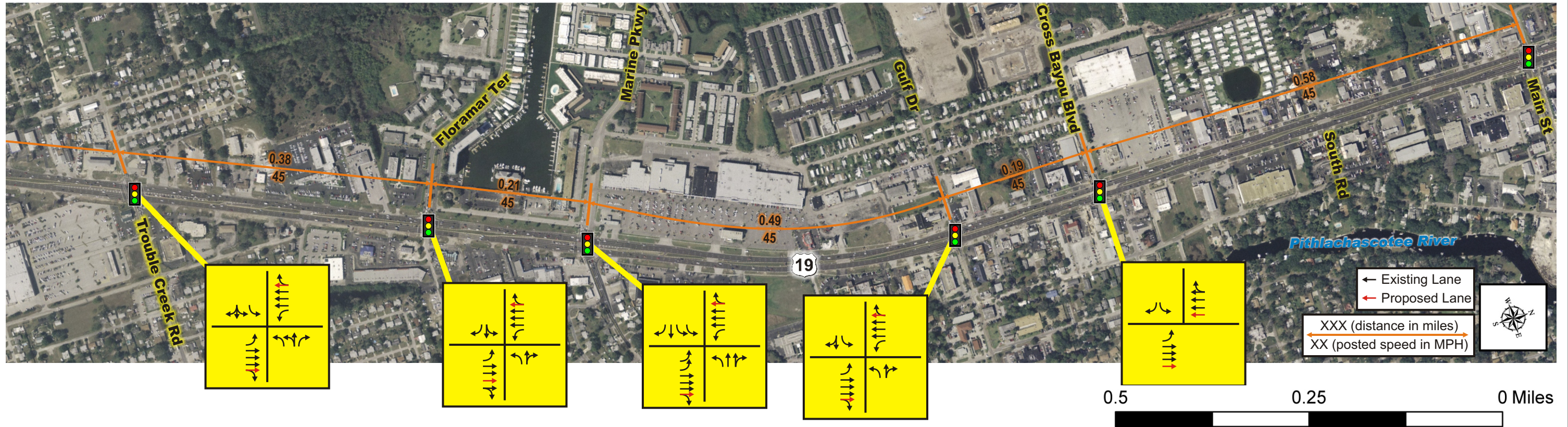
Cross Street	SR 55 (US 19) Mainline NB AM / PM	SR 55 (US 19) Mainline SB AM / PM	EB AM / PM	WB AM / PM	Overall LOS AM / PM	Overall Delay (sec / veh) AM / PM
Regency Park Drive	B / F	D / B	E / E	E / F	D / E	36 / 70
Jasmine Boulevard	C / F	F / C	F / E	E / E	E / F	62 / 93
Ranch Road	D / F	E / C	E / E	F / F	E / E	59 / 65
SR 52	D / F	F / F	E / E	F / F	F / F	159 / 242
Beacon Woods Drive	B / C	B / B	D / D	F / F	C / C	21 / 32
Hudson Avenue	F / F	F / D	E / E	E / F	F / F	114 / 183
New York Avenue	C / C	C / C	C / D	D / F	C / D	25 / 35
Denton Avenue	B / C	C / B	C / C	F / D	C / C	26 / 24
Little Road	C / C	F / F	D / D	F / F	F / F	236 / 217
County Line Road	F / F	F / F	E / E	F / F	F / F	276 / 308



SR 55 (US 19)
from Pinellas County Line
to Hernando County Line

DESIGN YEAR (2030) CONTINUOUS RIGHT-TURN LANE (CRTL)
ALTERNATIVE CORRIDOR LANE GEOMETRY

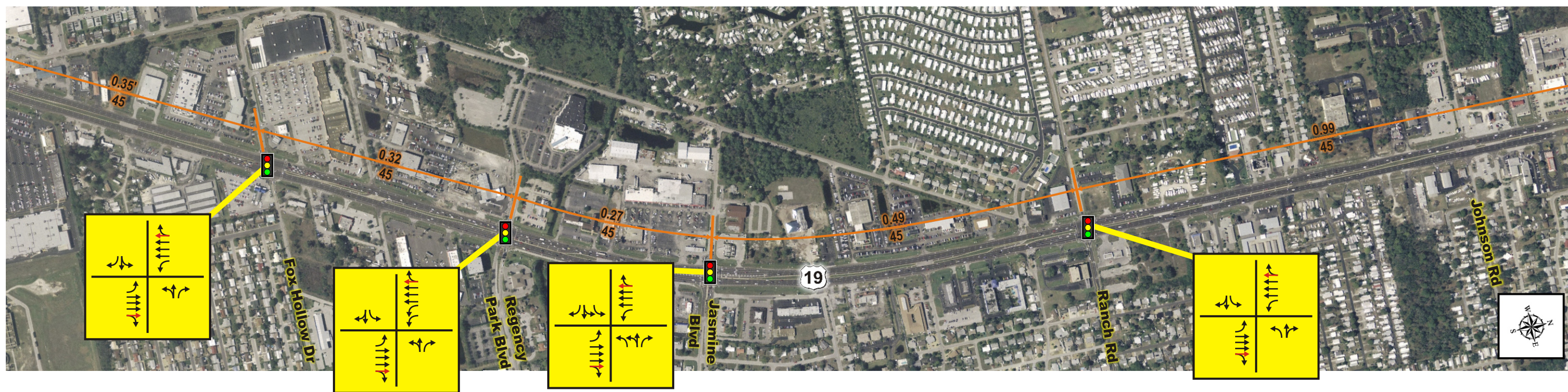
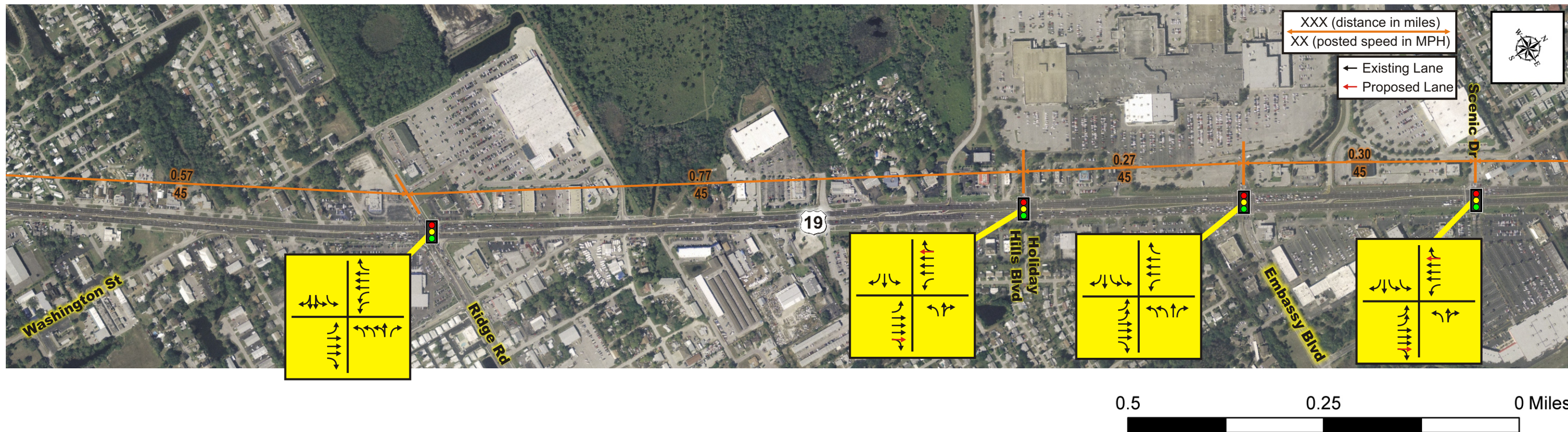
EXHIBIT 10A



SR 55 (US 19)
from Pinellas County Line
to Hernando County Line

DESIGN YEAR (2030) CONTINUOUS RIGHT-TURN LANE (CRTL)
ALTERNATIVE CORRIDOR LANE GEOMETRY

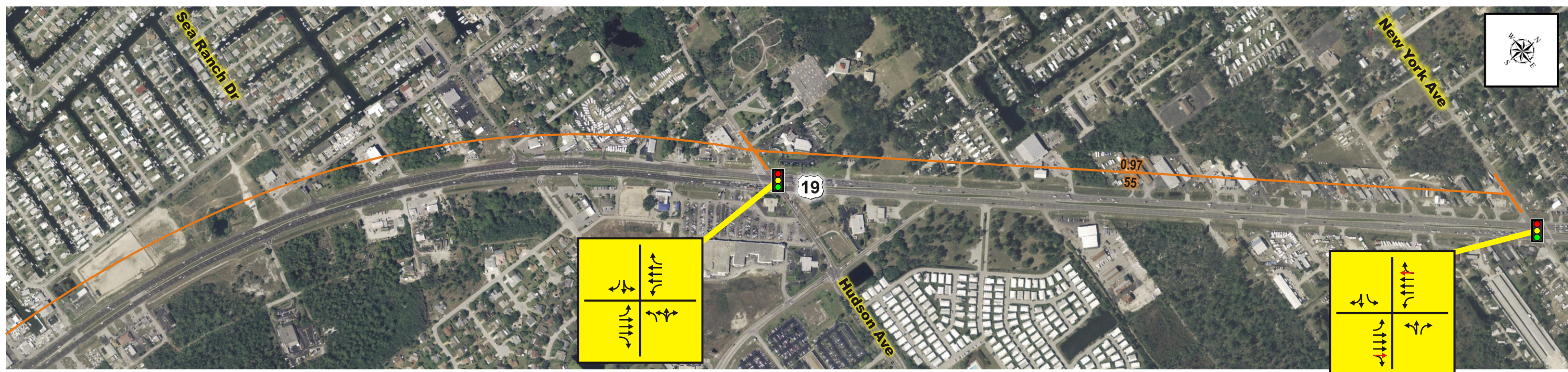
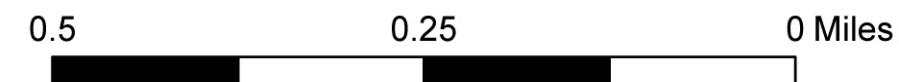
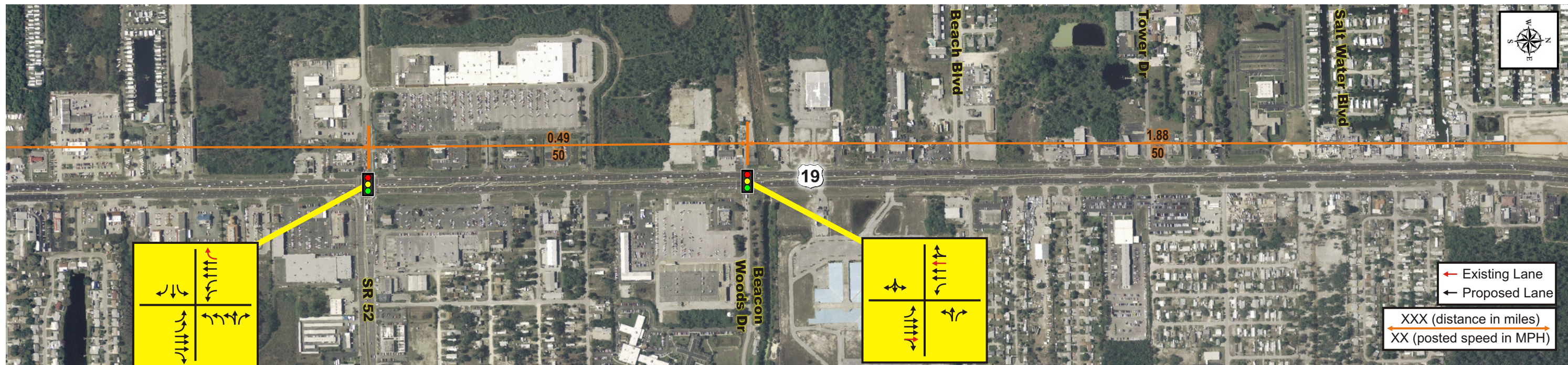
EXHIBIT 10B



SR 55 (US 19)
from Pinellas County Line
to Hernando County Line

DESIGN YEAR (2030) CONTINUOUS RIGHT-TURN LANE (CRTL)
ALTERNATIVE CORRIDOR LANE GEOMETRY

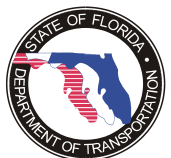
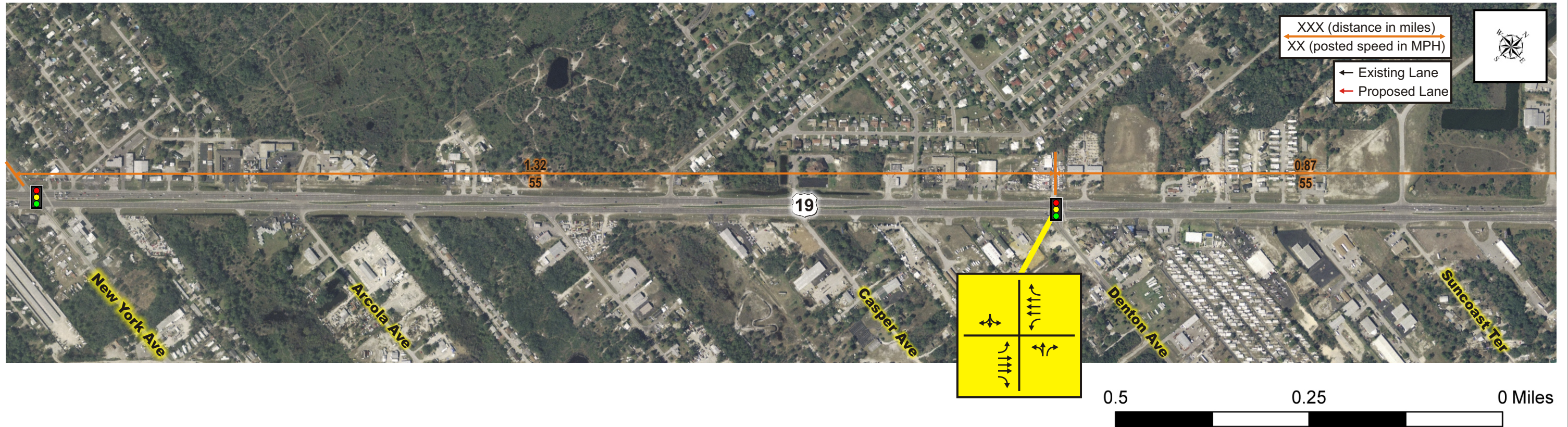
EXHIBIT 10C



SR 55 (US 19)
from Pinellas County Line
to Hernando County Line

DESIGN YEAR (2030) CONTINUOUS RIGHT-TURN LANE (CRTL)
ALTERNATIVE CORRIDOR LANE GEOMETRY

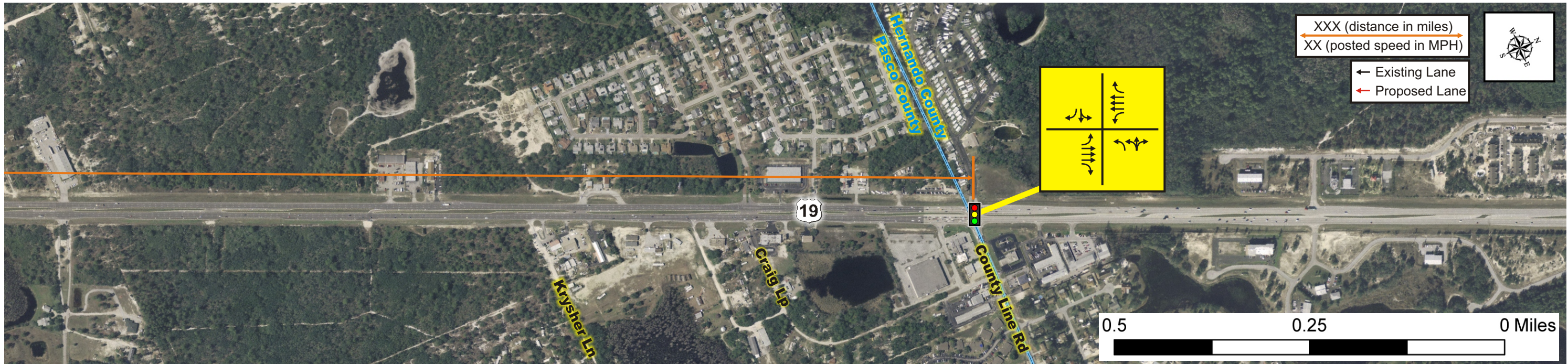
EXHIBIT 10D

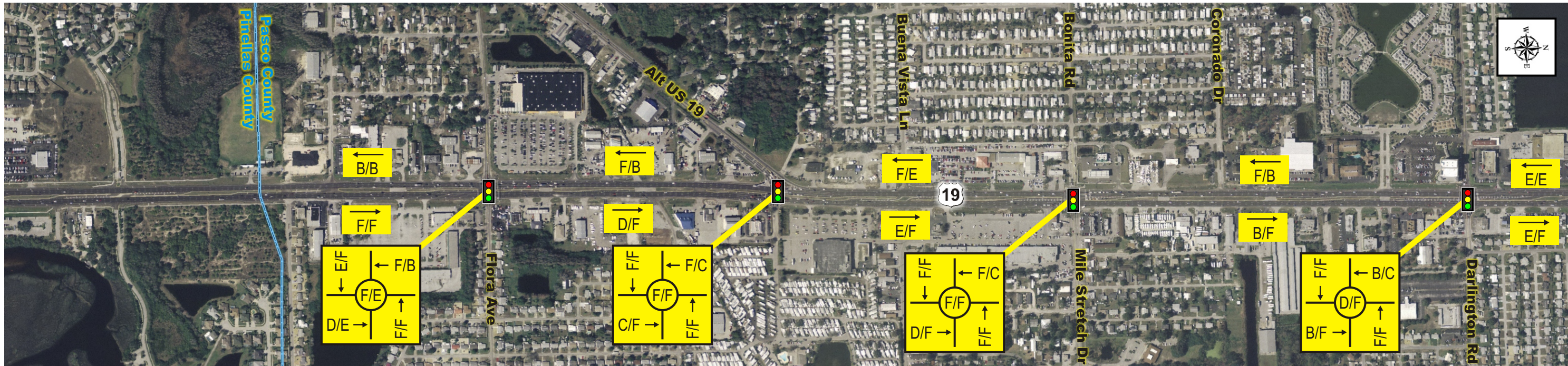


SR 55 (US 19)
from Pinellas County Line
to Hernando County Line

DESIGN YEAR (2030) CONTINUOUS RIGHT-TURN LANE (CRTL)
ALTERNATIVE CORRIDOR LANE GEOMETRY

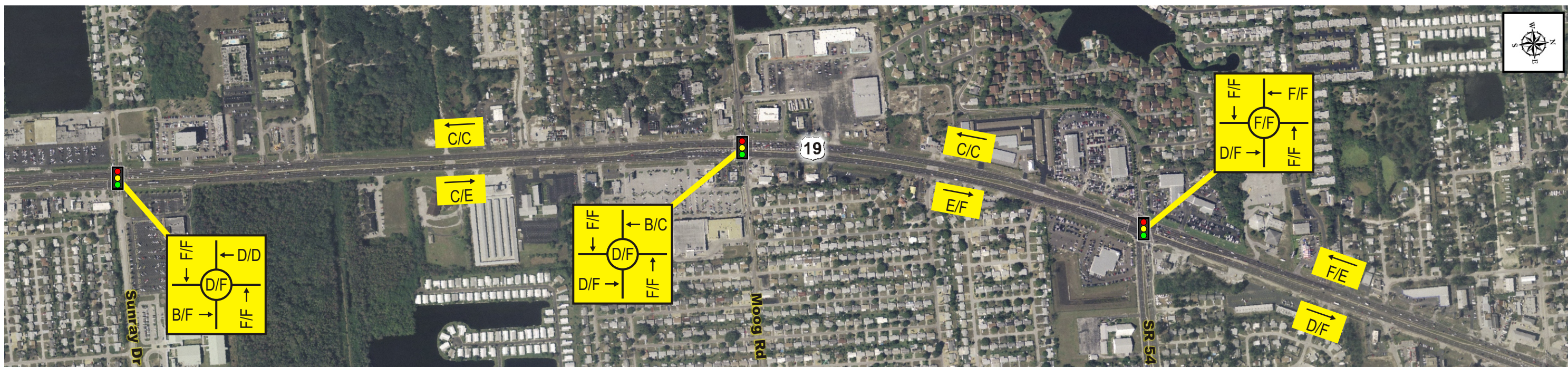
EXHIBIT 10E





0.5 0.25 0 Miles

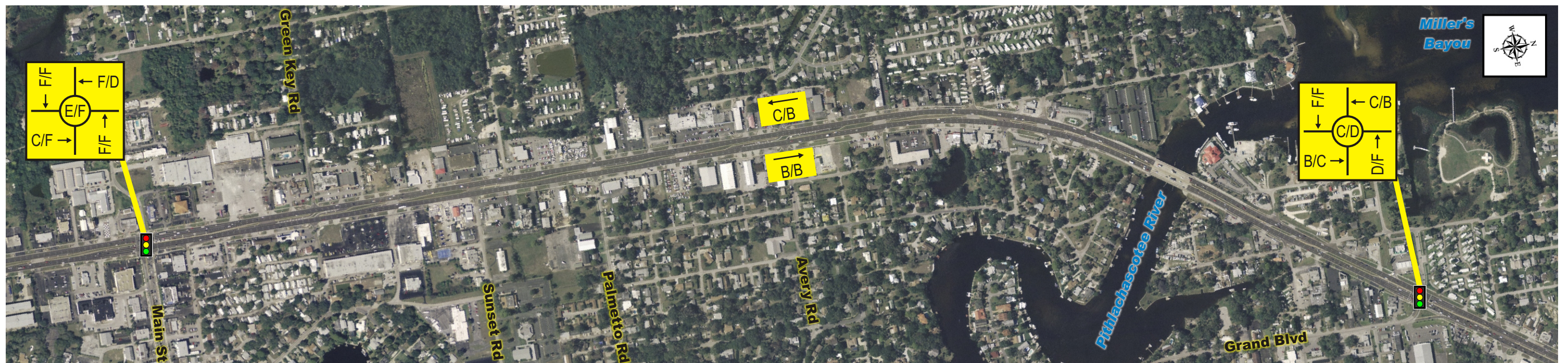
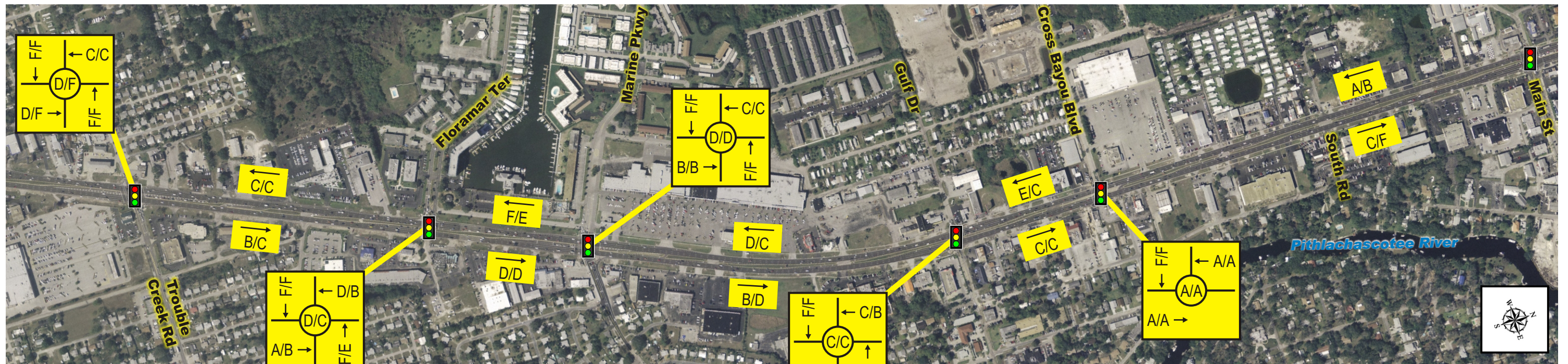
X/X
PM LOS
AM LOS



SR 55 (US 19)
from Pinellas County Line
to Hernando County Line

DESIGN YEAR (2030) CRTL ALTERNATIVE LEVEL OF SERVICE

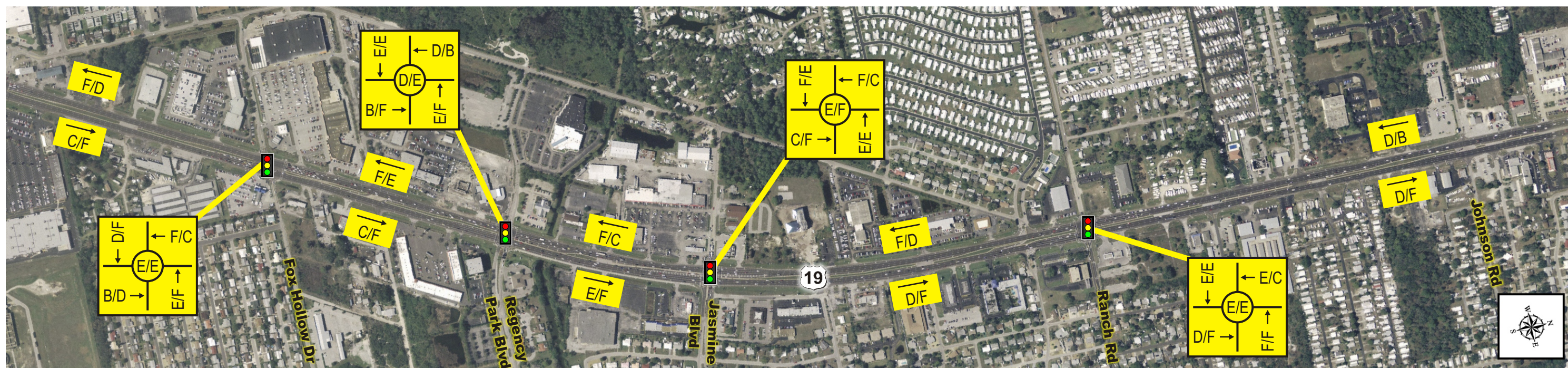
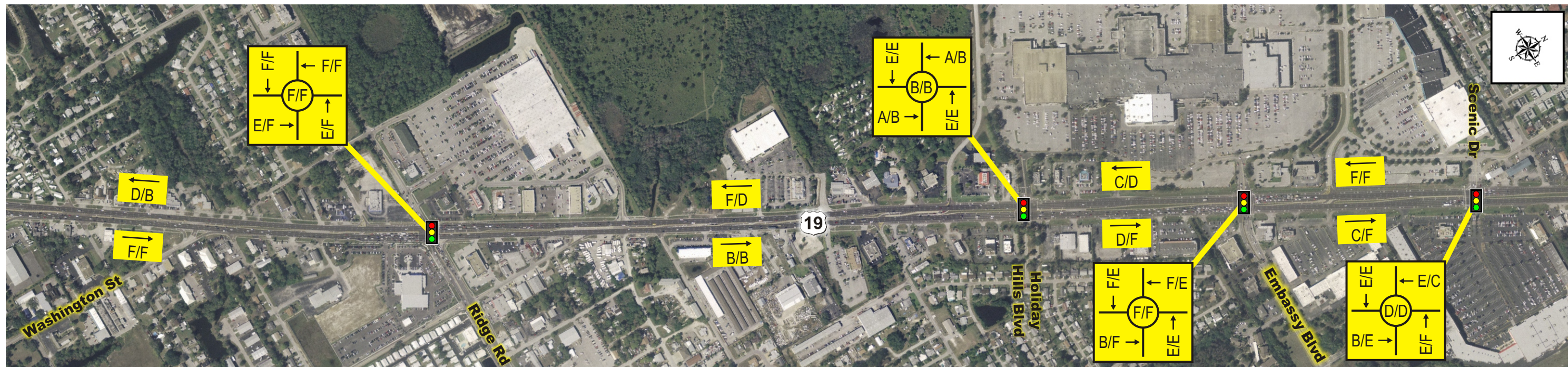
EXHIBIT 11A



SR 55 (US 19)
from Pinellas County Line
to Hernando County Line

DESIGN YEAR (2030) CRTL ALTERNATIVE LEVEL OF SERVICE

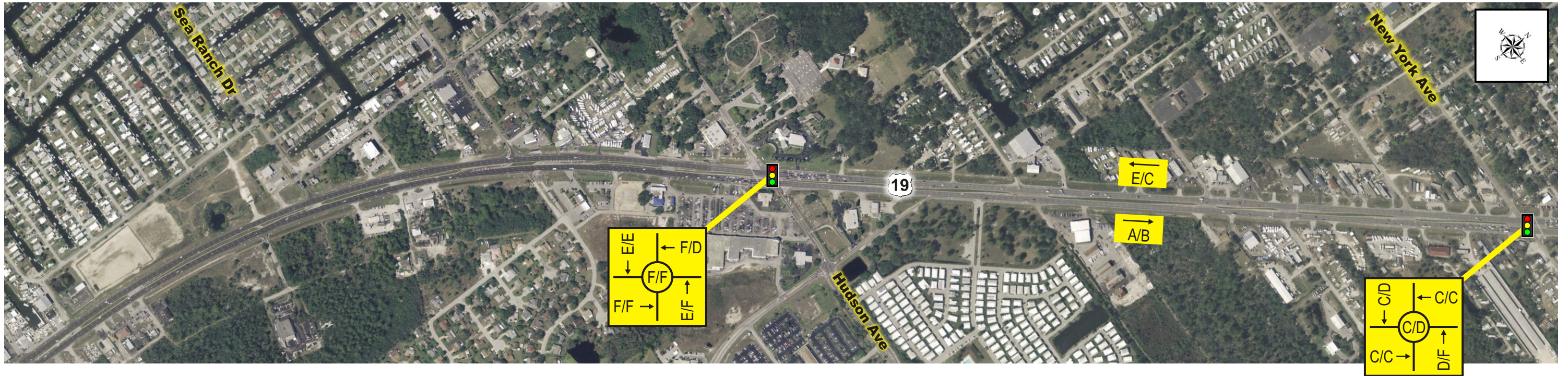
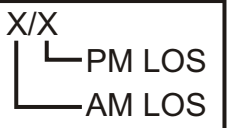
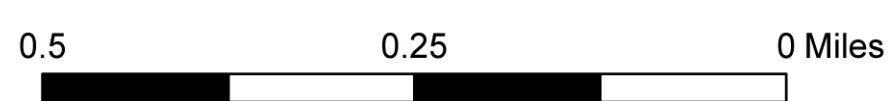
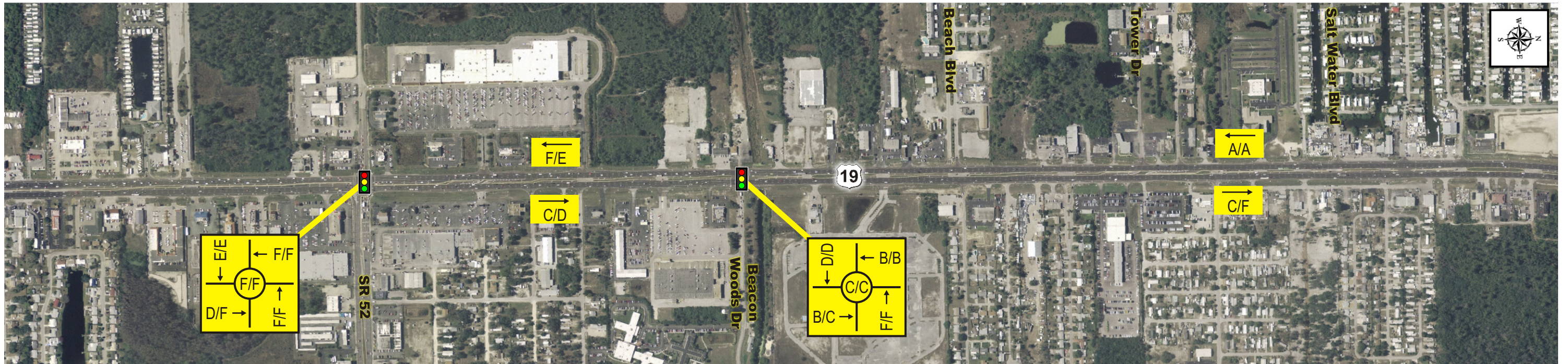
EXHIBIT 11B



SR 55 (US 19)
from Pinellas County Line
to Hernando County Line

DESIGN YEAR (2030) CRTL ALTERNATIVE LEVEL OF SERVICE

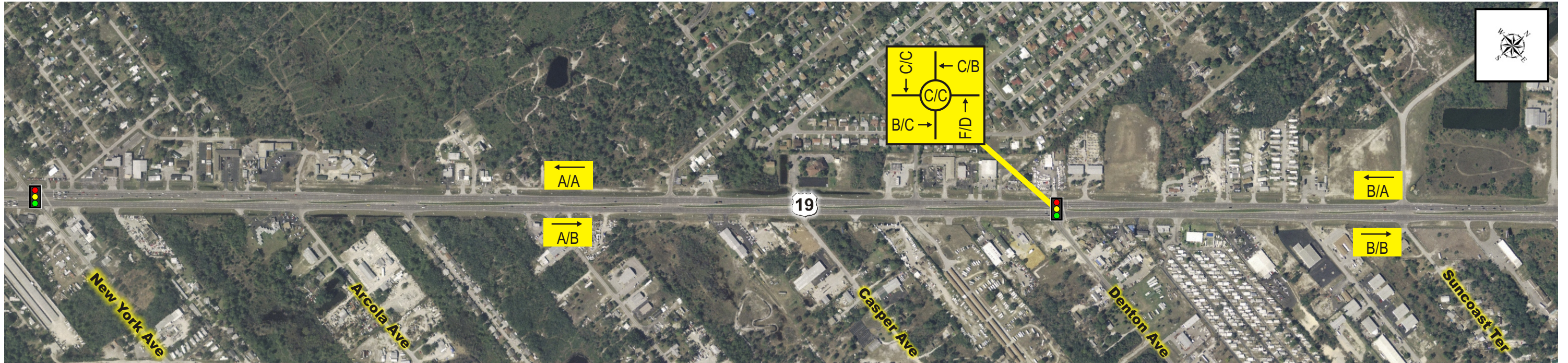
EXHIBIT 11C



SR 55 (US 19)
from Pinellas County Line
to Hernando County Line

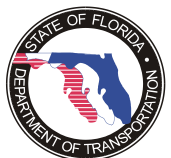
DESIGN YEAR (2030) CRTL ALTERNATIVE LEVEL OF SERVICE

EXHIBIT 11D



0.5 0.25 0 Miles

X/X
PM LOS
AM LOS



SR 55 (US 19)
from Pinellas County Line
to Hernando County Line

DESIGN YEAR (2030) CRTL ALTERNATIVE LEVEL OF SERVICE

EXHIBIT 11E



SR 55 (US 19)
from Pinellas County Line
to Hernando County Line

DESIGN YEAR (2030) CRTL ALTERNATIVE LEVEL OF SERVICE

EXHIBIT 11F

Table 4-5
Design Year (2030) SR 55 (US 19) Continuous Right-Turn Lane
Alternative Arterial Northbound Level of Service Summary

SR 55 (US 19) Segment	Arterial Class	Segment Length (miles)	Flow Speed (mph)	Running Time (sec)	Signal Delay (sec)		Travel Time (sec)		Arterial Speed (mph)		LOS		
					AM	PM	AM	PM	AM	PM	AM	PM	
Pinellas County Line to SR 54													
Pinellas County Line to Flora Avenue	I	3.03		272.9	202.7	919.5	475.6	1192.4	22.9	9.1	D	F	
Flora Avenue to Alt. 19		0.26	45	26.8	37.6	69.6	64.4	96.5	14.5	9.7	F	F	
Alt. 19 to Mile Stretch Drive		0.38	45	35.4	26.6	254.6	62.0	290.0	22.1	4.7	D	F	
Mile Stretch Drive to Darlington Road		0.37	45	36.2	30.7	101.4	66.9	137.6	19.9	9.7	E	F	
Darlington Road to Sunray Drive		0.50	45	44.1	5.7	107.2	49.8	151.3	36.1	11.9	B	F	
Sunray Drive to Moog Road		0.20	45	20.5	15.6	101.0	36.1	121.5	19.9	5.9	E	F	
Moog Road to SR 54		0.80	45	64.4	34.3	86.7	98.7	151.1	29.2	19.1	C	E	
SR 54 to Main Street		0.52	45	45.5	52.2	199.0	97.7	244.5	19.2	7.7	E	F	
SR 54 to Main Street													
SR 54 to Trouble Creek Road	I	2.41		211.2	69.2	276.8	280.4	488.0	30.9	17.8	C	E	
Trouble Creek Road to Floramar Terrace		0.56	45	44.7	33.1	85.0	77.8	129.7	25.9	15.5	D	F	
Floramar Terrace to Marine Parkway		0.38	45	35.6	1.6	7.0	37.2	42.6	36.8	32.1	B	C	
Marine Parkway to Gulf Drive		0.21	45	21.3	6.9	7.4	28.2	28.7	26.8	26.3	D	D	
Gulf Drive to Cross Bayou Blvd.		0.49	45	42.8	6.8	23.2	49.6	66.0	35.6	26.7	B	D	
Cross Bayou Blvd. to Main Street		0.19	45	20.1	0.3	0.8	20.4	20.9	33.5	32.7	C	C	
Main Street to Ridge Road		0.58	45	46.7	20.5	153.4	67.2	200.1	31.1	10.4	C	F	
Ridge Road to SR 52		2.28		181.9	76.9	348.2	258.8	530.1	31.7	15.5	C	F	
Main Street to Ridge Road													
Main Street to Grand Blvd.	I	1.71	45	136.4	11.1	31.3	147.5	167.7	41.7	36.7	B	B	
Grand Blvd. to Ridge Road		0.57	45	45.5	65.8	316.9	111.3	362.4	18.4	5.7	F	F	
Ridge Road to SR 52													
Ridge Road to Holiday Hills Blvd.	I	3.76		335.7	178.6	867.5	514.3	1203.2	26.3	11.3	D	F	
Holiday Hills Blvd. to Embassy Blvd.		0.77	45	61.7	6.5	10.4	68.2	72.1	40.6	38.4	B	B	
Embassy Blvd. to Scenic Drive		0.27	45	27.9	10.6	186.3	38.5	214.2	25.2	4.5	D	F	
Scenic Drive to Fox Hollow Drive		0.30	45	29.8	8.3	58.6	38.1	88.4	28.3	12.2	C	F	
Fox Hollow Drive to Regency Drive		0.35	45	34.2	10.2	43.4	44.4	77.6	28.4	16.2	C	F	
Regency Drive to Jasmine Blvd.		0.32	45	31.6	10.1	92.6	41.7	124.2	27.6	9.3	C	F	
Jasmine Blvd. to Ranch Road		0.27	45	28.1	26.0	144.4	54.1	172.5	18.0	5.6	E	F	
Ranch Road to SR 52		0.49	45	43.2	37.0	81.9	80.2	125.1	22.0	14.1	D	F	
Ranch Road to SR 52													
		0.99	45	79.2	69.9	249.9	149.1	329.1	23.9	10.8	D	F	

Table 4-5 (Cont.)
Design Year (2030) SR 55 (US 19) Continuous Right-Turn Lane
Alternative Arterial Northbound Level of Service Summary

SR 55 (US 19) Segment	Arterial Class	Segment Length (miles)	Flow Speed (mph)	Running Time (sec)	Signal Delay (sec)		Travel Time (sec)		Arterial Speed (mph)		LOS	
					AM	PM	AM	PM	AM	PM	AM	PM
SR 52 to County Line Road		8.21		555.1	555.1	820.1	935.3	1375.2	31.6	21.5	C	D
SR 52 to Beacon Woods Drive	I	0.49	50	38.0	18.8	30.7	56.8	68.7	31.1	25.7	C	D
Beacon Woods Drive to Hudson Avenue		1.88	50	135.2	95.6	341.8	230.8	477.0	29.3	14.2	C	F
Hudson Avenue to New York Avenue		0.97	55	63.4	19.3	30.0	82.7	93.4	42.2	37.4	A	B
New York Avenue to Denton Avenue		1.32	55	86.3	15.0	30.9	101.3	117.2	46.9	40.5	A	B
Denton Avenue to Little Road		0.87	55	57.0	23.6	31.7	80.6	88.7	38.9	35.3	B	B
Little Road to County Line Road		2.68	55	175.2	207.9	355.0	383.1	530.2	25.2	18.2	D	E
Pinellas County Line to County Line Road	I	19.69		1556.8	1082.5	3232.1	2464.4	4788.9	28.8	14.8	C	F

Table 4-6
Design Year (2030) SR 55 (US 19) Continuous Right-Turn Lane
Alternative Arterial Southbound Level of Service Summary

SR 55 (US 19) Segment	Arterial Class	Segment Length (miles)	Flow Speed (mph)	Running Time (sec)	Signal Delay (sec)		Travel Time (sec)		Arterial Speed (mph)		LOS	
					AM	PM	AM	PM	AM	PM	AM	PM
County Line Road to SR 52		8.21		555.1	411.4	166.3	966.5	721.4	30.6	41.0	C	B
County Line Road to Little Road		2.68	55	175.2	34.4	27.3	209.6	202.5	46.0	47.6	A	A
Little Road to Denton Avenue		0.87	55	57.0	26.0	12.7	83.0	69.7	37.7	44.9	B	A
Denton Avenue to New York Avenue	I	1.32	55	86.3	23.5	21.1	109.8	107.4	43.3	44.2	A	A
New York Avenue to Hudson Avenue		0.97	55	63.4	143.4	51.4	206.8	114.8	16.9	30.4	E	C
Hudson Avenue to Beacon Woods Drive		1.88	50	135.2	9.1	7.0	144.3	142.2	46.9	47.6	A	A
Beacon Woods Drive to SR 52		0.49	50	38.0	175.0	46.8	213.0	84.8	8.3	20.8	F	E
SR 52 to Ridge Road		3.76		335.7	780.5	241.5	1116.2	577.2	12.1	23.5	F	D
SR 52 to Ranch Road		0.99	45	79.2	70.7	19.4	149.9	98.6	23.8	36.1	D	B
Ranch Road to Jasmine Blvd.	I	0.49	45	43.2	84.1	32.1	127.3	75.3	13.9	23.4	F	D
Jasmine Blvd. to Regency Drive		0.27	45	28.1	46.0	4.5	74.1	32.6	13.1	29.8	F	C
Regency Drive to Fox Hollow Drive		0.32	45	31.6	101.3	30.3	132.9	61.9	8.7	18.6	F	E
Fox Hollow Drive to Scenic Drive		0.35	45	34.2	62.8	24.7	97.0	58.9	13.0	21.4	F	D
Scenic Drive to Embassy Blvd.		0.30	45	29.8	143.9	57.0	173.7	86.8	6.2	12.4	F	F
Embassy Blvd. to Holiday Hills Blvd.		0.27	45	27.9	7.4	11.9	35.3	39.8	27.5	24.4	C	D
Holiday Hills Blvd. to Ridge Road		0.77	45	61.7	264.3	61.6	326.0	123.3	8.5	22.5	F	D
Ridge Road to Main Street		2.28		181.9	119.3	54.5	301.2	236.4	27.3	34.7	C	B
Ridge Road to Grand Blvd.	I	0.57	45	45.5	33.8	14.3	79.3	59.8	25.9	34.3	D	B
Grand Blvd. to Main Street		1.71	45	136.4	85.5	40.2	221.9	176.6	27.7	34.9	C	B
Main Street to SR 54		2.41		211.2	221.4	111.7	432.6	322.9	20.1	26.9	E	D
Main Street to Cross Bayou Blvd.	I	0.58	45	46.7	1.9	4.2	48.6	50.9	43.0	41.0	A	B
Cross Bayou Blvd. to Gulf Drive		0.19	45	20.1	16.1	3.9	36.2	24.0	18.9	28.5	E	C
Gulf Drive to Marine Parkway		0.49	45	42.8	24.3	16.5	67.1	59.3	26.3	29.7	D	C
Marine Parkway to Floramar Terrace		0.21	45	21.3	42.7	16.2	64.0	37.5	11.8	20.2	F	E
Floramar Terrace to Trouble Creek Road		0.38	45	35.6	12.9	6.5	48.5	42.1	28.2	32.5	C	C
Trouble Creek Road to SR 54		0.56	45	44.7	123.5	64.4	168.2	109.1	12.0	18.5	F	E

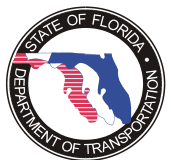
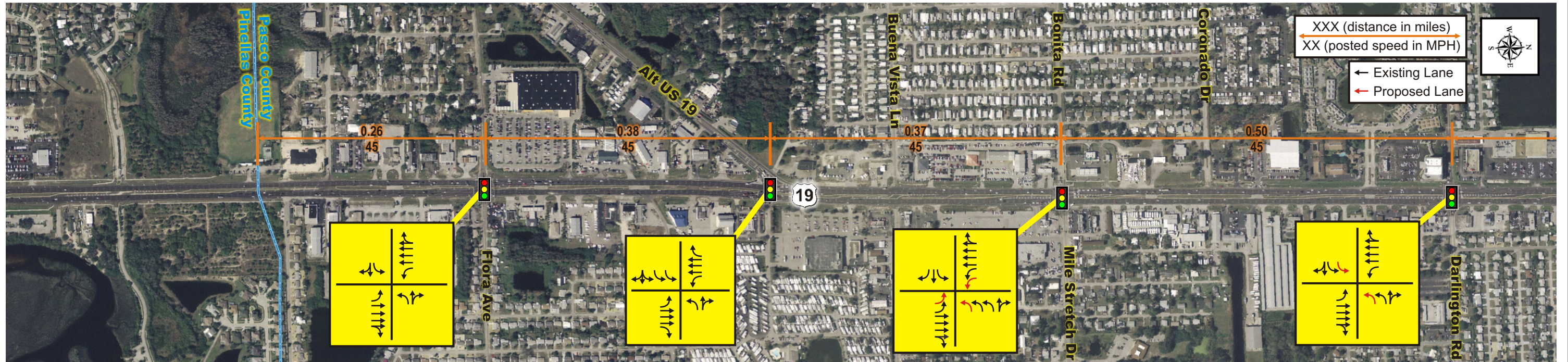
Table 4-6 (Cont.)
Design Year (2030) SR 55 (US 19) Continuous Right-Turn Lane
Alternative Arterial Southbound Level of Service Summary

SR 55 (US 19) Segment	Arterial Class	Segment Length (miles)	Flow Speed (mph)	Running Time (sec)	Signal Delay (sec)		Travel Time (sec)		Arterial Speed (mph)		LOS	
					AM	PM	AM	PM	AM	PM	AM	PM
SR 54 to Pinellas County Line		3.03		272.9	441.6	123.3	714.5	396.2	15.3	27.5	F	C
SR 54 to Moog Road	I	0.52	45	45.5	14.1	20.5	59.6	66.0	31.4	28.4	C	C
Moog Road to Sunray Drive		0.80	45	64.4	36.5	38.6	100.9	103.0	28.5	28.0	C	C
Sunray Drive to Darlington Road		0.20	45	20.5	18.5	18.7	39.0	39.2	18.5	18.4	E	E
Darlington Road to Mile Stretch Road		0.50	45	44.1	108.7	5.9	152.8	50.0	11.8	36.0	F	B
Mile Stretch Road to Alt. 19		0.37	45	36.2	171.1	37.8	207.3	74.0	6.4	18.0	F	E
Alt. 19 to Flora Avenue		0.38	45	35.4	92.7	1.8	128.1	37.2	10.7	36.8	F	B
Flora Avenue to Pinellas County Line		0.26	45	26.8	-	-	26.8	26.8	34.9	34.9	B	B
County Line Road to Pinellas County Line	I	19.69		1556.8	1974.2	697.3	3531.0	2254.1	20.1	31.4	E	C

4.5 DESIGN YEAR (2030) TRANSPORTATION SYSTEM MANAGEMENT ALTERNATIVE ANALYSES

The CRTL alternative analyzed in section 4.4 improves signalized intersection and arterial LOS for the SR 55 (US 19) arterial in Pasco County. However, the CRTL is not adequate to achieve acceptable LOS at many of the signalized intersections and arterial segments. Therefore, additional intersection improvements were considered and analyzed in this section for the TSM alternative. In the process of identifying TSM intersection improvements, the intersection turn volumes, intersection LOS and intersection signal delay were considered. Based on these analyses the following intersection improvements were identified for the TSM alternative in addition to the proposed continuous right-turn lane. The proposed intersection improvements for the TSM alternative are listed below and are shown on **Exhibits 12A-12F**.

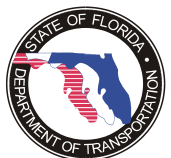
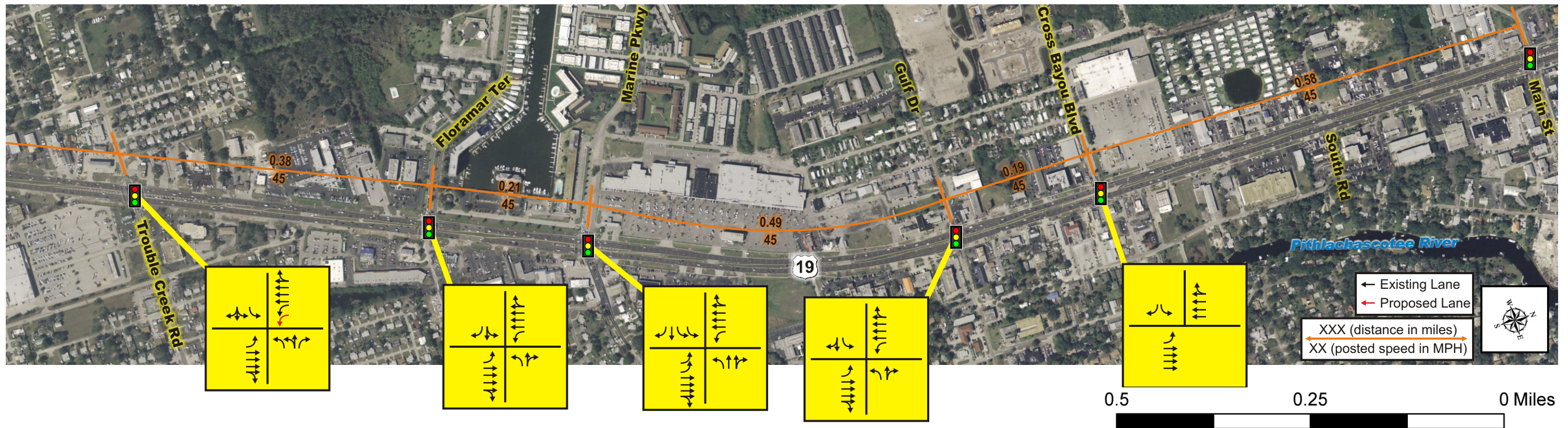
1. Mile Stretch Drive – Add second northbound and southbound exclusive left-turn lanes and third westbound exclusive left-turn lane.
2. Darlington Road – Add second eastbound and westbound exclusive left-turn lanes.
3. Sunray Drive – Add second eastbound exclusive left-turn lane.
4. SR 54 – Add third southbound exclusive left-turn lane, second westbound exclusive right-turn lane, second eastbound exclusive left-turn lane and make the eastbound shared left-through-right-turn lane as shared through-right-turn lane.
5. Trouble Creek Road – Add second southbound exclusive left-turn lane.
6. Ridge Road – Add third southbound exclusive left-turn lane and second westbound exclusive right-turn lane.
7. Embassy Boulevard – Add second southbound exclusive left-turn lane.
8. SR 52 – Add third southbound exclusive left-turn lane, third westbound exclusive left-turn lane and make the westbound shared left-through turn lane an exclusive through lane.
9. Hudson Avenue – Add second southbound exclusive left-turn lane, second westbound exclusive left-turn lane and make the westbound shared left-through-right-turn lane a shared through-right-turn lane.



SR 55 (US 19)
from Pinellas County Line
to Hernando County Line

DESIGN YEAR (2030) TRANSPORTATION SYSTEM MANAGEMENT (TSM)
ALTERNATIVE CORRIDOR LANE GEOMETRY

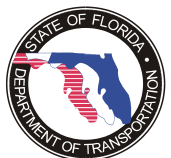
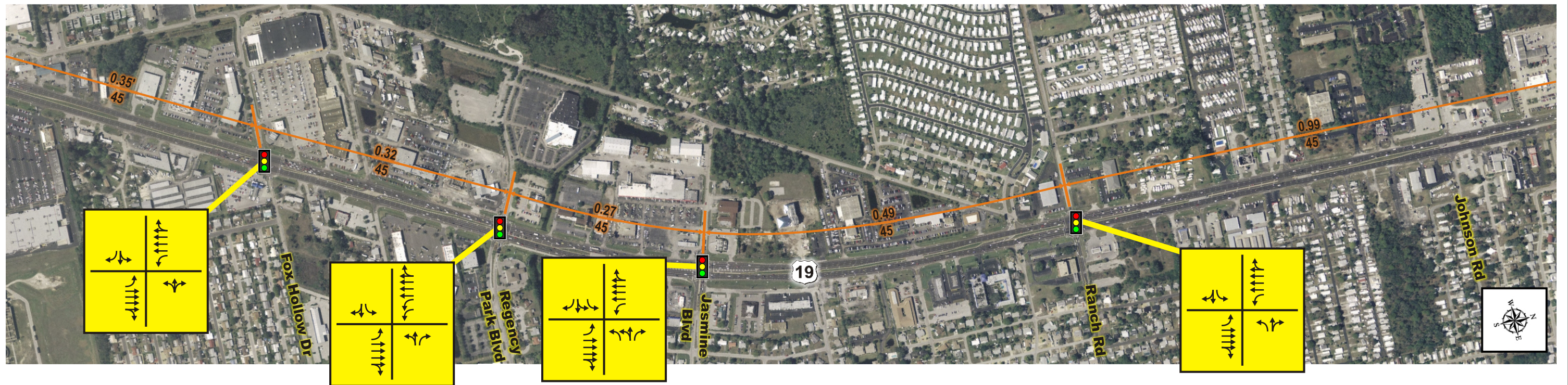
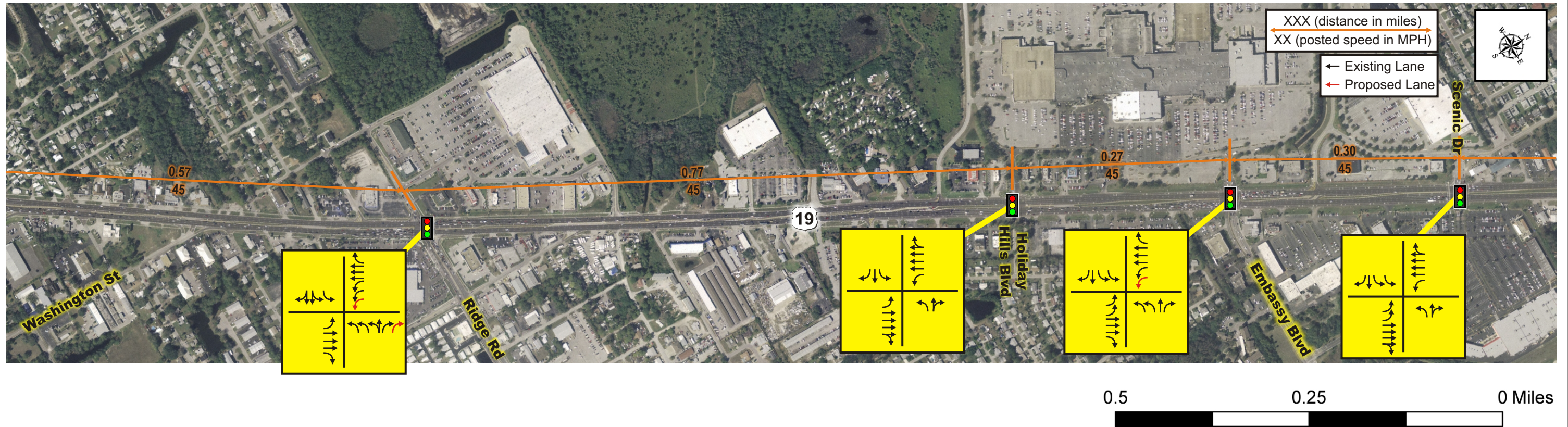
EXHIBIT 12A



SR 55 (US 19)
from Pinellas County Line
to Hernando County Line

DESIGN YEAR (2030) TRANSPORTATION SYSTEM MANAGEMENT (TSM)
ALTERNATIVE CORRIDOR LANE GEOMETRY

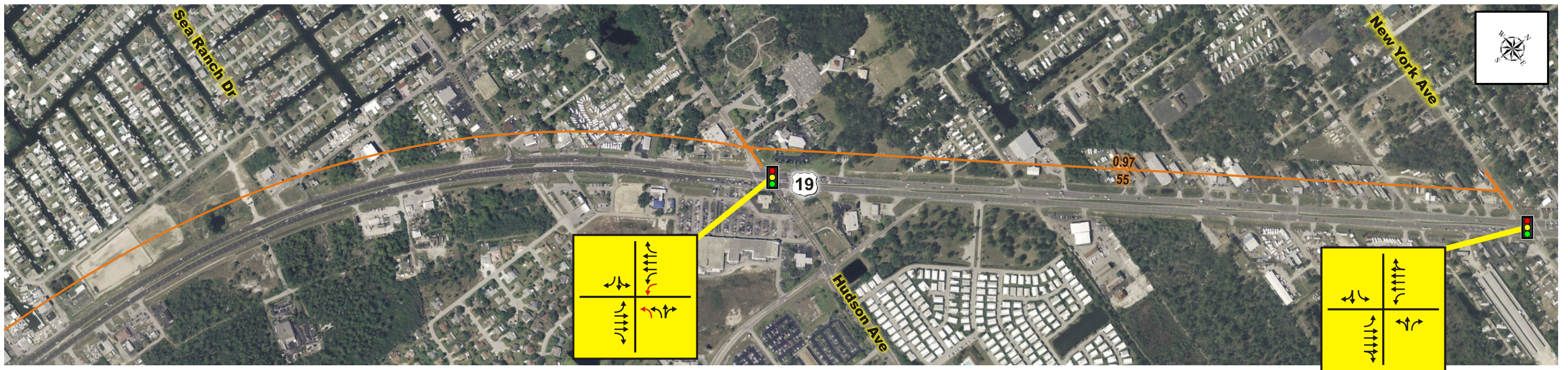
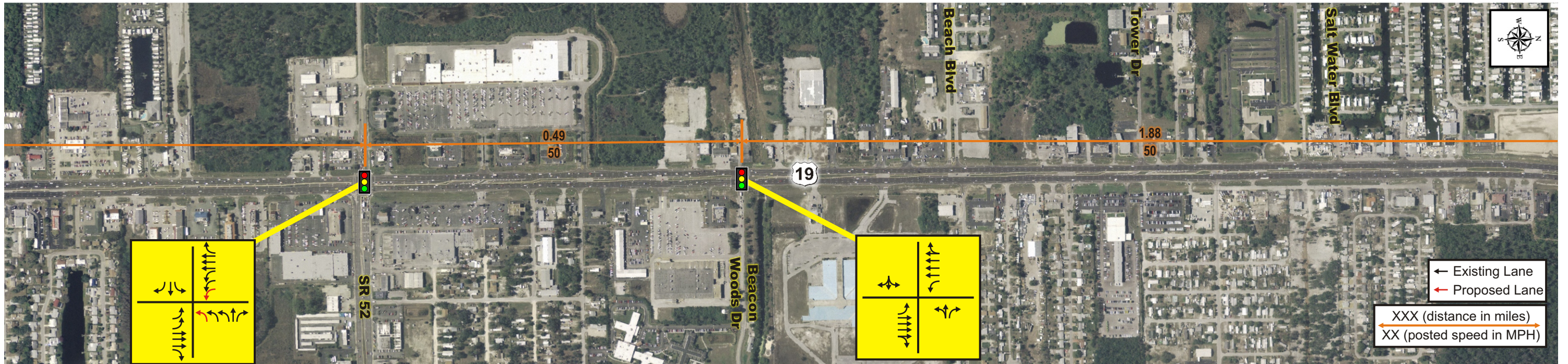
EXHIBIT 12B



SR 55 (US 19)
from Pinellas County Line
to Hernando County Line

DESIGN YEAR (2030) TRANSPORTATION SYSTEM MANAGEMENT (TSM)
ALTERNATIVE CORRIDOR LANE GEOMETRY

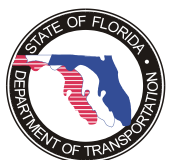
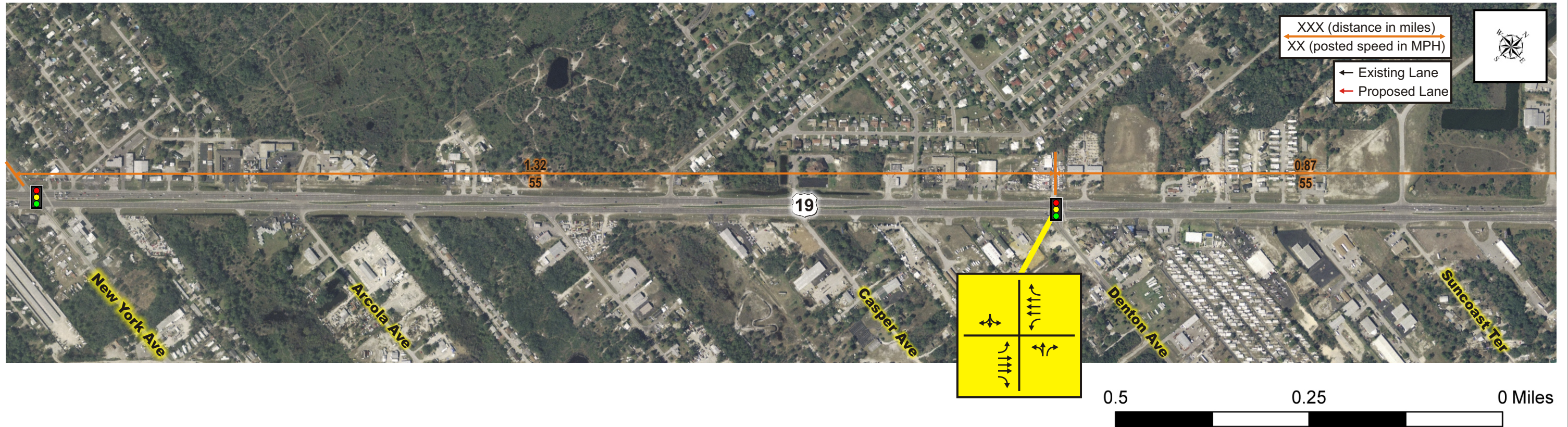
EXHIBIT 12C



SR 55 (US 19)
from Pinellas County Line
to Hernando County Line

DESIGN YEAR (2030) TRANSPORTATION SYSTEM MANAGEMENT (TSM) ALTERNATIVE CORRIDOR LANE GEOMETRY

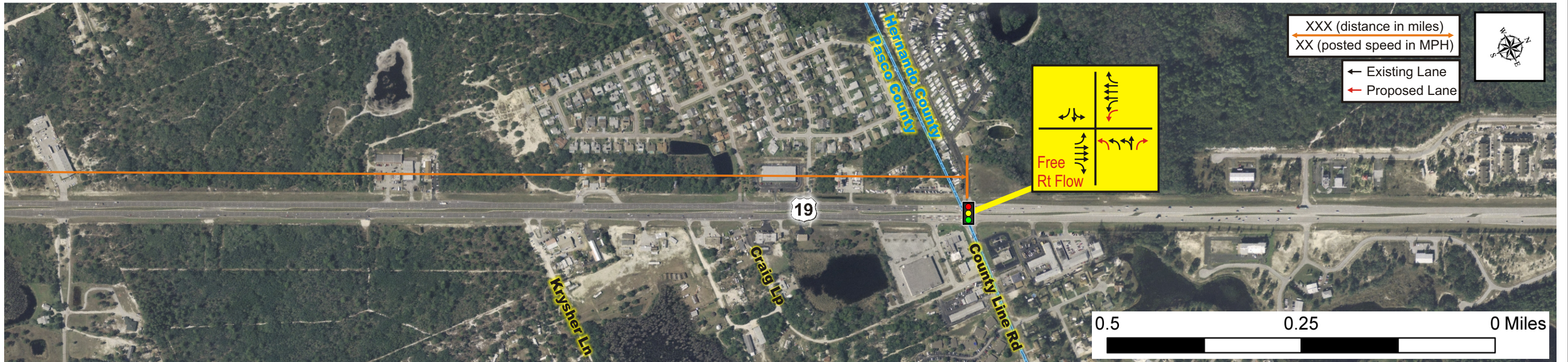
EXHIBIT 12D



SR 55 (US 19)
from Pinellas County Line
to Hernando County Line

DESIGN YEAR (2030) TRANSPORTATION SYSTEM MANAGEMENT (TSM) ALTERNATIVE CORRIDOR LANE GEOMETRY

EXHIBIT 12E



SR 55 (US 19)
from Pinellas County Line
to Hernando County Line

DESIGN YEAR (2030) TRANSPORTATION SYSTEM MANAGEMENT (TSM) ALTERNATIVE CORRIDOR LANE GEOMETRY

EXHIBIT 12F

10. Little Road – Add third southbound exclusive left-turn lane and make the westbound shared left-through turn lane a shared left-through-right-turn lane.
11. County Line Road – Add second southbound exclusive left-turn lane and second westbound exclusive left-turn lane, make the westbound shared left-through-right-turn lane as a shared left-through turn lane and provide a westbound exclusive right-turn lane and make the northbound right-turn lane as a free flow right-turn lane with appropriate chanelization.

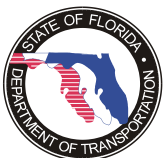
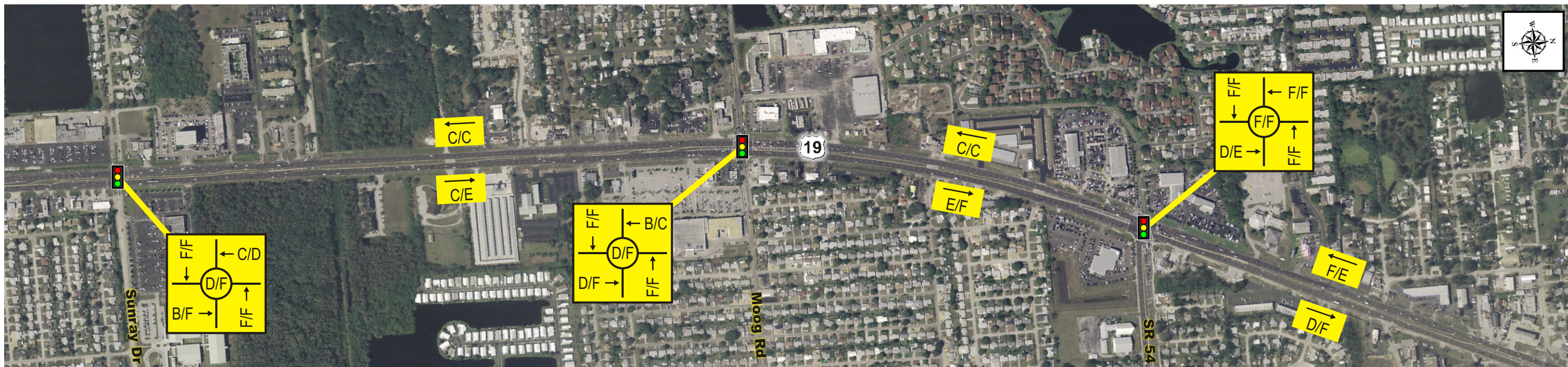
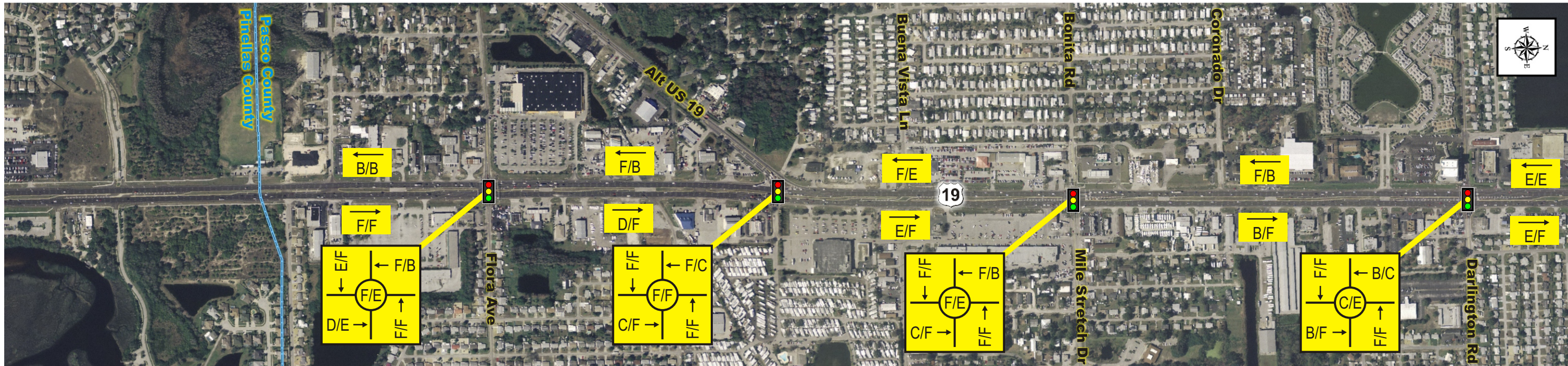
In the design year (2030) TSM alternative intersection and arterial LOS analysis, the proposed TSM alternative geometric conditions shown on **Exhibits 12A-12F** and the design year (2030) design hour turning movement traffic volumes were used. The analysis results for the signalized intersections are summarized in **Table 4-7** and shown on **Exhibits 13A-13F**. The SR 55 (US 19) northbound and southbound arterial segment LOS results for the design year (2030) TSM alternative are summarized in **Table 4-8** and **Table 4-9**, respectively and shown on **Exhibits 13A-13F**. The design year (2030) Synchro intersection analysis sheets for the TSM alternative are included in **Appendix E** (under separate cover).

Table 4-7
Design Year (2030) SR 55 (US 19) Transportation System
Management Alternative Intersection Level of Service Summary

SR 55 (US 19) Segment	SR 55 (US 19) Mainline NB AM / PM	SR 55 (US 19) Mainline SB AM / PM	EB AM / PM	WB AM / PM	Overall LOS AM / PM	Overall Delay (sec / veh) AM / PM
Flora Avenue	D / E	F / B	E / F	F / F	F / E	85 / 62
Alt. 19	C / F	F / C	F / F	F / F	F / F	128 / 185
Mile Stretch Drive	C / F	F / B	F / F	F / F	F / E	89 / 75
Darlington Road	B / F	B / C	F / F	F / F	C / E	29 / 78
Sunray Drive	B / F	C / D	F / F	F / F	D / F	40 / 87
Moog Road	D / F	B / C	F / F	F / F	D / F	46 / 87
SR 54	D / E	F / F	F / F	F / F	F / F	100 / 138
Trouble Creek Road	D / F	B / B	F / F	F / F	D / F	49 / 77
Floramar Terrace	A / B	D / B	F / F	F / E	D / C	42 / 25
Marine Parkway	B / B	C / C	F / F	F / F	D / D	37 / 35
Gulf Drive	B / C	C / B	F / F	F / F	C / C	25 / 32

Table 4-7 (Cont.)
Design Year (2030) SR 55 (US 19) Transportation System
Management Alternative Intersection Level of Service Summary

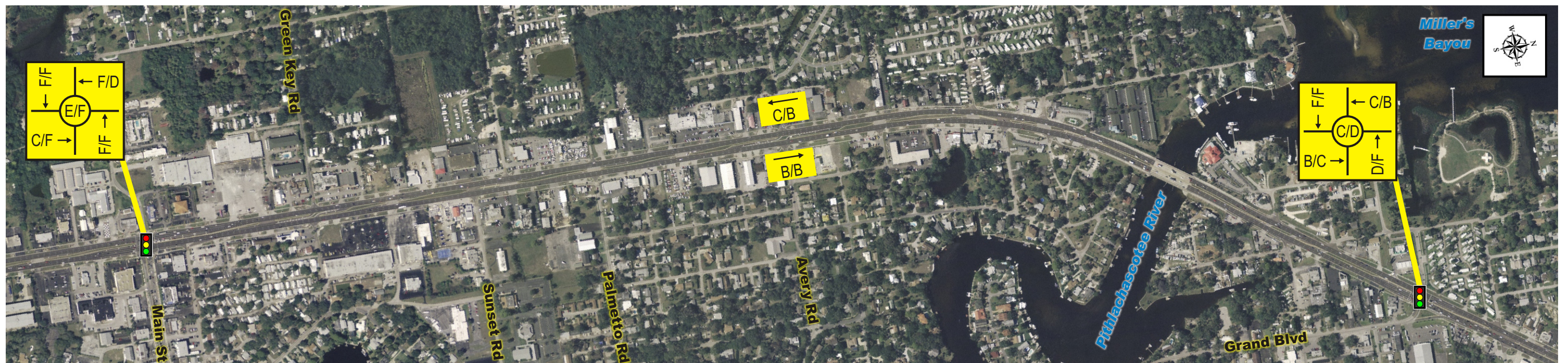
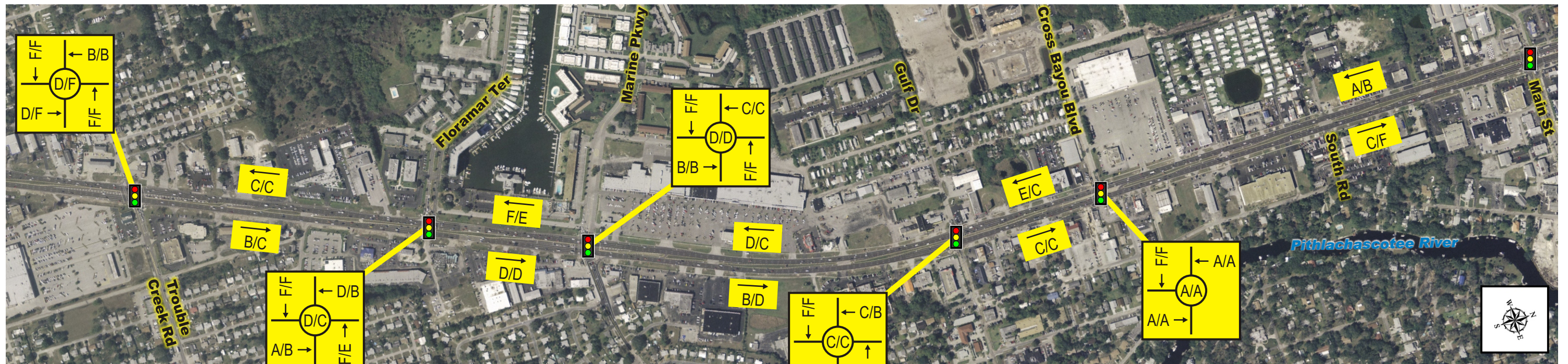
SR 55 (US 19) Segment	SR 55 (US 19) Mainline NB AM / PM	SR 55 (US 19) Mainline SB AM / PM	EB AM / PM	WB AM / PM	Overall LOS AM / PM	Overall Delay (sec / veh) AM / PM
Cross Bayou Boulevard	A / A	A / A	F / F	--	A / A	5 / 6
Main Street	C / F	F / D	F / F	F / F	E / F	77 / 121
Grand Boulevard	B / C	C / B	F / F	D / F	C / D	27 / 45
Ridge Road	E / F	F / E	F / F	E / F	F / F	147 / 176
Holiday Hills Boulevard	A / B	A / B	E / E	E / E	A / B	9 / 15
Embassy Boulevard	B / F	F / E	F / E	E / E	F / F	87 / 94
Scenic Drive	B / E	E / C	E / E	E / F	D / D	42 / 49
Fox Hollow Drive	B / D	F / C	D / F	E / F	E / E	65 / 63
Regency Park Drive	B / F	D / B	E / E	E / F	D / E	36 / 70
Jasmine Boulevard	C / F	F / C	F / E	E / E	E / F	62 / 93
Ranch Road	D / F	E / C	E / E	F / F	E / E	59 / 65
SR 52	D / F	F / F	E / E	F / F	F / F	118 / 179
Beacon Woods Drive	B / C	B / B	D / D	F / F	C / C	21 / 32
Hudson Avenue	E / F	F / D	E / E	D / E	F / F	87 / 140
New York Avenue	C / C	C / C	C / D	D / F	C / D	25 / 35
Denton Avenue	B / C	C / B	C / C	F / D	C / C	26 / 24
Little Road	C / C	F / F	D / D	F / F	F / F	143 / 140
County Line Road	F / F	F / E	E / E	D / D	F / F	183 / 114



SR 55 (US 19)
from Pinellas County Line
to Hernando County Line

DESIGN YEAR (2030) TRANSPORTATION SYSTEM MANAGEMENT (TSM)
ALTERNATIVE LEVEL OF SERVICE

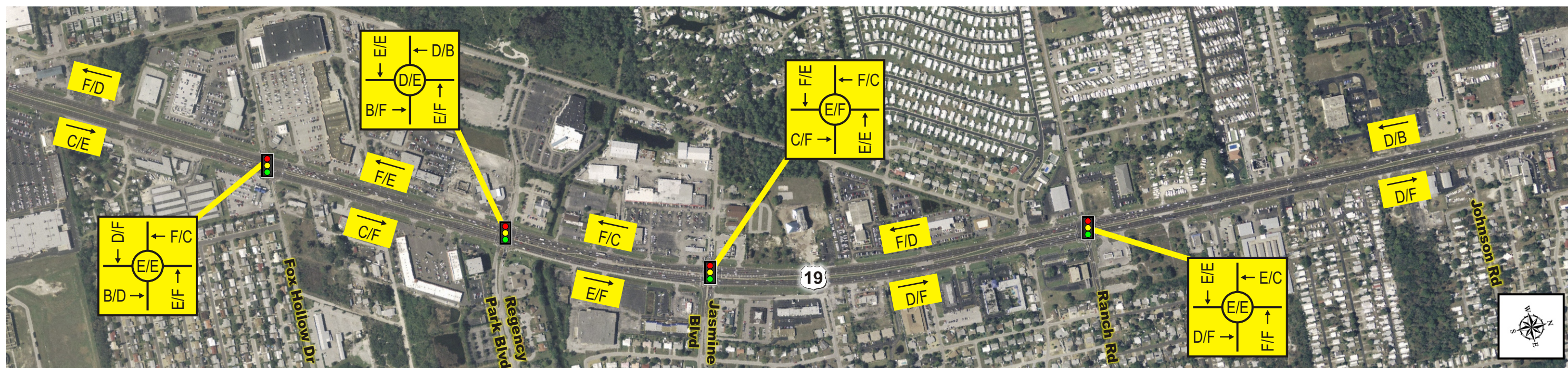
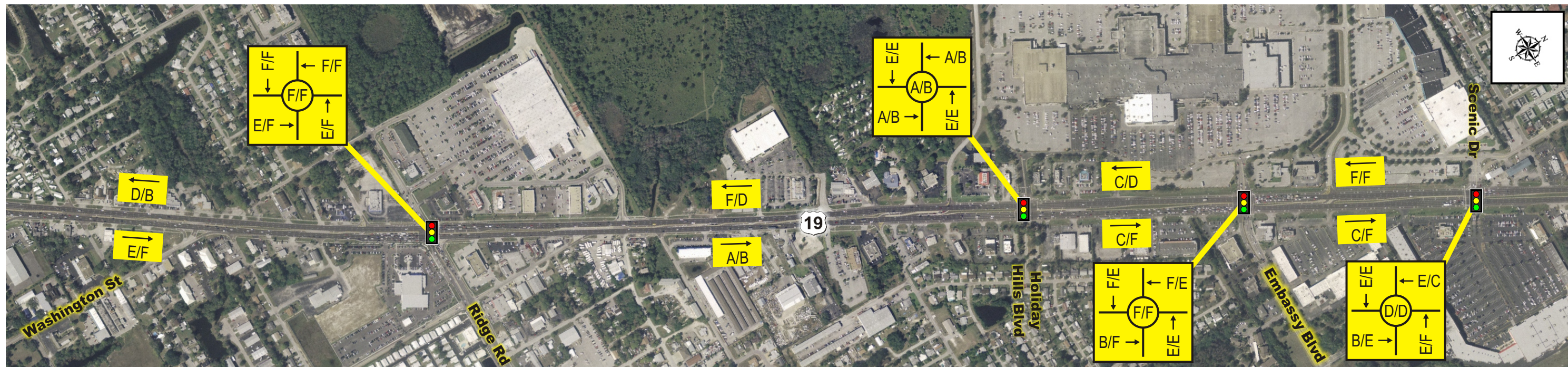
EXHIBIT 13A



SR 55 (US 19)
from Pinellas County Line
to Hernando County Line

DESIGN YEAR (2030) TRANSPORTATION SYSTEM MANAGEMENT (TSM)
ALTERNATIVE LEVEL OF SERVICE

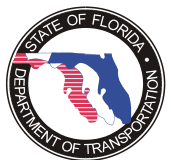
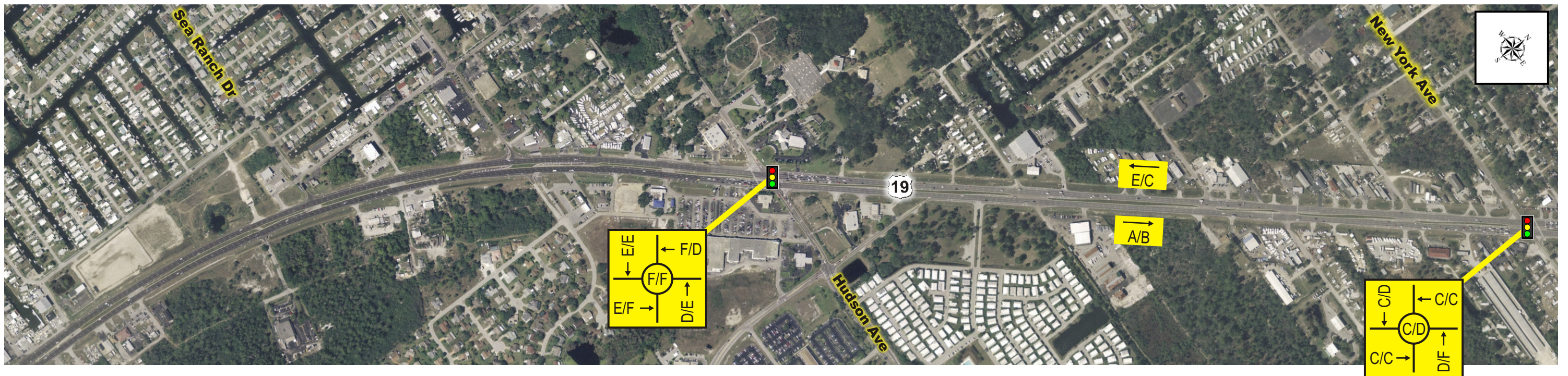
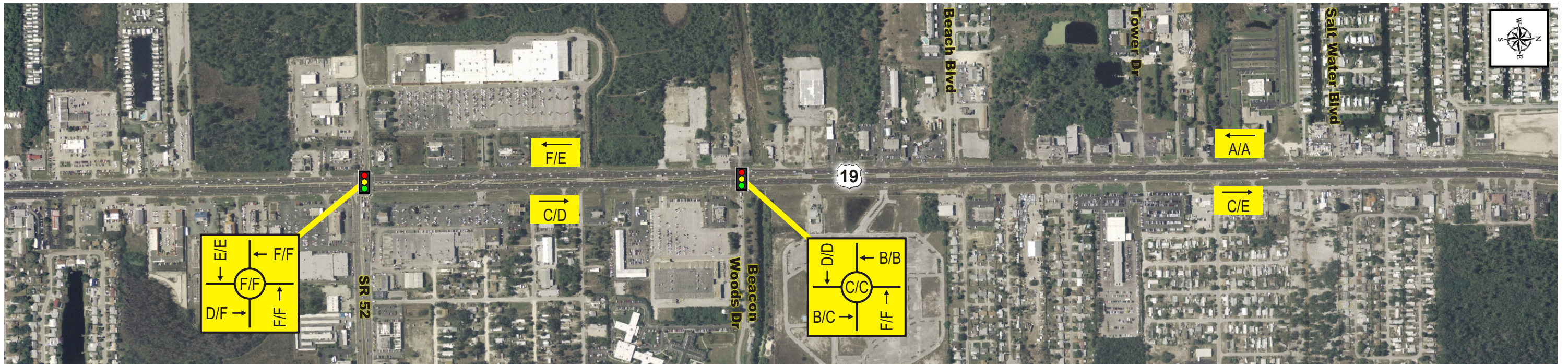
EXHIBIT 13B



SR 55 (US 19)
from Pinellas County Line
to Hernando County Line

DESIGN YEAR (2030) TRANSPORTATION SYSTEM MANAGEMENT (TSM)
ALTERNATIVE LEVEL OF SERVICE

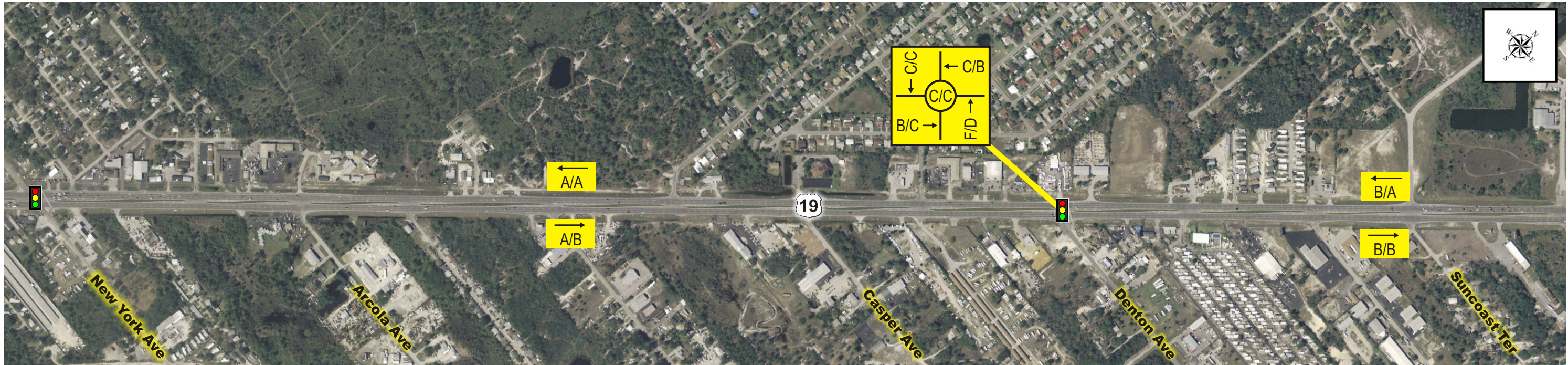
EXHIBIT 13C



SR 55 (US 19)
from Pinellas County Line
to Hernando County Line

DESIGN YEAR (2030) TRANSPORTATION SYSTEM MANAGEMENT (TSM)
ALTERNATIVE LEVEL OF SERVICE

EXHIBIT 13D



SR 55 (US 19)
from Pinellas County Line
to Hernando County Line

DESIGN YEAR (2030) TRANSPORTATION SYSTEM MANAGEMENT (TSM)
ALTERNATIVE LEVEL OF SERVICE

EXHIBIT 13E



SR 55 (US 19)
from Pinellas County Line
to Hernando County Line

DESIGN YEAR (2030) TRANSPORTATION SYSTEM MANAGEMENT (TSM)
ALTERNATIVE LEVEL OF SERVICE

EXHIBIT 13F

Table 4-8
Design Year (2030) SR 55 (US 19) Transportation System Management
Alternative Arterial Northbound Level of Service Summary

SR 55 (US 19) Segment	Arterial Class	Segment Length (miles)	Flow Speed (mph)	Running Time (sec)	Signal Delay (sec)		Travel Time (sec)		Arterial Speed (mph)		LOS	
					AM	PM	AM	PM	AM	PM	AM	PM
Pinellas County Line to SR 54	I	3.03		272.9	198.6	896.9	471.5	1169.8	23.1	9.3	D	F
Pinellas County Line to Flora Avenue		0.26	45	26.8	37.6	69.6	64.4	96.4	14.5	9.7	F	F
Flora Avenue to Alt. 19		0.38	45	35.4	26.6	254.6	62.0	290.0	22.1	4.7	D	F
Alt. 19 to Mile Stretch Drive		0.37	45	36.2	28.7	91.4	64.9	127.6	20.5	10.4	E	F
Mile Stretch Drive to Darlington Road		0.50	45	44.1	5.5	96.7	49.6	140.8	36.3	12.8	B	F
Darlington Road to Sunray Drive		0.20	45	20.5	14.9	99.9	35.4	120.4	20.3	6.0	E	F
Sunray Drive to Moog Road		0.80	45	64.4	32.6	85.7	97.0	150.1	29.7	19.2	C	E
Moog Road to SR 54		0.52	45	45.5	52.7	199.0	98.2	244.5	19.1	7.7	E	F
SR 54 to Main Street	I	2.41		211.2	70.8	279.0	282.0	490.2	30.8	17.7	C	E
SR 54 to Trouble Creek Road		0.56	45	44.7	34.9	87.2	79.6	131.9	25.3	15.3	D	F
Trouble Creek Road to Floramar Terrace		0.38	45	35.6	1.6	7.0	37.2	42.6	36.8	32.1	B	C
Floramar Terrace to Marine Parkway		0.21	45	21.3	6.9	7.4	28.2	28.7	26.8	26.3	D	D
Marine Parkway to Gulf Drive		0.49	45	42.8	6.6	23.2	49.4	66.0	35.7	26.7	B	D
Gulf Drive to Cross Bayou Blvd.		0.19	45	20.1	0.3	0.8	20.4	20.9	33.5	32.7	C	C
Cross Bayou Blvd. to Main Street		0.58	45	46.7	20.5	153.4	67.2	200.1	31.1	10.4	C	F
Main Street to Ridge Road	I	2.28		181.9	76.9	348.2	258.8	530.1	31.7	15.5	C	F
Main Street to Grand Blvd.		1.71	45	136.4	11.1	31.3	147.5	167.7	41.7	36.7	B	B
Grand Blvd. to Ridge Road		0.57	45	45.5	65.8	316.9	111.3	362.4	18.4	5.7	E	F
Ridge Road to SR 52	I	3.76		335.7	174.4	832.5	510.1	1168.5	26.5	11.6	D	F
Ridge Road to Holiday Hills Blvd.		0.77	45	61.7	4.1	10.8	65.8	72.5	42.1	38.2	A	B
Holiday Hills Blvd. to Embassy Blvd.		0.27	45	27.9	8.0	150.7	35.9	178.6	27.1	5.4	C	F
Embassy Blvd. to Scenic Drive		0.30	45	29.8	8.4	58.9	38.2	88.7	28.3	12.2	C	F
Scenic Drive to Fox Hollow Drive		0.35	45	34.2	11.0	43.6	45.2	77.8	27.9	16.2	C	E
Fox Hollow Drive to Regency Drive		0.32	45	31.6	10.2	92.6	41.8	124.2	27.6	9.3	C	F
Regency Drive to Jasmine Blvd.		0.27	45	28.1	25.8	144.4	53.9	172.5	18.0	5.6	E	F
Jasmine Blvd. to Ranch Road		0.49	45	43.2	37.0	81.9	80.2	125.1	22.0	14.1	D	F
Ranch Road to SR 52		0.99	45	79.2	69.9	249.9	149.1	329.1	23.9	10.8	D	F

Table 4-8 (Cont.)
Design Year (2030) SR 55 (US 19) Transportation System Management
Alternative Arterial Northbound Level of Service Summary

SR 55 (US 19) Segment	Arterial Class	Segment Length (miles)	Flow Speed (mph)	Running Time (sec)	Signal Delay (sec)		Travel Time (sec)		Arterial Speed (mph)		LOS	
					AM	PM	AM	PM	AM	PM	AM	PM
SR 52 to County Line Road		8.21		555.1	337.7	642.0	892.8	1197.1	33.1	24.7	C	D
SR 52 to Beacon Woods Drive	I	0.49	50	38.0	18.8	30.7	56.8	68.7	31.1	25.7	C	D
Beacon Woods Drive to Hudson Avenue		1.88	50	135.2	69.5	265.7	204.7	400.9	33.1	16.9	C	E
Hudson Avenue to New York Avenue		0.97	55	63.4	19.3	30.0	82.7	93.4	42.2	37.4	A	B
New York Avenue to Denton Avenue		1.32	55	86.3	15.0	30.9	101.3	117.2	46.9	40.5	A	B
Denton Avenue to Little Road		0.87	55	57.0	23.6	31.7	80.6	88.7	38.9	35.3	B	B
Little Road to County Line Road		2.68	55	175.2	191.5	253.0	366.7	428.2	26.3	22.5	D	D
Pinellas County Line to County Line Road	I	19.69		1556.8	858.4	2998.6	2415.2	4555.7	29.3	15.6	C	F

Table 4-9
Design Year (2030) SR 55 (US 19) Transportation System Management
Alternative Arterial Southbound Level of Service Summary

SR 55 (US 19) Segment	Arterial Class	Segment Length (miles)	Flow Speed (mph)	Running Time (sec)	Signal Delay (sec)		Travel Time (sec)		Arterial Speed (mph)		LOS	
					AM	PM	AM	PM	AM	PM	AM	PM
County Line Road to SR 52		8.21		555.1	395.6	164.8	950.7	719.9	31.1	41.1	C	B
County Line Road to Little Road		2.68	55	175.2	34.4	27.3	209.6	202.5	46.0	47.6	A	A
Little Road to Denton Avenue		0.87	55	57.0	26.0	12.7	83.0	69.7	37.7	44.9	B	A
Denton Avenue to New York Avenue	I	1.32	55	86.3	23.5	21.1	109.8	107.4	43.3	44.2	A	A
New York Avenue to Hudson Avenue		0.97	55	63.4	127.6	49.9	191.0	113.3	18.3	30.8	E	C
Hudson Avenue to Beacon Woods Drive		1.88	50	135.2	9.1	7.0	144.3	142.2	46.9	47.6	A	A
Beacon Woods Drive to SR 52		0.49	50	38.0	175.0	46.8	213.0	84.8	8.3	20.8	F	E
SR 52 to Ridge Road		3.76		335.7	780.5	240.8	1116.2	576.5	12.1	23.5	F	D
SR 52 to Ranch Road		0.99	45	79.2	70.7	19.4	149.9	98.6	23.8	36.1	D	B
Ranch Road to Jasmine Blvd.		0.49	45	43.2	84.1	32.1	127.3	75.3	13.9	23.4	F	D
Jasmine Blvd. to Regency Drive	I	0.27	45	28.1	46.0	4.5	74.1	32.6	13.1	29.8	F	C
Regency Drive to Fox Hollow Drive		0.32	45	31.6	101.3	30.3	132.9	61.9	8.7	18.6	F	E
Fox Hollow Drive to Scenic Drive		0.35	45	34.2	62.8	24.7	97.0	58.9	13.0	21.4	F	D
Scenic Drive to Embassy Blvd.		0.30	45	29.8	143.9	56.3	173.7	86.1	6.2	12.5	F	F
Embassy Blvd. to Holiday Hills Blvd.		0.27	45	27.9	7.4	11.9	35.3	39.8	27.5	24.4	C	D
Holiday Hills Blvd. to Ridge Road		0.77	45	61.7	264.3	61.6	326.0	123.3	8.5	22.5	F	D
Ridge Road to Main Street		2.28		181.9	119.3	54.5	301.2	236.4	27.3	34.7	C	B
Ridge Road to Grand Blvd.	I	0.57	45	45.5	33.8	14.3	79.3	59.8	25.9	34.3	D	B
Grand Blvd. to Main Street		1.71	45	136.4	85.5	40.2	221.9	176.6	27.7	34.9	C	B
Main Street to SR 54		2.41		211.2	221.4	111.7	432.6	322.9	20.1	26.9	E	D
Main Street to Cross Bayou Blvd.		0.58	45	46.7	1.9	4.2	48.6	50.9	43.0	41.0	A	B
Cross Bayou Blvd. to Gulf Drive	I	0.19	45	20.1	16.1	3.9	36.2	24.0	18.9	28.5	E	C
Gulf Drive to Marine Parkway		0.49	45	42.8	24.3	16.5	67.1	59.3	26.3	29.7	D	C
Marine Parkway to Floramar Terrace		0.21	45	21.3	42.7	16.2	64.0	37.5	11.8	20.2	F	E
Floramar Terrace to Trouble Creek Road		0.38	45	35.6	12.9	6.5	48.5	42.1	28.2	32.5	C	C
Trouble Creek Road to SR 54		0.56	45	44.7	123.5	64.4	168.2	109.1	12.0	18.5	F	E

Table 4-9 (Cont.)
Design Year (2030) SR 55 (US 19) Transportation System Management
Alternative Arterial Southbound Level of Service Summary

SR 55 (US 19) Segment	Arterial Class	Segment Length (miles)	Flow Speed (mph)	Running Time (sec)	Signal Delay (sec)		Travel Time (sec)		Arterial Speed (mph)		LOS	
					AM	PM	AM	PM	AM	PM	AM	PM
SR 54 to Pinellas County Line		3.03		272.9	427.1	121.5	700.0	394.4	15.6	27.7	F	C
SR 54 to Moog Road	I	0.52	45	45.5	14.1	20.6	59.6	66.1	31.4	28.3	C	C
Moog Road to Sunray Drive		0.80	45	64.4	25.8	38.0	90.2	102.4	31.9	28.1	C	C
Sunray Drive to Darlington Road		0.20	45	20.5	15.3	16.5	35.8	37.0	20.1	19.5	E	E
Darlington Road to Mile Stretch Road		0.50	45	44.1	107.9	6.4	152.0	50.5	11.8	35.6	F	B
Mile Stretch Road to Alt. 19		0.37	45	36.2	171.3	38.2	207.5	74.4	6.4	17.9	F	E
Alt. 19 to Flora Avenue		0.38	45	35.4	92.7	1.8	128.1	37.2	10.7	36.8	F	B
Flora Avenue to Pinellas County Line		0.26	45	26.8	-	-	26.8	26.8	34.9	34.9	B	B
County Line Road to Pinellas County Line	I	19.69		1556.8	1943.9	693.3	3500.7	2250.1	20.2	31.5	E	C

4.6 COMPARISON OF INTERSECTION AND ARTERIAL LEVEL OF SERVICE

Comparison of signalized intersection and arterial segment LOS between different alternatives were performed in this section to prioritize intersection and arterial capacity improvements. Overall intersection signal delay and arterial speed were also compared between design year (2030) CRTL and TSM alternatives. The comparison of overall signalized intersection LOS and signal delay between alternatives are shown in **Table 4-10**. The comparison of arterial segment LOS and arterial speed between alternatives are shown in **Table 4-11** and **Table 4-12**.

Table 4-10
Comparison of Design Year (2030) Signalized
Intersection Level of Service and Delay

Cross Street	Overall Intersection Level of Service AM / PM			Overall Intersection Signal Delay (sec/veh) AM / PM		
	No-Build Alt.	CRTL Alt.	TSM Alt.	No-Build Alt.	CRTL Alt.	TSM Alt.
Flora Avenue	F / F	F / E	F / E	153 / 92	85 / 62	85 / 62
Alt. 19	F / F	F / F	F / F	126 / 187	128 / 185	128 / 185
Mile Stretch Drive	F / F	F / F	F / E	164 / 115	106 / 86	89 / 75
Darlington Road	F / F	D / F	C / E	96 / 142	39 / 93	29 / 78
Sunray Drive	F / F	D / F	D / F	109 / 155	50 / 104	40 / 87
Moog Road	F / F	D / F	D / F	88 / 127	46 / 88	46 / 87
SR 54	F / F	F / F	F / F	101 / 161	105 / 163	100 / 138
Trouble Creek Road	F / F	D / F	D / F	90 / 110	51 / 83	49 / 77
Floramar Terrace	F / E	D / C	D / C	94 / 76	42 / 25	42 / 25
Marine Parkway	E / E	D / D	D / D	63 / 65	37 / 35	37 / 35
Gulf Drive	D / E	C / C	C / C	49 / 66	25 / 32	25 / 32
Cross Bayou Blvd.	A / B	A / A	A / A	8 / 13	5 / 6	5 / 6
Main Street	E / F	E / F	E / F	79 / 117	77 / 121	77 / 121
Grand Boulevard	D / F	C / D	C / D	55 / 95	27 / 45	27 / 45
Ridge Road	F / F	F / F	F / F	166 / 216	166 / 215	147 / 176

Table 4-10 (Cont.)
Comparison of Design Year (2030) Signalized
Intersection Level of Service and Delay

Cross Street	Overall Intersection Level of Service AM / PM			Overall Intersection Signal Delay (sec/veh) AM / PM		
	No-Build Alt.	CRTL Alt.	TSM Alt.	No-Build Alt.	CRTL Alt.	TSM Alt.
Holiday Hills Blvd.	C / D	B / B	A / B	32 / 38	10 / 15	9 / 15
Embassy Boulevard	F / F	F / F	F / F	89 / 108	88 / 108	87 / 94
Scenic Drive	F / F	D / D	D / D	103 / 103	42 / 49	42 / 49
Fox Hollow Drive	F / F	E / E	E / E	134 / 105	65 / 63	65 / 63
Regency Park Drive	F / F	D / E	D / E	112 / 136	36 / 70	36 / 70
Jasmine Boulevard	F / F	E / F	E / F	120 / 147	62 / 93	62 / 93
Ranch Road	F / F	E / E	E / E	121 / 97	59 / 65	59 / 65
SR 52	F / F	F / F	F / F	164 / 243	159 / 242	118 / 179
Beacon Woods Drive	C / E	C / C	C / C	25 / 58	21 / 32	21 / 32
Hudson Avenue	F / F	F / F	F / F	114 / 183	114 / 183	87 / 140
New York Avenue	D / D	C / D	C / D	38 / 52	25 / 35	25 / 35
Denton Avenue	C / C	C / C	C / C	26 / 24	26 / 24	26 / 24
Little Road	F / F	F / F	F / F	288 / 237	236 / 217	143 / 140
County Line Road	F / F	F / F	F / F	275 / 303	276 / 308	183 / 114

Table 4-11
Comparison of Design Year (2030) SR 55 (US 19)
Arterial Northbound Level of Service and Speed

SR 55 (US 19) Segment	Arterial Class	Segment Length (miles)	Arterial LOS AM / PM			Arterial Speed (mph) AM / PM		
			No-Build Alt.	CRTL Alt.	TSM Alt.	No-Build Alt.	CRTL Alt.	TSM Alt.
Pinellas County Line to SR 54		3.03	D / F	D / F	D / F	21.9 / 6.7	22.9 / 9.1	23.1 / 9.3
Pinellas County Line to Flora Avenue		0.26	F / F	F / F	F / F	12.1 / 5.7	14.5 / 9.7	14.5 / 9.7
Flora Avenue to Alt. 19		0.38	D / F	D / F	D / F	24.5 / 4.7	22.1 / 4.7	22.1 / 4.7
Alt. 19 to Mile Stretch Drive		0.37	E / F	E / F	E / F	18.6 / 6.4	19.9 / 9.7	20.5 / 10.4
Mile Stretch Drive to Darlington Road	I	0.50	B / F	B / F	B / F	34.5 / 7.4	36.1 / 11.9	36.3 / 12.8
Darlington Road to Sunray Drive		0.20	F / F	E / F	E / F	14.3 / 3.1	19.9 / 5.9	20.3 / 6.0
Sunray Drive to Moog Road		0.80	D / F	C / E	C / E	26.7 / 12.1	29.2 / 19.1	29.7 / 19.2
Moog Road to SR 54		0.52	D / F	E / F	E / F	22.5 / 7.7	19.2 / 7.7	19.1 / 7.7
SR 54 to Main Street		2.41	D / F	C / E	C / E	26.3 / 11.1	30.9 / 17.8	30.8 / 17.7
SR 54 to Trouble Creek Road		0.56	E / F	D / F	D / F	18.3 / 10.2	25.9 / 15.5	25.3 / 15.3
Trouble Creek Road to Floramar Terrace		0.38	C / F	B / C	B / C	31.3 / 10.0	36.8 / 32.1	36.8 / 32.1
Floramar Terrace to Marine Parkway	I	0.21	D / F	D / D	D / D	25.6 / 8.3	26.8 / 26.3	26.8 / 26.3
Marine Parkway to Gulf Drive		0.49	C / F	B / D	B / D	33.2 / 13.3	35.6 / 26.7	35.7 / 26.7
Gulf Drive to Cross Bayou Blvd.		0.19	C / E	C / C	C / C	33.2 / 20.7	33.5 / 32.7	33.5 / 32.7
Cross Bayou Blvd. to Main Street		0.58	C / F	C / F	C / F	28.5 / 11.0	31.1 / 10.4	31.1 / 10.4
Main Street to Ridge Road		2.28	C / F	C / F	C / F	31.0 / 13.2	31.7 / 15.5	31.7 / 15.5
Main Street to Grand Blvd.	I	1.71	B / D	B / B	B / B	40.6 / 23.9	41.7 / 36.7	41.7 / 36.7
Grand Blvd. to Ridge Road		0.57	E / F	F / F	E / F	18.2 / 5.6	18.4 / 5.7	18.4 / 5.7
Ridge Road to SR 52		3.76	D / F	D / F	D / F	23.2 / 7.8	26.3 / 11.3	26.5 / 11.6
Ridge Road to Holiday Hills Blvd.		0.77	B / D	B / B	A / B	38.0 / 24.6	40.6 / 38.4	42.1 / 38.2
Holiday Hills Blvd. to Embassy Blvd.	I	0.27	D / F	D / F	C / F	23.4 / 4.6	25.2 / 4.5	27.1 / 5.4
Embassy Blvd. to Scenic Drive		0.30	D / F	C / F	C / F	26.6 / 5.4	28.3 / 12.2	28.3 / 12.2
Scenic Drive to Fox Hollow Drive		0.35	D / F	C / F	C / E	24.2 / 8.3	28.4 / 16.2	27.9 / 16.2
Fox Hollow Drive to Regency Drive		0.32	F / F	C / F	C / F	15.9 / 4.5	27.6 / 9.3	27.6 / 9.3
Regency Drive to Jasmine Blvd.		0.27	E / F	E / F	E / F	16.4 / 3.6	18.0 / 5.6	18.0 / 5.6
Jasmine Blvd. to Ranch Road		0.49	E / F	D / F	D / F	18.5 / 9.1	22.0 / 14.1	22.0 / 14.1
Ranch Road to SR 52		0.99	D / F	D / F	D / F	23.9 / 10.8	23.9 / 10.8	23.9 / 10.8

Table 4-11 (Cont.)
Comparison of Design Year (2030) SR 55 (US 19)
Arterial Northbound Level of Service and Speed

SR 55 (US 19) Segment	Arterial Class	Segment Length (miles)	Arterial LOS AM / PM			Arterial Speed (mph) AM / PM		
			No-Build Alt.	CRTL Alt.	TSM Alt.	No-Build Alt.	CRTL Alt.	TSM Alt.
SR 52 to County Line Road		8.21	C / E	C / D	C / D	31.2 / 19.6	31.6 / 21.5	33.1 / 24.7
SR 52 to Beacon Woods Drive	I	0.49	C / F	C / D	C / D	28.6 / 14.7	31.1 / 25.7	31.1 / 25.7
Beacon Woods Drive to Hudson Avenue		1.88	C / F	C / F	C / E	29.3 / 14.2	29.3 / 14.2	33.1 / 16.9
Hudson Avenue to New York Avenue		0.97	B / C	A / B	A / B	41.2 / 27.2	42.2 / 37.4	42.2 / 37.4
New York Avenue to Denton Avenue		1.32	A / B	A / B	A / B	46.9 / 40.5	46.9 / 40.5	46.9 / 40.5
Denton Avenue to Little Road		0.87	B / D	B / B	B / B	36.5 / 22.8	38.9 / 35.3	38.9 / 35.3
Little Road to County Line Road		2.68	D / E	D / E	D / D	25.2 / 18.2	25.2 / 18.2	26.3 / 22.5
Pinellas County Line to County Line Road	I	19.69	D / F	C / F	C / F	27.0 / 11.3	28.8 / 14.8	29.3 / 15.6

Table 4-12
Comparison of Design Year (2030) SR 55 (US 19)
Arterial Southbound Level of Service and Speed

SR 55 (US 19) Segment	Arterial Class	Segment Length (miles)	Arterial LOS AM / PM			Arterial Speed (mph) AM / PM		
			No-Build Alt.	CRTL Alt.	TSM Alt.	No-Build Alt.	CRTL Alt.	TSM Alt.
County Line Road to SR 52		8.21	C / B	C / B	C / B	27.2 / 39.8	30.6 / 41.0	31.1 / 41.1
County Line Road to Little Road		2.68	C / A	A / A	A / A	33.4 / 44.4	46.0 / 47.6	46.0 / 47.6
Little Road to Denton Avenue		0.87	B / A	B / A	B / A	37.7 / 44.9	37.7 / 44.9	37.7 / 44.9
Denton Avenue to New York Avenue	I	1.32	B / A	A / A	A / A	34.9 / 42.8	43.3 / 44.2	43.3 / 44.2
New York Avenue to Hudson Avenue		0.97	E / C	E / C	E / C	16.9 / 30.4	16.9 / 30.4	18.3 / 30.8
Hudson Avenue to Beacon Woods Drive		1.88	A / A	A / A	A / A	45.6 / 47.1	46.9 / 47.6	46.9 / 47.6
Beacon Woods Drive to SR 52		0.49	F / E	F / E	F / E	7.8 / 20.3	8.3 / 20.8	8.3 / 20.8
SR 52 to Ridge Road		3.76	F / D	F / D	F / D	7.7 / 21.1	12.1 / 23.5	12.1 / 23.5
SR 52 to Ranch Road		0.99	F / C	D / B	D / B	13.6 / 33.0	23.8 / 36.1	23.8 / 36.1
Ranch Road to Jasmine Blvd.		0.49	F / E	F / D	F / D	7.3 / 16.8	13.9 / 23.4	13.9 / 23.4
Jasmine Blvd. to Regency Drive	I	0.27	F / C	F / C	F / C	4.8 / 27.6	13.1 / 29.8	13.1 / 29.8
Regency Drive to Fox Hollow Drive		0.32	F / F	F / E	F / E	4.4 / 14.7	8.7 / 18.6	8.7 / 18.6
Fox Hollow Drive to Scenic Drive		0.35	F / E	F / D	F / D	6.0 / 19.9	13.0 / 21.4	13.0 / 21.4
Scenic Drive to Embassy Blvd.		0.30	F / F	F / F	F / F	6.2 / 12.3	6.2 / 12.4	6.2 / 12.5
Embassy Blvd. to Holiday Hills Blvd.		0.27	F / D	C / D	C / D	13.2 / 22.7	27.5 / 24.4	27.5 / 24.4
Holiday Hills Blvd. to Ridge Road		0.77	F / D	F / D	F / D	8.5 / 22.9	8.5 / 22.5	8.5 / 22.5
Ridge Road to Main Street		2.28	D / C	C / B	C / B	23.4 / 34.0	27.3 / 34.7	27.3 / 34.7
Ridge Road to Grand Blvd.	I	0.57	F / C	D / B	D / B	16.0 / 31.6	25.9 / 34.3	25.9 / 34.3
Grand Blvd. to Main Street		1.71	C / B	C / B	C / B	27.7 / 34.9	27.7 / 34.9	27.7 / 34.9
Main Street to SR 54		2.41	F / D	E / D	E / D	12.4 / 26.0	20.1 / 26.9	20.1 / 26.9
Main Street to Cross Bayou Blvd.	I	0.58	B / B	A / B	A / B	38.5 / 40.2	43.0 / 41.0	43.0 / 41.0
Cross Bayou Blvd. to Gulf Drive		0.19	F / D	E / C	E / C	8.4 / 26.0	18.9 / 28.5	18.9 / 28.5
Gulf Drive to Marine Parkway		0.49	F / C	D / C	D / C	14.8 / 28.2	26.3 / 29.7	26.3 / 29.7
Marine Parkway to Floramar Terrace		0.21	F / E	F / E	F / E	4.6 / 16.4	11.8 / 20.2	11.8 / 20.2
Floramar Terrace to Trouble Creek Road		0.38	F / C	C / C	C / C	12.0 / 30.3	28.2 / 32.5	28.2 / 32.5
Trouble Creek Road to SR 54		0.56	F / E	F / E	F / E	11.9 / 19.9	12.0 / 18.5	12.0 / 18.5

Table 4-12 (Cont.)
Comparison of Design Year (2030) SR 55 (US 19)
Arterial Southbound Level of Service and Speed

SR 55 (US 19) Segment	Arterial Class	Segment Length (miles)	Arterial LOS AM / PM			Arterial Speed (mph) AM / PM		
			No-Build Alt.	CRTL Alt.	TSM Alt.	No-Build Alt.	CRTL Alt.	TSM Alt.
SR 54 to Pinellas County Line		3.03	F / D	F / C	F / C	8.6 / 24.6	15.3 / 27.5	15.6 / 27.7
SR 54 to Moog Road	I	0.52	F / D	C / C	C / C	13.3 / 25.7	31.4 / 28.4	31.4 / 28.3
Moog Road to Sunray Drive		0.80	F / D	C / C	C / C	13.7 / 26.6	28.5 / 28.0	31.9 / 28.1
Sunray Drive to Darlington Road		0.20	F / F	E / E	E / E	4.8 / 11.8	18.5 / 18.4	20.1 / 19.5
Darlington Road to Mile Stretch Road		0.50	F / B	F / B	F / B	6.5 / 35.6	11.8 / 36.0	11.8 / 35.6
Mile Stretch Road to Alt. 19		0.37	F / F	F / E	F / E	6.4 / 16.0	6.4 / 18.0	6.4 / 17.9
Alt. 19 to Flora Avenue		0.38	F / B	F / B	F / B	5.4 / 34.3	10.7 / 36.8	10.7 / 36.8
Flora Avenue to Pinellas County Line		0.26	B / B	B / B	B / B	34.9 / 34.9	34.9 / 34.9	34.9 / 34.9
County Line Road to Pinellas County Line	I	19.69	F / C	E / C	E / C	13.7 / 29.5	20.1 / 31.4	20.2 / 31.5

As shown in **Table 4-10**, for the CRTL alternative scenario, the signalized intersection overall delay was projected to decrease significantly at signalized intersection locations, where it was proposed to allow through traffic on the continuous right-turn lane, since the through traffic capacity would be increased at these intersections. For the TSM alternative scenario, the signalized intersection overall delay was projected to decrease at many signalized intersections compared to the No-Build and CRTL alternatives. However, 15 of the 29 signalized intersections of the SR 55 (US 19) arterial were projected to operate at LOS F even with the proposed TSM intersection improvements. Further intersection improvements were found not to improve the intersection LOS significantly, and hence, were not considered in the TSM alternative.

With the proposed intersection improvements the following signalized intersections were expected to operate at LOS F for both AM and PM design year (2030) projected peak hour traffic conditions. Furthermore, the signalized intersection delay for these intersections were projected to be more than 100 sec/veh for the design year (2030) AM and PM design peak hour traffic conditions. These SR 55 (US 19) signalized intersections are listed below:

1. Alt. 19
2. SR 54
3. Ridge Road
4. SR 52
5. Little Road
6. County Line Road

Transportation System Management improvements are not adequate for the above listed signalized intersections. Traffic re-routing, frontage road construction or interchanges would be necessary to alleviate congestion caused by excessive signal delay at these signalized intersections. As shown in **Tables 4-11 and 4-12**, the arterial LOS and arterial speed were projected to increase for the CRTL and TSM alternative scenarios compared to the No-Build alternative.

4.7 INTERSECTION QUEUE LENGTH ANALYSIS

The signalized intersection queue length analysis is necessary to estimate the required storage lengths for the intersection turn lanes along the SR 55 (US 19) arterial. The maximum 95th percentile queue length for each turning movement was estimated from the Synchro analysis results for AM and PM peak hours. If the 50th percentile queue length is more than the 95th percentile queue length, due to capacity constraints, then the 50th percentile queue length was considered. Since it is possible that through lane queuing can sometimes block access to left turn lanes, the anticipated queue lengths in the through lanes were also reviewed. The maximum queue length, for the SR 55 (US 19) signalized intersections, during the year 2030 design hour are summarized by individual movement in **Table 4-13**. The existing turn lane length shown in **Table 4-13** includes the existing taper length, but the shown queue length does not include the required deceleration length.

Table 4-13
Design Year (2030) Queue Lengths

SR 55 (US 19) Intersections	Turn Lane	Existing Turn Lane Length (ft)	2030 Maximum Queue Length (ft)		
			No-Build Alternative	CRTL Alternative	TSM Alternative
Flora Avenue	Eastbound Left	200	750	750	750
	Eastbound Through	Continuous	525	525	525
	Eastbound Right	-	-	-	-
	Westbound Left	250	1150	1150	1150
	Westbound Through	Continuous	275	275	275
	Westbound Right	-	-	-	-
	Northbound Left	325	350	350	350
	Northbound Through	Continuous	2600	1925	1925
	Northbound Right	1075	50	-	-
	Southbound Left	275	275	275	275
	Southbound Through	Continuous	3375	825	825
	Southbound Right	900	25	-	-
Alt. 19	Eastbound Left	600	1600	1600	1600
	Eastbound Through	Continuous	1775	1775	1775
	Eastbound Right	-	-	-	-
	Westbound Left	200	600	600	600
	Westbound Through	Continuous	650	650	650
	Westbound Right	-	-	-	-
	Northbound Left	300	75	100	100
	Northbound Through	Continuous	3275	3275	3275
	Northbound Right	350	50	50	50
	Southbound Left	400	75	75	75
	Southbound Through	Continuous	3325	3325	3325
	Southbound Right	1100	0	0	0
Mile Stretch Drive	Eastbound Left	150	450	450	450
	Eastbound Through	Continuous	450	450	450
	Eastbound Right	150	325	325	325
	Westbound Left	200	975	975	525
	Westbound Through	Continuous	800	800	800
	Westbound Right	-	-	-	-
	Northbound Left	500	475	475	200
	Northbound Through	Continuous	3250	1050	1025
	Northbound Right	675	100	-	-
	Southbound Left	400	425	500	200
	Southbound Through	Continuous	3575	2450	2450
	Southbound Right	350	50	-	-

Table 4-13 (Cont.)
Design Year (2030) Queue Lengths

SR 55 (US 19) Intersections	Turn Lane	Existing Turn Lane Length (ft)	2030 Maximum Queue Length (ft)		
			No-Build Alternative	CRTL Alternative	TSM Alternative
Darlington Road	Eastbound Left	225	975	975	300
	Eastbound Through	Continuous	775	775	775
	Eastbound Right	-	-	-	-
	Westbound Left	200	475	475	175
	Westbound Through	Continuous	750	750	750
	Westbound Right	-	-	-	-
	Northbound Left	950	275	275	275
	Northbound Through	Continuous	3150	2325	2300
	Northbound Right	350	200	-	-
	Southbound Left	450	250	300	300
	Southbound Through	Continuous	3450	2300	1550
	Southbound Right	925 / CRT	50	-	-
Sunray Drive	Eastbound Left	350	925	925	325
	Eastbound Through	Continuous	475	475	475
	Eastbound Right	-	-	-	-
	Westbound Left	400	500	500	500
	Westbound Through	Continuous	375	375	375
	Westbound Right	400	750	750	775
	Northbound Left	350	125	175	175
	Northbound Through	Continuous	3375	2500	2500
	Northbound Right	325	25	-	-
	Southbound Left	650	525	650	650
	Southbound Through	Continuous	3425	2325	1800
	Southbound Right	850	50	-	-
Moog Road	Eastbound Left	300	725	725	725
	Eastbound Through	Continuous	775	775	775
	Eastbound Right	300	250	250	250
	Westbound Left	225	725	725	725
	Westbound Through	Continuous	775	775	775
	Westbound Right	250	275	275	275
	Northbound Left	425	225	225	250
	Northbound Through	Continuous	3225	2450	2425
	Northbound Right	1250	25	-	-
	Southbound Left	550	375	375	375
	Southbound Through	Continuous	3075	1450	1450
	Southbound Right	900	25	-	-

Table 4-13 (Cont.)
Design Year (2030) Queue Lengths

SR 55 (US 19) Intersections	Turn Lane	Existing Turn Lane Length (ft)	2030 Maximum Queue Length (ft)		
			No-Build Alternative	CRTL Alternative	TSM Alternative
SR 54	Eastbound Left	200	675	675	275
	Eastbound Through	Continuous	675	675	500
	Eastbound Right	-	-	-	-
	Westbound Left	Continuous	950	950	950
	Westbound Through	Continuous	1125	1125	1125
	Westbound Right	250	1300	1300	550
	Northbound Left	525	75	100	100
	Northbound Through	Continuous	3050	3050	3050
	Northbound Right	850	75	225	225
	Southbound Left	550	475	475	250
	Southbound Through	Continuous	2725	2725	2725
	Southbound Right	350	25	50	50
Trouble Creek Road	Eastbound Left	250	550	550	550
	Eastbound Through	Continuous	575	575	575
	Eastbound Right	-	-	-	-
	Westbound Left	350	850	850	850
	Westbound Through	Continuous	900	900	900
	Westbound Right	150	575	575	575
	Northbound Left	550	175	175	200
	Northbound Through	Continuous	2775	2225	2225
	Northbound Right	450	75	-	-
	Southbound Left	550	800	1000	375
	Southbound Through	Continuous	2675	650	650
	Southbound Right	300	25	-	-
Floramar Terrace	Eastbound Left	-	-	-	-
	Eastbound Through	Continuous	1075	1075	1075
	Eastbound Right	Continuous	625	625	625
	Westbound Left	100	100	100	100
	Westbound Through	Continuous	150	150	150
	Westbound Right	-	-	-	-
	Northbound Left	425	275	275	275
	Northbound Through	Continuous	2900	225	225
	Northbound Right	-	-	-	-
	Southbound Left	200	50	50	50
	Southbound Through	Continuous	3250	2250	2250
	Southbound Right	425	0	-	-

Table 4-13 (Cont.)
Design Year (2030) Queue Lengths

SR 55 (US 19) Intersections	Turn Lane	Existing Turn Lane Length (ft)	2030 Maximum Queue Length (ft)		
			No-Build Alternative	CRTL Alternative	TSM Alternative
Marine Parkway	Eastbound Left	325	175	175	175
	Eastbound Through	Continuous	275	275	275
	Eastbound Right	Continuous	475	475	475
	Westbound Left	250	650	650	650
	Westbound Through	Continuous	300	300	300
	Westbound Right	-	-	-	-
	Northbound Left	575	200	250	250
	Northbound Through	Continuous	2700	400	400
	Northbound Right	300	25	-	-
	Southbound Left	400	225	300	300
	Southbound Through	Continuous	2850	975	975
	Southbound Right	700	25	-	-
Gulf Drive	Eastbound Left	200	450	450	450
	Eastbound Through	Continuous	175	175	175
	Eastbound Right	-	-	-	-
	Westbound Left	200	725	725	725
	Westbound Through	Continuous	400	400	400
	Westbound Right	-	-	-	-
	Northbound Left	400	200	275	275
	Northbound Through	Continuous	2800	675	675
	Northbound Right	250	50	-	-
	Southbound Left	425 / 900	325	425	425
	Southbound Through	Continuous	2775	550	550
	Southbound Right	300	50	-	-
Cross Bayou Boulevard	Eastbound Left	Continuous	200	200	200
	Eastbound Right	Continuous	225	225	225
	Northbound Left	550	75	100	100
	Northbound Through	Continuous	450	100	100
	Southbound Through	Continuous	300	250	250
	Southbound Right	-	-	-	-

Table 4-13 (Cont.)
Design Year (2030) Queue Lengths

SR 55 (US 19) Intersections	Turn Lane	Existing Turn Lane Length (ft)	2030 Maximum Queue Length (ft)		
			No-Build Alternative	CRTL Alternative	TSM Alternative
Main Street	Eastbound Left	200	375	375	375
	Eastbound Through	Continuous	550	550	550
	Eastbound Right	-	-	-	-
	Westbound Left	300	900	875	875
	Westbound Through	Continuous	925	925	925
	Westbound Right	Continuous	800	800	800
	Northbound Left	375	275	300	300
	Northbound Through	Continuous	2725	2750	2750
	Northbound Right	425	175	325	325
	Southbound Left	500	300	300	300
	Southbound Through	Continuous	2675	2675	2675
	Southbound Right	275	75	50	50
Grand Boulevard	Eastbound Left	-	-	-	-
	Eastbound Through	Continuous	425	425	425
	Eastbound Right	-	-	-	-
	Westbound Left	-	-	-	-
	Westbound Through	Continuous	400	400	400
	Westbound Right	800	0	0	0
	Northbound Left	300	100	100	100
	Northbound Through	Continuous	1750	1200	1200
	Northbound Right	250	50	-	-
	Southbound Left	350	125	125	125
	Southbound Through	Continuous	1575	1125	1125
	Southbound Right	-	-	-	-
Ridge Road	Eastbound Left	400	425	425	425
	Eastbound Through	Continuous	350	350	350
	Eastbound Right	-	-	-	-
	Westbound Left	300	625	625	625
	Westbound Through	Continuous	850	850	850
	Westbound Right	400	875	875	250
	Northbound Left	350	225	300	300
	Northbound Through	Continuous	1625	1625	1625
	Northbound Right	425	175	200	200
	Southbound Left	600	625	650	375
	Southbound Through	Continuous	1675	1725	1725
	Southbound Right	350	25	25	25

Table 4-13 (Cont.)
Design Year (2030) Queue Lengths

SR 55 (US 19) Intersections	Turn Lane	Existing Turn Lane Length (ft)	2030 Maximum Queue Length (ft)		
			No-Build Alternative	CRTL Alternative	TSM Alternative
Holiday Hills Boulevard	Eastbound Left	150	150	150	150
	Eastbound Through	Continuous	75	75	75
	Eastbound Right	150	75	75	75
	Westbound Left	350	125	125	125
	Westbound Through	Continuous	75	75	75
	Westbound Right	-	-	-	-
	Northbound Left	475	175	175	200
	Northbound Through	Continuous	975	750	500
	Northbound Right	875	25	-	-
	Southbound Left	625	50	50	50
	Southbound Through	Continuous	600	250	250
	Southbound Right	1325 / CRT	25	-	-
Embassy Boulevard	Eastbound Left	200	175	175	175
	Eastbound Through	Continuous	300	300	300
	Eastbound Right	200	50	50	50
	Westbound Left	Continuous	300	300	300
	Westbound Through	Continuous	425	425	425
	Westbound Right	325	125	125	125
	Northbound Left	475	200	225	225
	Northbound Through	Continuous	1450	1525	1500
	Northbound Right	1325 / CRT	125	150	150
	Southbound Left	450	225	275	125
	Southbound Through	Continuous	1650	1700	1700
	Southbound Right	450	50	50	50
Scenic Drive	Eastbound Left	150	125	125	125
	Eastbound Through	Continuous	125	125	125
	Eastbound Right	150	150	150	150
	Westbound Left	275	250	250	250
	Westbound Through	Continuous	325	325	325
	Westbound Right	-	-	-	-
	Northbound Left	600	125	125	125
	Northbound Through	Continuous	1625	1150	1150
	Northbound Right	1425 / CRT	25	-	-
	Southbound Left	400	150	200	200
	Southbound Through	Continuous	1675	1075	1075
	Southbound Right	350	50	-	-

Table 4-13 (Cont.)
Design Year (2030) Queue Lengths

SR 55 (US 19) Intersections	Turn Lane	Existing Turn Lane Length (ft)	2030 Maximum Queue Length (ft)		
			No-Build Alternative	CRTL Alternative	TSM Alternative
Fox Hollow Drive	Eastbound Left	-	-	-	-
	Eastbound Through	Continuous	550	550	550
	Eastbound Right	200	50	50	50
	Westbound Left	-	-	-	-
	Westbound Through	Continuous	500	500	500
	Westbound Right	-	-	-	-
	Northbound Left	300	325	375	375
	Northbound Through	Continuous	1500	1100	1100
	Northbound Right	250	75	-	-
	Southbound Left	350	125	175	175
	Southbound Through	Continuous	1775	1225	1225
	Southbound Right	950	25	-	-
Regency Park Boulevard	Eastbound Left	200	75	75	75
	Eastbound Through	Continuous	125	125	125
	Eastbound Right	-	-	-	-
	Westbound Left	-	-	-	-
	Westbound Through	Continuous	175	175	175
	Westbound Right	Continuous	550	550	550
	Northbound Left	425	50	100	75
	Northbound Through	Continuous	1800	1350	1350
	Northbound Right	1200	25	-	-
	Southbound Left	450	175	200	200
	Southbound Through	Continuous	1850	1275	1275
	Southbound Right	225	25	-	-
Jasmine Boulevard	Eastbound Left	200	325	325	325
	Eastbound Through	Continuous	350	350	350
	Eastbound Right	200	50	50	50
	Westbound Left	400	300	300	300
	Westbound Through	Continuous	325	325	325
	Westbound Right	Continuous	50	50	50
	Northbound Left	575	100	125	125
	Northbound Through	Continuous	1825	1400	1400
	Northbound Right	1300 / CRT	100	-	-
	Southbound Left	500	75	75	75
	Southbound Through	Continuous	1800	1300	1300
	Southbound Right	375	50	-	-

Table 4-13 (Cont.)
Design Year (2030) Queue Lengths

SR 55 (US 19) Intersections	Turn Lane	Existing Turn Lane Length (ft)	2030 Maximum Queue Length (ft)		
			No-Build Alternative	CRTL Alternative	TSM Alternative
Ranch Road	Eastbound Left	200	100	100	100
	Eastbound Through	Continuous	75	75	75
	Eastbound Right	-	-	-	-
	Westbound Left	325	525	525	525
	Westbound Through	Continuous	75	75	75
	Westbound Right	-	-	-	-
	Northbound Left	325	75	75	75
	Northbound Through	Continuous	1650	1300	1300
	Northbound Right	250	150	-	-
	Southbound Left	500	200	200	200
	Southbound Through	Continuous	1850	1300	1300
	Southbound Right	300	50	-	-
SR 52	Eastbound Left	350	450	450	450
	Eastbound Through	Continuous	450	450	450
	Eastbound Right	350	75	75	75
	Westbound Left	Continuous	1050	1050	725
	Westbound Through	Continuous	1225	1225	625
	Westbound Right	Continuous	850	850	850
	Northbound Left	950	200	200	200
	Northbound Through	Continuous	1550	1550	1550
	Northbound Right	1425	0	0	0
	Southbound Left	550	700	700	425
	Southbound Through	Continuous	1475	1425	1425
	Southbound Right	-	-	50	50
Beacon Woods Drive	Eastbound Left	-	-	-	-
	Eastbound Through	Continuous	75	75	75
	Eastbound Right	-	-	-	-
	Westbound Left	-	-	-	-
	Westbound Through	400	550	550	550
	Westbound Right	Continuous	350	350	350
	Northbound Left	325	75	75	75
	Northbound Through	Continuous	1400	900	900
	Northbound Right	875	50	-	-
	Southbound Left	450	225	225	225
	Southbound Through	Continuous	650	375	375
	Southbound Right	-	-	-	-

Table 4-13 (Cont.)
Design Year (2030) Queue Lengths

SR 55 (US 19) Intersections	Turn Lane	Existing Turn Lane Length (ft)	2030 Maximum Queue Length (ft)		
			No-Build Alternative	CRTL Alternative	TSM Alternative
Hudson Avenue	Eastbound Left	-	-	-	-
	Eastbound Through	Continuous	525	525	525
	Eastbound Right	250	125	125	125
	Westbound Left	400	700	700	325
	Westbound Through	Continuous	700	700	325
	Westbound Right	-	-	-	-
	Northbound Left	400	250	250	250
	Northbound Through	Continuous	1450	1450	1425
	Northbound Right	350	375	375	350
	Southbound Left	450	675	675	250
	Southbound Through	Continuous	1150	1150	1150
	Southbound Right	350	75	75	75
New York Avenue	Eastbound Left	400	150	150	150
	Eastbound Through	Continuous	175	175	175
	Eastbound Right	-	-	-	-
	Westbound Left	-	-	-	-
	Westbound Through	Continuous	525	525	525
	Westbound Right	50	125	125	125
	Northbound Left	500	125	125	125
	Northbound Through	Continuous	950	625	625
	Northbound Right	350	75	-	-
	Southbound Left	500	150	150	150
	Southbound Through	Continuous	950	575	575
	Southbound Right	2050	25	-	-
Denton Avenue	Eastbound Left	-	-	-	-
	Eastbound Through	Continuous	50	50	50
	Eastbound Right	-	-	-	-
	Westbound Left	-	-	-	-
	Westbound Through	Continuous	325	325	325
	Westbound Right	250	50	50	50
	Northbound Left	350	50	50	50
	Northbound Through	Continuous	625	625	625
	Northbound Right	350	50	50	50
	Southbound Left	300	75	75	75
	Southbound Through	Continuous	600	600	600
	Southbound Right	300	25	25	25

Table 4-13 (Cont.)
Design Year (2030) Queue Lengths

SR 55 (US 19) Intersections	Turn Lane	Existing Turn Lane Length (ft)	2030 Maximum Queue Length (ft)		
			No-Build Alternative	CRTL Alternative	TSM Alternative
Little Road	Eastbound Left	150	175	175	175
	Eastbound Through	Continuous	125	125	125
	Eastbound Right	-	-	-	-
	Westbound Left	-	-	-	-
	Westbound Through	450	100	100	875
	Westbound Right	Continuous	1500	1500	1075
	Northbound Left	325	75	75	75
	Northbound Through	Continuous	950	575	575
	Northbound Right	-	-	-	-
	Southbound Left	500	975	975	625
	Southbound Through	Continuous	1200	825	825
	Southbound Right	500	25	-	-
County Line Road	Eastbound Left	-	-	-	-
	Eastbound Through	Continuous	100	100	100
	Eastbound Right	150	50	50	50
	Westbound Left	500	1650	1650	550
	Westbound Through	Continuous	1500	1500	650
	Westbound Right	-	-	-	325
	Northbound Left	500	50	50	50
	Northbound Through	Continuous	1500	1500	1500
	Northbound Right	425	1775	1850	0
	Southbound Left	350	1375	1375	600
	Southbound Through	Continuous	1925	1925	1925
	Southbound Right	350	50	50	50

Appropriate deceleration length should be added to the queue length for the turn lane design. The required deceleration length for the intersection turn lanes was determined based on FDOT Design Standards Index No. 301 and are shown in **Table 4-14**. For the determination of the deceleration length, the design speed was assumed to be 5 mph more than the posted speed limit. The required turn lane length would be extensive for left-turn movements at certain intersections because of the longer through movement queue lengths projected in the Synchro analysis. However, if the left-turn volume is significantly low compared to the through movement volume at a particular intersection, then providing a longer left-turn storage lane may not be cost efficient. In these cases, improving intersection capacity for through movements can be considered.

Table 4-14
Required Deceleration Lengths for Intersection Turn Lanes

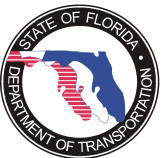
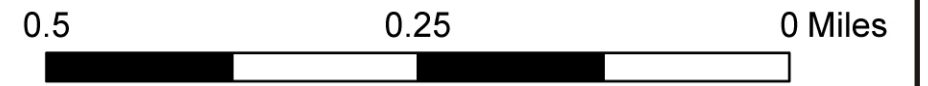
Roadway	Conditions	Design Speed (mph)	Deceleration Length (ft)
SR 55 (US 19) (Flora Avenue to SR 52)	Urban	50	240
SR 55 (US 19) (SR 52 to County Line Road)	Rural	60	405
SR 54	Urban	50	240
Ridge Road	Urban	50	240
SR 52	Urban	50	240
Little Road	Rural	50	290
County Line Road	Rural	50	290
Other Cross Streets	Urban / Rural	35	145

4.8 DEVELOPMENT OF OPENING YEAR (2010) DESIGN HOUR VOLUMES

The opening year (2010) AADT volumes and the AM and PM design peak hour intersection turning movement volumes were estimated by interpolating the existing year (2006) and the design year (2030) traffic volumes. The estimated opening year (2010) AADT volumes are shown on **Exhibits 14A-14F** and the estimated opening year (2010), AM and PM design peak hour turning movement traffic volumes are shown on **Exhibits 15A-16F**.

4.9 OPENING YEAR (2010) FEASIBLE CONTINUOUS RIGHT-TURN LANE ALTERNATIVE ANALYSES

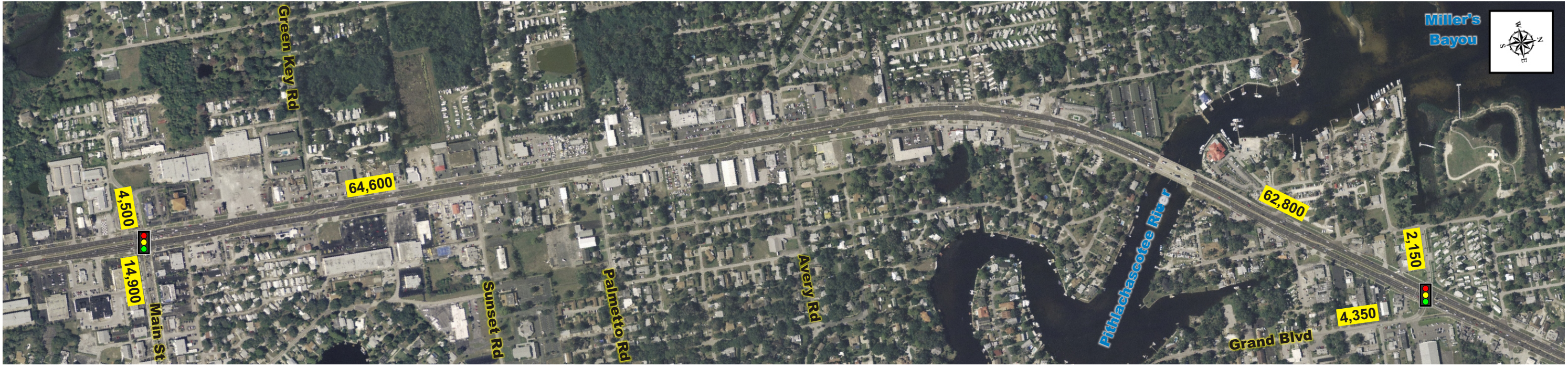
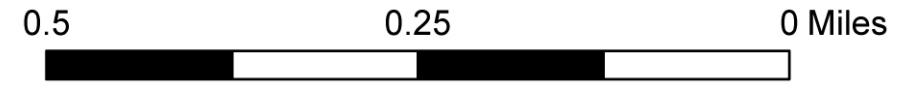
The feasible Continuous Right-Turn Lane (CRTL) alternative was considered for the opening year (2010) intersection and arterial analyses of the SR 55 (US 19) arterial in Pasco County between the Pinellas County Line and the Hernando County Line. In this alternative the CRTL was proposed to be built in the northbound direction from Mile Stretch Drive to Gulf Drive and from Stone Road to SR 52, and in the southbound direction from Trouble Creek Road to Alt.19 of the SR 55 (US 19) arterial by extending and connecting the available existing right-turn lane sections along the arterial. It was proposed to allow through traffic on the CRTL, however, the CRTL would be discontinued at major intersections with channelization of right-turn movements by raised

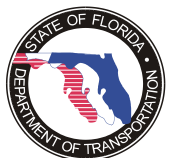
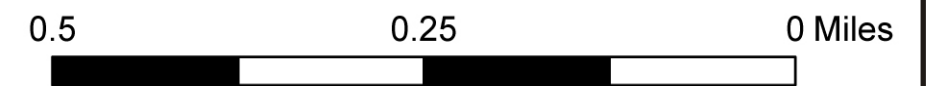


SR 55 (US 19)
from Pinellas County Line
to Hernando County Line

OPENING YEAR (2010) AADT

EXHIBIT 14A

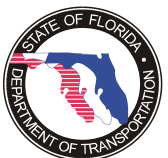
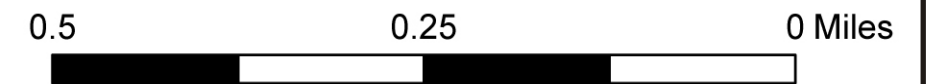




SR 55 (US 19)
from Pinellas County Line
to Hernando County Line

OPENING YEAR (2010) AADT

EXHIBIT 14C



SR 55 (US 19)
from Pinellas County Line
to Hernando County Line

OPENING YEAR (2010) AADT

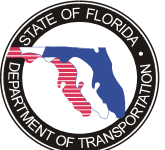
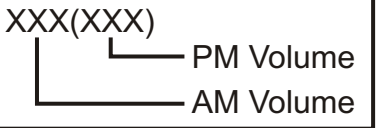
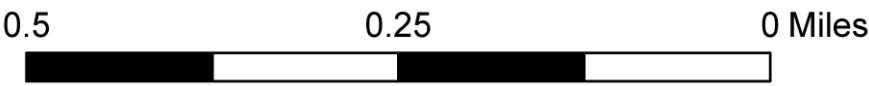
EXHIBIT 14E



SR 55 (US 19)
from Pinellas County Line
to Hernando County Line

OPENING YEAR (2010) AADT

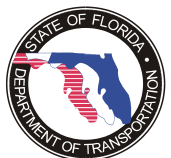
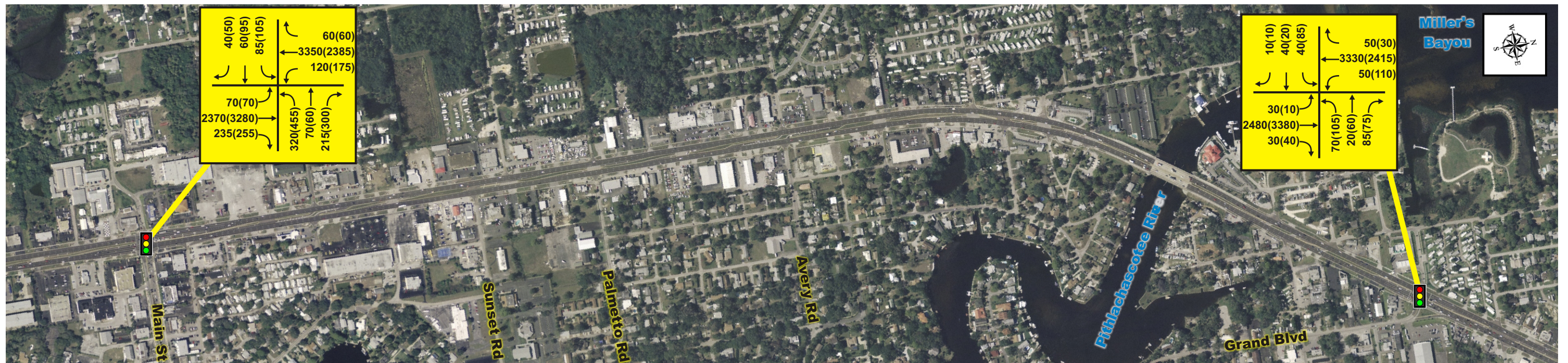
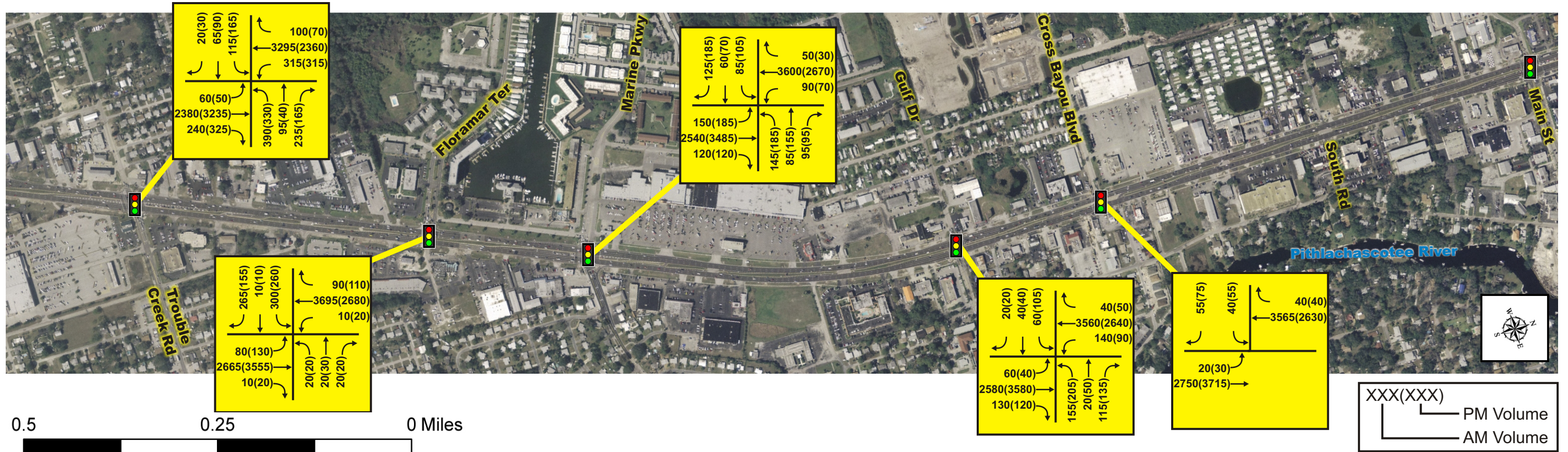
EXHIBIT 14F



SR 55 (US 19)
 from Pinellas County Line
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OPENING YEAR (2010) TURNING MOVEMENT VOLUMES

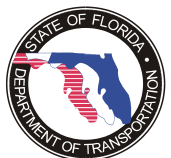
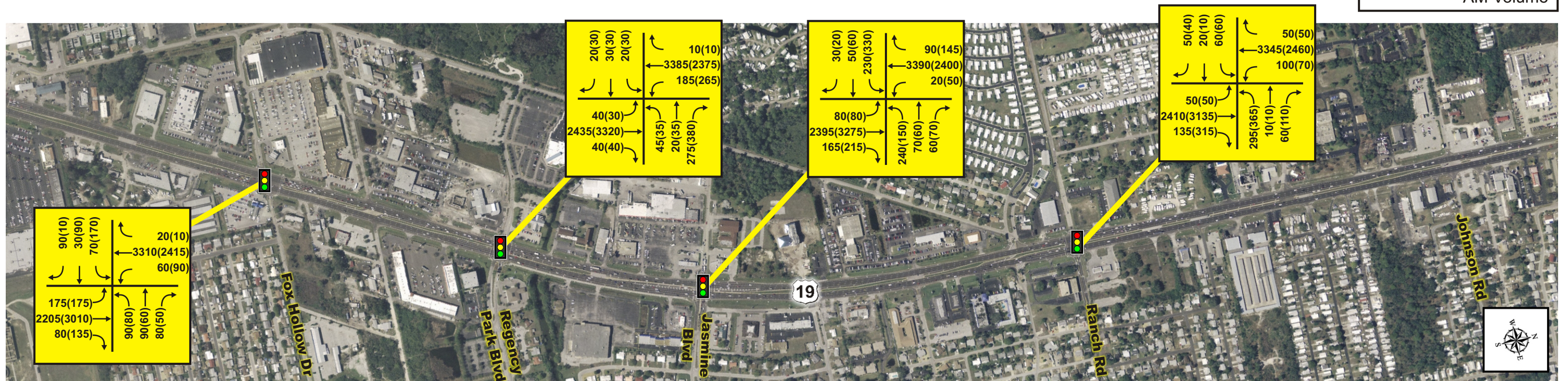
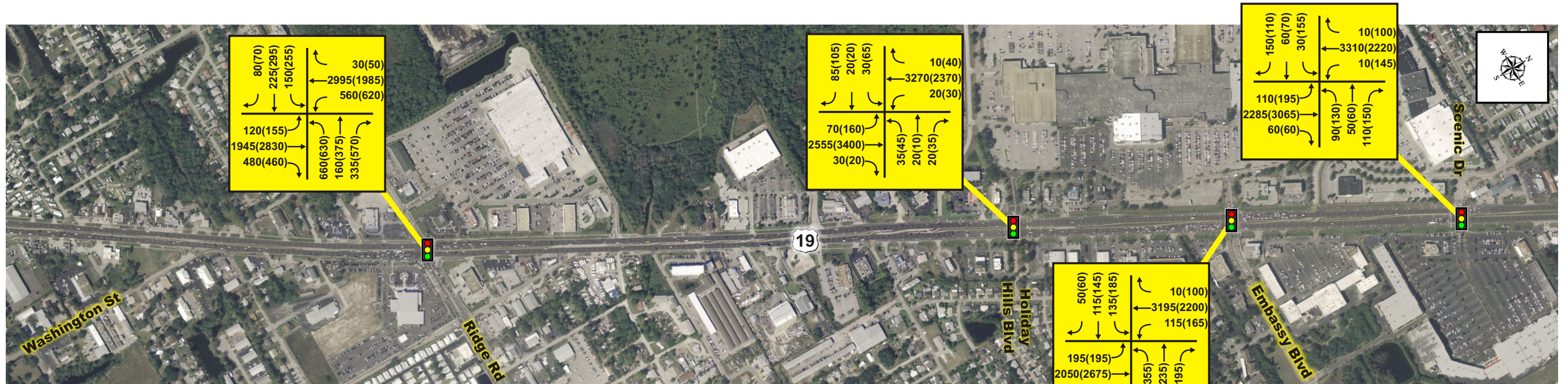
EXHIBIT 15A



SR 55 (US 19)
from Pinellas County Line
to Hernando County Line

OPENING YEAR (2010) TURNING MOVEMENT VOLUMES

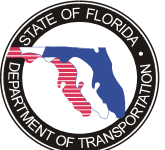
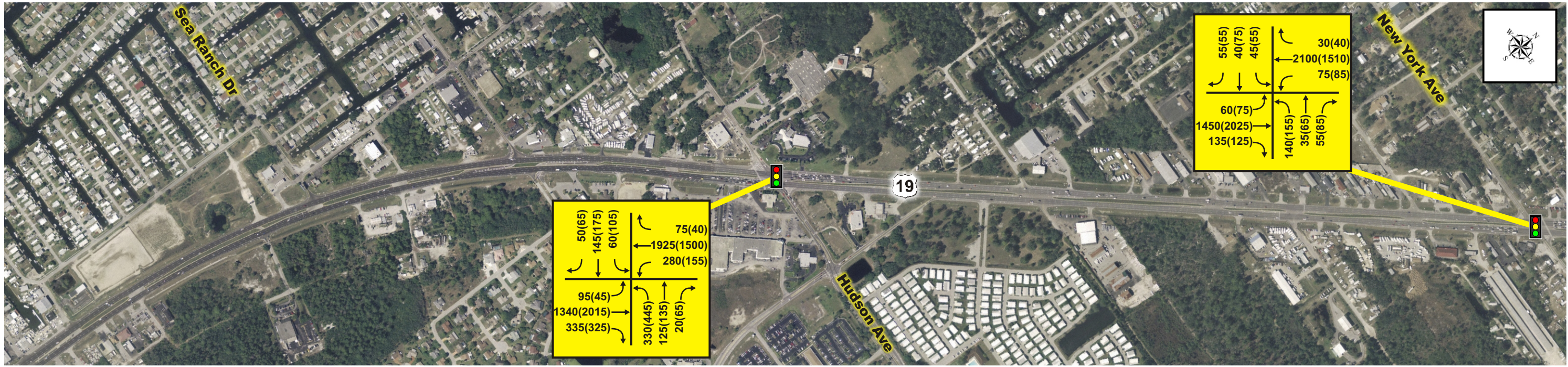
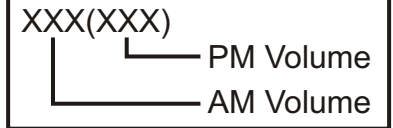
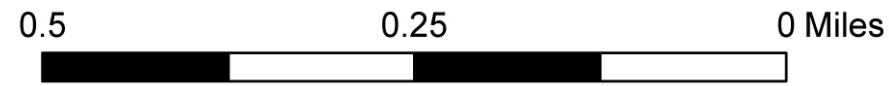
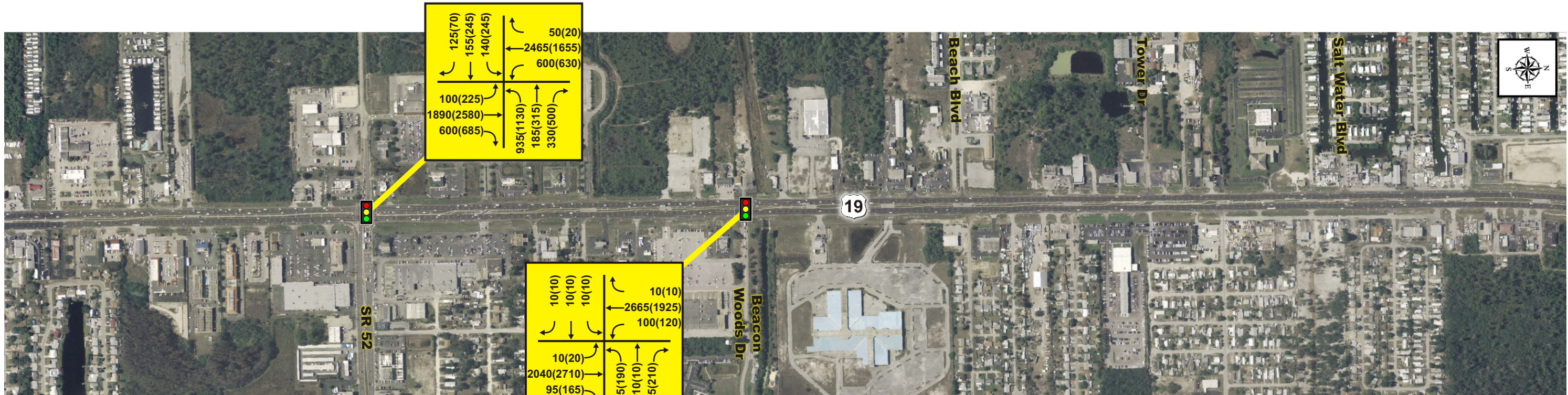
EXHIBIT 15B



SR 55 (US 19)
from Pinellas County Line
to Hernando County Line

OPENING YEAR (2010) TURNING MOVEMENT VOLUMES

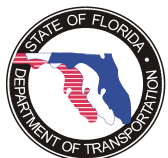
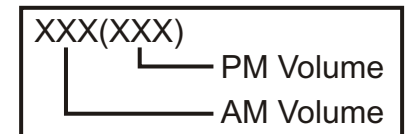
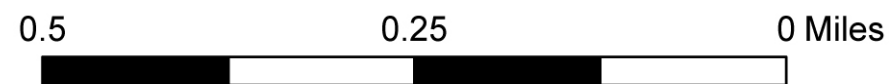
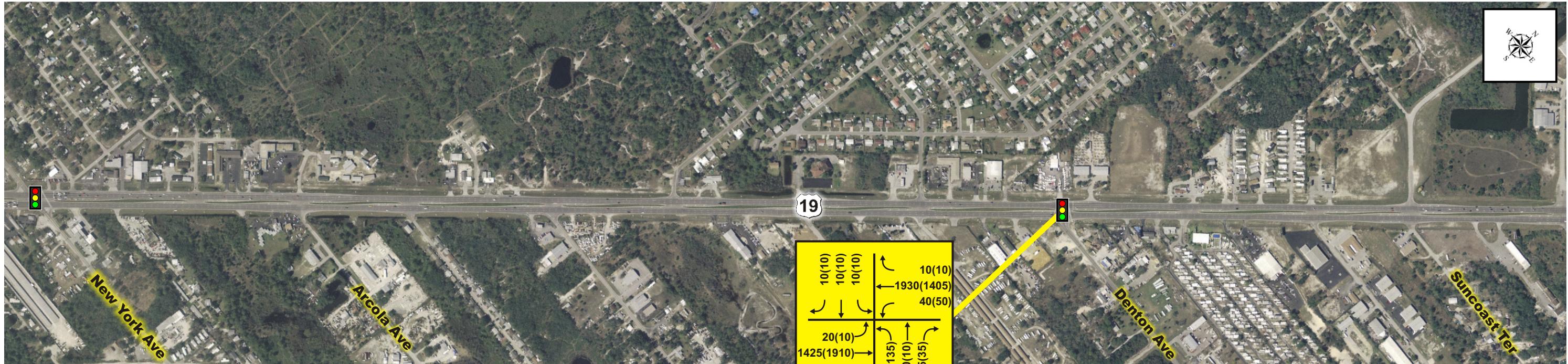
EXHIBIT 15C



SR 55 (US 19)
from Pinellas County Line
to Hernando County Line

OPENING YEAR (2010) TURNING MOVEMENT VOLUMES

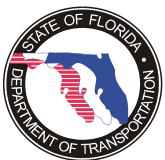
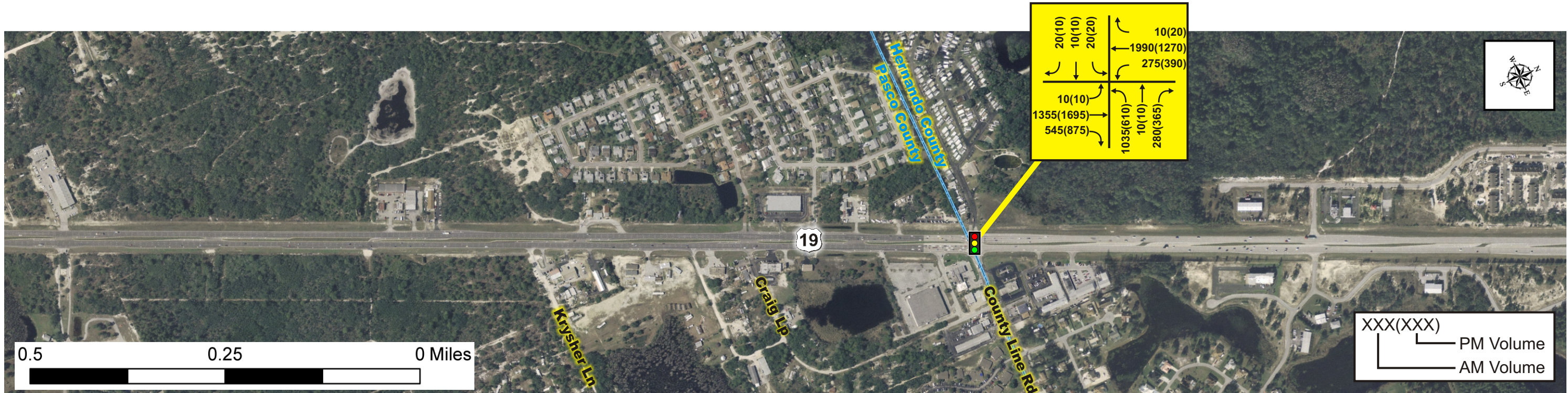
EXHIBIT 15D



SR 55 (US 19)
from Pinellas County Line
to Hernando County Line

OPENING YEAR (2010) TURNING MOVEMENT VOLUMES

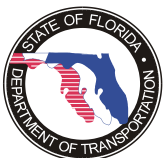
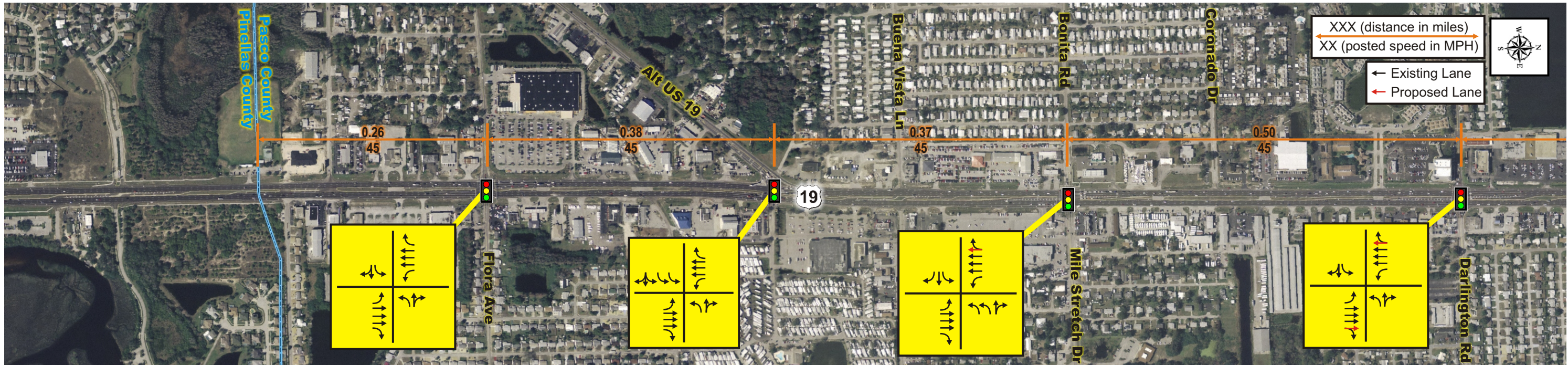
EXHIBIT 15E



SR 55 (US 19)
from Pinellas County Line
to Hernando County Line

OPENING YEAR (2010) TURNING MOVEMENT VOLUMES

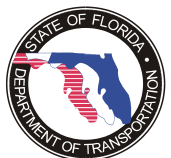
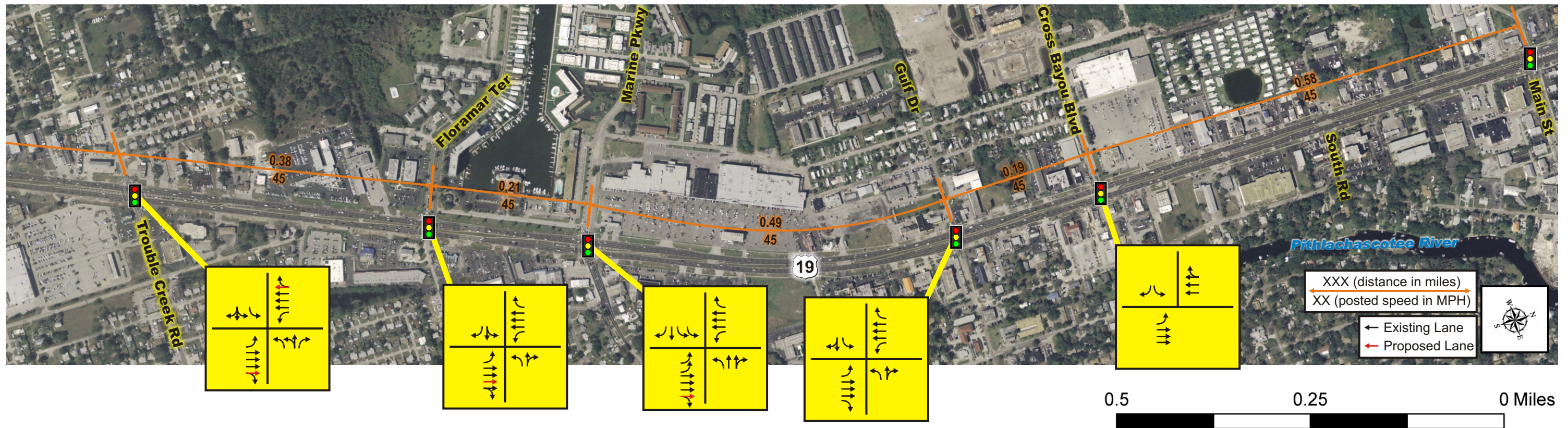
EXHIBIT 15F



SR 55 (US 19)
from Pinellas County Line
to Hernando County Line

OPENING YEAR (2010) CORRIDOR LANE GEOMETRY

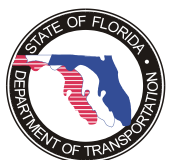
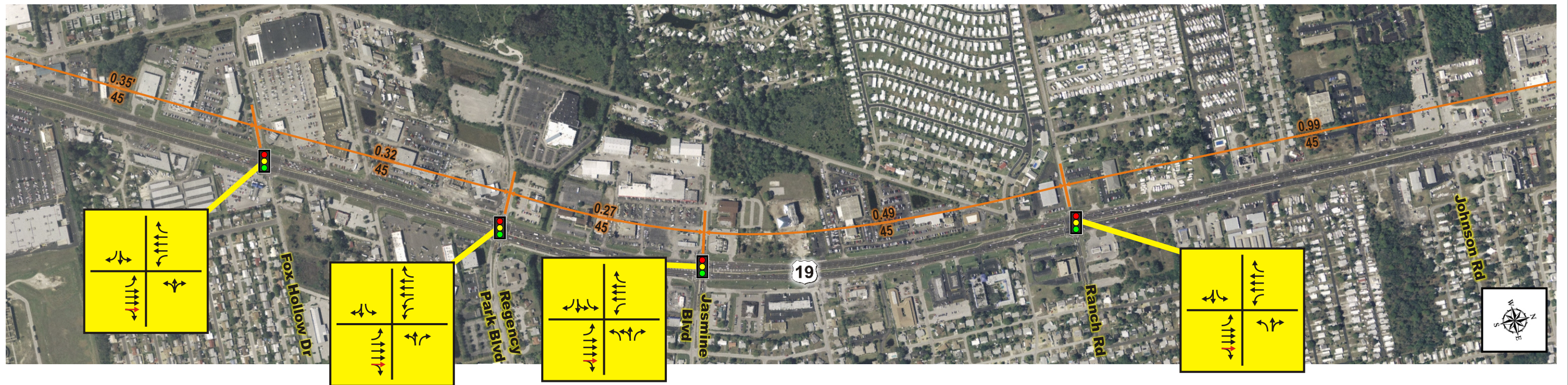
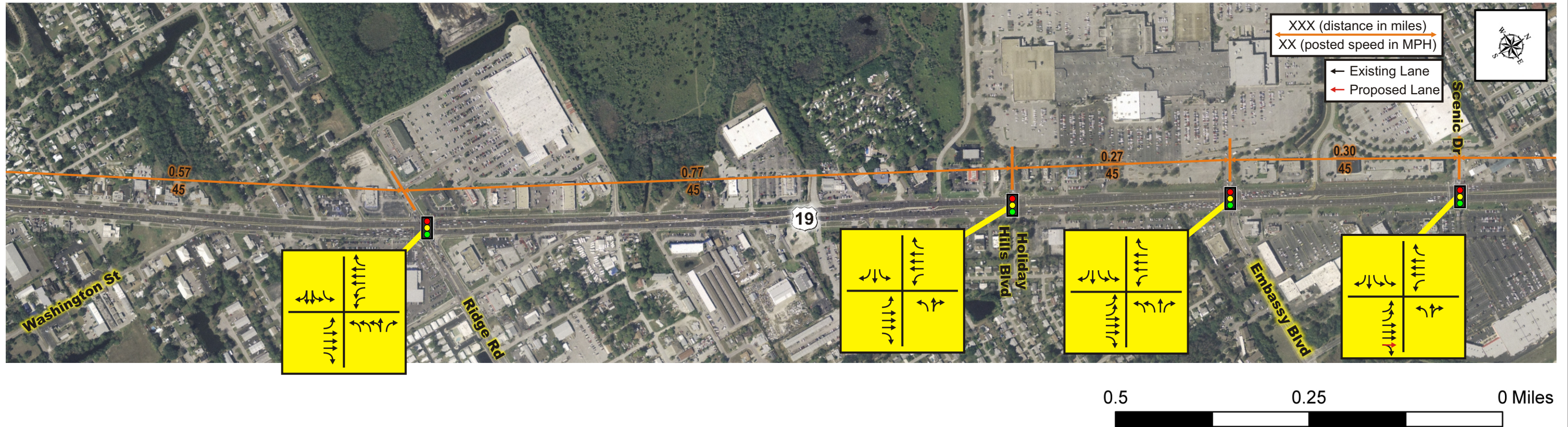
EXHIBIT 16A



SR 55 (US 19)
from Pinellas County Line
to Hernando County Line

OPENING YEAR (2010) CORRIDOR LANE GEOMETRY

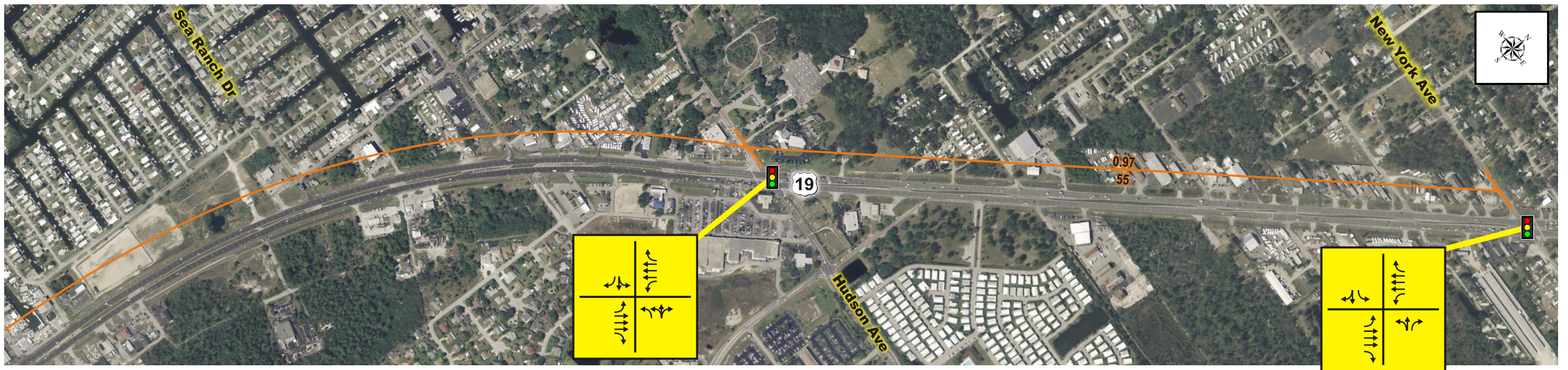
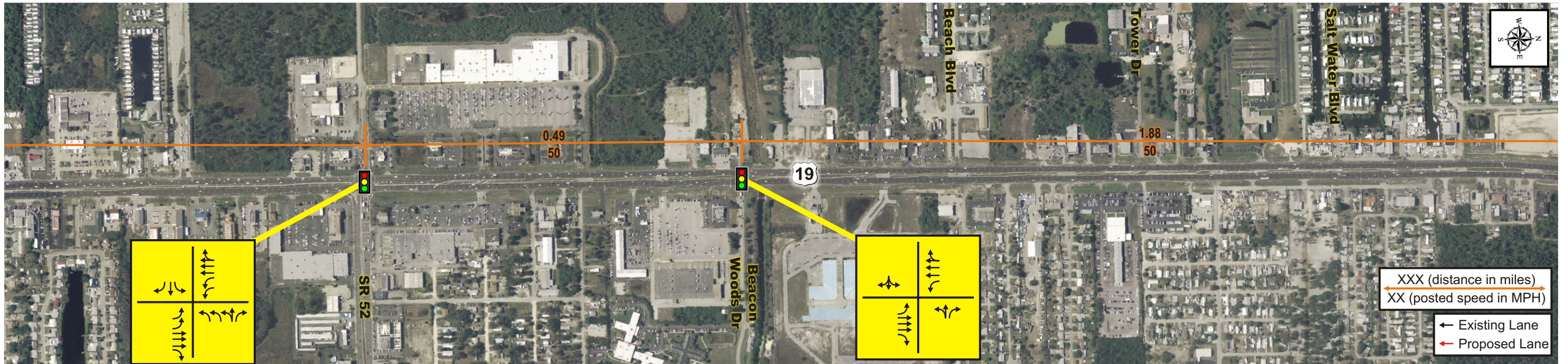
EXHIBIT 16B



SR 55 (US 19)
from Pinellas County Line
to Hernando County Line

OPENING YEAR (2010) CORRIDOR LANE GEOMETRY

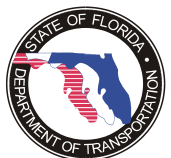
EXHIBIT 16C



SR 55 (US 19)
from Pinellas County Line
to Hernando County Line

OPENING YEAR (2010) CORRIDOR LANE GEOMETRY

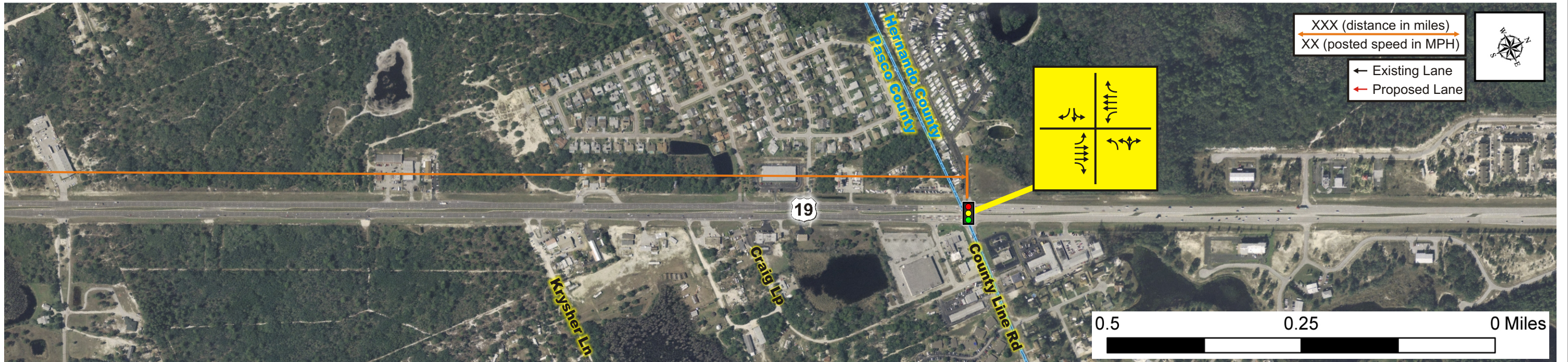
EXHIBIT 16D



SR 55 (US 19)
from Pinellas County Line
to Hernando County Line

OPENING YEAR (2010) CORRIDOR LANE GEOMETRY

EXHIBIT 16E



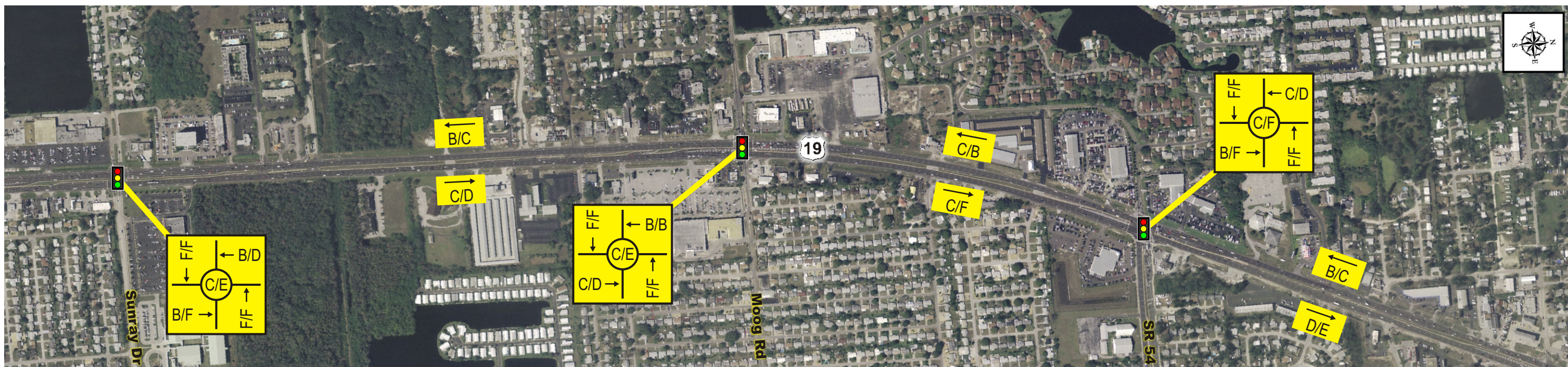
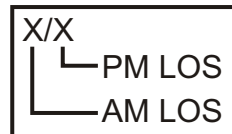
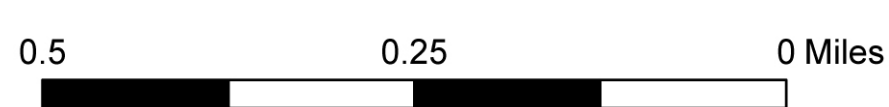
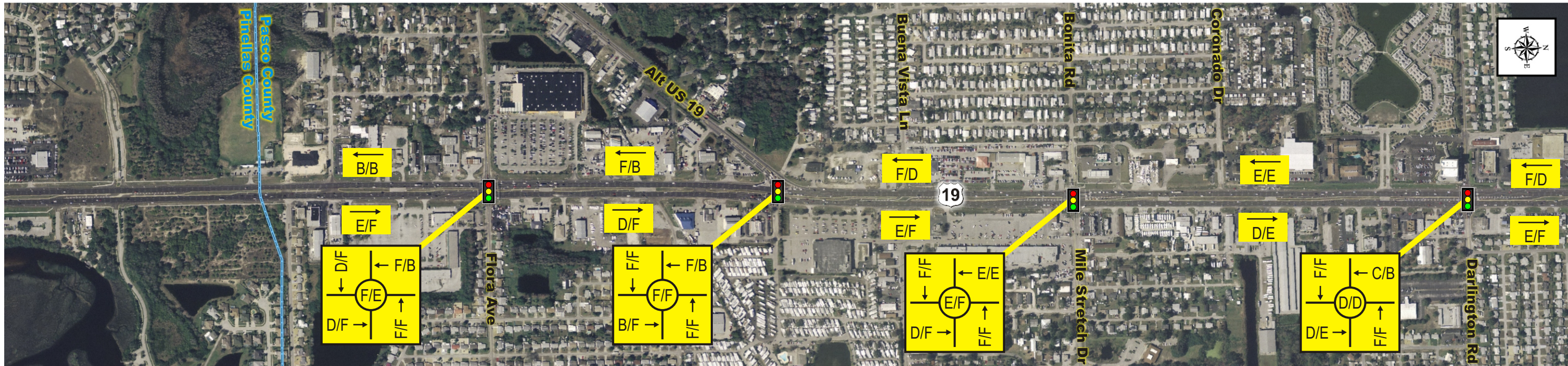
SR 55 (US 19)
from Pinellas County Line
to Hernando County Line

OPENING YEAR (2010) CORRIDOR LANE GEOMETRY

EXHIBIT 16F

traffic separators. At these major intersections the CRTL would act as an exclusive right-turn lane.

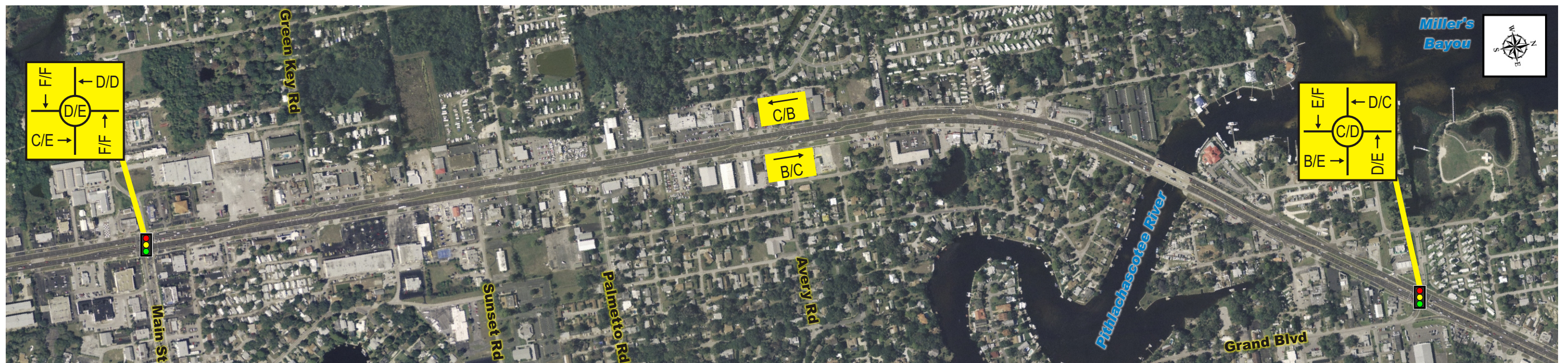
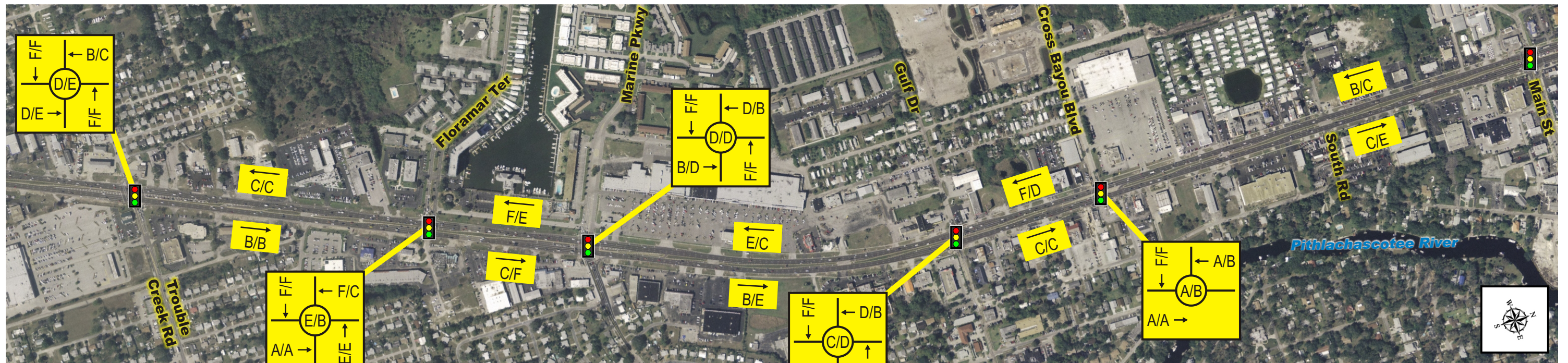
In the opening year (2010) feasible CRTL alternative intersection and arterial LOS analysis, the proposed feasible CRTL alternative geometric conditions shown on **Exhibits 16A-16F** and the opening year (2010) design hour turning movement traffic volumes were used. The analysis results for signalized intersections are summarized in **Table 4-15** and shown on **Exhibits 17A-17F**. The SR 55 (US 19) northbound and southbound arterial segment LOS results for the opening year (2010) feasible CRTL alternative are summarized in **Table 4-16** and **Table 4-17**, respectively and shown on **Exhibits 17A-17F**. The opening year (2010) Synchro intersection analysis sheets for the CRTL alternative are included in **Appendix F** (under separate cover).



SR 55 (US 19)
from Pinellas County Line
to Hernando County Line

OPENING YEAR (2010) LEVEL OF SERVICE

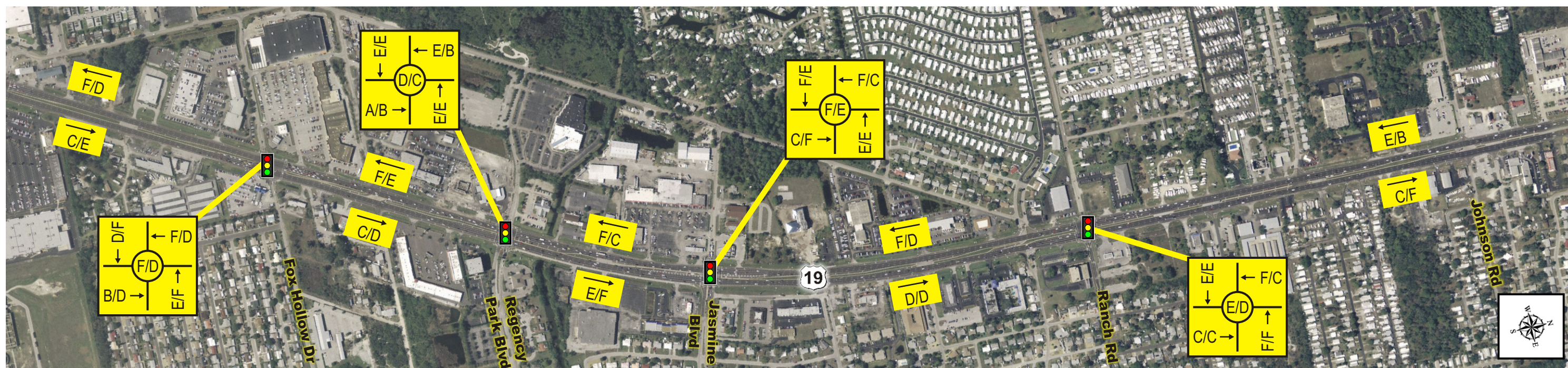
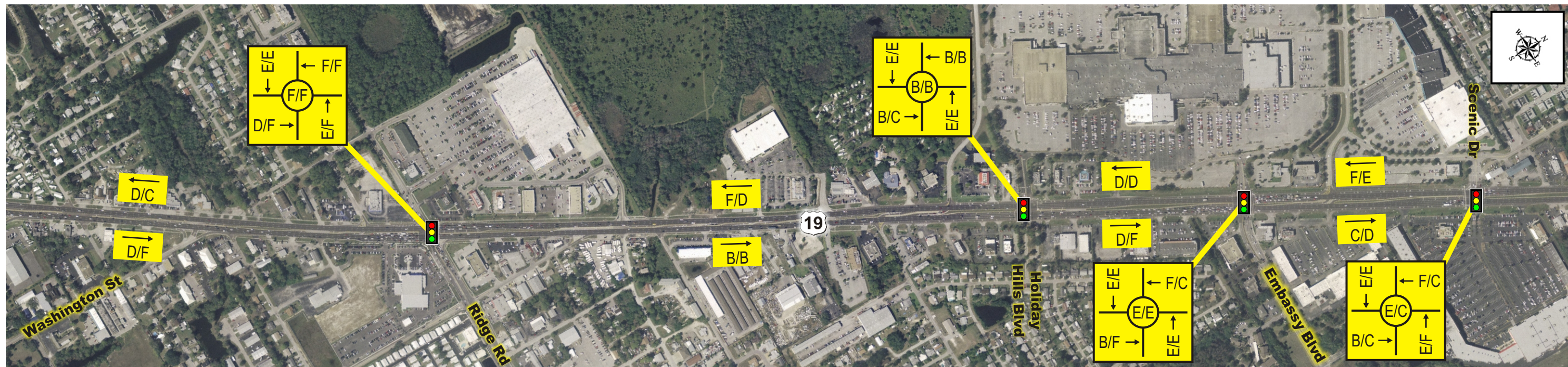
EXHIBIT 17A



SR 55 (US 19)
from Pinellas County Line
to Hernando County Line

OPENING YEAR (2010) LEVEL OF SERVICE

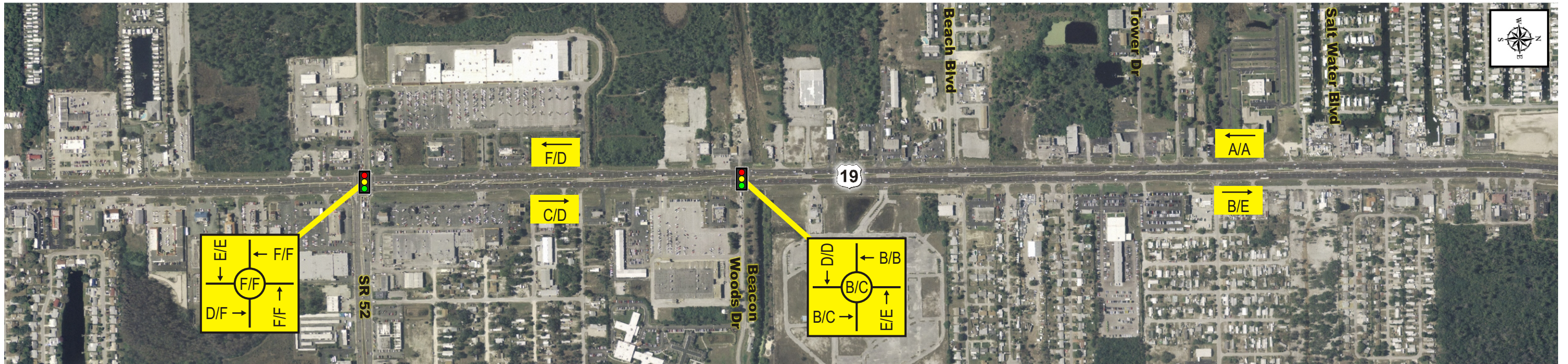
EXHIBIT 17B



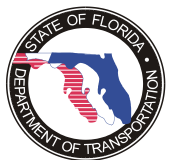
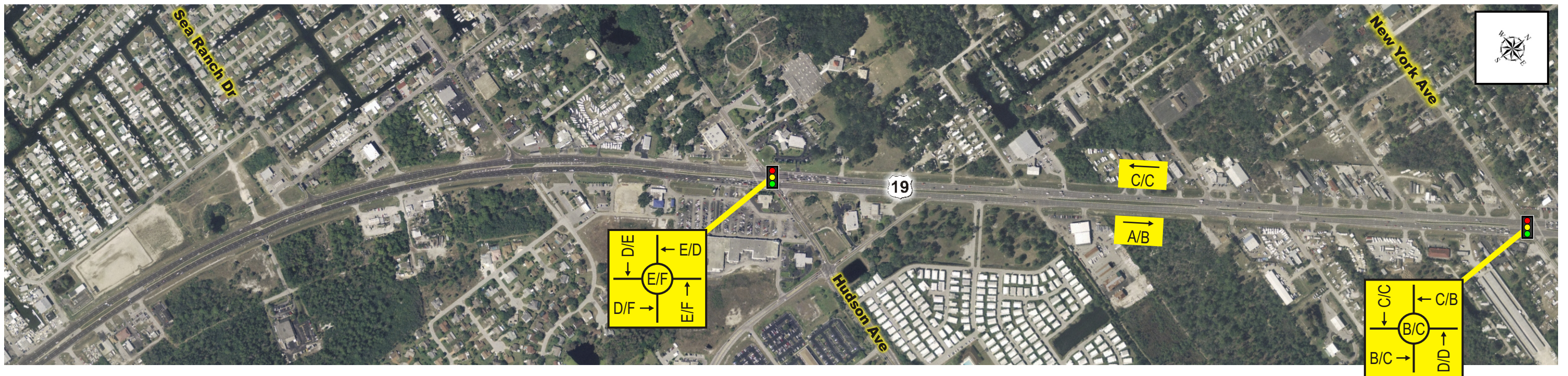
SR 55 (US 19)
from Pinellas County Line
to Hernando County Line

OPENING YEAR (2010) LEVEL OF SERVICE

EXHIBIT 17C



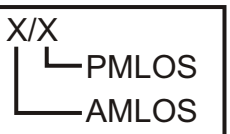
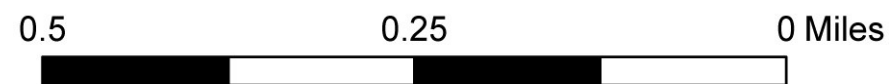
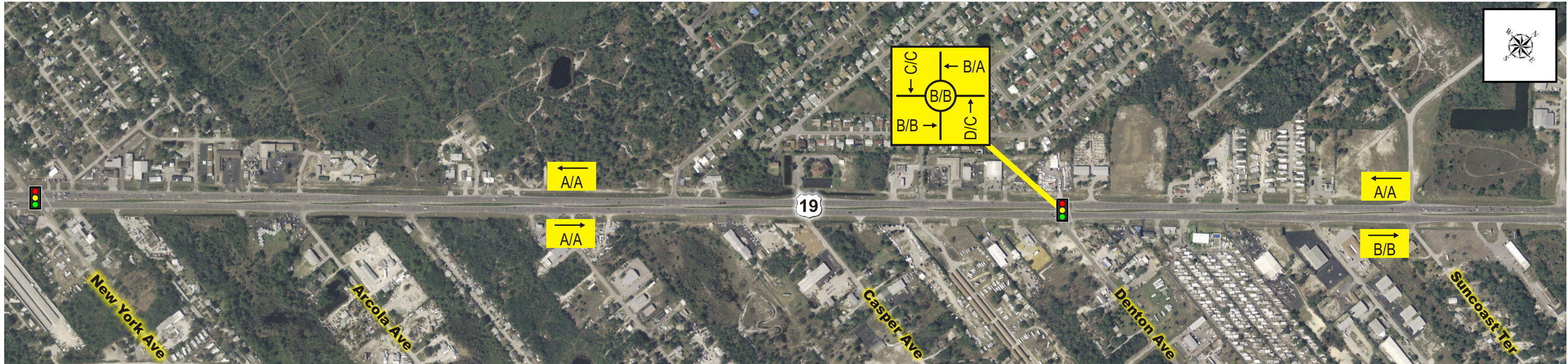
X/X
 └─ PM LOS
 └─ AM LOS



SR 55 (US 19)
 from Pinellas County Line
 to Hernando County Line

OPENING YEAR (2010) LEVEL OF SERVICE

EXHIBIT 17D



SR55(US19)
from Pinellas County Line
to Hernando County Line

OPENING YEAR(2010) LEVEL OF SER VICE

EXHIBIT 17E



SR55(US19)
fromPinellasCountyLine
toHernandoCountyLine

OPENING YEAR(2010)LEVEL OFSER VICE

EXHIBIT17F

Table 4-15
Opening Year (2010) SR 55 (US 19) Intersection Level of Service Summary

Cross Street	SR 55 (US 19) Mainline NB AM / PM	SR 55 (US 19) Mainline SB AM / PM	EB AM / PM	WB AM / PM	Overall LOS AM / PM	Overall Delay (sec / veh) AM / PM
Flora Avenue	D / F	F / B	D / F	F / F	F / E	115 / 58
Alt. 19	B / F	F / B	F / F	F / F	F / F	102 / 151
Mile Stretch Drive	D / F	E / E	F / F	F / F	E / F	67 / 103
Darlington Road	D / E	C / B	F / F	F / F	D / D	41 / 53
Sunray Drive	B / F	B / D	F / F	F / F	C / E	27 / 80
Moog Road	C / D	B / B	F / F	F / F	C / E	34 / 56
SR 54	B / F	C / D	F / F	F / F	C / F	33 / 117
Trouble Creek Road	D / E	B / C	F / F	F / F	D / E	42 / 64
Floramar Terrace	A / A	F / C	F / F	E / E	E / B	67 / 19
Marine Parkway	B / D	D / B	F / F	F / F	D / D	44 / 43
Gulf Drive	A / D	D / B	F / F	F / F	C / D	30 / 46
Cross Bayou Boulevard	A / A	A / B	F / F	--	A / B	4 / 11
Main Street	C / E	D / D	F / F	F / F	D / E	55 / 73
Grand Boulevard	B / E	D / C	E / F	D / E	C / D	29 / 52
Ridge Road	D / F	F / F	E / E	E / F	F / F	129 / 175
Holiday Hills Boulevard	B / C	B / B	E / E	E / E	B / B	13 / 19
Embassy Boulevard	B / F	F / C	E / E	E / E	E / E	55 / 67
Scenic Drive	B / C	F / C	E / E	E / F	E / C	69 / 28
Fox Hollow Drive	B / D	F / D	D / F	E / F	F / D	91 / 53
Regency Park Drive	A / B	E / B	E / E	E / E	D / C	44 / 20
Jasmine Boulevard	C / F	F / C	F / E	E / E	F / E	86 / 66
Ranch Road	C / C	F / C	E / E	F / F	E / D	76 / 39
SR 52	D / F	F / F	E / E	F / F	F / F	127 / 197
Beacon Woods Drive	B / C	B / B	D / D	E / E	B / C	18 / 26
Hudson Avenue	D / F	E / D	D / E	E / F	E / F	61 / 108
New York Avenue	B / C	C / B	C / C	D / D	B / C	20 / 24
Denton Avenue	B / B	B / A	C / C	D / C	B / B	15 / 13
Little Road	C / C	F / E	D / D	D / F	F / E	109 / 58
County Line Road	D / F	E / F	E / E	F / E	E / F	77 / 88

Table 4-16
Opening Year (2010) SR 55 (US 19) Arterial
Northbound Level of Service Summary

SR 55 (US 19) Segment	Arterial Class	Segment Length (miles)	Free Flow Speed (mph)	Running Time (sec)	Signal Delay (sec)		Travel Time (sec)		Arterial Speed (mph)		LOS	
					AM	PM	AM	PM	AM	PM	AM	PM
Pinellas County Line to SR 54		3.03		272.9	177.2	776.4	450.1	1049.3	24.2	10.4	D	F
Pinellas County Line to Flora Avenue		0.26	45	26.8	30.8	86.4	57.6	113.2	16.3	8.3	E	F
Flora Avenue to Alt. 19		0.38	45	35.4	15.2	214.7	50.6	250.1	27.0	5.5	D	F
Alt. 19 to Mile Stretch Drive		0.37	45	36.2	27.8	133.0	64.0	169.2	20.8	7.9	E	F
Mile Stretch Drive to Darlington Road	I	0.50	45	44.1	39.2	55.1	83.3	99.2	21.6	18.1	D	E
Darlington Road to Sunray Drive		0.20	45	20.5	15.8	90.9	36.3	111.4	19.8	6.5	E	F
Sunray Drive to Moog Road		0.80	45	64.4	30.6	53.0	95.0	117.4	30.3	24.5	C	D
Moog Road to SR 54		0.52	45	45.5	17.8	143.3	63.3	188.8	29.6	9.9	C	F
SR 54 to Main Street		2.41		211.2	84.3	246.6	295.5	457.8	29.4	19.0	C	E
SR 54 to Trouble Creek Road		0.56	45	44.7	50.0	67.5	94.7	112.2	21.3	18.0	D	E
Trouble Creek Road to Floramar Terr.		0.38	45	35.6	2.1	4.1	37.7	39.7	36.3	34.5	B	B
Floramar Terrace to Marine Parkway	I	0.21	45	21.3	6.0	41.4	27.3	62.7	27.7	12.1	C	F
Marine Parkway to Gulf Drive		0.49	45	42.8	5.5	55.3	48.3	98.1	36.5	18.0	B	E
Gulf Drive to Cross Bayou Blvd.		0.19	45	20.1	0.7	5.1	20.8	25.2	32.9	27.1	C	C
Cross Bayou Blvd. to Main Street		0.58	45	46.7	20.0	73.2	66.7	119.9	31.3	17.4	C	E
Main Street to Ridge Road		2.28		181.9	51.9	322.6	233.8	504.5	35.1	16.3	B	E
Main Street to Grand Blvd.	I	1.71	45	136.4	11.9	67.8	148.3	204.2	41.5	30.1	B	C
Grand Blvd. to Ridge Road		0.57	45	45.5	40.0	254.8	85.5	300.3	24.0	6.8	D	F
Ridge Road to SR 52		3.76		335.7	136.7	506.4	472.4	842.1	28.7	16.1	C	E
Ridge Road to Holiday Hills Blvd.		0.77	45	61.7	8.4	18.1	70.1	79.8	39.5	34.7	B	B
Holiday Hills Blvd. to Embassy Blvd.		0.27	45	27.9	8.5	105.4	36.4	133.3	26.7	7.3	D	F
Embassy Blvd. to Scenic Drive		0.30	45	29.8	8.0	17.6	37.8	47.4	28.6	22.8	C	D
Scenic Drive to Fox Hollow Drive	I	0.35	45	34.2	8.6	38.5	42.8	72.7	29.4	17.3	C	E
Fox Hollow Drive to Regency Drive		0.32	45	31.6	5.8	19.0	37.4	50.6	30.8	22.8	C	D
Regency Drive to Jasmine Blvd.		0.27	45	28.1	19.0	89.3	47.1	117.4	20.6	8.3	E	F
Jasmine Blvd. to Ranch Road		0.49	45	43.2	32.2	30.1	75.4	73.3	23.4	24.1	D	D
Ranch Road to SR 52		0.99	45	79.2	46.2	188.4	125.4	267.6	28.4	13.3	C	F

Table 4-16
Opening Year (2010) SR 55 (US 19) Arterial
Northbound Level of Service Summary

SR 55 (US 19) Segment	Arterial Class	Segment Length (miles)	Free Flow Speed (mph)	Running Time (sec)	Signal Delay (sec)		Travel Time (sec)		Arterial Speed (mph)		LOS		
					AM	PM	AM	PM	AM	PM	AM	PM	
SR 52 to County Line Road													
SR 52 to Beacon Woods Drive	I	8.21		555.1	168.8	371.1	723.9	926.2	40.8	31.9	B	C	
Beacon Woods Drive to Hudson Ave.		0.49	50	38.0	18.1	31.2	56.1	69.2	31.4	25.5	C	D	
Hudson Avenue to New York Avenue		1.88	50	135.2	47.5	187.9	182.7	323.1	37.0	20.9	B	E	
New York Avenue to Denton Avenue		0.97	55	63.4	14.7	22.9	78.1	86.3	44.7	40.5	A	B	
Denton Avenue to Little Road		1.32	55	86.3	11.7	13.6	98.0	99.9	48.5	47.6	A	A	
Little Road to County Line Road		0.87	55	57.0	23.8	29.1	80.8	86.1	38.8	36.4	B	B	
		2.68	55	175.2	53.0	86.4	228.2	261.6	42.3	36.9	A	B	
Pinellas County Line to County Line Road	I	19.69		1556.8	618.9	2223.1	2175.7	3779.9	32.6	18.8	C	E	

Table 4-17
Opening Year (2010) SR 55 (US 19) Arterial
Southbound Level of Service Summary

SR 55 (US 19) Segment	Arterial Class	Segment Length (miles)	Free Flow Speed (mph)	Running Time (sec)	Signal Delay (sec)		Travel Time (sec)		Arterial Speed (mph)		LOS	
					AM	PM	AM	PM	AM	PM	AM	PM
County Line Road to SR 52		8.21		555.1	265.4	136.7	820.5	691.8	36.0	42.7	B	A
County Line Road to Little Road		2.68	55	175.2	24.1	20.8	199.3	196.0	48.4	49.2	A	A
Little Road to Denton Avenue		0.87	55	57.0	13.9	9.1	70.9	66.1	44.2	47.4	A	A
Denton Avenue to New York Avenue	I	1.32	55	86.3	19.6	17.5	105.9	103.8	44.9	45.8	A	A
New York Avenue to Hudson Avenue		0.97	55	63.4	63.1	40.1	126.5	103.5	27.6	33.7	C	C
Hudson Avenue to Beacon Woods Dr.		1.88	50	135.2	10.5	7.6	145.7	142.8	46.5	47.4	A	A
Beacon Woods Drive to SR 52		0.49	50	38.0	134.2	41.6	172.2	79.6	10.2	22.2	F	D
SR 52 to Ridge Road		3.76		335.7	875.5	210.4	1211.2	546.1	11.2	24.8	F	D
SR 52 to Ranch Road		0.99	45	79.2	106.3	22.8	185.5	102.0	19.2	34.9	E	B
Ranch Road to Jasmine Blvd.		0.49	45	43.2	141.2	35.5	184.4	78.7	9.6	22.4	F	D
Jasmine Blvd. to Regency Drive	I	0.27	45	28.1	68.2	5.1	96.3	33.2	10.1	29.3	F	C
Regency Drive to Fox Hollow Drive		0.32	45	31.6	152.6	34.5	184.2	66.1	6.3	17.4	F	E
Fox Hollow Drive to Scenic Drive		0.35	45	34.2	112.7	25.2	146.9	59.4	8.6	21.2	F	D
Scenic Drive to Embassy Blvd.		0.30	45	29.8	81.5	29.2	111.3	59.0	9.7	18.3	F	E
Embassy Blvd. to Holiday Hills Blvd.		0.27	45	27.9	10.9	12.2	38.8	40.1	25.1	24.2	D	D
Holiday Hills Blvd. to Ridge Road		0.77	45	61.7	202.1	45.9	263.8	107.6	10.5	25.8	F	D
Ridge Road to Main Street		2.28		181.9	94.2	49.3	276.1	231.2	29.7	35.5	C	B
Ridge Road to Grand Blvd.	I	0.57	45	45.5	40.0	18.3	85.5	63.8	24.0	32.2	D	C
Grand Blvd. to Main Street		1.71	45	136.4	54.2	31.0	190.6	167.4	32.3	36.8	C	B
Main Street to SR 54		2.41		211.2	224.3	97.4	435.5	308.6	19.9	28.1	E	C
Main Street to Cross Bayou Blvd.	I	0.58	45	46.7	3.5	15.3	50.2	62.0	41.6	33.7	B	C
Cross Bayou Blvd. to Gulf Drive		0.19	45	20.1	35.5	9.4	55.6	29.5	12.3	23.2	F	D
Gulf Drive to Marine Parkway		0.49	45	42.8	54.2	13.8	97.0	56.6	18.2	31.2	E	C
Marine Parkway to Floramar Terrace		0.21	45	21.3	102.4	21.6	123.7	42.9	6.1	17.6	F	E
Floramar Terr. to Trouble Creek Road		0.38	45	35.6	14.2	11.3	49.8	46.9	27.5	29.2	C	C
Trouble Creek Road to SR 54		0.56	45	44.7	14.5	26.0	59.2	70.7	34.1	28.5	B	C

Table 4-17
Opening Year (2010) SR 55 (US 19) Arterial
Southbound Level of Service Summary

SR 55 (US 19) Segment	Arterial Class	Segment Length (miles)	Free Flow Speed (mph)	Running Time (sec)	Signal Delay (sec)		Travel Time (sec)		Arterial Speed (mph)		LOS		
					AM	PM	AM	PM	AM	PM	AM	PM	
SR 54 to Pinellas County Line													
SR 54 to Moog Road	I	3.03		272.9	416.5	113.9	689.4	386.8	15.8	28.2	F	C	
Moog Road to Sunray Drive		0.52	45	45.5	14.1	9.2	59.6	54.7	31.4	34.2	C	B	
Sunray Drive to Darlington Road		0.80	45	64.4	13.5	26.1	77.9	90.5	37.0	31.8	B	C	
Darlington Road to Mile Stretch Road		0.20	45	20.5	22.6	11.8	43.1	32.3	16.7	22.3	F	D	
Mile Stretch Road to Alt. 19		0.50	45	44.1	67.9	48.9	112.0	93.0	16.1	19.4	E	E	
Alt. 19 to Flora Avenue		0.37	45	36.2	133.9	13.6	170.1	49.8	7.8	26.7	F	D	
Flora Avenue to Pinellas County Line		0.38	45	35.4	164.5	4.3	199.9	39.7	6.8	34.5	F	B	
		0.26	45	26.8	-	-	26.8	26.8	34.9	34.9	B	B	
County Line Road to Pinellas County Line	I	19.69		1556.8	1875.9	607.7	3432.7	2164.5	20.6	32.7	E	C	

4.10 INTERCHANGE ANALYSIS

As part of the SR 55 (US 19) PD&E Study, interchange alternatives were analyzed at the SR 54, Ridge Road, SR 52 and County Line Road intersections. As discussed in Section 4.6 of the traffic report, the above mentioned signalized intersections were projected to operate at LOS F with a signal delay of more than 100 sec/veh for the design year (2030) AM and PM design peak hour traffic conditions. At these intersections single-point urban interchange (SPUI) and tight urban diamond interchange (TUDI) configurations were analyzed. Both the SPUI and the TUDIs were evaluated based on traffic operations criteria with preliminary geometric layouts.

In the single-point urban interchange, the four turning movements would be controlled by a traffic signal. In the TUDI, traffic signals would be installed at both ramp terminals. The geometric layouts for both SPUI and TUDI alternatives were kept primarily the same with the identical number of mainline and ramp lanes. The traffic operations for interchange alternatives were evaluated using the Synchro software. The operational analyses were performed for the design year (2030) AM and PM peak hour design traffic conditions. The analysis results for the interchange alternatives are summarized in **Table 4-18** and **Table 4-19** for the SPUI and TUDI interchange configurations, respectively. The design year (2030) Synchro analysis sheets for the interchange alternatives are included in **Appendix G** (under separate cover).

Table 4-18
SPUI Measures of Effectiveness

Interchange Locations	Average Vehicle Delay (sec/veh) AM / PM	Level of Service AM / PM	Maximum Queue Length (ft)			
			Ramp		Crossroad	
			NB LT	SB LT	EB LT / TH	WB LT / TH
SR 54	23 / 31	C / C	50	125	175 / 100	425 / 100
Ridge Road	30 / 37	C / D	150	300	300 / 125	300 / 350
SR 52	38 / 50	D / D	300	425	300 / 150	675 / 350
County Line Rd.	34 / 30	C / C	50	250	50 / 25	600 / 25

Table 4-19
TUDI Measures of Effectiveness

Interchange Locations	Average Vehicle Delay (sec/veh) AM / PM	Level of Service AM / PM	Maximum Queue Length (ft)			
			Ramp		Crossroad	
			NB LT / RT	SB LT / RT	EB LT / TH / RT	WB LT / TH / RT
SR 54 - West	18 / 22	B / C	-	150 / 25	- / 500 / -	475 / 25 / -
SR 54 - East	14 / 22	B / C	50 / 0	-	75 / 0 / -	- / 325 / 525
Ridge Road - West	18 / 21	B / C	-	300 / 50	- / 200 / -	25 / 375 / -
Ridge Road - East	24 / 34	C / C	75 / 0	-	50 / 300 / -	- / 350 / 125
SR 52 - West	24 / 29	C / C	-	375 / 50	- / 200 / -	175 / 0 / -
SR 52 - East	19 / 33	B / C	275 / 0	-	25 / 150 / -	- / 575 / 125
County Line Rd. - West	20 / 16	B / B	-	200 / 25	- / 75 / -	350 / 25 / -
County Line Rd. - East	10 / 12	B / B	25 / 0	-	25 / 50 / -	- / 325 / 75

The analyses reveal that at all four SR 55 (US 19) intersections, the ramp termini for both SPUI and TUDI alternatives were projected to operate with LOS D or better. The interchanges were considered as isolated interchanges at the proposed SR 55 (US 19) locations and the interchange evaluation was conducted based on isolated interchange traffic analyses. The effects of adjacent signalized intersection locations on cross streets were not considered in the analysis. Furthermore, the interchange evaluation did not include interchange conceptual geometrics based on right-of-way (R/W) constraints. The construction cost analysis for interchange configurations was also not performed. In the next stage of the PD&E Study, the conceptual design for the alternative interchange configurations would be developed and the interchange traffic analyses would be refined.

4.11 TRANSIT OPERATIONS

The Pasco County Metropolitan Planning Organization (MPO) updated the Pasco County Long Range Transit Element (LRTE) as part of the 2025 Transportation Plan Update. A 2025 Transit Needs Plan was developed. The 2025 Transit Needs Plan identified the following two needs for the SR 55 (US 19) corridor:

- An extension of SR 55 (US 19) service to Hernando County
- Express Bus Service along SR 55 (US 19) into Pinellas County

There were no other recommendations contained in the 2025 Transit Needs Plan that would affect the transit operations along the SR 55 (US 19) corridor.

SECTION 5.0

SUMMARY AND CONCLUSIONS

The existing year (2006) signalized intersection analysis indicates that approximately half of the 29 SR 55 (US 19) signalized intersections operate at level of service (LOS) F during peak hour design traffic conditions. The existing year (2006) arterial analysis indicates that the SR 55 (US 19) arterial segment between SR 52 and County Line Road operates at an average LOS B or better, but the SR 55 (US 19) arterial segments between the Pinellas County Line and SR 52 operates at an average LOS E or LOS F during peak hour, peak direction design traffic conditions, which is not acceptable according to the state highway LOS standards.

The recent five year (2000-2004) crash data analysis reveals that the average crash rate (crashes per million VMT) for the entire SR 55 (US 19) study corridor was approximately 2. For the SR 55 (US 19) segment between the Pinellas County Line and SR 54 the average crash rate was over 3. The analysis shows that the highest frequency crashes were rear-end and angle crashes. This reflects the fact that as SR 55 (US 19) becomes more congested, the excessive driveways and inappropriate median opening spacing creates speed differentials between traffic flow vehicles which cause rear-end and angle crashes. Therefore, adequate access management and transportation system management strategies potentially could help reduce the number of crashes.

The SR 55 (US 19) arterial is classified as an Access Class 3 roadway from the Pinellas County Line to the Hernando County Line. Roadways under this classification are characterized as controlled-access facilities with a raised restrictive median provided for controlling direct access to local land uses. However, the existing spacing between median openings does not satisfy the Florida Department of Transportation (FDOT) access classification spacing standard. An access management study was conducted recently and an access management plan for the entire Pasco County SR 55 (US 19) roadway has been proposed. The proposed median opening type and locations were documented in this traffic report. The proposed access management median

modifications contained in this report have been approved by the FDOT's access management staff. The proposed access management plan would provide safe and efficient access to the SR 55 (US 19) corridor land uses, while providing mobility to the through traffic.

For the No-Build Scenario with the design year (2030) design hour traffic conditions, all of the signalized intersections, except the intersections at Cross Bayou Boulevard, Holiday Hills Boulevard, New York Avenue and Denton Avenue were projected to operate at an overall LOS F or E during peak hour design traffic conditions. The design year (2030) No-Build alternative arterial analysis indicates that the SR 55 (US 19) arterial segments between the Pinellas County Line and SR 52 would operate at an average LOS E or LOS F during peak hour, peak direction design year traffic conditions, which is not acceptable according to the state highway LOS standards.

To improve the SR 55 (US 19) arterial traffic operation, the Continuous Right-Turn Lane (CRTL) alternative was considered for the SR 55 (US 19) arterial in Pasco County between the Pinellas County Line and the Hernando County Line. In this alternative the CRTL was proposed to be built in both the northbound and southbound directions of the SR 55 (US 19) arterial by extending the available existing right-turn lane sections along the arterial. It was proposed to allow through traffic on the CRTL, however, the CRTL would be discontinued at major intersections with physical separations. For the CRTL alternative scenario, the signalized intersection overall delay was projected to decrease significantly at signalized intersection locations where it was proposed to allow through traffic on the continuous right-turn lane, since the through traffic capacity would be increased at these intersections. The arterial LOS and arterial speed were projected to increase for the CRTL alternative scenario compared to the No-Build alternative.

The CRTL alternative improves signalized intersection and arterial LOS of the SR 55 (US 19) arterial in Pasco County. However, the CRTL is not adequate to achieve acceptable LOS at many signalized intersections and arterial segments. Therefore, additional intersection improvements were considered and analyzed as the Transportation System Management (TSM) alternative. For the TSM alternative scenario, the signalized

intersection overall delay was projected to decrease at many signalized intersections compared to the No-Build and CRTL alternatives. The arterial LOS and arterial speed were projected to increase for the TSM alternative scenario compared to the No-Build alternative.

Even with the proposed TSM intersection improvements, 15 of the 29 signalized intersections along the SR 55 (US 19) arterial were projected to operate at LOS F. With the proposed intersection improvements the following signalized intersections were expected to operate at LOS F for both the AM and PM design year (2030) projected peak hour traffic conditions. Furthermore, the signalized intersection delay for these intersections were projected to be more than 100 sec/veh for the design year (2030) AM and PM design peak hour traffic conditions. These SR 55 (US 19) signalized intersections are listed below:

1. Alt. 19
2. SR 54
3. Ridge Road
4. SR 52
5. Little Road
6. County Line Road

Transportation System Management improvements are not adequate for the above listed signalized intersections. Traffic re-routing, frontage road construction or interchanges would be necessary to alleviate congestion caused by excessive signal delay at these signalized intersections.

The feasible Continuous Right-Turn Lane (CRTL) alternative was considered for the opening year (2010) intersection and arterial analyses of the SR 55 (US 19) arterial in Pasco County between the Pinellas County Line and the Hernando County Line. In this alternative the CRTL was proposed to be built in the northbound direction from Mile Stretch Drive to Gulf Drive and from Stone Road to SR 52 and in the southbound direction from Trouble Creek Road to Alt.19 of the SR 55 (US 19) arterial by extending and connecting the available existing right-turn lane sections along the arterial. It was

proposed to allow through traffic on the CRTL, however, the CRTL would be discontinued at major intersections with channelization of right-turn movements by raised traffic separators. At these major intersections the CRTL would act as an exclusive right-turn lane.

In the opening year (2010) design hour traffic conditions, 11 of the 29 signalized intersections along the SR 55 (US 19) arterial were projected to operate at an overall LOS F during peak hour design traffic conditions. The opening year (2010) arterial analysis indicates that the SR 55 (US 19) arterial segments between the Pinellas County Line and SR 52 would operate at an average LOS E or LOS F during peak hour traffic conditions, which is not acceptable according to the state highway LOS standards.

As part of the SR 55 (US 19) PD&E Study, interchange alternatives were analyzed at the SR 54, Ridge Road, SR 52 and County Line Road intersections. At these intersections, single-point urban interchange (SPUI) and tight urban diamond interchange (TUDI) configurations were analyzed. Both the SPUI and the TUDIs were evaluated based on traffic operations criteria with preliminary geometric layouts.

The analyses revealed that the ramp termini for the interchange alternatives at all four intersections would operate with LOS D or better. The interchanges were considered as isolated interchanges at the proposed SR 55 (US 19) locations and the interchange evaluation was conducted based on isolated interchange traffic analyses. The effects of adjacent signalized intersection locations on cross streets were not considered in the analysis. Furthermore, the interchange evaluation did not include interchange conceptual geometrics based on right-of-way (R/W) constraints. The construction cost analysis for interchange configurations was also not performed. In the next stage of the PD&E Study, the conceptual design for the alternative interchange configurations would be developed.