TRAFFIC IMPACT ANALYSIS

Murphy Oil Gas Station
St. Lucie County
Port St. Lucie, Florida

Prepared For:
HSQ Group, Inc
7975 NW 154th Street,
Miami Lakes, Florida 33016

Prepared By:
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1221 Brickell Avenue, Suite 1800
Miami, FL 33016
FL Certificate of Authorization No: 6601

Maximo G Polanco

Digitally signed by Maximo G Polanco
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Reason: I have reviewed this document
Date: 2025.07.15 12:56:06-04'00'

MAXIMO G. POLANCO
LICENSE
No. 91355
STATE OF FLORIDA
PROFESSIONAL ENGINEER

This item has been digitally signed and sealed by Maximo Polanco, PE on the date adjacent to the seal.

Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

Maximo G. Polanco, P.E.
P.E. License No. 91355

Eric Schwarz, P.E., LEED AP
Principal/Vice President

October 2024;
March 2025
Revised: July 2025

LANGAN

341021601

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EXECUTIVE SUMMARY

Langan Engineering & Environmental Services, LLC was retained by HSQ Group, Inc. to prepare a traffic-impact analysis for the Murphy Oil Gas Station development that will be located built at in Port St. Lucie, Florida. The 0.9-acre vacant site is located on the northeast corner of the intersection of Port St. Lucie Boulevard (SR-716) and SW Bayshore Boulevard in Port St. Lucie, Florida. The development will comprise the construction of a gas station with 12 fueling positions and a 2,824-square-foot convenience store. The development is expected to be built by 2027 or sooner. We analyzed one signalized intersection and one stop-sign controlled intersection for the 2027 build conditions. The peak-hour traffic-impact analyses with the proposed development's impacts in 2027 yielded the following results:

- The signalized intersection is expected to operate within its adopted Level of Service (LOS) during the morning peak-hour and is expected to operate beyond capacity during the afternoon peak-hour with and without the proposed project's impacts.
- We optimized the signal timing, without changing the cycle length, of the intersection of Port St. Lucie Boulevard and SW Bayshore Boulevard during the morning and afternoon peak hours to improve the overall LOS and delay time of the movements and approaches that are expected to operate beyond capacity during the morning and afternoon peak hours. Through the signal timing optimization, some movements are still operating beyond capacity, but most of the expected delays improve relative to the no build conditions. The westbound, northbound, and southbound approaches are operating beyond capacity under existing conditions. The proposed development is expected to impact the subject intersection by 0.9 percent of the total traffic at the intersection.
- The stop-sign controlled approaches of the stop-sign controlled intersection are expected to operate within their adopted LOS during the morning and afternoon peak hours.
- The proposed driveways connections are expected to operate at LOS A during the morning and afternoon peak-hours.
- The proposed development will not have gate-controlled access at any of the proposed site driveways.

We conducted intersection-capacity analyses for the existing, no build (future without project) and build (future with project) conditions. The proposed development is expected to generate 2,750 daily, 48 morning peak-hour, and 57 afternoon new peak-hour trips.

1.0 INTRODUCTION

Langan was retained by HSQ Group, Inc to prepare this impact-analysis report for the Murphy Oil Gas Station (development) to be built in Port St. Lucie, Florida. The 0.9-acre vacant site is located on the northeast corner of the intersection of Port St. Lucie Boulevard (SR-716) and SW Bayshore Boulevard in Port St. Lucie, Florida. The development is proposing to construct a gas station with 12 fueling positions and a 2,824 square-foot convenience store expected to be built by 2027 or sooner.

We analyzed one signalized intersection and one stop sign controlled intersection during the morning and afternoon peak hours and found that the signalized intersection is expected to operate with their adopted LOS during the morning peak hour and beyond capacity during the afternoon peak-hour with and without the proposed project's impacts. We optimized the signal timing, without changing the cycle length, of the intersection of Port St. Lucie Boulevard and SW Bayshore Boulevard to mitigate the delay time of the movements and approaches that are expected to operate beyond capacity during the morning and afternoon peak hours. The stop-controlled intersection is expected to operate within their adopted LOS during the morning and afternoon peak hours. This report presents the traffic-data and traffic-impact analysis for this proposed development.

1.1 Project Description

The development will be built in one parcel (PCN No. 4408-511-0001-000-0). **Appendix A** contains the figures of this report. **Figure 1** illustrates the site location. **Appendix B** contains a copy of the site plan that shows the proposed development program and location of the development's driveways. The proposed development will have access through two driveway connections: one to Port St. Lucie Boulevard and one to the existing parking lot of the Shoppes of Victoria Square Mall. The south driveway on Port St. Lucie Boulevard (SR-716) will operate as a right-turn only ingress driveway and the north driveway will operate as a full access driveway. St. Lucie County's and FDOT adopted maximum LOS for non-state local and major city/county roads is LOS D and for primary arterials is LOS E within the study area.

1.2 Study Methodology and Study Area

Langan undertook the following steps to prepare this study in accordance with the standard methodology requirements from the **City of Port St. Lucie Engineering Standards** and the Florida Department of Transportation.

- Collected morning (7 to 9 AM) and afternoon (4 to 6 PM) peak-hour vehicle turning-movement volumes at the following study intersections:
    - SW Bayshore Boulevard & Crescent Avenue (unsignalized)
    - SW Port St. Lucie Boulevard & SW Bayshore Boulevard (signalized)
- Used Peak Season Conversion Factors (PSCF) from the Florida Department of Transportation (FDOT) to convert the traffic data into peak-season volumes.
- Prepared trip-generation estimates for the proposed development, based on accepted trip-generation rates developed by the Institute of Transportation Engineers (ITE), as well as from existing traffic data collected at the existing site's driveways.
- Calculated a growth rate for background traffic by using FDOT historical data from traffic-count stations near the project.
- Developed trip-distribution estimates for the proposed development based on census data Journey-to-Work (JTW) model.
- Prepared morning and afternoon peak-hour intersection-capacity analyses for the following conditions at the study intersections: 2024 existing, 2027 future no-build, and 2027 future build.
- Calculated the morning and afternoon peak-hour LOS intersection-capacity analyses of the development's driveways for the 2027 build conditions.

2.0 DESCRIPTION OF EXISTING CONDITIONS

Langan visited the study area to collect the lane-configuration and traffic-control data shown in **Figure 2**. **Appendix C** contains the county's signal-timing data.

2.1 Roadway Characteristics

SW Bayshore Boulevard

SW Bayshore Boulevard is a four-lane, divided, north-south, city-maintained, principal arterial roadway with a 40 MPH posted speed limit north of SW Port St. Lucie. It transitions to two-lane, undivided, urban minor collector with 35 MPH posted speed limit.

Crescent Avenue

Crescent Avenue is a two-lane, undivided, east-west, city-maintained, local roadway with a 30 MPH posted speed limit.

SW Port St. Lucie Boulevard

SW Port St. Lucie Boulevard is a six-lane, divided, east-west, state-maintained, principal arterial roadway with a 45 MPH posted speed limit.

2.2 Traffic Counts and Volumes

Traffic volume data was collected on Wednesday, October 16, 2024, from 7:00 to 9:00 AM and 4:00 to 6:00 PM. We applied FDOT's season adjustment factors (1.12) to convert the traffic data into peak-season volumes. We compared the data of each intersection and determined that the study area peak hour occurred between 7:30 AM and 8:30 AM and between 5:00 PM and 6:00 PM for the study area, but we analyzed the intersections based on the peak hour of each to provide a worst-case scenario. **Figure 3** illustrates the existing weekday morning and afternoon peak-hour traffic volumes. Appendix C contains the traffic data and seasonal adjustment factors.

2.3 Intersection Capacity Analysis (Level of Service)

We conducted 2024 existing-conditions capacity analyses for the study intersections using Synchro software. We found that the signalized intersection is operating within their adopted LOS during the morning peak hour and beyond capacity during the afternoon peak hour. The stop-sign controlled intersection is operating within their adopted LOS during the morning and afternoon peak hours. **Table 1** summarizes the results of the existing-conditions analysis. **Appendix D** contains intersection-volume tables; **Appendix E** contains the capacity-analyses worksheets.

Table 1 - 2024 Existing Intersection Capacity Analysis Summary

Location	Traffic Control	Approach	AM Peak Hour		PM Peak Hour	
			LOS	Delay (sec/veh)	LOS	Delay (sec/veh)
(1) SW Bayshore Boulevard & Crescent Avenue	Unsignalized	WB Approach	B	13.1	A	3.7
(2) SW Bayshore Boulevard & Port St Lucie Boulevard	Signalized	Overall	E	79.6	F	85.5

Capacity analyses for stop-sign controlled intersections are calculated for certain intersection approaches, not for the entire intersection. The stop-sign controlled approaches of stop-sign controlled intersections often exceed their adopted LOS during peak hours because all vehicles must stop and incur a delay before proceeding through the intersection. Capacity analysis provides an indication of the adequacy of intersection and roadway facilities to serve traffic demand. The evaluation criteria used to analyze the study intersections is based on the *7th Edition Highway Capacity Manual* published by the Transportation Research Board.

3.0 PLANNED AND PROGRAMMED ROADWAY IMPROVEMENTS

We reviewed the Transportation Planning Organization's 2024 Transportation Improvement Program (TIP 2024 through 2028), the county Long Range Transportation Plan (SmartMoves 2045) and the FDOT Five Year Work Program (2024 through 2028) and found one project in the TIP program. The project number 4462201 plans to improve the interchange of the Turnpike at Port St. Lucie. Appendix C includes excerpts from St. Lucie TIP showing the proposed improvement information.

4.0 NO BUILD CONDITIONS

This section of the report covers background traffic growth and future traffic volumes used to evaluate the no build conditions. The no-build conditions evaluate future traffic volumes without the impacts of the proposed development.

4.1 Background/No Build Traffic

Background, or no build traffic volumes, account for annual increases in traffic from approved and unbuilt land-development projects and historical increases in traffic volumes. Developing no build traffic operating conditions allows us to project what can be expected to exist in the study area without the proposed development.

We developed 2027 no-build traffic volumes by applying a compounded growth rate to the 2024 volumes. We reviewed FDOT Historical Data to review the traffic growth trends within the study area and found that there has been a declining trend in the past five years. Therefore, we used a 0.5 percent annual growth rate to develop future background volumes. The growth-rate factor accounts for increased background traffic volumes and was applied to the existing volumes to develop 2027 no-build traffic volumes.

4.2 Intersection Analysis No Build Conditions

We conducted intersection capacity analyses and found that the signalized intersection is operating within their adopted LOS during the morning peak hour and beyond capacity during the afternoon peak hour. The stop-sign controlled intersection is operating within their adopted LOS during the morning and afternoon peak hours. **Figure 4** illustrates the 2027 no-build traffic volumes. **Table 2** summarizes the results of the 2027 no-build conditions capacity analysis. Appendix E contains the capacity-analyses worksheets.

Table 2 - 2027 No Build Intersection Capacity Analysis Summary

Location	Traffic Control	Approach	AM Peak Hour		PM Peak Hour	
			LOS	Delay (sec/veh)	LOS	Delay (sec/veh)
(1) SW Bayshore Boulevard & Crescent Avenue	Unsignalized	WB Approach	B	13.3	C	17.0
(2) SW Bayshore Boulevard & Port St Lucie Boulevard	Signalized	Overall	F	82.0	F	89.4

5.0 BUILD CONDITIONS

This section of the report covers site-generated trips, trip distribution, and future traffic volumes used to evaluate the build conditions. The evaluation of the build conditions analyzes the future traffic volumes for the anticipated build-out year of the residential development by adding the development-generated traffic to the 2027 no-build peak hour traffic volumes.

5.1 Site-Generated Trips

The proposed development is expected to generate 2,750 daily, 48 morning peak-hour, and 57 afternoon new peak-hour trips. We prepared daily, morning peak-hour and afternoon peak-hour trip estimates for the proposed development using equations from the 11th Edition of the ITE *Trip Generation Manual* based on Land Use 945 – Convenience Store/Gas Station – GFA (2 – 4k). We applied a 76% and 75% pass-by rate to the gas station uses trip generation estimates during the morning and afternoon peak hours respectively, based on rates of the 11th Edition of the ITE *Trip Generation Manual* and the ITE Trip Generation Handbook 3rd Edition. **Table 3** summarizes the trip-generation estimates for the proposed development. **Appendix E** contains the trip-generation data.

Table 3 - Trip Generation Estimates

Use	Size	Daily	Weekday Morning Peak Hour			Weekday Afternoon Peak Hour		
			In	Out	Total	In	Out	Total
Proposed Uses Gasoline-Service Station with Convenience Store	12 Fuel Pumps	2,750	99	99	198	115	115	230
	Pass-by Trips	-	75	75	150	87	86	173
	Net New Trips	**2,750**	**24**	**24**	**48**	**28**	**29**	**57**

5.2 Trip Distribution

We used census data and the Journey to Work (JTW) Model to determine the directional distribution of site-generated trips. The OnTheMap website, created by the United States Census Bureau, was used to produce a work destination report based on census blocks. The report produces the number of people who commute to the selected work census blocks from home census blocks. Work census blocks were designated as census blocks that are within a 2-mile radius of the project site. A distribution was developed based on the direction of the home census blocks from the work census blocks and the number of employees in each home census block. Preferred routes were then assigned to the existing roadway, originating from the project site that follows the JTW distribution. Accordingly, for accessing the gas station development, 26% of the project traffic is expected to derive from the west, 30% from the north, 29% from the east and 15% from the south. **Figures 5** and **5.1** show the proposed development's net new and pass-by traffic distributions, respectively. **Figures 6** and **6.1** illustrate the morning and afternoon development net new and pass-by traffic assignments, respectively.

5.3 Intersection Analysis Build Conditions

We conducted capacity analyses for the study intersections and determined that the signalized intersection is expected to operate within their adopted LOS during the morning peak hour and beyond capacity during the afternoon peak hour. We optimized the signal timing, without changing the cycle length, of the intersection of Port St. Lucie Boulevard and SW Bayshore Boulevard during the morning and afternoon peak hours to improve the overall LOS and delay time of the movements and approaches that are expected to operate beyond capacity during the morning and afternoon peak hours. Through the signal timing optimization, some movements are still operating beyond capacity, but most of the overall expected delays improve relative to the no build conditions. The westbound, northbound, and southbound approaches are operating beyond capacity under existing conditions. The proposed development is expected to impact the subject intersection by 0.9 percent of the total traffic at the intersection.

The stop-sign controlled intersection is also expected to operate within their adopted LOS during the morning and afternoon peak hours with and without the developments' impacts. The 2027 build traffic volumes were derived by adding the total site-generated trips to the 2027 no-build traffic volumes. **Figure 7** illustrates the 2027 build morning and afternoon peak-hour traffic volumes. **Table 4** summarizes the 2027 build LOS for the morning and afternoon peak hours.

Table 4 - 2027 Build Intersection Capacity Analysis Summary

Location	Traffic Control	Approach	AM Peak Hour		PM Peak Hour	
			LOS	Delay (sec/veh)	LOS	Delay (sec/veh)
(1) SW Bayshore Boulevard & Crescent Avenue	Unsignalized	WB Approach	B	13.4	C	17.1
(2) SW Bayshore Boulevard & Port St Lucie Boulevard	Signalized	Overall	F	82.6	F	95.2
		Overall[1]	E	75.1	F	95.0

[1] Optimized signal timing without changing cycle length

5.4 Driveway Volumes and Turn Lane Analysis

We analyzed the development's proposed driveway connections to Port St. Lucie Boulevard and found that the driveway will operate at LOS A during the morning and afternoon peak hours for the 2027 build conditions. The south driveway on Port St. Lucie Boulevard (SR-716) will operate as a right-turn only ingress driveway. The north driveway will operate as a full access driveway. and will provide direct access to the internal parking lot of the Shoppes of Victoria Square Mall.

We analyzed the need for an exclusive right-turn lane at the driveway connection to Port St. Lucie Boulevard and determined that an exclusive right turn lane is not warranted. The proposed development is expected to generate at most 68 right-turn ingress trips during the peak hour periods which is below the 80 right-turn warrant threshold as discussed with the City of Port St. Lucie Public Works Department.

Figure 8 shows the project site generated trips at the driveway connections to public roadways; Appendix E contains the capacity analysis worksheets.

6.0 CONCLUSIONS

Langan performed a traffic-impact analysis for the Murphy Oil Gas Station development expected to be completed by 2027. The analysis shows the following results for the 2027 build conditions:

- The signalized intersection is expected to operate within their adopted Level of Service (LOS) during the morning peak-hour. The intersection is expected to operate beyond capacity during the afternoon peak-hour with and without the proposed project's impacts.
- We optimized the signal timing, without changing the cycle length, of the intersection of Port St. Lucie Boulevard and SW Bayshore Boulevard during the morning and afternoon peak hours to improve the overall LOS and delay time of the movements and approaches that are expected to operate beyond capacity during the morning and afternoon peak hours. Through the signal timing optimization, some movements are still operating beyond capacity, but most of the expected delays improve relative to the no build conditions. The westbound, northbound, and southbound approaches are operating beyond capacity under existing conditions. The proposed development is expected to impact the subject intersection by 0.9 percent of the total traffic at the intersection.
- The stop-sign controlled approaches of the stop-sign controlled intersection are expected to operate within their adopted LOS during the morning and afternoon peak hours.
- The proposed driveways connections are expected to operate at LOS A during the morning and afternoon peak-hours.
- The proposed development will not have gate-controlled access at any of the proposed site driveways.

APPENDIX A
FIGURES

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Project No. 341021601

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525 Okeechobee Boulevard, Suite 910
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T: 561.473.8300 F: 561.473.8350 www.langan.com

Project	MURPHY OIL GAS STATION PORT SAINT LUCIE ST. LUCIE COUNTY FLORIDA
Drawing Title	SITE LOCATION MAP
Project No.	341021601
Date	JULY 2025
Drawn By	RSM
Checked By	JCG
Figure	1

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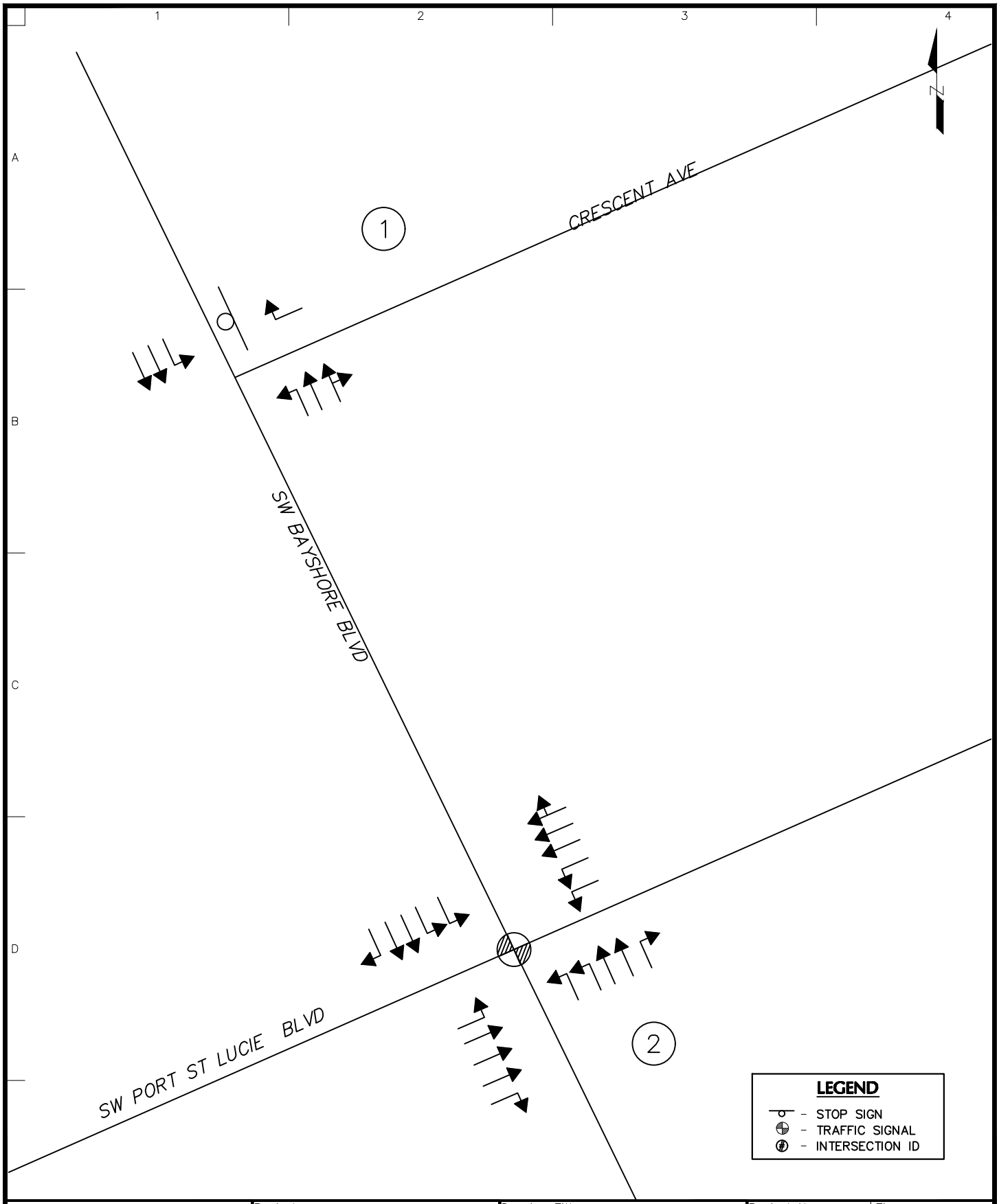

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Project
MURPHY OIL GAS STATION
PORT SAINT LUCIE
ST. LUCIE COUNTY FLORIDA

Drawing Title
INTERSECTION LANES CONFIGURATION

Project No.	341021601
Date	JULY 2025
Drawn By	RSM
Checked By	JCG
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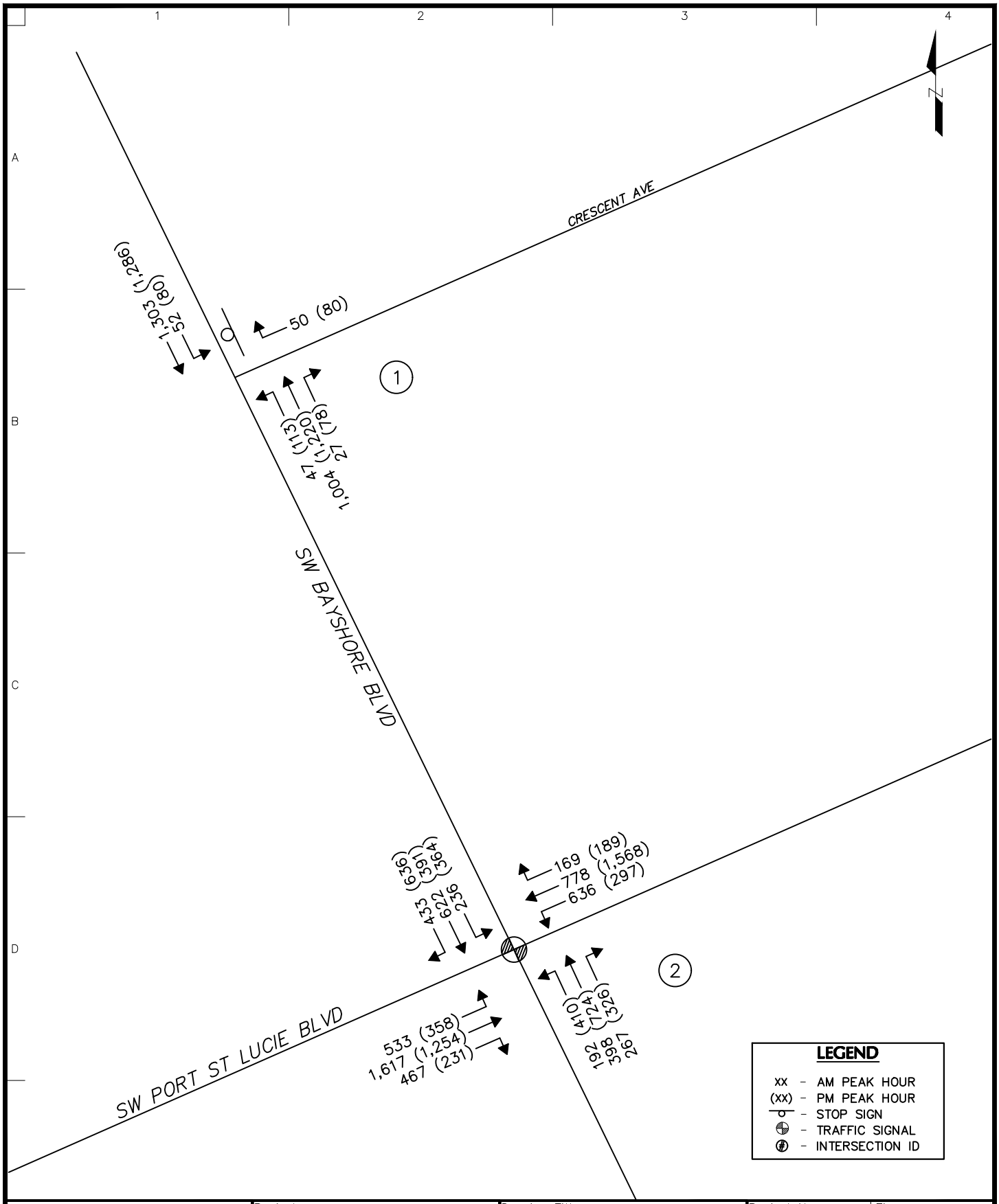

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Project	Drawing Title	Project No.	Figure
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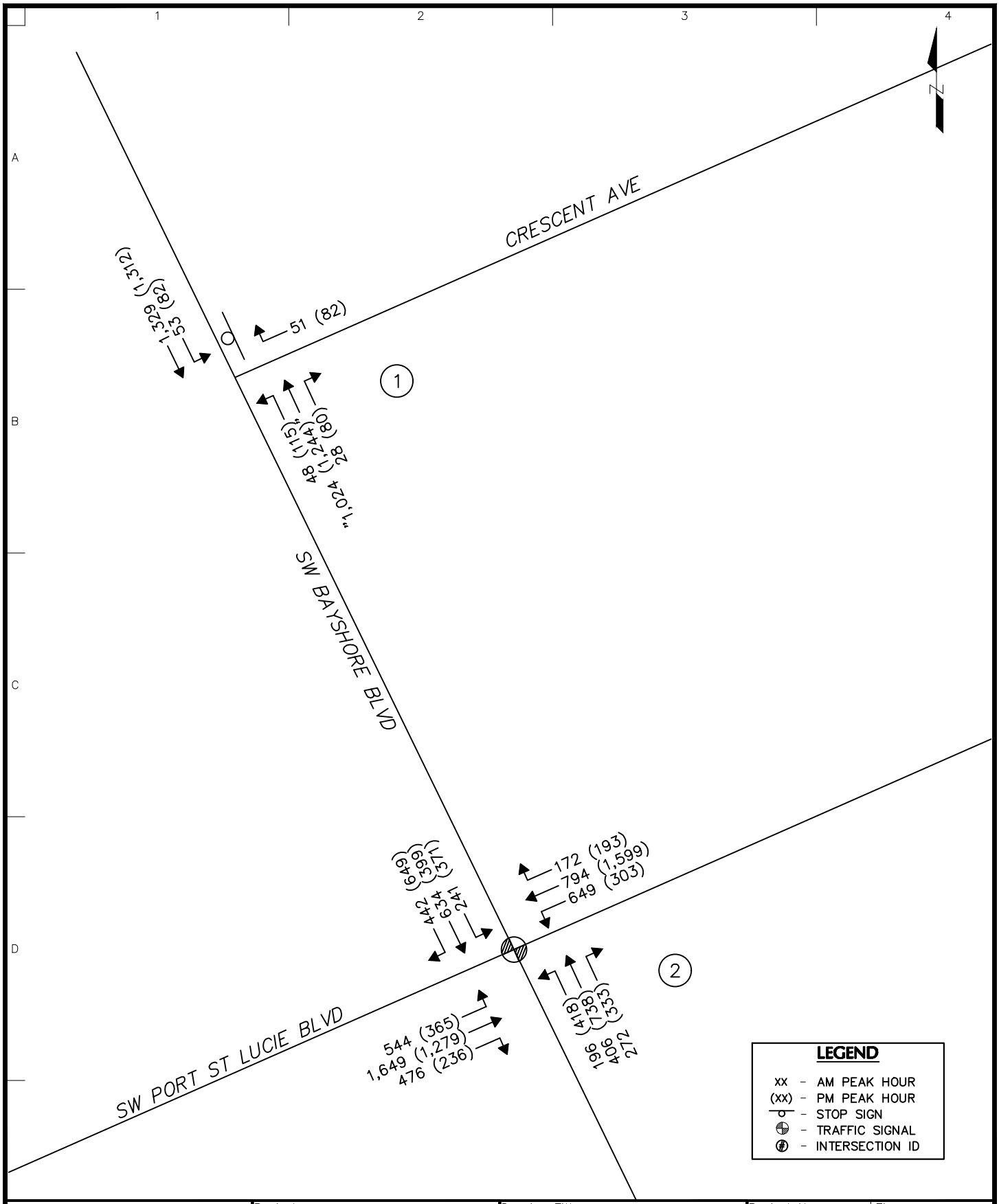

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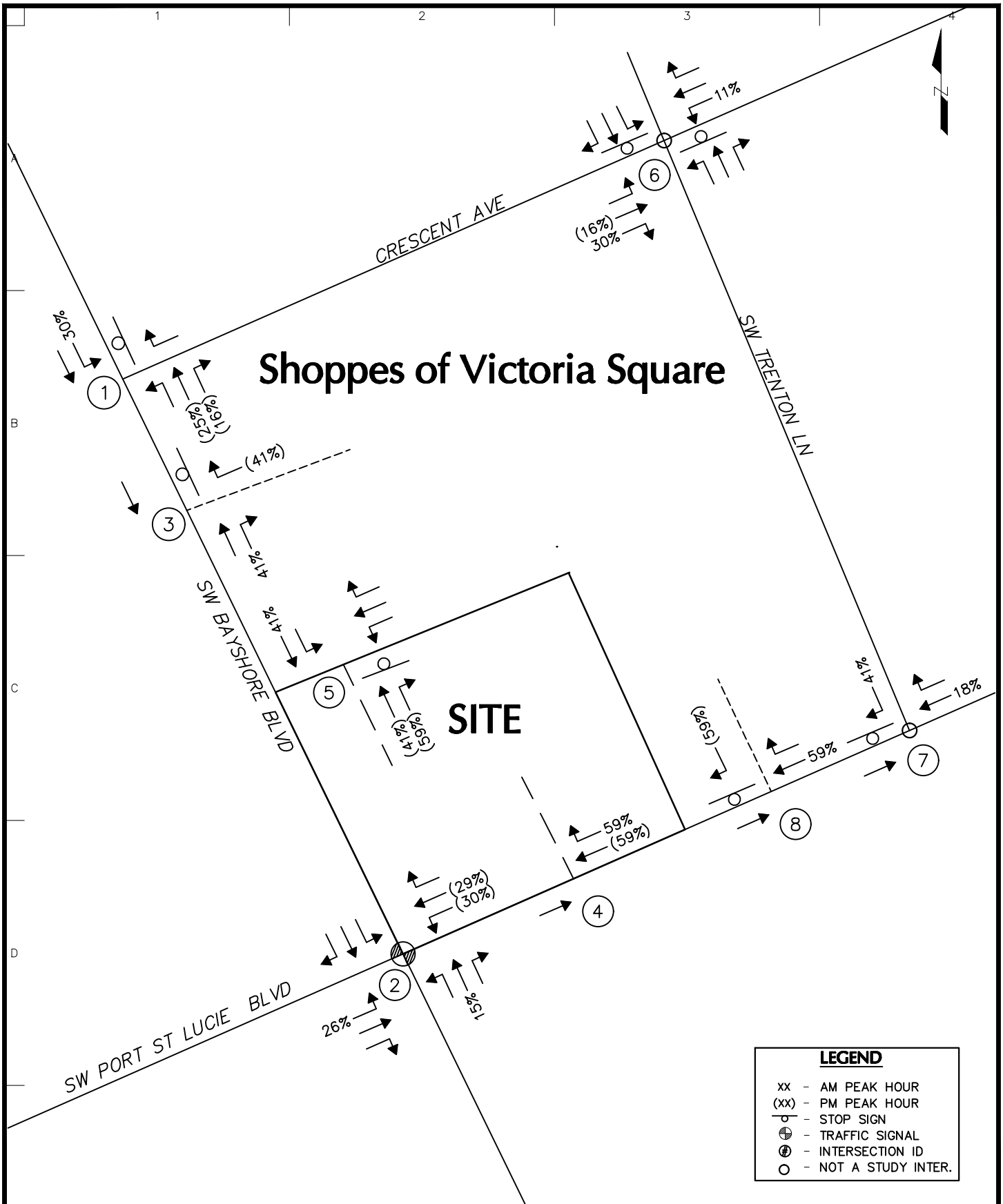

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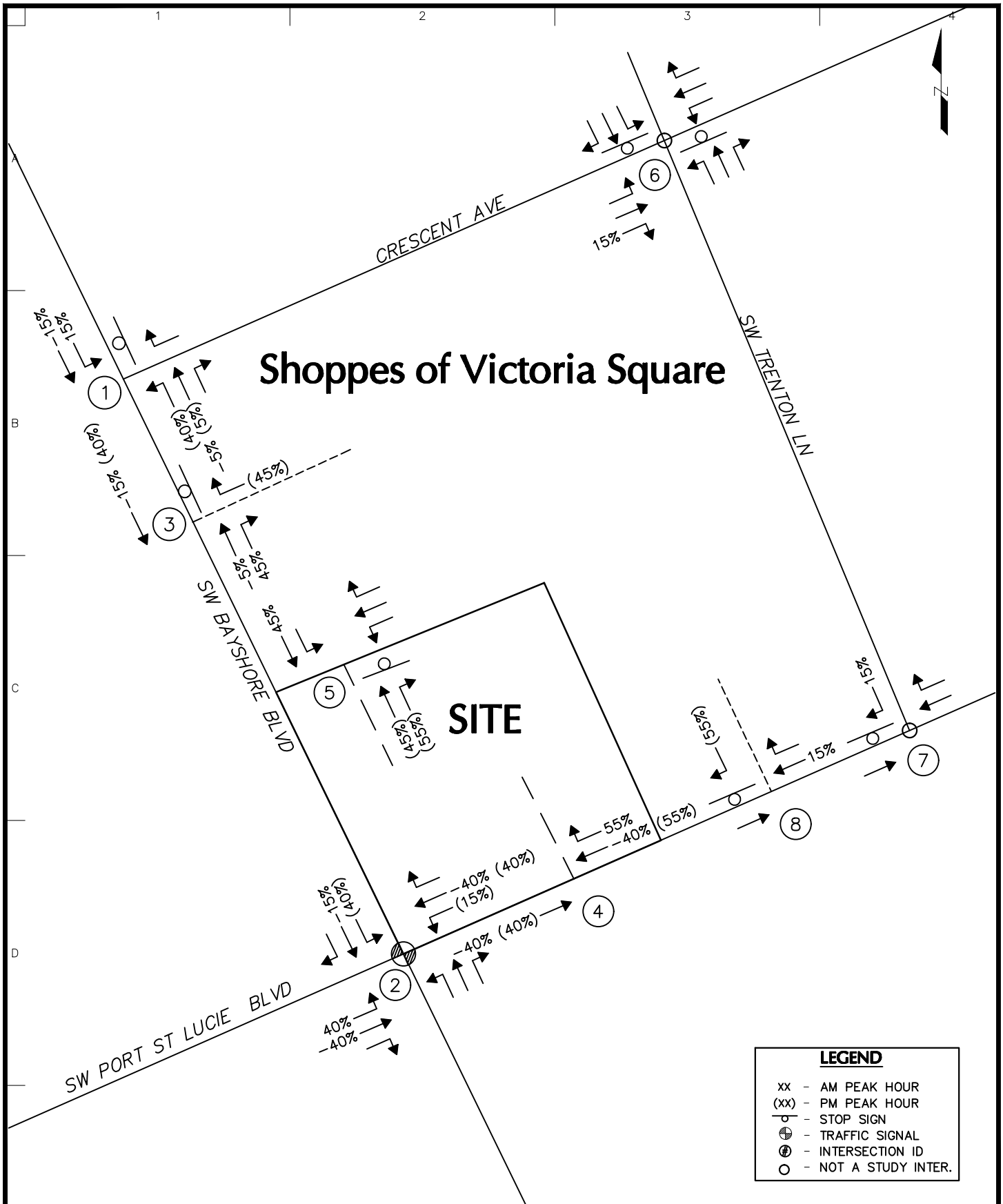

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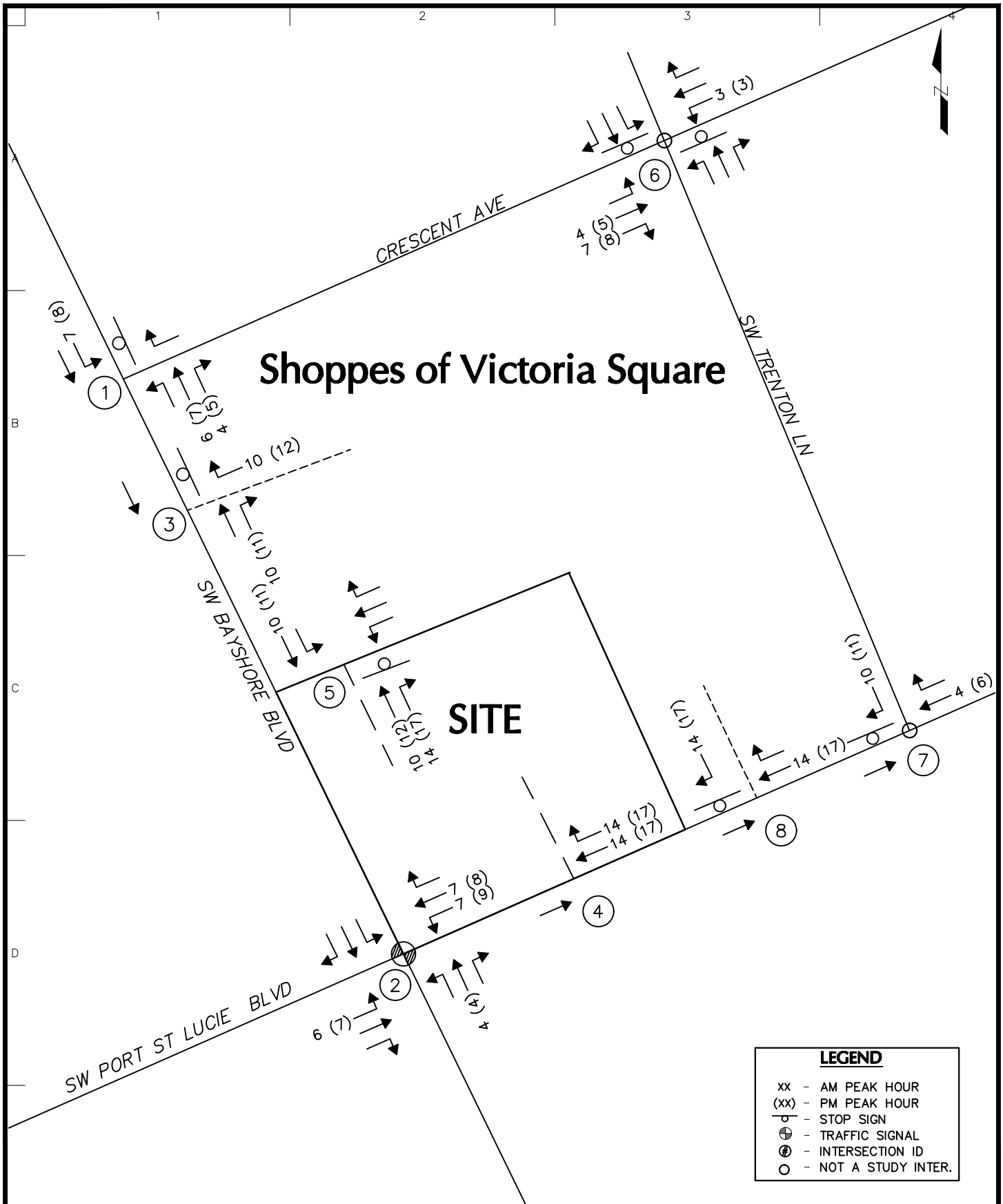

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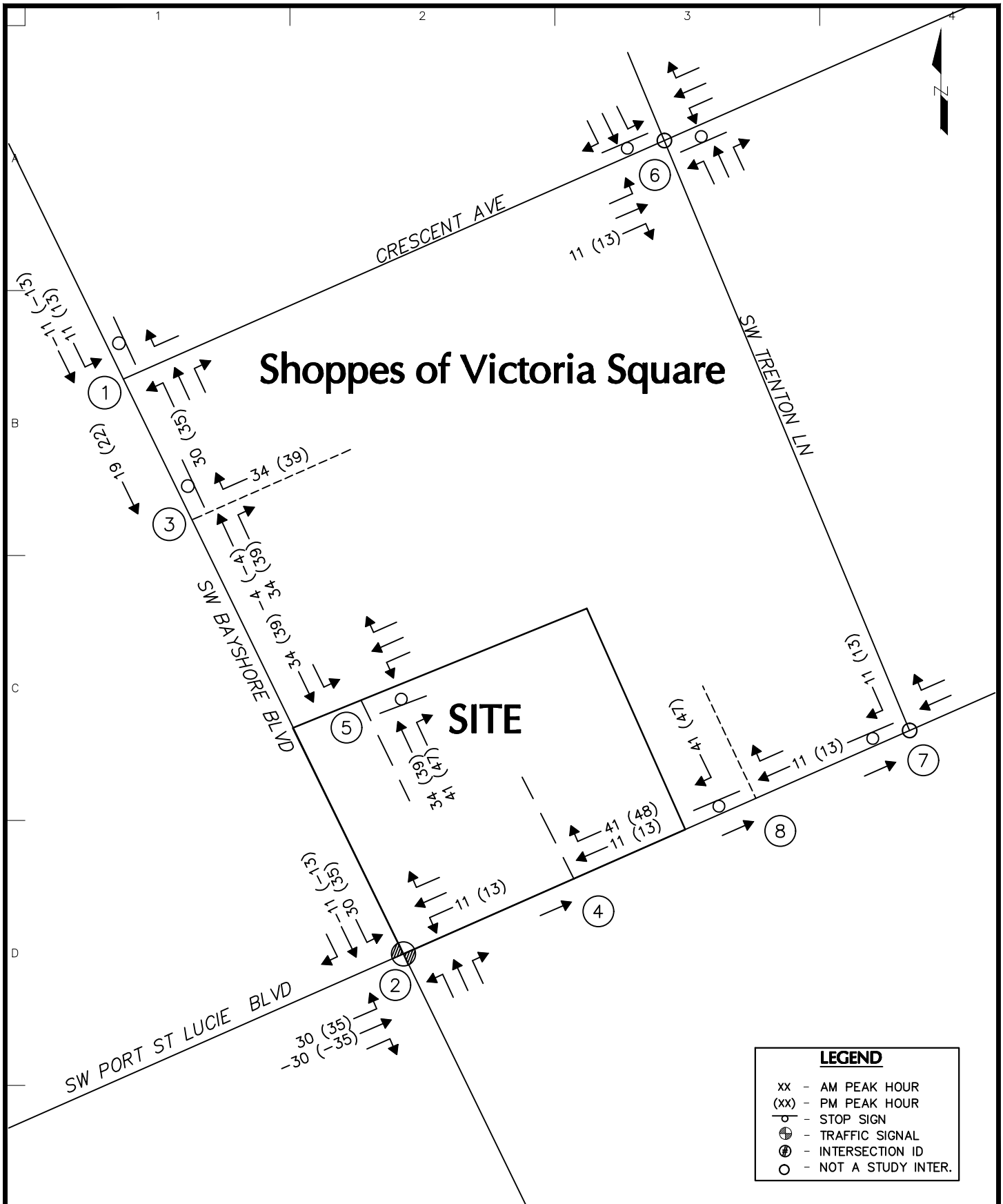

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Project	Drawing Title	Project No.	Figure
MURPHY OIL GAS STATION PORT SAINT LUCIE ST. LUCIE COUNTY FLORIDA	PASS-BY PROJECT TRAFFIC	341021601 Date: JULY 2025 Drawn By: RSM Checked By: JCG	6.1

Project No. 341021601

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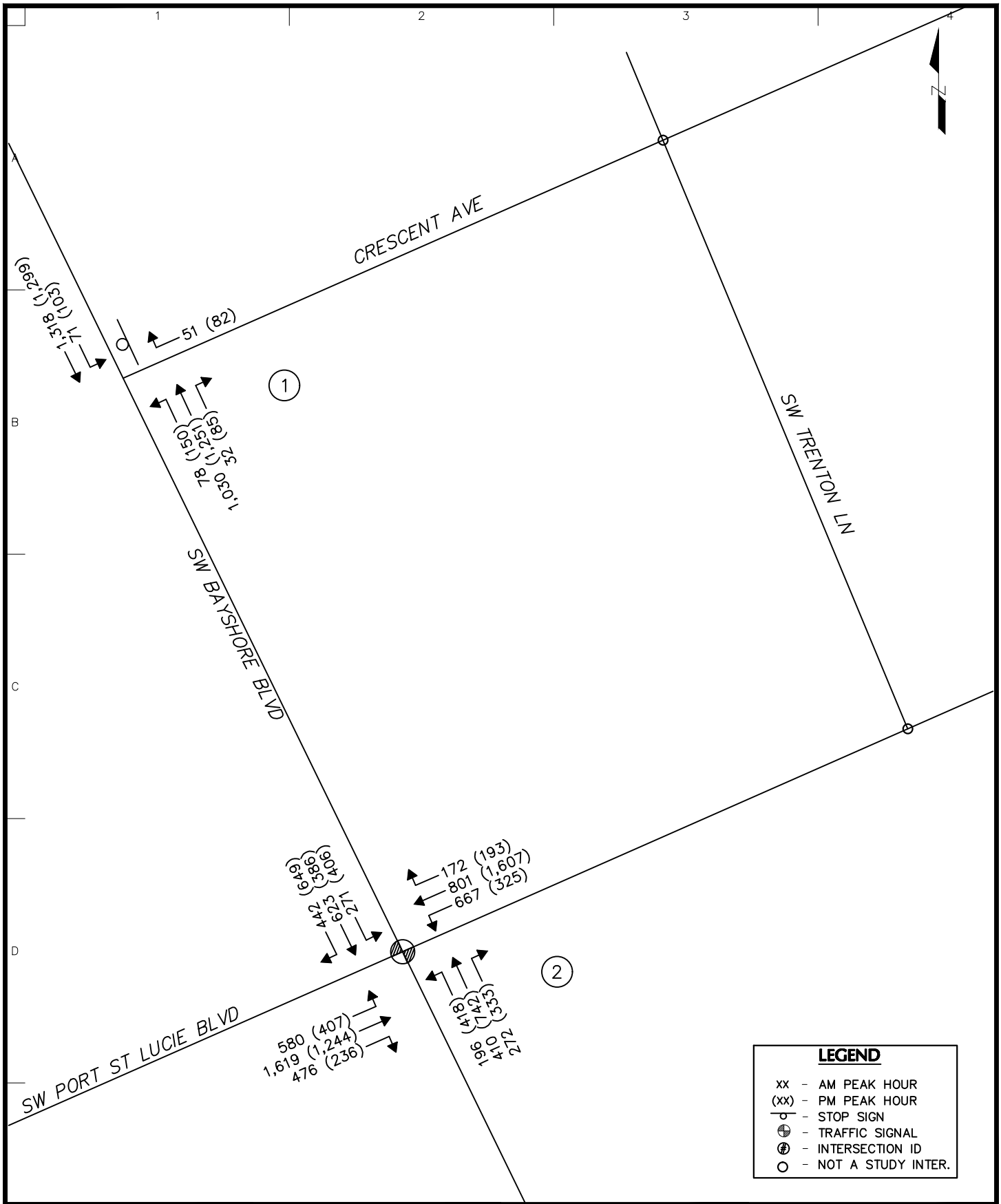

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Project	Drawing Title	Project No.	Figure
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		Date: JULY 2025	
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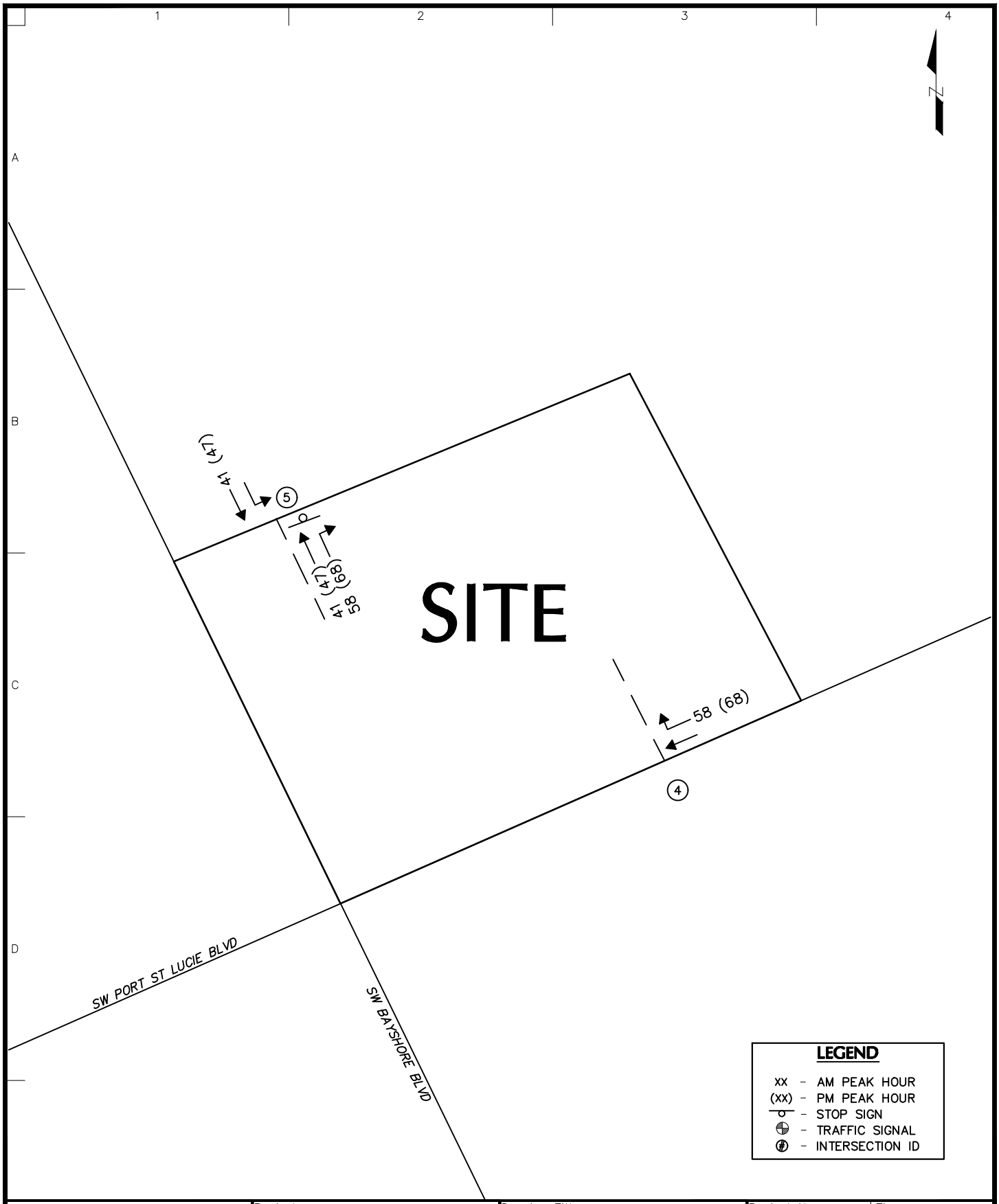

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LANGAN Langan Engineering and Environmental Services, LLC. 525 Okeechobee Boulevard, Suite 910 West Palm Beach, FL 33401 T: 561.473.8300 F: 561.473.8350 www.langan.com	Project MURPHY OIL GAS STATION PORT SAINT LUCIE ST. LUCIE COUNTY FLORIDA	Drawing Title DRIVEWAY VOLUMES	Project No. 341021601 Date JULY 2025 Drawn By RSM Checked By JCG	Figure 8

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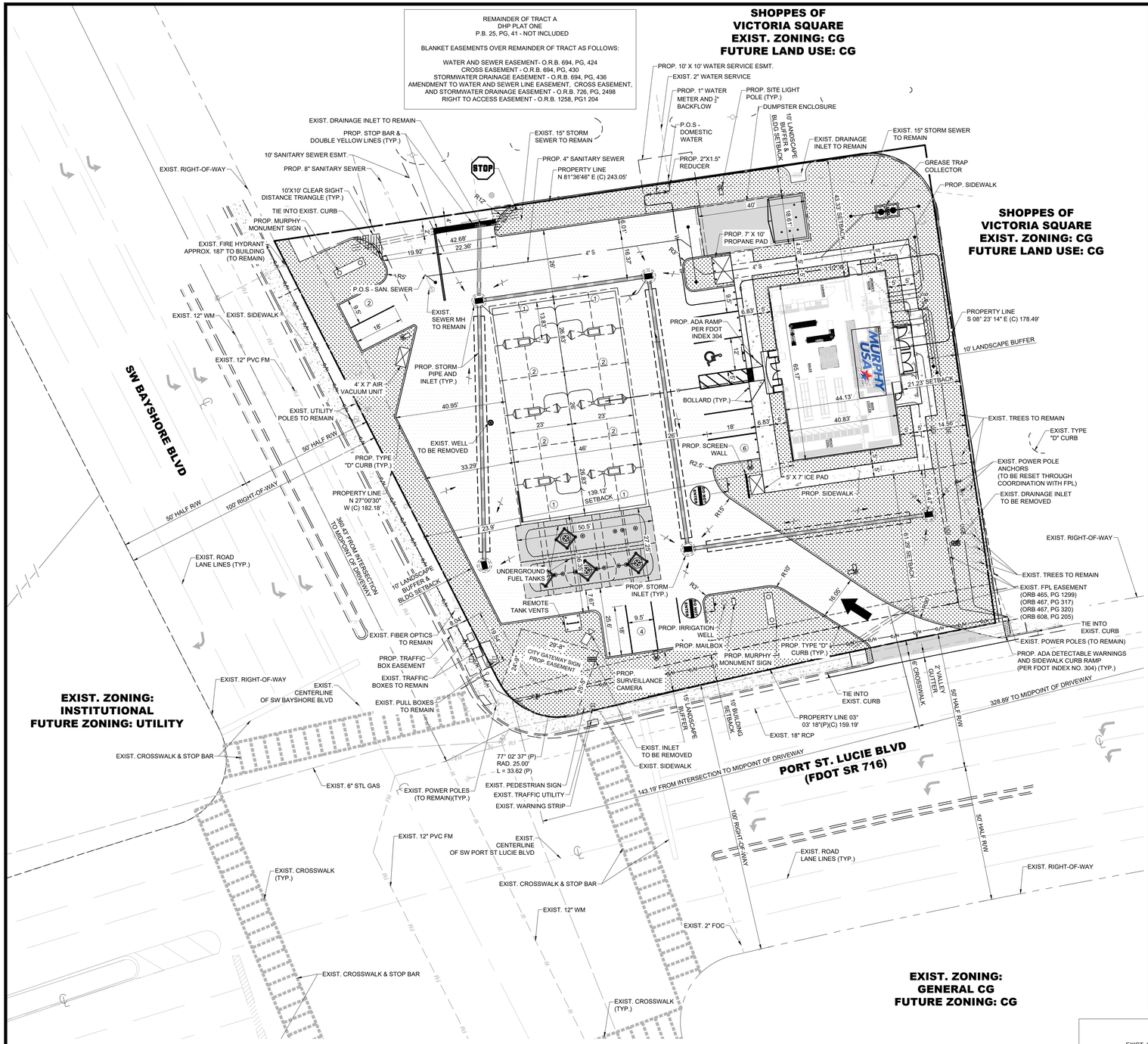
APPENDIX B
SITE PLAN

REMAINDER OF TRACT A
DHP PLAT ONE
P.B. 25, PG, 41 - NOT INCLUDED

BLANKET EASEMENTS OVER REMAINDER OF TRACT AS FOLLOWS:

WATER AND SEWER EASEMENT- O.R.B. 694, PG, 424
CROSS EASEMENT - O.R.B. 694, PG, 430
STORMWATER DRAINAGE EASEMENT - O.R.B. 694, PG, 436
AMENDMENT TO WATER AND SEWER LINE EASEMENT, CROSS EASEMENT, AND STORMWATER DRAINAGE EASEMENT - O.R.B. 726, PG, 2498
RIGHT TO ACCESS EASEMENT - O.R.B. 1258, PG1 204

SHOPPES OF VICTORIA SQUARE
EXIST. ZONING: CG
FUTURE LAND USE: CG



PERVIOUS AREA	TYPE	AREA (sf)	AREA (ac)	%
	GREEN	20,908.80	0.48	47.9%
			-	
	TOTAL	20,908.80	0.48	47.9%

IMPERVIOUS AREA	TYPE	AREA (sf)	AREA (ac)	%
	SIDEWALK	827.64	0.02	1.9%
	PAVEMENT	19,045.06	0.48	43.7%
	BUILDING	2,831.40	0.07	6.5%
			-	
	TOTAL	22,704.10	0.52	52.1%

PROJECT TEAM:

OWNER
SL PSL BLVD LP
5950 BERKSHIRE LN, STE 700
DALLAS, TX 75225

DEVELOPER
MURPHY OIL USA, INC.
200 PEACH STREET
EL DORADO, AR 71730

LANDSCAPE
COLLABORATIVE INDEPENDENT
2347 SW 5TH STREET
MIAMI, FL 33135

CIVIL ENGINEER/SURVEY
HSQ GROUP
7975 NW 154TH STREET SUITE 360
MIAMI LAKES, FLORIDA 33016

811 Know what's **below.** **Call** before you dig.

SCALE IN FEET 0' 20' 30' 40'

SITE DATA

LEGAL DESCRIPTION:
A REPLAT OF A PORTION OF TRACT "A", ACCORDING TO DHP PLAT ONE, AS RECORDED IN PLAT BOOK 25, PAGE 41 AND 41A, LYING IN SECTION 8, TOWNSHIP 37 SOUTH, RANGE 40 EAST, CITY OF PORT ST. LUCIE ST. LUCIE COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE A THE INTERSECTION OF THE CENTERLINE OF S.W. PORT ST. LUCIE BLVD. (100 FOOT RIGHT-OF-WAY) AND THE CENTERLINE OF SW BAYSHORE BLVD. (100 FOOT RIGHT-OF-WAY); THENCE N 26°54'12" W, ALONG THE CENTERLINE OF SAID S.W. BAYSHORE BLVD. (BASIS OF BEARINGS), A DISTANCE OF 60.32 FEET; THENCE N 63°05'08" E, A DISTANCE 50.00 FEET TO THE INTERSECTION WITH THE EAST RIGHT-OF-WAY LINE OF SAID S.W. BAYSHORE BLVD. AND THE POINT OF BEGINNING; THENCE N 26°54'12" W, ALONG SAID EAST RIGHT-OF-WAY LINE, A DISTANCE OF 182.18 FEET; THENCE N 81°42'24" E, A DISTANCE OF 243.05 FEET; THENCE S 08°17'36" E, A DISTANCE OF 178.10 FEET TO THE INTERSECTION WITH THE NORTH RIGHT-OF-WAY LINE OF SAID S.W. PORT ST. LUCIE BLVD., BEING A CURVE CONCAVE TO THE SOUTH HAVING A RADIUS OF 2985.60 FEET AND A CHORD BEARING OF S 77°34'50" W; THENCE WESTERLY ALONG SAID CURVE, THROUGH A CENTRAL ANGLE OF 03°03'17", A DISTANCE OF 159.19 FEET TOP THE POINT OF REVERSE CURVATURE, OF A CONCAVE TOP THE NORTHEAST, HAVING A RADIUS OF 25.00 FEET: THENCE NORTHWESTERLY ALONG SAID CURVE, THROUGH A CENTRAL ANGLE OF 77°02'37", A DISTANCE OF 33.62 FEET TO THE POINT OF BEGINNING.

BUILDING COVERAGE:
PROPOSED: 2,824 S.F

MAXIMUM ALLOWED: 40% PROVIDED THAT THE COMBINED AREA COVERAGE OF ALL IMPERVIOUS SURFACES SHALL NOT EXCEED 80%

PROJECT NOTES:

UTILITY PROVIDERS:
WATER & WASTEWATER: PSLUSD
IRRIGATION: N/A (PROPOSED)
SOLIDWASTE: WASTEPRO
ELECTRIC: FPL

STORM WATER DRAINAGE:
THE SURFACE WATER MANAGEMENT SYSTEM FOR THE PROPOSED DEVELOPMENT WILL COLLECT SITE RUNOFF THROUGH THE USE OF CATCH BASINS INTERCONNECTED BY PIPES WITH EXFILTRATION TRENCH THAT ULTIMATELY CONNECT TO THE MASTER DRAINAGE SYSTEM AT THE NEIGHBORING PLAZA.

WATER:
CONNECTION TO EXISTING WATER MAIN WILL BE UTILIZED TO SERVE THE PROPOSED BUILDING.

SEWER:
CONNECTION TO EXISTING GRAVITY SEWER WILL BE UTILIZED TO SERVE THE PROPOSED BUILDING.

FIRE PROTECTION:
EXISTING FIRE HYDRANT ASSEMBLY SHOWN ON THE PLAN VIEW. EXISTING FIRE HYDRANT IS APPROXIMATELY 187' TO THE CLOSEST POINT OF THE PROPOSED BUILDING.

HAZARDOUS WASTE:
ALL HAZARDOUS WASTE DISPOSAL SHALL COMPLY WITH ALL FEDERAL, STATE, AND LOCAL REGULATIONS.

SOLID WASTE:
BASED ON THE INTENDED USE OF THE BUILDING, THIS PROJECT WILL USE THE PROPOSED DUMPSTER AREA FOR SOLID WASTE AND RECYCLABLE ITEMS.

LANDSCAPE:
PROPOSED LANDSCAPE PLANS TO ADHERE WITH CITY OF PORT ST. LUCIE LAND DEVELOPMENT CODE.

ENVIRONMENTAL:
AN ENVIRONMENTAL ASSESSMENT WILL BE PROVIDED DURING CONSTRUCTION PLAN SUBMITTAL.

ACCESSIBILITY AND ADA COMPLIANCE:
ALL SIDEWALKS AND RAMPS TO ADHERE WITH FDOT AND ADA REQUIREMENTS.

A/C UNITS:
ALL A/C UNITS TO BE LOCATED ON THE ROOF.

SIGNAGE:
SIGNAGE TO BE APPROVED UNDER SEPARATE REVIEW PROCESS.

TRAFFIC STATEMENT:
THE ITE TRIP GENERATION MANUAL, 11TH EDITION, LAND USE CODE 945 (CONVENIENCE STORE/GAS STATION) WAS USED TO DETERMINE THE EXPECTED GROSS DAILY AND PEAK HOUR TRIPS FOR THE PROPOSED DEVELOPMENT.

Designation	Land Use	ITE Code	Size	Units	Daily Trips	AM Peak Trips	PM Peak Trips
Existing	Convenience Store w/ Gas Station (2-4k GFA)	945	8	FP	2,121	132	153
	Existing Total				2,121	132	153
Proposed	Convenience Store w/ Gas Station (2-4k GFA)	945	12	FP	3,181	198	230
	Proposed Total				3,181	198	230
	Net New Trips				1,060	66	77

WELLFIELD PROTECTION ORDINANCE:
THE PARCEL IS NOT LOCATED WITHIN A FLORIDA WELLFIELD PROTECTION ZONE.

NEAREST FIRE HYDRANT LOCATIONS:
EXISTING FIRE HYDRANTS ARE SHOWN ON THE PLAN VIEW.

MAINTENANCE NOTE:
THE PROPERTY OWNER, CONTRACTOR, AND AUTHORIZED REPRESENTATIVES SHALL PROVIDE PICKUP, REMOVAL, AND DISPOSAL OF LITTER WITHIN THE PROJECT LIMITS SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE AREA FROM THE EDGE OF PAVEMENT TO THE PROPERTY LINE WITHIN THE CITY'S RIGHT-OF-WAY IN ACCORDANCE WITH THE ITY CODE, SECTION 41.08 (g).

GENERAL SITE NOTES

A. ALL DIMENSIONS SHOWN ARE TO THE FACE OF CURB UNLESS OTHERWISE NOTED.

B. ALL CURB RETURN RADII SHALL BE 3', AS SHOWN TYPICAL ON THIS PLAN, UNLESS OTHERWISE NOTED.

C. UNLESS OTHERWISE SHOWN, CALLED OUT OR SPECIFIED HEREON:
ALL CURB AND GUTTER ADJACENT TO PAVING SHALL BE INSTALLED PER DETAIL.

PAVEMENT SHALL BE INSTALLED IN ACCORDANCE WITH THE PAVING PLAN OVER THE ENTIRE PARKING LOT AREA AND ALL APPROACH DRIVES.

SEE ASSOCIATED PLANS FOR CANOPY, COLUMN, DISPENSER ISLAND DETAILS AND LAYOUT.

D. ALL PROPOSED PAVEMENT STRIPING OR MARKINGS SHALL FOLLOW THE SPECIFICATIONS FOR PAINT INCLUDED IN DETAIL 10A.

STATEMENT OF INTENT:
THE OWNER PROPOSES TO CONSTRUCT A NEW 2,824 S.F MURPHY EXPRESS CONVENIENCE STORE WITH THE REQUIRED SITE SUPPORT ELEMENTS TO SERVE IT.

OVERALL SITE ADDRESS: 299 SW PORT ST. LUCIE BLVD, PORT ST. LUCIE, FLORIDA 34984

TOWNSHIP: SEC. 8, TOWNSHIP 37 S, RANGE 40 E

FOLIO: 4408-511-0001-000-0

TOTAL SITE AREA: 38,969 S.F. (0.895 ACRES)

EXISTING ZONING: CG (GENERAL COMMERCIAL)

EXISTING LAND USE: VACANT LAND – GENERAL COMMERCIAL

PROPOSED USE: CONVENIENCE STORE WITH GAS SALES

REQUIRED BUILDING HEIGHT:
THE FACADE OF THE BUILDING FACING AN ARTERIAL OR COLLECTOR ROAD OR AN INTERSTATE HIGHWAY SHALL HAVE A MINIMUM BUILDING WALL HEIGHT OF 22 FEET, EXCLUSIVE OF SLOPED ROOF HEIGHT, FOR AT LEAST 60% OF THE LENGTH OF THE BUILDING. 35 FEET MAX. HEIGHT.

PROPOSED BUILDING HEIGHT: TOP OF BUILDING: 22'-0"
TOP OF TOWER ROOF: 28'-6"

NUMBER OF STORIES: 1

CONVENIENCE STORE AREA: 2,824 S.F. CANOPY AREA: 3,920 S.F.

TOTAL BUILDING AREA: 2,824 S.F.

BUILDING SETBACKS	REQUIRED	PROVIDED
NORTH:	10'	43'
EAST:	10'	21'
SOUTH:	10'	71'
WEST:	25'	131'

	ZONING	LAND USE
NORTH:	CG	COMMERCIAL
EAST:	CG	COMMERCIAL
SOUTH:	CG	ROW
WEST:	I	ROW

PROVIDED FLOOR AREA RATIO: 6,396 S.F.

REQUIRED FLOOR AREA RATIO: N/A

EXISTING
- S — SANITARY SEWER LINE
- W — WATER LINE
- UGE — UNDERGROUND ELECTRIC LINE
- UGT — UNDERGROUND TELEPHONE LINE
- OHE,TV,T — OVERHEAD ELECTRIC, TELEVISION,TELEPHONE
- SEWER MANHOLE
- WATER METER
- FIRE HYDRANT
- UTILITY POLE

PROPOSED
- BOUNDARY LINE
- CONCRETE CURB AND GUTTER
- FPL EASEMENT
- BUILDING SETBACK LINE AND LANDSCAPE BUFFER
- CONCRETE SIDEWALK
- LANDSCAPE
- PAVERS
- HEAVY DUTY CONCRETE 8"
- STAND DUTY CONCRETE 5"

PARKING INFORMATION:

DESCRIPTION	BUILDING AREA (S.F)					
FUELING STATION	2,824	REQUIRED:				
		RATIO	SPACES			
		1/200 S.F.	REGULAR	UNDER CANOPY	ACCESSIBLE	TOTAL
			15		1	16
		PROVIDED:				
			SPACES			
		1/91 S.F.	REGULAR	UNDER CANOPY	ACCESSIBLE	TOTAL
			11	12	1	24

NO. OF FUEL ISLANDS: 6
NO. OF VEHICLE FUELING POINTS: 12

ENVIRONMENTAL ASSESSMENT NOTE:
UNITED CONSULTING RECOMMENDS THE PRODUCTION OF A SOIL AND GROUNDWATER MANAGEMENT PLAN (SGMP) PER THE LIMITED PHASE II ENVIRONMENTAL ASSESSMENT DATED JUNE 26, 2024

VICINITY MAP

PSLUSD Project # 11-074-0001
City Project Site Plan #: P24-164
City Project Special Exception Use #: P24-164

SHEET NO. CSP-1

AREF SHEHADEH LICENSE No 92128 STATE OF FLORIDA PROFESSIONAL ENGINEER
DATE: 2\25\25
AREF SHEHADEH, P.E.
FLORIDA REGISTRATION NO. 92128

REV-2	2/25/2025	---	---	---	---
DATE	PRN	PM	DES	DRW	

SITE PLAN
MURPHY USA
PORT ST LUCIE BLVD & BAYSHORE BLVD
PORT ST. LUCIE FLORIDA

HSQ GROUP
Engineers · Planners · Surveyors
7975 NW 154th Street, Suite 360
Miami Lakes, Florida 33016
(786.534.7360
Contact: Aref Shehadeh, P.E.

MURPHY OIL USA, INC.
200 PEACH STREET
EL DORADO, AR 71730

Know what's **below.**
Call before you dig.

0' 20' 30' 40'
SCALE IN FEET

REMAINDER OF TRACT A
DHP PLAT ONE
P.B. 25, PG, 41 - NOT INCLUDED

BLANKET EASEMENTS OVER REMAINDER OF TRACT AS FOLLOWS:

WATER AND SEWER EASEMENT- O.R.B. 694, PG, 424
CROSS EASEMENT - O.R.B. 694, PG, 430
STORMWATER DRAINAGE EASEMENT - O.R.B. 694, PG, 436
AMENDMENT TO WATER AND SEWER LINE EASEMENT, CROSS EASEMENT, AND STORMWATER DRAINAGE EASEMENT - O.R.B. 726, PG, 2498
RIGHT TO ACCESS EASEMENT - O.R.B. 1258, PG1 204

SHOPPES OF VICTORIA SQUARE
EXIST. ZONING: CG
FUTURE LAND USE: CG

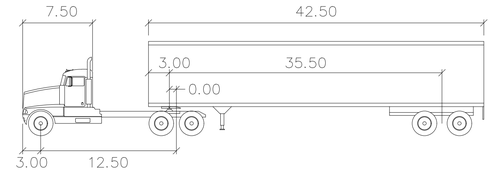
SHOPPES OF VICTORIA SQUARE
EXIST. ZONING: CG
FUTURE LAND USE: CG

EXIST. ZONING:
INSTITUTIONAL
FUTURE ZONING: UTILITY

SW BAYSHORE BLVD

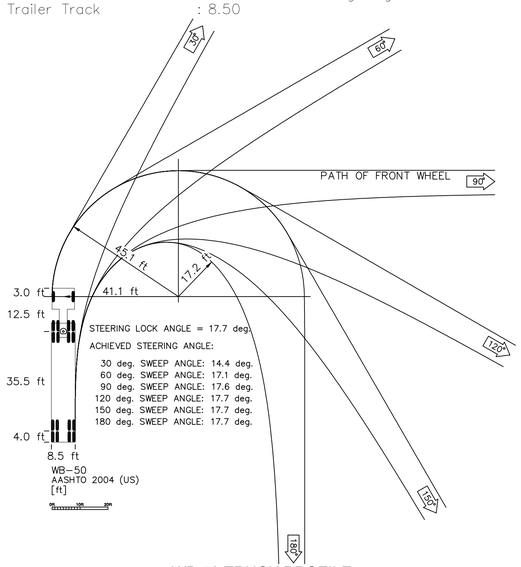
PORT ST. LUCIE BLVD
(FDOT SR 716)

WB-50
AASHTO 2004 (US)



WB–50

	feet		
Tractor Width	: 8.00	Lock to Lock Time	: 6.0
Trailer Width	: 8.50	Steering Angle	: 17.7
Tractor Track	: 8.00	Articulating Angle	: 70.0
Trailer Track	: 8.50		



WB 50 TRUCK PROFILE
(DO NOT SHOW UNLESS REQUIRED BY PERMITTING AGENCY)

PSLUSD Project # 11–074–0001
City Project Site Plan #: P24–164
City Project Special Exception Use #: P24–164

SHEET NO. C-08

AREF SHEHADEH LICENSE No 92128 STATE OF FLORIDA PROFESSIONAL ENGINEER

DATE: 2\25\25
AREF SHEHADEH, P.E.
FLORIDA REGISTRATION NO. 92128

REV	DATE	PRN	PM	DES	DRW
–2	2/25/2025	---	---	---	---

FUEL TRUCK ROUTE PLAN
MURPHY USA
PORT ST LUCIE BLVD & BAYSHORE BLVD
PORT ST. LUCIE FLORIDA

HSQ GROUP
Engineers · Planners · Surveyors
7975 NW 154th Street, Suite 360
Miami Lakes, Florida 33016 · 786.534.7361
Contact: Aref Shehadeh, P.E.

MURPHY OIL USA, INC.
MURPHY USA
200 PEACH STREET
EL DORADO, AR 71730

Know what's **below.**
Call before you dig.

0' 20' 30' 40'
SCALE IN FEET

REMAINDER OF TRACT A
DHP PLAT ONE
P.B. 25, PG, 41 - NOT INCLUDED

BLANKET EASEMENTS OVER REMAINDER OF TRACT AS FOLLOWS:

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CROSS EASEMENT - O.R.B. 694, PG, 430
STORMWATER DRAINAGE EASEMENT - O.R.B. 694, PG, 436
AMENDMENT TO WATER AND SEWER LINE EASEMENT, CROSS EASEMENT, AND STORMWATER DRAINAGE EASEMENT - O.R.B. 726, PG, 2498
RIGHT TO ACCESS EASEMENT - O.R.B. 1258, PG1 204

SHOPPES OF VICTORIA SQUARE
EXIST. ZONING: CG
FUTURE LAND USE: CG

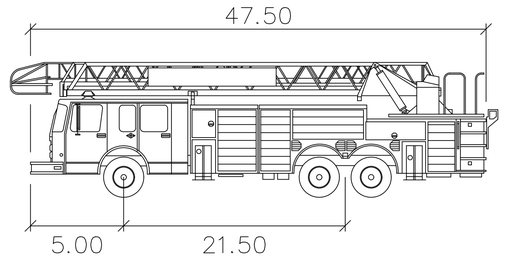
SHOPPES OF VICTORIA SQUARE
EXIST. ZONING: CG
FUTURE LAND USE: CG

EXIST. ZONING: INSTITUTIONAL
FUTURE ZONING: UTILITY

SW BAYSHORE BLVD

PORT ST. LUCIE BLVD (FDOT SR 716)

City of PSL Custom



City of PSL

	feet
Width	: 10.50
Track	: 10.50
Lock to Lock Time	: 6.0
Steering Angle	: 41.5

PSLUSD Project # 11-074-0001
City Project Site Plan #: P24-164
City Project Special Exception Use #: P24-164

SHEET NO. C-08.1

ARE SHEHADEH LICENSE No 92128 STATE OF FLORIDA PROFESSIONAL ENGINEER

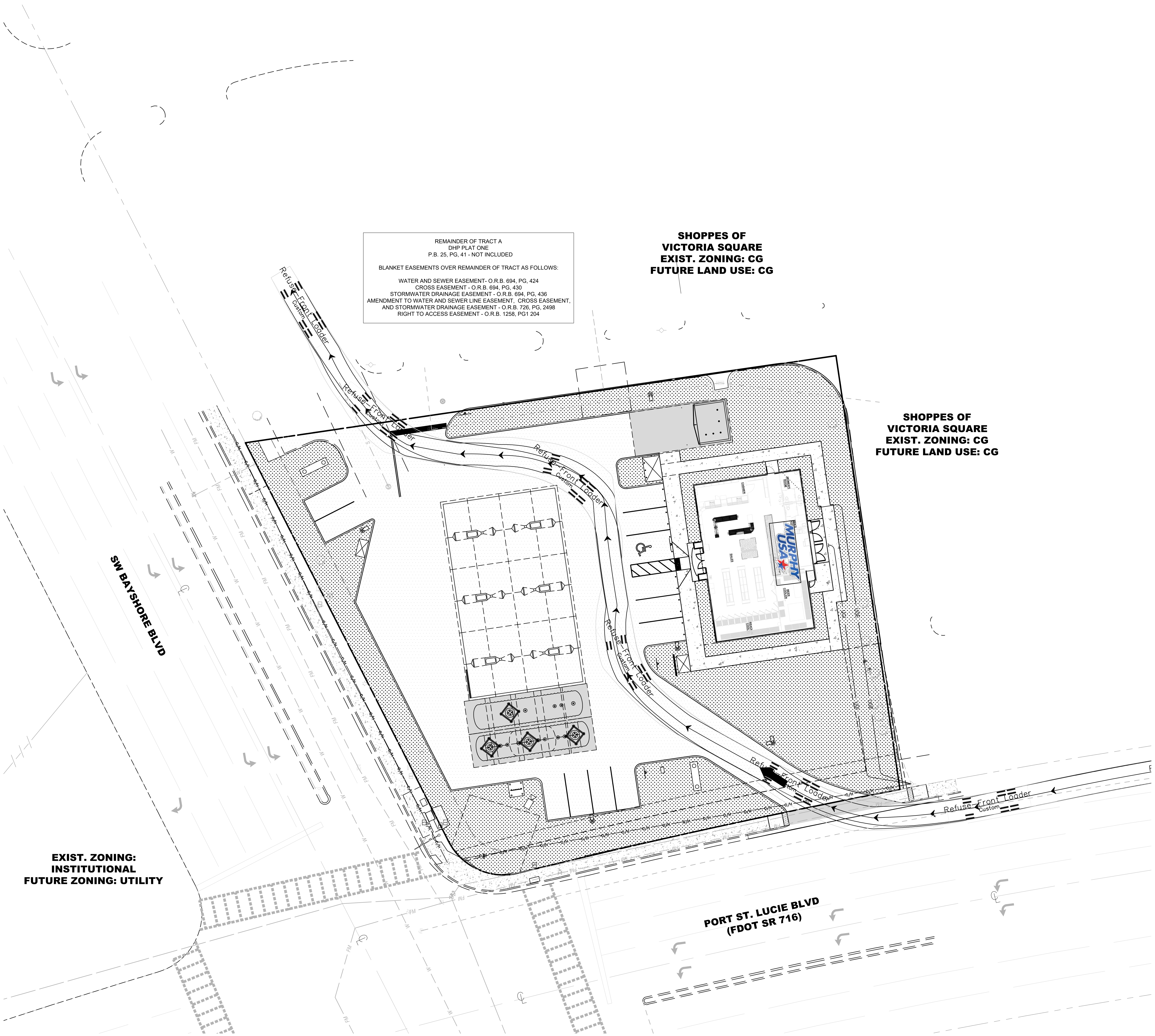
DATE: 2\25\25
AREF SHEHADEH, P.E.
FLORIDA REGISTRATION NO. 92128

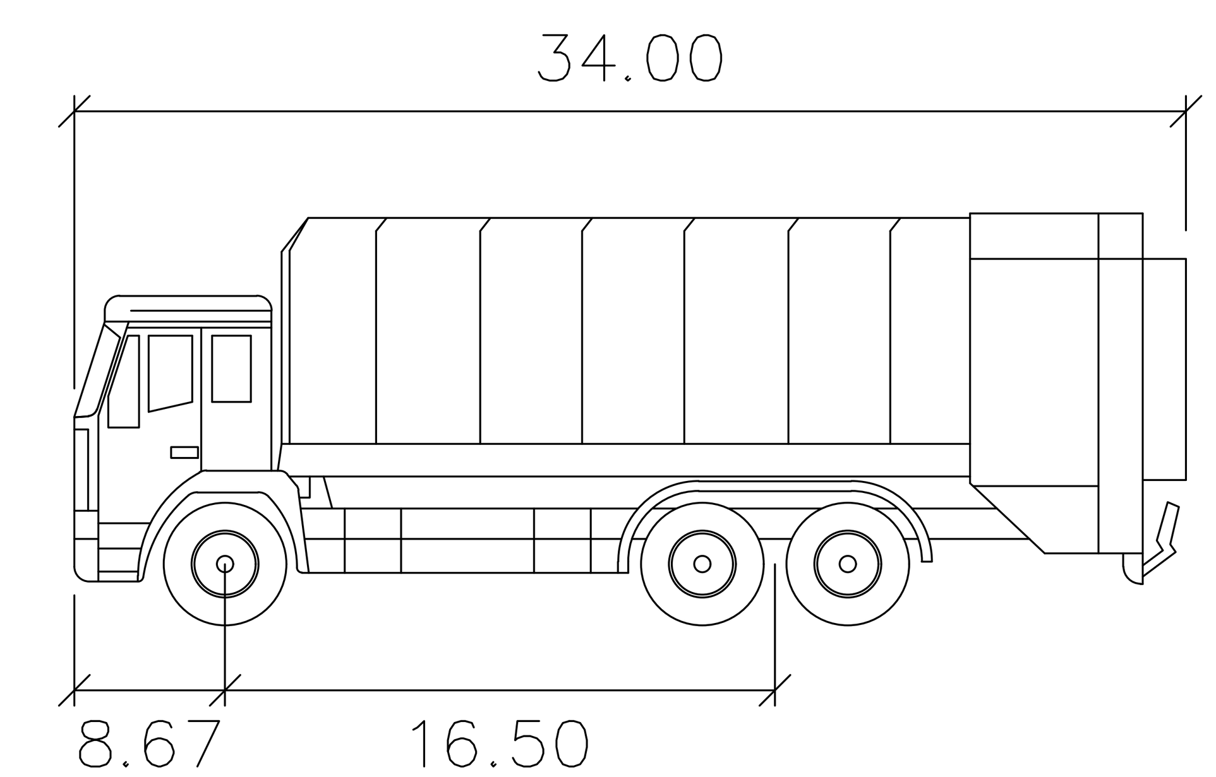
REV-2	2/25/2025	---	---	---	---
	DATE	PRN	PM	DES	DRW

FIRE TRUCK ROUTE PLAN
MURPHY USA
PORT ST LUCIE BLVD & BAYSHORE BLVD
PORT ST. LUCIE FLORIDA

HSQ GROUP
Engineers · Planners · Surveyors
7975 NW 154th Street, Suite 360
Miami Lakes, Florida 33016 786.534.7361
CA#28 LB#7709
Contact: Aref Shehadeh, P.E.

MURPHY OIL USA, INC.
MURPHY USA
200 PEACH STREET
EL DORADO, AR 71730





Refuse–Front Loader

	feet
Width	: 9.00
Track	: 9.00
Lock to Lock Time	: 6.0
Steering Angle	: 29.0

811 Know what's below. Call before you dig.

0' 20' 30' 40' SCALE IN FEET

SHEET NO. C-08.2

AREF SHEHADEH LICENSE No 92128 STATE OF FLORIDA PROFESSIONAL ENGINEER

DATE: 2\25\25
AREF SHEHADEH, P.E.
FLORIDA REGISTRATION NO. 92128

REV	DATE	PRN	PM	DES	DRW
REV-2	2/25/2025	---	---	---	---

TRASH TRUCK ROUTE PLAN

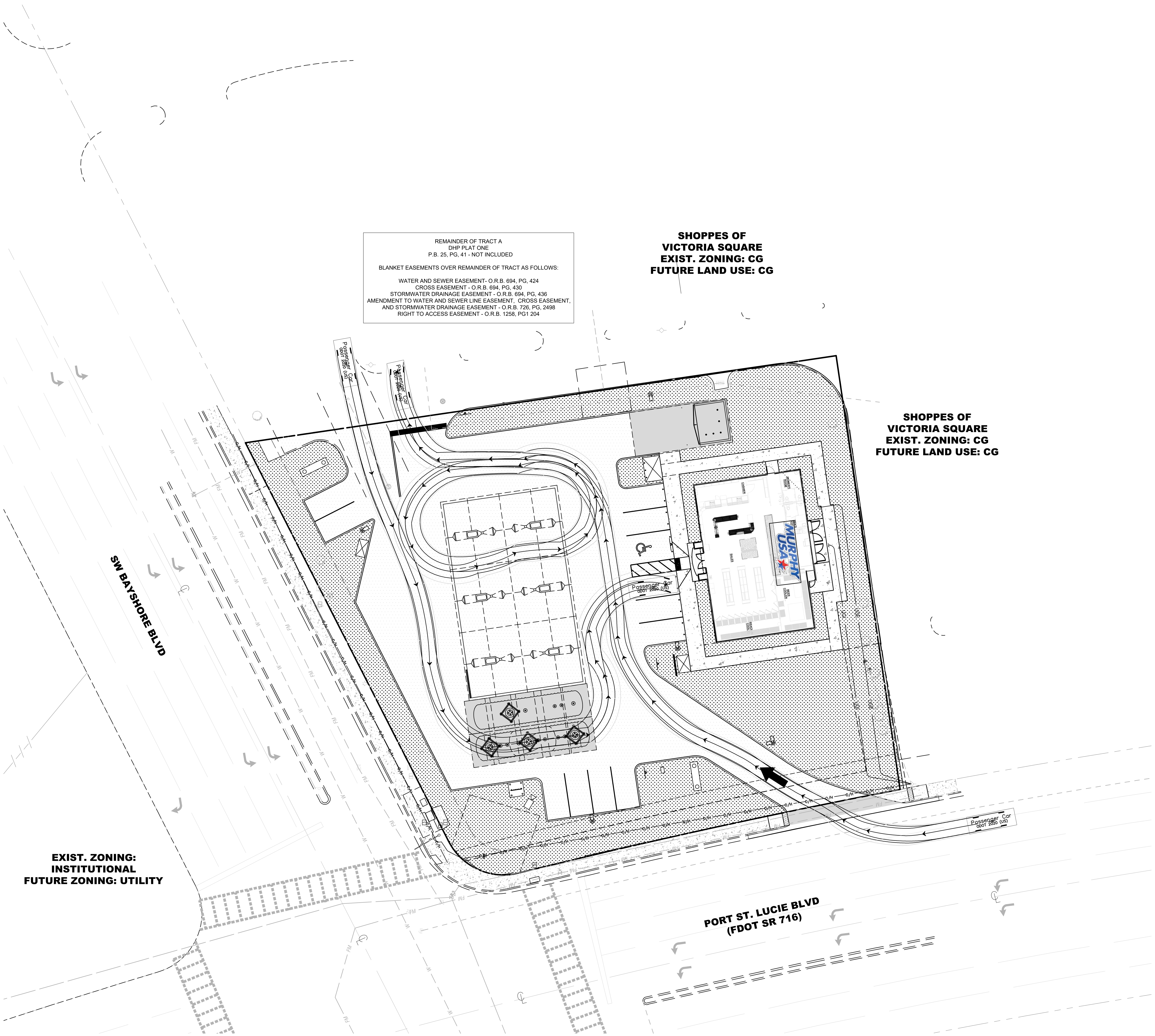
MURPHY USA
PORT ST LUCIE BLVD & BAYSHORE BLVD
PORT ST. LUCIE FLORIDA

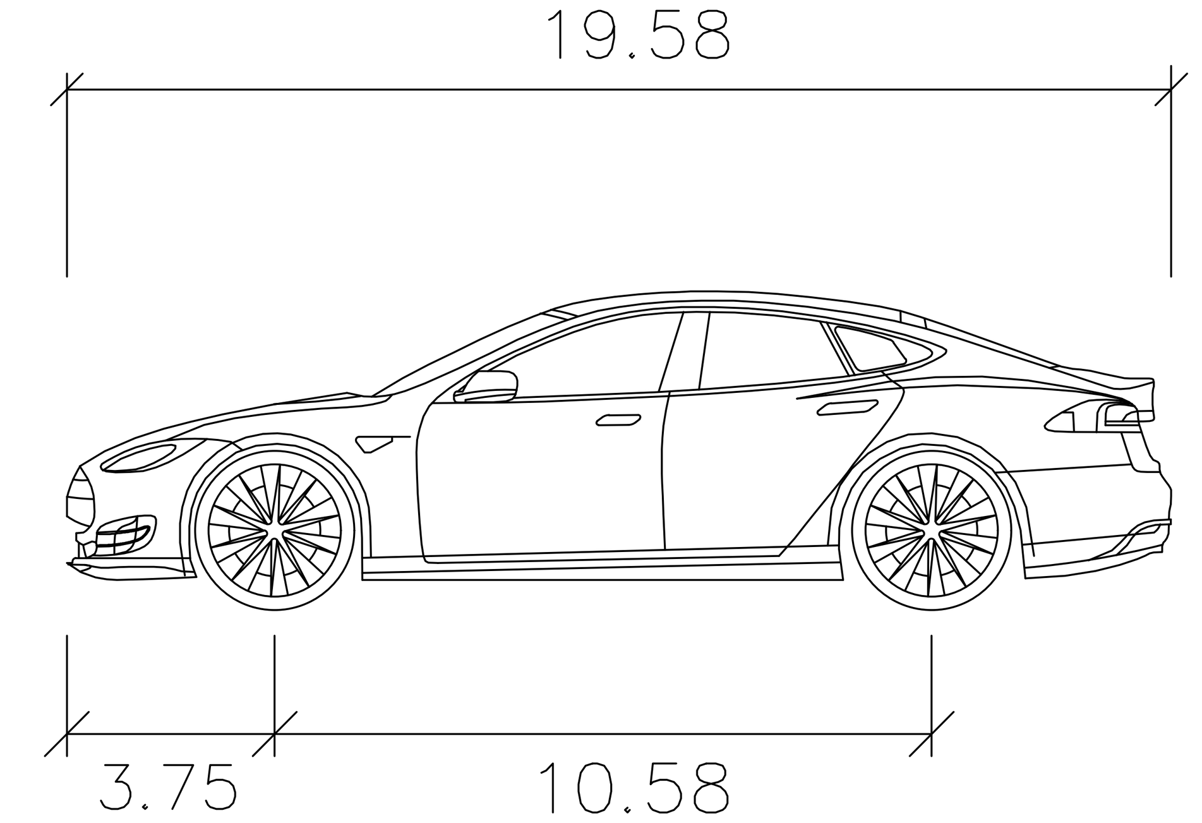
HSQ GROUP
Engineers · Planners · Surveyors
7975 NW 154th Street, Suite 360
Miami Lakes, Florida 33016 786.534.7361
C26258 · LB7924
Contact: Aref Shehadeh, P.E.

MURPHY OIL USA, INC.
200 PEACH STREET
EL DORADO, AR 71730

MURPHY USA

PSLUSD Project # 11-074-0001
City Project Site Plan #: P24-164
City Project Special Exception Use #: P24-164





Passenger Car

	feet
Width	: 7.00
Track	: 6.00
Lock to Lock Time	: 6.0
Steering Angle	: 31.6

811 Know what's below. Call before you dig.

N

0' 20' 30' 40'
SCALE IN FEET

PSLUSD Project # 11-074-0001
City Project Site Plan #: P24-164
City Project Special Exception Use #: P24-164

MURPHY OIL USA, INC.
MURPHY USA
200 PEACH STREET
EL DORADO, AR 71730

HSQ GROUP
Engineers · Planners · Surveyors
7975 NW 154th Street, Suite 360
Miami Lakes, Florida 33016 · 786.534.7361
C26258 · LB7924
Contact: Aref Shehadeh, P.E.

REV-2	2/25/2025	---	---	---	---
	DATE	PRN	PM	DES	DRW

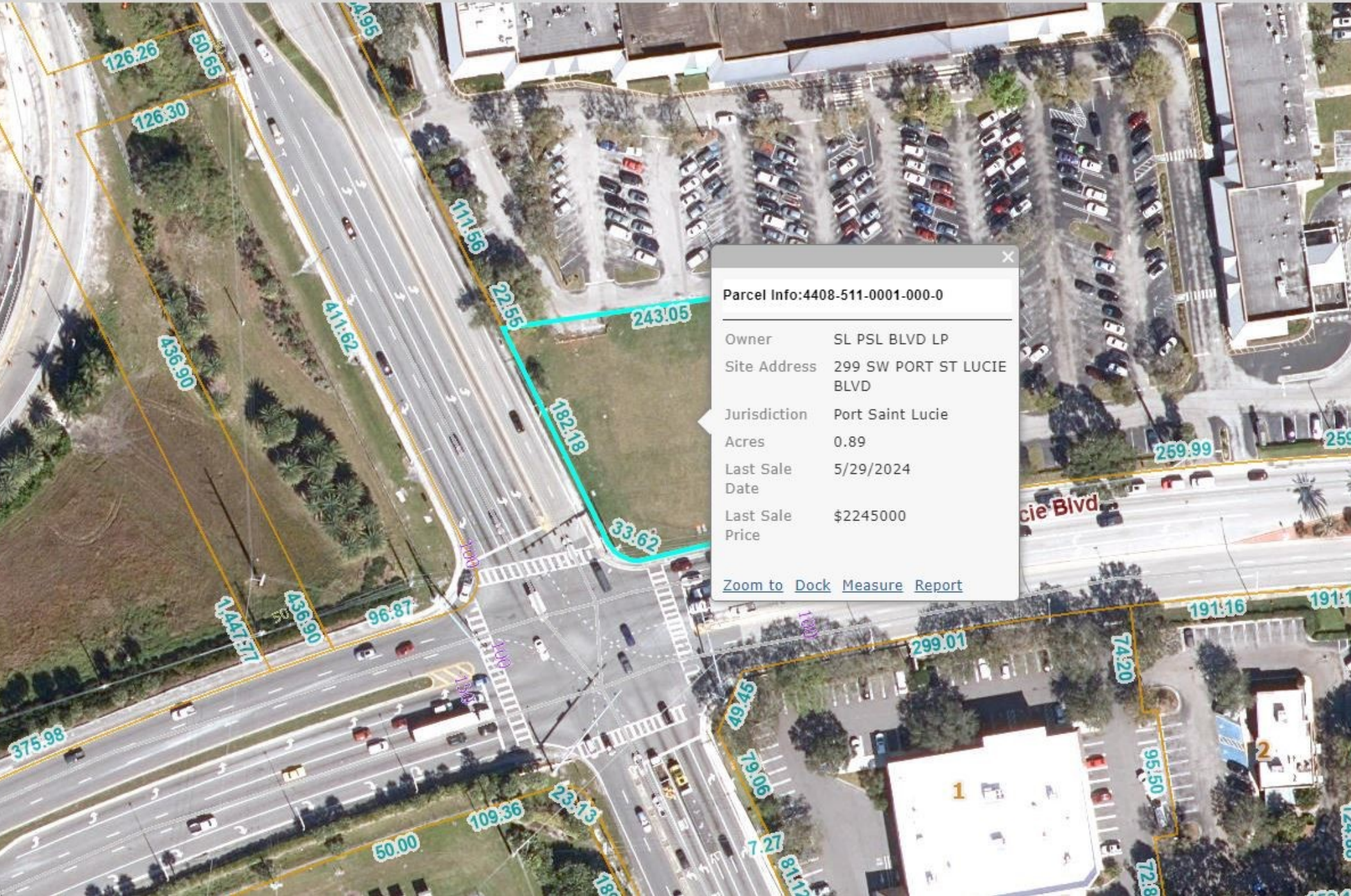
PASSENGER VEHICLE ROUTE PLAN
MURPHY USA
PORT ST LUCIE BLVD & BAYSHORE BLVD
PORT ST. LUCIE FLORIDA

AREF SHEHADEH LICENSE No 92128 STATE OF FLORIDA PROFESSIONAL ENGINEER
DATE: 2\25\25
AREF SHEHADEH, P.E.
FLORIDA REGISTRATION NO. 92128

SHEET NO.
C-08.3

ie County Property Appraiser
anklin CFA

nced Search | Sales Search | View Search Results



Property Identification

Site Address: 299 SW PORT ST LUCIE BLVD
Sec/Town/Range: 08/37S/40E
Parcel ID: 4408-511-0001-000-0
Jurisdiction: Port Saint Lucie

Use Type: 1000
Account #: 176615
Map ID: 44/08N
Zoning: General Co

Ownership

SL PSL BLVD LP
5950 Berkshire LN Ste 700
Dallas, TX 75225-5867

Legal Description

299 SW PORT ST. LUCIE BLVD. (PB 67-23)- TRACT B (0.894 AC - 38,943 SF)

Current Values

Just/Market Value:	$426,600
Assessed Value:	$426,600
Exemptions:	$0
Taxable Value:	$426,600

Property taxes are subject to change upon change of ownership.

- **Past taxes are not a reliable projection of future taxes.**
- **The sale of a property will prompt the removal of all exemptions, assessment caps, and special classifications.**

Taxes for this parcel: SLC Tax Collector's Office
Download TRIM for this parcel: Download PDF

Total Areas

Finished/Under Air (SF):	0
Gross Sketched Area (SF):	0
Land Size (acres):	0.89
Land Size (SF):	38,943

Building Design Wind Speed

Occupancy Category	I	II	III
Speed	140	160	160

Sources/links:

APPENDIX C
TRAFFIC, SIGNAL TIMING DATA, CENSUS DATA & FDOT TABLES

National Data & Surveying Services

Intersection Turning Movement Count

Location: SW Bayshore Blvd & Crescent Ave
City: Port St. Lucie
Control: 1-Way Stop(WB)

Project ID: 24-140305-001
Date: 10/16/2024

Data - Total

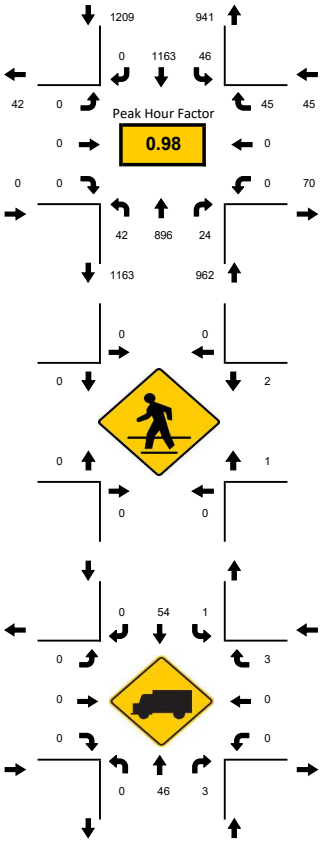
NS/EW Streets:	SW Bayshore Blvd				SW Bayshore Blvd				Crescent Ave				Crescent Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	176	1	3	11	212	0	0	0	0	0	0	0	0	9	0	412
7:15 AM	0	180	9	1	12	271	0	0	0	0	0	0	0	0	7	0	480
7:30 AM	0	237	7	5	11	288	0	0	0	0	0	0	0	0	20	0	568
7:45 AM	0	228	4	4	17	266	0	1	0	0	0	0	0	0	10	0	530
8:00 AM	0	245	3	8	8	290	0	0	0	0	0	0	0	0	13	0	567
8:15 AM	0	207	14	4	8	306	0	0	0	0	0	0	0	0	8	0	547
8:30 AM	0	206	2	11	15	317	0	0	0	0	0	0	0	0	15	0	566
8:45 AM	0	238	5	19	15	250	0	0	0	0	0	0	0	0	9	0	536
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	1717	45	55	97	2200	0	1	0	0	0	0	0	0	91	0	4206
APPROACH %'s :	0.00%	94.50%	2.48%	3.03%	4.22%	95.74%	0.00%	0.04%					0.00%	0.00%	100.00%	0.00%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	0	896	24	42	46	1163	0	0	0	0	0	0	0	0	45	0	2216
PEAK HR FACTOR :	0.000	0.914	0.429	0.553	0.767	0.917	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.750	0.000	0.977
		0.918				0.910								0.750			

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	238	18	22	18	298	0	1	0	0	0	0	0	0	9	0	604
4:15 PM	0	262	15	13	18	267	0	1	0	0	0	0	0	0	20	0	596
4:30 PM	0	241	10	21	23	298	0	1	0	0	0	0	0	0	17	0	611
4:45 PM	0	245	8	29	13	308	0	0	0	0	0	0	0	0	17	0	620
5:00 PM	0	256	18	20	17	292	0	0	0	0	0	0	0	0	19	0	622
5:15 PM	0	295	19	33	10	290	0	0	0	0	0	0	0	0	19	0	666
5:30 PM	0	271	18	22	23	288	0	0	0	0	0	0	0	0	16	0	638
5:45 PM	0	267	15	26	20	278	0	1	0	0	0	0	0	0	17	0	624
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	2075	121	186	142	2319	0	4	0	0	0	0	0	0	134	0	4981
APPROACH %'s :	0.00%	87.11%	5.08%	7.81%	5.76%	94.08%	0.00%	0.16%					0.00%	0.00%	100.00%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	0	1089	70	101	70	1148	0	1	0	0	0	0	0	0	71	0	2550
PEAK HR FACTOR :	0.000	0.923	0.921	0.765	0.761	0.983	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.934	0.000	0.957
		0.908				0.980								0.934			

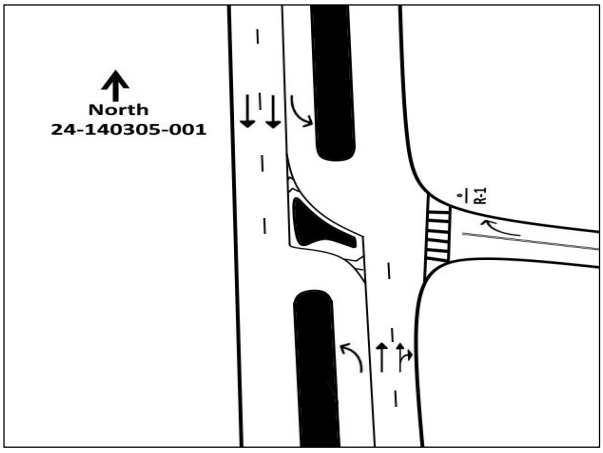
LOCATION: SW Bayshore Blvd & Crescent Ave
CITY/STATE: Port St. Lucie, FL

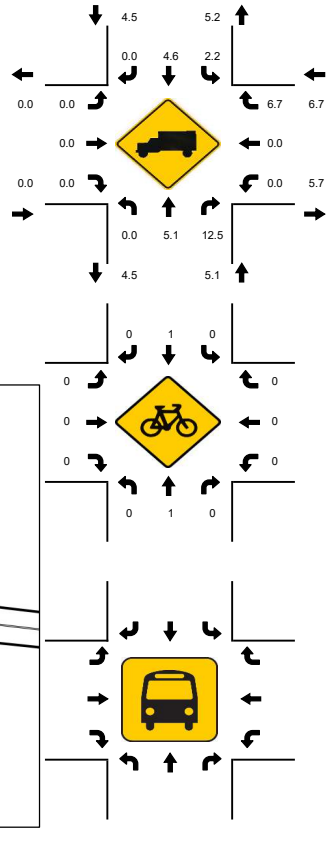
PROJECT ID: 24-140305-001
DATE: Wed, Oct 16, 2024

Peak-Hour: 08:00 AM - 09:00 AM
Peak 15-Minute: 08:00 AM - 08:15 AM



National Data & Surveying Services



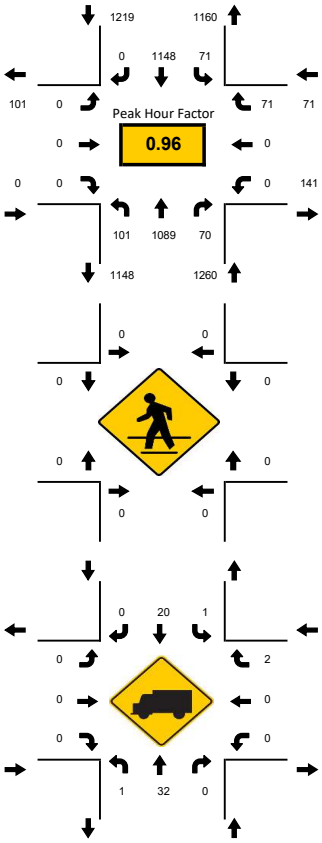


15-Min Count Period Beginning At	SW Bayshore Blvd Northbound					SW Bayshore Blvd Southbound					Crescent Ave Eastbound					Crescent Ave Westbound					Total	Hourly Total
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
7:00 AM	0	176	1	3		11	212	0	0		0	0	0	0		0	0	9	0		412	1990
7:15 AM	0	180	9	1		12	271	0	0		0	0	0	0		0	0	7	0		480	2145
7:30 AM	0	237	7	5		11	288	0	0		0	0	0	0		0	0	20	0		568	2212
7:45 AM	0	228	4	4		17	266	0	1		0	0	0	0		0	0	10	0		530	2210
8:00 AM	0	245	3	8		8	290	0	0		0	0	0	0		0	0	13	0		567	2216
8:15 AM	0	207	14	4		8	306	0	0		0	0	0	0		0	0	8	0		547	1649
8:30 AM	0	206	2	11		15	317	0	0		0	0	0	0		0	0	15	0		566	1102
8:45 AM	0	238	5	19		15	250	0	0		0	0	0	0		0	0	9	0		536	536
Peak 15-Min Flowrates	**Northbound**					**Southbound**					**Eastbound**					**Westbound**						
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	**Total**	
All Vehicles	0	980	56	76		60	1268	0	0		0	0	0	0		0	0	60	0		**2500**	
Heavy Trucks	0	68	8	0		4	76	0	0		0	0	0	0		0	0	4	0		**160**	
Pedestrians		0					0					0					4				**4**	
Bicycles	0	4	0	0		0	4	0	0		0	0	0	0		0	0	0	0		**8**	
Buses																						
Stopped Buses																						

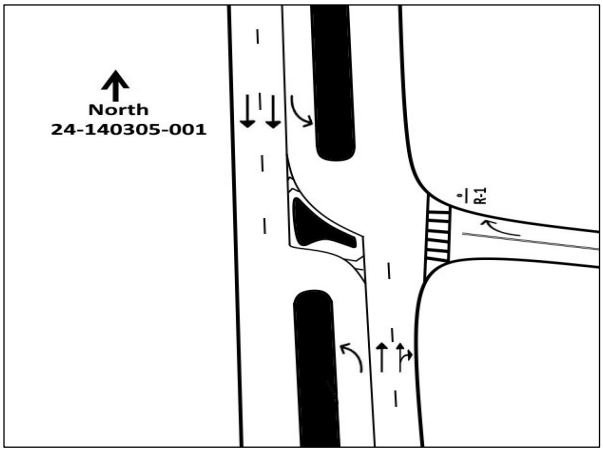
LOCATION: SW Bayshore Blvd & Crescent Ave
CITY/STATE: Port St. Lucie, FL

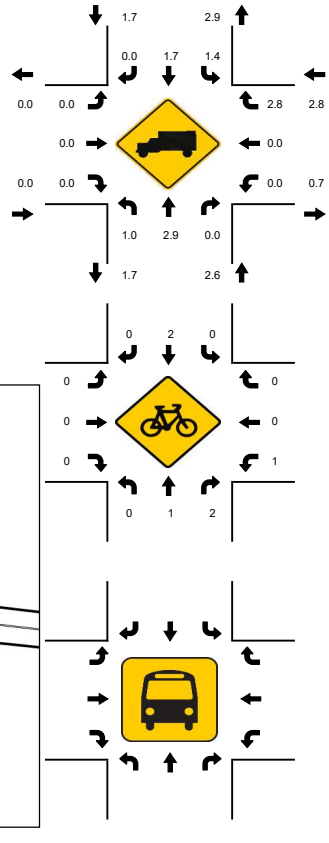
PROJECT ID: 24-140305-001
DATE: Wed, Oct 16, 2024

Peak-Hour: 05:00 PM - 06:00 PM
Peak 15-Minute: 05:15 PM - 05:30 PM



National Data & Surveying Services





15-Min Count Period Beginning At	SW Bayshore Blvd Northbound					SW Bayshore Blvd Southbound					Crescent Ave Eastbound					Crescent Ave Westbound					Total	Hourly Total
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
4:00 PM	0	238	18	22		18	298	0	1		0	0	0	0		0	0	9	0		604	2431
4:15 PM	0	262	15	13		18	267	0	1		0	0	0	0		0	0	20	0		596	2449
4:30 PM	0	241	10	21		23	298	0	1		0	0	0	0		0	0	17	0		611	2519
4:45 PM	0	245	8	29		13	308	0	0		0	0	0	0		0	0	17	0		620	2546
5:00 PM	0	256	18	20		17	292	0	0		0	0	0	0		0	0	19	0		622	2550
5:15 PM	0	295	19	33		10	290	0	0		0	0	0	0		0	0	19	0		666	1928
5:30 PM	0	271	18	22		23	288	0	0		0	0	0	0		0	0	16	0		638	1262
5:45 PM	0	267	15	26		20	278	0	1		0	0	0	0		0	0	17	0		624	624
Peak 15-Min Flowrates	**Northbound**					**Southbound**					**Eastbound**					**Westbound**						
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	**Total**	
All Vehicles	0	1180	76	132		92	1168	0	4		0	0	0	0		0	0	76	0		**2728**	
Heavy Trucks	0	52	0	4		4	40	0	0		0	0	0	0		0	0	4	0		**100**	
Pedestrians		0					0					0					0				**0**	
Bicycles	0	4	8	0		0	4	0	0		0	0	0	0		4	0	0	0		**20**	
Buses																						
Stopped Buses																						

National Data & Surveying Services

Intersection Turning Movement Count

Location: SW/SE Bayshore Blvd & SW Port St Lucie Blvd/SR 716
City: Port St. Lucie
Control: Signalized

Project ID: 24-140305-002
Date: 10/16/2024

Data - Total

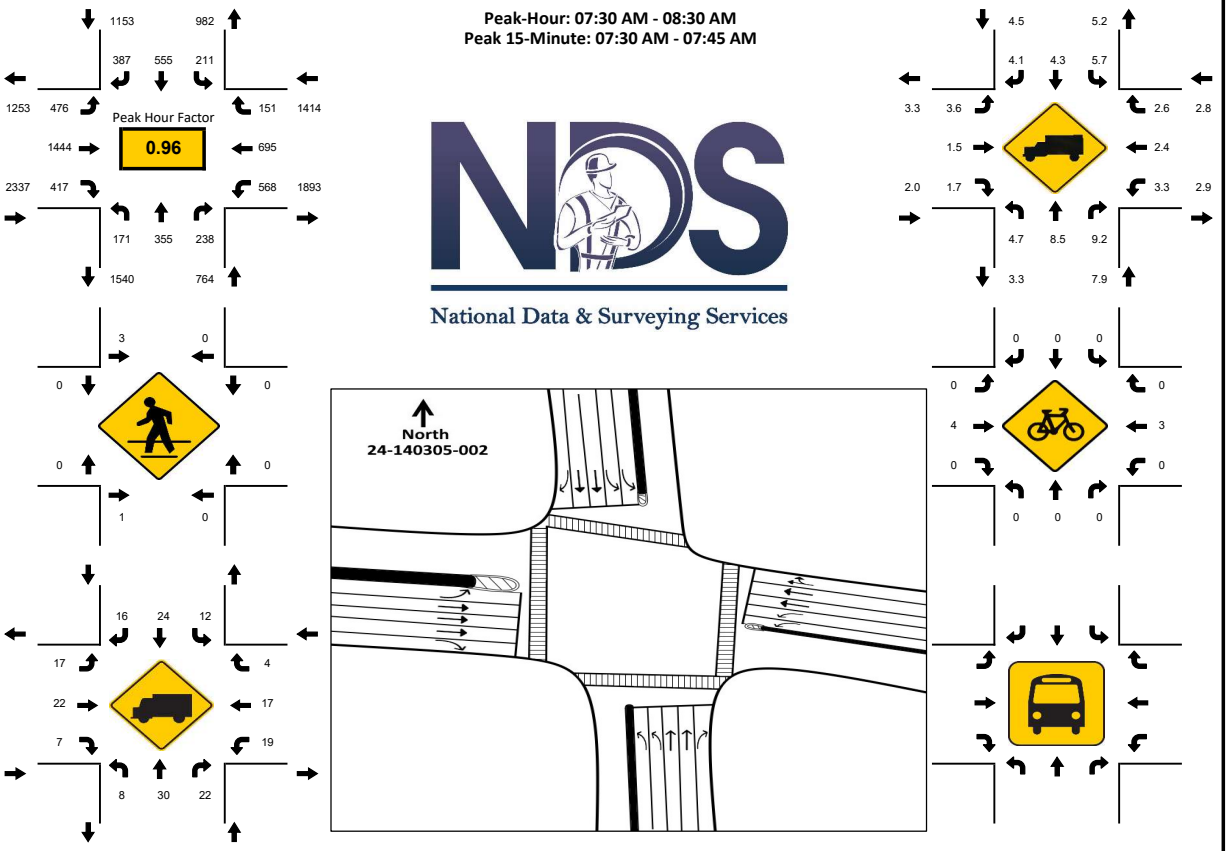
NS/EW Streets:	SW/SE Bayshore Blvd				SW/SE Bayshore Blvd				SW Port St Lucie Blvd/SR 716				SW Port St Lucie Blvd/SR 716				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	37	70	28	0	19	126	58	1	83	249	110	0	98	92	32	2	1005
7:15 AM	33	71	41	0	34	156	91	1	96	332	140	0	121	149	28	5	1298
7:30 AM	45	98	53	0	52	149	80	1	117	389	131	0	142	183	37	5	1482
7:45 AM	40	99	77	0	50	138	92	1	119	373	107	0	121	184	32	3	1436
8:00 AM	42	87	65	0	48	147	89	1	127	348	99	0	140	157	43	6	1399
8:15 AM	44	71	43	0	57	121	126	1	113	334	80	0	139	171	39	12	1351
8:30 AM	33	71	44	0	69	137	134	2	120	319	70	0	106	165	34	5	1309
8:45 AM	55	82	58	0	62	95	99	1	116	309	77	1	113	201	48	16	1333
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	329	649	409	0	391	1069	769	9	891	2653	814	1	980	1302	293	54	10613
APPROACH %'s :	23.72%	46.79%	29.49%	0.00%	17.47%	47.77%	34.36%	0.40%	20.44%	60.86%	18.67%	0.02%	37.28%	49.52%	11.14%	2.05%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	171	355	238	0	207	555	387	4	476	1444	417	0	542	695	151	26	5668
PEAK HR FACTOR :	0.950	0.896	0.773	0.000	0.908	0.931	0.768	1.000	0.937	0.928	0.796	0.000	0.954	0.944	0.878	0.542	0.956
	0.884				0.945				0.917				0.963				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	71	108	74	0	83	100	123	2	91	236	55	2	46	327	52	19	1389
4:15 PM	83	147	74	0	89	93	120	0	86	224	53	1	56	288	51	18	1383
4:30 PM	71	127	63	0	79	85	138	2	76	283	50	0	68	369	52	18	1481
4:45 PM	78	124	78	0	91	109	152	2	90	275	43	1	55	311	50	16	1475
5:00 PM	93	162	74	0	85	89	146	2	71	261	56	2	53	333	40	18	1485
5:15 PM	83	179	72	0	62	101	149	2	73	256	45	0	66	363	39	19	1509
5:30 PM	87	145	82	0	77	68	141	1	86	306	56	1	38	373	47	14	1522
5:45 PM	103	160	63	0	92	91	132	4	87	297	49	0	44	331	43	13	1509
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	669	1152	580	0	658	736	1101	15	660	2138	407	7	426	2695	374	135	11753
APPROACH %'s :	27.86%	47.98%	24.16%	0.00%	26.22%	29.32%	43.86%	0.60%	20.55%	66.56%	12.67%	0.22%	11.74%	74.24%	10.30%	3.72%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	366	646	291	0	316	349	568	9	317	1120	206	3	201	1400	169	64	6025
PEAK HR FACTOR :	0.888	0.902	0.887	0.000	0.859	0.864	0.953	0.563	0.911	0.915	0.920	0.375	0.761	0.938	0.899	0.842	0.990
	0.975				0.964				0.916				0.941				

LOCATION: SW/SE Bayshore Blvd & SW Port St Lucie Blvd/SR 716
CITY/STATE: Port St. Lucie, FL

PROJECT ID: 24-140305-002
DATE: Wed, Oct 16, 2024

Peak-Hour: 07:30 AM - 08:30 AM
Peak 15-Minute: 07:30 AM - 07:45 AM

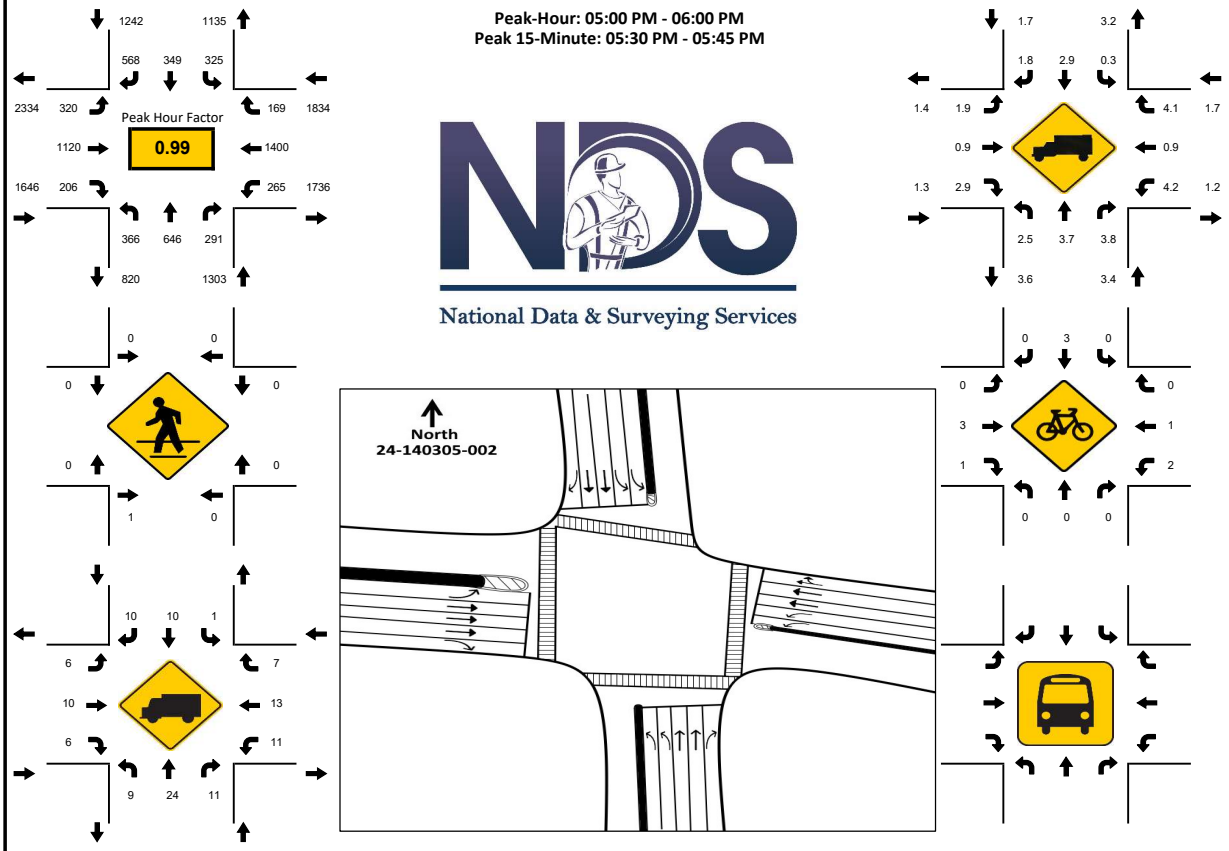


15-Min Count Period Beginning At	SW/SE Bayshore Blvd Northbound					SW/SE Bayshore Blvd Southbound					SW Port St Lucie Blvd/SR 716 Eastbound					SW Port St Lucie Blvd/SR 716 Westbound					Total	Hourly Total
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
7:00 AM	37	70	28	0		19	126	58	1		83	249	110	0		98	92	32	2		1005	5221
7:15 AM	33	71	41	0		34	156	91	1		96	332	140	0		121	149	28	5		1298	5615
7:30 AM	45	98	53	0		52	149	80	1		117	389	131	0		142	183	37	5		1482	5668
7:45 AM	40	99	77	0		50	138	92	1		119	373	107	0		121	184	32	3		1436	5495
8:00 AM	42	87	65	0		48	147	89	1		127	348	99	0		140	157	43	6		1399	5392
8:15 AM	44	71	43	0		57	121	126	1		113	334	80	0		139	171	39	12		1351	3993
8:30 AM	33	71	44	0		69	137	134	2		120	319	70	0		106	165	34	5		1309	2642
8:45 AM	55	82	58	0		62	95	99	1		116	309	77	1		113	201	48	16		1333	1333
Peak 15-Min Flowrates	**Northbound**					**Southbound**					**Eastbound**					**Westbound**					**Total**	
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
All Vehicles	180	396	308	0		228	596	504	4		508	1556	524	0		568	736	172	48		**6328**	
Heavy Trucks	12	48	32	0		20	32	28	0		44	28	8	0		36	32	8	0		**328**	
Pedestrians		4					8					0					0				**12**	
Bicycles	0	0	0	0		0	0	0	0		0	12	0	0		0	8	0	0		**20**	
Buses																						
Stopped Buses																						

LOCATION: SW/SE Bayshore Blvd & SW Port St Lucie Blvd/SR 716
CITY/STATE: Port St. Lucie, FL

PROJECT ID: 24-140305-002
DATE: Wed, Oct 16, 2024

Peak-Hour: 05:00 PM - 06:00 PM
Peak 15-Minute: 05:30 PM - 05:45 PM



National Data & Surveying Services

15-Min Count Period Beginning At	SW/SE Bayshore Blvd Northbound					SW/SE Bayshore Blvd Southbound					SW Port St Lucie Blvd/SR 716 Eastbound					SW Port St Lucie Blvd/SR 716 Westbound					Total	Hourly Total
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
4:00 PM	71	108	74	0		83	100	123	2		91	236	55	2		46	327	52	19		1389	5728
4:15 PM	83	147	74	0		89	93	120	0		86	224	53	1		56	288	51	18		1383	5824
4:30 PM	71	127	63	0		79	85	138	2		76	283	50	0		68	369	52	18		1481	5950
4:45 PM	78	124	78	0		91	109	152	2		90	275	43	1		55	311	50	16		1475	5991
5:00 PM	93	162	74	0		85	89	146	2		71	261	56	2		53	333	40	18		1485	6025
5:15 PM	83	179	72	0		62	101	149	2		73	256	45	0		66	363	39	19		1509	4540
5:30 PM	87	145	82	0		77	68	141	1		86	306	56	1		38	373	47	14		1522	3031
5:45 PM	103	160	63	0		92	91	132	4		87	297	49	0		44	331	43	13		1509	1509
Peak 15-Min Flowrates	**Northbound**					**Southbound**					**Eastbound**					**Westbound**					**Total**	
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
All Vehicles	412	716	328	0		368	404	596	16		348	1224	224	8		264	1492	188	76		**6664**	
Heavy Trucks	12	40	16	0		4	16	24	0		12	12	8	0		16	16	12	0		**188**	
Pedestrians		4					0					0					0				**4**	
Bicycles	0	0	0	0		0	8	0	0		0	4	4	0		4	4	0	4		**24**	
Buses																						
Stopped Buses																						

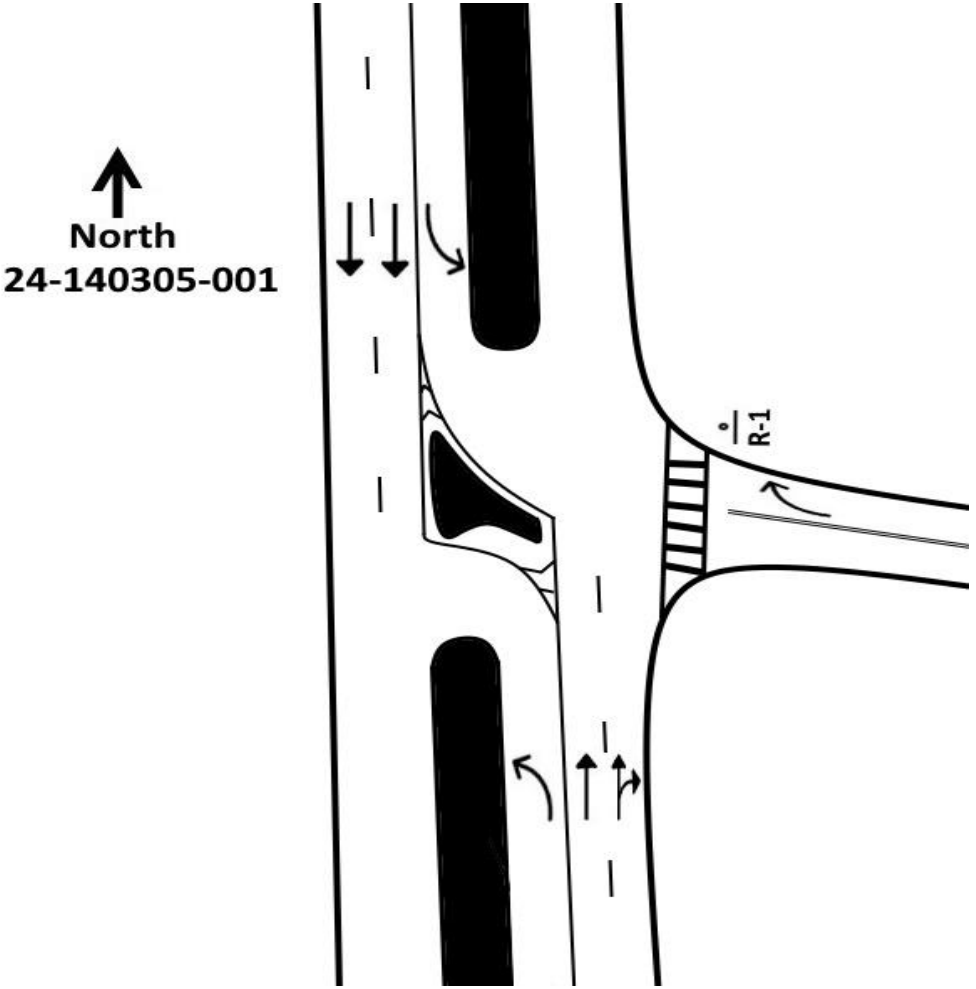
National Data & Surveying Services

Site Code:	**24-140305-001**
Date:	**10/16/2024**
Weather:	**Sunny**
City:	**Port St. Lucie**
County:	**St. Lucie**
Count Times:	**07:00 - 09:00**
	16:00 - 18:00
Control:	**1-Way Stop(WB)**

N

N/S Street: **SW Bayshore Blvd**

Speed: **40 MPH**



E/W Street: **Crescent Ave**

Speed: **25 MPH**

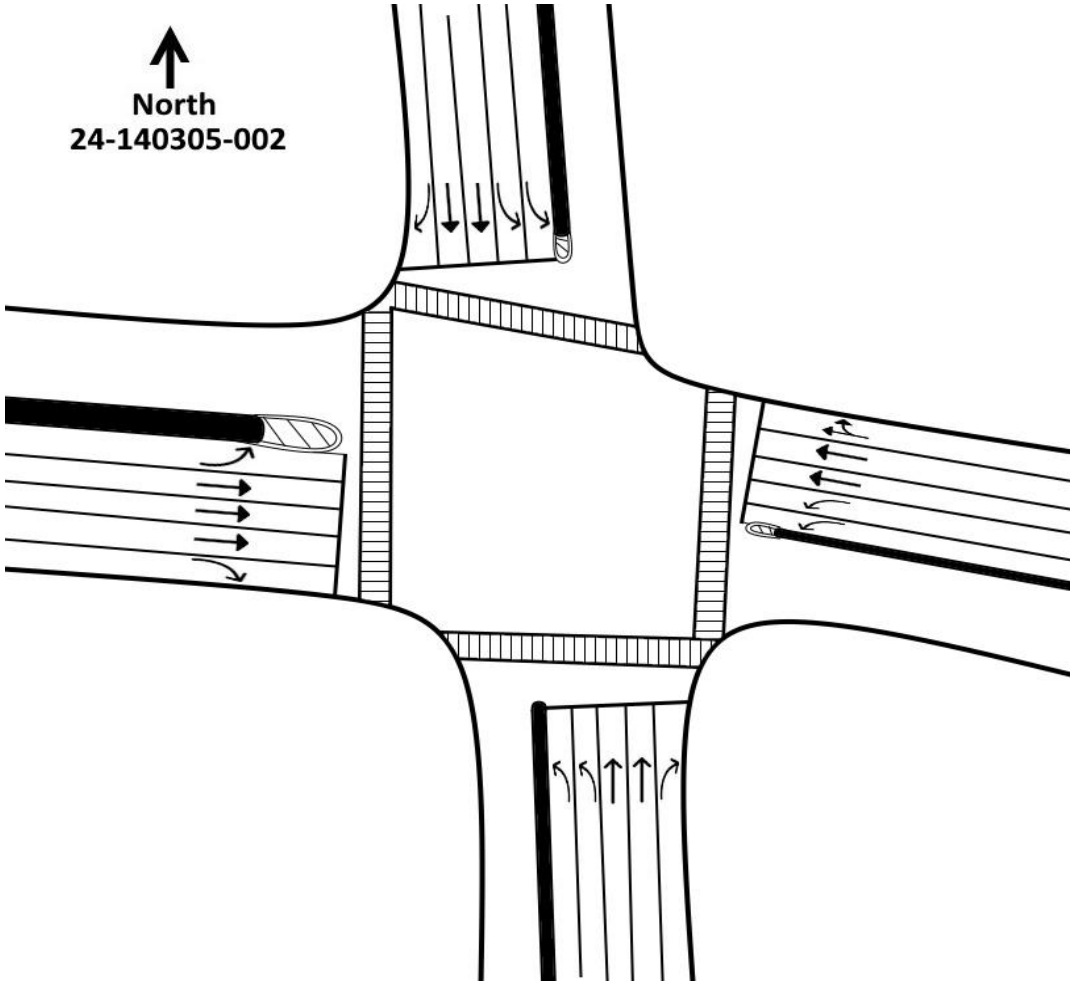
National Data & Surveying Services

Site Code:	**24-140305-002**
Date:	**10/16/2024**
Weather:	**Sunny**
City:	**Port St. Lucie**
County:	**St. Lucie**
Count Times:	**07:00 - 09:00**
	16:00 - 18:00
Control:	**Signalized**

N

N/S Street: **SW/SE Bayshore Blvd**

Speed: **25/40 MPH**



E/W Street: **SW Port St Lucie Blvd/SR 716**

Speed: **45 MPH**

SIGNAL TIMING

	Cycle	Phase	BOG	EOY	Signal Timing
AM	1	NL/SL	8:05:15	8:05:42	0:00:27
		NT/ST	8:05:42	8:06:14	0:00:32
		WL/WT	8:06:14	8:06:53	0:00:39
		ET/WT	8:06:53	8:07:09	0:00:16
		EL/ET	8:07:09	8:08:15	0:01:06
	2	NL/SL	8:08:15	8:08:41	0:00:26
		NT/ST	8:08:41	8:09:14	0:00:33
		WL/WT	8:09:14	8:09:55	0:00:41
		ET/WT	8:09:55	8:10:10	0:00:15
		EL/ET	8:10:10	8:11:15	0:01:05
PM	1	NL/SL	16:45:53	16:46:18	0:00:25
		NT/ST	16:46:18	16:46:55	0:00:37
		WL/WT	16:46:55	16:47:28	0:00:33
		ET/WT	16:47:28	16:48:05	0:00:37
		EL/ET	16:48:05	16:48:44	0:00:39
	2	NL/SL	16:48:44	16:49:06	0:00:22
		NT/ST	16:49:06	16:49:51	0:00:45
		WL/WT	16:49:51	16:50:20	0:00:29
		ET/WT	16:50:20	16:50:55	0:00:35
		EL/ET	16:50:55	16:51:33	0:00:38

Green Time

WT: 40+16=56
ET=16+66=82
All other we use average

WT:31+36=67
ET=36+39=75
All other we use average

2023 PEAK SEASON FACTOR CATEGORY REPORT - REPORT TYPE: ALL

CATEGORY: 9401 CEN.-W OF US1 TO I95

MOCF: 0.93

WEEK	DATES	SF	PSCF
1	01/01/2023 - 01/07/2023	1.00	1.08
2	01/08/2023 - 01/14/2023	0.98	1.05
* 3	01/15/2023 - 01/21/2023	0.95	1.02
* 4	01/22/2023 - 01/28/2023	0.94	1.01
* 5	01/29/2023 - 02/04/2023	0.93	1.00
* 6	02/05/2023 - 02/11/2023	0.92	0.99
* 7	02/12/2023 - 02/18/2023	0.91	0.98
* 8	02/19/2023 - 02/25/2023	0.91	0.98
* 9	02/26/2023 - 03/04/2023	0.92	0.99
*10	03/05/2023 - 03/11/2023	0.92	0.99
*11	03/12/2023 - 03/18/2023	0.92	0.99
*12	03/19/2023 - 03/25/2023	0.93	1.00
*13	03/26/2023 - 04/01/2023	0.94	1.01
*14	04/02/2023 - 04/08/2023	0.95	1.02
*15	04/09/2023 - 04/15/2023	0.96	1.03
16	04/16/2023 - 04/22/2023	0.97	1.04
17	04/23/2023 - 04/29/2023	0.98	1.05
18	04/30/2023 - 05/06/2023	0.98	1.05
19	05/07/2023 - 05/13/2023	0.99	1.06
20	05/14/2023 - 05/20/2023	1.00	1.08
21	05/21/2023 - 05/27/2023	1.01	1.09
22	05/28/2023 - 06/03/2023	1.02	1.10
23	06/04/2023 - 06/10/2023	1.03	1.11
24	06/11/2023 - 06/17/2023	1.04	1.12
25	06/18/2023 - 06/24/2023	1.05	1.13
26	06/25/2023 - 07/01/2023	1.06	1.14
27	07/02/2023 - 07/08/2023	1.06	1.14
28	07/09/2023 - 07/15/2023	1.07	1.15
29	07/16/2023 - 07/22/2023	1.07	1.15
30	07/23/2023 - 07/29/2023	1.07	1.15
31	07/30/2023 - 08/05/2023	1.06	1.14
32	08/06/2023 - 08/12/2023	1.06	1.14
33	08/13/2023 - 08/19/2023	1.06	1.14
34	08/20/2023 - 08/26/2023	1.06	1.14
35	08/27/2023 - 09/02/2023	1.07	1.15
36	09/03/2023 - 09/09/2023	1.07	1.15
37	09/10/2023 - 09/16/2023	1.07	1.15
38	09/17/2023 - 09/23/2023	1.06	1.14
39	09/24/2023 - 09/30/2023	1.06	1.14
40	10/01/2023 - 10/07/2023	1.05	1.13
41	10/08/2023 - 10/14/2023	1.05	1.13
42	10/15/2023 - 10/21/2023	1.04	1.12
43	10/22/2023 - 10/28/2023	1.04	1.12
44	10/29/2023 - 11/04/2023	1.03	1.11
45	11/05/2023 - 11/11/2023	1.03	1.11
46	11/12/2023 - 11/18/2023	1.02	1.10
47	11/19/2023 - 11/25/2023	1.02	1.10
48	11/26/2023 - 12/02/2023	1.01	1.09
49	12/03/2023 - 12/09/2023	1.01	1.09
50	12/10/2023 - 12/16/2023	1.00	1.08
51	12/17/2023 - 12/23/2023	0.98	1.05
52	12/24/2023 - 12/30/2023	0.97	1.04
53	12/31/2023 - 12/31/2023	0.95	1.02

* PEAK SEASON

GROWTH RATE CALCULATION

MURPHY OIL GAS STATION

Roadway	FDOT Site	5 Year Linear Trend	5 Year Exponential Trend	5 Year Decaying Trend
BAYSHORE BLVD FROM THORNHILL DR TO WHITMORE DR (HPMS)	8508	10.64%	9.33%	9.23%
SW THORNHILL DR- EAST OFAIRES LN	0079	-1.06%	-1.08%	-1.34%
SR 716/PORT ST LUCIE BLVD - E OF TPK ENT (COUNTY 5073)	5073	-0.33%	-0.39%	-0.98%
CR 615/AIROSA BLVD - N OF CR 716/PORT ST LUCIE BLV (COUNTY 303)	0019	-9.69%	-11.58%	-10.20%
Average Annual Growth Rate		**-0.11%**	**-0.93%**	**-0.82%**

Used 0.5% Growth Rate

LANGAN
ENGINEERING & ENVIRONMENTAL SERVICES

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2023 HISTORICAL AADT REPORT

COUNTY: 94 - ST.LUCIE

SITE: 0019 - CR 615/AIROSA BLVD - N OF CR 716/PORT ST LUCIE BLV (COUNTY 303)

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2023	10100 F	N 5600	S 4500	9.00	51.60	7.10
2022	9800 C	N 5400	S 4400	9.00	51.40	5.00
2021	14500 V	N 6600	S 7900	9.00	50.90	7.20
2020	14700 R	N 6700	S 8000	9.00	51.30	31.50
2019	15400 T	N 7000	S 8400	9.00	51.00	7.80
2018	15500 S	N 7000	S 8500	9.00	51.30	5.80
2017	15300 F	N 6900	S 8400	9.00	50.90	10.00
2016	15100 C	N 6800	S 8300	9.00	50.90	6.20
2015	15400 R	N 7200	S 8200	9.00	51.00	41.80
2014	15400 T	N 7200	S 8200	9.00	50.80	49.50
2013	15400 S	N 7200	S 8200	9.00	50.80	2.90
2012	15400 F	N 7200	S 8200	9.00	56.80	2.90
2011	15600 C	N 7300	S 8300	9.00	57.20	2.90

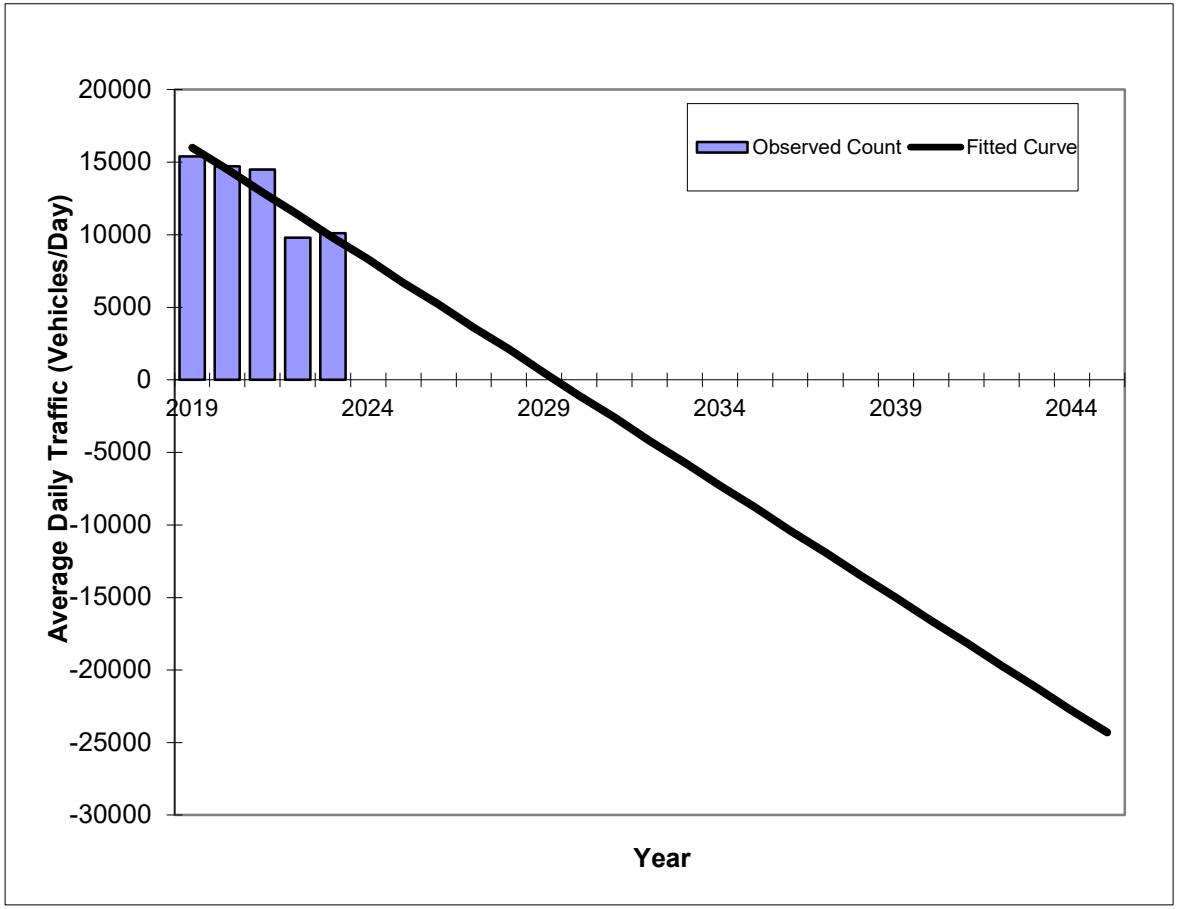
AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN
*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

Traffic Trends - V3.0

CR 615/AIROSA BLVD -- N OF CR 716/PORT ST LUCIE BLV (COUNTY 303)

FIN#	0
Location	1

County:	St. Lucie (94)
Station #:	0019
Highway:	CR 615/AIROSA BLVD



Year	Traffic (ADT/AADT) Count*	Trend**
2019	15400	16000
2020	14700	14500
2021	14500	12900
2022	9800	11400
2023	10100	9800
2027 Opening Year Trend		
2027	N/A	3600
2035 Mid-Year Trend		
2035	N/A	-8800
2045 Design Year Trend		
2045	N/A	-24300
TRANPLAN Forecasts/Trends		

**** Annual Trend Increase:**	-1,550
Trend R-squared:	81.44%
Trend Annual Historic Growth Rate:	-9.69%
Trend Growth Rate (2023 to Design Year):	-15.82%
Printed:	4-Oct-24

Straight Line Growth Option

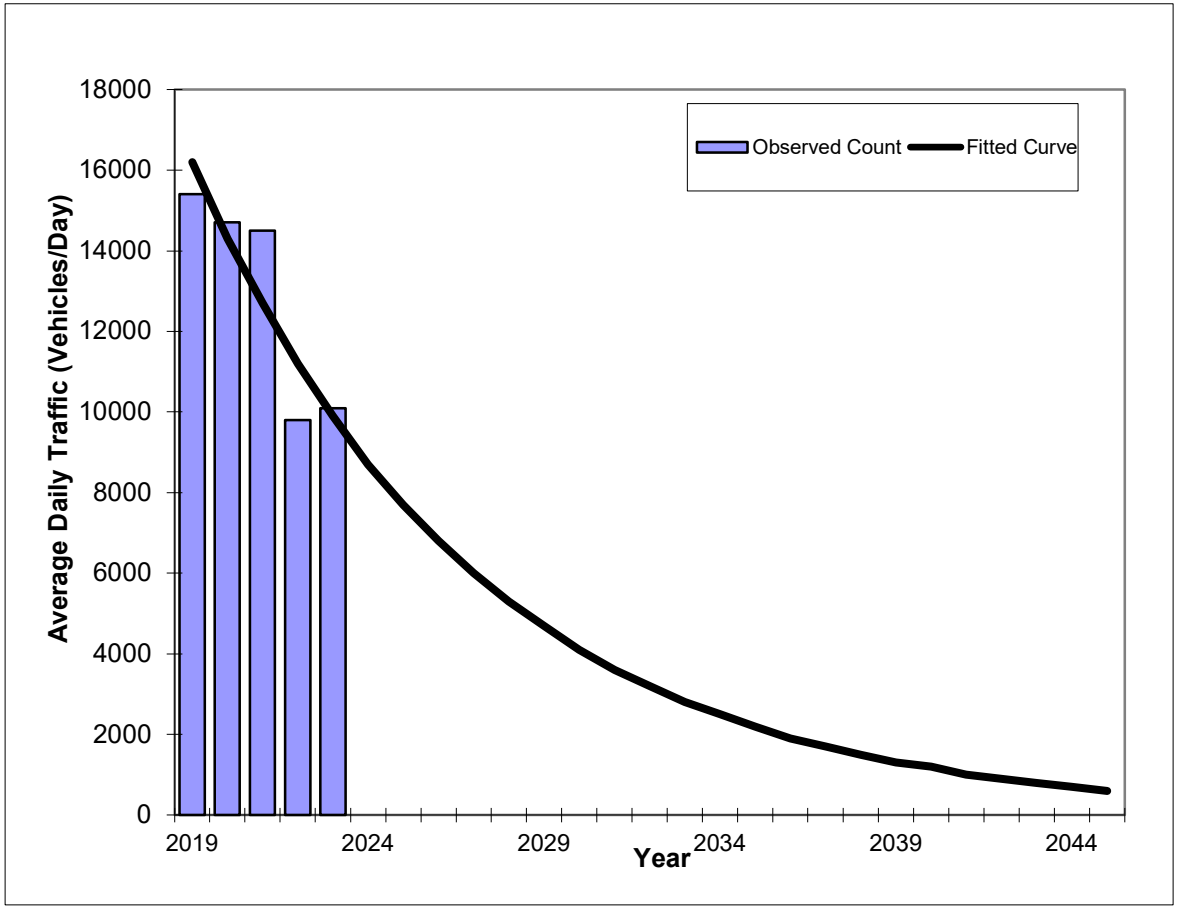
***Axle-Adjusted**

Traffic Trends - V3.0

CR 615/AIROSA BLVD -- N OF CR 716/PORT ST LUCIE BLV (COUNTY 303)

FIN#	0
Location	1

County:	St. Lucie (94)
Station #:	0019
Highway:	CR 615/AIROSA BLVD



Trend R-squared:	79.72%
Compounded Annual Historic Growth Rate:	-11.58%
Compounded Growth Rate (2023 to Design Year):	-11.96%
Printed:	4-Oct-24

Exponential Growth Option

Year	Traffic (ADT/AADT) Count*	Trend**
2019	15400	16200
2020	14700	14300
2021	14500	12700
2022	9800	11200
2023	10100	9900
2027 Opening Year Trend		
2027	N/A	6000
2035 Mid-Year Trend		
2035	N/A	2200
2045 Design Year Trend		
2045	N/A	600
TRANPLAN Forecasts/Trends		

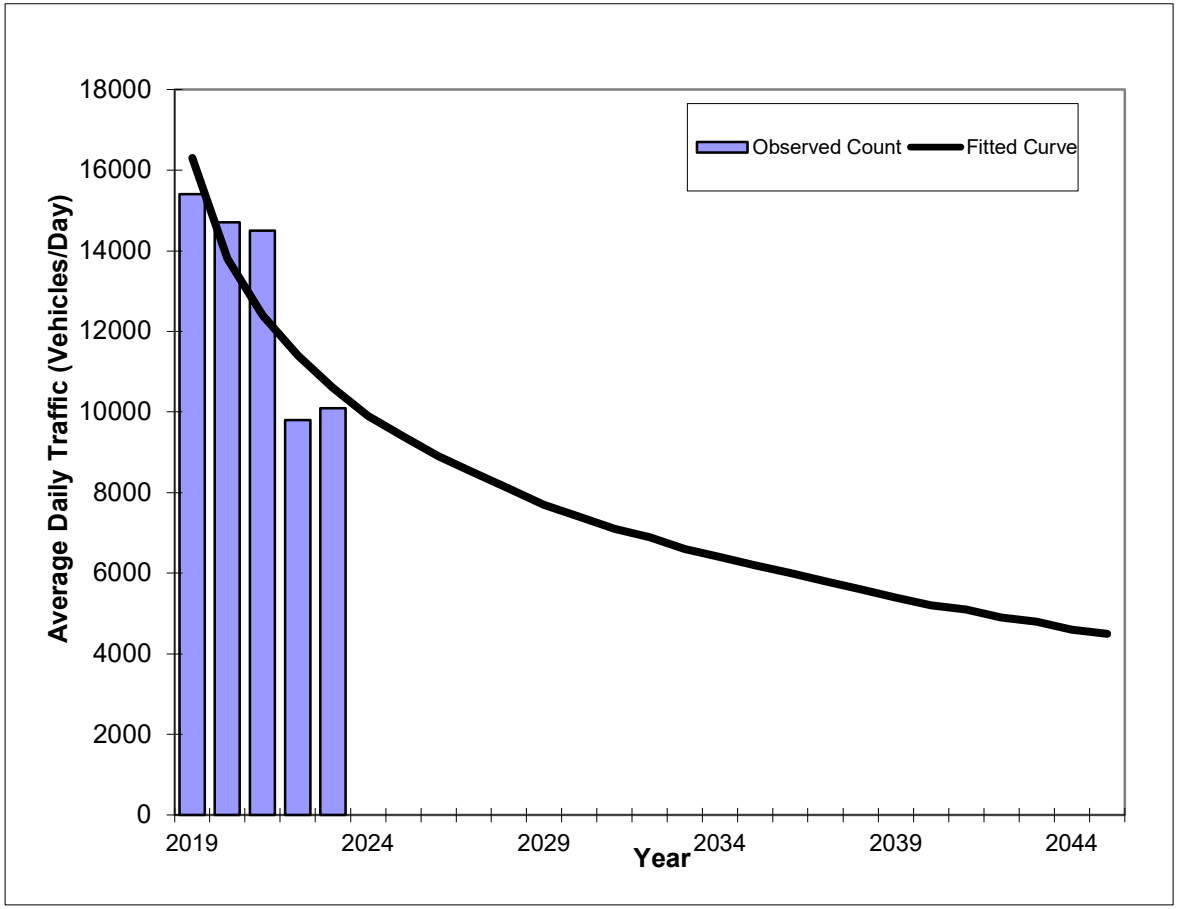
***Axle-Adjusted**

Traffic Trends - V3.0

CR 615/AIROSA BLVD -- N OF CR 716/PORT ST LUCIE BLV (COUNTY 303)

FIN#	0
Location	1

County:	St. Lucie (94)
Station #:	0019
Highway:	CR 615/AIROSA BLVD



Trend R-squared:	70.55%
Compounded Annual Historic Growth Rate:	-10.20%
Compounded Growth Rate (2023 to Design Year):	-3.82%
Printed:	4-Oct-24

Decaying Exponential Growth Option

Year	Traffic (ADT/AADT) Count*	Trend**
2019	15400	16300
2020	14700	13800
2021	14500	12400
2022	9800	11400
2023	10100	10600
2027 Opening Year Trend		
2027	N/A	8500
2035 Mid-Year Trend		
2035	N/A	6200
2045 Design Year Trend		
2045	N/A	4500
TRANPLAN Forecasts/Trends		

***Axle-Adjusted**

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2023 HISTORICAL AADT REPORT

COUNTY: 94 - ST.LUCIE

SITE: 0079 - SW THORNHILL DR- EAST OFAIRES LN

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2023	9200 V	E 4200	W 5000	9.00	51.60	7.10
2022	9000 R	E 4100	W 4900	9.00	51.40	5.00
2021	9000 T	E 4100	W 4900	9.00	50.90	7.20
2020	9200 S	E 4200	W 5000	9.00	51.30	31.50
2019	9600 F	E 4400	W 5200	9.00	51.00	7.80
2018	9600 C	E 4400	W 5200	9.00	51.30	5.80
2017	4800 V	0	0	9.00	50.90	10.00
2016	4700 R	0	0	9.00	50.90	6.20
2015	4700 T	0	0	9.00	51.00	41.80
2014	4700 S			9.00	50.80	49.50
2013	4700 F	0	0	9.00	50.80	11.90
2012	4700 C	E 0	W 0	9.00	56.80	7.10

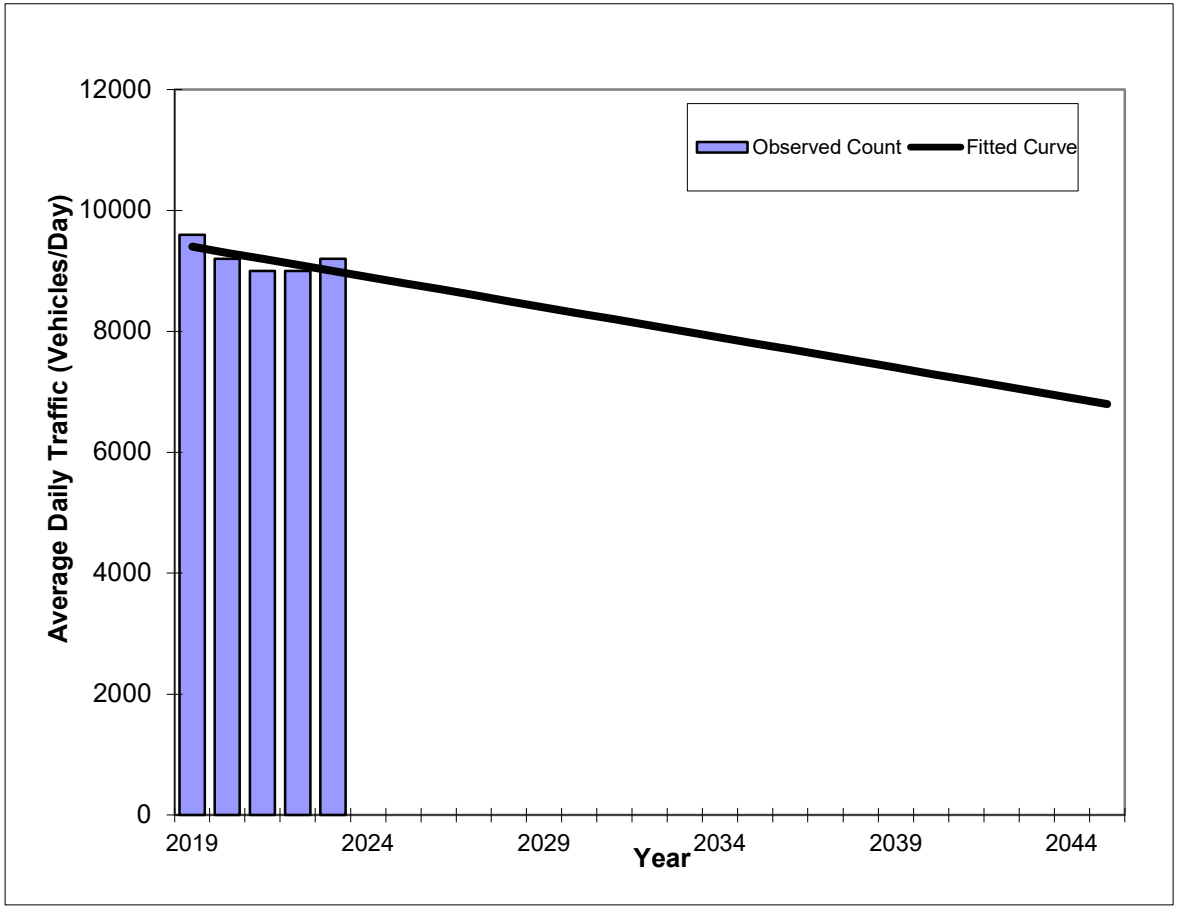
AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN
*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

Traffic Trends - V3.0

SW THORNHILL DR -- EAST OFAIRES LN

FIN#	0
Location	1

County:	St. Lucie (94)
Station #:	0079
Highway:	SW THORNHILL DR



Year	Traffic (ADT/AADT) Count*	Trend**
2019	9600	9400
2020	9200	9300
2021	9000	9200
2022	9000	9100
2023	9200	9000
2027 Opening Year Trend		
2027	N/A	8600
2035 Mid-Year Trend		
2035	N/A	7800
2045 Design Year Trend		
2045	N/A	6800
TRANPLAN Forecasts/Trends		

**** Annual Trend Increase:**	-100
Trend R-squared:	41.67%
Trend Annual Historic Growth Rate:	-1.06%
Trend Growth Rate (2023 to Design Year):	-1.11%
Printed:	4-Oct-24

Straight Line Growth Option

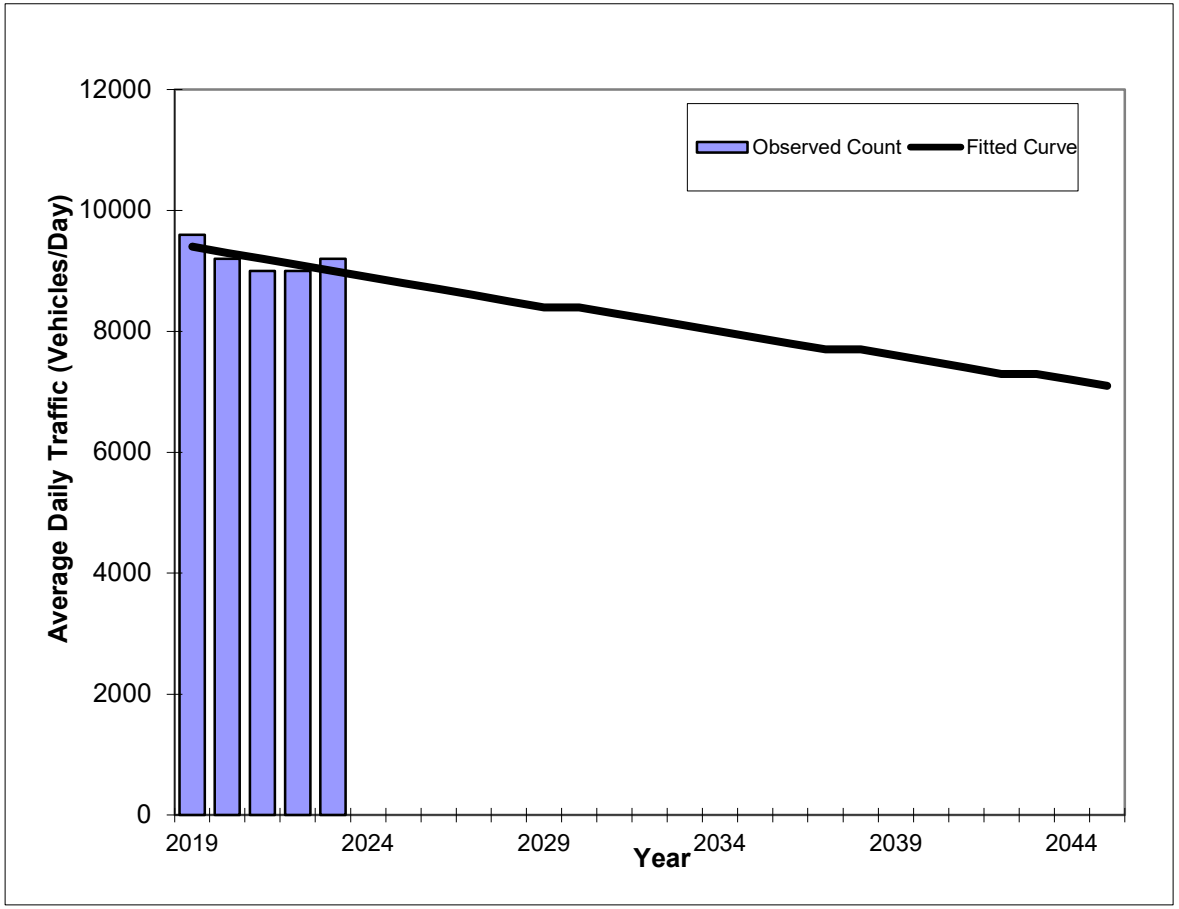
***Axle-Adjusted**

Traffic Trends - V3.0

SW THORNHILL DR -- EAST OFAIRES LN

FIN#	0
Location	1

County:	St. Lucie (94)
Station #:	0079
Highway:	SW THORNHILL DR



Year	Traffic (ADT/AADT) Count*	Trend**
2019	9600	9400
2020	9200	9300
2021	9000	9200
2022	9000	9100
2023	9200	9000
2027 Opening Year Trend		
2027	N/A	8600
2035 Mid-Year Trend		
2035	N/A	7900
2045 Design Year Trend		
2045	N/A	7100
TRANPLAN Forecasts/Trends		

Trend R-squared:	41.30%
Compounded Annual Historic Growth Rate:	-1.08%
Compounded Growth Rate (2023 to Design Year):	-1.07%
Printed:	4-Oct-24

Exponential Growth Option

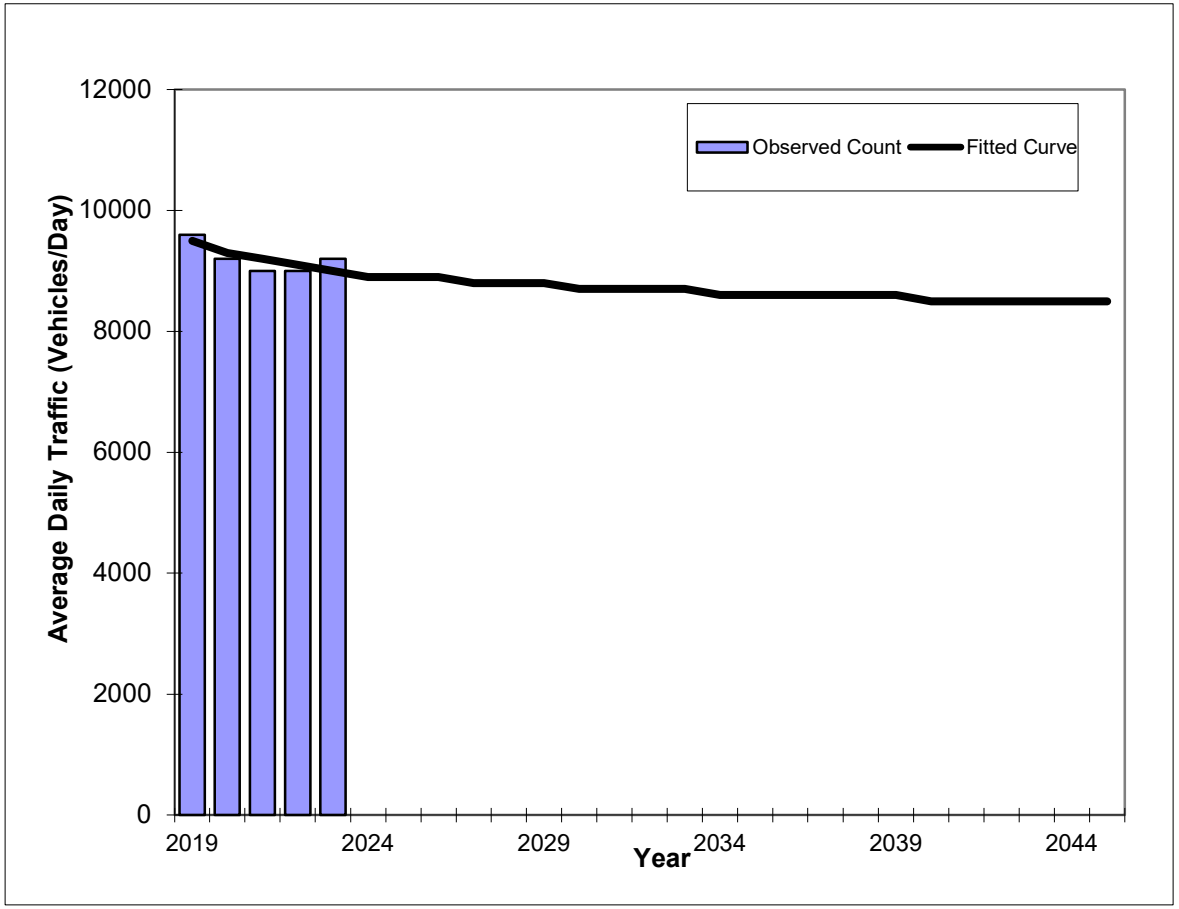
***Axle-Adjusted**

Traffic Trends - V3.0

SW THORNHILL DR -- EAST OFAIRES LN

FIN#	0
Location	1

County:	St. Lucie (94)
Station #:	0079
Highway:	SW THORNHILL DR



Year	Traffic (ADT/AADT) Count*	Trend**
2019	9600	9500
2020	9200	9300
2021	9000	9200
2022	9000	9100
2023	9200	9000
2027 Opening Year Trend		
2027	N/A	8800
2035 Mid-Year Trend		
2035	N/A	8600
2045 Design Year Trend		
2045	N/A	8500
TRANPLAN Forecasts/Trends		

Trend R-squared:	63.70%
Compounded Annual Historic Growth Rate:	-1.34%
Compounded Growth Rate (2023 to Design Year):	-0.26%
Printed:	4-Oct-24

Decaying Exponential Growth Option

***Axle-Adjusted**

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2023 HISTORICAL AADT REPORT

COUNTY: 94 - ST.LUCIE

SITE: 5073 - SR 716/PORT ST LUCIE BLVD - E OF TPK ENT (COUNTY 5073)

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2023	48000 C	E 23500	W 24500	9.00	51.60	5.60
2022	43000 C	E 20500	W 22500	9.00	51.40	5.60
2021	42500 C	E 21000	W 21500	9.00	50.90	10.20
2020	45500 F	E 22500	W 23000	9.00	51.30	10.20
2019	47500 C	E 23500	W 24000	9.00	51.00	10.20
2018	47500 C	E 23000	W 24500	9.00	51.30	6.20
2017	52000 C	E 26500	W 25500	9.00	50.90	6.20
2016	47500 C	E 23000	W 24500	9.00	50.90	6.20
2015	43500 C	E 21500	W 22000	9.00	51.00	3.00
2014	42500 C	E 20000	W 22500	9.00	50.80	3.00
2013	45000 C	E 21500	W 23500	9.00	50.80	3.00
2012	43500 C	E 21500	W 22000	9.00	56.80	2.00
2011	44000 C	E 22000	W 22000	9.00	57.20	13.00
2010	44000 S	E 21000	W 23000	10.32	55.40	2.80
2009	44000 F	E 21000	W 23000	10.27	57.35	2.80
2008	45000 C	E 21500	W 23500	10.45	58.06	2.80

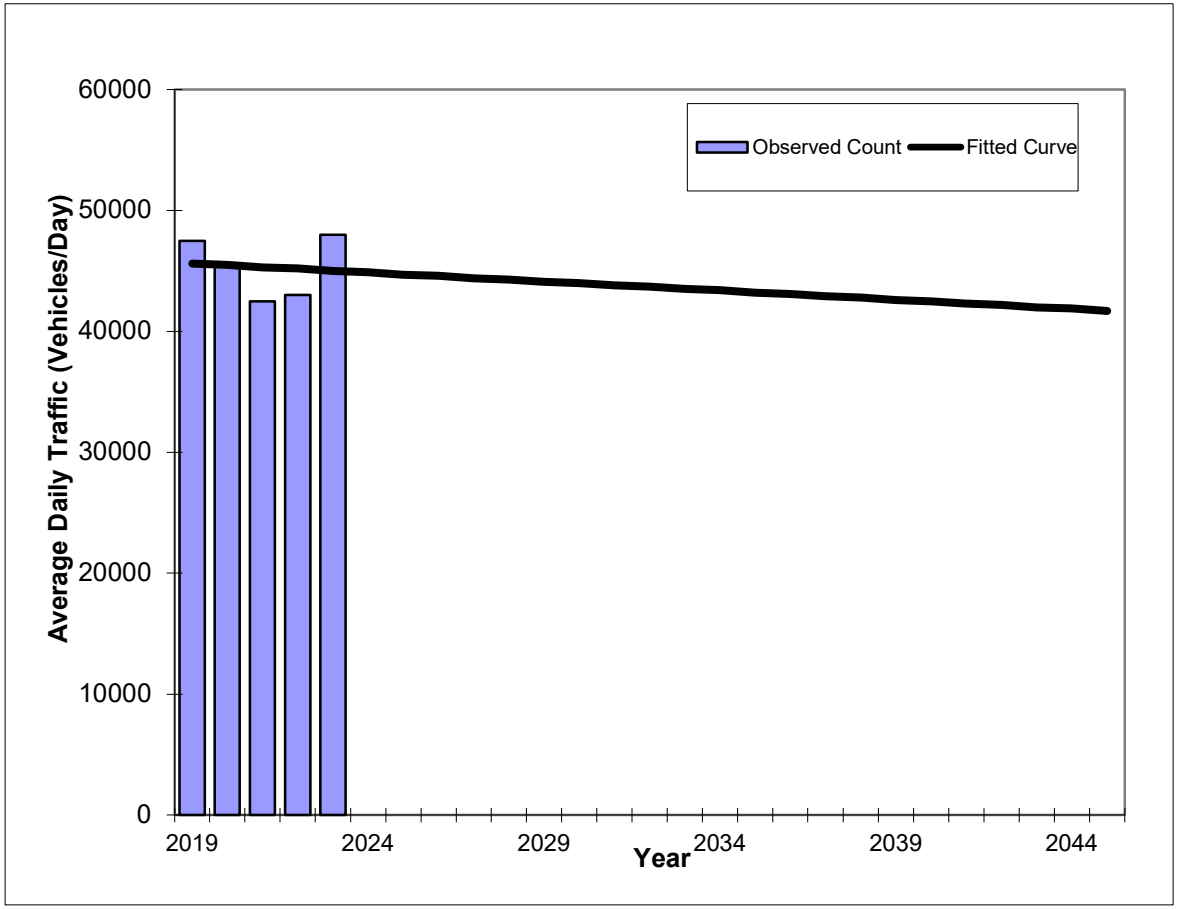
AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN
*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

Traffic Trends - V3.0

SR 716/PORT ST LUCIE BLVD -- E OF TPK ENT (COUNTY 5073)

FIN#	0
Location	1

County:	St. Lucie (94)
Station #:	5073
Highway:	SR 716/PORT ST LUCIE BLVD



Year	Traffic (ADT/AADT) Count*	Trend**
2019	47500	45600
2020	45500	45500
2021	42500	45300
2022	43000	45200
2023	48000	45000
2027 Opening Year Trend		
2027	N/A	44400
2035 Mid-Year Trend		
2035	N/A	43200
2045 Design Year Trend		
2045	N/A	41700
TRANPLAN Forecasts/Trends		

**** Annual Trend Increase:**	-150
Trend R-squared:	0.89%
Trend Annual Historic Growth Rate:	-0.33%
Trend Growth Rate (2023 to Design Year):	-0.33%
Printed:	4-Oct-24

Straight Line Growth Option

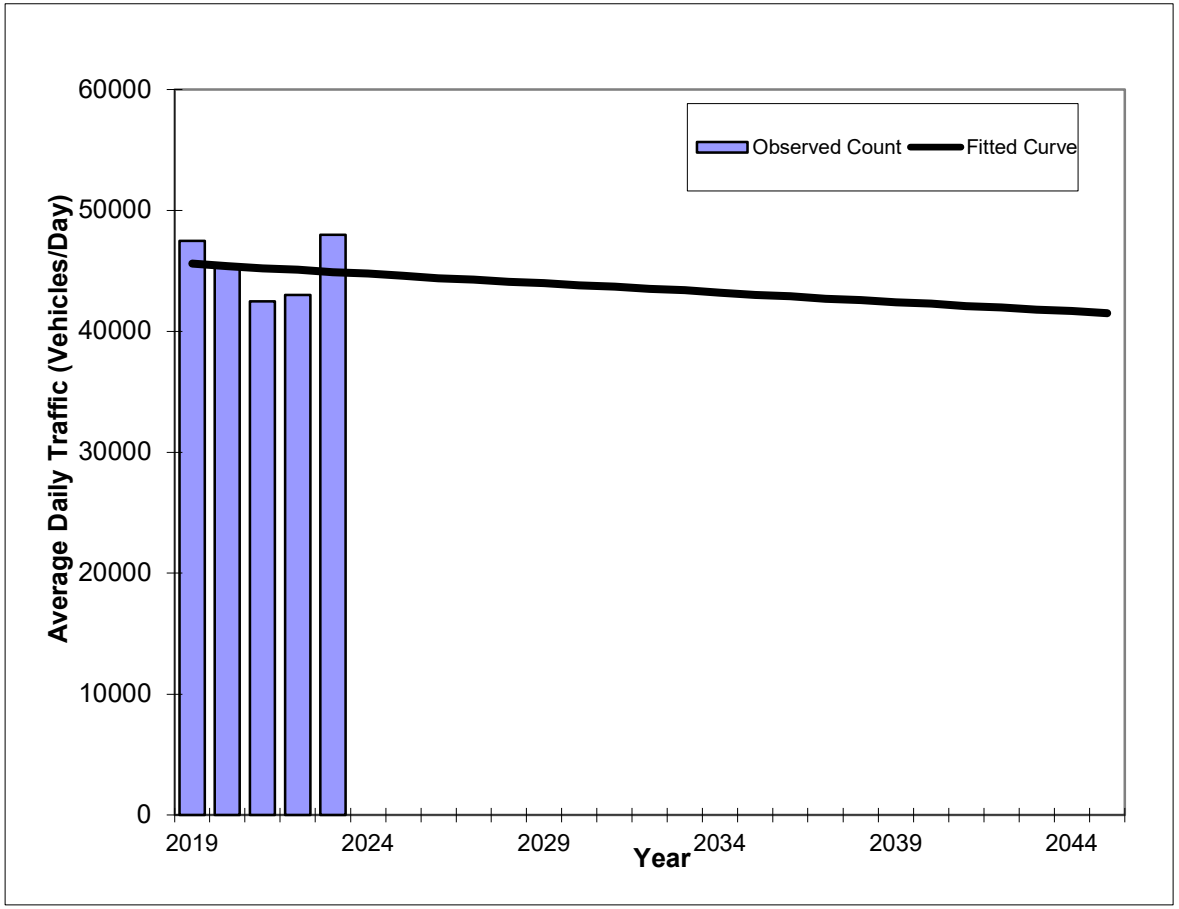
***Axle-Adjusted**

Traffic Trends - V3.0

SR 716/PORT ST LUCIE BLVD -- E OF TPK ENT (COUNTY 5073)

FIN#	0
Location	1

County:	St. Lucie (94)
Station #:	5073
Highway:	SR 716/PORT ST LUCIE BLVD



Year	Traffic (ADT/AADT) Count*	Trend**
2019	47500	45600
2020	45500	45400
2021	42500	45200
2022	43000	45100
2023	48000	44900
2027 Opening Year Trend		
2027	N/A	44300
2035 Mid-Year Trend		
2035	N/A	43000
2045 Design Year Trend		
2045	N/A	41500
TRANPLAN Forecasts/Trends		

Trend R-squared:	1.02%
Compounded Annual Historic Growth Rate:	-0.39%
Compounded Growth Rate (2023 to Design Year):	-0.36%
Printed:	4-Oct-24

Exponential Growth Option

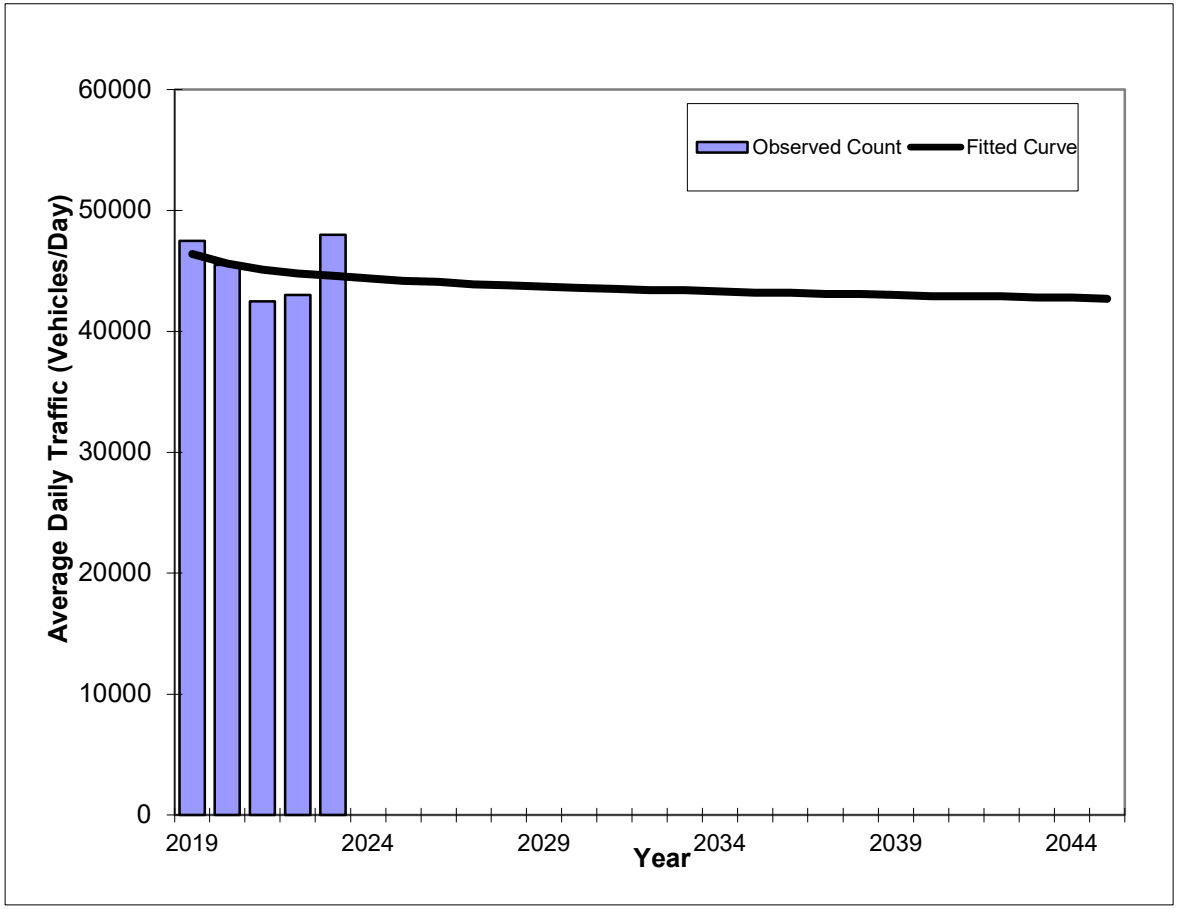
***Axle-Adjusted**

Traffic Trends - V3.0

SR 716/PORT ST LUCIE BLVD -- E OF TPK ENT (COUNTY 5073)

FIN#	0
Location	1

County:	St. Lucie (94)
Station #:	5073
Highway:	SR 716/PORT ST LUCIE BLVD



Year	Traffic (ADT/AADT) Count*	Trend**
2019	47500	46400
2020	45500	45600
2021	42500	45100
2022	43000	44800
2023	48000	44600
2027 Opening Year Trend		
2027	N/A	43900
2035 Mid-Year Trend		
2035	N/A	43200
2045 Design Year Trend		
2045	N/A	42700
TRANPLAN Forecasts/Trends		

Trend R-squared:	7.76%
Compounded Annual Historic Growth Rate:	-0.98%
Compounded Growth Rate (2023 to Design Year):	-0.20%
Printed:	4-Oct-24

Decaying Exponential Growth Option

***Axle-Adjusted**

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2023 HISTORICAL AADT REPORT

COUNTY: 94 - ST.LUCIE

SITE: 8508 - BAYSHORE BLVD FROM THORNHILL DR TO WHITMORE DR (HPMS)

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2023	27000 S	N 12500	S 14500	9.00	51.60	14.40
2022	26000 F	N 12000	S 14000	9.00	51.40	14.40
2021	26000 C	N 12000	S 14000	9.00	50.90	14.40
2020	19200 S	N 8700	S 10500	9.00	51.30	4.90
2019	20100 F	N 9100	S 11000	9.00	51.00	4.90
2018	20200 C	N 9200	S 11000	9.00	51.30	4.90
2017	21000 S	N 10500	S 10500	9.00	50.90	4.90
2016	21000 F	N 10500	S 10500	9.00	50.90	4.90
2015	21000 C	N 10500	S 10500	9.00	51.00	4.90
2014	19500 F	N 10000	S 9500	9.00	50.80	2.30
2013	19500 C	N 10000	S 9500	9.00	50.80	2.30
2012	19300 C	N 11000	S 8300	9.00	56.80	2.30
2011	21000 T	0	0	9.00	57.20	7.60
2010	21000 S	N 10500	S 10500	10.32	55.40	5.10
2009	21000 F	N 10500	S 10500	10.27	57.35	5.10
2008	21000 C	N 10500	S 10500	10.45	58.06	5.10

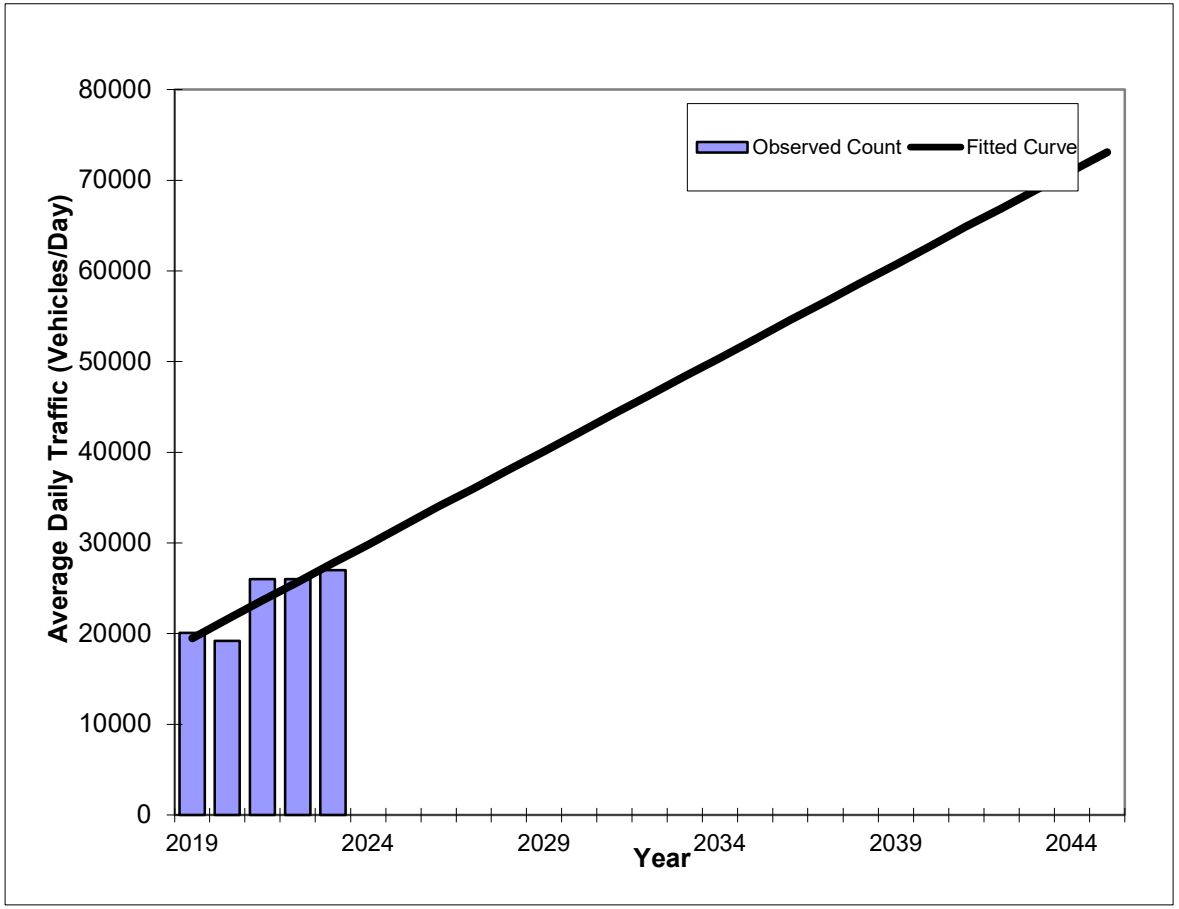
AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN
*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

Traffic Trends - V3.0

BAYSHORE BLVD -- FROM THORNHILL DR TO WHITMORE DR (HPMS)

FIN#	0
Location	1

County:	St. Lucie (94)
Station #:	8508
Highway:	BAYSHORE BLVD



Year	Traffic (ADT/AADT) Count*	Trend**
2019	20100	19500
2020	19200	21600
2021	26000	23700
2022	26000	25700
2023	27000	27800
2027 Opening Year Trend		
2027	N/A	36000
2035 Mid-Year Trend		
2035	N/A	52500
2045 Design Year Trend		
2045	N/A	73100
TRANPLAN Forecasts/Trends		

**** Annual Trend Increase:**	2,060
Trend R-squared:	77.62%
Trend Annual Historic Growth Rate:	10.64%
Trend Growth Rate (2023 to Design Year):	7.41%
Printed:	4-Oct-24

Straight Line Growth Option

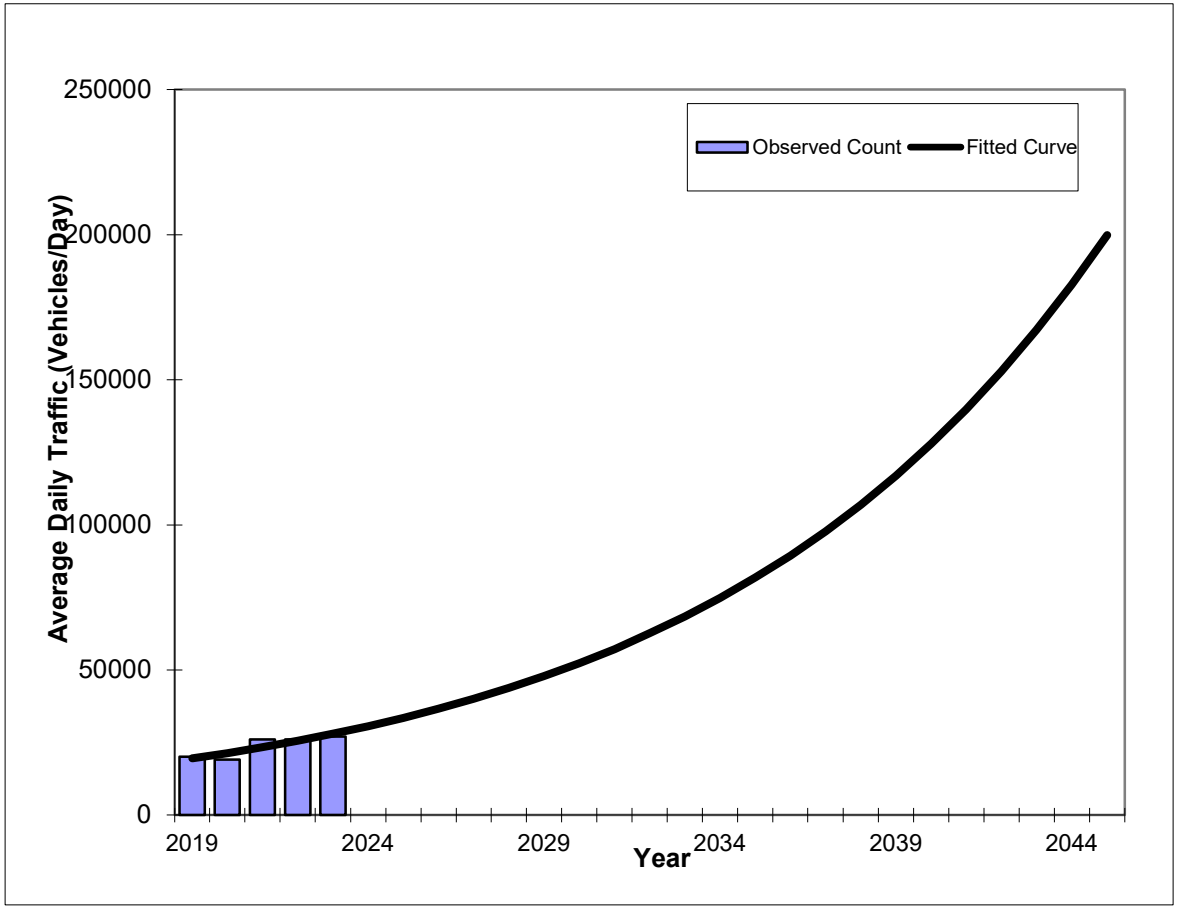
***Axle-Adjusted**

Traffic Trends - V3.0

BAYSHORE BLVD -- FROM THORNHILL DR TO WHITMORE DR (HPMS)

FIN#	0
Location	1

County:	St. Lucie (94)
Station #:	8508
Highway:	BAYSHORE BLVD



Year	Traffic (ADT/AADT) Count*	Trend**
2019	20100	19600
2020	19200	21400
2021	26000	23400
2022	26000	25600
2023	27000	28000
2027 Opening Year Trend		
2027	N/A	40000
2035 Mid-Year Trend		
2035	N/A	81800
2045 Design Year Trend		
2045	N/A	199900
TRANPLAN Forecasts/Trends		

Trend R-squared:	76.08%
Compounded Annual Historic Growth Rate:	9.33%
Compounded Growth Rate (2023 to Design Year):	9.35%
Printed:	4-Oct-24

Exponential Growth Option

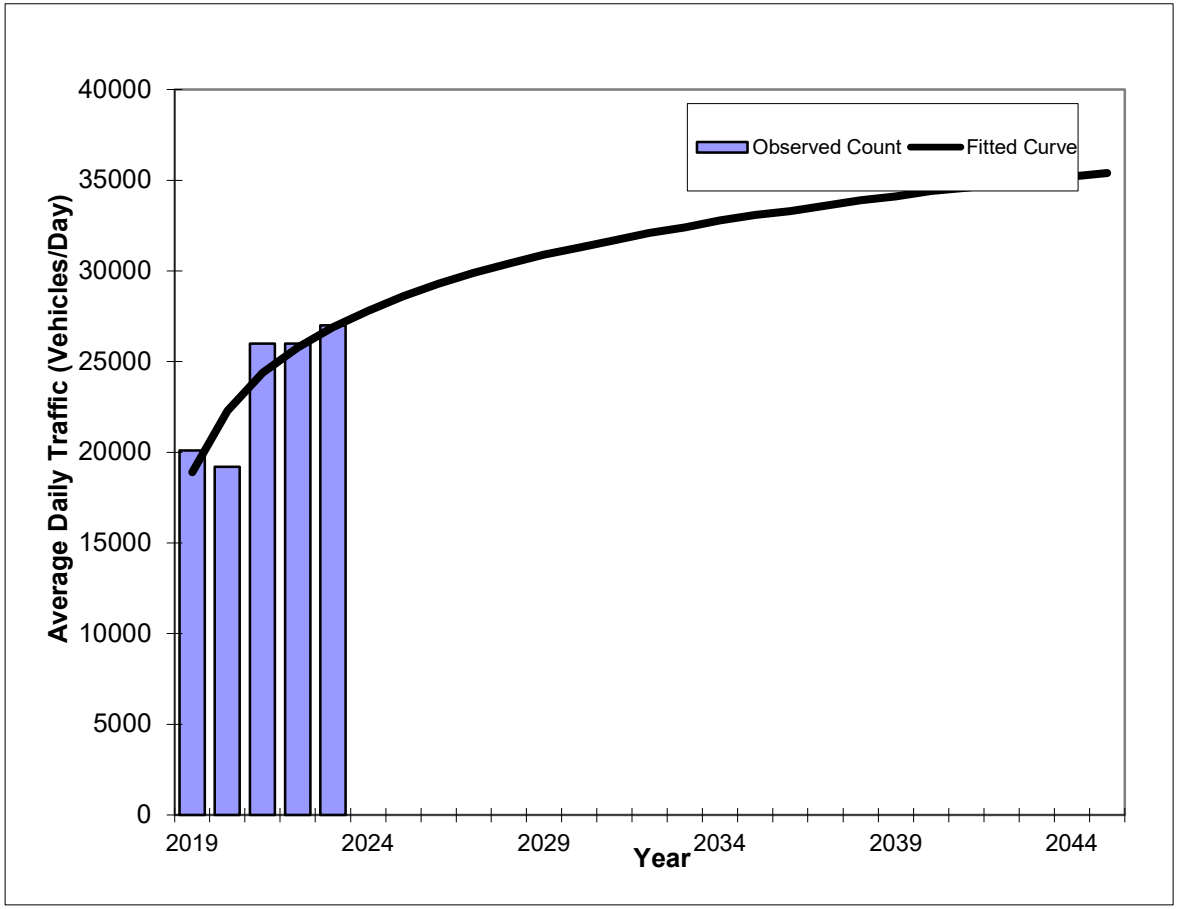
***Axle-Adjusted**

Traffic Trends - V3.0

BAYSHORE BLVD -- FROM THORNHILL DR TO WHITMORE DR (HPMS)

FIN#	0
Location	1

County:	St. Lucie (94)
Station #:	8508
Highway:	BAYSHORE BLVD



Year	Traffic (ADT/AADT) Count*	Trend**
2019	20100	18900
2020	19200	22300
2021	26000	24400
2022	26000	25800
2023	27000	26900
2027 Opening Year Trend		
2027	N/A	29900
2035 Mid-Year Trend		
2035	N/A	33100
2045 Design Year Trend		
2045	N/A	35400
TRANPLAN Forecasts/Trends		

Trend R-squared:	74.26%
Compounded Annual Historic Growth Rate:	9.23%
Compounded Growth Rate (2023 to Design Year):	1.26%
Printed:	4-Oct-24

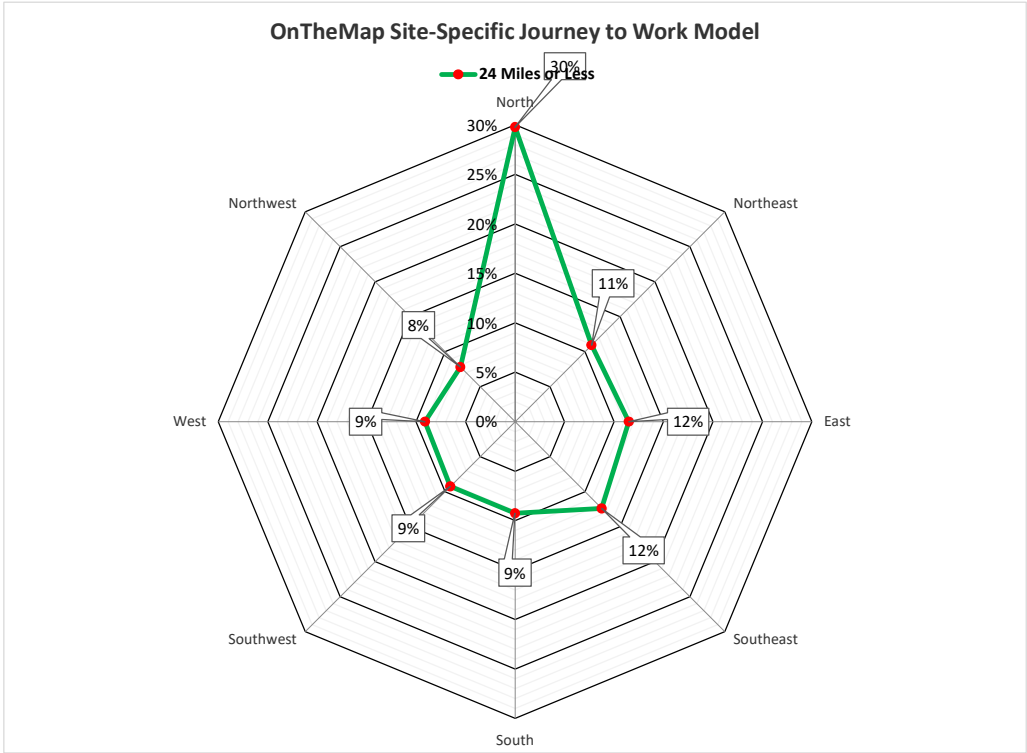
Decaying Exponential Growth Option

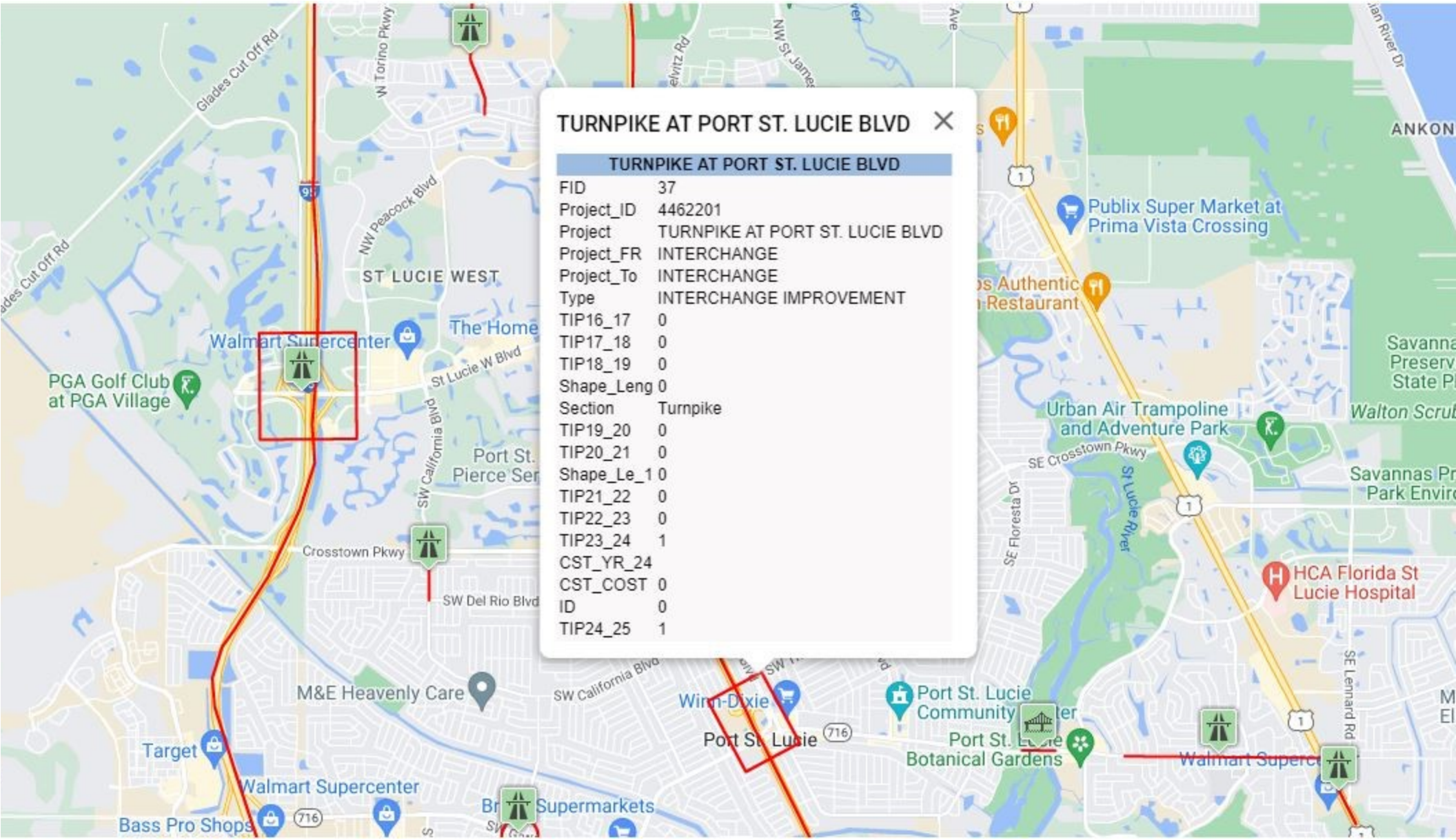
***Axle-Adjusted**

Distance/Direction Report - Home Census Block to Work Census Block

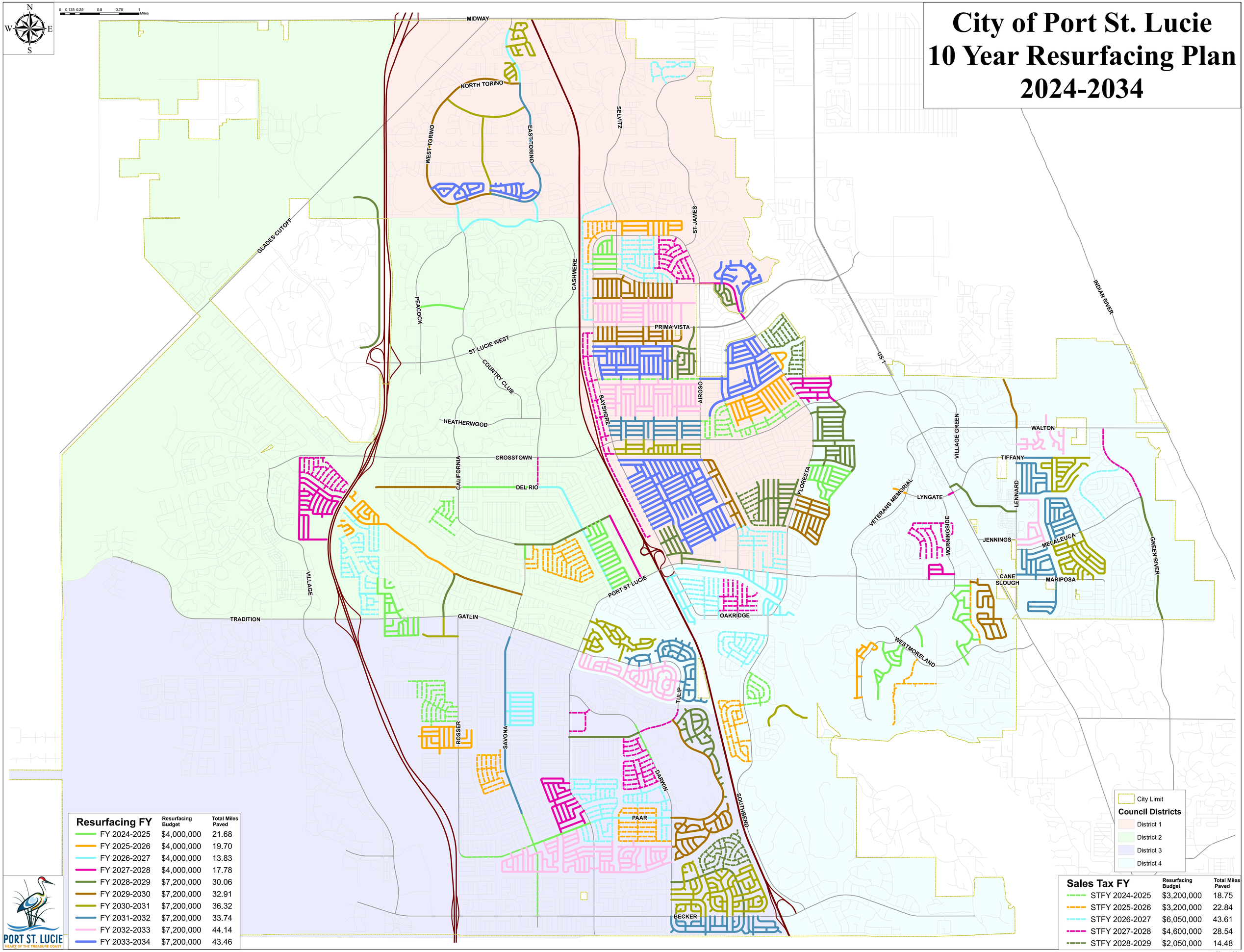
Job Counts in Home Blocks by Distance Only

	All		North		Northeast		East		Southeast		South		Southwest		West		Northwest	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
Total All Private Jobs	1,848	100.0%	456	24.7%	136	7.4%	143	7.7%	196	10.6%	331	17.9%	155	8.4%	206	11.1%	225	12.2%
Less than 10 miles	1,009	100.0%	221	21.9%	136	13.5%	140	13.9%	92	9.1%	109	10.8%	111	11.0%	108	10.7%	92	9.1%
10 to 24 miles	234	100.0%	149	63.7%	0	0.0%	3	1.3%	62	26.5%	6	2.6%	4	1.7%	5	2.1%	5	2.1%
25 to 50 miles	162	100.0%	31	19.1%	0	0.0%	0	0.0%	42	25.9%	67	41.4%	8	4.9%	9	5.6%	5	3.1%
Greater than 50 miles	443	100.0%	55	12.4%	0	0.0%	0	0.0%	0	0.0%	149	33.6%	32	7.2%	84	19.0%	123	27.8%
Include:																		
24 Miles or Less	1,243	**100%**	370	**30%**	136	**11%**	143	**12%**	154	**12%**	115	**9%**	115	**9%**	113	**9%**	97	**8%**




TURNPIKE AT PORT ST. LUCIE BLVD
TURNPIKE AT PORT ST. LUCIE BLVD
FID 37
Project_ID 4462201
Project TURNPIKE AT PORT ST. LUCIE BLVD
Project_FR INTERCHANGE
Project_To INTERCHANGE
Type INTERCHANGE IMPROVEMENT
TIP16_17 0
TIP17_18 0
TIP18_19 0
Shape_Leng 0
Section Turnpike
TIP19_20 0
TIP20_21 0
Shape_Le_1 0
TIP21_22 0
TIP22_23 0
TIP23_24 1
CST_YR_24
CST_COST 0
ID 0
TIP24_25 1
Glades Cut Off Rd
W Torino Pkwy
NW Peacock Blvd
ST LUCIE WEST
Walmart Supercenter
The Home
PGA Golf Club at PGA Village
St Lucie W Blvd
SW California Blvd
Port St. Pierce Ser
Crosstown Pkwy
SW Del Rio Blvd
M&E Heavenly Care
Target
Walmart Supercenter
Bass Pro Shops
Publix Super Market at Prima Vista Crossing
Urban Air Trampoline and Adventure Park
SE Crosstown Pkwy
SE Floresta Dr
St Lucie River
HCA Florida St Lucie Hospital
Port St. Lucie
Port St. Lucie Botanical Gardens
SE Lennard Rd

City of Port St. Lucie
10 Year Resurfacing Plan
2024-2034



Resurfacing FY	Resurfacing Budget	Total Miles Paved
FY 2024-2025	$4,000,000	21.68
FY 2025-2026	$4,000,000	19.70
FY 2026-2027	$4,000,000	13.83
FY 2027-2028	$4,000,000	17.78
FY 2028-2029	$7,200,000	30.06
FY 2029-2030	$7,200,000	32.91
FY 2030-2031	$7,200,000	36.32
FY 2031-2032	$7,200,000	33.74
FY 2032-2033	$7,200,000	44.14
FY 2033-2034	$7,200,000	43.46

City Limit

Council Districts

- District 1
- District 2
- District 3
- District 4

Sales Tax FY	Resurfacing Budget	Total Miles Paved
STFY 2024-2025	$3,200,000	18.75
STFY 2025-2026	$3,200,000	22.84
STFY 2026-2027	$6,050,000	43.61
STFY 2027-2028	$4,600,000	28.54
STFY 2028-2029	$2,050,000	14.48

PORT ST. LUCIE
HEART OF THE TREASURE COAST

pwgis0001 July 2024

APPENDIX D
INTERSECTION VOLUME SPREADSHEETS

AM Peak Hour Volumes

Intersection	Road	Direction	Movement	AM PEAK 2024 Existing Volumes	AM PEAK 2027 No Build Volumes	AM PEAK Site Trip Distribution	AM PEAK Site Trips	AM PEAK Pass-by Site Trip Distributions	AM PEAK Pass-by Site Trips	AM PEAK 2027 Build Volumes	
(1) SW Bayshore Boulevard & Crescent Avenue	Crescent Avenue	Eastbound	EBL	0	0		0		0	0	Int 1
			EBT	0	0		0		0	0	
			EBR	0	0		0		0	0	
			Approach	0	0		0		0	0	
		Westbound	WBL	0	0		0		0	0	
			WBT	0	0		0		0	0	
			WBR	50	51		0		0	51	
			Approach	50	51		0		0	51	
	SW Bayshore Boulevard	Northbound	NBL	47	48		0		0	48	
			NBT	1004	1024	(25%)	5	(42%)	31	1060	
			NBR	27	28	(16%)	4		0	32	
			Approach	1078	1100	(41%)	9	(42%)	31	1140	
		Southbound	SBL	52	53	30%	7	58%	43	103	
			SBT	1303	1329		0	-58%	-43	1286	
			SBR	0	0		0		0	0	
			Approach	1355	1382	30%	7		0	1389	
(2) SW Bayshore Boulevard & Port St Lucie Boulevard	Port St Lucie Boulevard	Eastbound	EBL	533	544	26%	6		0	550	Int 2
			EBT	1617	1649		0		0	1649	
			EBR	467	476		0		0	476	
			Approach	2617	2669	26%	6		0	2675	
		Westbound	WBL	636	649	(30%)	7	(58%)	42	698	
			WBT	778	794	(29%)	7	(-58%)	-42	759	
			WBR	169	172		0		0	172	
			Approach	1583	1615	(59%)	14		0	1629	
	SW Bayshore Boulevard	Northbound	NBL	192	196		0		0	196	
			NBT	398	406	15%	3	42%	31	440	
			NBR	267	272		0		0	272	
			Approach	857	874	15%	3	42%	31	908	
		Southbound	SBL	236	241		0		0	241	
			SBT	622	634		0	(-58%)	-42	592	
			SBR	433	442		0		0	442	
			Approach	1291	1317		0	(-58%)	-42	1275	
(3) Port St Lucie Boulevard & Driveway 1	Port St Lucie Boulevard	Eastbound	EBL	0	0		0		0	0	Int 3
			EBT	0	0	(59%)	14		0	14	
			EBR	0	0		0		0	0	
			Approach	0	0	(59%)	14		0	14	
		Westbound	WBL	0	0		0		0	0	
			WBT	0	0		0		0	0	
			WBR	0	0		0		0	0	
			Approach	0	0		0		0	0	
	Driveway 1	Northbound	NBL	0	0		0		0	0	
			NBT	0	0		0		0	0	
			NBR	0	0		0		0	0	
			Approach	0	0		0		0	0	
		Southbound	SBL	0	0		0		0	0	
			SBT	0	0		0		0	0	
			SBR	0	0		0		0	0	
			Approach	0	0		0		0	0	
(4) Driveway 2 & Victoria Square Parking Lot St	Driveway 2	Eastbound	EBL	0	0		0		0	0	Int 4
			EBT	0	0		0		0	0	
			EBR	0	0		0		0	0	
			Approach	0	0		0		0	0	
		Westbound	WBL	0	0		0		0	0	
			WBT	0	0		0		0	0	
			WBR	0	0	59%	14		0	14	
			Approach	0	0	59%	14		0	14	
	Victoria Square Parking Lot St	Northbound	NBL	0	0		0		0	0	
			NBT	0	0		0		0	0	
			NBR	0	0		0		0	0	
			Approach	0	0		0		0	0	
		Southbound	SBL	0	0		0		0	0	
			SBT	0	0		0		0	0	
			SBR	0	0		0		0	0	
			Approach	0	0		0		0	0	

PM Peak Hour Volumes

Intersection	Road	Direction	Movement	PM PEAK 2024 Existing Volumes	PM PEAK 2027 No Build Volumes	PM PEAK Site Trip Distribution	PM PEAK Site Trips	PM PEAK Pass-by Site Trip Distributions	PM PEAK Pass-by Site Trips	PM PEAK 2027 Build Volumes	
(1) SW Bayshore Boulevard & Crescent Avenue	Crescent Avenue	Eastbound	EBL	0	0		0		0	0	Int 1
			EBT	0	0		0		0	0	
			EBR	0	0		0		0	0	
			Approach	0	0		0		0	0	
		Westbound	WBL	0	0		0		0	0	
			WBT	0	0		0		0	0	
			WBR	80	82		0		0	82	
			Approach	80	82		0		0	82	
	SW Bayshore Boulevard	Northbound	NBL	113	115		0		0	115	
			NBT	1220	1244	(25%)	7	(42%)	35	1286	
			NBR	78	80	(16%)	4		0	84	
			Approach	1411	1439	(41%)	11	(42%)	35	1485	
		Southbound	SBL	80	82	30%	8	58%	48	138	
			SBT	1286	1312		0	-58%	-48	1264	
			SBR	0	0		0		0	0	
			Approach	1366	1394	30%	8		0	1402	
(2) SW Bayshore Boulevard & Port St Lucie Boulevard	Port St Lucie Boulevard	Eastbound	EBL	358	365	26%	7		0	372	Int 2
			EBT	1254	1279		0		0	1279	
			EBR	231	236		0		0	236	
			Approach	1843	1880	26%	7		0	1887	
		Westbound	WBL	297	303	(30%)	8	(58%)	48	359	
			WBT	1568	1599	(29%)	8	(-58%)	-48	1559	
			WBR	189	193		0		0	193	
			Approach	2054	2095	(59%)	16		0	2111	
	SW Bayshore Boulevard	Northbound	NBL	410	418		0		0	418	
			NBT	724	738	15%	4	42%	35	777	
			NBR	326	333		0		0	333	
			Approach	1460	1489	15%	4	42%	35	1528	
		Southbound	SBL	364	371		0		0	371	
			SBT	391	399		0	(-58%)	-48	351	
			SBR	636	649		0		0	649	
			Approach	1391	1419		0	(-58%)	-48	1371	
(3) Port St Lucie Boulevard & Driveway 1	Port St Lucie Boulevard	Eastbound	EBL	0	0		0		0	0	Int 3
			EBT	0	0	(59%)	16		0	16	
			EBR	0	0		0		0	0	
			Approach	0	0	(59%)	16		0	16	
		Westbound	WBL	0	0		0		0	0	
			WBT	0	0		0		0	0	
			WBR	0	0		0		0	0	
			Approach	0	0		0		0	0	
	Driveway 1	Northbound	NBL	0	0		0		0	0	
			NBT	0	0		0		0	0	
			NBR	0	0		0		0	0	
			Approach	0	0		0		0	0	
		Southbound	SBL	0	0		0		0	0	
			SBT	0	0		0		0	0	
			SBR	0	0		0		0	0	
			Approach	0	0		0		0	0	
(4) Driveway 2 & Victoria Square Parking Lot St	Driveway 2	Eastbound	EBL	0	0		0		0	0	Int 4
			EBT	0	0		0		0	0	
			EBR	0	0		0		0	0	
			Approach	0	0		0		0	0	
		Westbound	WBL	0	0		0		0	0	
			WBT	0	0		0		0	0	
			WBR	0	0	59%	17		0	17	
			Approach	0	0	59%	17		0	17	
	Victoria Square Parking Lot St	Northbound	NBL	0	0		0		0	0	
			NBT	0	0		0		0	0	
			NBR	0	0		0		0	0	
			Approach	0	0		0		0	0	
		Southbound	SBL	0	0		0		0	0	
			SBT	0	0		0		0	0	
			SBR	0	0		0		0	0	
			Approach	0	0		0		0	0	

APPENDIX E
INTERSECTION CAPACITY REPORTS

EXISTING CONDITIONS

Table 1.1 -2024 Existing Intersection Capacity Analysis Summary

Location	Time	Level of Service[1]			
		(1) SW Bayshore Boulevard & Crescent Avenue		(2) SW Bayshore Boulevard & Port St Lucie Boulevard	
		Unsignalized		Signalized	
		LOS	Delay	LOS	Delay
EBL	AM			F	90.9
	PM			F	134.9
EBT	AM			D	43.6
	PM			D	35.7
EBR	AM			C	33.6
	PM			C	20.8
EB Approach	AM			D	51.5
	PM			D	53.1
WBL	AM			F	118.5
	PM			F	85.9
WBT	AM			E	56.0
	PM			E	73.4
WBR	AM			E	58.9
	PM			F	83.6
WB Approach	AM	B	13.1	F	81.7
	PM	A	3.7	E	78.2
NBL	AM			F	90.7
	PM			F	170.2
NBT	AM			F	86.5
	PM			F	104.8
NBR	AM			F	198.1
	PM			F	124.0
NB Approach	AM			F	122.2
	PM			F	127.4
SBL	AM			F	94.7
	PM			F	129.0
SBT	AM			F	157.6
	PM			E	63.9
SBR	AM			D	37.3
	PM			F	94.5
SB Approach	AM			F	105.8
	PM			F	94.9
Overall	AM			E	79.6
	PM			F	85.5

[1] Delay is average delay per vehicle in seconds

[2] Approach operates under Free-flow conditions

Table 1.2 -2024 Existing Intersection Queue Lengths Summary

Location	Time	95th Percentile Queue Lenghts (ft)															
		EBL		EBR		WBL		WBR		NBL		NBR		SBL		SBR	
		Storage (ft)	95th %tile	Storage (ft)	95th %tile	Storage (ft)	95th %tile	Storage (ft)	95th %tile	Storage (ft)	95th %tile	Storage (ft)	95th %tile	Storage (ft)	95th %tile	Storage (ft)	95th %tile
(1) SW Bayshore Boulevard & Crescent	AM																
	PM																
(2) SW Bayshore Boulevard & Port St	AM	380	#903			430	#521			215	164			345	m197	360	m420
	PM		#664				219				#396				m#331		m#857

 # 95th percentile volume exceeds capacity, queue may be longer.

m Volume for 95th percentile queue is metered by upstream signal.

LANGAN
ENGINEERING & ENVIRONMENTAL SERVICES

Intersection	
Int Delay, s/veh	1

Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Vol, veh/h	0	50	47	1004	27	52	1303
Future Vol, veh/h	0	50	47	1004	27	52	1303
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	-	None	-	None
Storage Length	-	0	150	-	-	200	-
Veh in Median Storage, #	0	-	-	0	-	-	0
Grade, %	0	-	-	0	-	-	0
Peak Hour Factor	98	98	98	98	98	98	98
Heavy Vehicles, %	3	3	3	3	3	3	3
Mvmt Flow	0	51	48	1024	28	53	1330

Major/Minor	Minor1		Major1			Major2	
Conflicting Flow All	-	526	1330	0	0	1052	0
Stage 1	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-
Critical Hdwy	-	6.96	6.46	-	-	4.16	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-
Follow-up Hdwy	-	3.33	2.53	-	-	2.23	-
Pot Cap-1 Maneuver	0	494	201	-	-	651	-
Stage 1	0	-	-	-	-	-	-
Stage 2	0	-	-	-	-	-	-
Platoon blocked, %				-	-		-
Mov Cap-1 Maneuver	-	494	201	-	-	651	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	13.13	1.24	0.42
HCM LOS	B		

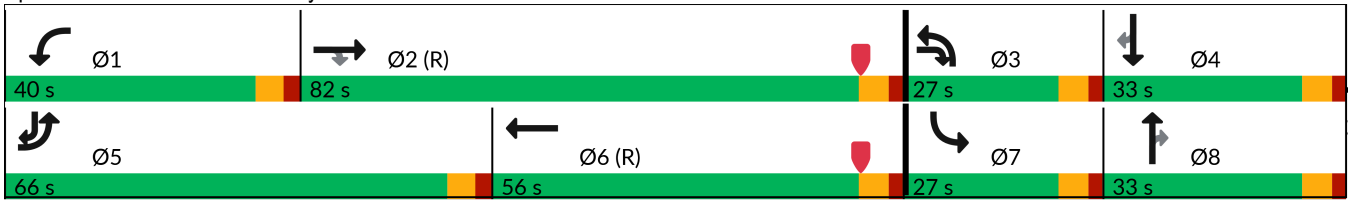
Minor Lane/Major Mvmt	NBU	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	201	-	-	494	651	-
HCM Lane V/C Ratio	0.238	-	-	0.103	0.081	-
HCM Control Delay (s/veh)	28.4	-	-	13.1	11	-
HCM Lane LOS	D	-	-	B	B	-
HCM 95th %tile Q(veh)	0.9	-	-	0.3	0.3	-

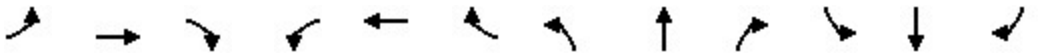
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	533	1617	467	636	778	192	398	267	236	622	433
Future Volume (vph)	533	1617	467	636	778	192	398	267	236	622	433
Lane Group Flow (vph)	555	1684	486	663	986	200	415	278	246	648	451
Turn Type	Prot	NA	pm+ov	Prot	NA	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	5	2	3	1	6	3	8		7	4	5
Permitted Phases			2					8			4
Detector Phase	5	2	3	1	6	3	8	8	7	4	5
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0	24.0	11.0	11.0	24.0	11.0	24.0	24.0	11.0	24.0	11.0
Total Split (s)	66.0	82.0	27.0	40.0	56.0	27.0	33.0	33.0	27.0	33.0	66.0
Total Split (%)	36.3%	45.1%	14.8%	22.0%	30.8%	14.8%	18.1%	18.1%	14.8%	18.1%	36.3%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	None	C-Max	None	Max	Max	None	Max	None
v/c Ratio	0.98	0.80	0.56	1.04	0.71	0.66	0.72	0.57	0.73	1.06	0.53
Control Delay (s/veh)	92.0	50.0	26.5	116.8	60.8	90.2	80.3	11.5	93.4	123.0	26.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	92.0	50.0	26.5	116.8	60.8	90.2	80.3	11.5	93.4	123.0	26.6
Queue Length 50th (ft)	654	643	336	~440	384	121	252	0	150	~442	291
Queue Length 95th (ft)	#903	704	422	#571	440	164	323	95	m197	m#639	m420
Internal Link Dist (ft)		1546			604		266			624	
Turn Bay Length (ft)	380			430		215			345		360
Base Capacity (vph)	577	2102	910	635	1390	392	577	490	392	609	866
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.96	0.80	0.53	1.04	0.71	0.51	0.72	0.57	0.63	1.06	0.52

Intersection Summary

Cycle Length: 182
Actuated Cycle Length: 182
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 100
Control Type: Actuated-Coordinated
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: SW Bayshore Blvd & SW Port St. Lucie Blvd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	533	1617	467	636	778	169	192	398	267	236	622	433
Future Volume (veh/h)	533	1617	467	636	778	169	192	398	267	236	622	433
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	555	1684	486	662	810	176	200	415	278	246	648	451
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	571	2274	817	640	1305	281	242	523	233	288	570	762
Arrive On Green	0.32	0.45	0.45	0.19	0.31	0.31	0.07	0.15	0.15	0.08	0.16	0.16
Sat Flow, veh/h	1767	5066	1572	3428	4171	900	3428	3526	1572	3428	3526	1572
Grp Volume(v), veh/h	555	1684	486	662	655	331	200	415	278	246	648	451
Grp Sat Flow(s),veh/h/ln	1767	1689	1572	1714	1689	1694	1714	1763	1572	1714	1763	1572
Q Serve(g_s), s	56.4	49.9	39.1	34.0	30.1	30.4	10.5	20.7	27.0	12.9	29.4	29.4
Cycle Q Clear(g_c), s	56.4	49.9	39.1	34.0	30.1	30.4	10.5	20.7	27.0	12.9	29.4	29.4
Prop In Lane	1.00		1.00	1.00		0.53	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	571	2274	817	640	1056	530	242	523	233	288	570	762
V/C Ratio(X)	0.97	0.74	0.59	1.03	0.62	0.63	0.83	0.79	1.19	0.85	1.14	0.59
Avail Cap(c_a), veh/h	583	2274	817	640	1056	530	396	523	233	396	570	762
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	60.8	41.4	30.4	74.0	53.3	53.4	83.5	74.8	77.5	82.2	76.3	33.9
Incr Delay (d2), s/veh	30.1	2.2	3.2	44.5	2.7	5.5	7.2	11.7	120.6	12.5	81.4	3.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	29.6	20.9	15.5	18.7	13.1	13.6	4.9	10.2	18.7	6.2	19.7	15.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	90.9	43.6	33.6	118.5	56.0	58.9	90.7	86.5	198.1	94.7	157.6	37.3
LnGrp LOS	F	D	C	F	E	E	F	F	F	F	F	D
Approach Vol, veh/h		2725			1648			893			1345	
Approach Delay, s/veh		51.5			81.7			122.2			105.8	
Approach LOS		D			F			F			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	40.0	87.7	18.9	35.4	64.8	62.9	21.3	33.0
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	34.0	76.0	21.0	27.0	60.0	50.0	21.0	27.0
Max Q Clear Time (g_c+I1), s	36.0	51.9	12.5	31.4	58.4	32.4	14.9	29.0
Green Ext Time (p_c), s	0.0	15.1	0.4	0.0	0.4	5.7	0.4	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	79.6
HCM 7th LOS	E

Intersection	
Int Delay, s/veh	2.7

Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Vol, veh/h	0	80	113	1220	78	80	1286
Future Vol, veh/h	0	80	113	1220	78	80	1286
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	-	None	-	None
Storage Length	-	0	150	-	-	200	-
Veh in Median Storage, #	0	-	-	0	-	-	0
Grade, %	0	-	-	0	-	-	0
Peak Hour Factor	96	96	96	96	96	96	96
Heavy Vehicles, %	3	3	3	3	3	3	3
Mvmt Flow	0	83	118	1271	81	83	1340

Major/Minor	Minor1		Major1			Major2	
Conflicting Flow All	-	676	1340	0	0	1352	0
Stage 1	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-
Critical Hdwy	-	6.96	6.46	-	-	4.16	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-
Follow-up Hdwy	-	3.33	2.53	-	-	2.23	-
Pot Cap-1 Maneuver	0	394	198	-	-	500	-
Stage 1	0	-	-	-	-	-	-
Stage 2	0	-	-	-	-	-	-
Platoon blocked, %				-	-		-
Mov Cap-1 Maneuver	-	394	198	-	-	500	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	16.59	3.73	0.8
HCM LOS	C		

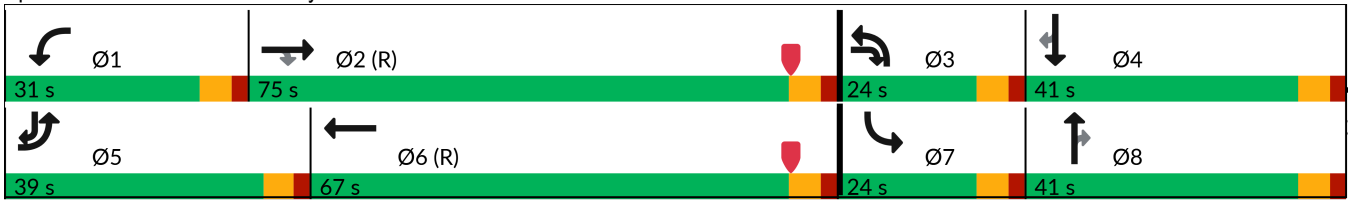
Minor Lane/Major Mvmt	NBU	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	198	-	-	394	500	-
HCM Lane V/C Ratio	0.593	-	-	0.212	0.167	-
HCM Control Delay (s/veh)	46.6	-	-	16.6	13.6	-
HCM Lane LOS	E	-	-	C	B	-
HCM 95th %tile Q(veh)	3.3	-	-	0.8	0.6	-

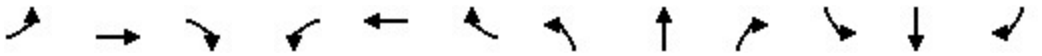
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	358	1254	231	297	1568	410	724	326	364	391	636
Future Volume (vph)	358	1254	231	297	1568	410	724	326	364	391	636
Lane Group Flow (vph)	362	1267	233	300	1775	414	731	329	368	395	642
Turn Type	Prot	NA	pm+ov	Prot	NA	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	5	2	3	1	6	3	8		7	4	5
Permitted Phases			2					8			4
Detector Phase	5	2	3	1	6	3	8	8	7	4	5
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0	24.0	11.0	11.0	24.0	11.0	24.0	24.0	11.0	24.0	11.0
Total Split (s)	39.0	75.0	24.0	31.0	67.0	24.0	41.0	41.0	24.0	41.0	39.0
Total Split (%)	22.8%	43.9%	14.0%	18.1%	39.2%	14.0%	24.0%	24.0%	14.0%	24.0%	22.8%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	None	C-Max	None	Max	Max	None	Max	None
v/c Ratio	1.07	0.58	0.25	0.75	1.00	1.16	1.02	0.64	1.03	0.55	0.90
Control Delay (s/veh)	131.7	38.7	13.0	84.4	75.0	161.9	104.0	21.5	128.7	66.1	57.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	131.7	38.7	13.0	84.4	75.0	161.9	104.0	21.5	128.7	66.1	57.3
Queue Length 50th (ft)	~448	393	81	170	726	~280	~454	78	~226	211	616
Queue Length 95th (ft)	#664	464	143	219	#843	#396	#590	195	m#331	m264	m#857
Internal Link Dist (ft)		1546			604		266			624	
Turn Bay Length (ft)	380			430		215			345		360
Base Capacity (vph)	338	2171	929	497	1776	357	717	518	357	717	710
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.07	0.58	0.25	0.60	1.00	1.16	1.02	0.64	1.03	0.55	0.90

Intersection Summary

Cycle Length: 171
Actuated Cycle Length: 171
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 140
Control Type: Actuated-Coordinated
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: SW Bayshore Blvd & SW Port St. Lucie Blvd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	358	1254	231	297	1568	189	410	724	326	364	391	636
Future Volume (veh/h)	358	1254	231	297	1568	189	410	724	326	364	391	636
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	362	1267	233	300	1584	191	414	731	329	368	395	642
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	341	2270	870	348	1634	197	361	722	322	361	722	625
Arrive On Green	0.19	0.45	0.45	0.10	0.36	0.36	0.11	0.20	0.20	0.11	0.20	0.20
Sat Flow, veh/h	1767	5066	1572	3428	4582	551	3428	3526	1572	3428	3526	1572
Grp Volume(v), veh/h	362	1267	233	300	1167	608	414	731	329	368	395	642
Grp Sat Flow(s),veh/h/ln	1767	1689	1572	1714	1689	1756	1714	1763	1572	1714	1763	1572
Q Serve(g_s), s	33.0	31.5	13.3	14.7	58.1	58.3	18.0	35.0	35.0	18.0	17.2	35.0
Cycle Q Clear(g_c), s	33.0	31.5	13.3	14.7	58.1	58.3	18.0	35.0	35.0	18.0	17.2	35.0
Prop In Lane	1.00		1.00	1.00		0.31	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	341	2270	870	348	1205	627	361	722	322	361	722	625
V/C Ratio(X)	1.06	0.56	0.27	0.86	0.97	0.97	1.15	1.01	1.02	1.02	0.55	1.03
Avail Cap(c_a), veh/h	341	2270	870	501	1205	627	361	722	322	361	722	625
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	69.0	34.7	20.0	75.6	54.1	54.1	76.5	68.0	68.0	76.5	60.9	51.5
Incr Delay (d2), s/veh	65.9	1.0	0.8	10.2	19.4	29.5	93.7	36.8	56.0	52.5	3.0	43.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	20.9	13.0	5.1	6.9	27.3	30.3	12.6	19.3	18.9	10.5	8.0	33.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	134.9	35.7	20.8	85.9	73.4	83.6	170.2	104.8	124.0	129.0	63.9	94.5
LnGrp LOS	F	D	C	F	E	F	F	F	F	F	E	F
Approach Vol, veh/h		1862			2075			1474			1405	
Approach Delay, s/veh		53.1			78.2			127.4			94.9	
Approach LOS		D			E			F			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	23.4	82.6	24.0	41.0	39.0	67.0	24.0	41.0
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	25.0	69.0	18.0	35.0	33.0	61.0	18.0	35.0
Max Q Clear Time (g_c+I1), s	16.7	33.5	20.0	37.0	35.0	60.3	20.0	37.0
Green Ext Time (p_c), s	0.6	11.7	0.0	0.0	0.0	0.6	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	85.5
HCM 7th LOS	F

FUTURE NO BUILD CONDITIONS

Table 2.1 - 2027 No Build Intersection Capacity Analysis Summary

Location	Time	Level of Service[1]			
		(1) SW Bayshore Boulevard & Crescent Avenue		(2) SW Bayshore Boulevard & Port St Lucie Boulevard	
		Unsignalized		Signalized	
		LOS	Delay	LOS	Delay
EBL	AM			F	91.6
	PM			F	141.4
EBT	AM			D	44.5
	PM			D	36.2
EBR	AM			C	34.1
	PM			C	21.0
EB Approach	AM			D	52.2
	PM			D	54.8
WBL	AM			F	125.1
	PM			F	86.2
WBT	AM			E	57.8
	PM			E	77.7
WBR	AM			E	61.1
	PM			F	88.4
WB Approach	AM	B	13.3	F	85.5
	PM	C	17.0	F	82.1
NBL	AM			F	91.1
	PM			F	178.5
NBT	AM			F	87.7
	PM			F	110.1
NBR	AM			F	206.1
	PM			F	130.1
NB Approach	AM			F	125.3
	PM			F	133.8
SBL	AM			F	95.2
	PM			F	134.4
SBT	AM			F	164.9
	PM			E	64.2
SBR	AM			D	36.8
	PM			F	101.0
SB Approach	AM			F	109.1
	PM			F	99.4
Overall	AM			F	82.0
	PM			F	89.4

[1] Delay is average delay per vehicle in seconds

[2] Approach operates under Free-flow conditions

Table 2.2 -2027 No Build Intersection Queue Lengths Summary

Location	Time	95th Percentile Queue Lenghts (ft)															
		EBL		EBR		WBL		WBR		NBL		NBR		SBL		SBR	
		Storage (ft)	95th %tile	Storage (ft)	95th %tile	Storage (ft)	95th %tile	Storage (ft)	95th %tile	Storage (ft)	95th %tile	Storage (ft)	95th %tile	Storage (ft)	95th %tile	Storage (ft)	95th %tile
(1) SW Bayshore Boulevard & Crescent	AM																
	PM																
(2) SW Bayshore Boulevard & Port St	AM	380	#935			430	#588			215	167			345	m201	360	m434
	PM		#682				223				#406				m#338		m#887

 # 95th percentile volume exceeds capacity, queue may be longer.

m Volume for 95th percentile queue is metered by upstream signal.

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Intersection	
Int Delay, s/veh	1.1

Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Vol, veh/h	0	51	48	1024	28	53	1329
Future Vol, veh/h	0	51	48	1024	28	53	1329
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	-	None	-	None
Storage Length	-	0	150	-	-	200	-
Veh in Median Storage, #	0	-	-	0	-	-	0
Grade, %	0	-	-	0	-	-	0
Peak Hour Factor	98	98	98	98	98	98	98
Heavy Vehicles, %	3	3	3	3	3	3	3
Mvmt Flow	0	52	49	1045	29	54	1356

Major/Minor	Minor1		Major1			Major2	
Conflicting Flow All	-	537	1356	0	0	1073	0
Stage 1	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-
Critical Hdwy	-	6.96	6.46	-	-	4.16	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-
Follow-up Hdwy	-	3.33	2.53	-	-	2.23	-
Pot Cap-1 Maneuver	0	486	194	-	-	639	-
Stage 1	0	-	-	-	-	-	-
Stage 2	0	-	-	-	-	-	-
Platoon blocked, %				-	-		-
Mov Cap-1 Maneuver	-	486	194	-	-	639	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	13.3	1.3	0.43
HCM LOS	B		

Minor Lane/Major Mvmt	NBU	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	194	-	-	486	639	-
HCM Lane V/C Ratio	0.253	-	-	0.107	0.085	-
HCM Control Delay (s/veh)	29.8	-	-	13.3	11.2	-
HCM Lane LOS	D	-	-	B	B	-
HCM 95th %tile Q(veh)	1	-	-	0.4	0.3	-

Murphy Oil Gas Station
2: SW Bayshore Blvd & SW Port St. Lucie Blvd

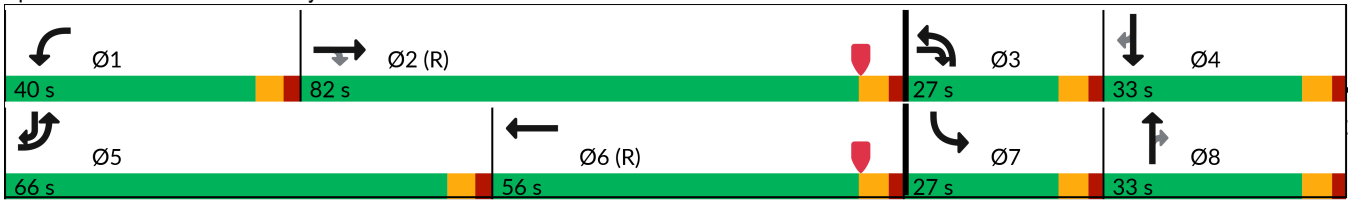
2027 NO BUILD CONDITIONS
Timing Plan: AM PEAK HOUR

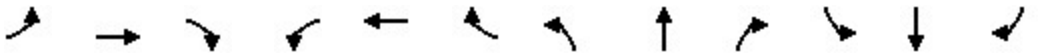
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	544	1649	476	649	794	196	406	272	241	634	442
Future Volume (vph)	544	1649	476	649	794	196	406	272	241	634	442
Lane Group Flow (vph)	567	1718	496	676	1006	204	423	283	251	660	460
Turn Type	Prot	NA	pm+ov	Prot	NA	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	5	2	3	1	6	3	8		7	4	5
Permitted Phases			2					8			4
Detector Phase	5	2	3	1	6	3	8	8	7	4	5
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0	24.0	11.0	11.0	24.0	11.0	24.0	24.0	11.0	24.0	11.0
Total Split (s)	66.0	82.0	27.0	40.0	56.0	27.0	33.0	33.0	27.0	33.0	66.0
Total Split (%)	36.3%	45.1%	14.8%	22.0%	30.8%	14.8%	18.1%	18.1%	14.8%	18.1%	36.3%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	None	C-Max	None	Max	Max	None	Max	None
v/c Ratio	0.98	0.82	0.57	1.06	0.74	0.66	0.74	0.57	0.74	1.09	0.53
Control Delay (s/veh)	92.6	50.8	26.8	121.8	62.2	90.3	81.2	11.5	93.7	130.0	26.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	92.6	50.8	26.8	121.8	62.2	90.3	81.2	11.5	93.7	130.0	26.6
Queue Length 50th (ft)	675	663	346	~456	394	124	257	0	153	~460	300
Queue Length 95th (ft)	#935	724	436	#588	450	167	329	95	m201	m#654	m434
Internal Link Dist (ft)		1546			604		266			624	
Turn Bay Length (ft)	380			430		215			345		360
Base Capacity (vph)	577	2102	910	635	1365	392	574	493	392	606	865
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.98	0.82	0.55	1.06	0.74	0.52	0.74	0.57	0.64	1.09	0.53

Intersection Summary

Cycle Length: 182
Actuated Cycle Length: 182
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 100
Control Type: Actuated-Coordinated
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: SW Bayshore Blvd & SW Port St. Lucie Blvd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	544	1649	476	649	794	172	196	406	272	241	634	442
Future Volume (veh/h)	544	1649	476	649	794	172	196	406	272	241	634	442
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	567	1718	496	676	827	179	204	423	283	251	660	460
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	581	2267	817	640	1276	274	246	523	233	293	571	771
Arrive On Green	0.33	0.45	0.45	0.19	0.31	0.31	0.07	0.15	0.15	0.09	0.16	0.16
Sat Flow, veh/h	1767	5066	1572	3428	4174	897	3428	3526	1572	3428	3526	1572
Grp Volume(v), veh/h	567	1718	496	676	668	338	204	423	283	251	660	460
Grp Sat Flow(s),veh/h/ln	1767	1689	1572	1714	1689	1694	1714	1763	1572	1714	1763	1572
Q Serve(g_s), s	57.7	51.6	40.3	34.0	31.2	31.5	10.7	21.1	27.0	13.1	29.5	29.5
Cycle Q Clear(g_c), s	57.7	51.6	40.3	34.0	31.2	31.5	10.7	21.1	27.0	13.1	29.5	29.5
Prop In Lane	1.00		1.00	1.00		0.53	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	581	2267	817	640	1033	518	246	523	233	293	571	771
V/C Ratio(X)	0.98	0.76	0.61	1.06	0.65	0.65	0.83	0.81	1.21	0.86	1.16	0.60
Avail Cap(c_a), veh/h	583	2267	817	640	1033	518	396	523	233	396	571	771
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	60.4	42.0	30.7	74.0	54.7	54.8	83.4	75.0	77.5	82.1	76.3	33.4
Incr Delay (d2), s/veh	31.2	2.4	3.3	51.1	3.1	6.3	7.7	12.7	128.6	13.0	88.7	3.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	30.4	21.6	15.9	19.3	13.6	14.2	5.0	10.5	19.2	6.3	20.3	15.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	91.6	44.5	34.1	125.1	57.8	61.1	91.1	87.7	206.1	95.2	164.9	36.8
LnGrp LOS	F	D	C	F	E	E	F	F	F	F	F	D
Approach Vol, veh/h		2781			1682			910			1371	
Approach Delay, s/veh		52.2			85.5			125.3			109.1	
Approach LOS		D			F			F			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	40.0	87.4	19.1	35.5	65.8	61.6	21.6	33.0
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	34.0	76.0	21.0	27.0	60.0	50.0	21.0	27.0
Max Q Clear Time (g_c+I1), s	36.0	53.6	12.7	31.5	59.7	33.5	15.1	29.0
Green Ext Time (p_c), s	0.0	14.7	0.4	0.0	0.1	5.7	0.4	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	82.0
HCM 7th LOS	F

Intersection	
Int Delay, s/veh	2.9

Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Vol, veh/h	0	82	115	1244	80	82	1312
Future Vol, veh/h	0	82	115	1244	80	82	1312
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	-	None	-	None
Storage Length	-	0	150	-	-	200	-
Veh in Median Storage, #	0	-	-	0	-	-	0
Grade, %	0	-	-	0	-	-	0
Peak Hour Factor	96	96	96	96	96	96	96
Heavy Vehicles, %	3	3	3	3	3	3	3
Mvmt Flow	0	85	120	1296	83	85	1367

Major/Minor	Minor1		Major1			Major2	
Conflicting Flow All	-	690	1367	0	0	1379	0
Stage 1	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-
Critical Hdwy	-	6.96	6.46	-	-	4.16	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-
Follow-up Hdwy	-	3.33	2.53	-	-	2.23	-
Pot Cap-1 Maneuver	0	386	191	-	-	488	-
Stage 1	0	-	-	-	-	-	-
Stage 2	0	-	-	-	-	-	-
Platoon blocked, %				-	-		-
Mov Cap-1 Maneuver	-	386	191	-	-	488	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	16.98	4.1	0.82
HCM LOS	C		

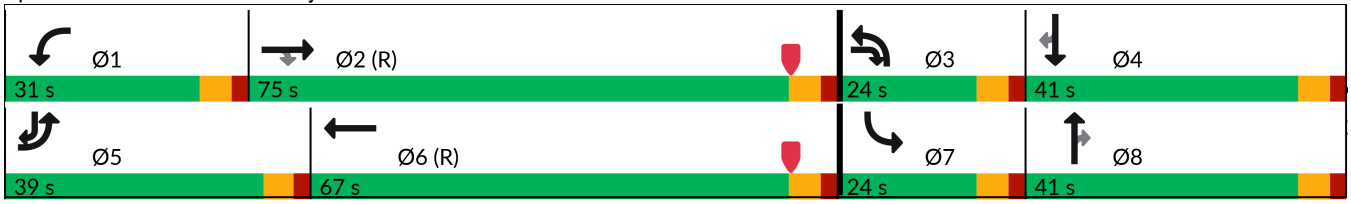
Minor Lane/Major Mvmt	NBU	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	191	-	-	386	488	-
HCM Lane V/C Ratio	0.629	-	-	0.222	0.175	-
HCM Control Delay (s/veh)	51.3	-	-	17	13.9	-
HCM Lane LOS	F	-	-	C	B	-
HCM 95th %tile Q(veh)	3.6	-	-	0.8	0.6	-

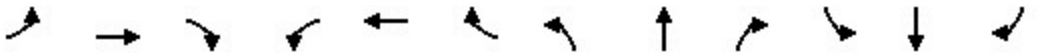
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	365	1279	236	303	1599	418	738	333	371	399	649
Future Volume (vph)	365	1279	236	303	1599	418	738	333	371	399	649
Lane Group Flow (vph)	369	1292	238	306	1810	422	745	336	375	403	656
Turn Type	Prot	NA	pm+ov	Prot	NA	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	5	2	3	1	6	3	8		7	4	5
Permitted Phases			2					8			4
Detector Phase	5	2	3	1	6	3	8	8	7	4	5
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0	24.0	11.0	11.0	24.0	11.0	24.0	24.0	11.0	24.0	11.0
Total Split (s)	39.0	75.0	24.0	31.0	67.0	24.0	41.0	41.0	24.0	41.0	39.0
Total Split (%)	22.8%	43.9%	14.0%	18.1%	39.2%	14.0%	24.0%	24.0%	14.0%	24.0%	22.8%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	None	C-Max	None	Max	Max	None	Max	None
v/c Ratio	1.09	0.60	0.26	0.75	1.02	1.18	1.04	0.65	1.05	0.56	0.92
Control Delay (s/veh)	137.2	39.2	13.6	84.6	79.3	169.0	108.3	22.4	132.9	66.4	60.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	137.2	39.2	13.6	84.6	79.3	169.0	108.3	22.4	132.9	66.4	60.3
Queue Length 50th (ft)	~464	404	87	173	~779	~290	~471	86	~235	215	643
Queue Length 95th (ft)	#682	476	150	223	#872	#406	#607	205	m#338	m270	m#887
Internal Link Dist (ft)		1546			604		266			624	
Turn Bay Length (ft)	380			430		215			345		360
Base Capacity (vph)	338	2165	926	497	1776	357	717	519	357	717	710
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.09	0.60	0.26	0.62	1.02	1.18	1.04	0.65	1.05	0.56	0.92

Intersection Summary

Cycle Length: 171
Actuated Cycle Length: 171
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 130
Control Type: Actuated-Coordinated
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: SW Bayshore Blvd & SW Port St. Lucie Blvd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	365	1279	236	303	1599	193	418	738	333	371	399	649
Future Volume (veh/h)	365	1279	236	303	1599	193	418	738	333	371	399	649
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	369	1292	238	306	1615	195	422	745	336	375	403	656
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	341	2261	867	354	1634	197	361	722	322	361	722	625
Arrive On Green	0.19	0.45	0.45	0.10	0.36	0.36	0.11	0.20	0.20	0.11	0.20	0.20
Sat Flow, veh/h	1767	5066	1572	3428	4581	552	3428	3526	1572	3428	3526	1572
Grp Volume(v), veh/h	369	1292	238	306	1190	620	422	745	336	375	403	656
Grp Sat Flow(s),veh/h/ln	1767	1689	1572	1714	1689	1756	1714	1763	1572	1714	1763	1572
Q Serve(g_s), s	33.0	32.4	13.7	15.0	59.8	60.1	18.0	35.0	35.0	18.0	17.6	35.0
Cycle Q Clear(g_c), s	33.0	32.4	13.7	15.0	59.8	60.1	18.0	35.0	35.0	18.0	17.6	35.0
Prop In Lane	1.00		1.00	1.00		0.31	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	341	2261	867	354	1205	626	361	722	322	361	722	625
V/C Ratio(X)	1.08	0.57	0.27	0.86	0.99	0.99	1.17	1.03	1.04	1.04	0.56	1.05
Avail Cap(c_a), veh/h	341	2261	867	501	1205	626	361	722	322	361	722	625
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	69.0	35.2	20.3	75.5	54.6	54.7	76.5	68.0	68.0	76.5	61.1	51.5
Incr Delay (d2), s/veh	72.4	1.1	0.8	10.7	23.1	33.7	102.0	42.1	62.1	57.9	3.1	49.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	21.5	13.4	5.2	7.1	28.6	31.8	13.0	19.8	19.5	10.8	8.1	34.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	141.4	36.2	21.0	86.2	77.7	88.4	178.5	110.1	130.1	134.4	64.2	101.0
LnGrp LOS	F	D	C	F	E	F	F	F	F	F	E	F
Approach Vol, veh/h		1899			2116			1503			1434	
Approach Delay, s/veh		54.8			82.1			133.8			99.4	
Approach LOS		D			F			F			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	23.7	82.3	24.0	41.0	39.0	67.0	24.0	41.0
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	25.0	69.0	18.0	35.0	33.0	61.0	18.0	35.0
Max Q Clear Time (g_c+I1), s	17.0	34.4	20.0	37.0	35.0	62.1	20.0	37.0
Green Ext Time (p_c), s	0.6	11.9	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	89.4
HCM 7th LOS	F

FUTURE BUILD CONDITIONS

Table 5.1 - 2027 Build Intersection Capacity Analysis Summary

Location	Time	Level of Service[1]					
		(1) SW Bayshore Boulevard & Crescent Avenue		(2) SW Bayshore Boulevard & Port St Lucie Boulevard		(2) SW Bayshore Boulevard & Port St Lucie Boulevard [3]	
		Unsignalized		Signalized		Signalized	
		LOS	Delay	LOS	Delay	LOS	Delay
EBL	AM			F	108.1	F	102.6
	PM			F	185.8	F	185.8
EBT	AM			D	45.5	D	54.7
	PM			D	36.7	D	36.2
EBR	AM			D	35.4	D	42.9
	PM			C	21.6	C	20.7
EB Approach	AM			E	57.2	E	63.0
	PM			E	67.0	E	66.5
WBL	AM			F	134.9	F	97.9
	PM			F	87.3	F	80.2
WBT	AM			E	60.0	E	66.4
	PM			E	78.8	E	74.3
WBR	AM			E	63.7	E	71.9
	PM			F	89.6	F	84.7
WB Approach	AM	B	13.4	F	91.2	F	80.3
	PM	C	17.1	F	83.2	E	78.2
NBL	AM			F	91.1	F	93.8
	PM			F	178.5	F	154.5
NBT	AM			F	88.3	E	78.3
	PM			F	111.7	F	122.3
NBR	AM			F	206.1	F	146.2
	PM			F	130.1	F	140.7
NB Approach	AM			F	125.4	F	102.8
	PM			F	134.5	F	135.4
SBL	AM			F	97.7	F	94.6
	PM			F	166.2	F	166.2
SBT	AM			F	135.1	F	96.8
	PM			E	63.7	E	66.1
SBR	AM			D	35.3	C	31.2
	PM			F	101.0	F	112.8
SB Approach	AM			F	94.5	E	74.6
	PM			F	109.4	F	115.3
Overall	AM			F	82.6	E	75.1
	PM			F	95.2	F	95.0

[1] Delay is average delay per vehicle in seconds

[2] Approach operates under Free-flow conditions

[3] Optimized signal timing without changing cycle length

Table 5.2 -2027 Build Intersection Queue Lengths Summary

Location	Time	95th Percentile Queue Lenghts (ft)															
		EBL		EBR		WBL		WBR		NBL		NBR		SBL		SBR	
		Storage (ft)	95th %tile	Storage (ft)	95th %tile	Storage (ft)	95th %tile	Storage (ft)	95th %tile	Storage (ft)	95th %tile	Storage (ft)	95th %tile	Storage (ft)	95th %tile	Storage (ft)	95th %tile
(1) SW Bayshore Boulevard & Crescent	AM																
	PM																
(2) SW Bayshore Boulevard & Port St Lucie Boulevard	AM	380	#1032			430	#613			215	167			345	m226	360	m423
	AM [1]		#1020				#565				169				m223		m374
	PM		#786				239				#406				m#379		m#874
	PM [1]		#786				236				#394				m#378		m#895

 # 95th percentile volume exceeds capacity, queue may be longer.

m Volume for 95th percentile queue is metered by upstream signal.

[1] Optimized signal timing without changing cycle length

LANGAN
ENGINEERING & ENVIRONMENTAL SERVICES

Intersection	
Int Delay, s/veh	1.6

Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Vol, veh/h	0	51	78	1030	32	71	1318
Future Vol, veh/h	0	51	78	1030	32	71	1318
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	-	None	-	None
Storage Length	-	0	150	-	-	200	-
Veh in Median Storage, #	0	-	-	0	-	-	0
Grade, %	0	-	-	0	-	-	0
Peak Hour Factor	98	98	98	98	98	98	98
Heavy Vehicles, %	3	3	3	3	3	3	3
Mvmt Flow	0	52	80	1051	33	72	1345

Major/Minor	Minor1		Major1			Major2	
Conflicting Flow All	-	542	1345	0	0	1084	0
Stage 1	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-
Critical Hdwy	-	6.96	6.46	-	-	4.16	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-
Follow-up Hdwy	-	3.33	2.53	-	-	2.23	-
Pot Cap-1 Maneuver	0	482	197	-	-	634	-
Stage 1	0	-	-	-	-	-	-
Stage 2	0	-	-	-	-	-	-
Platoon blocked, %				-	-		-
Mov Cap-1 Maneuver	-	482	197	-	-	634	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	13.37	2.41	0.58
HCM LOS	B		

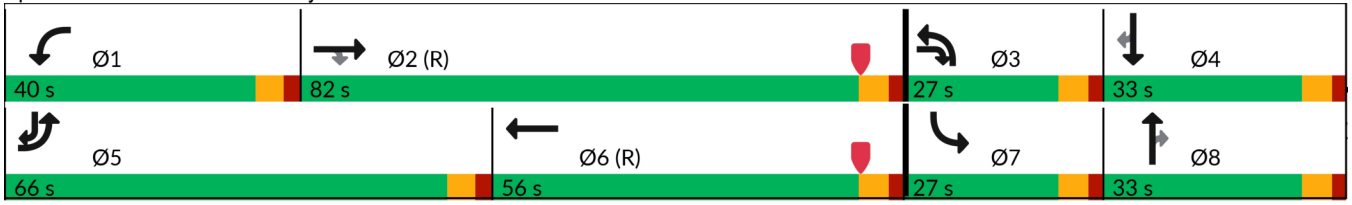
Minor Lane/Major Mvmt	NBU	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	197	-	-	482	634	-
HCM Lane V/C Ratio	0.404	-	-	0.108	0.114	-
HCM Ctrl Dly (s/v)	35.2	-	-	13.4	11.4	-
HCM Lane LOS	E	-	-	B	B	-
HCM 95th %tile Q(veh)	1.8	-	-	0.4	0.4	-

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	580	1619	476	667	801	196	410	272	271	623	442
Future Volume (vph)	580	1619	476	667	801	196	410	272	271	623	442
Lane Group Flow (vph)	604	1686	496	695	1013	204	427	283	282	649	460
Turn Type	Prot	NA	pm+ov	Prot	NA	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	5	2	3	1	6	3	8		7	4	5
Permitted Phases			2					8			4
Detector Phase	5	2	3	1	6	3	8	8	7	4	5
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0	24.0	11.0	11.0	24.0	11.0	24.0	24.0	11.0	24.0	11.0
Total Split (s)	66.0	82.0	27.0	40.0	56.0	27.0	33.0	33.0	27.0	33.0	66.0
Total Split (%)	36.3%	45.1%	14.8%	22.0%	30.8%	14.8%	18.1%	18.1%	14.8%	18.1%	36.3%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	None	C-Max	None	Max	Max	None	Max	None
v/c Ratio	1.05	0.80	0.57	1.09	0.74	0.66	0.77	0.58	0.79	1.07	0.53
Control Delay (s/veh)	107.4	50.1	26.8	130.0	62.5	90.3	83.8	11.8	96.4	125.7	26.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	107.4	50.1	26.8	130.0	62.5	90.3	83.8	11.8	96.4	125.7	26.4
Queue Length 50th (ft)	~779	644	346	~480	398	124	263	0	172	~445	295
Queue Length 95th (ft)	#1032	704	436	#613	454	167	#332	95	m226	m#637	m423
Internal Link Dist (ft)		1546			604		266			624	
Turn Bay Length (ft)	380			430		215			345		360
Base Capacity (vph)	577	2102	910	635	1364	392	554	486	392	606	865
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.05	0.80	0.55	1.09	0.74	0.52	0.77	0.58	0.72	1.07	0.53

Intersection Summary

Cycle Length: 182
Actuated Cycle Length: 182
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 110
Control Type: Actuated-Coordinated
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: SW Bayshore Blvd & SW Port St. Lucie Blvd



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	580	1619	476	667	801	172	196	410	272	271	623	442
Future Volume (veh/h)	580	1619	476	667	801	172	196	410	272	271	623	442
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	604	1686	496	695	834	179	204	427	283	282	649	460
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	583	2223	803	640	1237	264	246	523	233	323	602	787
Arrive On Green	0.33	0.44	0.44	0.19	0.30	0.30	0.07	0.15	0.15	0.09	0.17	0.17
Sat Flow, veh/h	1767	5066	1572	3428	4181	891	3428	3526	1572	3428	3526	1572
Grp Volume(v), veh/h	604	1686	496	695	673	340	204	427	283	282	649	460
Grp Sat Flow(s),veh/h/ln	1767	1689	1572	1714	1689	1695	1714	1763	1572	1714	1763	1572
Q Serve(g_s), s	60.0	51.0	41.0	34.0	31.9	32.2	10.7	21.4	27.0	14.8	31.1	31.1
Cycle Q Clear(g_c), s	60.0	51.0	41.0	34.0	31.9	32.2	10.7	21.4	27.0	14.8	31.1	31.1
Prop In Lane	1.00		1.00	1.00		0.53	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	583	2223	803	640	999	502	246	523	233	323	602	787
V/C Ratio(X)	1.04	0.76	0.62	1.09	0.67	0.68	0.83	0.82	1.21	0.87	1.08	0.58
Avail Cap(c_a), veh/h	583	2223	803	640	999	502	396	523	233	396	602	787
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	61.0	43.0	31.8	74.0	56.3	56.4	83.4	75.1	77.5	81.4	75.5	32.1
Incr Delay (d2), s/veh	47.1	2.5	3.5	60.9	3.6	7.2	7.7	13.2	128.6	16.4	59.6	3.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	34.0	21.4	16.3	20.2	14.0	14.6	5.0	10.6	19.2	7.3	19.0	14.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	108.1	45.5	35.4	134.9	60.0	63.7	91.1	88.3	206.1	97.7	135.1	35.3
LnGrp LOS	F	D	D	F	E	E	F	F	F	F	F	D
Approach Vol, veh/h		2786			1708			914			1391	
Approach Delay, s/veh		57.2			91.2			125.4			94.5	
Approach LOS		E			F			F			F	

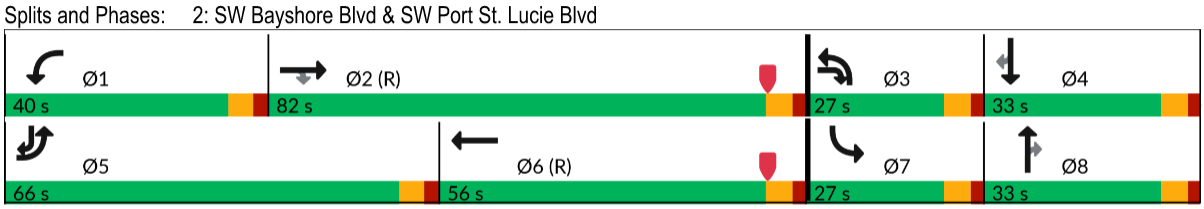
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	40.0	85.9	19.1	37.1	66.0	59.9	23.1	33.0
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	34.0	76.0	21.0	27.0	60.0	50.0	21.0	27.0
Max Q Clear Time (g_c+I1), s	36.0	53.0	12.7	33.1	62.0	34.2	16.8	29.0
Green Ext Time (p_c), s	0.0	14.8	0.4	0.0	0.0	5.6	0.4	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	82.6
HCM 7th LOS	F

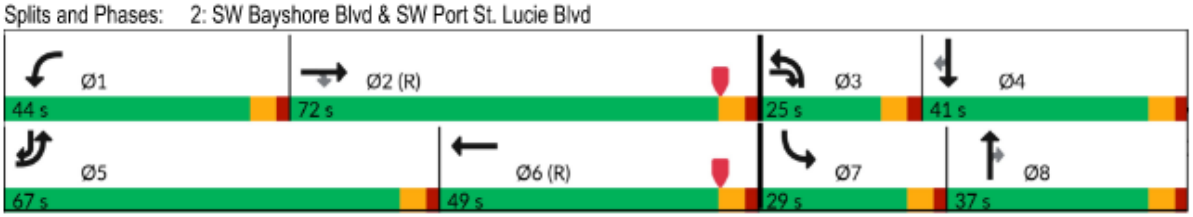
Murphy Oil Gas Station
Signal Timing Optimization Modifications
July 2025
341021601
SW Bayshore Boulevard & Port St Lucie Boulevard

Morning Peak Hour

Existing Timing



Optimized Timing

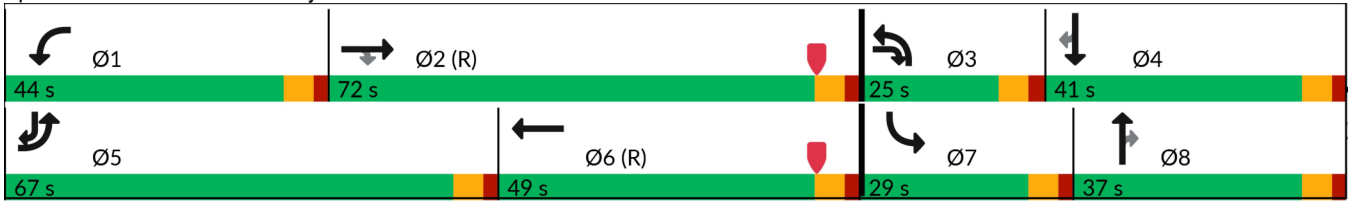


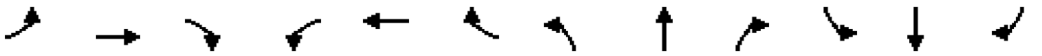
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	580	1619	476	667	801	196	410	272	271	623	442
Future Volume (vph)	580	1619	476	667	801	196	410	272	271	623	442
Lane Group Flow (vph)	604	1686	496	695	1013	204	427	283	282	649	460
Turn Type	Prot	NA	pm+ov	Prot	NA	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	5	2	3	1	6	3	8		7	4	5
Permitted Phases			2					8			4
Detector Phase	5	2	3	1	6	3	8	8	7	4	5
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0	24.0	11.0	11.0	24.0	11.0	24.0	24.0	11.0	24.0	11.0
Total Split (s)	67.0	72.0	25.0	44.0	49.0	25.0	37.0	37.0	29.0	41.0	67.0
Total Split (%)	36.8%	39.6%	13.7%	24.2%	26.9%	13.7%	20.3%	20.3%	15.9%	22.5%	36.8%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	None	C-Max	None	Max	Max	None	Max	None
v/c Ratio	1.03	0.92	0.63	0.98	0.86	0.68	0.65	0.54	0.76	0.89	0.50
Control Delay (s/veh)	102.3	64.9	34.5	99.6	73.6	91.9	74.3	10.3	93.2	85.6	21.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	102.3	64.9	34.5	99.6	73.6	91.9	74.3	10.3	93.2	85.6	21.9
Queue Length 50th (ft)	~768	709	391	431	421	124	253	0	172	399	269
Queue Length 95th (ft)	#1020	775	508	#565	480	169	323	92	m223	m#536	m374
Internal Link Dist (ft)		1546			604		266			624	
Turn Bay Length (ft)	380			430		215			345		360
Base Capacity (vph)	587	1826	811	709	1176	354	657	524	429	729	926
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.03	0.92	0.61	0.98	0.86	0.58	0.65	0.54	0.66	0.89	0.50

Intersection Summary

Cycle Length: 182
Actuated Cycle Length: 182
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 110
Control Type: Actuated-Coordinated
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: SW Bayshore Blvd & SW Port St. Lucie Blvd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	580	1619	476	667	801	172	196	410	272	271	623	442
Future Volume (veh/h)	580	1619	476	667	801	172	196	410	272	271	623	442
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	604	1686	496	695	834	179	204	427	283	282	649	460
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	592	1997	732	716	1120	239	245	601	268	325	683	832
Arrive On Green	0.34	0.39	0.39	0.21	0.27	0.27	0.07	0.17	0.17	0.09	0.19	0.19
Sat Flow, veh/h	1767	5066	1572	3428	4181	891	3428	3526	1572	3428	3526	1572
Grp Volume(v), veh/h	604	1686	496	695	673	340	204	427	283	282	649	460
Grp Sat Flow(s),veh/h/ln	1767	1689	1572	1714	1689	1695	1714	1763	1572	1714	1763	1572
Q Serve(g_s), s	61.0	55.0	44.8	36.6	33.1	33.5	10.7	20.8	31.0	14.8	33.1	35.2
Cycle Q Clear(g_c), s	61.0	55.0	44.8	36.6	33.1	33.5	10.7	20.8	31.0	14.8	33.1	35.2
Prop In Lane	1.00		1.00	1.00		0.53	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	592	1997	732	716	904	454	245	601	268	325	683	832
V/C Ratio(X)	1.02	0.84	0.68	0.97	0.74	0.75	0.83	0.71	1.06	0.87	0.95	0.55
Avail Cap(c_a), veh/h	592	1997	732	716	904	454	358	601	268	433	683	832
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	60.5	50.1	38.0	71.5	60.9	61.0	83.4	71.3	75.5	81.2	72.5	28.6
Incr Delay (d2), s/veh	42.1	4.6	5.0	26.5	5.5	10.8	10.4	7.0	70.7	13.4	24.3	2.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	33.7	23.7	18.2	18.5	14.7	15.6	5.1	10.0	17.7	7.1	17.2	13.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	102.6	54.7	42.9	97.9	66.4	71.9	93.8	78.3	146.2	94.6	96.8	31.2
LnGrp LOS	F	D	D	F	E	E	F	E	F	F	F	C
Approach Vol, veh/h		2786			1708			914			1391	
Approach Delay, s/veh		63.0			80.3			102.8			74.6	
Approach LOS		E			F			F			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	44.0	77.7	19.0	41.2	67.0	54.7	23.3	37.0
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	38.0	66.0	19.0	35.0	61.0	43.0	23.0	31.0
Max Q Clear Time (g_c+I1), s	38.6	57.0	12.7	37.2	63.0	35.5	16.8	33.0
Green Ext Time (p_c), s	0.0	7.1	0.3	0.0	0.0	3.6	0.5	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	75.1
HCM 7th LOS	E

Notes

User approved pedestrian interval to be less than phase max green.

Intersection	
Int Delay, s/veh	4.6

Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Vol, veh/h	0	82	150	1251	85	103	1299
Future Vol, veh/h	0	82	150	1251	85	103	1299
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	-	None	-	None
Storage Length	-	0	150	-	-	200	-
Veh in Median Storage, #	0	-	-	0	-	-	0
Grade, %	0	-	-	0	-	-	0
Peak Hour Factor	96	96	96	96	96	96	96
Heavy Vehicles, %	3	3	3	3	3	3	3
Mvmt Flow	0	85	156	1303	89	107	1353

Major/Minor	Minor1		Major1			Major2	
Conflicting Flow All	-	696	1353	0	0	1392	0
Stage 1	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-
Critical Hdwy	-	6.96	6.46	-	-	4.16	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-
Follow-up Hdwy	-	3.33	2.53	-	-	2.23	-
Pot Cap-1 Maneuver	0	382	195	-	-	482	-
Stage 1	0	-	-	-	-	-	-
Stage 2	0	-	-	-	-	-	-
Platoon blocked, %				-	-		-
Mov Cap-1 Maneuver	-	382	195	-	-	482	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	17.12	7.29	1.07
HCM LOS	C		

Minor Lane/Major Mvmt	NBU	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	195	-	-	382	482	-
HCM Lane V/C Ratio	0.803	-	-	0.224	0.222	-
HCM Ctrl Dly (s/v)	72.3	-	-	17.1	14.6	-
HCM Lane LOS	F	-	-	C	B	-
HCM 95th %tile Q(veh)	5.6	-	-	0.8	0.8	-

Murphy Oil Gas Station
2: SW Bayshore Blvd & SW Port St. Lucie Blvd

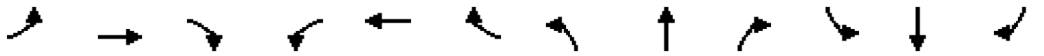
2027 BUILD CONDITIONS
PM PEAK HOUR

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	407	1244	236	325	1607	418	742	333	406	386	649
Future Volume (vph)	407	1244	236	325	1607	418	742	333	406	386	649
Lane Group Flow (vph)	411	1257	238	328	1818	422	749	336	410	390	656
Turn Type	Prot	NA	pm+ov	Prot	NA	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	5	2	3	1	6	3	8		7	4	5
Permitted Phases			2					8			4
Detector Phase	5	2	3	1	6	3	8	8	7	4	5
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0	24.0	11.0	11.0	24.0	11.0	24.0	24.0	11.0	24.0	11.0
Total Split (s)	39.0	75.0	24.0	31.0	67.0	24.0	41.0	41.0	24.0	41.0	39.0
Total Split (%)	22.8%	43.9%	14.0%	18.1%	39.2%	14.0%	24.0%	24.0%	14.0%	24.0%	22.8%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	None	C-Max	None	Max	Max	None	Max	None
v/c Ratio	1.22	0.59	0.26	0.78	1.02	1.18	1.04	0.65	1.15	0.54	0.92
Control Delay (s/veh)	176.2	39.4	14.0	85.2	80.4	169.0	109.6	22.8	159.4	66.4	60.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	176.2	39.4	14.0	85.2	80.4	169.0	109.6	22.8	159.4	66.4	60.1
Queue Length 50th (ft)	~561	394	89	186	~786	~290	~476	88	~277	207	641
Queue Length 95th (ft)	#786	461	151	239	#879	#406	#612	208	m#379	m258	m#874
Internal Link Dist (ft)		1546			604		266			624	
Turn Bay Length (ft)	380			430		215			345		360
Base Capacity (vph)	338	2141	918	497	1776	357	717	518	357	717	710
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.22	0.59	0.26	0.66	1.02	1.18	1.04	0.65	1.15	0.54	0.92

Intersection Summary

Cycle Length: 171
Actuated Cycle Length: 171
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 140
Control Type: Actuated-Coordinated
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: SW Bayshore Blvd & SW Port St. Lucie Blvd



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	407	1244	236	325	1607	193	418	742	333	406	386	649
Future Volume (veh/h)	407	1244	236	325	1607	193	418	742	333	406	386	649
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	411	1257	238	328	1623	195	422	749	336	410	390	656
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	341	2229	858	376	1635	196	361	722	322	361	722	625
Arrive On Green	0.19	0.44	0.44	0.11	0.36	0.36	0.11	0.20	0.20	0.11	0.20	0.20
Sat Flow, veh/h	1767	5066	1572	3428	4584	549	3428	3526	1572	3428	3526	1572
Grp Volume(v), veh/h	411	1257	238	328	1195	623	422	749	336	410	390	656
Grp Sat Flow(s),veh/h/ln	1767	1689	1572	1714	1689	1757	1714	1763	1572	1714	1763	1572
Q Serve(g_s), s	33.0	31.6	13.9	16.1	60.2	60.5	18.0	35.0	35.0	18.0	16.9	35.0
Cycle Q Clear(g_c), s	33.0	31.6	13.9	16.1	60.2	60.5	18.0	35.0	35.0	18.0	16.9	35.0
Prop In Lane	1.00		1.00	1.00		0.31	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	341	2229	858	376	1205	627	361	722	322	361	722	625
V/C Ratio(X)	1.21	0.56	0.28	0.87	0.99	0.99	1.17	1.04	1.04	1.14	0.54	1.05
Avail Cap(c_a), veh/h	341	2229	858	501	1205	627	361	722	322	361	722	625
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	69.0	35.7	20.8	75.0	54.7	54.8	76.5	68.0	68.0	76.5	60.8	51.5
Incr Delay (d2), s/veh	116.8	1.0	0.8	12.4	24.0	34.7	102.0	43.7	62.1	89.7	2.9	49.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	25.8	13.0	5.3	7.7	29.0	32.1	13.0	20.0	19.5	12.4	7.8	34.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	185.8	36.7	21.6	87.3	78.8	89.6	178.5	111.7	130.1	166.2	63.7	101.0
LnGrp LOS	F	D	C	F	E	F	F	F	F	F	E	F
Approach Vol, veh/h		1906			2146			1507			1456	
Approach Delay, s/veh		67.0			83.2			134.5			109.4	
Approach LOS		E			F			F			F	

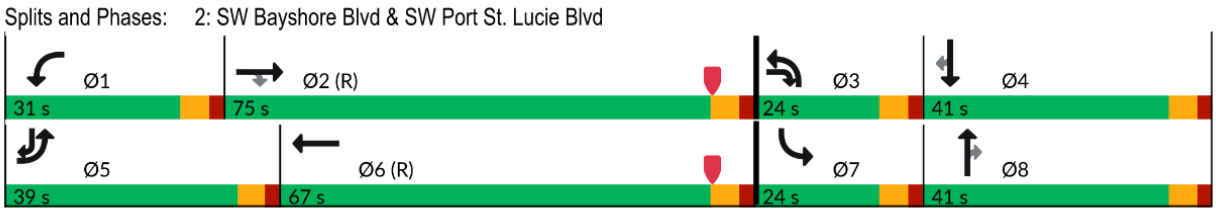
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	24.7	81.3	24.0	41.0	39.0	67.0	24.0	41.0
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	25.0	69.0	18.0	35.0	33.0	61.0	18.0	35.0
Max Q Clear Time (g_c+I1), s	18.1	33.6	20.0	37.0	35.0	62.5	20.0	37.0
Green Ext Time (p_c), s	0.6	11.6	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	95.2
HCM 7th LOS	F

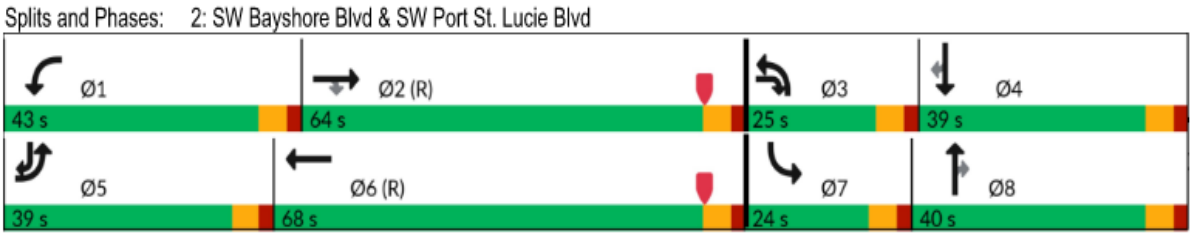
Murphy Oil Gas Station
Signal Timing Optimization Modifications
July 2025
341021601
SW Bayshore Boulevard & Port St Lucie Boulevard

Afternoon Peak Hour

Existing Timing



Optimized Timing

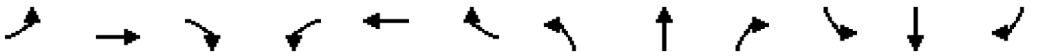


Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	407	1244	236	325	1607	418	742	333	406	386	649
Future Volume (vph)	407	1244	236	325	1607	418	742	333	406	386	649
Lane Group Flow (vph)	411	1257	238	328	1818	422	749	336	410	390	656
Turn Type	Prot	NA	pm+ov	Prot	NA	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	5	2	3	1	6	3	8		7	4	5
Permitted Phases			2					8			4
Detector Phase	5	2	3	1	6	3	8	8	7	4	5
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0	24.0	11.0	11.0	24.0	11.0	24.0	24.0	11.0	24.0	11.0
Total Split (s)	39.0	64.0	25.0	43.0	68.0	25.0	40.0	40.0	24.0	39.0	39.0
Total Split (%)	22.8%	37.4%	14.6%	25.1%	39.8%	14.6%	23.4%	23.4%	14.0%	22.8%	22.8%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	None	C-Max	None	Max	Max	None	Max	None
v/c Ratio	1.22	0.58	0.25	0.76	1.01	1.12	1.08	0.66	1.15	0.58	0.95
Control Delay (s/veh)	176.2	39.1	10.4	83.3	75.9	148.3	118.8	23.6	159.4	69.0	65.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	176.2	39.1	10.4	83.3	75.9	148.3	118.8	23.6	159.4	69.0	65.2
Queue Length 50th (ft)	~561	391	64	186	~755	~278	~488	90	~277	211	659
Queue Length 95th (ft)	#786	466	125	236	#867	#394	#624	211	m#378	m262	m#895
Internal Link Dist (ft)		1546			604		266			624	
Turn Bay Length (ft)	380			430		215			345		360
Base Capacity (vph)	338	2154	947	735	1805	377	696	509	357	676	693
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.22	0.58	0.25	0.45	1.01	1.12	1.08	0.66	1.15	0.58	0.95

Intersection Summary

Cycle Length: 171
Actuated Cycle Length: 171
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 140
Control Type: Actuated-Coordinated
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: SW Bayshore Blvd & SW Port St. Lucie Blvd



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	407	1244	236	325	1607	193	418	742	333	406	386	649
Future Volume (veh/h)	407	1244	236	325	1607	193	418	742	333	406	386	649
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	411	1257	238	328	1623	195	422	749	336	410	390	656
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	341	2249	873	383	1662	199	381	701	313	361	680	607
Arrive On Green	0.19	0.44	0.44	0.11	0.36	0.36	0.11	0.20	0.20	0.11	0.19	0.19
Sat Flow, veh/h	1767	5066	1572	3428	4584	549	3428	3526	1572	3428	3526	1572
Grp Volume(v), veh/h	411	1257	238	328	1195	623	422	749	336	410	390	656
Grp Sat Flow(s),veh/h/ln	1767	1689	1572	1714	1689	1757	1714	1763	1572	1714	1763	1572
Q Serve(g_s), s	33.0	31.4	13.6	16.1	59.7	60.0	19.0	34.0	34.0	18.0	17.2	33.0
Cycle Q Clear(g_c), s	33.0	31.4	13.6	16.1	59.7	60.0	19.0	34.0	34.0	18.0	17.2	33.0
Prop In Lane	1.00		1.00	1.00		0.31	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	341	2249	873	383	1224	637	381	701	313	361	680	607
V/C Ratio(X)	1.21	0.56	0.27	0.86	0.98	0.98	1.11	1.07	1.07	1.14	0.57	1.08
Avail Cap(c_a), veh/h	341	2249	873	742	1224	637	381	701	313	361	680	607
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	69.0	35.2	19.9	74.6	53.8	53.9	76.0	68.5	68.5	76.5	62.6	52.5
Incr Delay (d2), s/veh	116.8	1.0	0.8	5.6	20.5	30.8	78.5	53.8	72.2	89.7	3.5	60.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	25.8	12.9	5.2	7.3	28.2	31.3	12.5	20.4	19.8	12.4	8.0	35.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	185.8	36.2	20.7	80.2	74.3	84.7	154.5	122.3	140.7	166.2	66.1	112.8
LnGrp LOS	F	D	C	F	E	F	F	F	F	F	E	F
Approach Vol, veh/h		1906			2146			1507			1456	
Approach Delay, s/veh		66.5			78.2			135.4			115.3	
Approach LOS		E			E			F			F	

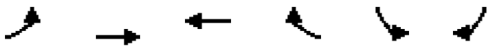
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	25.1	81.9	25.0	39.0	39.0	68.0	24.0	40.0
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	37.0	58.0	19.0	33.0	33.0	62.0	18.0	34.0
Max Q Clear Time (g_c+I1), s	18.1	33.4	21.0	35.0	35.0	62.0	20.0	36.0
Green Ext Time (p_c), s	1.0	10.2	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	95.0
HCM 7th LOS	F

Notes

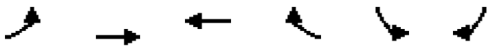
User approved pedestrian interval to be less than phase max green.

DRIVEWAYS



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	2162	1640	58	0	0
Future Volume (vph)	0	2162	1640	58	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.91	0.91	0.91	1.00	1.00
Frt			0.995			
Flt Protected						
Satd. Flow (prot)	0	5036	5011	0	0	0
Flt Permitted						
Satd. Flow (perm)	0	5036	5011	0	0	0
Link Speed (mph)		45	45		30	
Link Distance (ft)		192	488		150	
Travel Time (s)		2.9	7.4		3.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	2350	1783	63	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	2350	1846	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		24	24		0	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 45.1%		ICU Level of Service A	
Analysis Period (min) 15			



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	1983	2125	68	0	0
Future Volume (vph)	0	1983	2125	68	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.91	0.91	0.91	1.00	1.00
Frt			0.995			
Flt Protected						
Satd. Flow (prot)	0	5036	5011	0	0	0
Flt Permitted						
Satd. Flow (perm)	0	5036	5011	0	0	0
Link Speed (mph)		45	45		30	
Link Distance (ft)		192	488		152	
Travel Time (s)		2.9	7.4		3.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	2155	2310	74	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	2155	2384	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		24	24		0	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 45.9%		ICU Level of Service A	
Analysis Period (min) 15			

APPENDIX F
TRIP GENERATION DATA

TRIP GENERATION ANALYSIS
MURPHY OIL GAS STATION

DAILY

Land Use	ITE Code	Size	Trip Generation Rate	In	Out	Total Trips			Pass-by				Net New Trips		
						In	Out	Total	In	Out	Total	%	In	Out	Total
Proposed Uses															
Gasoline-Service Station with Convenience Store	945	12 Fuel Pumps	T = 158.28 (X) + 850.23	50%	50%	1,375	1,375	2,750	0	0	0	0%	1,375	1,375	2,750

MORNING PEAK HOUR

Land Use	ITE Code	Size	Trip Generation Rate	In	Out	Total Trips			Pass-by				Net New Trips		
						In	Out	Total	In	Out	Total	%	In	Out	Total
Proposed Uses															
Gasoline-Service Station with Convenience Store	945	12 Fuel Pumps	T = 16.46 (X) 0.00	50%	50%	99	99	198	75	75	150	76%	24	24	48

AFTERNOON PEAK HOUR

Land Use	ITE Code	Size	Trip Generation Rate	In	Out	Total Trips			Pass-by				Net New Trips		
						In	Out	Total	In	Out	Total	%	In	Out	Total
Proposed Uses															
Gasoline-Service Station with Convenience Store	945	12 Fuel Pumps	T = 19.13 (X) 0.00	50%	50%	115	115	230	87	86	173	75%	28	29	57

LANGAN
ENGINEERING & ENVIRONMENTAL SERVICES

Convenience Store/Gas Station - GFA (2-4k) (945)

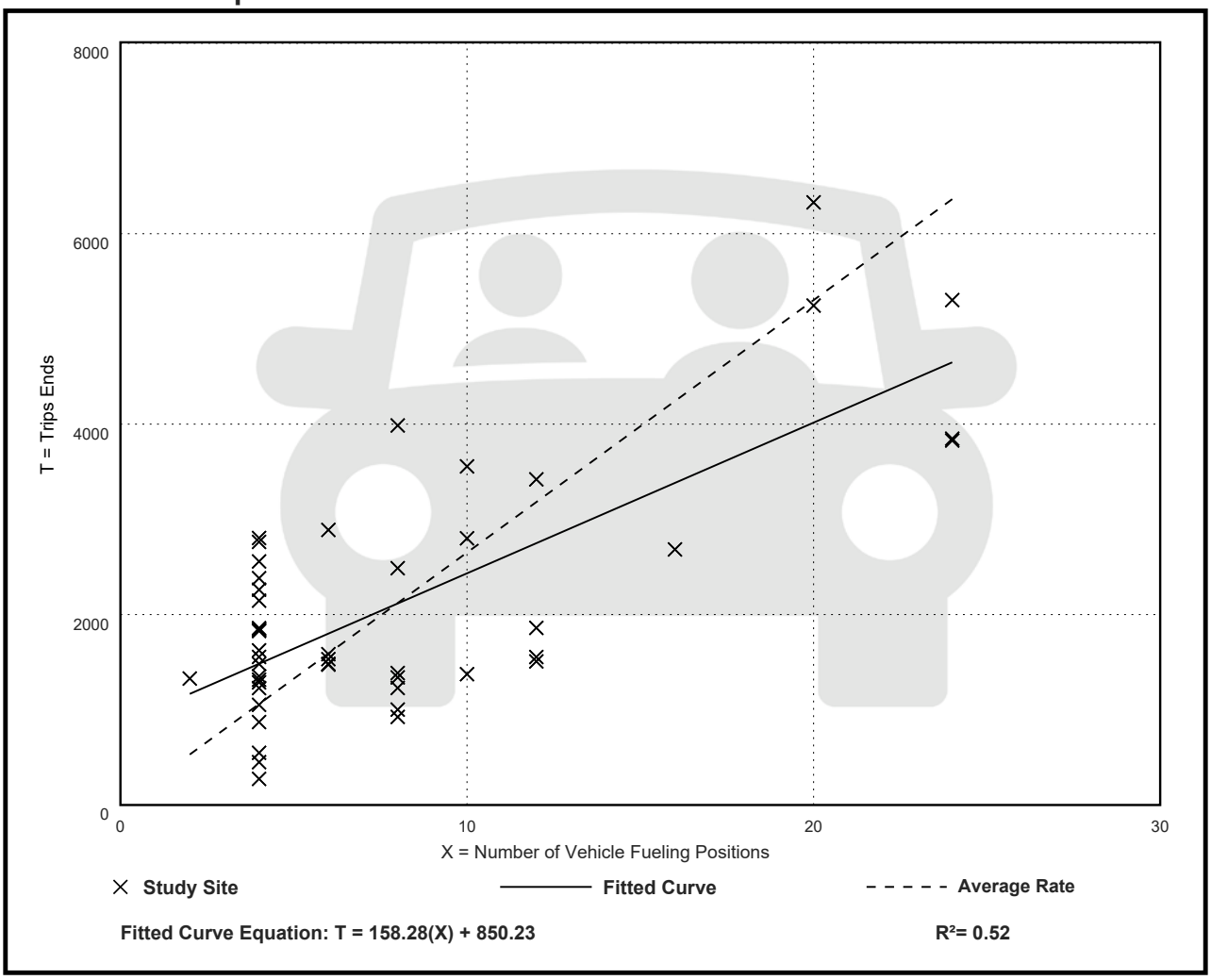
Vehicle Trip Ends vs: Vehicle Fueling Positions
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 48
Avg. Num. of Vehicle Fueling Positions: 8
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Vehicle Fueling Position

Average Rate	Range of Rates	Standard Deviation
265.12	68.50 - 701.00	142.37

Data Plot and Equation



Convenience Store/Gas Station - GFA (2-4k) (945)

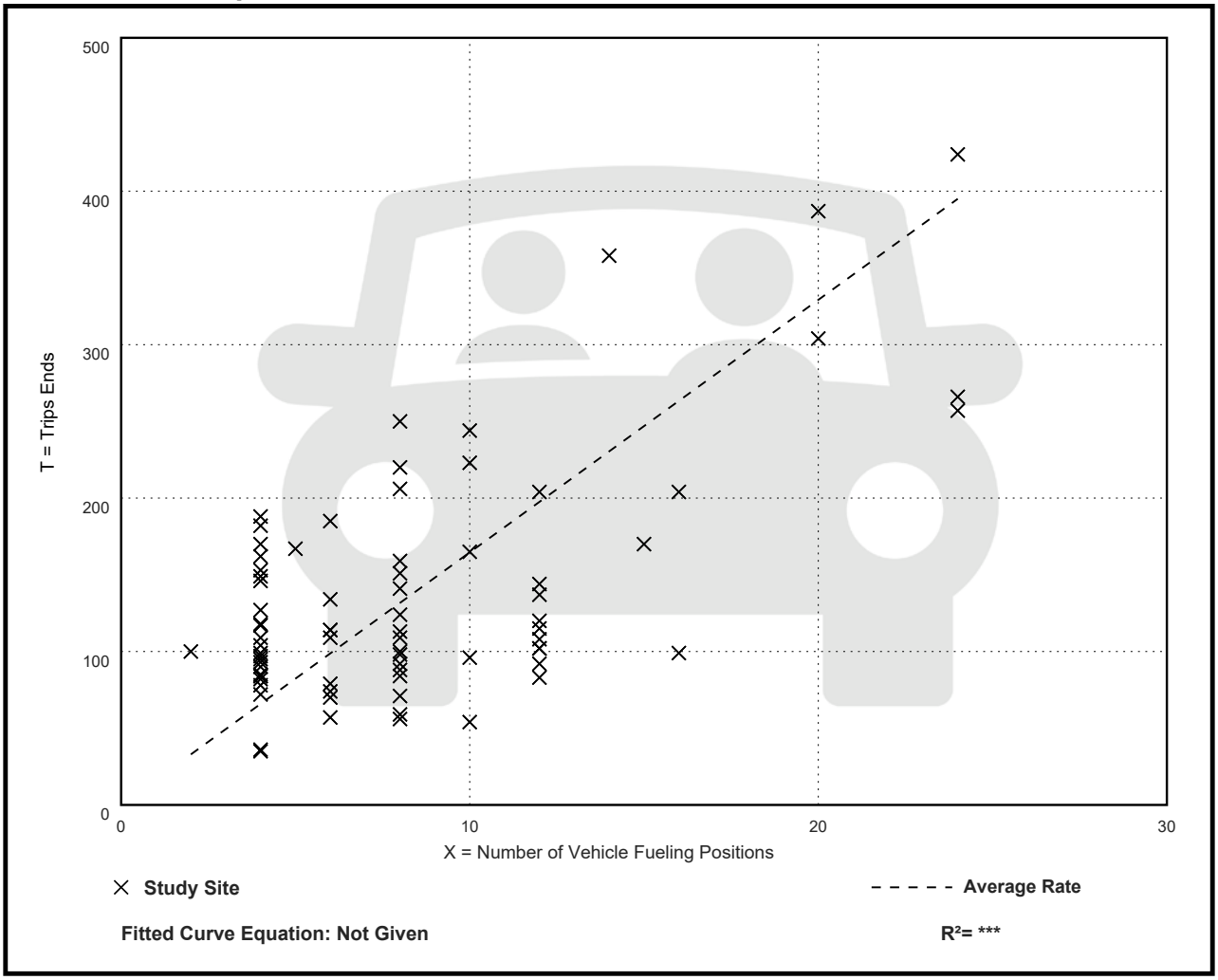
Vehicle Trip Ends vs: Vehicle Fueling Positions
On a: Weekday,
AM Peak Hour of Generator

Setting/Location: General Urban/Suburban
Number of Studies: 77
Avg. Num. of Vehicle Fueling Positions: 8
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Vehicle Fueling Position

Average Rate	Range of Rates	Standard Deviation
16.46	5.40 - 50.00	8.75

Data Plot and Equation



Convenience Store/Gas Station - GFA (2-4k) (945)

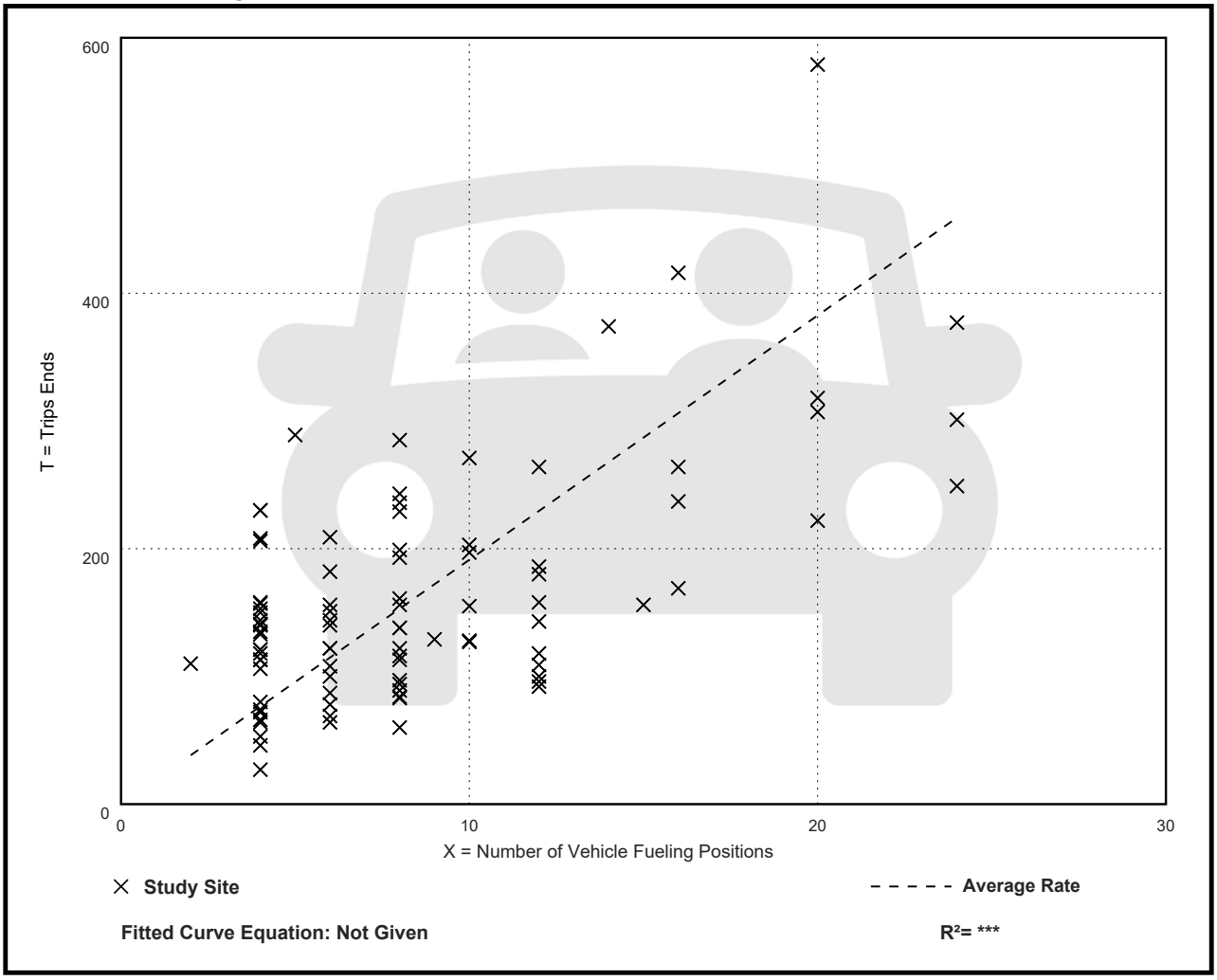
Vehicle Trip Ends vs: Vehicle Fueling Positions
On a: Weekday,
PM Peak Hour of Generator

Setting/Location: General Urban/Suburban
Number of Studies: 93
Avg. Num. of Vehicle Fueling Positions: 8
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Vehicle Fueling Position

Average Rate	Range of Rates	Standard Deviation
19.13	6.75 - 57.80	10.15

Data Plot and Equation



Vehicle Pass-By Rates by Land Use

Source: ITE *Trip Generation Manual* , 11th Edition

Land Use Code	945									
Land Use	Convenience Store/Gas Station									
Setting	General Urban/Suburban									
Time Period	Weekday AM Peak Period									
# Data Sites	16 Sites with between 2 and 8 VFP					28 Sites with between 9 and 20 VFP				
Average Pass-By Rate	60% for Sites with between 2 and 8 VFP					76% for Sites with between 9 and 20 VFP				
	Pass-By Characteristics for Individual Sites									
			Survey		Pass-By	Non-Pass-By Trips			Adj Street Peak	
GFA (000)	VFP	State or Province	Year	# Interviews	Trip (%)	Primary (%)	Diverted (%)	Total (%)	Hour Volume	Source
2	8	Maryland	1992	46	87	13	0	13	2235	25
2.1	6	Maryland	1992	26	58	23	19	42	2080	25
2.1	6	Maryland	1992	26	58	23	19	42	2080	25
2.2	8	Maryland	1992	31	47	34	19	53	1785	25
2.2	< 8	Indiana	1993	79	56	6	38	44	635	2
2.2	8	Maryland	1992	35	78	9	13	22	7080	25
2.3	6	Maryland	1992	37	32	41	27	68	2080	25
2.3	< 8	Kentucky	1993	58	64	5	31	36	1255	2
2.3	6	Maryland	1992	37	32	41	27	68	2080	25
2.4	< 8	Kentucky	1993	—	48	17	35	52	1210	2
2.6	< 8	Kentucky	1993	—	72	15	13	28	940	2
2.8	< 8	Kentucky	1993	—	54	11	35	46	1240	2
3	< 8	Indiana	1993	62	74	10	16	26	790	2
3.6	< 8	Kentucky	1993	49	67	4	29	33	1985	2
3.7	< 8	Kentucky	1993	49	66	16	18	34	990	2
4.694	12	Maryland	2000	—	72	—	—	28	2440	30
4.694	12	Maryland	2000	—	78	—	—	22	1561	30
4.694	12	Maryland	2000	—	79	—	—	21	2764	30
4.848	12	Virginia	2000	—	55	—	—	45	1398	30
5.06	12	Pennsylvania	2000	—	84	—	—	16	3219	30
5.242	12	Virginia	2000	—	74	—	—	26	1160	30
5.242	12	Virginia	2000	—	71	—	—	29	548	30
5.488	12	Delaware	2000	—	80	—	—	20	—	30
5.5	12	Pennsylvania	2000	—	85	—	—	15	2975	30
4.2	< 8	Kentucky	1993	47	62	19	19	38	1705	2
4.694	16	Maryland	2000	—	90	—	—	10	2278	30
4.694	16	Delaware	2000	—	74	—	—	26	2185	30
4.694	16	Delaware	2000	—	58	—	—	42	962	30
4.694	16	Delaware	2000	—	84	—	—	16	2956	30
4.694	16	New Jersey	2000	—	79	—	—	21	1859	30
4.694	20	Delaware	2000	—	84	—	—	16	3864	30
4.848	16	Virginia	2000	—	68	—	—	32	2106	30
4.848	16	Virginia	2000	—	85	—	—	15	2676	30
4.848	16	Virginia	2000	—	75	—	—	25	3244	30
4.848	16	Virginia	2000	—	71	—	—	29	1663	30
4.993	16	Pennsylvania	2000	—	75	—	—	25	1991	30
5.094	16	New Jersey	2000	—	86	—	—	14	1260	30
5.5	16	Pennsylvania	2000	—	82	—	—	18	1570	30
5.543	16	Pennsylvania	2000	—	84	—	—	16	1933	30
5.565	16	Pennsylvania	2000	—	77	—	—	23	2262	30
5.565	16	Pennsylvania	2000	—	68	—	—	32	2854	30
5.565	16	New Jersey	2000	—	58	—	—	42	1253	30
5.565	16	New Jersey	2000	—	79	—	—	21	1928	30
5.565	16	New Jersey	2000	---	84	---	---	16	1953	30

Vehicle Pass-By Rates by Land Use

Source: ITE *Trip Generation Manual* , 11th Edition

Land Use Code	945									
Land Use	Convenience Store/Gas Station									
Setting	General Urban/Suburban									
Time Period	Weekday PM Peak Period									
# Data Sites	12 Sites with between 2 and 8 VFP					28 Sites with between 9 and 20 VFP				
Average Pass-By Rate	56% for Sites with between 2 and 8 VFP					75% for Sites with between 9 and 20 VFP				
	Pass-By Characteristics for Individual Sites									
			Survey		Pass-By	Non-Pass-By Trips			Adj Street Peak	
GFA (000)	VFP	State or Province	Year	# Interviews	Trip (%)	Primary (%)	Diverted (%)	Total (%)	Hour Volume	Source
2.1	8	Maryland	1992	31	52	13	35	48	1785	25
2.1	6	Maryland	1992	30	53	20	27	47	1060	25
2.2	< 8	Indiana	1993	115	48	16	36	52	820	2
2.3	< 8	Kentucky	1993	67	57	16	27	43	1954	2
2.3	6	Maryland	1992	55	40	11	49	60	2760	25
2.4	< 8	Kentucky	1993	—	58	13	29	42	2655	2
2.6	< 8	Kentucky	1993	68	67	15	18	33	950	2
2.8	< 8	Kentucky	1993	—	62	11	27	38	2875	2
3	< 8	Indiana	1993	80	65	15	20	35	1165	2
3.6	< 8	Kentucky	1993	60	56	17	27	44	2505	2
3.7	< 8	Kentucky	1993	70	61	16	23	39	2175	2
4.2	< 8	Kentucky	1993	61	58	26	16	42	2300	2
4.694	12	Maryland	2000	—	78	—	—	22	3549	30
4.694	12	Maryland	2000	—	67	—	—	33	2272	30
4.694	12	Maryland	2000	—	66	—	—	34	3514	30
4.848	12	Virginia	2000	—	71	—	—	29	2350	30
5.06	12	Pennsylvania	2000	—	91	—	—	9	4181	30
5.242	12	Virginia	2000	—	70	—	—	30	2445	30
5.242	12	Virginia	2000	—	56	—	—	44	950	30
5.488	12	Delaware	2000	—	73	—	—	27	—	30
5.5	12	Pennsylvania	2000	—	84	—	—	16	4025	30
4.694	16	Maryland	2000	—	89	—	—	11	2755	30
4.694	16	Delaware	2000	—	73	—	—	27	1858	30
4.694	16	Delaware	2000	—	59	—	—	41	1344	30
4.694	16	Delaware	2000	—	72	—	—	28	3434	30
4.694	16	New Jersey	2000	—	81	—	—	19	1734	30
4.694	20	Delaware	2000	—	76	—	—	24	1616	30
4.848	16	Virginia	2000	—	67	—	—	33	2.954	30
4.848	16	Virginia	2000	—	78	—	—	22	3086	30
4.848	16	Virginia	2000	—	83	—	—	17	4143	30
4.848	16	Virginia	2000	—	73	—	—	27	2534	30
4.993	16	Pennsylvania	2000	—	72	—	—	28	2917	30
5.094	16	New Jersey	2000	—	86	—	—	14	1730	30
5.5	16	Pennsylvania	2000	—	90	—	—	10	2616	30
5.543	16	Pennsylvania	2000	—	87	—	—	13	2363	30
5.565	16	Pennsylvania	2000	—	81	—	—	19	2770	30
5.565	16	Pennsylvania	2000	—	76	—	—	24	3362	30
5.565	16	New Jersey	2000	—	61	—	—	39	1713	30
5.565	16	New Jersey	2000	—	86	—	—	14	1721	30
5.565	16	New Jersey	2000	---	81	---	---	19	2227	30