



# **Southern Grove Delivery Station**

## Traffic Impact Analysis

March 2021

**Kimley»»Horn**

# **TRAFFIC IMPACT ANALYSIS**

## **Southern Grove Delivery Station**

**City of Port St. Lucie, FL**

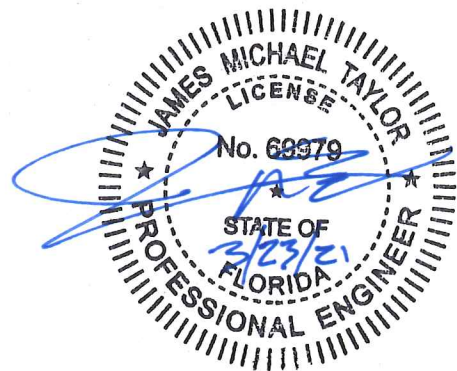
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**March 2021**



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**PE #69979**

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## 1.0 INTRODUCTION

Kimley-Horn has been retained by Sansone Group, LLC. to analyze and document the traffic impacts associated with the development of the Southern Grove Delivery Station in the City of Port St. Lucie, Florida.

The proposed Southern Grove Delivery Station is a delivery logistics facility to be located on the north side of SW Becker Road, east of SW Village Parkway. The project property is currently vacant and is within the Southern Grove Development of Regional Impact (DRI). More specifically, the site is located within the proposed Legacy Park at Tradition commercial and industrial development. The proposed development will consist of approximately ±219,000 square foot delivery station/warehouse building, parking spaces, vehicle staging, and loading spaces. Buildout for the development is anticipated by 2022.

The site will be accessed by site employees, delivery drivers, and heavy trucks. As previously noted, the site will be located within the proposed Legacy Park at Tradition commercial and industrial development which will include access driveways on both SW Village Parkway and SW Becker Road. Access to the delivery station will be provided via ten (10) driveways, which will all connect to the Legacy Park at Tradition internal roadway network except for one driveway which will directly connect to SW Village Parkway. The analysis will evaluate all proposed external driveway connections on SW Village Parkway and SW Becker Road. For ease of review, project driveways have been numbered in **Figure 1** as follows:

- **Intersection 4 (Driveway 1):** Full-access driveway located on the east side of SW Village Parkway at the future Paar Drive extension.
- **Intersection 5 (Driveway 2):** Full-access driveway located on the east side of SW Village Parkway, south of Driveway 1. This driveway will provide direct access to the proposed development.
- **Intersection 6 (Driveway 3):** Full-access driveway located on the east side of SW Village Parkway, south of Driveway 2 and north of SW Becker Road.
- **Intersection 7 (Driveway 4):** A full-access driveway located on the north side of SW Becker Road, east of SW Village Parkway.
- **Intersection 8 (Driveway 5):** A LI/RI/RO driveway located on the north side of SW Becker Road, east of Driveway 4 and west of the I-95 interchange.

The site plan is provided in **Appendix A**.

## 1.1 STUDY AREA

A traffic impact analysis (TIA) for the Southern Grove Development of Regional Impact (DRI) was performed in June 2009. The Southern Grove DRI is one of four DRI's that fall within the area known as the Southwest Annexation Area, which generally bound by I-95 to the east, Rangeline Road to the west, Tradition Parkway/Gatlin Boulevard to the north, and the St. Lucie County/Martin County Line to the south. The proposed development was divided into four phases with an ultimate buildout year of 2028. For the purposes of this analysis, information pertaining to Phase 3 (buildout of 2023) within the Southern Grove DRI TIA was utilized. The Southern Grove DRI Phase 3 consists of the following uses:

- 4,918 residential dwelling units
- 791 hotel rooms
- 3,222,224 square feet of industrial use
- 2,675,075 square feet of retail
- 1,737,152 square feet of office use
- 1,970,734 square feet of research and development use
- 300 bed hospital
- 188,676 square feet of civic/institutional use
- 80 acres of recreational/park use
- 1,600 student K-8 school (2)

As previously stated, the proposed development is located within the Southern Grove DRI. Therefore, traffic impacts for this development were accounted for within the approved Southern Grove DRI TIA. This analysis will evaluate traffic operations of adjacent roadway facilities and intersections near the proposed delivery station. The study area for the traffic operational analysis is detailed below:

### Study Roadway Segments

- SW Village Parkway – from Paar Drive to SW Becker Road
- SW Becker Road – from SW Village Parkway to I-95 Interchange
- I-95 – from SW Martin Highway to SW Gatlin Boulevard

### Offsite Study Intersection

- SW Village Parkway & SW Becker Road
- SW Becker Road & I-95 SB Ramps
- SW Becker Road & I-95 NB Ramps

Excerpts from the Southern Grove DRI TIA are provided within **Appendix B**.

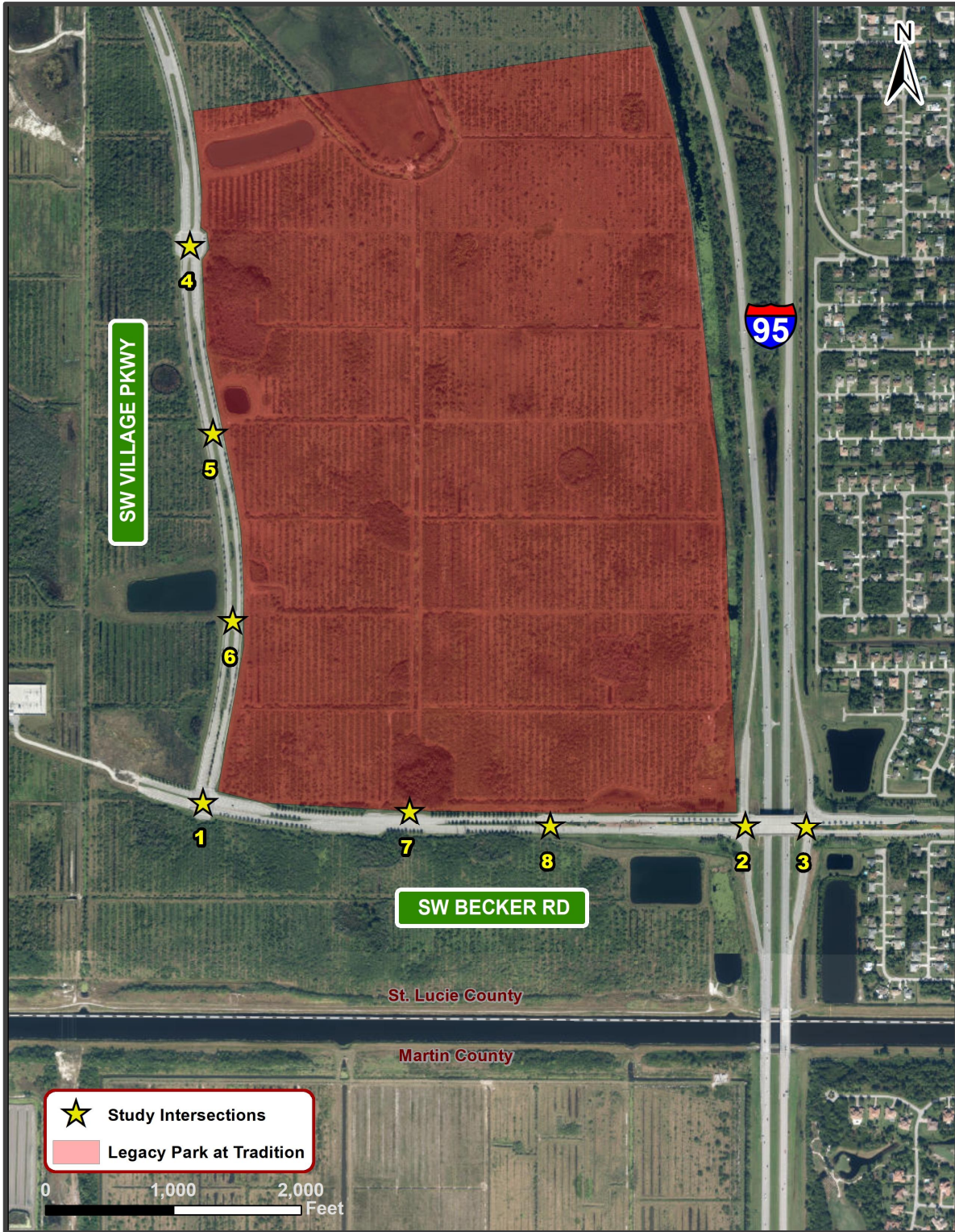


Figure 1: Project Location Map & Study Area Intersections



## 2.0 EXISTING CONDITIONS ANALYSIS – YEAR 2021

### 2.1 EXISTING TRAFFIC COUNTS

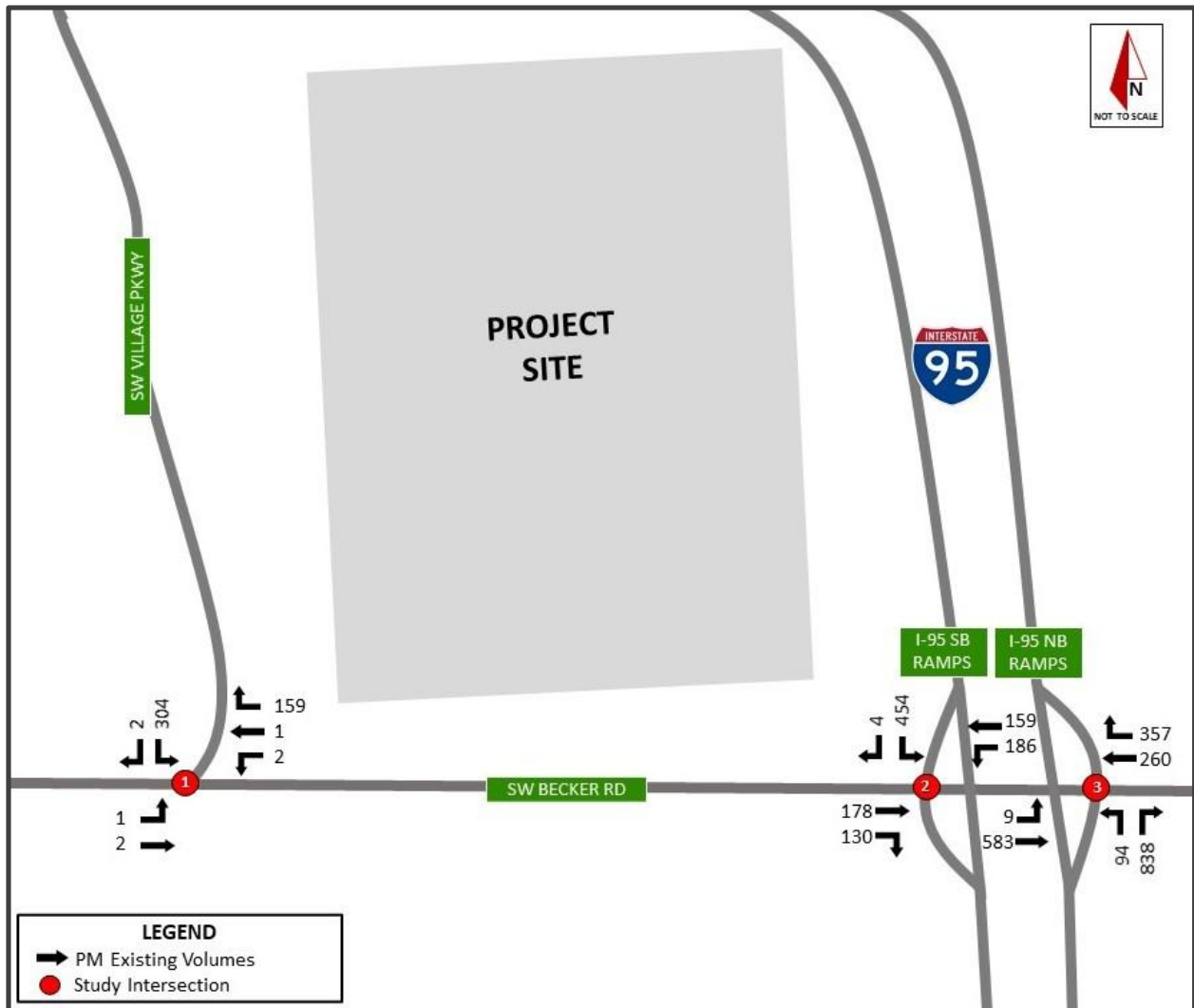
Turning movement counts (TMCs) were performed during the PM (4PM-6PM) peak hour at the study area intersections in March 2021. Data is provided in **Appendix C**. The counts were adjusted using the seasonal factor (SF) from FDOT's Florida Traffic Online (FTO) publication. **Appendix D** includes SF data. **Appendix E** contains the adjusted turning movement volume worksheets for all intersections. **Figure 2** illustrates turning movement volumes for existing conditions at the study intersections.

### 2.2 EXISTING ROADWAY CONDITIONS

The study area roadway segments were evaluated for level of service (LOS) and volume-to-capacity (v/c) ratios based on 2021 existing traffic conditions during the PM peak hour. PM (4PM-6PM) peak hour turning movement counts were performed at the study area intersections in March 2021. The turning movement counts were adjusted using the seasonal factor published by FDOT. As shown in **Table 1**, all segments operate with acceptable overall LOS during existing PM peak hour traffic conditions except for the road segment of I-95 from SW Becker Road to SW Gatlin Boulevard which operates with a v/c ratio greater than 1.0.

### 2.3 EXISTING INTERSECTION CONDITIONS

Intersection operational analysis was performed for the year 2021 existing conditions in the PM peak hour using procedures outlined in the *Highway Capacity Manual 6<sup>th</sup> Edition* with Synchro (v10) software. Intersection level of service (LOS) and maximum volume-to-capacity (v/c) ratios for existing conditions are provided in **Tables 2**. Signal timings were provided by the City of Port St. Lucie and provided in **Appendix C**. provides Synchro outputs. As shown in **Table 2**, all study area intersections operate with acceptable overall LOS during existing PM peak hour traffic conditions.



**Figure 2:** Existing (2020) Turning Movement Counts

**Table 1: Existing Roadway Segment Analysis**

Roadway From                      To		Roadway Attributes <sup>1</sup>				Peak Hour Directional Maximum Service Capacity <sup>2</sup>	Existing Traffic Conditions			
		Functional Classification	Area Type	Adopted LOS	Number of Lanes		Volumes <sup>3</sup>		Max V/C Ratio	LOS
							NB / EB	SB / WB		
SW Village Parkway SW Becker Road	Paar Drive	Minor Arterial	U	E	4D	1,710	160	306	0.18	C
SW Becker Road SW Village Parkway	I-95 Interchange	Minor Arterial	U	E	4D	3,170	307	163	0.10	C
I-95 <sup>4</sup>	Gatlin Boulevard	Interstate	U	D	6D	4,580	4,607	2,908	1.01	F
	SW Becker Road	Interstate	U	D	6D	4,580	4,574	2,888	1.00	D

Note:

1. The roadway attributes were obtained from the latest FDOT Urban Area Boundary & Federal Functional Classification Map for St. Lucie County, City of Port St. Lucie Transportation Element, and supplemented with the 2020 FDOT Quality/LOS Handbook.
2. Peak Hour Directional Maximum Service Volumes were determined using the sources listed in Note 1.
3. Existing traffic conditions were taken from the turning movement counts performed in March 2021.
4. Existing traffic conditions were taken from the latest FDOT Traffic Online Historical AADT reports for count stations 941901 and 890334 on I-95 north and south of SW Becker Road.

**Table 2:** Existing Intersection Conditions (PM Peak Hour)

2021 Existing Traffic Conditions					
Intersection	Control Type	Approach	PM Peak Hour		
			Approach LOS (overall delay)	Max V/C Movement	Max v/c Ratio
SW Village Parkway & SW Becker Road	Signalized	EB	D	EBL	0.29
		WB	A	WBR	0.01
		NB	--	--	--
		SB	D	SBL	0.91
		<b>Overall</b>	<b>D (52.8 sec)</b>	<b>SBL</b>	<b>0.91</b>
SW Becker Road & I-95 SB Ramps	Signalized	EB	B	EBT	0.04
		WB	D	WBL	0.86
		NB	--	--	--
		SB	D	SBL	0.84
		<b>Overall</b>	<b>D (42.2 sec)</b>	<b>WBL</b>	<b>0.86</b>
SW Becker Road & I-95 NB Ramps	Signalized	EB	B	EBT	0.22
		WB	B	WBT	0.08
		NB	D	NBR	0.91
		SB	--	--	--
		<b>Overall</b>	<b>C (31.4 sec)</b>	<b>NBR</b>	<b>0.91</b>

## 3.0 DEVELOPMENT TRAFFIC

The proposed development consists of a ±219,000 square foot delivery station/warehouse building, parking spaces, vehicle staging, and loading spaces with a buildout year of 2022. However, to be consistent with Phase 3 of the Southern Grove DRI TIA, a buildout year of 2023 was utilized. Operational data from the end-user was referenced to develop new external trips to be generated by the site at buildout.

### 3.1 TRIP GENERATION

The 10<sup>th</sup> Edition of the Institute of Transportation Engineers' (ITE) *Trip Generation Manual* was reviewed for available Land Use Codes (LUC) that may coincide with the proposed use at the Southern Grove Delivery Station site. LUCs that were examined to compare include:

- LUC 130, Industrial Park
- LUC 140, Manufacturing
- LUC 150, Warehousing
- LUC 154, High-Cube Transload & Short-Term Storage
- LUC 155, High-Cube Fulfillment

None of the ITE LUCs reviewed were shown to account for the quantity and other specifics of traffic expected at the site based on the operator's description of anticipated operations. Therefore, trip generation estimates from operation data provided from the end-user were utilized.

Based on end-user data, the delivery station is anticipated to operate with the following trip purposes:

1. *Autos* (722 daily trips each direction)
  - *Site Employees* – Major employee shifts for the site (to receive and sort deliveries) occur outside of the traditional AM and PM peak hours. Cycle One employees work from approximately 2:00 AM – 12:30 PM. Cycle Two employees and additional staging crews work from approximately 6:00 AM – 2:30 PM. Cycle Three employees work from approximately 1:30 PM – 10:00 PM. Same day (SD) delivery shift employees work from 2:00 PM – 6:00 PM. Route to Station (RTS) delivery shift employees work from 12:00 PM to 10:30 PM.
  - *Flex Fleet* – Personal vehicles from flex fleet employees arrive during the PM peak hour to pick-up and deliver priority items. These flex deliveries have shorter routes (less than 4-hours) and do not return to the facility.
  - *Delivery Van Drivers* – Delivery van drivers arrive in their personal vehicles between 9:00 AM to 10:30 AM.
2. *Trucks* (32 daily trips each direction) – Large heavy truck traffic from regional distribution centers generally occurs evenly throughout the day.
3. *Delivery Vans* (344 daily trips each direction) – Van depart in waves, primarily avoid peak hour impacts. Upon return, van drivers then park vans and depart in personal vehicles.

Trip generation estimates from operational data provided by the end-user were utilized. End-user data summarizing the travel demand for the three trip purposes is provided in **Appendix G**. The Daily, AM and PM peak hour trip generation summary for the project is shown in **Table 3**.

**Table 3:** Trip Generation Summary

Land Use	Total Daily Trips	AM Peak Hour Trips					PM Peak Hour Trips				
		Total	In	Out	Total	In	Out				
<i>Autos (Associates/Employees, Delivery Van Drivers, and Flex Fleet)</i>	1,444	0	-	0	-	0	135	67%	90	33%	45
Trucks	64	3	33%	1	67%	2	1	100%	1	0%	0
Delivery Vans	688	0	-	0	-	0	0	-	0	-	0
<b>Total</b>	<b>2,196</b>	<b>3</b>	<b>1</b>	<b>2</b>	<b>136</b>	<b>91</b>	<b>45</b>				

As shown in **Table 3**, the proposed delivery station is anticipated to generate 2,196 Daily trips, 3 AM peak hour trips (1 in and 2 out), and 136 PM peak hour trips (91 in and 45 out). Because of the minimal project impact during the AM peak hour, only the PM peak hour was considered in the analysis.

### 3.2 TRIP DISTRIBUTION

Projected traffic demand of project trips on study roadways was derived based upon the Phase 3 model output within the approved Southern Grove DRI TIA. Site specific project traffic percentages were determined based upon Phase 3 model distributions and engineering judgment and knowledge of the area. It should be noted that Paar Drive was assumed within the model output to extend from its existing western terminus to SW Village Parkway. The distribution has been updated as there are no future plans to extend Paar Drive east to SW Village Parkway. **Appendix B** provides the CFRPM model plots utilized for the percent of daily project trips.

Daily model project distribution was referenced to manually assign project distribution at study area intersections and driveways in general accordance with anticipated project traffic behavior. **Figure 3** shows the project distribution generated by the Delivery Station activities. **Appendix H** provides vested traffic distribution for Phase 3 of the Southern Grove DRI.



Figure 3: Project Trip Distribution

### 3.3 TRIP ASSIGNMENT

Project trips were assigned onto study area roadways and intersection based on project trip distribution percentages. **Figure 5** shows the anticipated PM peak hour project trips generated by the proposed delivery station. **Appendix H** provides vested project traffic trips for Phase 3 of the Southern Grove DRI.



Figure 4: PM Peak Hour Project Trip Assignment



3.4 HISTORIC TRAFFIC GROWTH

The University of Florida's Bureau of Economic and Business Research (BEBR) analyzes population growth trends in counties throughout the state, along with other statistical metrics. To determine a reasonable background growth rate for the study area, the medium BEBR growth rate for St. Lucie County was calculated.

As shown in **Table 4**, the medium BEBR growth rate for Year 2025 is approximately 1.55%. Therefore, a 1.55% annual background growth rate was applied on all study area roadway segments in the operational analysis to provide conservative results. **Appendix I** provides the historical growth calculations based upon BEBR population data.

**Table 4: BEBR Growth Rate Calculation**

County	BEBR Pop Estimate Apr 1, 2019	BEBR Population Projections (April 1)		
		Range	2025	2025
St. Lucie County	309,359	Low	319,300	0.46%
		Medium	342,900	1.55%
		High	364,600	2.55%

Source: Bureau of Economic and Business Research (BEBR) *Projections of Florida*.

3.5 VESTED TRAFFIC

Vested traffic from Phase 3 of the approved Southern Grove DRI TIA was utilized within the traffic operational analysis and is included within **Appendix B**. A reduction of Phase 3 Southern Grove DRI vested traffic was calculated based upon the trip generation potential of the proposed delivery station. Using ITE Trip Generation Manual, 8<sup>th</sup> Edition (used within the approved Southern Grove DRI TIA), approximately 365,000 square feet of the approved Phase 3 industrial square footage is equivalent to the proposed delivery station PM peak hour trip generation potential. Therefore, a reduction of approximate 365,000 square feet of industrial use was applied to the vested traffic volumes. **Table 5** illustrates the reduction of Phase 3 Southern Grove DRI vested traffic.

**Table 5: Trip Generation Summary of Displaced DRI Use**

Land Use	Intensity	Daily Trips	AM Peak Hour of Adjacent Street			PM Peak Hour of Adjacent Street		
			Total	In	Out	Total	In	Out
Proposed Development Warehousing	365,000 SF	1,501	168	129	39	136	37	99
	<i>Subtotal</i>	<i>1,501</i>	<i>168</i>	<i>129</i>	<i>39</i>	<i>136</i>	<i>37</i>	<i>99</i>
<b>TOTAL NET EXTERNAL TRIPS</b>		<b>1,501</b>	<b>168</b>	<b>129</b>	<b>39</b>	<b>136</b>	<b>37</b>	<b>99</b>
Trip Generation was calculated using the data from ITE's Trip Generation Manual, 8th Edition.  <u>Warehousing [ITE 150]</u> Daily $\ln(T) = 0.86 * \ln(X) + 2.24$ ; (X is SF/10000) AM Peak Hour of Adjacent Street $\ln(T) = 0.55 * \ln(X) + 1.88$ ; (X is SF/1000); (77% in/ 23% out) PM Peak Hour of Adjacent Street $\ln(T) = 0.64 * \ln(X) + 1.14$ ; (X is SF/1000); (27% in/ 73% out)								

A reduction was also applied based upon development that has been constructed as of the 2018 biennial report. The 2018 biennial report calculations are provided within **Appendix B**.

## 4.0 BACKGROUND CONDITIONS ANALYSIS – YEAR 2023

### 4.1 BACKGROUND TRAFFIC

Traffic conditions were evaluated for 2023 future background (with project) traffic conditions during the PM peak hour. Future background volumes at the study area intersections were derived by applying 1.55% annual growth to existing traffic counts. Additionally, vested traffic from the Phase 3 of the Southern Grove DRI TIA was included in the background traffic volume calculations. **Appendix E** provides adjusted turning movement volume worksheets for all intersections. **Figure 7** illustrates turning movement volumes for background conditions at the study intersections and roadways.

### 4.2 FUTURE IMPROVEMENTS

Based on a review of St. Lucie Transportation Planning Organization (TPO) Transportation Improvement Program (TIP) and FDOT's Five-Year Work Program, no transportation improvements were identified within the study area of the development.

### 4.3 FUTURE BACKGROUND INTERSECTION ANALYSIS

Intersection operational analysis was performed for 2023 future background (with project) traffic conditions during the PM peak hour using procedures outlined in the *Highway Capacity Manual 6<sup>th</sup> Edition* with Synchro (v10) software. Intersection level of service (LOS) and maximum volume-to-capacity (v/c) ratios for the background conditions are provided in **Table 6**. **Appendix F** includes Synchro (v10) outputs. The following transportation improvements are recommended to provide acceptable traffic operations during 2023 PM peak hour future background (without project) traffic conditions:

- SW Village Parkway & SW Becker Road
  - Signal Timing Adjustments
- SW Becker Road & I-95 NB Ramps
  - Signal Timing Adjustments
- SW Village Parkway & Intersection 4 (Driveway 1)/Future Paar Drive
  - Signalization
  - EB Geometry: 2 Left-Turn Lanes, 1 Through Lane, 1 Right-Turn Lane
  - WB Geometry: 1 Left-Turn Lane, 1 Through Lane, 1 Shared Through/Right-Turn Lane
  - Additional NB & SB Left-Turn Lanes (existing today, but gored)
- SW Becker Road & Intersection 7 (Driveway 4)
  - Signalization
  - SB Geometry: 2 Left-Turn Lanes, 1 Shared Through/Right-Turn Lane
  - NB Geometry: 1 Left-Turn Lane, 1 Shared Through/Right-Turn Lane
  - Additional EB & WB Left-Turn Lanes (existing today, but gored)

A signal warrant analysis was performed for the intersections of SW Village Parkway & Intersection 4 (Driveway 1)/Future Paar Drive and SW Becker Road & Intersection 7 (Driveway 4). The signal warrant analysis shows that both study area intersections will warrant signalization based upon 2023 future background (without project) traffic conditions. The signal warrant analysis is provided within **Appendix J**.



**Table 6:** Future Background Intersection Conditions (PM Peak Hour)

2023 Future Background Traffic Conditions					
Intersection	Control Type	Approach	PM Peak Hour		
			Approach LOS (overall delay)	Max V/C Movement	Max v/c Movement
SW Village Parkway & Intersection 4 (Driveway 1) <sup>1</sup>	Signalized	EB	D	EBL	0.84
		WB	D	WBR	0.88
		NB	D	NBL	0.71
		SB	D	SBR	0.83
		<b>Overall</b>	<b>D (38.4 sec)</b>	<b>WBR</b>	<b>0.88</b>
SW Village Parkway & Intersection 5 (Driveway 2)	Unsignalized (TWSC)	EB	D	EBL	0.28
		WB	C	WBL	0.64
		NB	A	NBL	0.02
		SB	A	SBL	0.10
		<b>Overall</b>	--	--	--
SW Village Parkway & Intersection 6 (Driveway 3)	Unsignalized (TWSC)	EB	C	EBL	0.15
		WB	C	WBL	0.61
		NB	A	NBL	0.03
		SB	A	SBL	0.10
		<b>Overall</b>	--	--	--
SW Becker Road & Intersection 7 (Driveway 4) <sup>1</sup>	Signalized	EB	C	EBL	0.74
		WB	D	WBL	0.58
		NB	E	NBR	0.89
		SB	E	SBR	0.94
		<b>Overall</b>	<b>D (50.2 sec)</b>	<b>SBR</b>	<b>0.94</b>
SW Becker Road & Intersection 8 (Driveway 5)	Unsignalized (TWSC)	EB	--	--	--
		WB	--	--	--
		SB	E	SBL	0.92
		<b>Overall</b>	--	--	--
SW Village Parkway & SW Becker Road <sup>1</sup>	Signalized	EB	D	EBL	0.87
		WB	D	WBL	0.69
		NB	E	NBL	0.89
		SB	D	SBL	0.89
		<b>Overall</b>	<b>D (47.3 sec)</b>	<b>SBL</b>	<b>0.89</b>
SW Becker Road & I-95 SB Ramps	Signalized	EB	B	EBT	0.23
		WB	B	WBL	0.89
		NB	--	--	--
		SB	D	SBL	0.81
		<b>Overall</b>	<b>C (25.2 sec)</b>	<b>WBL</b>	<b>0.89</b>
SW Becker Road & I-95 NB Ramps <sup>1</sup>	Signalized	EB	C	EBL	0.86
		WB	C	WBT	0.21
		NB	D	NBR	0.91
		SB	--	--	--
		<b>Overall</b>	<b>C (33.7 sec)</b>	<b>NBR</b>	<b>0.91</b>

Notes:

1. Intersection improvements were incorporated to allow for acceptable operations during 2023 future background traffic conditions.

## 5.0 BUILDOUT CONDITIONS ANALYSIS – YEAR 2023

### 5.1 BUILDOUT TRAFFIC

Future traffic conditions were evaluated for the buildout year 2023. Buildout volumes were developed by adding anticipated project trips to future background volumes. **Appendix E** provides the adjusted turning movement volume worksheets for all intersections. **Figure 8** illustrates turning movement volumes for buildout conditions at the study intersections.

### 5.2 BUILDOUT INTERSECTION ANALYSIS

Intersection operational analysis was performed for the year 2023 buildout conditions in the PM peak hour using procedures outlined in the *Highway Capacity Manual 6<sup>th</sup> Edition* with Synchro (v10) software. Intersection level of service (LOS) and maximum volume-to-capacity (v/c) ratios for the buildout conditions are provided in **Table 7**. **Appendix F** provides Synchro (v10) outputs.

As shown in the table, all study area intersections operate at an acceptable LOS overall during 2023 buildout PM peak hour traffic conditions.

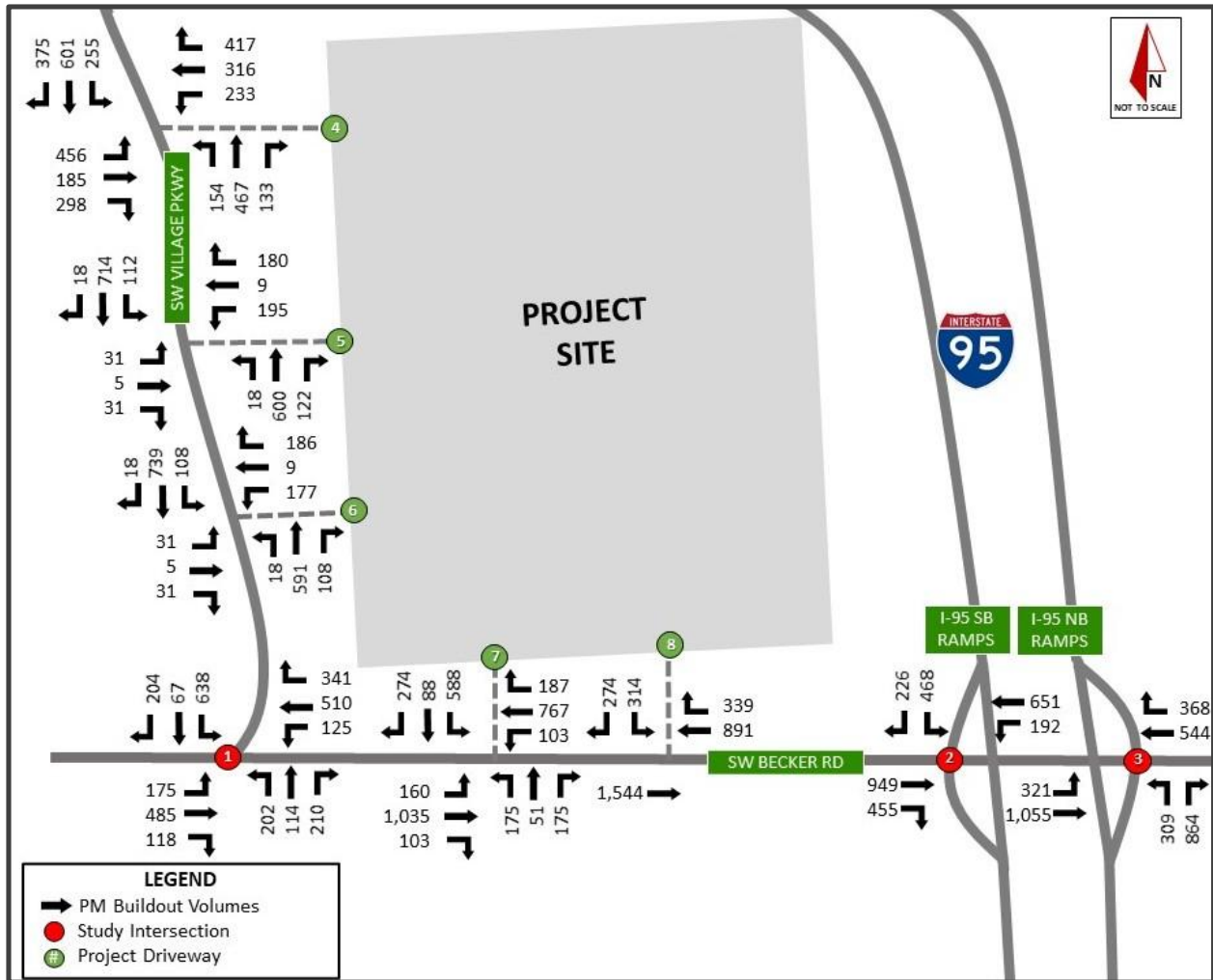


Figure 6: Buildout (2023) Turning Movement Counts

**Table 7: Buildout Intersection Conditions (PM Peak Hour)**

2023 Buildout Traffic Conditions					
Intersection	Control Type	Approach	PM Peak Hour		
			Approach LOS (overall delay)	Max V/C Movement	Max v/c Movement
SW Village Parkway & Intersection 4 (Driveway 1)	Signalized	EB	D	EBL	0.84
		WB	D	WBR	0.88
		NB	D	NBL	0.71
		SB	D	SBR	0.83
		<b>Overall</b>	<b>D (39.0 sec)</b>	<b>WBR</b>	<b>0.88</b>
SW Village Parkway & Intersection 5 (Driveway 2)	Unsignalized (TWSC)	EB	D	EBL	0.30
		WB	D	WBL	0.71
		NB	A	NBL	0.02
		SB	A	SBL	0.11
		<b>Overall</b>	--	--	--
SW Village Parkway & Intersection 6 (Driveway 3)	Unsignalized (TWSC)	EB	C	EBL	0.16
		WB	C	WBL	0.62
		NB	A	NBL	0.03
		SB	A	SBL	0.11
		<b>Overall</b>	--	--	--
SW Becker Road & Intersection 7 (Driveway 4)	Signalized	EB	D	EBL	0.74
		WB	D	WBL	0.58
		NB	E	NBR	0.90
		SB	E	SBR	0.94
		<b>Overall</b>	<b>D (50.4 sec)</b>	<b>SBR</b>	<b>0.94</b>
SW Becker Road & Interseciton 8 (Driveway 5)	Unsignalized (TWSC)	EB	--	--	--
		WB	--	--	--
		SB	E	SBL	0.95
		<b>Overall</b>	--	--	--
SW Village Parkway & SW Becker Road	Signalized	EB	D	EBL	0.87
		WB	D	WBL	0.69
		NB	E	NBL	0.89
		SB	D	SBL	0.90
		<b>Overall</b>	<b>D (47.3 sec)</b>	<b>SBL</b>	<b>0.90</b>
SW Becker Road & I-95 SB Ramps	Signalized	EB	B	EBT	0.24
		WB	B	WBL	0.89
		NB	--	--	--
		SB	D	SBR	0.82
		<b>Overall</b>	<b>C (25.0 sec)</b>	<b>WBL</b>	<b>0.89</b>
SW Becker Road & I-95 NB Ramps	Signalized	EB	C	EBL	0.89
		WB	C	WBT	0.22
		NB	D	NBR	0.91
		SB	--	--	--
		<b>Overall</b>	<b>C (34.3 sec)</b>	<b>NBR</b>	<b>0.91</b>



5.3 TURN LANE ANALYSIS

The observed traffic volumes on SW Village Parkway, as well as the projected ingress turning volumes at the Intersection 5 (Driveway 2) and Intersection 6 (Driveway 3), were compared to the thresholds of the NCHRP Report 457 for determination of whether a major road right-turn lane is required at a stop-controlled minor street intersection. Report NCHRP 457 compares the major street speed, approach volume, and right-turning volume to determine whether a dedicated right-turn lane is warranted on the major street approach. Based on the ingress right-turn volumes projected at the project driveways, and the future background traffic volumes on SW Village Parkway during the PM peak hour, an exclusive right-turn lane at both Intersection 5 (Driveway 2) and Intersection 6 (Driveway 3) is warranted based on the criteria within the NCHRP 457 analysis. It should be noted that this improvement is required based upon 2023 future background (without project) traffic volumes. The recommended queue lengths for the ingress right-turn lanes are provided in **Table 8**. The NCHRP Report 457 output is provided in **Appendix K**.

**Table 8: Recommended Ingress Right-Turn Lane Storage Lengths**

Intersection/Turn Lane	Posted Speed	Required Deceleration (Ft) <sup>1</sup>	Synchro 95th Percentile Queue Length (Ft) <sup>2</sup>	Proposed Turn Lane Length (Ft)
SW Village Parkway & Intersection 5 (Driveway Access 2) Northbound Right-Turn Lane	45	185	25	210
SW Village Parkway & Intersection 6 (Driveway Access 3) Northbound Right-Turn Lane	45	185	25	210

Notes:

1. Based on the 2021 FDOT Design Manual, Exhibit 212-1.
2. Based on the 95th percentile queue reported in Synchro 10. A minimum of one car length was utilized.
3. Proposed storage lengths were determined based on the required deceleration length and 95th percentile queue length.

Existing turn lanes at the site driveways along both SW Village Parkway and SW Becker Road were evaluated to determine if sufficient deceleration and storage is provided to accommodate buildout project traffic volume projections. The total turn lane length should accommodate the minimum deceleration required in the 2021 FDOT Design Manual, Exhibit 212-1 and the expected 50<sup>th</sup> percentile queue as calculated using Synchro 10. Additionally, existing storage lengths were determined to be sufficient if the turn lane could accommodate the 95<sup>th</sup> percentile queue length. The summary of the queue length evaluation is provided in **Table 9** shows that the existing turn lanes have sufficient length to support project traffic.

**Table 9: Existing Ingress Turn-Lane Storage Length Summary**

Intersection/Turn Lane	Existing Length (Ft)	Posted Speed	Required Deceleration (Ft) <sup>1</sup>	Synchro 50th Percentile Queue Length (Ft) <sup>2</sup>	Synchro 95th Percentile Queue Length (Ft) <sup>2</sup>	Existing Turn Lane Sufficient (Y/N)	Turn Lane Extension (Ft)
SW Village Parkway & Intersection 4 (Driveway 1)							
Southbound Left-Turn Lane	500	45	185	100	175	Y	--
Northbound Right-Turn Lane	360	45	185	25	50	Y	--
SW Village Parkway & Intersection 5 (Driveway 2)							
Southbound Left-Turn Lane	330	45	185	25	25	Y	--
SW Village Parkway & Intersection 6 (Driveway 3)							
Southbound Left-Turn Lane	330	45	185	25	25	Y	--
SW Becker Road & Intersection 7 (Driveway 4)							
Eastbound Left-Turn Lane	450	45	185	75	100	Y	--
Westbound Right-Turn Lane	320	45	185	25	50	Y	--
SW Becker Road & Intersection 8 (Driveway 5)							
Westbound Right-Turn Lane	270	45	185	25	25	Y	--

Notes:

1. Based on the 2021 FDOT Design Manual, Exhibit 212-1.
2. Based on the 50th and 95th percentile queue reported in Synchro 10. A minimum of one car length was utilized.
3. Existing storage lengths were determined to be sufficient if the turn lane could accommodate the sum of the required deceleration length and 50th percentile queue length. Additionally, the existing storage length was determined to be sufficient if the turn lane could accommodate the 95th percentile queue length.

## 7.0 FUTURE ROADWAY SEGMENT ANALYSIS

A PM peak hour roadway segment analysis was performed for future background and buildout conditions (Year 2023). Future background (2023) AADT volumes were derived by applying a 1.55% annual growth rate to existing (2020) AADT volumes. Additionally, vested traffic from the Southern Grove DRI traffic impact analysis was included in the background traffic volume calculations. Buildout volumes were developed by summing background volume and project trips. As shown in **Table 10**, all roadway segments operate at acceptable levels of service during PM peak hour future conditions except for the road segment of I-95 from SW Martin Highway to SW Gatlin Boulevard which operates with a v/c ratio greater than 1.0. No new roadway deficiencies were identified as a result of project traffic impact.

**Table 10: Future Roadway Segment Analysis (PM Peak Hour)**

Roadway From To		Peak Hour Directional Maximum Service Capacity <sup>1</sup>	Applied Growth Rate <sup>2</sup>	Vested Traffic		Future Background Traffic Conditions				PM Peak Hour Project Traffic			Future Buildout Peak Hour Traffic Conditions				
				Volumes <sup>2</sup>		Volumes <sup>3</sup>		Max V/C Ratio	LOS	Assign <sup>4</sup>	Volumes <sup>5</sup>		Volumes <sup>5</sup>		Max V/C Ratio	LOS	
				NB / EB	SB / WB	NB / EB	SB / WB				NB / EB	SB / WB	NB / EB	SB / WB			
SW Village Parkway	SW Becker Road	Paar Drive	1,710	1.55%	796	972	961	1,137	0.66	C	25%	11	23	972	1,160	0.68	C
SW Becker Road	SW Village Parkway	I-95 Interchange	3,170	1.55%	2,530	2,070	2,847	2,387	0.90	C	75%	34	68	2,881	2,455	0.91	C
I-95	Gatlin Boulevard	SW Becker Road	4,580	1.55%	173	793	4,923	5,543	1.21	F	30%	14	27	4,937	5,570	1.22	F
	SW Becker Road	Martin Highway	4,580	1.55%	141	675	4,857	5,391	1.18	F	30%	27	14	4,884	5,405	1.18	F

Note:

1. Peak Hour Directional Maximum Service Capacities were obtained from the 2020 FDOT Quality/LOS Tables.
2. A historical growth rate of 1.55% was applied.
3. Future non-project traffic volumes are the summation of the existing peak season volumes and background growth.
4. The percent project traffic is the maximum across the roadway segment
5. Buildout project traffic volumes are the summation of future background traffic and project traffic.

## 8.0 CONCLUSION

This traffic impact analysis was performed to assess the transportation impacts of the Southern Grove Delivery Station located on the north side of SW Becker Road, east of SW Village Parkway in the City of Port St. Lucie, Florida. The proposed development consists of a ±219,000 square foot delivery station/warehouse building, parking spaces, vehicle staging, and loading spaces with a buildout year of 2022. However, to be consistent with Phase 3 of the Southern Grove DRI TIA, a buildout year of 2023 was utilized.

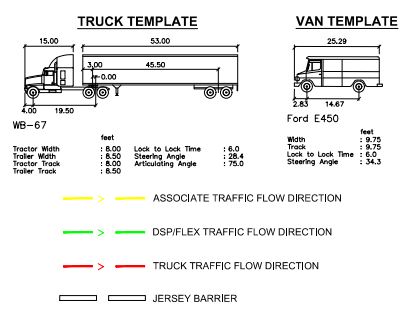
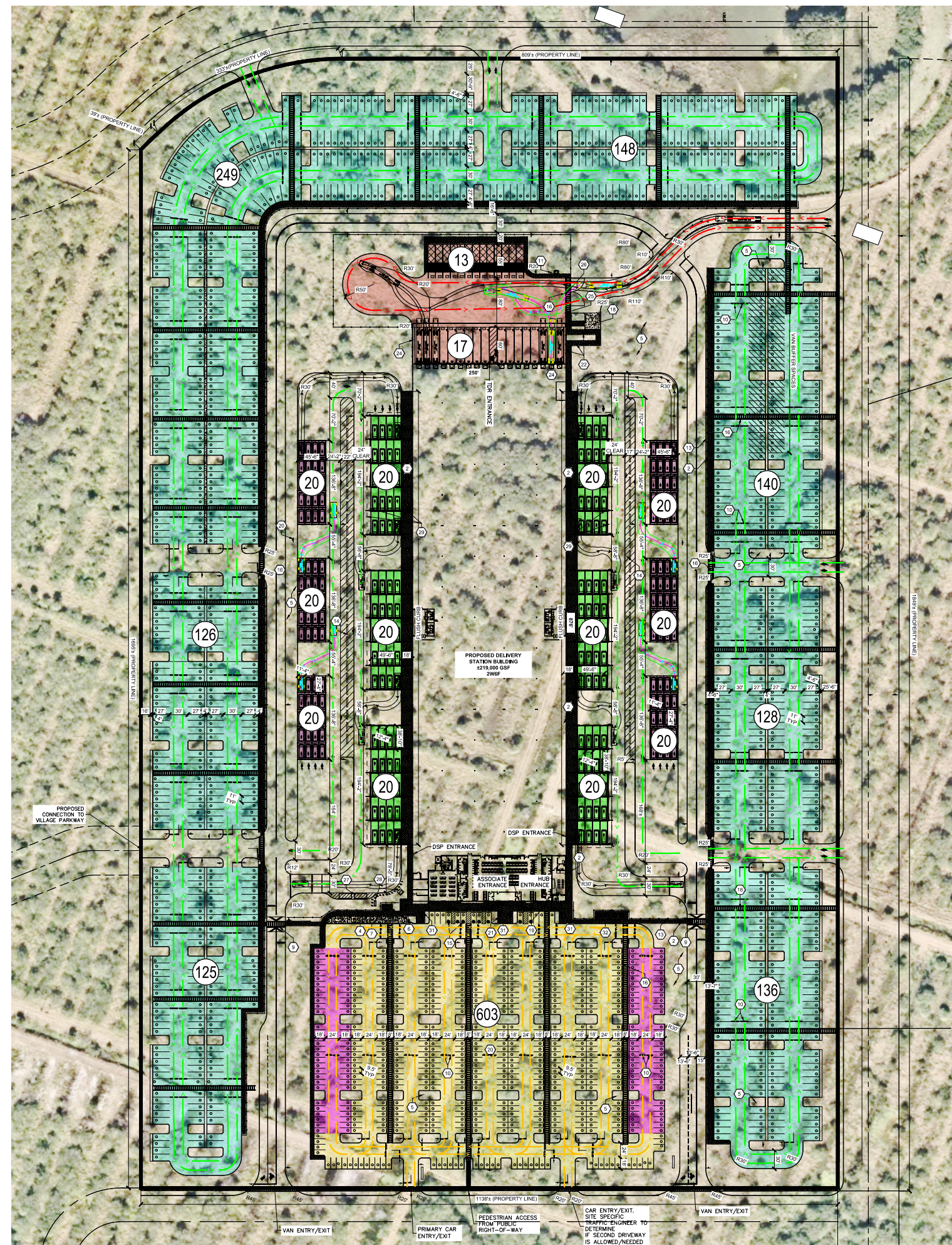
The site will be accessed by site employees, delivery drivers, and heavy trucks. The majority of the traffic entering and exiting the delivery station is programmed to travel outside the traditional peak hours. Access to the site will eventually be provided via multiple driveways on the adjacent roadways as the DRI develops. The project is expected to generate 136 new external vehicular trips (91 in/ 45 out) during the PM peak hour based on a trip generation estimate developed from operational data provided by the end-user. At this level of trips, a single access with two-way stop-control will be adequate to provide acceptable operations for the proposed delivery station.

Roadway segment analyses performed for the existing, background, and buildout conditions conclude that all roadway segments within the study operate at an acceptable level of service (LOS) during PM peak hour except for the road segment of I-95 from SW Martin Highway to SW Gatlin Boulevard which operates with a v/c ratio greater than 1.0 during 2023 future background (without project) traffic conditions. No new roadway deficiencies were identified as a result of project traffic impact.

Operational analyses performed at study area intersections and driveways conclude that transportation improvements will be required to provide acceptable traffic operations during 2023 future background (without project) traffic conditions. No new operational deficiencies were identified as a result of project traffic impact at project buildout.

APPENDIX A  
Site Plan

Plotted By: Win\_Chas\_Sheet\_Sett: dda\_Layout1: Layout1: February 23, 2022 04:31:23pm K:\VNL\_CAD\04660000-DP17\_Layout1.dwg - Port St. Lucie, FL - VNUAD - CONCEPT - Medium - VCH7 - Site Concept - DFT - Rev: 20210226.dwg  
 The information contained herein is the property of Kimley-Horn and Associates, Inc. and is intended for the use of the recipient only. No warranty is made by Kimley-Horn and Associates, Inc. for the use of this information for any other purpose.



DESIGN INFORMATION	
AREA OF BUILDING	±219,000 SF
AREA OF EXTERIOR CANOPY	±104,400 SF
TOTAL SITE AREA	±47.79 AC
SETBACKS:	FRONT: 25 FEET REAR: 25 FEET SIDE: 15 FEET SIDE/CORNER: 25 FEET

PARKING SUMMARY TABLE				
PARKING	REQUIRED	PROPOSED ON-SITE	PROPOSED OFF-SITE	DELTA
ASSOCIATE LOT				
ASSOCIATE SPACES	258	516	0	258
AMZL MANAGEMENT SPACES	21	21	0	0
DSP MANAGEMENT SPACES	52	52	0	0
CUSTOMER SPACES	3	3	0	0
GUEST SPACES	3	3	0	0
ACCESSIBLE & ACCESSIBLE VAN	8	8	0	0
TOTAL AUTO SPACES (9' x 16')	345	603	0	258
VAN LOT				
STANDARD VAN SPACES (11'x27')	816	819	0	3
VAN DRIVER PERSONAL VEHICLE (11'x27')	240	240	0	0
VAN DRIVER PERSONAL VEHICLE (9'x18')	120	120	0	0
VAN BUFFER SPACES (11'x27')	47	47	0	0
TOTAL VAN SPACES (11' x 27')	1103	1106	0	3
TOTAL VAN SPACES (9.5' x 16')	120	120	0	0
LOADING & STAGING AREA				
TRUCK/VAN LOADING	120	120	-	0
VAN QUELING	120	120	-	0
TRUCK YARD				
DOCK DOORS FOR INDUCT	15	17	-	2

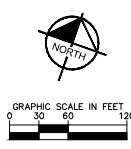
**PARKING LEGEND**

**KEYNOTES**

- STORMWATER MANAGEMENT AS REQUIRED BY CODE.
- CONCRETE SIDEWALK
- ACCESSIBLE CURB RAMP
- RIDE SHARE DROP-OFF
- LANDSCAPE
- SMOKING SHELTER
- RIDE-SHARE SHELTER
- CONCRETE WHEEL STOP
- SPEED TABLE / PEDESTRIAN WALKWAY
- SPEED BUMP
- 4x6 TRUCK YARD SPILL KIT SHED BY TENANT ON THE CONCRETE PAD
- 12" WIDE CURB
- PEDESTRIAN BARRIER FENCE PER SITE DETAILS
- STRIPED TRAFFIC SEPARATION WITH JERSEY BARRIERS (OR EQUAL)
- ACCESSIBLE PARKING STALL
- STRIPED PEDESTRIAN ACCESS
- YARD PERIMETER SECURITY FENCE
- TRASH ENCLOSURE PER ARCHITECTURAL PLANS
- BOLLARDS PER SITE PLAN (INCLUDE DETAILS AND SITE DETAILS)
- EMPLOYEE STUNTER AREA STORAGE PER STORAGE AND STORING PLAN
- BIKE RACKS
- 8" WIDE CONCRETE SIDEWALK 6% MAX SLOPE WITH CURB RAMP AND LANDINGS AS REQUIRED
- TRASH CAN (BY TENANT) ON CONCRETE PAD
- RETAINING WALL AS REQUIRED
- 2" MIN MAN GATE WITH LOCKING HARDWARE
- PAIR OF 24" x 24" 16-GA GALVANIZED MANUAL SWING GATES WITH DROP ROD AND LOCKING HARDWARE IS REQUIRED. PROVIDE GATE WITH RUBBER ROLLERS OR TIRE.
- IN-GROUND TRACK SYSTEMS ARE NOT ALLOWED
- EMERGENCY MOBILE GENERATOR PARKING
- ELECTRICAL EQUIPMENT WITH BOLLARD PROTECTION PER ELECTRICAL PLANS
- BUILDING CANOPY AND COLUMN PER ARCHITECTURAL SHEET A.10
- SKYLINE PER SIGNAGE AND STRIPING PLAN
- BENCH
- ASSOCIATE OUTDOOR AREA
- SPEED HUMP

**GENERAL NOTES**

- REFER TO THE AMZL DESIGN CRITERIA AND OUTLINE SPECIFICATIONS FOR FURTHER INFORMATION REGARDING THE SITE PLAN ELEMENTS KEYNOTED ON PLANS.
- BUILDING DIMENSIONS TAKEN FROM INSIDE FACE OF CONCRETE PANEL.
- SPREADABLE DIMENSIONS SHOWN ARE MEASURED FROM FACE OF CURB TO FACE OF CURB OR BACK OF PARKING STALL TO BACK OF PARKING STALL.
- SITE PLAN LAYOUT TO GRAPHICALLY ILLUSTRATE INTENT ONLY. DEVELOPERS AND DESIGN TEAMS ARE RESPONSIBLE FOR RECONCILING WITH SITE SPECIFIC CONSTRAINTS AND JURISDICTIONAL REQUIREMENTS.



**NOT FOR CONSTRUCTION**

**Kimley-Horn**  
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**FOR INFORMATIONAL PURPOSES ONLY**

REV	PROJECT	DATE	DESCRIPTION
01	DFH7	02/25/2021	SCALE AS SHOWN
02			ISSUED BY: BJS
03			DRAWN BY: CBR
04			CHECKED BY: BJS

**DFH7 SITE CONCEPT**

COMMERCIALWAREHOUSE  
FLORIDA  
PORT ST. LUCIE

SHEET NUMBER  
**SSA (R0)**

NO.	REVISIONS	DATE

**APPENDIX B**  
Southern Grove DRI TIA Excerpts



**TRANSPORTATION RESOURCE  
IMPACTS**

## **QUESTION 21 - TRANSPORTATION**

- A. Using Map J or a table as a base, indicate existing conditions on the highway network within the study area (as previously defined on Map J), including AADT, peak-hour trips directional, traffic split, levels of service and maximum service volumes for the adopted level of service (LOS). Identify the assumptions used in this analysis, including "K" factor, directional "D" factor, facility type, number of lanes and existing signal locations. (If levels of service are based on some methodology other than the most recent procedures of the Transportation Research Board and FDOT, this should be agreed upon at the preapplication conference stage.) Identify the adopted LOS standards of the FDOT, appropriate regional planning council, and local government for roadways within the identified study area. Identify what improvements or new facilities within this study area are planned, programmed, or committed for improvement. Attach appropriate excerpts from published capital improvements plans, budgets and programs showing schedules and types of work and letters from the appropriate agencies stating the current status of the planned, programmed and committed improvements. Please also include AM and PM peak hour-peak season information in addition to AADT.**

### **TCRPC Addendum**

**Please also include AM and PM peak hour-peak season information in addition to AADT.**

## Introduction

The Southern Grove Development of Regional Impact (DRI) (the “Project”) is generally located west of I-95 and south of Tradition Parkway in the City of Port St. Lucie, Florida (see Figure 21 A-1). The DRI is one of four DRIs that fall within an area known as the Southwest Annexation Area, which is generally bounded by I-95 to the east, Rangeline Road to the west, Tradition Parkway/Gatlin Boulevard to the north, and the St. Lucie County/Martin County Line to the south. The buildout of the project, which is proposed to be completed by the end of 2028, will consist of 7,388 residential dwelling units, 791 hotel rooms, 4,583,336 square feet of industrial use, 3,675,075 square feet of retail, 2,430,728 square feet of office use, 2,498,601 square feet of research and development use, a hospital (300 beds), 318,277 square feet of civic/institutional use, 80 acres of recreational/park use, and two 1,600 student K-8 schools. The proposed development will be divided into four phases with phase buildout dates of 2013, 2018, 2023, and 2028. The proposed development program and phasing for the Southern Grove DRI are summarized in Table 21 A-1.

Table 21 A-1  
Proposed Development Program and Phasing Schedule

Land Use	Unit	Phase 1 (2013)	Phase 2 (2018)	Phase 3 (2023)	Phase 4 (2028)	Total
Single-Family	DUs	300	1,000	1,000	1,014	3,314
Multi-Family	DUs	600	1,000	1,018	1,456	4,074
Hotel	Rooms	371	250	170	0	791
Industrial	SF	450,000	1,411,112	1,361,112	1,361,112	4,583,336
Commercial Retail	SF	465,000	1,210,075	1,000,000	1,000,000	3,675,075
Office	SF	350,000	693,576	693,576	693,576	2,430,728
Research/Development	SF	915,000	527,867	527,867	527,867	2,498,601
Hospital	Beds	300	0	0	0	300
Civic/Institutional	SF	0	49,841	138,835	129,601	318,277
Park	Acres	10	35	35	0	80
K-8 School	Students	0	1,600	1,600	0	3,200

This traffic analysis was conducted in accordance with the methodology dated May 4, 2009 and updated June 10, 2009, which is included in Appendix 21-A.

## **Study Area**

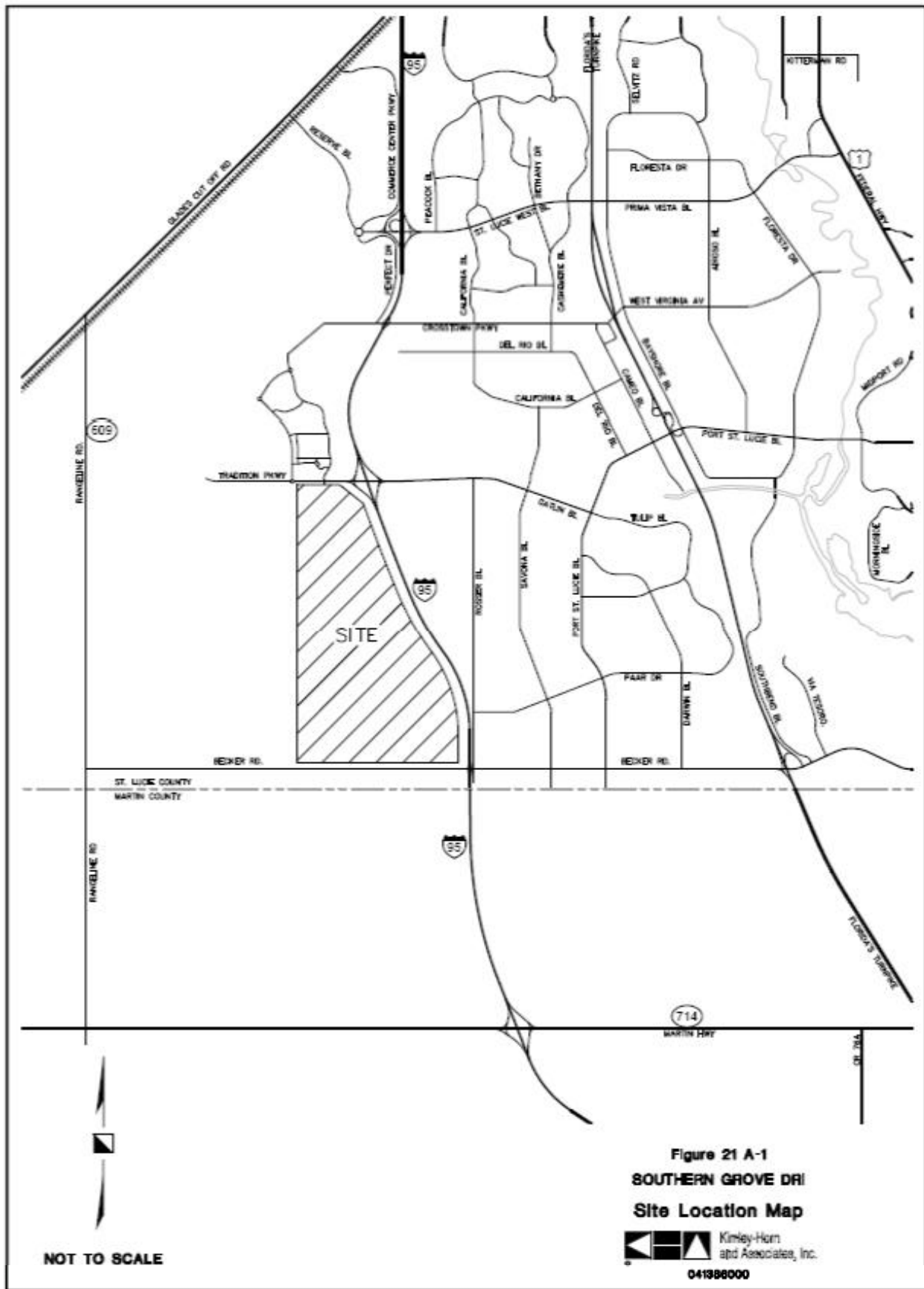
For the purposes of this analysis, the traffic impact study area is defined by those roadway links where project traffic is determined to have a significant impact. Links are determined to have a significant impact when the project's peak hour directional trips equal or exceed five percent of the roadway's adopted service volume. The traffic impact study area will extend one link beyond those links where the project has a significant impact. As such, the study area is generally described by the following boundaries:

North: Midway Road

South: Martin Highway (County Road 714)

East: US Highway 1 (State Road 5)

West: Rangeline Road



**TABLE 21 B-3a**  
**DAILY TRIP GENERATION (2023 - PHASE 3 LAND USE)**

DRI	Gross Daily Trip Generation	TAZ Internal Capture Trips		External TAZ Trips		Pass-by Trips		External Daily Trip Generation	DRI Internal Capture Trips		External DRI Trips
		in	out	in	out	in	out		in	out	
Southern Grove	207,691	26,784	180,907	8,112	172,795	35,596	137,199				
Western Grove	62,512	9,322	53,190	2,347	50,843	4,118	46,725				
Wilson Groves	124,865	12,238	112,627	3,705	108,922	24,725	84,197				
Riverland	177,281	14,608	162,673	5,253	157,420	23,456	133,964				

**TABLE 21 B-3b**  
**PM PEAK HOUR TRIP GENERATION (2023 - PHASE 3 LAND USE)**

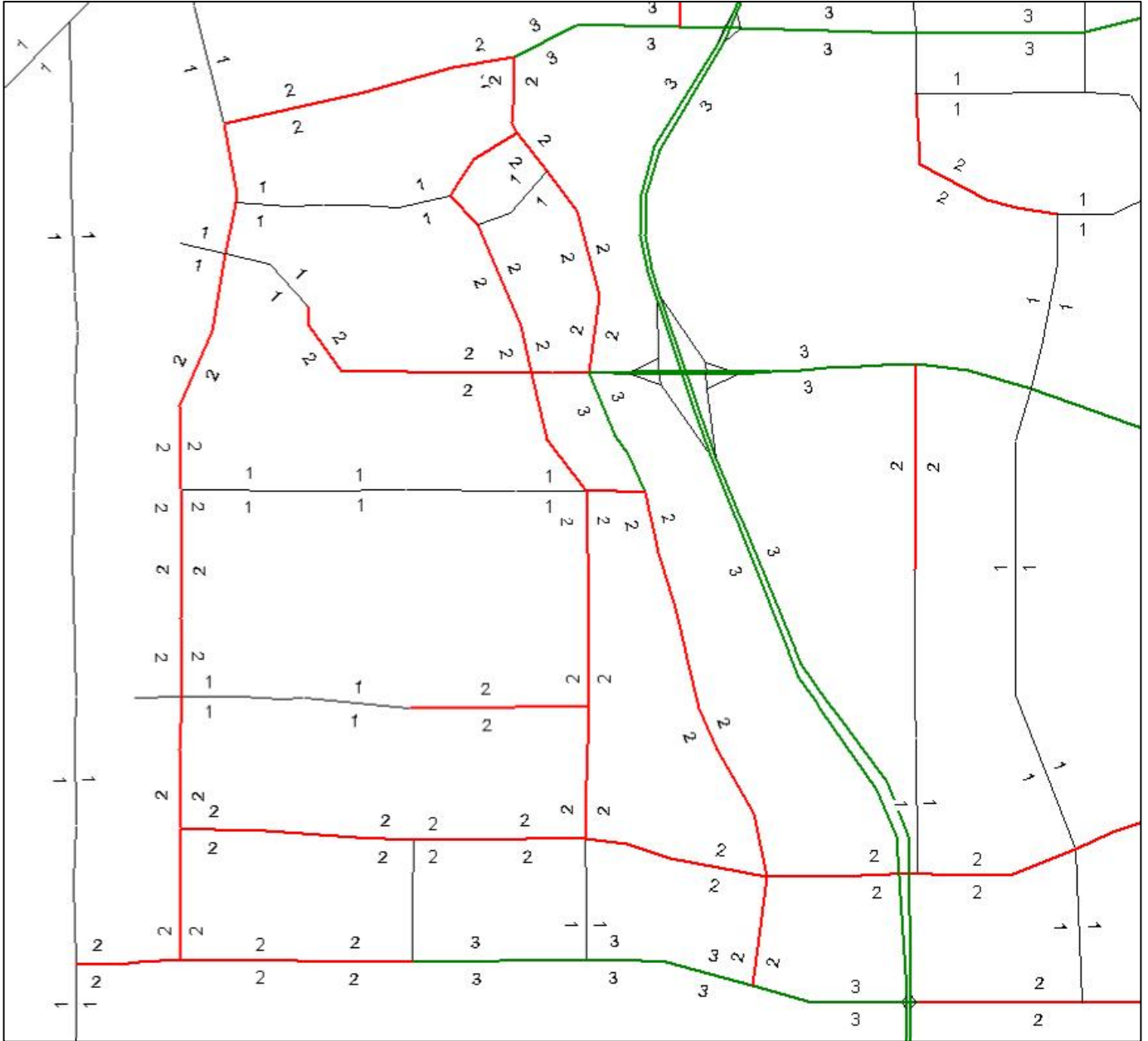
DRI	Gross PM Peak Hour Trip Generation		TAZ Internal Capture Trips		Pass-by Trips		Net External TAZ Trips		Internal Capture % among DRI*	Internal Capture Trips among DRI		Net External DRI Trips	
	in	out	in	out	in	out	in	out		in	out	in	out
Southern Grove	8,909	12,885	1,238	1,238	391	391	7,280	11,256	20.6%	1,909	1,909	5,371	9,347
Western Grove	3,259	2,762	432	432	111	111	2,716	2,219	8.1%	200	200	2,516	2,019
Wilson Groves	6,244	6,276	553	553	175	175	5,516	5,548	22.7%	1,256	1,256	4,260	4,292
Riverland	9,089	8,357	661	661	249	249	8,179	7,447	14.9%	1,164	1,164	7,015	6,283

\* These internal capture percentages (with the exception of Southern Grove) were obtained from the WATS. The Southern Grove internal capture percentage was obtained from the TCRPM III (per the agreed upon methodology).

TABLE 21 D-3  
2025 MODEL ROADWAY ADJUSTMENTS

Facility	From	To	Modification
Crosstown Parkway	N/S A	Village Pkwy	New 4-lane
Crosstown Parkway	Village Pkwy	Commerce Center Pkwy	Widen to 6-lanes
N/S A	Westcliffe Ln	Crosstown Pkwy	Widen to 4-lanes
Community Blvd	Tradition Pkwy	E/W 1	Widen to 4-lanes
N/S B	Becker Rd	Paar Dr	New 2-lane
Paar Drive	N/S A	N/S B	Widen to 4-lanes
Paar Drive	Rosser Blvd	Port St. Lucie Blvd	Widen to 4-lanes
Becker Road	N/S B	Community Blvd	Widen to 6-lanes
Port St. Lucie Blvd	Darwin Blvd	Gatlin Blvd	Widen to 6-lanes
California Blvd	Savona Blvd	Del Rio Blvd	Widen to 4-lanes
Martin Highway	PSL Blvd Extension	Florida's Turnpike	Widen to 4-Lanes
St. Lucie West Blvd	Interstate 95	Peacock Blvd	Widen to 6-Lanes

FIGURE 21 D-3  
2025 SOUTHWEST ANNEXATION AREA ROADWAY NETWORK AND LANEAGE





## Project Traffic

Project trips were distributed and assigned to the roadway network using model output information. New external project traffic was isolated on the roadway network using the model. A review of the Model traffic distribution appeared reasonable. The resulting distributions may be generally summarized into the following four cardinal directions:

	<u>2013</u>	<u>2018</u>	<u>2023</u>	<u>2028</u>
North	40%	30%	25%	30%
South	15%	15%	15%	15%
East	25%	20%	25%	25%
West	20%	35%	35%	35%

**E. Assign the trips generated by this development as shown in (B) and (C) above and show, on separate maps or tables for each phase-end year, the DRI traffic on each link of the then-existing network within the study area. Include peak-hour directional trips. If local data is available, compare average trip lengths by purpose for the project and local jurisdiction. For the year of buildout and at the end of each phase estimate the percent impact, in terms of peak hour directional DRI trips/ total peak hour directional trips and in terms of peak hour directional DRI trips/ existing peak hour service volume for desired LOS, on each regionally significant roadway in the study area. Identify facility type, number of lanes and projected signal locations for the regionally significant roads. Include daily and, AM and PM peak hour-peak season traffic assignment for each phase of the development.**

**TCRPC Addendum**

**Include daily and AM and PM peak hour-peak season traffic assignment for each phase of the development.**

The assignment of project trips as discussed in Question 21-D was used as the traffic assignment. The resulting regional assignments for the Southern Grove DRI traffic are summarized in Figures 21 E-1 thru 21 E-4.

Project significance was calculated using the peak hour service capacity thresholds (as detailed in Table 21 A-2) and Southern Grove DRI project traffic. These significance calculations can be seen in Tables 21 E-1 through 21 E-4.

FIGURE 21 E-3a  
2023 TRAFFIC ASSIGNMENT

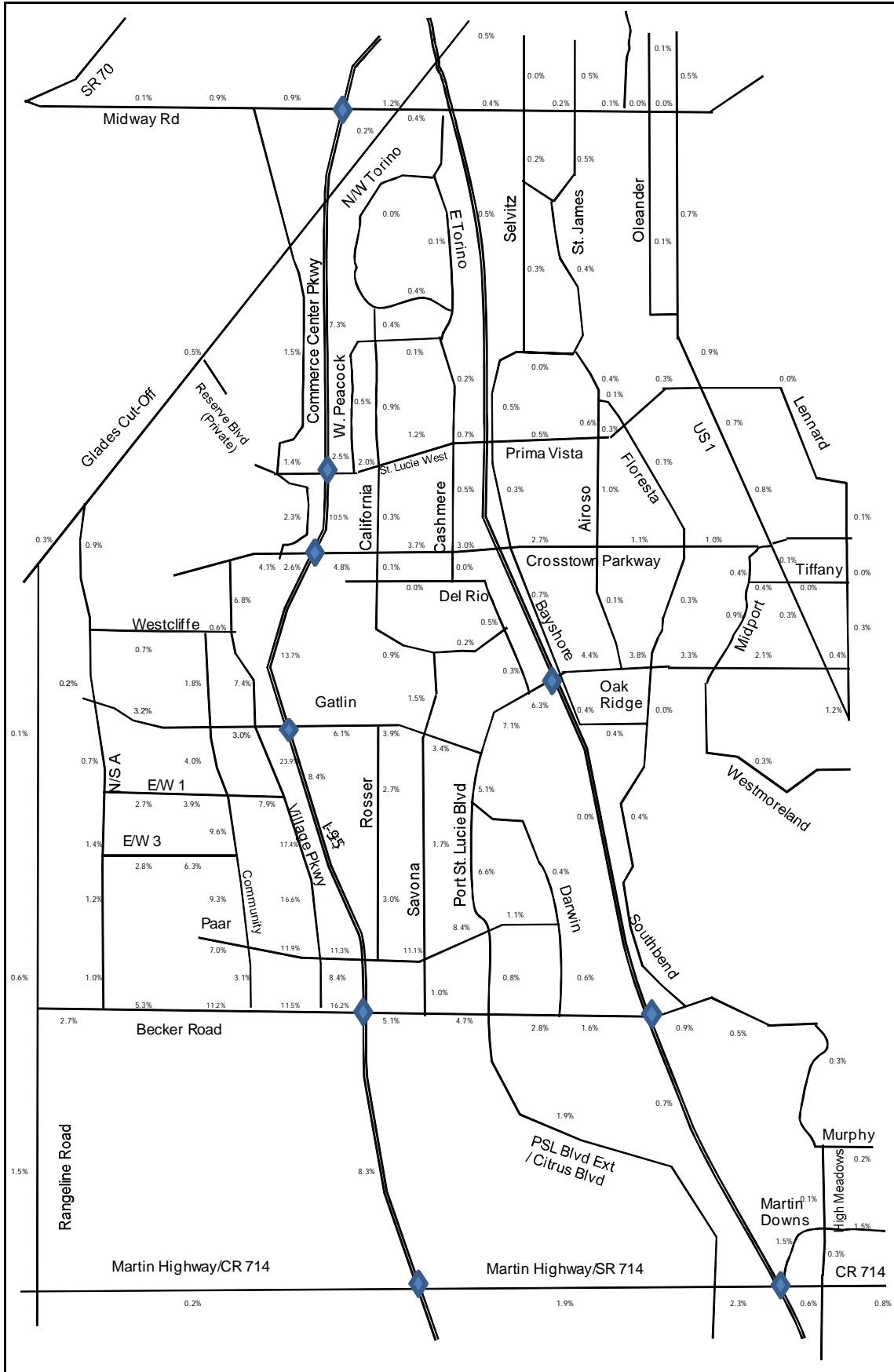
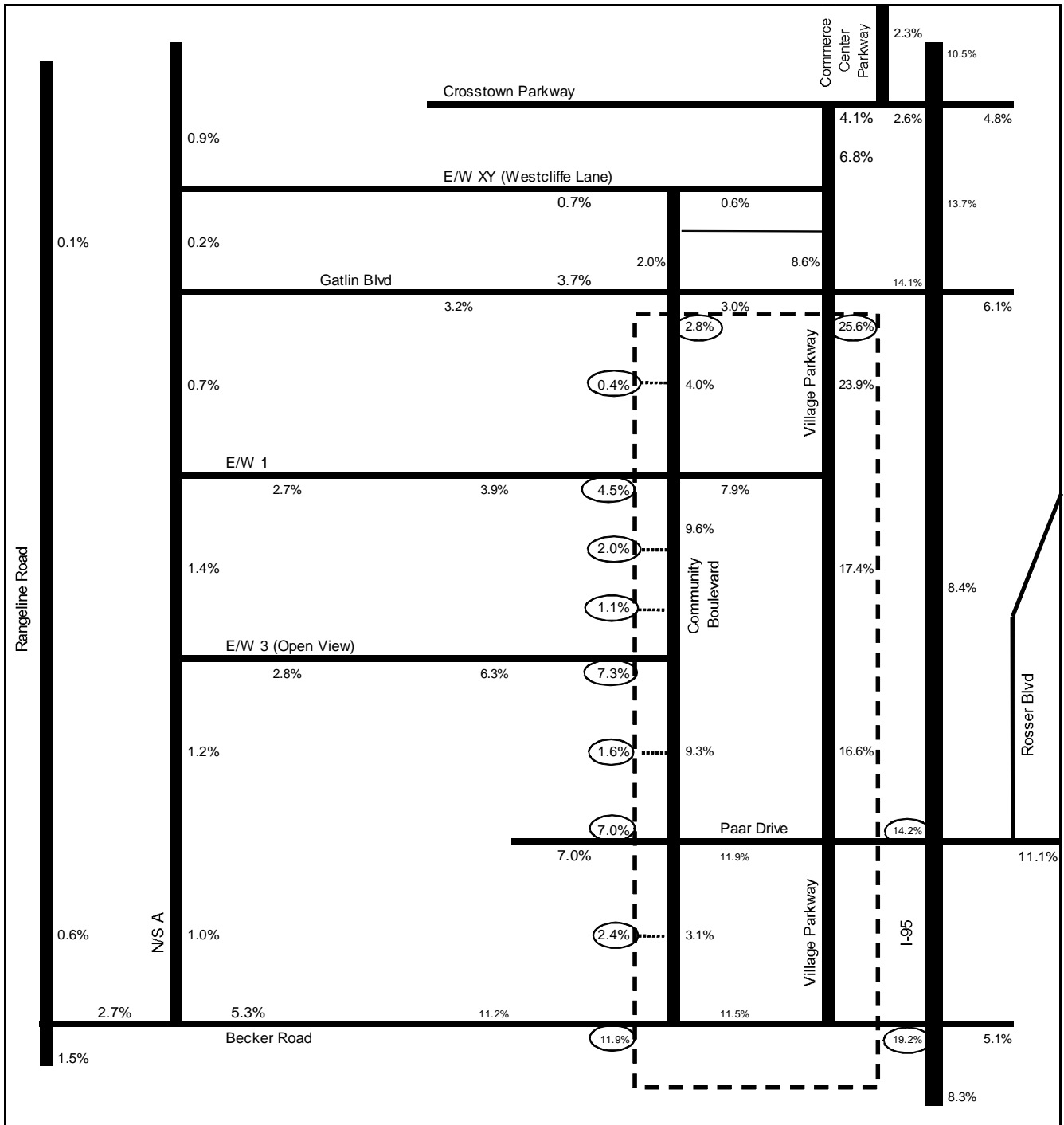


FIGURE 21 E-3b  
2023 TRAFFIC ASSIGNMENT ON INTERNAL ROADS



**TABLE 21 E-3  
2023 SIGNIFICANCE (BASED ON PM PEAK HOUR)**

Roadway	From	To	Trip Assignment	PM Peak Hour Trips		Service Capacity	% Impact		Significant Impact???	
				Total	NB/EB		SB/WB	NB/EB	SB/WB	NB/EB
Rangeline Road	South of Martin Hwy		1.0%	151	55	96	4.9%	8.6%	NO	YES
	Martin Highway	Becker Road	1.5%	217	79	138	7.2%	12.6%	YES	YES
	Becker Road	Paar Drive	0.6%	88	32	56	4.1%	7.1%	NO	YES
	Paar Drive	Open View	0.1%	11	4	7	0.5%	0.9%	NO	NO
	Open View	E/W Road # 1	0.1%	11	4	7	0.5%	0.9%	NO	NO
	E/W Road # 1	Gatlin Blvd	0.1%	11	7	4	0.9%	0.5%	NO	NO
	Gatlin Blvd	Crosstown Pkwy	0.1%	11	7	4	0.9%	0.5%	NO	NO
Glades Cut-Off Road	Grosstown Pkwy	Glades Cut-Off Road	0.1%	11	7	4	0.9%	0.5%	NO	NO
	Rangeline Road	N/S Road A	0.3%	51	32	19	4.1%	2.4%	NO	NO
	N/S Road A	Commerce Center Pkwy	0.5%	79	50	29	6.3%	3.7%	YES	NO
	Commerce Center Pkwy	Midway Road	0.2%	31	20	11	2.5%	1.4%	NO	NO
Commerce Center Pkwy	North of Midway Road		0.5%	78	50	28	6.3%	3.5%	YES	NO
	Crosstown Pkwy	St. Lucie West Blvd	2.3%	343	218	125	12.4%	7.1%	YES	YES
	St. Lucie West Blvd	Glades Cut-Off Road	1.5%	218	139	79	17.6%	10.0%	YES	YES
Interstate 95	Indiantown Road	Bridge Road	2.8%	419	153	266	2.7%	4.8%	NO	NO
	Bridge Road	Kanner Highway	3.0%	444	162	282	2.9%	5.1%	NO	YES
	Kanner Highway	High Meadow Ave	5.8%	849	310	539	5.6%	9.7%	YES	YES
	High Meadow Ave	Martin Highway	6.2%	920	336	584	7.3%	12.8%	YES	YES
	Martin Highway	Becker Road	8.3%	1,219	445	774	8.0%	13.9%	YES	YES
	Becker Road	Gatlin Blvd	8.4%	1,232	450	782	8.1%	14.0%	YES	YES
	Gatlin Blvd	Crosstown Pkwy	13.7%	2,022	1,284	738	23.0%	13.2%	YES	YES
	Crosstown Pkwy	St. Lucie West Blvd	10.5%	1,552	986	566	15.0%	8.6%	YES	YES
	St. Lucie West Blvd	Midway Road	7.3%	1,072	681	391	12.2%	7.0%	YES	YES
	Midway Road	Okeechobee Road	5.2%	763	484	279	10.6%	6.1%	YES	YES
	Okeechobee Road	Orange Avenue	2.7%	402	256	146	8.5%	4.8%	YES	NO
	Orange Avenue	Indrio Road	1.2%	177	112	65	2.0%	1.2%	NO	NO
Peacock Boulevard	St. Lucie West Blvd	California Blvd	0.5%	75	47	28	2.7%	1.6%	NO	NO
	California Blvd	Cashmere Blvd	0.1%	16	10	6	1.3%	0.8%	NO	NO
Rosser Boulevard	Paar Drive	Open View	3.0%	446	283	163	35.8%	20.6%	YES	YES
	Open View	Gatlin Blvd	2.7%	394	250	144	31.7%	18.2%	YES	YES
North/West Torino Pkwy	East Torino Pkwy	California Blvd	0.0%	3	2	1	0.3%	0.1%	NO	NO
	California Blvd	Cashmere Blvd	0.4%	54	34	20	4.3%	2.5%	NO	NO
East Torino Pkwy	Cashmere Blvd	Midway Road	0.1%	16	10	6	1.3%	0.8%	NO	NO
	Del Rio Blvd	Savona Blvd	0.2%	34	21	13	2.7%	1.7%	NO	NO
California Boulevard	Savona Blvd	Del Rio Blvd	0.9%	135	86	49	4.9%	2.8%	NO	NO
	Del Rio Blvd	Crosstown Pkwy	0.1%	18	12	6	1.5%	0.8%	NO	NO
	Crosstown Pkwy	St. Lucie West Blvd	0.3%	48	30	18	3.8%	2.3%	NO	NO
	St. Lucie West Blvd	Peacock Blvd	0.9%	132	84	48	10.6%	6.1%	YES	YES
	Peacock Blvd	West Torino Pkwy	0.4%	56	36	20	4.6%	2.5%	NO	NO
	Becker Road	Paar Drive	1.0%	153	97	56	12.3%	7.1%	YES	YES
Savona Boulevard	Paar Drive	Gatlin Blvd	1.7%	249	158	91	20.0%	11.5%	YES	YES
	Gatlin Blvd	California Blvd	1.5%	220	140	80	17.7%	10.1%	YES	YES
Cashmere Boulevard	Del Rio Blvd	Crosstown Pkwy	0.0%	2	1	1	0.1%	0.1%	NO	NO
	Crosstown Pkwy	St. Lucie West Blvd	0.5%	76	48	28	6.1%	3.5%	YES	NO
Del Rio Boulevard	St. Lucie West Blvd	Peacock Blvd	0.2%	25	16	9	2.0%	1.1%	NO	NO
	Port St. Lucie Blvd	California Blvd	0.3%	42	27	15	3.4%	1.9%	NO	NO
Del Rio Boulevard	California Blvd	Cashmere Blvd	0.5%	76	48	28	6.1%	3.5%	YES	NO
	Cashmere Blvd	California Blvd	0.0%	2	1	1	0.1%	0.1%	NO	NO

TABLE 21 E-3 (CONTINUED)  
2023 SIGNIFICANCE (BASED ON PM PEAK HOUR)

Roadway	From	To	Trip Assignment	PM Peak Hour Trips			Service Capacity	% Impact		Significant Impact???	
				Total	NB/EB	SB/WB		NB/EB	SB/WB	NB/EB	SB/WB
Port St. Lucie Boulevard	Martin Highway	Becker Road	1.9%	278	101	177	1,120	9.0%	15.8%	YES	YES
	Becker Road	Paar Drive	0.8%	118	43	75	790	5.4%	9.5%	YES	YES
	Paar Drive	Darwin Blvd	6.6%	964	612	352	1,760	34.8%	20.0%	YES	YES
	Darwin Blvd	Gatlin Blvd	5.1%	746	474	272	2,650	17.9%	10.3%	YES	YES
	Gatlin Blvd	Del Rio Blvd	7.1%	1,045	663	382	2,940	22.6%	13.0%	YES	YES
	Del Rio Blvd	Bayshore Blvd	6.3%	921	585	336	2,940	19.9%	11.4%	YES	YES
	Bayshore Blvd	Airosso Blvd	4.4%	642	408	234	2,940	13.9%	8.0%	YES	YES
	Airosso Blvd	Floresta Drive	3.8%	553	351	202	2,940	11.9%	6.9%	YES	YES
	Floresta Drive	Midport Road	3.3%	484	307	177	2,940	10.4%	6.0%	YES	YES
	Midport Road	US Highway 1	2.1%	311	198	113	2,940	6.7%	3.8%	YES	NO
Darwin Boulevard	US Highway 1	Lennard Road	0.4%	65	41	24	1,960	2.1%	1.2%	NO	NO
	Becker Road	Paar Drive	0.6%	95	35	60	790	4.4%	7.6%	NO	YES
Florida's Turnpike	Paar Drive	Port St. Lucie Blvd	0.4%	64	41	23	790	5.2%	2.9%	YES	NO
	Martin Highway	Becker Road	0.7%	99	36	63	3,020	1.2%	2.1%	NO	NO
	Becker Road	Port St. Lucie Blvd	0.0%	0	0	0	3,020	0.0%	0.0%	NO	NO
	Port St. Lucie Blvd	SR 70	0.5%	70	44	26	3,020	1.5%	0.9%	NO	NO
Bayshore Boulevard	Oakridge Drive	Port St. Lucie Blvd	0.4%	62	39	23	1,760	2.2%	1.3%	NO	NO
	Port St. Lucie Blvd	Crosstown Pkwy	0.7%	107	68	39	1,760	3.9%	2.2%	NO	NO
	Crosstown Pkwy	Prima Vista Blvd	0.3%	48	30	18	1,760	1.7%	1.0%	NO	NO
	Prima Vista Blvd	Selvitz Road	0.5%	68	43	25	790	5.4%	3.2%	YES	NO
	Selvitz Road	St. James Drive	0.0%	5	3	2	790	0.4%	0.3%	NO	NO
	Bayshore Blvd	St. James Blvd	0.3%	47	30	17	790	3.8%	2.2%	NO	NO
Selvitz Road	St. James Blvd	Midway Road	0.2%	25	16	9	790	2.0%	1.1%	NO	NO
	North of Midway Road	Midway Road	0.0%	3	2	1	790	0.3%	0.1%	NO	NO
St. James Drive	Bayshore Blvd	St. James Blvd	0.4%	63	40	23	1,760	2.3%	1.3%	NO	NO
	St. James Blvd	Midway Road	0.5%	68	43	25	1,760	2.4%	1.4%	NO	NO
25th Street	North of Midway Road	Midway Road	0.5%	69	44	25	1,960	2.2%	1.3%	NO	NO
	Port St. Lucie Blvd	Crosstown Pkwy	0.1%	18	12	6	1,760	0.7%	0.3%	NO	NO
Airosso Boulevard	Crosstown Pkwy	Prima Vista Blvd	1.0%	141	89	52	1,760	5.1%	3.0%	YES	NO
	Prima Vista Blvd	Floresta Drive	0.6%	87	55	32	1,760	3.1%	1.8%	NO	NO
	Floresta Drive	St. James Drive	0.4%	63	40	23	1,760	2.3%	1.3%	NO	NO
	Becker Road	Oakridge Drive	0.4%	60	38	22	790	4.8%	2.8%	NO	NO
Southbend Boulevard	Oakridge Drive	Port St. Lucie Blvd	0.0%	2	1	1	790	0.1%	0.1%	NO	NO
	Port St. Lucie Blvd	Crosstown Pkwy	0.3%	37	24	13	790	3.0%	1.7%	NO	NO
Floresta Boulevard	Crosstown Pkwy	Prima Vista Blvd	0.1%	18	11	7	790	1.4%	0.9%	NO	NO
	Prima Vista Blvd	Airosso Blvd	0.1%	16	10	6	790	1.3%	0.8%	NO	NO
Oleander Ave	Kitterman Road	Midway Road	0.1%	8	5	3	790	0.6%	0.4%	NO	NO
	North of Midway Road	Lyngate Drive	0.1%	11	7	4	790	0.9%	0.5%	NO	NO
Midport Road	Port St. Lucie Blvd	Lyngate Drive	0.9%	133	84	49	1,760	4.8%	2.8%	NO	NO
	Lyngate Drive	Crosstown Pkwy	0.4%	59	37	22	1,760	2.1%	1.3%	NO	NO
High Meadows Ave	Martin Highway	Martin Downs Blvd	0.3%	47	17	30	880	1.9%	3.4%	NO	NO
	Martin Downs Blvd	Murphy Road	0.1%	8	3	5	1,140	0.3%	0.4%	NO	NO
Gilson Road	Murphy Road	Becker Road	0.3%	50	18	32	790	2.3%	4.1%	NO	NO

TABLE 21 E-3 (CONTINUED)  
2023 SIGNIFICANCE (BASED ON PM PEAK HOUR)

Roadway	From	To	Trip Assignment	PM Peak Hour Trips			Service Capacity	% Impact		Significant Impact???	
				Total	NB/EB	SB/WB		NB/EB	SB/WB	NB/EB	SB/WB
US Highway 1	Lennard Road	Port St. Lucie Blvd	1.2%	176	64	112	3,940	1.6%	2.8%	NO	NO
	Port St. Lucie Blvd	Lyngate Drive/Tiffany Ave	0.3%	49	31	18	2,940	1.1%	0.6%	NO	NO
	Lyngate Drive/Tiffany Ave	Crosstown Pkwy	0.1%	15	9	6	2,940	0.3%	0.2%	NO	NO
	Crosstown Pkwy	Village Green Drive	0.8%	120	76	44	2,940	2.6%	1.5%	NO	NO
	Village Green Drive	Savanna Club Blvd	0.7%	109	69	40	2,940	2.4%	1.4%	NO	NO
	Savanna Club Blvd	Prima Vista Blvd	0.7%	97	62	35	2,940	2.1%	1.2%	NO	NO
	Prima Vista Blvd	Kitterman Road	0.9%	138	87	51	2,940	3.0%	1.7%	NO	NO
	Kitterman Road	Midway Road	0.7%	108	68	40	2,940	2.3%	1.4%	NO	NO
	US Highway 1	Lyngate Drive/Tiffany Ave	0.3%	50	18	32	1,760	1.0%	1.8%	NO	NO
	Lyngate Drive/Tiffany Ave	Crosstown Pkwy	0.0%	1	0	1	1,760	0.0%	0.1%	NO	NO
Martin Highway (SR 714)	Rangeline Road	Interstate 95	0.2%	27	17	10	1,100	1.6%	0.9%	NO	NO
	Interstate 95	PSL Blvd Extension	1.9%	284	180	104	1,120	16.1%	9.3%	YES	YES
Martin Downs Boulevard (SR 714)	PSL Blvd Extension	Florida's Turnpike	2.3%	343	218	125	1,960	11.1%	6.4%	YES	YES
	North of Turnpike Entrance	High Meadows Ave	1.5%	219	139	80	1,960	7.1%	4.1%	YES	NO
	East of High Meadows Ave	High Meadows Ave	1.5%	216	137	79	1,960	7.0%	4.0%	YES	NO
County Road 714	Florida's Turnpike	High Meadows Ave	0.6%	89	57	32	880	6.5%	3.6%	YES	NO
	High Meadows Ave	Berry Ave	0.8%	111	71	40	880	8.1%	4.6%	YES	NO
Murphy Road	East of High Meadows Ave	East of High Meadows Ave	0.2%	26	17	9	792	2.2%	1.1%	NO	NO
	Interstate 95	Rosser Blvd	5.1%	754	479	275	1,780	26.9%	15.5%	YES	YES
Becker Road	Savona Blvd	Port St. Lucie Blvd	4.7%	697	442	255	1,860	23.8%	13.7%	YES	YES
	Port St. Lucie Blvd	Darwin Blvd	2.8%	418	265	153	1,860	14.3%	8.2%	YES	YES
	Darwin Blvd	Florida's Turnpike	1.6%	237	151	86	1,860	8.1%	4.6%	YES	NO
	Florida's Turnpike	Southbend Blvd	0.9%	138	88	50	1,780	4.9%	2.8%	NO	NO
	Southbend Blvd	Gilson Road	0.5%	72	45	27	790	5.7%	3.4%	YES	NO
	Rosser Blvd	Savona Blvd	11.1%	1,640	1,042	598	1,860	56.0%	32.2%	YES	YES
	Savona Blvd	Port St. Lucie Blvd	8.4%	1,238	786	452	1,860	42.3%	24.3%	YES	YES
Gatlin Boulevard	Interstate 95	Rosser Blvd	6.1%	896	569	327	2,790	20.4%	11.7%	YES	YES
	Rosser Blvd	Savona Blvd	3.9%	575	365	210	2,790	13.1%	7.5%	YES	YES
	Savona Blvd	Port St. Lucie Blvd	3.4%	497	316	181	2,790	11.3%	6.5%	YES	YES
Westmoreland Boulevard	Port St. Lucie Blvd	US Highway 1	0.3%	40	15	25	790	1.9%	3.2%	NO	NO
	Mountwell Street	Southbend Blvd	0.4%	62	39	23	790	4.9%	2.9%	NO	NO
Oakridge Drive	Midport Road	US Highway 1	0.4%	59	38	21	790	4.8%	2.7%	NO	NO
	US Highway 1	Village Green Drive	0.0%	7	4	3	790	0.5%	0.4%	NO	NO
Lyngate Drive/Tiffany Ave	Village Green Drive	Lennard Road	0.0%	7	4	3	790	0.5%	0.4%	NO	NO

TABLE 21 E-3 (CONTINUED)  
2023 SIGNIFICANCE (BASED ON PM PEAK HOUR)

Roadway	From	To	Trip Assignment	PM Peak Hour Trips		Service Capacity	% Impact		Significant Impact???	
				Total	NB/EB		SB/WB	NB/EB	SB/WB	NB/EB
Crosstown Pkwy	Village Pkwy	Commerce Center Pkwy	4.1%	603	383	220	17.2%	9.9%	YES	YES
	Commerce Center Pkwy	I-95 Interchange	2.6%	385	244	141	7.3%	4.2%	YES	NO
	I-95 Interchange	California Blvd	4.8%	713	453	260	13.5%	7.8%	YES	YES
	California Blvd	Cashmere Blvd	3.7%	550	349	201	10.4%	6.0%	YES	YES
	Cashmere Blvd	Bayshore Blvd	3.0%	437	277	160	8.3%	4.8%	YES	NO
	Bayshore Blvd	Airosa Blvd	2.7%	392	249	143	7.4%	4.3%	YES	NO
	Airosa Blvd	Floresta Blvd	1.1%	165	105	60	3.8%	2.2%	NO	NO
	Floresta Blvd	US Highway 1	1.0%	147	93	54	3.3%	1.9%	NO	NO
	Commerce Center Pkwy	Interstate 95	1.4%	208	132	76	16.1%	9.3%	YES	YES
	Interstate 95	Peacock Blvd	2.5%	366	233	133	8.7%	4.9%	YES	NO
St Lucie West Boulevard/Prima Vista Boulevard	Peacock Blvd	California Blvd	2.0%	292	185	107	10.4%	6.0%	YES	YES
	California Blvd	Cashmere Blvd	1.2%	178	113	65	6.4%	3.7%	YES	NO
	Cashmere Blvd	Bayshore Blvd	0.7%	97	62	35	2.3%	1.3%	NO	NO
	Bayshore Blvd	Airosa Blvd	0.5%	77	49	28	2.6%	1.5%	NO	NO
	Airosa Blvd	Floresta Drive	0.3%	42	27	15	1.5%	0.8%	NO	NO
	Floresta Drive	US Highway 1	0.3%	42	27	15	1.5%	0.8%	NO	NO
	West of Eleven Mile Road	Interstate 95	0.1%	11	4	7	0.5%	0.9%	NO	NO
	Eleven Mile Road	Commerce Center Pkwy	0.9%	132	48	84	6.1%	10.6%	YES	YES
	Commerce Center Pkwy	Interstate 95	0.9%	132	48	84	6.1%	10.6%	YES	YES
	Interstate 95	Glades Cut-Off Road	1.2%	178	113	65	6.4%	3.7%	YES	NO
Midway Road	Glades Cut-Off Road	East Torino Pkwy	0.4%	56	35	21	2.0%	1.2%	NO	NO
	East Torino Pkwy	Selvitz Road	0.4%	57	36	21	4.6%	2.7%	NO	NO
	Selvitz Road	25th Street	0.2%	30	19	11	2.4%	1.4%	NO	NO
	25th Street	Sunrise Blvd	0.1%	10	6	4	0.8%	0.5%	NO	NO
	Sunrise Blvd	Oleander Ave	0.0%	6	4	2	0.5%	0.3%	NO	NO
	Oleander Ave	US Highway 1	0.0%	6	4	2	0.5%	0.3%	NO	NO
	US Highway 1			6	4	2				
				6	4	2				



**TABLE 21 F-1  
COMMITTED/ANTICIPATED PROJECT INTENSITY**

Project Land Use	Unit	Intensity				
		2015	2020	2025	2028	Total
<b>Western Grove</b>						
Single Family	d.u.	846	1,055	1,367	0	3,268
Multi Family	d.u.	0	392	420	0	812
Commercial Retail	s.f.	0	125,453	240,451	0	365,904
Office	s.f.	0	69,696	181,210	0	250,906
Institutional Use	s.f.	12,100	22,940	19,410	0	54,450
Park	acres	10	10	0	0	20
Elementary School	stu.	0	820	0	0	820
K-8 School	stu.	0	1,400	0	0	1,400
<b>Wilson Groves</b>						
Single Family	d.u.	2,000	3,075	700	0	5,775
Multi Family	d.u.	200	1,019	706	0	1,925
Industrial Park	s.f.	136,125	408,375	408,375	408,374	1,361,249
Commercial Retail	s.f.	210,000	120,000	260,000	175,000	765,000
Office	s.f.	136,125	470,375	488,375	488,374	1,583,249
Civic Use	s.f.	0	0	40,347	40,348	80,695
Institutional Use	s.f.	0	50,638	135,089	116,450	302,177
Park	acres	50	8	35	37	130
Elementary School	stu.	0	820	0	0	820
K-8 School	stu.	0	0	1,400	0	1,400
<b>Riverland</b>						
Single Family	d.u.	2,025	6,170	229	0	8,424
Multi Family	d.u.	475	1,731	1,070	0	3,276
Industrial Park	s.f.	136,125	408,375	408,375	408,375	1,361,250
Commercial Retail	s.f.	192,000	540,668	160,000	0	892,668
Office	s.f.	136,125	408,375	408,375	408,375	1,361,250
Civic Use	s.f.	25,000	76,781	0	0	101,781
Institutional Use	s.f.	25,000	215,327	87,000	0	327,327
Park	acres	39	109	24	0	172
Elementary School	stu.	820	820	0	0	1,640
High School	stu.	0	2,500	0	0	2,500

**TABLE 21 F-4a**  
**2023 PM PEAK HOUR TOTAL TRAFFIC**  
**(ONLY SIGNIFICANTLY IMPACTED EXTERNAL LINKS SHOWN)**

Roadway	From	To	Lanes	Service Capacity	2023 Background PM Peak Hour Traffic		Southern Grove DRI Trips		Western Grove DRI Trips		Wilson Groves DRI Trips		Riverland DRI Trips		WAA DRI Trips (TOTAL)		2023 Total Peak Hour Traffic	
					NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB
Rangeline Road	South of Martin Hwy	Becker Road	2	1,120	99	73	55	96	40	32	185	187	157	141	437	456	536	529
	Martin Highway	Paar Drive	2	1,100	138	83	79	138	61	49	322	324	242	216	704	727	842	810
	Becker Road	Commerce Center Pkwy	2	790	138	83	32	56	14	12	208	210	85	85	349	363	487	446
	N/S Road A	Commerce Center Pkwy	2	790	230	151	50	29	146	181	131	131	93	104	420	445	650	596
Glades Cut-Off Road	North of Midway Road	Paar Drive	2	790	301	353	50	28	18	23	20	19	31	35	119	105	420	458
	Crosstown Pkwy	St. Lucie West Blvd	4	1,760	909	1,111	218	125	65	81	36	36	101	113	420	355	1,329	1,466
Commerce Center Pkwy	St. Lucie West Blvd	Glades Cut-Off Road	2	790	191	217	139	79	1	1	2	2	35	39	177	121	368	338
	Paar Drive	Open View	2	790	203	279	283	163	3	2	69	68	81	91	436	324	639	603
Resser Boulevard	Open View	Gatlin Blvd	2	790	203	279	250	144	45	35	61	60	76	424	315	627	594	
	St. Lucie West Blvd	Peacock Blvd	2	790	398	360	84	48	31	39	27	27	53	60	195	174	593	534
Savona Boulevard	Becker Road	Paar Drive	2	790	372	337	97	56	2	1	10	10	29	32	138	99	510	436
	Paar Drive	Gatlin Blvd	2	790	646	918	156	91	0	1	23	23	29	33	210	149	856	1,067
	Gatlin Blvd	California Blvd	2	790	652	593	140	80	5	3	13	13	34	38	192	134	844	727
Cashmere Boulevard	Crosstown Pkwy	St. Lucie West Blvd	2	790	689	505	48	28	16	20	14	13	26	30	104	91	793	596
	California Blvd	Cashmere Blvd	2	790	401	450	48	28	9	11	7	7	13	15	77	61	478	511
Del Rio Boulevard	Martin Highway	Becker Road	2	1,120	652	534	101	177	8	7	73	74	117	105	299	363	951	897
	Becker Road	Paar Drive	2	790	640	318	43	75	13	10	14	14	40	37	110	136	750	454
	Paar Drive	Darwin Blvd	4	1,760	955	1,324	612	352	28	22	135	133	146	163	921	670	1,876	1,994
	Darwin Blvd	Gatlin Blvd	6	2,650	1,455	2,275	474	272	38	30	99	98	116	129	727	529	2,182	2,804
Port St. Lucie Boulevard	Gatlin Blvd	Del Rio Blvd	6	2,940	1,454	1,967	663	382	43	53	139	137	270	301	1,115	873	2,569	2,860
	Del Rio Blvd	Bayshore Blvd	6	2,940	1,474	2,347	585	336	38	47	127	126	252	281	1,002	790	2,476	3,137
	Bayshore Blvd	Alrosio Blvd	6	2,940	1,535	2,314	408	234	27	34	100	100	193	215	728	583	2,263	2,897
	Alrosio Blvd	Floresta Drive	6	2,940	1,672	2,544	351	202	21	26	88	88	171	190	631	506	2,303	3,050
	Floresta Drive	Midport Road	6	2,940	2,283	2,425	307	177	20	25	82	81	159	178	568	461	2,851	2,886
	Midport Road	US Highway 1	6	2,940	1,455	2,451	198	113	13	17	58	57	111	125	380	312	1,835	2,763
Darwin Boulevard	Becker Road	Paar Drive	2	790	540	157	35	60	5	4	9	9	16	14	65	87	605	244
	Paar Drive	Port St. Lucie Blvd	2	790	879	513	41	23	10	8	7	7	12	14	70	52	949	565
Bayshore Boulevard	Prima Vista Blvd	Semtz Road	2	790	795	921	43	25	11	15	10	11	24	28	88	79	883	1,000
	Crosstown Pkwy	Prima Vista Blvd	4	1,760	859	861	89	52	27	33	22	22	48	54	186	161	1,045	1,022

**TABLE 21 F-4a (CONTINUED)**  
**2023 PM PEAK HOUR TOTAL TRAFFIC**  
**(ONLY SIGNIFICANTLY IMPACTED EXTERNAL LINKS SHOWN)**

Roadway	From	To	Lanes	Service Capacity	2023 Background PM Peak Hour Traffic		Southern Grove DRI Trips		Western Grove DRI Trips		Wilson Groves DRI Trips		Riverland DRI Trips		WAA DRI Trips (TOTAL)		2023 Total Peak Hour Traffic	
					NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB
Martin Highway (SR 714)	Interstate 95	PSL Blvd Extension	2	1,120	545	180	104	28	35	88	109	121	405	348	950	839		
	PSL Blvd Extension	Florida's Turnpike	4	1,960	720	218	125	17	22	106	134	149	475	400	1,195	1,525		
	North of Turnpike Entrance	High Meadows Ave	4	1,960	1,047	139	80	10	14	69	87	96	305	258	1,234	1,305		
	East of High Meadows Ave	High Meadows Ave	4	1,960	1,261	1,741	137	79	10	13	68	88	301	267	1,562	1,988		
County Road 714	Florida's Turnpike	High Meadows Ave	2	880	553	57	32	3	4	26	35	39	121	102	674	966		
	High Meadows Ave	Berry Ave	2	880	512	71	40	9	12	33	44	48	157	132	669	810		
	Interstate 95	Savona Blvd	4	1,780	1,162	479	275	25	30	167	166	209	234	880	705	2,042	1,043	
	Savona Blvd	Port St. Lucie Blvd	4	1,860	338	442	255	19	23	151	149	199	221	811	648	1,973	986	
Becker Road	Port St. Lucie Blvd	Darwin Blvd	4	1,860	307	265	153	18	21	74	74	105	118	462	366	769	1,492	
	Darwin Blvd	Florida's Turnpike	4	1,860	307	151	86	13	16	51	73	82	286	235	595	1,361		
	Southbend Blvd	Gilson Road	2	790	469	45	27	4	4	15	14	21	24	85	69	554	1,516	
	Rosser Blvd	Savona Blvd	4	1,860	204	1,042	598	3	3	199	197	264	295	1,508	1,093	1,712	1,392	
Paar Drive	Savona Blvd	Port St. Lucie Blvd	4	1,860	451	786	452	2	2	165	164	206	229	1,159	847	1,610	1,340	
	Interstate 95	Rosser Blvd	6	2,790	1,953	569	327	135	169	65	64	293	328	1,062	868	3,015	2,185	
	Rosser Blvd	Savona Blvd	6	2,790	1,656	365	210	80	101	45	45	212	237	702	593	2,358	2,582	
	Savona Blvd	Port St. Lucie Blvd	6	2,790	1,541	316	181	77	95	44	43	192	214	629	533	2,170	2,064	
Crosstown Pkwy	Village Pkwy	Commerce Center Pkwy	4	2,232	805	383	220	509	635	222	419	469	1,533	1,545	2,336	2,529		
	Commerce Center Pkwy	i-95 Interchange	6	3,348	1,118	244	141	444	554	187	185	328	366	1,203	1,246	2,321	2,613	
	i-95 Interchange	California Blvd	6	3,348	1,586	453	260	257	320	142	141	279	311	1,131	1,032	2,717	2,329	
	California Blvd	Cashmere Blvd	6	3,348	1,584	349	201	208	254	208	108	220	245	808	808	2,475	2,112	
	Cashmere Blvd	Bayshore Blvd	6	3,348	1,868	277	160	175	219	90	90	183	205	726	674	2,614	2,219	
	Bayshore Blvd	Airosa Blvd	6	3,348	1,630	249	143	157	196	81	83	167	186	656	607	2,286	1,941	
St. Lucie West Boulevard	Commerce Center Pkwy	Interstate 95	2	820	508	132	76	64	80	36	36	73	81	305	273	813	792	
	Interstate 95	Peacock Blvd	6	2,680	1,534	233	133	53	66	58	57	117	131	461	387	1,985	1,849	
	Peacock Blvd	California Blvd	4	1,780	1,414	1,228	107	41	52	47	46	96	107	369	312	1,783	1,540	
	California Blvd	Cashmere Blvd	4	1,780	1,751	1,163	65	19	24	24	24	49	54	205	167	1,956	1,735	
Midway Road	Eleven Mile Road	Commerce Center Pkwy	2	790	282	48	84	31	24	25	25	50	45	154	178	436	409	
	Commerce Center Pkwy	Interstate 95	2	790	379	48	84	28	22	23	23	49	44	148	173	527	483	
	Interstate 95	Glades Cut-Off Road	4	1,760	861	1,113	65	12	15	17	17	61	68	203	165	1,064	1,216	

**TABLE 21 F-4a (CONTINUED)**  
**2023 PM PEAK HOUR TOTAL TRAFFIC – INTERSTATE 95**  
**(ONLY SIGNIFICANTLY IMPACTED LINKS SHOWN)**

I-95 Segment Location		AADT Calculation Method	Significant in 2023?	2023 AADT	K-factor	D-factor	2023 peak hour volumes		WAA DRI Traffic needed?	WAA DRI Traffic		SG SD % Assign	Additional traffic from Southern Grove SD		2023 Total Peak Hour Volumes	
From	To						NB	SB		Total NB	Total SB		NB	SB	NB	SB
Orange Avenue	Okeechobee Road	[1]	Yes	77,500	9.0%	54.2%	3,190	3,780	No	-	-	2.7%	72	7	3,262	3,787
Okeechobee Road	Midway Road	[1]	Yes	99,300	9.0%	54.2%	4,090	4,840	No	-	-	5.2%	137	13	4,227	4,853
Midway Road	St. Lucie West Blvd	[1]	Yes	93,700	9.0%	54.2%	3,860	4,570	No	-	-	7.3%	193	18	4,053	4,588
St. Lucie West Blvd	Crosstown Pkwy	[1]	Yes	99,500	9.0%	54.2%	4,100	4,850	No	-	-	10.5%	279	26	4,379	4,876
Crosstown Pkwy	Gatlin Blvd	[1]	Yes	92,900	9.0%	54.2%	3,830	4,530	No	-	-	13.7%	364	34	4,194	4,564
Gatlin Blvd	Becker Road	[1]	Yes	94,300	9.0%	54.2%	4,600	3,890	No	-	-	8.4%	21	222	4,621	4,112
Becker Road	Martin Highway	[1]	Yes	94,300	9.0%	54.2%	4,600	3,890	No	-	-	8.3%	21	219	4,621	4,109
Martin Highway	High Meadows Avenue	[2]	Yes	56,905	9.0%	54.2%	2,780	2,350	Yes	1,059	-	-	-	-	3,839	3,632
High Meadows Avenue	Kanner Highway	[2]	Yes	69,424	9.0%	54.2%	3,390	2,860	Yes	973	-	-	-	-	4,363	4,041
Kanner Highway	Bridge Road	[2]	Yes	75,683	9.0%	54.2%	3,690	3,120	Yes	509	-	-	-	-	4,199	3,738

[1] AADT obtained from 3R Report (consistent with methodology). AADT is inclusive of the WAA DRI traffic. Only the additional traffic from the proposed Southern Grove Substantial Deviation (SD) is added.

[2] AADT obtained from 2010 FDOT Florida Traffic Information CD because 3R Report did not cover this segment. This AADT is not inclusive of WAA DRI traffic. Therefore, all WAA DRI traffic is added.

**TABLE 21 F-4b**  
**2023 PM PEAK HOUR TOTAL TRAFFIC**  
**(ALL SOUTHWEST ANNEXATION AREA LINKS SHOWN)**

Roadway	From	To	Model Traffic	Peak Hour	NB/EB	SB/WB	Required Service Capacity	Meets Capacity ???
<b>Becker Road</b>	Rangeline	N/S A	25,933	2,334	1,050	1,284	1,860	4-Lanes YES
	N/S A	N/S B	30,270	2,724	1,498	1,226	1,860	4-Lanes YES
	N/S B	N/S BC	36,889	3,320	1,494	1,826	1,860	4-Lanes YES
	N/S BC	Community Blvd	42,222	3,800	1,710	2,090	2,790	6-Lanes YES
<b>N/S A</b>	Community Blvd	Village Parkway	45,242	4,072	2,239	1,833	2,790	6-Lanes YES
	Village Parkway	I-95 Interchange	51,112	4,600	2,530	2,070	2,690	6-Lanes YES
	Becker Rd	Paar Drive	21,966	1,977	890	1,087	1,860	4-Lanes YES
<b>N/S B</b>	Paar Drive	Open View	26,604	2,394	1,317	1,077	1,860	4-Lanes YES
	Open View	E/W 1	29,960	2,696	1,483	1,213	1,860	4-Lanes YES
	E/W 1	Gatlin Blvd	29,254	2,633	1,448	1,185	1,860	4-Lanes YES
	Gatlin Blvd	Westcliffe Ln	22,673	2,041	1,122	919	1,860	4-Lanes YES
<b>Community Blvd</b>	Westcliffe Ln	Crosstown Pkwy	32,571	2,931	1,612	1,319	1,860	4-Lanes YES
	Becker Rd	Paar Drive	9,917	893	402	491	840	2-Lanes YES
<b>Village Parkway</b>	Becker Rd	Paar Drive	14,481	1,303	586	717	840	2-Lanes YES
	Paar Drive	Open View	27,288	2,456	1,105	1,351	1,860	4-Lanes YES
	Open View	E/W 1	32,982	2,968	1,335	1,633	1,860	4-Lanes YES
	E/W 1	Gatlin Blvd	24,249	2,182	982	1,200	1,860	4-Lanes YES
<b>E/W 4 (Paar Drive)</b>	Gatlin Blvd	Westcliffe Ln	13,673	1,231	677	554	840	2-Lanes YES
	Becker Rd	Paar Drive	19,642	1,768	796	972	1,860	4-Lanes YES
	Paar Drive	Open View	24,208	2,179	981	1,198	1,860	4-Lanes YES
	Open View	E/W 1	25,278	2,275	1,251	1,024	1,860	4-Lanes YES
<b>E/W 3 (Open View)</b>	E/W 1	Gatlin Blvd	43,329	3,900	2,145	1,755	2,790	6-Lanes YES
	Gatlin Blvd	Westcliffe Ln	19,553	1,760	988	792	1,860	4-Lanes YES
	Westcliffe Ln	Crosstown Pkwy	27,462	2,472	1,359	1,113	1,860	4-Lanes YES
	N/S A	N/S B	16,770	1,509	679	830	840	2-Lanes YES
<b>E/W 1</b>	N/S B	N/S BC	17,443	1,570	707	863	1,860	4-Lanes YES
	N/S BC	Community Blvd	22,821	2,054	924	1,130	1,860	4-Lanes YES
	Community Blvd	Village Parkway	27,313	2,458	1,106	1,352	1,860	4-Lanes YES
	Village Parkway	Rosser Blvd	29,284	2,636	1,186	1,450	1,860	4-Lanes YES
<b>Gatlin Blvd / Tradition Pkwy</b>	N/S A	N/S B	13,408	1,207	543	664	840	2-Lanes YES
	N/S B	Community Blvd	23,473	2,113	951	1,162	1,860	4-Lanes YES
<b>Westcliffe Lane</b>	N/S A	N/S B	10,691	962	433	529	840	2-Lanes YES
	N/S B	Community Blvd	13,889	1,250	562	688	840	2-Lanes YES
<b>Community Blvd</b>	Community Blvd	Village Parkway	22,451	2,021	910	1,111	1,860	4-Lanes YES
	N/S A	Community Blvd	13,832	1,245	560	685	840	2-Lanes YES
	Community Blvd	Village Parkway	21,748	1,967	880	1,077	1,860	4-Lanes YES
	Village Parkway	I-95 Interchange	52,694	4,742	2,608	2,134	2,790	6-Lanes YES
<b>Community Blvd</b>	N/S A	Community Blvd	5,730	516	284	232	840	2-Lanes YES
	Community Blvd	Village Parkway	13,189	1,187	653	534	840	2-Lanes YES

**TABLE 21 F-8**  
**2023 PM PEAK HOUR**  
**ROADWAY CAPACITY ANALYSIS**

Roadway	From	To	Lanes	Service Capacity	2023 Total Peak Hour Traffic		V/C Ratio	Meets Capacity ???		Needed # of Lanes
					NB/EB	SB/WB		NB/EB	SB/WB	
<b>Rangeline Road</b>	South of Martin Hwy		2	1,120	536	529	0.48	YES	YES	
	Martin Highway	Becker Road	2	1,100	842	810	0.77	YES	YES	
	Becker Road	Paar Drive	2	790	487	446	0.62	YES	YES	
<b>Glades Cut-Off Road</b>	N/S Road A	Commerce Center Pkwy	2	790	650	596	0.82	YES	YES	
	North of Midway Road		2	790	420	458	0.58	YES	YES	
<b>Commerce Center Pkwy</b>	Crosstown Pkwy	St. Lucie West Blvd	4	1,760	1,329	1,466	0.83	YES	YES	
	St. Lucie West Blvd	Glades Cut-Off Road	2	790	368	338	0.47	YES	YES	
<b>Rosser Boulevard</b>	Paar Drive	Open View	2	790	639	603	0.81	YES	YES	
	Open View	Gatlin Blvd	2	790	627	594	0.79	YES	YES	
<b>California Boulevard</b>	St. Lucie West Blvd	Peacock Blvd	2	790	593	534	0.75	YES	YES	
	Becker Road	Paar Drive	2	790	510	436	0.65	YES	YES	
<b>Savona Boulevard</b>	Paar Drive	Gatlin Blvd	2	790	856	1,067	1.35	NO	NO	4-Lanes
	Gatlin Blvd	California Blvd	2	790	844	727	1.07	NO	YES	4-Lanes
<b>Cashmere Boulevard</b>	Crosstown Pkwy	St. Lucie West Blvd	2	790	793	596	1.00	NO	YES	4-Lanes
	California Blvd	Cashmere Blvd	2	790	478	511	0.65	YES	YES	
<b>Del Rio Boulevard</b>	Martin Highway	Becker Road	2	1,120	951	897	0.85	YES	YES	
	Becker Road	Paar Drive	2	790	750	454	0.95	YES	YES	
<b>Port St. Lucie Boulevard</b>	Paar Drive	Darwin Blvd	4	1,760	1,876	1,994	1.13	NO	NO	6-Lanes
	Darwin Blvd	Gatlin Blvd	6	2,650	2,182	2,804	1.06	YES	NO	???
	Gatlin Blvd	Del Rio Blvd	6	2,940	2,569	2,860	0.97	YES	YES	
	Del Rio Blvd	Bayshore Blvd	6	2,940	2,476	3,137	1.07	YES	NO	???
	Bayshore Blvd	Airoso Blvd	6	2,940	2,263	2,897	0.99	YES	YES	
	Airoso Blvd	Floresta Drive	6	2,940	2,303	3,050	1.04	YES	NO	???
<b>Darwin Boulevard</b>	Floresta Drive	Midport Road	6	2,940	2,851	2,886	0.98	YES	YES	
	Midport Road	US Highway 1	6	2,940	1,835	2,763	0.94	YES	YES	
<b>Bayshore Boulevard</b>	Becker Road	Paar Drive	2	790	605	244	0.77	YES	YES	
	Paar Drive	Port St. Lucie Blvd	2	790	949	565	1.20	NO	YES	4-Lanes
<b>Airoso Boulevard</b>	Prima Vista Blvd	Selwitz Road	2	790	883	1,000	1.27	NO	NO	4-Lanes
	Crosstown Pkwy	Prima Vista Blvd	4	1,760	1,045	1,022	0.59	YES	YES	

[1] Southern Grove significantly impacts this segment in the non-adverse direction. Therefore, no improvement is applied. Note that a ??? represents a constrained facility; this nomenclature is consistent with the WATS.

**TABLE 21 F-8 (CONTINUED)**  
**2023 PM PEAK HOUR**  
**ROADWAY CAPACITY ANALYSIS**

Roadway	From	To	Lanes	Service Capacity	2023 Total Peak Hour Traffic		V/C Ratio	Meets Capacity ???		Needed # of Lanes
					NB/EB	SB/WB		NB/EB	SB/WB	
Martin Highway (SR 714)	Interstate 95	PSL Blvd Extension	2	1,120	950	939	0.85	YES	YES	
	PSL Blvd Extension	Florida's Turnpike	4	1,960	1,195	1,525	0.78	YES	YES	
Martin Downs Boulevard (SR 714)	North of Turnpike Entrance	High Meadows Ave	4	1,960	1,234	1,305	0.67	YES	YES	
	East of High Meadows Ave	High Meadows Ave	4	1,960	1,562	1,998	1.02	YES	NO	[1]
County Road 714	Florida's Turnpike	High Meadows Ave	2	880	674	966	1.10	YES	NO	[1]
	High Meadows Ave	Berry Ave	2	880	669	810	0.92	YES	YES	
Becker Road	Interstate 95	Savona Blvd	4	1,780	2,042	1,043	1.15	NO	YES	6-Lanes
	Savona Blvd	Port St. Lucie Blvd	4	1,860	1,973	986	1.06	NO	YES	6-Lanes
	Port St. Lucie Blvd	Darwin Blvd	4	1,860	769	1,492	0.80	YES	YES	
	Darwin Blvd	Florida's Turnpike	4	1,860	595	1,361	0.73	YES	YES	
	Southbend Blvd	Gilson Road	2	790	554	1,516	1.92	YES	NO	[1]
Paar Drive	Rosser Blvd	Savona Blvd	4	1,860	1,712	1,392	0.92	YES	YES	
	Savona Blvd	Port St. Lucie Blvd	4	1,860	1,610	1,340	0.87	YES	YES	
Gatlin Boulevard	Interstate 95	Rosser Blvd	6	2,790	3,015	2,185	1.08	NO	YES	???
	Rosser Blvd	Savona Blvd	6	2,790	2,358	2,582	0.93	YES	YES	
	Savona Blvd	Port St. Lucie Blvd	6	2,790	2,170	2,064	0.78	YES	YES	
Crosstown Pkwy	Village Pkwy	Commerce Center Pkwy	4	2,232	2,338	2,529	1.13	NO	NO	6-Lanes
	Commerce Center Pkwy	I-95 Interchange	6	3,348	2,321	2,613	0.78	YES	YES	
	I-95 Interchange	California Blvd	6	3,348	2,717	2,329	0.81	YES	YES	
	California Blvd	Cashmere Blvd	6	3,348	2,475	2,112	0.74	YES	YES	
	Cashmere Blvd	Bayshore Blvd	6	3,348	2,614	2,219	0.78	YES	YES	
	Bayshore Blvd	Airosa Blvd	6	3,348	2,286	1,941	0.68	YES	YES	
St. Lucie West Boulevard	Commerce Center Pkwy	Interstate 95	2	820	813	792	0.99	YES	YES	
	Interstate 95	Peacock Blvd	6	2,690	1,995	1,849	0.74	YES	YES	
	Peacock Blvd	California Blvd	4	1,780	1,783	1,540	1.00	NO	YES	6-Lanes
	California Blvd	Cashmere Blvd	4	1,780	1,956	1,735	1.10	NO	YES	6-Lanes
Midway Road	Eleven Mile Road	Commerce Center Pkwy	2	790	436	409	0.55	YES	YES	
	Commerce Center Pkwy	Interstate 95	2	790	527	483	0.67	YES	YES	
	Interstate 95	Glades Cut-Off Road	4	1,760	1,064	1,216	0.69	YES	YES	

[1] Southern Grove significantly impacts this segment in the non-adverse direction. Therefore, no improvement is applied. Note that a ??? represents a constrained facility; this nomenclature is consistent with the WATS.

**TABLE 21 F-8 (CONTINUED)**  
**2023 PM PEAK HOUR**  
**ROADWAY CAPACITY ANALYSIS – INTERSTATE 95**

i-95 Segment Location		2023 Total Peak Hour		Service Capacity	Meets Standard
		Volumes			
From	To	NB	SB		
Orange Avenue	Okeechobee Road	3,262	3,787	5,580	Yes
Okeechobee Road	Midway Road	4,227	4,853	5,580	Yes
Midway Road	St. Lucie West Blvd	4,053	4,588	5,580	Yes
St. Lucie West Blvd	Crosstown Pkwy	4,379	4,876	6,580	Yes
Crosstown Pkwy	Gatlin Blvd	4,194	4,564	5,580	Yes
Gatlin Blvd	Becker Road	4,621	4,112	5,580	Yes
Becker Road	Martin Highway	4,621	4,109	5,580	Yes
Martin Highway	High Meadows Avenue	3,839	3,632	5,580	Yes
High Meadows Avenue	Kanner Highway	4,363	4,041	5,580	Yes
Kanner Highway	Bridge Road	4,199	3,738	5,580	Yes



**TABLE 21 F-12**  
**TOTAL TRAFFIC CONDITIONS - NEEDED IMPROVEMENTS**  
**(ONLY SIGNIFICANTLY IMPACTED LINKS SHOWN)**

Roadway	From	To	Lanes		2013 Lane Needs	2018 Lane Needs	2023 Lane Needs	2028 Lane Needs
			Existing	Committed				
<b>Rangeline Road</b>	South of Martin Hwy	Becker Road	2	2	(1)	-	-	-
	Martin Highway	Paar Drive	2	2	(1)	-	-	-
	Becker Road	Glades Cut-Off Road	2	2	(1)	(1)	(1)	-
	Crosstown Pkwy	Commerce Center Pkwy	2	2	(1)	(1)	-	-
<b>Glades Cut-Off Road</b>	Reserve Blvd		2	2	(1)	(1)	-	-
	North of Midway Road		2	2	(1)	-	-	-
<b>Commerce Center Pkwy</b>	Crosstown Pkwy	St. Lucie West Blvd	4	4	(1)	-	-	-
	St. Lucie West Blvd	Glades Cut-Off Road	2	2	-	-	-	-
	Indiantown Road	Bridge Road	6	6	(1)	(1)	(1)	-
<b>Interstate 95</b>	Bridge Road	SR-76	6	6	(1)	(1)	-	-
	SR-76	High Meadows Ave	6	6	(1)	-	-	-
	High Meadows Ave	Martin Highway	6	6	(1)	-	-	-
	Martin Highway	Becker Road	6	6	-	-	-	-
	Becker Road	Gatlin Blvd	6	6	-	-	-	-
	Gatlin Blvd	Crosstown Pkwy	6	6	-	-	-	-
	Crosstown Pkwy	St. Lucie West Blvd	6	6	-	-	-	-
	St. Lucie West Blvd	Midway Road	6	6	-	-	-	-
	Midway Road	SR-70	6	6	-	-	-	-
	SR-70	Orange Ave	4	6	(1)	-	-	-
<b>Rosser Boulevard</b>	Paar Drive	Open View	2	2	(1)	-	-	-
	Open View	Gatlin Blvd	2	2	-	-	-	-
<b>California Boulevard</b>	Del Rio Blvd	Savona Blvd	2	2	(1)	(1)	(1)	-
	Savona Blvd	Del Rio Blvd	2	2	-	4	4	4
	St. Lucie West Blvd	Peacock Blvd	2	2	(1)	-	-	-
	Peacock Blvd	West Torino Pkwy	2	2	(1)	(1)	(1)	-
<b>Savona Boulevard</b>	Becker Road	Paar Drive	2	2	-	(1)	-	-
	Paar Drive	Gatlin Blvd	2	2	(1)	-	4	4
	Gatlin Blvd	California Blvd	2	2	-	-	4	4
<b>Cashmere Boulevard</b>	Crosstown Pkwy	St. Lucie West Blvd	2	2	(1)	-	4	4
	California Blvd	Cashmere Blvd	2	2	(1)	(1)	(1)	-

Notes:

- = no improvement needed beyond existing/committed laneage

(1) = project has insignificant impacts, therefore needs analysis not performed

??? represents a constrained facility; this nomenclature is consistent with the WATS.

These laneage needs are based on Total traffic volumes; only significantly impacted links are shown.

**TABLE 21 F-12 (CONTINUED)**  
**TOTAL TRAFFIC CONDITIONS - NEEDED IMPROVEMENTS**  
**(ONLY SIGNIFICANTLY IMPACTED LINKS SHOWN)**

Roadway	From	To	Lanes		2013 Lane Needs	2018 Lane Needs	2023 Lane Needs	2028 Lane Needs
			Existing	Committed				
<b>Port St. Lucie Boulevard</b>	Martin Highway	Becker Road	2	2	(1)	-	-	-
	Becker Road	Paar Drive	2	2	(1)	(1)	-	(1)
	Paar Drive	Darwin Blvd	2	2	4	4	6	6
	Darwin Blvd	Gatlin Blvd	4	4	(1)	-	???	???
	Gatlin Blvd	Del Rio Blvd	6	6	-	-	???	???
	Del Rio Blvd	Bayshore Blvd	6	6	-	???	???	???
	Bayshore Blvd	Airosa Blvd	6	6	-	-	-	???
	Airosa Blvd	Floresta Drive	6	6	(1)	???	???	???
	Floresta Drive	Midport Road	6	6	(1)	-	-	???
	Midport Road	US Highway 1	6	6	(1)	(1)	-	-
<b>Darwin Boulevard</b>	Becker Road	Paar Drive	2	2	(1)	(1)	-	-
	Paar Drive	Port St. Lucie Blvd	2	2	(1)	(1)	4	4
<b>Bayshore Boulevard</b>	Port St. Lucie Blvd	Crosstown Pkwy	4	4	(1)	(1)	(1)	-
	Prima Vista Blvd	Selvitz Road	2	2	(1)	(1)	4	4
<b>Selvitz Road</b>	Bayshore Blvd	E/W Road # 5	2	2	(1)	(1)	(1)	-
<b>Airosa Boulevard</b>	Crosstown Pkwy	Prima Vista Blvd	4	4	(1)	(1)	-	-
<b>Southbend Blvd</b>	Becker Road	Oakridge Dr	2	2	(1)	(1)	(1)	-
	Port St. Lucie Blvd	Lyngate Drive	4	4	(1)	(1)	(1)	-
<b>Midport Rd</b>	Murphy Road	Becker Road	2	2	(1)	(1)	(1)	(1)
	Interstate 95	PSL Blvd Extension	2	2	(1)	-	-	-
<b>Martin Highway (SR 714)</b>	PSL Blvd Extension	Florida's Turnpike	2	2	(1)	4	4	4
	North of Turnpike Entrance	High Meadows Ave	4	4	(1)	(1)	-	-
<b>Martin Downs Boulevard (SR 714)</b>	East of High Meadows Ave	High Meadows Ave	4	4	(1)	(1)	-	-
	Florida's Turnpike	High Meadows Ave	2	2	(1)	(1)	-	4
<b>County Road 714</b>	High Meadows Ave	Berry Ave	2	2	(1)	-	-	4
	Interstate 95	Savona Blvd	4	4	-	-	6	6
<b>Becker Road</b>	Savona Blvd	Port St. Lucie Blvd	4	4	(1)	-	6	6
	Port St. Lucie Blvd	Darwin Blvd	4	4	(1)	-	-	-
	Darwin Blvd	Florida's Turnpike	4	4	(1)	-	-	-
	Florida's Turnpike	Southbend Blvd	4	4	(1)	(1)	(1)	-
	Southbend Blvd	Gilson Road	2	2	(1)	(1)	-	(1)

Notes:

- = no improvement needed beyond existing/committed laneage

(1) = project has insignificant impacts, therefore needs analysis not performed

?? = represents a constrained facility; this nomenclature is consistent with the WATS.

These laneage needs are based on Total traffic volumes; only significantly impacted links are shown.

**TABLE 21 F-12 (CONTINUED)**  
**TOTAL TRAFFIC CONDITIONS - NEEDED IMPROVEMENTS**  
**(ONLY SIGNIFICANTLY IMPACTED LINKS SHOWN)**

Roadway	From	To	Lanes		2013 Lane Needs	2018 Lane Needs	2023 Lane Needs	2028 Lane Needs
			Existing	Committed				
<b>Paar Drive</b>	Rosser Blvd	Savona Blvd	2	2	(1)	4	4	6
	Savona Blvd	Port St. Lucie Blvd	2	2	(1)	4	4	4
<b>Gattin Boulevard</b>	Interstate 95	Rosser Blvd	6	6	-	???	???	???
	Rosser Blvd	Savona Blvd	6	6	-	-	-	-
	Savona Blvd	Port St. Lucie Blvd	6	6	-	-	-	-
<b>Oakridge Drive</b>	Mountwell Street	Southbend Blvd	2	2	(1)	(1)	(1)	-
	Midport Road	US Highway 1	2	2	(1)	(1)	(1)	-
<b>Lyngate Drive/Tiffany Ave</b>	Rangeline Rd	N/S A	-	2	(1)	(1)	(1)	-
	N/S A	Village Pkwy	-	4	(1)	(1)	(1)	-
	Village Pkwy	Commerce Center Pkwy	4	4	-	-	6	6
	Commerce Center Pkwy	I-95 Interchange	6	6	(1)	-	-	-
	I-95 Interchange	California Blvd	6	6	-	-	-	-
	California Blvd	Cashmere Blvd	6	6	(1)	-	-	-
	Cashmere Blvd	Bayshore Blvd	6	6	(1)	-	-	-
	Bayshore Blvd	Airosa Blvd	6	6	(1)	-	-	-
	Commerce Center Pkwy	Interstate 95	2	2	(1)	-	-	4
	Interstate 95	Peacock Blvd	4	4	(1)	6	6	6
<b>St Lucie West Boulevard</b>	Peacock Blvd	California Blvd	4	4	(1)	-	6	6
	California Blvd	Cashmere Blvd	4	4	(1)	(1)	6	6
	Eleven Mile Road	Commerce Center Pkwy	2	2	-	-	-	-
<b>Midway Road</b>	Commerce Center Pkwy	Interstate 95	2	2	-	-	-	-
	Interstate 95	Glades Cut-Off Road	4	4	(1)	-	-	-

Notes:

- = no improvement needed beyond existing/committed laneage

(1) = project has insignificant impacts, therefore needs analysis not performed

???

represents a constrained facility; this nomenclature is consistent with the VWATS.

These laneage needs are based on Total traffic volumes; only significantly impacted links are shown.

**TABLE 21 F-13**  
**TOTAL TRAFFIC CONDITIONS – REQUIRED LANEAGES**  
**(ALL SOUTHWEST ANNEXATION AREA LINKS SHOWN)**

Roadway	From	To	2013 Required Laneage	2018 Required Laneage	2023 Required Laneage	2028 Required Laneage
<b>Becker Road</b>	Rangeline	N/S A	2	4	4	4
	N/S A	N/S B	4	4	4	4
	N/S B	N/S BC	4	4	4	6
	N/S BC	Community Blvd	4	4	6	6
	Community Blvd	Village Parkway	4	4	6	6
	Village Parkway	I-95 Interchange	4	6	6	8
<b>N/S A</b>	Becker Rd	Paar Drive	2	4	4	4
	Paar Drive	Open View	-	4	4	4
	Open View	E/W 1	2	4	4	4
	E/W 1	Gatlin Blvd	-	4	4	4
	Gatlin Blvd	Westcliffe Ln	2	4	4	4
	Westcliffe Ln	Crosstown Pkwy	2	2	4	4
<b>N/S B</b>	Becker Rd	Paar Drive	-	-	2	2
	Paar Drive	Open View	-	-	-	2
	Open View	E/W 1	-	-	-	2
<b>N/S BC</b>	Becker Rd	Paar Drive	-	-	-	2
<b>Community Blvd</b>	Becker Rd	Paar Drive	2	2	2	2
	Paar Drive	Open View	2	4	4	4
	Open View	E/W 1	2	4	4	4
	E/W 1	Gatlin Blvd	2	2	4	4
	Gatlin Blvd	Westcliffe Ln	2	2	2	2
<b>Village Parkway</b>	Becker Rd	Paar Drive	2	2	4	4
	Paar Drive	Open View	2	2	4	4
	Open View	E/W 1	2	2	4	4
	E/W 1	Gatlin Blvd	4	6	6	6
	Gatlin Blvd	Westcliffe Ln	2	2	4	4
	Westcliffe Ln	Crosstown Pkwy	4	4	4	4
<b>E/W 4 (Paar Drive)</b>	N/S A	N/S B	-	-	2	2
	N/S B	N/S BC	-	-	4	4
	N/S BC	Community Blvd	-	2	4	4
	Community Blvd	Village Parkway	-	4	4	4
	Village Parkway	Rosser Blvd	-	4	4	4
<b>E/W 3 (Open View)</b>	N/S A	N/S B	2	4	4	4
	N/S B	Community Blvd	2	4	4	4
	Community Blvd	Village Parkway	-	-	-	4
<b>E/W 1</b>	N/S A	N/S B	2	2	2	2
	N/S B	Community Blvd	2	2	2	2
	Community Blvd	Village Parkway	2	4	4	4
<b>Tradition Pkwy</b>	N/S A	Community Blvd	2	2	2	4
	Community Blvd	Village Parkway	2	2	4	4
	Village Parkway	I-95 Interchange	6	6	6	8
<b>Westcliffe Lane</b>	N/S A	Community Blvd	2	2	2	2
	Community Blvd	Village Parkway	2	4	4	4

SOUTHERN GROVE DRI - CUMULATIVE TRIP GENERATION CALCULATIONS

TAZ	Use	Intensity <sup>(1)</sup>	PM Peak Hour Gross Trips <sup>(2)</sup>			PM Peak Hour Internal Capture Trips Within TAZ <sup>(3)</sup>			PM Peak Hour Internal Capture Trips Within DRI <sup>(4)</sup>			PM Peak Hour Pass-By Trips <sup>(5)</sup>			PM Peak Hour Net New External Trips <sup>(6)</sup>		
			Total	Enter	Exit	Total	Enter	Exit	Total	Enter	Exit	Total	Enter	Exit	Total	Enter	Exit
481	Hotel	111 rooms	78	38	40	30	22	8	4	1	3	0	0	0	44	15	29
	Hospital	180 rooms	236	85	151	18	9	9	17	6	11	0	0	0	201	70	131
	Commercial Retail	17,838 sq. ft.	200	98	102	37	16	21	12	6	6	38	19	19	113	57	56
	Service & Office (<500,000 s.f.)	217,705 sq. ft.	324	55	269	17	6	11	23	4	19	0	0	0	284	45	239
	Research & Development (≤1,800,000 s.f.)	201,557 sq. ft.	231	35	196	16	6	10	16	2	14	0	0	0	199	27	172
<i>Subtotal - TAZ 481 →</i>			<i>1,069</i>	<i>311</i>	<i>758</i>	<i>118</i>	<i>59</i>	<i>59</i>	<i>72</i>	<i>19</i>	<i>53</i>	<i>38</i>	<i>19</i>	<i>19</i>	<i>841</i>	<i>214</i>	<i>627</i>
482	Multi-Family Residential	904 d.u.	366	245	121	22	12	10	34	27	7	0	0	0	310	206	104
	Commercial Retail	20,198 sq. ft.	218	107	111	22	10	12	18	11	7	45	22	23	133	64	69
<i>Subtotal - TAZ 482 →</i>			<i>584</i>	<i>352</i>	<i>232</i>	<i>44</i>	<i>22</i>	<i>22</i>	<i>52</i>	<i>38</i>	<i>14</i>	<i>45</i>	<i>22</i>	<i>23</i>	<i>443</i>	<i>270</i>	<i>173</i>
486	Single-Family Residential	203 d.u.	199	125	74	0	0	0	20	15	5	0	0	0	179	110	69
	<i>Subtotal - TAZ 486 →</i>			<i>199</i>	<i>125</i>	<i>74</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>20</i>	<i>15</i>	<i>5</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>179</i>	<i>110</i>
<b>GRAND TOTAL (INCLUDING TAZ 481, TAZ 482, AND TAZ 486)</b>			<b>1,852</b>	<b>788</b>	<b>1,064</b>	<b>162</b>	<b>81</b>	<b>81</b>	<b>144</b>	<b>72</b>	<b>72</b>	<b>83</b>	<b>41</b>	<b>42</b>	<b>1,463</b>	<b>594</b>	<b>869</b>

Notes:

- (1) Includes site plan approvals, residential subdivision approvals, and building permits obtained through 12/31/2017
- (2) Calculated based on rates/equations established in Exhibit E of the approved Southern Grove Development Order
- (3) Calculated based on rates/equations established in Exhibit E of the approved Southern Grove Development Order (applied among TAZs with multiple uses)
- (4) Calculated based on 8.5% Phase 1 internal capture rate established in Exhibit E of the approved Southern Grove Development Order (applied between TAZ 481, TAZ 482, and TAZ 486)
- (5) Calculated based on rates established in Exhibit E of the approved Southern Grove Development Order
- (6) Net New External Trips = Gross Trips - Internal Capture Trips - Pass-By Trips

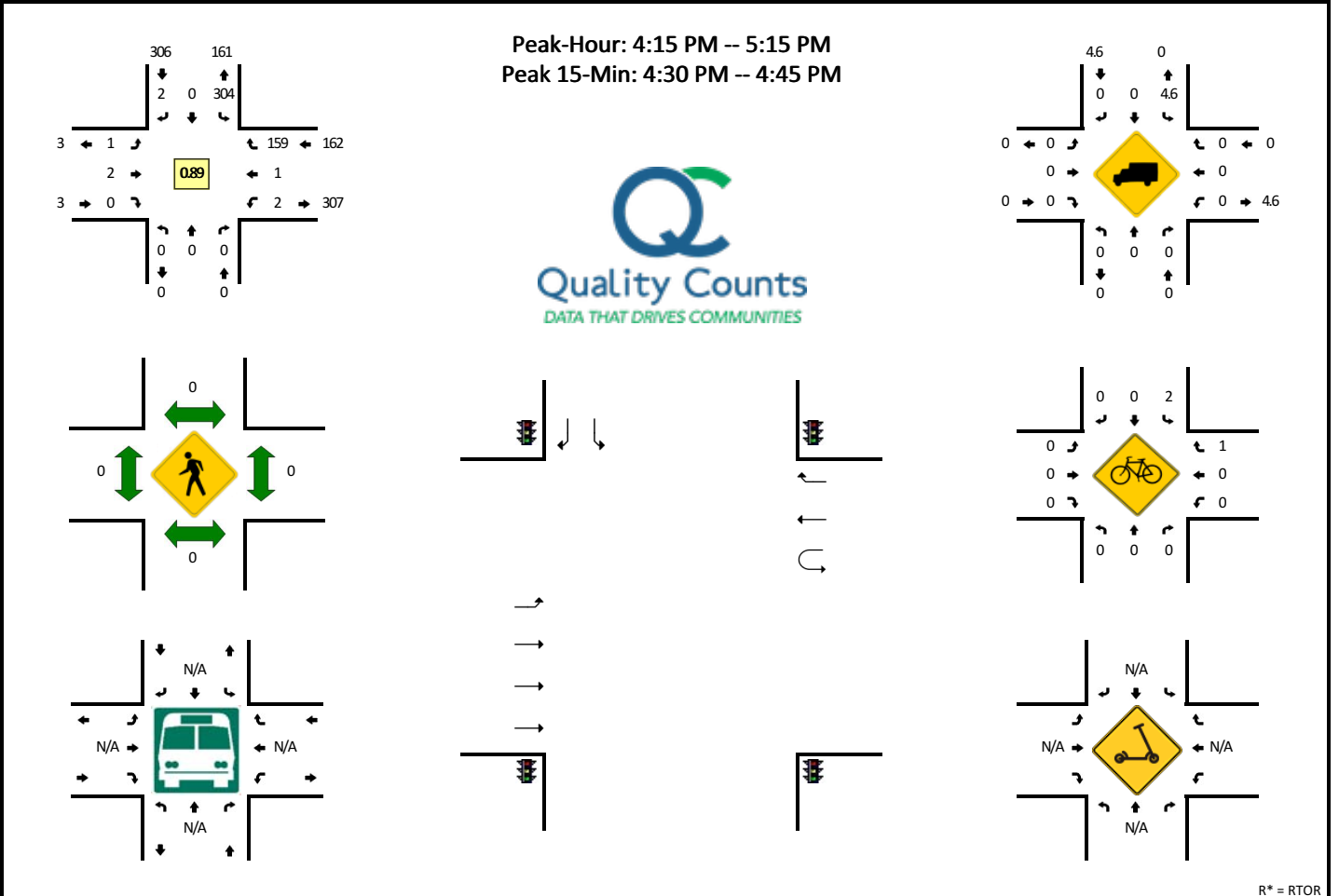
k:\voca\_civil\041386000 - swaa analyses (vero)\2018-02\_biennial report calcs\southern grove biennial report calcs\_2018-02-14.xlsx\biennial report trip calcs

## APPENDIX C

# Turning Movement Counts and Signal Timings

**LOCATION:** SW Village Pkwy -- SW Becker Rd  
**CITY/STATE:** Port St. Lucie, FL

**QC JOB #:** 15386602  
**DATE:** Thu, Mar 11 2021



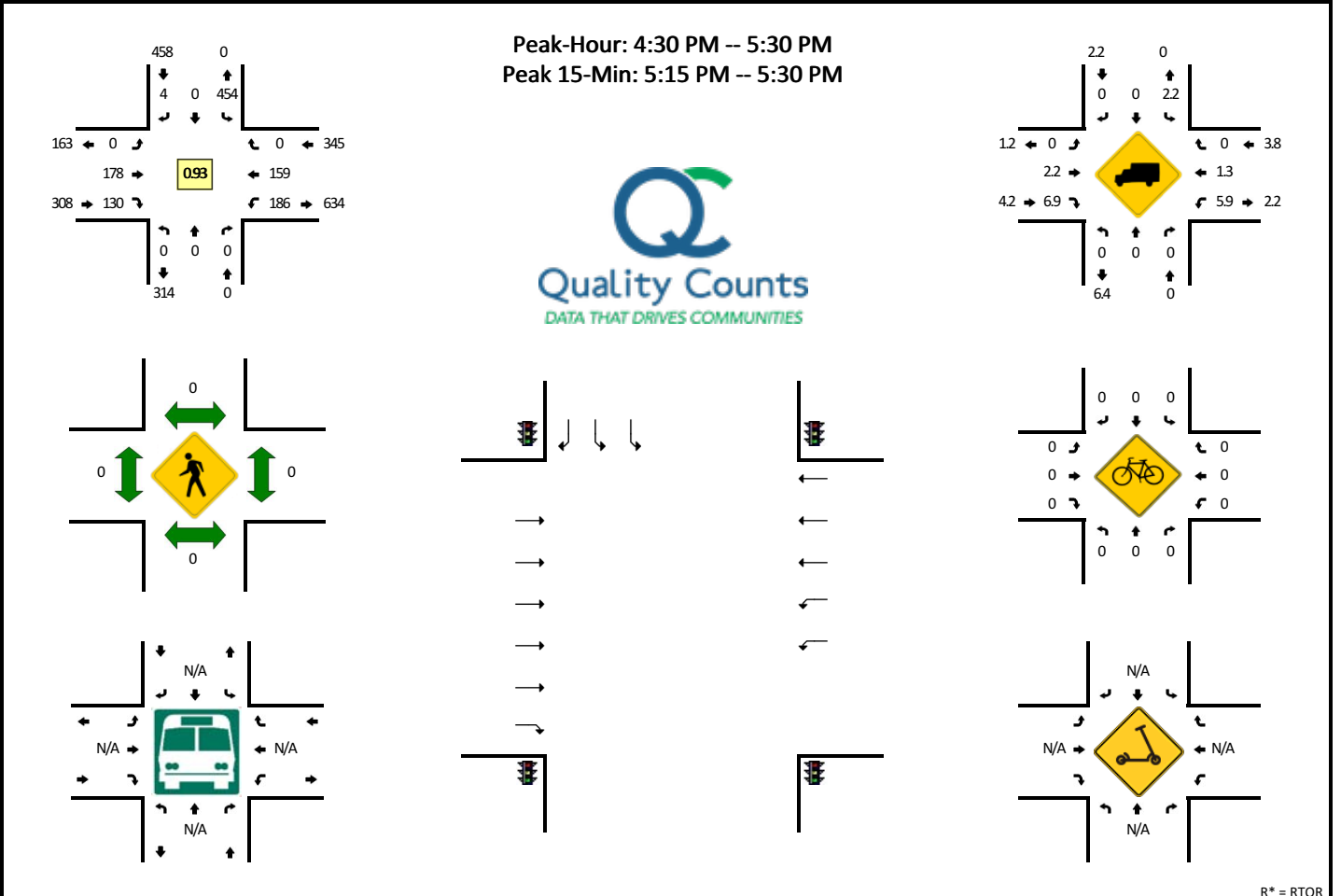
R\* = RTOR

15-Min Count Period Beginning At	SW Village Pkwy (Northbound)					SW Village Pkwy (Southbound)					SW Becker Rd (Eastbound)					SW Becker Rd (Westbound)					Total	Hourly Totals
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*		
4:00 PM	0	0	1	0	0	61	0	1	1	0	0	0	0	0	0	0	0	2	0	33	99	
4:15 PM	0	0	0	0	0	72	0	1	0	0	0	0	0	0	0	0	0	4	1	37	115	
4:30 PM	0	0	0	0	0	77	0	0	1	0	1	1	0	0	0	0	1	1	1	49	132	
4:45 PM	0	0	0	0	0	83	0	0	0	0	0	1	0	0	0	0	0	0	0	31	115	461
5:00 PM	0	0	0	0	0	71	0	1	0	0	0	0	0	0	0	0	0	2	0	35	109	471
5:15 PM	0	0	0	0	0	54	0	1	0	0	0	5	0	0	0	0	0	6	1	40	107	463
5:30 PM	0	0	0	0	0	73	0	0	0	0	0	3	0	0	0	0	1	3	1	52	133	464
5:45 PM	0	0	0	0	0	43	0	0	0	0	0	0	0	0	0	0	0	0	0	56	99	448
Peak 15-Min Flowrates	Northbound					Southbound					Eastbound					Westbound					Total	
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*		
All Vehicles	0	0	0	0	0	308	0	0	4	0	4	4	0	0	0	0	4	200	4	196	724	
Heavy Trucks	0	0	0	0	0	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24	
Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Scoters	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

*Comments:*

**LOCATION:** I-95 SB Ramps -- SW Becker Rd  
**CITY/STATE:** Port St. Lucie, FL

**QC JOB #:** 15386604  
**DATE:** Thu, Mar 11 2021



R\* = RTOR

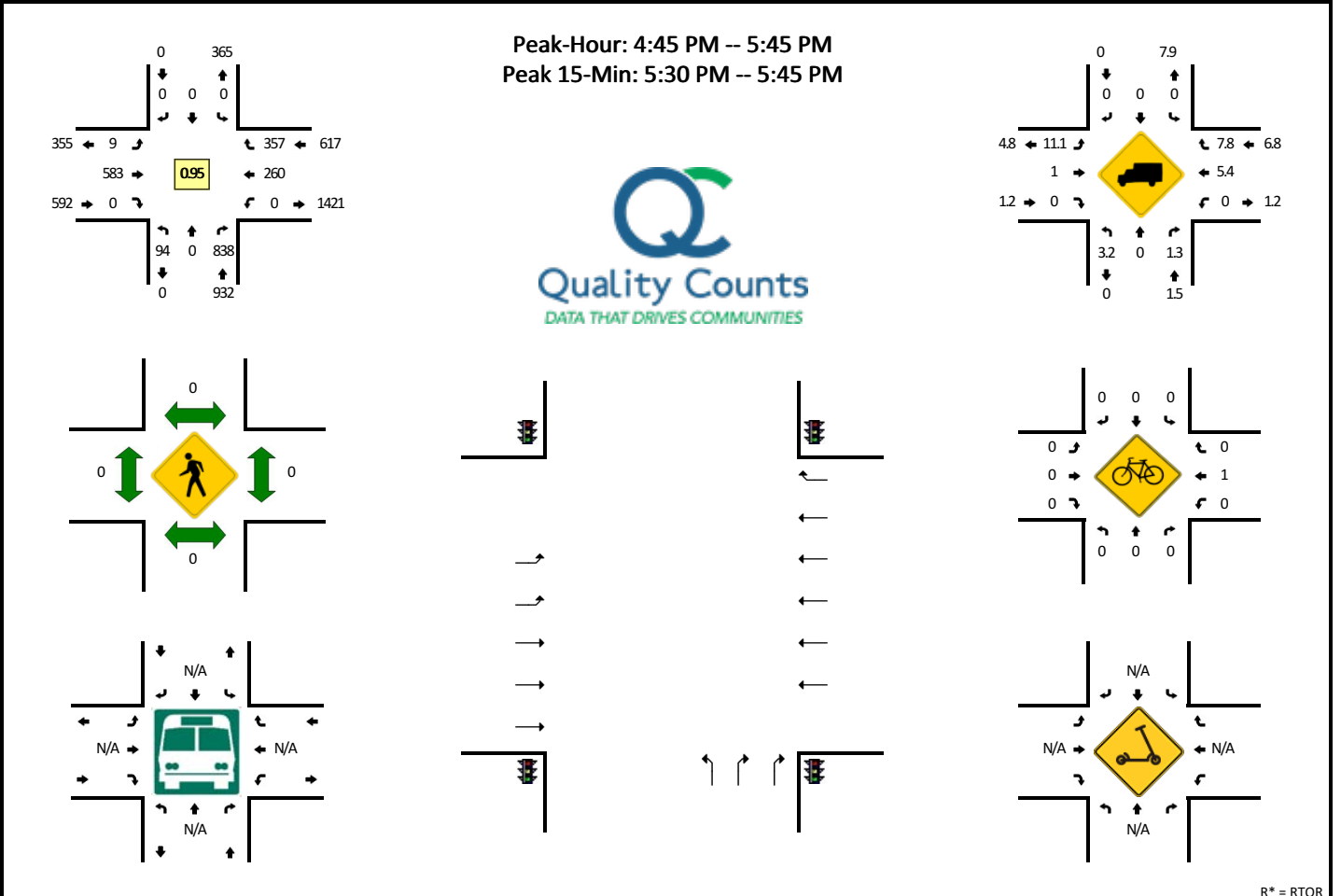
15-Min Count Period Beginning At	I-95 SB Ramps (Northbound)					I-95 SB Ramps (Southbound)					SW Becker Rd (Eastbound)					SW Becker Rd (Westbound)					Total	Hourly Totals
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*		
4:00 PM	0	0	0	0	0	94	0	0	0	0	0	33	30	0	0	39	36	0	0	0	232	
4:15 PM	0	0	0	0	0	92	0	5	0	0	0	55	23	0	0	51	47	0	0	0	273	
4:30 PM	0	0	0	0	0	115	0	0	0	0	0	45	32	0	0	49	47	0	2	0	290	
4:45 PM	0	0	0	0	0	108	0	1	0	0	0	42	38	0	0	46	29	0	0	0	264	1059
5:00 PM	0	0	0	0	0	100	0	1	0	1	0	51	31	0	0	36	38	0	0	0	258	1085
5:15 PM	0	0	0	0	0	131	0	1	0	0	0	40	29	0	0	53	45	0	0	0	299	1111
5:30 PM	0	0	0	0	0	102	0	0	0	0	0	34	38	0	0	44	59	0	0	0	277	1098
5:45 PM	0	0	0	0	0	112	1	0	0	1	0	29	20	0	0	50	54	0	0	0	267	1101
Peak 15-Min Flowrates	Northbound					Southbound					Eastbound					Westbound					Total	
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*		
All Vehicles	0	0	0	0	0	524	0	4	0	0	0	160	116	0	0	212	180	0	0	0	1196	
Heavy Trucks	0	0	0	0	0	16	0	0	0	0	0	0	8	0	0	8	0	0	0	0	32	
Buses																						
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Scoters																						

Comments:



**LOCATION:** I-95 NB Ramps -- SW Becker Rd  
**CITY/STATE:** Port St. Lucie, FL

**QC JOB #:** 15386606  
**DATE:** Thu, Mar 11 2021



R\* = RTOR

15-Min Count Period Beginning At	I-95 NB Ramps (Northbound)				I-95 NB Ramps (Southbound)				SW Becker Rd (Eastbound)				SW Becker Rd (Westbound)				Total	Hourly Totals				
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left			Thru	Right	U	R*
4:00 PM	16	0	136	0	5	0	0	0	0	0	2	125	0	0	0	0	65	73	0	0	422	
4:15 PM	25	0	157	0	4	0	0	0	0	0	0	143	0	0	0	0	73	87	0	0	489	
4:30 PM	28	0	185	0	4	0	0	0	0	0	3	164	0	0	0	0	69	75	0	0	528	
4:45 PM	19	0	181	0	2	0	0	0	0	0	1	147	0	0	0	0	60	88	0	0	498	1937
5:00 PM	18	0	212	0	3	0	0	0	0	0	3	142	0	0	0	0	51	91	0	0	520	2035
5:15 PM	30	0	215	0	0	0	0	0	0	0	3	145	0	0	0	0	73	95	0	0	561	2107
5:30 PM	27	0	221	0	4	0	0	0	0	0	1	149	0	1	0	0	76	83	0	0	562	2141
5:45 PM	26	0	193	0	5	0	0	0	0	0	1	132	0	0	0	0	72	60	0	0	489	2132
Peak 15-Min Flowrates	Northbound					Southbound					Eastbound					Westbound					Total	
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*		
All Vehicles	108	0	900	0	16	0	0	0	0	0	4	596	0	4	0	0	304	332	0	0	2264	
Heavy Trucks	0	0	12			0	0	0			0	4	0			0	8	8			32	
Buses																						
Pedestrians	0	0	0			0	0	0			0	0	0			0	0	0			0	
Bicycles	0	0	0			0	0	0			0	0	0			0	4	0			4	
Scoters																						

Comments:



3	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0

3	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0

City of Port St Lucie

Timing Sheet

3/18/2021 8:39:12 AM

Station : 37 - Becker @ Village ( Upload File )

Unit Parameters [1.2.1]

StartUp Flash	Auto Ped Clear	Backup Time	Red Revert	Console Timeout	Tone Disable	Feature Profile	Phase Mode	Diamond Mode	SDLC Retry Time	TS2 Det Faults	Cycle Fault Action	Max Cycle Time	Max Seek Track Time	Max Seek Dwell Time	Enable Run	Local Flash Start	Start Red Time	Disable Init Ped	Yellow 3 Second Disable	Omit Yellow Enable	Free Ring Sequence
	OFF		3	10	OFF		STD8	4PH		OFF	ALARM				ON	OFF		OFF	OFF	OFF	1

Comm, General Comm Parameters [6.1]

Station ID	Master Station ID	Fallback time	Allow Pencil	Port	System-Up	Sys-Down	PC/Print	Aux 232
37			OFF					

Port Parameters [6.2]

Comm	Mode	Baud	MsgTime	Duplex	Enable	DialTime	Modem	ModemTime	Tel#1	Tel#2
System Up(P-A)										
System Down(P-B)										
PC/Print(P-2)										

Overlap General Parameters [1.5.1]

Conflict Lock	Lock Inhibit	Program Card	Use Parent	Canadian Fast Flash
OFF	OFF	OFF	OFF	OFF

Overlap Program Parameters [1.5.2.1]

Overlap	Included Phases	Modifier Phases	Type	Green	Yellow	Red
Overlap 1	2		NORMAL		3.5	1.5
Overlap 2	4		NORMAL		3.5	1.5
Overlap 3	6		NORMAL		3.5	1.5
Overlap 4	8		NORMAL		3.5	1.5
Overlap 5			NORMAL		3.5	1.5
Overlap 6			NORMAL		3.5	1.5
Overlap 7			NORMAL		3.5	1.5
Overlap 8			NORMAL		3.5	1.5

Overlap Conflict Parameters+ [1.5.2.2]

Overlap	Conflicting Phases	Conflicting Overlaps	Conflicting Peds
Overlap 1			OFF OFF
Overlap 2			OFF OFF
Overlap 3			OFF OFF
Overlap 4			OFF OFF
Overlap 5			OFF OFF
Overlap 6			OFF OFF
Overlap 7			OFF OFF
Overlap 8			OFF OFF

Detector, Vehicle Parameters 1-16 [5.1]

	1 (SL1)	2 (ST1)	3 (EL1)	4 (ET1)	5	6 (NT1)	7 (WL1)	8 (WT1)	9	10	11	12	13	14	15	16
Call Phase	3	8	1	6	7	4	5	2	0	0	0	0	0	0	0	0
Switch Phase	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Time	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Detector, Vehicle Parameters 17-32 [5.1]

	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Call Phase	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Switch Phase	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Time	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

City of Port St Lucie

Timing Sheet

3/18/2021 8:39:12 AM

Station : 37 - Becker @ Village ( Upload File )

Detector Alternate Program 1, Vehicle Parameters [5.5.1]

	1 (SL1)	2 (ST1)	3 (EL1)	4 (ET1)	5	6 (NT1)	7 (WL1)	8 (WT1)	9	10	11	12	13	14	15	16
Call Phase	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Switch Phase	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Time	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Channels/SDLC, Assign to Phases [1.3.1]

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
PH/OLP #	1	2	3	4	5	6	7	8	9	10	11	12	2	4	6	3	1	3	5	7				
Type	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	OLP	OLP	OLP	OLP	PED	PED	PED	PED	PED	PED	PED	PED	VEH	VEH	VEH	VEH
Flash	RED	YEL	RED	RED	RED	YEL	RED	RED	RED	RED	RED	RED	DRK	DRK	DRK	DRK	DRK	DRK	DRK	DRK	DRK	DRK	DRK	DRK
Flash 1-2 Hertz																								
Dimming Green																								
Dimming Yellow																								
Dimming Red																								
Alt Cyc	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

Channel/SDLC, Parameters [1.3.3]

TOD Dim Enable	Extra Maps Enable	D Connector Enable	Single BIU Map	IO Mode	Preempt or Ext Output
OFF	DEFAULT	TX2_V14	ON	AUTO	EXT

Channel/SDLC, MMU Map [1.3.5]

MMU-to-Controller Channel Map

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

Channel/SDLC, Permissive [1.3.4]

Channel	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2
1		1									1	1			
2		1		1							1	1			
3	1								1	1					
4	1		1						1	1					
5				1											
6		1		1											
7			1												
8	1		1												
9															
10															
11															
12															
13			1												
14	1														
15															

Channel/SDLC, Permissive [1.3.7]

SDLC Device	Term/Fac	Detector														MMU	Diag		
BIU#	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8			
Present	ON	ON							ON									ON	
Peer to Peer																			

Ring Sequence [1.2.4]

Ring	P1	P2	P3	P4	P5	P6	P7	P8
Ring 1	1	2	3	4				
Ring 2	5	6	7	8				

Ring 3								
Ring 4								

City of Port St Lucie

Timing Sheet

3/18/2021 8:39:12 AM

Station : 37 - Becker @ Village ( Upload File )

Alarms, Enable Events [1.6.1]

Event#	Event Enable
1	
2	
3	
4	
5	
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Alarms, Enable Alarms [1.6.4]

Alarm#	Alarm Enable
1	
2	
3	
4	
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11	
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Preemption Times[3.1]/Phases[3.2]/Options[3.3]

Channel	1	2	3	4	5	6
Lock Input	ON	ON	ON	ON	ON	ON
Override Flash	ON	ON	ON	ON	ON	ON
Override Higher	ON	ON	ON	ON	ON	ON
Flash Dwell	ON	ON	ON	ON	ON	ON
Link						
Delay						
Min Duration						
Min Green						
Min Walk						
Ped Clear						
Track Green						
Min Dwell						
Max Presence						
Track R1						
Track R2						
Track R3						
Track R4						
Dwell P1						
Dwell P2						
Dwell P3						
Dwell P4						
Dwell P5						
Dwell P6						
Dwell P7						
Dwell P8						
Dwell P9						
Dwell P10						
Dwell P11						
Dwell P12						
Dwell Ped1						
Dwell Ped2						
Dwell Ped3						
Dwell Ped4						
Dwell Ped5						
Dwell Ped6						
Dwell Ped7						
Dwell Ped8						
Exit R1						
Exit R2						
Exit R3						
Exit R4						

Alarms, Parameters [1.4.1]

Auto Flash Parameter

Yellow	Red	Mode	Source
40	20	VOT_MON	D-CONN

Alarms, Parameters [1.6.7]

Preempt Event Enabled	Pattern Event Enabled
OFF	OFF



















3	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0

3	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0

City of Port St Lucie

Timing Sheet

3/18/2021 8:43:33 AM

Station : 39 - Becker @ I-95 East ( Upload File )

Unit Parameters [1.2.1]

StartUp Flash	Auto Ped Clear	Backup Time	Red Revert	Console Timeout	Tone Disable	Feature Profile	Phase Mode	Diamond Mode	SDLC Retry Time	TS2 Det Faults	Cycle Fault Action	Max Cycle Time	Max Seek Track Time	Max Seek Dwell Time	Enable Run	Local Flash Start	Start Red Time	Disable Init Ped	Yellow 3 Second Disable	Omit Yellow Enable	Free Ring Sequence
	OFF		3	10	OFF		STD8	4PH		OFF	ALARM				ON	OFF		OFF	OFF	OFF	1

Comm, General Comm Parameters [6.1]

Station ID	Master Station ID	Fallback time	Allow Pencil	Port	System-Up	Sys-Down	PC/Print	Aux 232
39			OFF					

Port Parameters [6.2]

Comm	Mode	Baud	Msg Time	Duplex	Enable	Dial Time	Modem	Modem Time	Tel#1	Tel#2
System Up(P-A)										
System Down(P-B)										
PC/Print(P-2)										

Overlap General Parameters [1.5.1]

Conflict Lock	Lock Inhibit	Program Card	Use Parent	Canadian Fast Flash
OFF	OFF	OFF	OFF	OFF

Overlap Program Parameters [1.5.2.1]

Overlap	Included Phases	Modifier Phases	Type	Green	Yellow	Red
Overlap 1	2		NORMAL		3.5	1.5
Overlap 2	4		NORMAL		3.5	1.5
Overlap 3	6		NORMAL		3.5	1.5
Overlap 4	8		NORMAL		3.5	1.5
Overlap 5			NORMAL		3.5	1.5
Overlap 6			NORMAL		3.5	1.5
Overlap 7			NORMAL		3.5	1.5
Overlap 8			NORMAL		3.5	1.5

Overlap Conflict Parameters+ [1.5.2.2]

Overlap	Conflicting Phases	Conflicting Overlaps	Conflicting Peds
Overlap 1			OFF OFF
Overlap 2			OFF OFF
Overlap 3			OFF OFF
Overlap 4			OFF OFF
Overlap 5			OFF OFF
Overlap 6			OFF OFF
Overlap 7			OFF OFF
Overlap 8			OFF OFF

Detector, Vehicle Parameters 1-16 [5.1]

	1	2	3 (EL1)	4 (ET1)	5 (NL1)	6 (NR1)	7	8 (WT1)	9	10	11	12	13	14	15	16
Call Phase	3	8	1	6	7	4	5	2	0	0	0	0	0	0	0	0
Switch Phase	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Time	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Detector, Vehicle Parameters 17-32 [5.1]

	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Call Phase	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Switch Phase	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Time	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

City of Port St Lucie

Timing Sheet

3/18/2021 8:43:33 AM

Station : 39 - Becker @ I-95 East ( Upload File )

Detector Alternate Program 1, Vehicle Parameters [5.5.1]

	1	2	3 (EL1)	4 (ET1)	5 (NL1)	6 (NR1)	7	8 (WT1)	9	10	11	12	13	14	15	16
Call Phase	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Switch Phase	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Time	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Channels/SDLC, Assign to Phases [1.3.1]

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
PH/OLP #	1	2	3	4	5	6	7	8	9	10	11	12	2	4	6	8	1	3	5	7				
Type	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	OLP	OLP	OLP	OLP	PED	PED	PED	PED	PED	PED	PED	PED	VEH	VEH	VEH	VEH
Flash	RED	YEL	RED	RED	RED	YEL	RED	RED	RED	RED	RED	RED	DRK	DRK	DRK	DRK	DRK	DRK	DRK	DRK	DRK	DRK	DRK	DRK
Flash 1-2 Hertz																								
Dimming Green																								
Dimming Yellow																								
Dimming Red																								
Alt Cyc	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

Channel/SDLC, Parameters [1.3.3]

TOD Dim Enable	Extra Maps Enable	D Connector Enable	Single BIU Map	IO Mode	Preempt or Ext Output
OFF	DEFAULT	TX2_V14	ON	AUTO	EXT

Channel/SDLC, MMU Map [1.3.5]

MMU-to-Controller Channel Map

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

Channel/SDLC, Permissive [1.3.4]

Channel	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2
1		1									1	1			
2		1		1							1	1			
3	1								1	1					
4	1		1						1	1					
5				1											
6		1		1											
7			1												
8	1		1												
9															
10															
11															
12															
13			1												
14	1														
15															

Channel/SDLC, Permissive [1.3.7]

SDLC Device	Term/Fac	Detector														MMU	Diag		
BIU#	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8			
Present	ON	ON							ON									ON	
Peer to Peer																			

Ring Sequence [1.2.4]

Ring	P1	P2	P3	P4	P5	P6	P7	P8
Ring 1	1	2	3	4				
Ring 2	5	6	7	8				

Ring 3								
Ring 4								

City of Port St Lucie

Timing Sheet

3/18/2021 8:43:33 AM

Station : 39 - Becker @ I-95 East ( Upload File )

Alarms, Enable Events [1.6.1]

Event#	Event Enable
1	ON
2	ON
3	ON
4	ON
5	ON
6	ON
7	ON
8	ON
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
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Alarms, Enable Alarms [1.6.4]

Alarm#	Alarm Enable
1	ON
2	ON
3	ON
4	ON
5	ON
6	ON
7	ON
8	ON
9	
10	
11	
12	
13	
14	
15	
16	
17	
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Preemption Times[3.1]/Phases[3.2]/Options[3.3]

Channel	1	2	3	4	5	6
Lock Input	ON	ON	ON	ON	ON	ON
Override Flash	ON	ON	ON	ON	ON	ON
Override Higher	ON	ON	ON	ON	ON	ON
Flash Dwell	ON	ON	ON	ON	ON	ON
Link						
Delay						
Min Duration						
Min Green						
Min Walk						
Ped Clear						
Track Green						
Min Dwell						
Max Presence						
Track R1						
Track R2						
Track R3						
Track R4						
Dwell P1						
Dwell P2						
Dwell P3						
Dwell P4						
Dwell P5						
Dwell P6						
Dwell P7						
Dwell P8						
Dwell P9						
Dwell P10						
Dwell P11						
Dwell P12						
Dwell Ped1						
Dwell Ped2						
Dwell Ped3						
Dwell Ped4						
Dwell Ped5						
Dwell Ped6						
Dwell Ped7						
Dwell Ped8						
Exit R1						
Exit R2						
Exit R3						
Exit R4						

Alarms, Parameters [1.4.1]

Auto Flash Parameter

Yellow	Red	Mode	Source
40	20	VOT_MON	D-CONN

Alarms, Parameters [1.6.7]

Preempt Event Enabled	Pattern Event Enabled
OFF	OFF





















3	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0

3	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0

City of Port St Lucie

Timing Sheet

3/18/2021 8:48:42 AM

Station : 38 - Becker @ I-95 West ( Upload File )

Unit Parameters [1.2.1]

StartUp Flash	Auto Ped Clear	Backup Time	Red Revert	Console Timeout	Tone Disable	Feature Profile	Phase Mode	Diamond Mode	SDLC Retry Time	TS2 Det Faults	Cycle Fault Action	Max Cycle Time	Max Seek Track Time	Max Seek Dwell Time	Enable Run	Local Flash Start	Start Red Time	Disable Init Ped	Yellow 3 Second Disable	Omit Yellow Enable	Free Ring Sequence
	OFF		3	10	OFF		STD8	4PH		OFF	ALARM				ON	OFF		OFF	OFF	OFF	1

Comm, General Comm Parameters [6.1]

Station ID	Master Station ID	Fallback time	Allow Pencil	Port	System-Up	Sys-Down	PC/Print	Aux 232
38			OFF					

Port Parameters [6.2]

Comm	Mode	Baud	MsgTime	Duplex	Enable	DialTime	Modem	ModemTime	Tel#1	Tel#2
System Up(P-A)										
System Down(P-B)										
PC/Print(P-2)										

Overlap General Parameters [1.5.1]

Conflict Lock	Lock Inhibit	Program Card	Use Parent	Canadian Fast Flash
OFF	OFF	OFF	OFF	OFF

Overlap Program Parameters [1.5.2.1]

Overlap	Included Phases	Modifier Phases	Type	Green	Yellow	Red
Overlap 1	2		NORMAL		3.5	1.5
Overlap 2	4		NORMAL		3.5	1.5
Overlap 3	6		NORMAL		3.5	1.5
Overlap 4	8		NORMAL		3.5	1.5
Overlap 5			NORMAL		3.5	1.5
Overlap 6			NORMAL		3.5	1.5
Overlap 7			NORMAL		3.5	1.5
Overlap 8			NORMAL		3.5	1.5

Overlap Conflict Parameters+ [1.5.2.2]

Overlap	Conflicting Phases	Conflicting Overlaps	Conflicting Peds
Overlap 1			OFF OFF
Overlap 2			OFF OFF
Overlap 3			OFF OFF
Overlap 4			OFF OFF
Overlap 5			OFF OFF
Overlap 6			OFF OFF
Overlap 7			OFF OFF
Overlap 8			OFF OFF

Detector, Vehicle Parameters 1-16 [5.1]

	1 (SL1)	2 (SR1)	3	4 (ET1)	5	6	7 (WL1)	8 (WT1)	9	10	11	12	13	14	15	16
Call Phase	3	8	1	6	7	4	5	2	0	0	0	0	0	0	0	0
Switch Phase	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Time	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Detector, Vehicle Parameters 17-32 [5.1]

	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Call Phase	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Switch Phase	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Time	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

City of Port St Lucie

Timing Sheet

3/18/2021 8:48:42 AM

Station : 38 - Becker @ I-95 West ( Upload File )

Detector Alternate Program 1, Vehicle Parameters [5.5.1]

	1 (SL1)	2 (SR1)	3	4 (ET1)	5	6	7 (WL1)	8 (WT1)	9	10	11	12	13	14	15	16
Call Phase	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Switch Phase	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Time	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Channels/SDLC, Assign to Phases [1.3.1]

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
PH/OLP #	1	2	3	4	5	6	7	8	9	10	11	12	2	4	6	8	1	3	5	7				
Type	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	OLP	OLP	OLP	OLP	PED	PED	PED	PED	PED	PED	PED	PED	VEH	VEH	VEH	VEH
Flash	RED	YEL	RED	RED	RED	YEL	RED	RED	RED	RED	RED	RED	DRK	DRK	DRK	DRK	DRK	DRK	DRK	DRK	DRK	DRK	DRK	DRK
Flash 1-2 Hertz																								
Dimming Green																								
Dimming Yellow																								
Dimming Red																								
Alt Cyc	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

Channel/SDLC, Parameters [1.3.3]

TOD Dim Enable	Extra Maps Enable	D Connector Enable	Single BIU Map	IO Mode	Preempt or Ext Output
OFF	DEFAULT	TX2_V14	ON	AUTO	EXT

Channel/SDLC, MMU Map [1.3.5]

MMU-to-Controller Channel Map

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

Channel/SDLC, Permissive [1.3.4]

Channel	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2
1		1									1	1			
2		1		1							1	1			
3	1								1	1					
4	1		1						1	1					
5				1											
6		1		1											
7			1												
8	1		1												
9															
10															
11															
12															
13			1												
14	1														
15															

Channel/SDLC, Permissive [1.3.7]

SDLC Device	Term/Fac	Detector														MMU	Diag		
BIU#	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8			
Present	ON	ON							ON									ON	
Peer to Peer																			

Ring Sequence [1.2.4]

Ring	P1	P2	P3	P4	P5	P6	P7	P8
Ring 1	1	2	3	4				
Ring 2	5	6	7	8				

Ring 3								
Ring 4								

City of Port St Lucie

Timing Sheet

3/18/2021 8:48:42 AM

Station : 38 - Becker @ I-95 West ( Upload File )

Alarms, Enable Events [1.6.1]

Event#	Event Enable
1	ON
2	ON
3	ON
4	ON
5	ON
6	ON
7	ON
8	ON
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Alarms, Enable Alarms [1.6.4]

Alarm#	Alarm Enable
1	ON
2	ON
3	ON
4	ON
5	ON
6	ON
7	ON
8	ON
9	
10	
11	
12	
13	
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Preemption Times[3.1]/Phases[3.2]/Options[3.3]

Channel	1	2	3	4	5	6
Lock Input	ON	ON	ON	ON	ON	ON
Override Flash	ON	ON	ON	ON	ON	ON
Override Higher	ON	ON	ON	ON	ON	ON
Flash Dwell	ON	ON	ON	ON	ON	ON
Link						
Delay						
Min Duration						
Min Green						
Min Walk						
Ped Clear						
Track Green						
Min Dwell						
Max Presence						
Track R1						
Track R2						
Track R3						
Track R4						
Dwell P1						
Dwell P2						
Dwell P3						
Dwell P4						
Dwell P5						
Dwell P6						
Dwell P7						
Dwell P8						
Dwell P9						
Dwell P10						
Dwell P11						
Dwell P12						
Dwell Ped1						
Dwell Ped2						
Dwell Ped3						
Dwell Ped4						
Dwell Ped5						
Dwell Ped6						
Dwell Ped7						
Dwell Ped8						
Exit R1						
Exit R2						
Exit R3						
Exit R4						

Alarms, Parameters [1.4.1]

Auto Flash Parameter

Yellow	Red	Mode	Source
40	20	VOT_MON	D-CONN

Alarms, Parameters [1.6.7]

Preempt Event Enabled	Pattern Event Enabled
OFF	OFF

















**APPENDIX D**  
FDOT's Florida Traffic Online (FTO) Data

2019 PEAK SEASON FACTOR CATEGORY REPORT - REPORT TYPE: ALL  
 CATEGORY: 9402 WEST-W OF I95

WEEK	DATES	SF	MOCF: 0.92 PSCF
1	01/01/2019 - 01/05/2019	1.05	1.14
2	01/06/2019 - 01/12/2019	1.03	1.12
3	01/13/2019 - 01/19/2019	1.00	1.09
* 4	01/20/2019 - 01/26/2019	0.97	1.05
* 5	01/27/2019 - 02/02/2019	0.93	1.01
* 6	02/03/2019 - 02/09/2019	0.90	0.98
* 7	02/10/2019 - 02/16/2019	0.86	0.93
* 8	02/17/2019 - 02/23/2019	0.87	0.95
* 9	02/24/2019 - 03/02/2019	0.88	0.96
*10	03/03/2019 - 03/09/2019	0.89	0.97
*11	03/10/2019 - 03/16/2019	0.90	0.98
*12	03/17/2019 - 03/23/2019	0.91	0.99
*13	03/24/2019 - 03/30/2019	0.93	1.01
*14	03/31/2019 - 04/06/2019	0.94	1.02
*15	04/07/2019 - 04/13/2019	0.95	1.03
*16	04/14/2019 - 04/20/2019	0.97	1.05
17	04/21/2019 - 04/27/2019	0.99	1.08
18	04/28/2019 - 05/04/2019	1.00	1.09
19	05/05/2019 - 05/11/2019	1.02	1.11
20	05/12/2019 - 05/18/2019	1.04	1.13
21	05/19/2019 - 05/25/2019	1.06	1.15
22	05/26/2019 - 06/01/2019	1.07	1.16
23	06/02/2019 - 06/08/2019	1.09	1.18
24	06/09/2019 - 06/15/2019	1.10	1.20
25	06/16/2019 - 06/22/2019	1.11	1.21
26	06/23/2019 - 06/29/2019	1.12	1.22
27	06/30/2019 - 07/06/2019	1.12	1.22
28	07/07/2019 - 07/13/2019	1.13	1.23
29	07/14/2019 - 07/20/2019	1.14	1.24
30	07/21/2019 - 07/27/2019	1.13	1.23
31	07/28/2019 - 08/03/2019	1.13	1.23
32	08/04/2019 - 08/10/2019	1.12	1.22
33	08/11/2019 - 08/17/2019	1.12	1.22
34	08/18/2019 - 08/24/2019	1.11	1.21
35	08/25/2019 - 08/31/2019	1.10	1.20
36	09/01/2019 - 09/07/2019	1.09	1.18
37	09/08/2019 - 09/14/2019	1.08	1.17
38	09/15/2019 - 09/21/2019	1.08	1.17
39	09/22/2019 - 09/28/2019	1.05	1.14
40	09/29/2019 - 10/05/2019	1.03	1.12
41	10/06/2019 - 10/12/2019	1.00	1.09
42	10/13/2019 - 10/19/2019	0.98	1.07
43	10/20/2019 - 10/26/2019	0.97	1.05
44	10/27/2019 - 11/02/2019	0.96	1.04
45	11/03/2019 - 11/09/2019	0.94	1.02
46	11/10/2019 - 11/16/2019	0.93	1.01
47	11/17/2019 - 11/23/2019	0.95	1.03
48	11/24/2019 - 11/30/2019	0.98	1.07
49	12/01/2019 - 12/07/2019	1.00	1.09
50	12/08/2019 - 12/14/2019	1.02	1.11
51	12/15/2019 - 12/21/2019	1.05	1.14
52	12/22/2019 - 12/28/2019	1.03	1.12
53	12/29/2019 - 12/31/2019	1.00	1.09

\* PEAK SEASON

2019 PEAK SEASON FACTOR CATEGORY REPORT - REPORT TYPE: ALL  
 CATEGORY: 9495 ST LUCIE I95

WEEK	DATES	SF	MOCF: 0.97 PSCF
1	01/01/2019 - 01/05/2019	0.92	0.95
2	01/06/2019 - 01/12/2019	0.98	1.01
3	01/13/2019 - 01/19/2019	1.03	1.06
4	01/20/2019 - 01/26/2019	1.02	1.05
5	01/27/2019 - 02/02/2019	1.01	1.04
6	02/03/2019 - 02/09/2019	1.00	1.03
7	02/10/2019 - 02/16/2019	0.99	1.02
8	02/17/2019 - 02/23/2019	0.98	1.01
9	02/24/2019 - 03/02/2019	0.97	1.00
10	03/03/2019 - 03/09/2019	0.96	0.99
11	03/10/2019 - 03/16/2019	0.95	0.98
12	03/17/2019 - 03/23/2019	0.96	0.99
13	03/24/2019 - 03/30/2019	0.96	0.99
14	03/31/2019 - 04/06/2019	0.97	1.00
15	04/07/2019 - 04/13/2019	0.97	1.00
16	04/14/2019 - 04/20/2019	0.98	1.01
17	04/21/2019 - 04/27/2019	0.99	1.02
18	04/28/2019 - 05/04/2019	1.00	1.03
19	05/05/2019 - 05/11/2019	1.00	1.03
20	05/12/2019 - 05/18/2019	1.01	1.04
21	05/19/2019 - 05/25/2019	1.01	1.04
22	05/26/2019 - 06/01/2019	1.02	1.05
23	06/02/2019 - 06/08/2019	1.02	1.05
24	06/09/2019 - 06/15/2019	1.02	1.05
25	06/16/2019 - 06/22/2019	1.02	1.05
26	06/23/2019 - 06/29/2019	1.02	1.05
27	06/30/2019 - 07/06/2019	1.02	1.05
28	07/07/2019 - 07/13/2019	1.02	1.05
29	07/14/2019 - 07/20/2019	1.02	1.05
30	07/21/2019 - 07/27/2019	1.03	1.06
31	07/28/2019 - 08/03/2019	1.03	1.06
32	08/04/2019 - 08/10/2019	1.04	1.07
33	08/11/2019 - 08/17/2019	1.04	1.07
34	08/18/2019 - 08/24/2019	1.06	1.09
35	08/25/2019 - 08/31/2019	1.08	1.11
36	09/01/2019 - 09/07/2019	1.10	1.13
37	09/08/2019 - 09/14/2019	1.12	1.15
38	09/15/2019 - 09/21/2019	1.14	1.18
39	09/22/2019 - 09/28/2019	1.11	1.14
40	09/29/2019 - 10/05/2019	1.08	1.11
*41	10/06/2019 - 10/12/2019	1.04	1.07
*42	10/13/2019 - 10/19/2019	1.01	1.04
*43	10/20/2019 - 10/26/2019	1.00	1.03
*44	10/27/2019 - 11/02/2019	0.98	1.01
*45	11/03/2019 - 11/09/2019	0.97	1.00
*46	11/10/2019 - 11/16/2019	0.95	0.98
*47	11/17/2019 - 11/23/2019	0.94	0.97
*48	11/24/2019 - 11/30/2019	0.94	0.97
*49	12/01/2019 - 12/07/2019	0.93	0.96
*50	12/08/2019 - 12/14/2019	0.93	0.96
*51	12/15/2019 - 12/21/2019	0.92	0.95
*52	12/22/2019 - 12/28/2019	0.98	1.01
*53	12/29/2019 - 12/31/2019	1.03	1.06

\* PEAK SEASON

**APPENDIX E**  
Turning Movement Volume Worksheets

INTERSECTION VOLUME DEVELOPMENT  
 SW Village Parkway @ SW Becker Road  
 PM Peak Hour

Case	SW Village Parkway Northbound			SW Village Parkway Southbound			SW Becker Road Eastbound			SW Becker Road Westbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
3/11/21 Observed Volumes	0	0	0	304	0	2	1	2	0	2	1	159
Peak Season Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
2021 Peak Season Volumes	0	0	0	304	0	2	1	2	0	2	1	159
Growth Factor	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03
2023 Peak Season Volumes	0	0	0	313	0	2	1	2	0	2	1	164
Reserved Trips												
Southern Grove DRI	2.3%	1.3%	2.4%	3.5%	1.3%	2.3%	3.4%	6.8%	2.3%	2.4%	7.7%	3.0%
	OUT	OUT	OUT	OUT	IN	OUT	IN	IN/OUT	IN	IN	IN/OUT	IN
Project Traffic (Net New Trips)	202	114	210	307	67	202	174	483	118	123	509	154
Reserved Trips	202	114	210	307	67	202	174	483	118	123	509	154
2023 Non-Project Traffic	202	114	210	620	67	204	175	485	118	125	510	318
Project Assignment	0.0%	0.0%	0.0%	40.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	25.0%
	--	--	--	OUT	--	--	--	--	--	--	--	IN
Project Traffic (Net New Trips)	0	0	0	18	0	0	0	0	0	0	0	23
Total Build-Out Volumes	202	114	210	638	67	204	175	485	118	125	510	341

Raw-To-Peak Season Factor: 1.00  
 Applied Growth Rate: 1.55%  
 Existing Year: 2021  
 Build-Out Year: 2023  
 Growth Factor: 1.03

INTERSECTION VOLUME DEVELOPMENT  
I-95 SB On-Ramp @ SW Becker Road  
PM Peak Hour

Case	I-95 SB On-Ramp Northbound			I-95 SB Off-Ramp Southbound			SW Becker Road Eastbound			SW Becker Road Westbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
3/11/21 Observed Volumes	0	0	0	454	0	4	0	178	130	186	159	0
Peak Season Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
2021 Peak Season Volumes	0	0	0	454	0	4	0	178	130	186	159	0
Growth Factor	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03
2023 Peak Season Volumes	0	0	0	468	0	4	0	184	134	192	164	0
Reserved Trips												
Southern Grove DRI	0.0%	0.0%	0.0%	0.0%	0.0%	3.8%	0.0%	8.5%	3.5%	0.0%	8.7%	0.0%
	--	--	--	--	--	IN	--	OUT	OUT	--	IN	--
Project Traffic (Net New Trips)	0	0	0	0	0	195	0	745	307	0	446	0
Reserved Trips	0	0	0	0	0	195	0	745	307	0	446	0
2023 Non-Project Traffic	0	0	0	468	0	199	0	929	441	192	610	0
Project Assignment	0.0%	0.0%	0.0%	0.0%	0.0%	30.0%	0.0%	45.0%	30.0%	0.0%	45.0%	0.0%
	--	--	--	--	--	IN	--	OUT	OUT	--	IN	--
Project Traffic (Net New Trips)	0	0	0	0	0	27	0	20	14	0	41	0
Total Build-Out Volumes	0	0	0	468	0	226	0	949	455	192	651	0

Raw-To-Peak Season Factor: 1.00  
Applied Growth Rate: 1.55%  
Existing Year: 2021  
Build-Out Year: 2023  
Growth Factor: 1.03



INTERSECTION VOLUME DEVELOPMENT  
I-95 NB On-Ramp @ SW Becker Road  
PM Peak Hour

Case	I-95 NB Off-Ramp Northbound			I-95 NB On-Ramp Southbound			SW Becker Road Eastbound			SW Becker Road Westbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
3/11/21 Observed Volumes	94	0	838	0	0	0	9	583	0	0	260	357
Peak Season Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
2021 Peak Season Volumes	94	0	838	0	0	0	9	583	0	0	260	357
Growth Factor	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03
2023 Peak Season Volumes	97	0	864	0	0	0	9	601	0	0	268	368
Reserved Trips												
Southern Grove DRI	3.6%	0.0%	0.0%	0.0%	0.0%	0.0%	3.4%	5.1%	0.0%	0.0%	5.1%	0.0%
	IN	--	--	--	--	--	OUT	OUT	--	--	IN	--
Project Traffic (Net New Trips)	185	0	0	0	0	0	298	447	0	0	262	0
Reserved Trips	185	0	0	0	0	0	298	447	0	0	262	0
2023 Non-Project Traffic	282	0	864	0	0	0	307	1,048	0	0	530	368
Project Assignment	30.0%	0.0%	0.0%	0.0%	0.0%	0.0%	30.0%	15.0%	0.0%	0.0%	15.0%	0.0%
	IN	--	--	--	--	--	OUT	OUT	--	--	IN	--
Project Traffic (Net New Trips)	27	0	0	0	0	0	14	7	0	0	14	0
Total Build-Out Volumes	309	0	864	0	0	0	321	1,055	0	0	544	368

Raw-To-Peak Season Factor: 1.00  
Applied Growth Rate: 1.55%  
Existing Year: 2021  
Build-Out Year: 2023  
Growth Factor: 1.03

INTERSECTION VOLUME DEVELOPMENT  
 SW Village Parkway @ Driveway Access 1  
 PM Peak Hour

Case	SW Village Parkway Northbound			SW Village Parkway Southbound			Paar Drive Eastbound			Driveway Access 1 Westbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
3/11/21 Observed Volumes	0	160	0	0	306	0	0	0	0	0	0	0
Peak Season Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
2021 Peak Season Volumes	0	160	0	0	306	0	0	0	0	0	0	0
Growth Factor	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03
2023 Peak Season Volumes	0	165	0	0	315	0	0	0	0	0	0	0
Reserved Trips												
Southern Grove DRI	3.0%	4.1%	2.6%	4.7%	5.4%	7.3%	5.2%	3.6%	3.4%	2.6%	3.6%	4.7%
	IN	IN/OUT	IN	IN	IN	IN	OUT	IN	OUT	OUT	OUT	OUT
Project Traffic (Net New Trips)	154	295	133	241	277	375	456	185	298	228	316	412
Reserved Trips	154	295	133	241	277	375	456	185	298	228	316	412
2023 Non-Project Traffic	154	460	133	241	592	375	456	185	298	228	316	412
Project Assignment	0.0%	15.0%	0.0%	15.0%	10.0%	0.0%	0.0%	0.0%	0.0%	10.0%	0.0%	10.0%
	--	OUT	--	IN	IN	--	--	--	--	OUT	--	OUT
Project Traffic (Net New Trips)	0	7	0	14	9	0	0	0	0	5	0	5
Total Build-Out Volumes	154	467	133	255	601	375	456	185	298	233	316	417

Raw-To-Peak Season Factor: 1.00  
 Applied Growth Rate: 1.55%  
 Existing Year: 2021  
 Build-Out Year: 2023  
 Growth Factor: 1.03

INTERSECTION VOLUME DEVELOPMENT  
 SW Village Parkway @ Driveway Access 2  
 PM Peak Hour

Case	SW Village Parkway Northbound			SW Village Parkway Southbound			Future Driveway Connection Eastbound			Westbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
3/11/21 Observed Volumes	0	160	0	0	306	0	0	0	0	0	0	0
Peak Season Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
2021 Peak Season Volumes	0	160	0	0	306	0	0	0	0	0	0	0
Growth Factor	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03
2023 Peak Season Volumes	0	165	0	0	315	0	0	0	0	0	0	0
Reserved Trips												
Southern Grove DRI	0.4%	6.0%	2.1%	2.0%	6.0%	0.4%	0.4%	0.1%	0.4%	2.1%	0.1%	2.0%
	IN	IN/OUT	IN	IN	IN/OUT	IN	OUT	IN	OUT	OUT	OUT	OUT
Project Traffic (Net New Trips)	18	433	108	103	394	18	31	5	31	184	9	175
Reserved Trips	18	433	108	103	394	18	31	5	31	184	9	175
2023 Non-Project Traffic	18	598	108	103	709	18	31	5	31	184	9	175
Project Assignment	0.0%	5.0%	20.0%	10.0%	10.0%	0.0%	0.0%	0.0%	0.0%	25.0%	0.0%	10.0%
	--	OUT	IN	IN	OUT	--	--	--	--	OUT	--	OUT
Project Traffic (Net New Trips)	0	2	18	9	5	0	0	0	0	11	0	5
Total Build-Out Volumes	18	600	126	112	714	18	31	5	31	195	9	180

Raw-To-Peak Season Factor: 1.00  
 Applied Growth Rate: 1.55%  
 Existing Year: 2021  
 Build-Out Year: 2023  
 Growth Factor: 1.03

INTERSECTION VOLUME DEVELOPMENT  
 SW Village Parkway @ Driveway Access 3  
 PM Peak Hour

Case	SW Village Parkway Northbound			SW Village Parkway Southbound			Future Driveway Connection Eastbound			Westbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
3/11/21 Observed Volumes	0	160	0	0	306	0	0	0	0	0	0	0
Peak Season Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
2021 Peak Season Volumes	0	160	0	0	306	0	0	0	0	0	0	0
Growth Factor	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03
2023 Peak Season Volumes	0	165	0	0	315	0	0	0	0	0	0	0
Reserved Trips												
Southern Grove DRI	0.4%	4.7%	2.0%	2.1%	4.7%	0.4%	0.4%	0.1%	0.4%	2.0%	0.1%	2.1%
	IN	OUT	IN	IN	OUT	IN	OUT	IN	OUT	OUT	OUT	OUT
Project Traffic (Net New Trips)	18	408	103	108	408	18	31	5	31	175	9	184
Reserved Trips	18	408	103	108	408	18	31	5	31	175	9	184
2023 Non-Project Traffic	18	573	103	108	723	18	31	5	31	175	9	184
Project Assignment	0.0%	20.0%	5.0%	0.0%	35.0%	0.0%	0.0%	0.0%	0.0%	5.0%	0.0%	5.0%
	--	IN	IN	--	OUT	--	--	--	--	OUT	--	OUT
Project Traffic (Net New Trips)	0	18	5	0	16	0	0	0	0	2	0	2
Total Build-Out Volumes	18	591	108	108	739	18	31	5	31	177	9	186

Raw-To-Peak Season Factor: 1.00  
 Applied Growth Rate: 1.55%  
 Existing Year: 2021  
 Build-Out Year: 2023  
 Growth Factor: 1.03

INTERSECTION VOLUME DEVELOPMENT  
 Driveway Access 4 @ SW Becker Road  
 PM Peak Hour

Case	Future Driveway Connection Northbound			Driveway Access 4 Southbound			SW Becker Road Eastbound			SW Becker Road Westbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
3/11/21 Observed Volumes	0	0	0	0	0	0	0	308	0	0	163	0
Peak Season Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
2021 Peak Season Volumes	0	0	0	0	0	0	0	308	0	0	163	0
Growth Factor	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03
2023 Peak Season Volumes	0	0	0	0	0	0	0	318	0	0	168	0
Reserved Trips												
Southern Grove DRI	2.0%	1.0%	2.0%	6.6%	1.0%	3.1%	3.1%	8.0%	2.0%	2.0%	9.0%	3.1%
	OUT	IN	OUT	OUT	OUT	OUT	IN	OUT	IN	IN	IN/OUT	IN
Project Traffic (Net New Trips)	175	51	175	579	88	274	160	699	103	103	576	160
Reserved Trips	175	51	175	579	88	274	160	699	103	103	576	160
2023 Non-Project Traffic	175	51	175	579	88	274	160	1,017	103	103	744	160
Project Assignment	0.0%	0.0%	0.0%	20.0%	0.0%	0.0%	0.0%	40.0%	0.0%	0.0%	25.0%	30.0%
	--	--	--	OUT	--	--	--	OUT	--	--	IN	IN
Project Traffic (Net New Trips)	0	0	0	9	0	0	0	18	0	0	23	27
Total Build-Out Volumes	175	51	175	588	88	274	160	1,035	103	103	767	187

Raw-To-Peak Season Factor: 1.00  
 Applied Growth Rate: 1.55%  
 Existing Year: 2021  
 Build-Out Year: 2023  
 Growth Factor: 1.03

INTERSECTION VOLUME DEVELOPMENT  
 Driveway Access 5 @ SW Becker Road  
 PM Peak Hour

Case	N/A Northbound			Driveway Access 5 Southbound			SW Becker Road Eastbound			SW Becker Road Westbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
3/11/21 Observed Volumes	0	0	0	0	0	0	0	308	0	0	163	0
Peak Season Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
2021 Peak Season Volumes	0	0	0	0	0	0	0	308	0	0	163	0
Growth Factor	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03
2023 Peak Season Volumes	0	0	0	0	0	0	0	318	0	0	168	0
Reserved Trips												
Southern Grove DRI	0.0%	0.0%	0.0%	3.5%	0.0%	3.1%	0.0%	13.7%	0.0%	0.0%	13.1%	6.3%
	--	--	--	OUT	--	OUT	--	OUT	--	--	IN	IN
Project Traffic (Net New Trips)	0	0	0	307	0	274	0	1,199	0	0	673	321
Reserved Trips	0	0	0	307	0	274	0	1,199	0	0	673	321
2023 Non-Project Traffic	0	0	0	307	0	274	0	1,517	0	0	841	321
Project Assignment	0.0%	0.0%	0.0%	15.0%	0.0%	0.0%	0.0%	60.0%	0.0%	0.0%	55.0%	20.0%
	--	--	--	OUT	--	--	--	OUT	--	--	IN	IN
Project Traffic (Net New Trips)	0	0	0	7	0	0	0	27	0	0	50	18
Total Build-Out Volumes	0	0	0	314	0	274	0	1,544	0	0	891	339

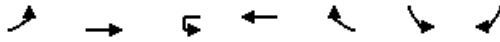
Raw-To-Peak Season Factor: 1.00  
 Applied Growth Rate: 1.55%  
 Existing Year: 2021  
 Build-Out Year: 2023  
 Growth Factor: 1.03

# APPENDIX F

## Synchro Outputs

Lanes, Volumes, Timings  
 1: SW Becker Road & SW Village Parkway

2021 Existing Traffic Conditions  
 Timing Plan: PM Peak Hour



Lane Group	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations	↑	↑↑↑	↑	↑	↑	↑	↑
Traffic Volume (vph)	1	2	2	1	159	304	2
Future Volume (vph)	1	2	2	1	159	304	2
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	2%	2%	2%	2%	2%	5%	5%
Adj. Flow (vph)	1	2	2	1	179	342	2
Shared Lane Traffic (%)							
Lane Group Flow (vph)	1	2	2	1	179	342	2
Turn Type	Prot	NA	Prot	NA	pm+ov	Prot	Perm
Protected Phases	1	6	5	2	8	8	
Permitted Phases					2		8
Detector Phase	1	6	5	2	8	8	8
Switch Phase							
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	13.8	13.8	13.8	13.8	13.8	13.8	13.8
Total Split (s)	15.0	50.0	15.0	50.0	55.0	55.0	55.0
Total Split (%)	12.5%	41.7%	12.5%	41.7%	45.8%	45.8%	45.8%
Yellow Time (s)	4.8	4.8	4.8	4.8	4.8	4.8	4.8
All-Red Time (s)	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
Total Lost Time (s)	6.8	6.8	6.8	6.8	6.8	6.8	6.8
Lead/Lag	Lead	Lag	Lead	Lag			
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			
Recall Mode	None	Max	None	C-Max	None	None	None
v/c Ratio	0.01	0.00	0.02	0.00	0.12	0.80	0.01
Control Delay	54.0	15.0	44.5	14.0	1.5	55.5	19.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	54.0	15.0	44.5	14.0	1.5	55.5	19.5
Queue Length 50th (ft)	1	0	1	0	0	249	0
Queue Length 95th (ft)	7	2	9	3	12	318	6
Internal Link Dist (ft)		413		3700		1151	
Turn Bay Length (ft)							
Base Capacity (vph)	120	3121	120	1143	1555	690	618
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.01	0.00	0.02	0.00	0.12	0.50	0.00

Intersection Summary

Cycle Length: 120

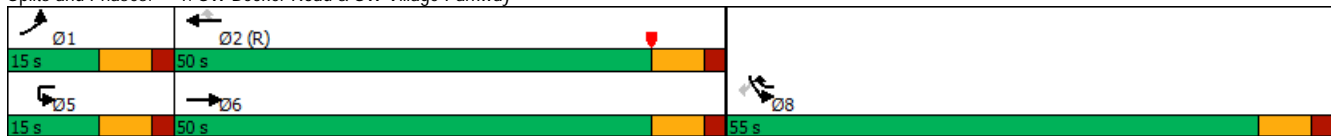
Actuated Cycle Length: 120

Offset: 108 (90%), Referenced to phase 2:WBT, Start of Yellow

Natural Cycle: 50

Control Type: Actuated-Coordinated

Splits and Phases: 1: SW Becker Road & SW Village Parkway





HCM 6th Signalized Intersection Summary  
 1: SW Becker Road & SW Village Parkway

2021 Existing Traffic Conditions  
 Timing Plan: PM Peak Hour



Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations	↖	↗↗↗	↖	↗	↗	↖	↗
Traffic Volume (veh/h)	1	2	2	1	159	304	2
Future Volume (veh/h)	1	2	2	1	159	304	2
Initial Q (Qb), veh	0	0		0	0	0	0
Ped-Bike Adj(A_pbT)	1.00				1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00		1.00	1.00	1.00	1.00
Work Zone On Approach		No		No		No	
Adj Sat Flow, veh/h/ln	1870	1870		1870	1870	1826	1826
Adj Flow Rate, veh/h	1	2		1	8	342	2
Peak Hour Factor	0.89	0.89		0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2		2	2	5	5
Cap, veh/h	3	3422		1144	1313	377	335
Arrive On Green	0.00	0.67		0.61	0.61	0.22	0.22
Sat Flow, veh/h	1781	5274		1870	1585	1739	1547
Grp Volume(v), veh/h	1	2		1	8	342	2
Grp Sat Flow(s),veh/h/ln	1781	1702		1870	1585	1739	1547
Q Serve(g_s), s	0.1	0.0		0.0	0.1	23.0	0.1
Cycle Q Clear(g_c), s	0.1	0.0		0.0	0.1	23.0	0.1
Prop In Lane	1.00				1.00	1.00	1.00
Lane Grp Cap(c), veh/h	3	3422		1144	1313	377	335
V/C Ratio(X)	0.29	0.00		0.00	0.01	0.91	0.01
Avail Cap(c_a), veh/h	122	3422		1144	1313	698	622
HCM Platoon Ratio	1.00	1.00		1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00		1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	59.8	6.5		9.1	1.8	45.8	36.9
Incr Delay (d2), s/veh	41.9	0.0		0.0	0.0	8.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0		0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0		0.0	0.1	10.5	0.0
Unsig. Movement Delay, s/veh							
LnGrp Delay(d),s/veh	101.7	6.5		9.1	1.8	54.3	36.9
LnGrp LOS	F	A		A	A	D	D
Approach Vol, veh/h		3		9		344	
Approach Delay, s/veh		38.3		2.6		54.2	
Approach LOS		D		A		D	
Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	7.0	80.2				87.2	32.8
Change Period (Y+Rc), s	6.8	6.8				6.8	6.8
Max Green Setting (Gmax), s	8.2	43.2				43.2	48.2
Max Q Clear Time (g_c+I1), s	2.1	2.1				2.0	25.0
Green Ext Time (p_c), s	0.0	0.0				0.0	1.0

Intersection Summary

HCM 6th Ctrl Delay	52.8
HCM 6th LOS	D

Notes

User approved ignoring U-Turning movement.

Lanes, Volumes, Timings  
 2: I-95 SB On-Ramp/I-95 SB Off-Ramp & SW Becker Road

2021 Existing Traffic Conditions  
 Timing Plan: PM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑↑	↑	↑↑	↑↑↑					↑↑		↑
Traffic Volume (vph)	0	178	130	186	159	0	0	0	0	454	0	4
Future Volume (vph)	0	178	130	186	159	0	0	0	0	454	0	4
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	2%	2%	2%	2%	2%	2%
Adj. Flow (vph)	0	191	140	200	171	0	0	0	0	488	0	4
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	191	140	200	171	0	0	0	0	488	0	4
Turn Type		NA	Perm	Prot	NA					Prot		Prot
Protected Phases		6		5	2					3		8
Permitted Phases			6									
Detector Phase		6	6	5	2					3		8
Switch Phase												
Minimum Initial (s)		10.0	10.0	7.0	10.0					7.0		7.0
Minimum Split (s)		16.8	16.8	13.8	16.8					13.8		13.8
Total Split (s)		50.0	50.0	15.0	65.0					55.0		55.0
Total Split (%)		41.7%	41.7%	12.5%	54.2%					45.8%		45.8%
Yellow Time (s)		4.8	4.8	4.8	4.8					4.8		4.8
All-Red Time (s)		2.0	2.0	2.0	2.0					2.0		2.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0					0.0		0.0
Total Lost Time (s)		6.8	6.8	6.8	6.8					6.8		6.8
Lead/Lag		Lag	Lag	Lead								
Lead-Lag Optimize?		Yes	Yes	Yes								
Recall Mode		Max	Max	None	C-Max					None		None
v/c Ratio		0.05	0.16	0.55	0.05					0.75		0.01
Control Delay		1.0	1.4	48.6	5.9					53.1		0.0
Queue Delay		0.0	0.0	0.0	0.0					0.0		0.0
Total Delay		1.0	1.4	48.6	5.9					53.1		0.0
Queue Length 50th (ft)		0	0	79	20					185		0
Queue Length 95th (ft)		9	37	64	5					230		0
Internal Link Dist (ft)		3700			360		547				879	
Turn Bay Length (ft)			550							540		540
Base Capacity (vph)		3928	890	366	3474					1378		693
Starvation Cap Reductn		0	0	0	0					0		0
Spillback Cap Reductn		0	0	0	0					0		0
Storage Cap Reductn		0	0	0	0					0		0
Reduced v/c Ratio		0.05	0.16	0.55	0.05					0.35		0.01

Intersection Summary

Cycle Length: 120

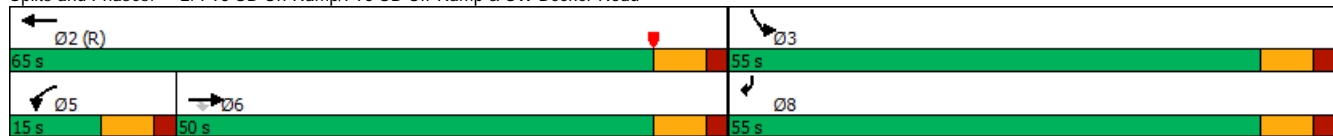
Actuated Cycle Length: 120

Offset: 118 (98%), Referenced to phase 2:WBT, Start of Yellow

Natural Cycle: 45

Control Type: Actuated-Coordinated

Splits and Phases: 2: I-95 SB On-Ramp/I-95 SB Off-Ramp & SW Becker Road



HCM 6th Signalized Intersection Summary  
 2: I-95 SB On-Ramp/I-95 SB Off-Ramp & SW Becker Road

2021 Existing Traffic Conditions  
 Timing Plan: PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑↑	↗	↘↗	↑↑↑					↘↗		↗
Traffic Volume (veh/h)	0	178	130	186	159	0	0	0	0	454	0	4
Future Volume (veh/h)	0	178	130	186	159	0	0	0	0	454	0	4
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1841	1841	1841	1841	0				1870	0	1870
Adj Flow Rate, veh/h	0	191	0	200	171	0				488	0	4
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93				0.93	0.93	0.93
Percent Heavy Veh, %	0	4	4	4	4	0				2	0	2
Cap, veh/h	0	4422		232	3609	0				582	0	267
Arrive On Green	0.00	0.59	0.00	0.07	0.72	0.00				0.17	0.00	0.17
Sat Flow, veh/h	0	7805	1560	3401	5191	0				3456	0	1585
Grp Volume(v), veh/h	0	191	0	200	171	0				488	0	4
Grp Sat Flow(s),veh/h/ln	0	1491	1560	1700	1675	0				1728	0	1585
Q Serve(g_s), s	0.0	1.3	0.0	7.0	1.2	0.0				16.4	0.0	0.3
Cycle Q Clear(g_c), s	0.0	1.3	0.0	7.0	1.2	0.0				16.4	0.0	0.3
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	4422		232	3609	0				582	0	267
V/C Ratio(X)	0.00	0.04		0.86	0.05	0.00				0.84	0.00	0.01
Avail Cap(c_a), veh/h	0	4422		232	3609	0				1388	0	637
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.52	0.00	1.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	10.2	0.0	55.3	4.9	0.0				48.3	0.0	41.6
Incr Delay (d2), s/veh	0.0	0.0	0.0	26.3	0.0	0.0				3.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.4	0.0	3.8	0.4	0.0				7.3	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	10.2	0.0	81.7	5.0	0.0				51.6	0.0	41.6
LnGrp LOS	A	B		F	A	A				D	A	D
Approach Vol, veh/h		191	A		371						492	
Approach Delay, s/veh		10.2			46.3						51.5	
Approach LOS		B			D						D	
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		93.0			15.0	78.0		27.0				
Change Period (Y+Rc), s		6.8			6.8	6.8		6.8				
Max Green Setting (Gmax), s		58.2			8.2	43.2		48.2				
Max Q Clear Time (g_c+I1), s		3.2			9.0	3.3		18.4				
Green Ext Time (p_c), s		1.1			0.0	1.2		1.8				

Intersection Summary

HCM 6th Ctrl Delay	42.2
HCM 6th LOS	D

Notes

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

Lanes, Volumes, Timings  
 3: I-95 NB Off-Ramp/I-95 NB On-Ramp & SW Becker Road

2021 Existing Traffic Conditions  
 Timing Plan: PM Peak Hour

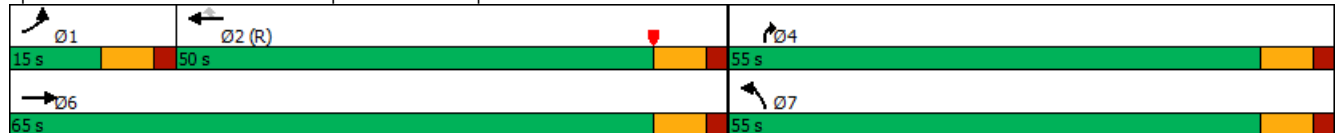


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔	↑↑↑			↑↑↑↑	↔	↔		↔↔			
Traffic Volume (vph)	9	583	0	0	260	357	94	0	838	0	0	0
Future Volume (vph)	9	583	0	0	260	357	94	0	838	0	0	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	2%	2%	7%	7%	7%	2%	2%	2%	2%	2%	2%
Adj. Flow (vph)	9	614	0	0	274	376	99	0	882	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	9	614	0	0	274	376	99	0	882	0	0	0
Turn Type	Prot	NA			NA	Perm	Prot		Prot			
Protected Phases	1	6			2		7		4			
Permitted Phases						2						
Detector Phase	1	6			2	2	7		4			
Switch Phase												
Minimum Initial (s)	7.0	7.0			7.0	7.0	7.0		7.0			
Minimum Split (s)	13.8	13.8			13.8	13.8	13.8		13.8			
Total Split (s)	15.0	65.0			50.0	50.0	55.0		55.0			
Total Split (%)	12.5%	54.2%			41.7%	41.7%	45.8%		45.8%			
Yellow Time (s)	4.8	4.8			4.8	4.8	4.8		4.8			
All-Red Time (s)	2.0	2.0			2.0	2.0	2.0		2.0			
Lost Time Adjust (s)	0.0	0.0			0.0	0.0	0.0		0.0			
Total Lost Time (s)	6.8	6.8			6.8	6.8	6.8		6.8			
Lead/Lag	Lead				Lag	Lag						
Lead-Lag Optimize?	Yes				Yes	Yes						
Recall Mode	None	Min			C-Min	C-Min	None		None			
v/c Ratio	0.04	0.20			0.06	0.36	0.21		0.87			
Control Delay	46.9	3.1			12.5	3.0	32.8		33.2			
Queue Delay	0.0	0.0			0.0	0.0	0.0		0.0			
Total Delay	46.9	3.1			12.5	3.0	32.8		33.2			
Queue Length 50th (ft)	3	4			19	0	59		230			
Queue Length 95th (ft)	m7	160			44	58	93		284			
Internal Link Dist (ft)		360			1273			780		740		
Turn Bay Length (ft)						340	610		610			
Base Capacity (vph)	234	3144			4282	1050	710		1339			
Starvation Cap Reductn	0	0			0	0	0		0			
Spillback Cap Reductn	0	0			0	0	0		0			
Storage Cap Reductn	0	0			0	0	0		0			
Reduced v/c Ratio	0.04	0.20			0.06	0.36	0.14		0.66			

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 116 (97%), Referenced to phase 2:WBT, Start of Yellow  
 Natural Cycle: 60  
 Control Type: Actuated-Coordinated  
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: I-95 NB Off-Ramp/I-95 NB On-Ramp & SW Becker Road



HCM 6th Signalized Intersection Summary  
 3: I-95 NB Off-Ramp/I-95 NB On-Ramp & SW Becker Road

2021 Existing Traffic Conditions  
 Timing Plan: PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔	↑↑↑			↑↑↑↑	↔	↔		↔↔			
Traffic Volume (veh/h)	9	583	0	0	260	357	94	0	838	0	0	0
Future Volume (veh/h)	9	583	0	0	260	357	94	0	838	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1796	1796	1870	0	1870			
Adj Flow Rate, veh/h	9	614	0	0	274	0	99	0	873			
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95			
Percent Heavy Veh, %	2	2	0	0	7	7	2	0	2			
Cap, veh/h	52	2778	0	0	3436		610	0	956			
Arrive On Green	0.02	0.54	0.00	0.00	0.47	0.00	0.34	0.00	0.34			
Sat Flow, veh/h	3456	5274	0	0	7616	1522	1781	0	2790			
Grp Volume(v), veh/h	9	614	0	0	274	0	99	0	873			
Grp Sat Flow(s),veh/h/ln	1728	1702	0	0	1455	1522	1781	0	1395			
Q Serve(g_s), s	0.3	7.5	0.0	0.0	2.5	0.0	4.6	0.0	35.9			
Cycle Q Clear(g_c), s	0.3	7.5	0.0	0.0	2.5	0.0	4.6	0.0	35.9			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	52	2778	0	0	3436		610	0	956			
V/C Ratio(X)	0.17	0.22	0.00	0.00	0.08		0.16	0.00	0.91			
Avail Cap(c_a), veh/h	236	2778	0	0	3436		715	0	1121			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.82	0.82	0.00	0.00	1.00	0.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	58.4	14.2	0.0	0.0	17.4	0.0	27.5	0.0	37.7			
Incr Delay (d2), s/veh	1.3	0.0	0.0	0.0	0.0	0.0	0.1	0.0	10.3			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.1	2.7	0.0	0.0	0.8	0.0	2.0	0.0	13.3			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	59.6	14.2	0.0	0.0	17.4	0.0	27.6	0.0	48.0			
LnGrp LOS	E	B	A	A	B		C	A	D			
Approach Vol, veh/h		623			274	A		972				
Approach Delay, s/veh		14.9			17.4			46.0				
Approach LOS		B			B			D				
Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	8.6	63.5		47.9		72.1						
Change Period (Y+Rc), s	6.8	6.8		6.8		6.8						
Max Green Setting (Gmax), s	8.2	43.2		48.2		58.2						
Max Q Clear Time (g_c+I1), s	2.3	4.5		37.9		9.5						
Green Ext Time (p_c), s	0.0	1.8		3.2		4.3						

Intersection Summary

HCM 6th Ctrl Delay	31.4
HCM 6th LOS	C

Notes

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

Lanes, Volumes, Timings  
1: SW Village Parkway & SW Becker Road

2023 Future Background Traffic Conditions  
Timing Plan: PM Peak Hour

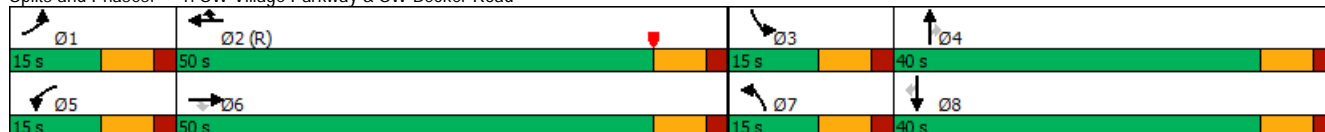


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗↗↗	↘	↖↖	↗↗↗	↘↘	↖	↗↗	↘	↖↖	↗↗	↘↘
Traffic Volume (vph)	175	485	118	125	510	318	202	114	210	620	67	204
Future Volume (vph)	175	485	118	125	510	318	202	114	210	620	67	204
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	5%	5%	5%
Adj. Flow (vph)	197	545	133	140	573	357	227	128	236	697	75	229
Shared Lane Traffic (%)												
Lane Group Flow (vph)	197	545	133	140	573	357	227	128	236	697	75	229
Turn Type	Prot	NA	Perm	Prot	NA	Prot	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2	2	7	4		3	8	
Permitted Phases			6						4			8
Detector Phase	1	6	6	5	2	2	7	4	4	3	8	8
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8
Total Split (s)	15.0	50.0	50.0	15.0	50.0	50.0	15.0	40.0	40.0	15.0	40.0	40.0
Total Split (%)	12.5%	41.7%	41.7%	12.5%	41.7%	41.7%	12.5%	33.3%	33.3%	12.5%	33.3%	33.3%
Yellow Time (s)	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8
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	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	0.0
Total Lost Time (s)	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Max	Max	None	C-Max	C-Max	None	None	None	None	None	None
v/c Ratio	0.49	0.20	0.14	0.48	0.29	0.27	1.89	0.42	0.67	3.07	0.26	0.67
Control Delay	46.6	15.5	2.0	54.0	25.0	4.2	461.4	55.7	16.4	962.4	52.4	16.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	46.6	15.5	2.0	54.0	25.0	4.2	461.4	55.7	16.4	962.4	52.4	16.8
Queue Length 50th (ft)	137	76	0	55	105	3	-268	50	0	-484	29	0
Queue Length 95th (ft)	213	113	22	86	140	30	#423	78	72	#596	51	72
Internal Link Dist (ft)		413			1122			602			1192	
Turn Bay Length (ft)	320		320	400		400	300		300	570		340
Base Capacity (vph)	399	2717	919	296	2002	1313	120	979	608	227	951	591
Starvation Cap Reductn	0	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	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.49	0.20	0.14	0.47	0.29	0.27	1.89	0.13	0.39	3.07	0.08	0.39

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 108 (90%), Referenced to phase 2:WBT, Start of Yellow  
 Natural Cycle: 75  
 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.

Splits and Phases: 1: SW Village Parkway & SW Becker Road



HCM 6th Signalized Intersection Summary  
1: SW Village Parkway & SW Becker Road

2023 Future Background Traffic Conditions  
Timing Plan: PM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	175	485	118	125	510	318	202	114	210	620	67	204
Future Volume (veh/h)	175	485	118	125	510	318	202	114	210	620	67	204
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1826	1826	1826
Adj Flow Rate, veh/h	197	545	133	140	573	323	227	128	236	697	75	218
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	5	5	5
Cap, veh/h	122	2428	754	200	2374	1297	122	610	272	231	596	266
Arrive On Green	0.07	0.48	0.48	0.06	0.46	0.46	0.07	0.17	0.17	0.07	0.17	0.17
Sat Flow, veh/h	1781	5106	1585	3456	5106	2790	1781	3554	1585	3374	3469	1547
Grp Volume(v), veh/h	197	545	133	140	573	323	227	128	236	697	75	218
Grp Sat Flow(s),veh/h/ln	1781	1702	1585	1728	1702	1395	1781	1777	1585	1687	1735	1547
Q Serve(g_s), s	8.2	7.5	5.8	4.8	8.1	8.4	8.2	3.7	17.4	8.2	2.2	16.3
Cycle Q Clear(g_c), s	8.2	7.5	5.8	4.8	8.1	8.4	8.2	3.7	17.4	8.2	2.2	16.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	122	2428	754	200	2374	1297	122	610	272	231	596	266
V/C Ratio(X)	1.62	0.22	0.18	0.70	0.24	0.25	1.86	0.21	0.87	3.02	0.13	0.82
Avail Cap(c_a), veh/h	122	2428	754	236	2374	1297	122	983	439	231	960	428
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.9	18.5	18.0	55.5	19.4	19.4	55.9	42.7	48.4	55.9	42.1	47.9
Incr Delay (d2), s/veh	312.7	0.2	0.5	7.3	0.2	0.5	418.8	0.2	10.1	922.1	0.1	6.6
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	14.2	2.9	2.1	2.2	3.1	2.7	17.8	1.6	7.4	32.9	0.9	6.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	368.6	18.7	18.5	62.8	19.6	19.9	474.7	42.9	58.5	978.0	42.2	54.5
LnGrp LOS	F	B	B	E	B	B	F	D	E	F	D	D
Approach Vol, veh/h		875			1036			591			990	
Approach Delay, s/veh		97.5			25.5			215.0			703.7	
Approach LOS		F			C			F			F	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	15.0	62.6	15.0	27.4	13.7	63.9	15.0	27.4				
Change Period (Y+Rc), s	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8				
Max Green Setting (Gmax), s	8.2	43.2	8.2	33.2	8.2	43.2	8.2	33.2				
Max Q Clear Time (g_c+I1), s	10.2	10.4	10.2	19.4	6.8	9.5	10.2	18.3				
Green Ext Time (p_c), s	0.0	5.3	0.0	1.2	0.1	4.1	0.0	0.9				

Intersection Summary												
HCM 6th Ctrl Delay											267.9	
HCM 6th LOS											F	

Notes

User approved ignoring U-Turning movement.

Lanes, Volumes, Timings  
 2: I-95 SB On-Ramp/I-95 SB Off-Ramp & SW Becker Road

2023 Future Background Traffic Conditions  
 Timing Plan: PM Peak Hour

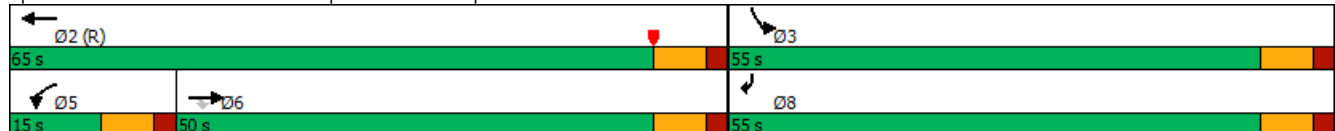


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑↑	↑	↑↓	↑↑↑					↑↓		↑
Traffic Volume (vph)	0	929	441	192	610	0	0	0	0	468	0	199
Future Volume (vph)	0	929	441	192	610	0	0	0	0	468	0	199
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	2%	2%	2%	2%	2%	2%
Adj. Flow (vph)	0	999	474	206	656	0	0	0	0	503	0	214
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	999	474	206	656	0	0	0	0	503	0	214
Turn Type		NA	Perm	Prot	NA					Prot		Prot
Protected Phases		6		5	2					3		8
Permitted Phases			6									
Detector Phase		6	6	5	2					3		8
Switch Phase												
Minimum Initial (s)		10.0	10.0	7.0	10.0					7.0		7.0
Minimum Split (s)		16.8	16.8	13.8	16.8					13.8		13.8
Total Split (s)		50.0	50.0	15.0	65.0					55.0		55.0
Total Split (%)		41.7%	41.7%	12.5%	54.2%					45.8%		45.8%
Yellow Time (s)		4.8	4.8	4.8	4.8					4.8		4.8
All-Red Time (s)		2.0	2.0	2.0	2.0					2.0		2.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0					0.0		0.0
Total Lost Time (s)		6.8	6.8	6.8	6.8					6.8		6.8
Lead/Lag		Lag	Lag	Lead								
Lead-Lag Optimize?		Yes	Yes	Yes								
Recall Mode		Max	Max	None	C-Max					None		None
v/c Ratio		0.26	0.46	0.55	0.19					0.75		0.47
Control Delay		14.3	2.4	58.9	7.1					52.8		11.8
Queue Delay		0.0	0.0	0.0	0.0					0.0		0.0
Total Delay		14.3	2.4	58.9	7.1					52.8		11.8
Queue Length 50th (ft)		110	0	85	64					191		19
Queue Length 95th (ft)		m127	m89	124	79					236		83
Internal Link Dist (ft)		1265			360			547			879	
Turn Bay Length (ft)			550							540		540
Base Capacity (vph)		3873	1038	376	3451					1378		746
Starvation Cap Reductn		0	0	0	0					0		0
Spillback Cap Reductn		0	0	0	0					0		0
Storage Cap Reductn		0	0	0	0					0		0
Reduced v/c Ratio		0.26	0.46	0.55	0.19					0.37		0.29

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 118 (98%), Referenced to phase 2:WBT, Start of Yellow  
 Natural Cycle: 55  
 Control Type: Actuated-Coordinated  
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: I-95 SB On-Ramp/I-95 SB Off-Ramp & SW Becker Road





HCM 6th Signalized Intersection Summary  
 2: I-95 SB On-Ramp/I-95 SB Off-Ramp & SW Becker Road

2023 Future Background Traffic Conditions  
 Timing Plan: PM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑↑	↗	↘↗	↑↑↑					↘↗		↗
Traffic Volume (veh/h)	0	929	441	192	610	0	0	0	0	468	0	199
Future Volume (veh/h)	0	929	441	192	610	0	0	0	0	468	0	199
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1841	1841	1841	1841	0				1870	0	1870
Adj Flow Rate, veh/h	0	999	0	206	656	0				503	0	214
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93				0.93	0.93	0.93
Percent Heavy Veh, %	0	4	4	4	4	0				2	0	2
Cap, veh/h	0	4343		232	3556	0				619	0	284
Arrive On Green	0.00	0.58	0.00	0.14	1.00	0.00				0.18	0.00	0.18
Sat Flow, veh/h	0	7805	1560	3401	5191	0				3456	0	1585
Grp Volume(v), veh/h	0	999	0	206	656	0				503	0	214
Grp Sat Flow(s), veh/h/ln	0	1491	1560	1700	1675	0				1728	0	1585
Q Serve(g_s), s	0.0	7.8	0.0	7.1	0.0	0.0				16.8	0.0	15.4
Cycle Q Clear(g_c), s	0.0	7.8	0.0	7.1	0.0	0.0				16.8	0.0	15.4
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	4343		232	3556	0				619	0	284
V/C Ratio(X)	0.00	0.23		0.89	0.18	0.00				0.81	0.00	0.75
Avail Cap(c_a), veh/h	0	4343		232	3556	0				1388	0	637
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	0.96	0.96	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	12.1	0.0	51.3	0.0	0.0				47.3	0.0	46.7
Incr Delay (d2), s/veh	0.0	0.1	0.0	30.0	0.1	0.0				2.6	0.0	4.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	0.0	2.4	0.0	3.7	0.0	0.0				7.4	0.0	6.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	12.2	0.0	81.4	0.1	0.0				50.0	0.0	50.8
LnGrp LOS	A	B		F	A	A				D	A	D
Approach Vol, veh/h		999	A		862						717	
Approach Delay, s/veh		12.2			19.5						50.2	
Approach LOS		B			B						D	
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		91.7			15.0	76.7		28.3				
Change Period (Y+Rc), s		6.8			6.8	6.8		6.8				
Max Green Setting (Gmax), s		58.2			8.2	43.2		48.2				
Max Q Clear Time (g_c+I1), s		2.0			9.1	9.8		18.8				
Green Ext Time (p_c), s		4.7			0.0	7.5		2.7				

Intersection Summary

HCM 6th Ctrl Delay	25.2
HCM 6th LOS	C

Notes

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

Lanes, Volumes, Timings  
 3: I-95 NB Off-Ramp/I-95 NB On-Ramp & SW Becker Road

2023 Future Background Traffic Conditions  
 Timing Plan: PM Peak Hour

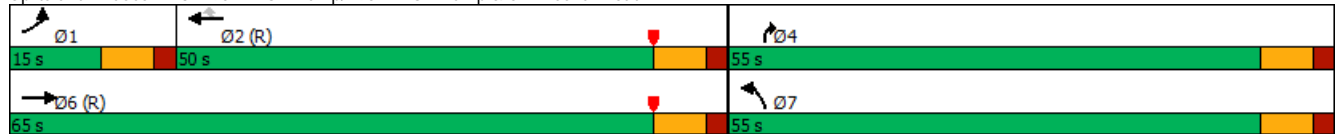


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	307	1048	0	0	530	368	282	0	864	0	0	0
Future Volume (vph)	307	1048	0	0	530	368	282	0	864	0	0	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	2%	2%	7%	7%	7%	2%	2%	2%	2%	2%	2%
Adj. Flow (vph)	323	1103	0	0	558	387	297	0	909	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	323	1103	0	0	558	387	297	0	909	0	0	0
Turn Type	Prot	NA			NA	Perm	Prot		Prot			
Protected Phases	1	6			2		7		4			
Permitted Phases						2						
Detector Phase	1	6			2	2	7		4			
Switch Phase												
Minimum Initial (s)	7.0	7.0			7.0	7.0	7.0		7.0			
Minimum Split (s)	13.8	13.8			13.8	13.8	13.8		13.8			
Total Split (s)	15.0	65.0			50.0	50.0	55.0		55.0			
Total Split (%)	12.5%	54.2%			41.7%	41.7%	45.8%		45.8%			
Yellow Time (s)	4.8	4.8			4.8	4.8	4.8		4.8			
All-Red Time (s)	2.0	2.0			2.0	2.0	2.0		2.0			
Lost Time Adjust (s)	0.0	0.0			0.0	0.0	0.0		0.0			
Total Lost Time (s)	6.8	6.8			6.8	6.8	6.8		6.8			
Lead/Lag	Lead				Lag	Lag						
Lead-Lag Optimize?	Yes				Yes	Yes						
Recall Mode	None	C-Max			C-Max	C-Max	None		None			
v/c Ratio	0.78	0.40			0.22	0.49	0.48		0.88			
Control Delay	70.6	16.2			26.9	4.9	32.5		42.6			
Queue Delay	0.0	0.1			0.0	0.0	0.0		0.0			
Total Delay	70.6	16.4			26.9	4.9	32.5		42.6			
Queue Length 50th (ft)	117	125			73	0	176		335			
Queue Length 95th (ft)	#274	163			93	65	242		402			
Internal Link Dist (ft)		360			1273			780			740	
Turn Bay Length (ft)						340	610		610			
Base Capacity (vph)	413	2731			2589	790	710		1176			
Starvation Cap Reductn	0	575			0	0	0		0			
Spillback Cap Reductn	0	0			0	0	0		0			
Storage Cap Reductn	0	0			0	0	0		0			
Reduced v/c Ratio	0.78	0.51			0.22	0.49	0.42		0.77			

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 116 (97%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow  
 Natural Cycle: 60  
 Control Type: Actuated-Coordinated  
 # 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.

Splits and Phases: 3: I-95 NB Off-Ramp/I-95 NB On-Ramp & SW Becker Road



HCM 6th Signalized Intersection Summary  
 3: I-95 NB Off-Ramp/I-95 NB On-Ramp & SW Becker Road

2023 Future Background Traffic Conditions  
 Timing Plan: PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔	↑↑↑			↑↑↑↑	↔	↔		↔↔			
Traffic Volume (veh/h)	307	1048	0	0	530	368	282	0	864	0	0	0
Future Volume (veh/h)	307	1048	0	0	530	368	282	0	864	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1796	1796	1870	0	1870			
Adj Flow Rate, veh/h	323	1103	0	0	558	0	297	0	900			
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95			
Percent Heavy Veh, %	2	2	0	0	7	7	2	0	2			
Cap, veh/h	236	2718	0	0	2963		631	0	989			
Arrive On Green	0.07	0.53	0.00	0.00	0.41	0.00	0.35	0.00	0.35			
Sat Flow, veh/h	3456	5274	0	0	7616	1522	1781	0	2790			
Grp Volume(v), veh/h	323	1103	0	0	558	0	297	0	900			
Grp Sat Flow(s),veh/h/ln	1728	1702	0	0	1455	1522	1781	0	1395			
Q Serve(g_s), s	8.2	15.5	0.0	0.0	5.9	0.0	15.5	0.0	36.9			
Cycle Q Clear(g_c), s	8.2	15.5	0.0	0.0	5.9	0.0	15.5	0.0	36.9			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	236	2718	0	0	2963		631	0	989			
V/C Ratio(X)	1.37	0.41	0.00	0.00	0.19		0.47	0.00	0.91			
Avail Cap(c_a), veh/h	236	2718	0	0	2963		715	0	1121			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.91	0.91	0.00	0.00	1.00	0.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	55.9	16.7	0.0	0.0	22.8	0.0	30.0	0.0	36.9			
Incr Delay (d2), s/veh	188.2	0.4	0.0	0.0	0.1	0.0	0.5	0.0	10.2			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	9.7	5.7	0.0	0.0	2.0	0.0	6.7	0.0	13.8			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	244.1	17.2	0.0	0.0	23.0	0.0	30.6	0.0	47.1			
LnGrp LOS	F	B	A	A	C		C	A	D			
Approach Vol, veh/h		1426			558	A		1197				
Approach Delay, s/veh		68.6			23.0			43.0				
Approach LOS		E			C			D				
Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	15.0	55.7		49.3		70.7						
Change Period (Y+Rc), s	6.8	6.8		6.8		6.8						
Max Green Setting (Gmax), s	8.2	43.2		48.2		58.2						
Max Q Clear Time (g_c+I1), s	10.2	7.9		38.9		17.5						
Green Ext Time (p_c), s	0.0	3.9		3.6		8.8						

Intersection Summary

























HCM 6th Ctrl Delay	50.9
HCM 6th LOS	D

Notes

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

Lanes, Volumes, Timings  
 4: SW Village Parkway & Paar Drive/Driveway 1

2023 Future Background Traffic Conditions  
 Timing Plan: PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	456	185	298	228	316	412	154	460	133	241	592	375
Future Volume (vph)	456	185	298	228	316	412	154	460	133	241	592	375
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	5%	5%	5%	5%	5%	5%
Adj. Flow (vph)	496	201	324	248	343	448	167	500	145	262	643	408
Shared Lane Traffic (%)												
Lane Group Flow (vph)	496	201	324	248	791	0	167	500	145	262	643	408
Sign Control		Stop			Stop			Free			Free	

**Intersection Summary**

Control Type: Unsignalized

Intersection												
Int Delay, s/veh	537											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↑	↗	↖	↕		↖	↕	↗	↖	↕	↗
Traffic Vol, veh/h	456	185	298	228	316	412	154	460	133	241	592	375
Future Vol, veh/h	456	185	298	228	316	412	154	460	133	241	592	375
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	400	-	0	415	-	-	490	-	360	500	-	320
Veh in Median Storage, #	-	0	-	-	2	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	5	5	5	5	5	5
Mvmt Flow	496	201	324	248	343	448	167	500	145	262	643	408
Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	1923	2146	322	1780	2409	250	1051	0	0	645	0	0
Stage 1	1167	1167	-	834	834	-	-	-	-	-	-	-
Stage 2	756	979	-	946	1575	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.2	-	-	4.2	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.25	-	-	2.25	-	-
Pot Cap-1 Maneuver	~ 40	~ 48	674	~ 52	~ 32	750	640	-	-	916	-	-
Stage 1	~ 206	266	-	329	381	-	-	-	-	-	-	-
Stage 2	~ 366	326	-	281	~ 169	-	-	-	-	-	-	-
Platoon blocked, %												
Mov Cap-1 Maneuver	~ 65	~ 25	674	-	~ 17	750	640	-	-	916	-	-
Mov Cap-2 Maneuver	~ 65	~ 25	-	~ -65	~ -40	-	-	-	-	-	-	-
Stage 1	~ 152	~ 190	-	~ 243	~ 282	-	-	-	-	-	-	-
Stage 2	-	241	-	-	~ 121	-	-	-	-	-	-	-
Approach	EB		WB			NB			SB			
HCM Control Delay, s	\$ 2197					2.6			2.1			
HCM LOS	F											
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBL	SBT	SBR
Capacity (veh/h)	640	-	-	65	25	674	-	+	+	916	-	-
HCM Lane V/C Ratio	0.262	-	-	7.625	8.043	0.481	-	-	-	0.286	-	-
HCM Control Delay (s)	12.6	-	-	\$ 3104.3	\$ 3475.3	15.2	-	-	0.3	10.5	-	-
HCM Lane LOS	B	-	-	F	F	C	-	-	A	B	-	-
HCM 95th %tile Q(veh)	1	-	-	57.1	25	2.6	-	-	-	1.2	-	-
Notes												
-: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    *: All major volume in platoon												

Lanes, Volumes, Timings  
 5: SW Village Parkway & Driveway 2

2023 Future Background Traffic Conditions  
 Timing Plan: PM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	31	5	31	184	9	175	18	598	108	103	709	18
Future Volume (vph)	31	5	31	184	9	175	18	598	108	103	709	18
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	5%	5%	5%	5%	5%	5%
Adj. Flow (vph)	34	5	34	200	10	190	20	650	117	112	771	20
Shared Lane Traffic (%)												
Lane Group Flow (vph)	34	39	0	200	200	0	20	767	0	112	791	0
Sign Control		Stop			Stop			Free			Free	

Intersection Summary

Control Type: Unsignalized

Intersection												
Int Delay, s/veh	5.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔		↔	↔		↔	↔		↔	↔	
Traffic Vol, veh/h	31	5	31	184	9	175	18	598	108	103	709	18
Future Vol, veh/h	31	5	31	184	9	175	18	598	108	103	709	18
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	145	-	-	145	-	-	340	-	-	330	-	-
Veh in Median Storage, #	-	0	-	-	2	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	5	5	5	5	5	5
Mvmt Flow	34	5	34	200	10	190	20	650	117	112	771	20
Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	1375	1812	396	1361	1764	384	791	0	0	767	0	0
Stage 1	1005	1005	-	749	749	-	-	-	-	-	-	-
Stage 2	370	807	-	612	1015	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.2	-	-	4.2	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.25	-	-	2.25	-	-
Pot Cap-1 Maneuver	*175	97	603	~181	106	*848	806	-	-	1103	-	-
Stage 1	*259	317	-	677	620	-	-	-	-	-	-	-
Stage 2	*800	576	-	447	314	-	-	-	-	-	-	-
Platoon blocked, %	1	1	-	1	1	1	-	-	-	1	-	-
Mov Cap-1 Maneuver	*119	85	603	~147	93	*848	806	-	-	1103	-	-
Mov Cap-2 Maneuver	*119	85	-	314	236	-	-	-	-	-	-	-
Stage 1	*253	285	-	661	604	-	-	-	-	-	-	-
Stage 2	*595	561	-	372	282	-	-	-	-	-	-	-
Approach	EB		WB			NB			SB			
HCM Control Delay, s	31.1		23.1			0.2			1.1			
HCM LOS	D		C									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR		
Capacity (veh/h)	806	-	-	119	327	314	753	1103	-	-		
HCM Lane V/C Ratio	0.024	-	-	0.283	0.12	0.637	0.266	0.102	-	-		
HCM Control Delay (s)	9.6	-	-	46.8	17.5	34.6	11.5	8.6	-	-		
HCM Lane LOS	A	-	-	E	C	D	B	A	-	-		
HCM 95th %tile Q(veh)	0.1	-	-	1.1	0.4	4.1	1.1	0.3	-	-		
Notes												
-: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    *: All major volume in platoon												

Lanes, Volumes, Timings  
 6: SW Village Parkway & Driveway 3

2023 Future Background Traffic Conditions  
 Timing Plan: PM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	31	5	31	175	9	184	18	573	103	108	723	18
Future Volume (vph)	31	5	31	175	9	184	18	573	103	108	723	18
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	5%	5%	5%	5%	5%	5%
Adj. Flow (vph)	34	5	34	190	10	200	20	623	112	117	786	20
Shared Lane Traffic (%)												
Lane Group Flow (vph)	34	39	0	190	210	0	20	735	0	117	806	0
Sign Control		Stop			Stop			Free			Free	

Intersection Summary

Control Type: Unsignalized



Intersection												
Int Delay, s/veh	5.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔		↔	↔		↔	↕↔		↔	↕↔	
Traffic Vol, veh/h	31	5	31	175	9	184	18	573	103	108	723	18
Future Vol, veh/h	31	5	31	175	9	184	18	573	103	108	723	18
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	170	-	-	370	-	-	340	-	-	320	-	-
Veh in Median Storage, #	-	2	-	-	2	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	5	5	5	5	5	5
Mvmt Flow	34	5	34	190	10	200	20	623	112	117	786	20

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	1387	1805	403	1349	1759	368	806	0	0	735	0	0
Stage 1	1030	1030	-	719	719	-	-	-	-	-	-	-
Stage 2	357	775	-	630	1040	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.2	-	-	4.2	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.25	-	-	2.25	-	-
Pot Cap-1 Maneuver	*171	98	597	~186	107	*848	795	-	-	1143	-	-
Stage 1	*250	309	-	713	643	-	-	-	-	-	-	-
Stage 2	*800	599	-	436	306	-	-	-	-	-	-	-
Platoon blocked, %	1	1	-	1	1	1	-	-	-	1	-	-
Mov Cap-1 Maneuver	*114	86	597	~156	93	*848	795	-	-	1143	-	-
Mov Cap-2 Maneuver	*221	237	-	310	232	-	-	-	-	-	-	-
Stage 1	*244	277	-	695	627	-	-	-	-	-	-	-
Stage 2	*586	584	-	362	275	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	18.1		22		0.3		1.1	
HCM LOS	C		C					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	795	-	-	221	493	310	755	1143	-	-
HCM Lane V/C Ratio	0.025	-	-	0.152	0.079	0.614	0.278	0.103	-	-
HCM Control Delay (s)	9.6	-	-	24.2	12.9	33.4	11.6	8.5	-	-
HCM Lane LOS	A	-	-	C	B	D	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.5	0.3	3.8	1.1	0.3	-	-

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

Lanes, Volumes, Timings  
7: SW Becker Road & Driveway 4



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	160	1017	103	103	744	160	175	51	175	579	88	274
Future Volume (vph)	160	1017	103	103	744	160	175	51	175	579	88	274
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	2%	2%	2%	2%	2%	2%
Adj. Flow (vph)	174	1105	112	112	809	174	190	55	190	629	96	298
Shared Lane Traffic (%)												
Lane Group Flow (vph)	174	1105	112	112	809	174	190	245	0	629	394	0
Sign Control		Free			Free			Stop			Stop	

Intersection Summary

Control Type: Unsignalized

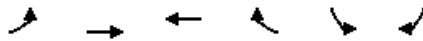
Intersection												
Int Delay, s/veh	17.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↑↑↑↑	↔	↔	↑↑↑↑	↔	↔	↔		↔	↔	
Traffic Vol, veh/h	160	1017	103	103	744	160	175	51	175	579	88	274
Future Vol, veh/h	160	1017	103	103	744	160	175	51	175	579	88	274
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	450	-	350	450	-	320	400	-	-	460	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	5	5	5	5	5	5	2	2	2	2	2	2
Mvmt Flow	174	1105	112	112	809	174	190	55	190	629	96	298

Major/Minor	Major1	Major2	Minor1	Minor2
Conflicting Flow All	983	0	0	1217
Stage 1	-	-	-	-
Stage 2	-	-	-	-
Critical Hdwy	5.4	-	-	5.4
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	3.15	-	-	3.15
Pot Cap-1 Maneuver	715	-	-	299
Stage 1	-	-	-	-
Stage 2	-	-	-	-
Platoon blocked, %	1	-	-	-
Mov Cap-1 Maneuver	715	-	-	299
Mov Cap-2 Maneuver	-	-	-	-
Stage 1	-	-	-	-
Stage 2	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.5	2.5	148.1	
HCM LOS			F	-

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	935	177	715	-	-	299	-	-	+	761
HCM Lane V/C Ratio	0.203	1.388	0.243	-	-	0.374	-	-	-	0.517
HCM Control Delay (s)	9.8	255.2	11.6	-	-	24.1	-	-	-	14.7
HCM Lane LOS	A	F	B	-	-	C	-	-	-	B
HCM 95th %tile Q(veh)	0.8	14.8	1	-	-	1.7	-	-	-	3

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



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑↑	↑	↓	↓
Traffic Volume (vph)	0	1517	841	321	307	274
Future Volume (vph)	0	1517	841	321	307	274
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	5%	5%	5%	5%	2%	2%
Adj. Flow (vph)	0	1649	914	349	334	298
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1649	914	349	334	298
Sign Control		Free	Free		Stop	

**Intersection Summary**

Control Type: Unsignalized

Intersection						
Int Delay, s/veh	7.1					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑↑	↑↑↑↑	↑	↓	↑
Traffic Vol, veh/h	0	1517	841	321	307	274
Future Vol, veh/h	0	1517	841	321	307	274
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	260	370	0
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	5	5	5	5	2	2
Mvmt Flow	0	1649	914	349	334	298
Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	-	0	-	0	1574	457
Stage 1	-	-	-	-	914	-
Stage 2	-	-	-	-	660	-
Critical Hdwy	-	-	-	-	5.74	7.14
Critical Hdwy Stg 1	-	-	-	-	6.64	-
Critical Hdwy Stg 2	-	-	-	-	6.04	-
Follow-up Hdwy	-	-	-	-	3.82	3.92
Pot Cap-1 Maneuver	0	-	-	-	-290	*740
Stage 1	0	-	-	-	707	-
Stage 2	0	-	-	-	433	-
Platoon blocked, %	-	-	-	-	1	1
Mov Cap-1 Maneuver	-	-	-	-	-290	*740
Mov Cap-2 Maneuver	-	-	-	-	362	-
Stage 1	-	-	-	-	707	-
Stage 2	-	-	-	-	433	-
Approach	EB	WB	SB			
HCM Control Delay, s	0	0	39.9			
HCM LOS	E					
Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1	SBLn2	
Capacity (veh/h)	-	-	-	362	740	
HCM Lane V/C Ratio	-	-	-	0.922	0.402	
HCM Control Delay (s)	-	-	-	63.9	13.1	
HCM Lane LOS	-	-	-	F	B	
HCM 95th %tile Q(veh)	-	-	-	9.6	2	
Notes						
-: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    *: All major volume in platoon						

Lanes, Volumes, Timings  
1: SW Village Parkway & SW Becker Road

2023 Future Background Traffic Conditions w/Imp  
Timing Plan: PM Peak Hour

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↖↖↖	↖	↖↖	↖↖↖	↖↖	↖	↖↖	↖	↖↖	↖↖	↖
Traffic Volume (vph)	175	485	118	125	510	318	202	114	210	620	67	204
Future Volume (vph)	175	485	118	125	510	318	202	114	210	620	67	204
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	5%	5%	5%
Adj. Flow (vph)	197	545	133	140	573	357	227	128	236	697	75	229
Shared Lane Traffic (%)												
Lane Group Flow (vph)	197	545	133	140	573	357	227	128	236	697	75	229
Turn Type	Prot	NA	Perm	Prot	NA	pt+ov	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2	2 3	7	4		3	8	
Permitted Phases			6						4			8
Detector Phase	1	6	6	5	2	2 3	7	4	4	3	8	8
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0		7.0	7.0	7.0	10.0	7.0	7.0
Minimum Split (s)	13.8	13.8	13.8	13.8	13.8		13.8	13.8	13.8	16.8	13.8	13.8
Total Split (s)	26.0	33.0	33.0	22.0	29.0		28.0	24.0	24.0	41.0	37.0	37.0
Total Split (%)	21.7%	27.5%	27.5%	18.3%	24.2%		23.3%	20.0%	20.0%	34.2%	30.8%	30.8%
Yellow Time (s)	4.8	4.8	4.8	4.8	4.8		4.8	4.8	4.8	4.8	4.8	4.8
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.8	6.8	6.8	6.8	6.8		6.8	6.8	6.8	6.8	6.8	6.8
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Max	Max	None	C-Max		None	None	None	None	None	None
v/c Ratio	0.75	0.31	0.19	0.48	0.40	0.20	0.81	0.43	0.67	0.82	0.12	0.49
Control Delay	65.7	30.8	0.6	47.9	39.8	9.3	70.7	55.8	16.4	51.0	40.1	8.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	65.7	30.8	0.6	47.9	39.8	9.3	70.7	55.8	16.4	51.0	40.1	8.8
Queue Length 50th (ft)	147	113	0	57	145	34	168	50	0	259	26	0
Queue Length 95th (ft)	220	164	0	m80	m195	m74	#269	78	72	316	44	61
Internal Link Dist (ft)		413			1122			597			1192	
Turn Bay Length (ft)	320		320	400		400	300		300	570		340
Base Capacity (vph)	296	1775	695	434	1448	1879	312	507	429	950	865	558
Starvation Cap Reductn	0	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	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.67	0.31	0.19	0.32	0.40	0.19	0.73	0.25	0.55	0.73	0.09	0.41

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 69 (58%), Referenced to phase 2:WBT, Start of Yellow

Natural Cycle: 75

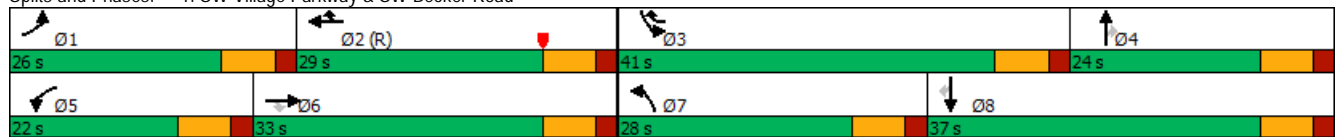
Control Type: Actuated-Coordinated

# 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: 1: SW Village Parkway & SW Becker Road



HCM 6th Signalized Intersection Summary  
 1: SW Village Parkway & SW Becker Road

2023 Future Background Traffic Conditions w/Imp  
 Timing Plan: PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↑↑↑	↔	↔	↑↑↑	↔	↔	↑↑	↔	↔	↑↑	↔
Traffic Volume (veh/h)	175	485	118	125	510	318	202	114	210	620	67	204
Future Volume (veh/h)	175	485	118	125	510	318	202	114	210	620	67	204
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1826	1826	1826
Adj Flow Rate, veh/h	197	545	133	140	573	323	227	128	189	697	75	207
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	5	5	5
Cap, veh/h	226	1779	552	202	1430	1427	256	480	214	781	774	345
Arrive On Green	0.13	0.35	0.35	0.02	0.09	0.09	0.14	0.14	0.14	0.23	0.22	0.22
Sat Flow, veh/h	1781	5106	1585	3456	5106	2790	1781	3554	1585	3374	3469	1547
Grp Volume(v), veh/h	197	545	133	140	573	323	227	128	189	697	75	207
Grp Sat Flow(s),veh/h/ln	1781	1702	1585	1728	1702	1395	1781	1777	1585	1687	1735	1547
Q Serve(g_s), s	13.0	9.3	7.2	4.8	12.7	8.9	15.0	3.9	14.1	24.0	2.1	14.4
Cycle Q Clear(g_c), s	13.0	9.3	7.2	4.8	12.7	8.9	15.0	3.9	14.1	24.0	2.1	14.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	226	1779	552	202	1430	1427	256	480	214	781	774	345
V/C Ratio(X)	0.87	0.31	0.24	0.69	0.40	0.23	0.89	0.27	0.88	0.89	0.10	0.60
Avail Cap(c_a), veh/h	285	1779	552	438	1430	1427	315	509	227	961	873	389
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.82	0.82	0.82	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.5	28.5	27.8	57.8	45.0	20.8	50.4	46.6	51.0	44.7	37.0	41.8
Incr Delay (d2), s/veh	20.8	0.4	1.0	3.5	0.7	0.3	21.8	0.3	29.8	9.2	0.1	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.0	3.8	2.8	2.2	5.8	3.1	8.1	1.7	7.2	10.7	0.9	5.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	72.2	29.0	28.8	61.3	45.7	21.1	72.2	46.9	80.7	53.8	37.1	43.9
LnGrp LOS	E	C	C	E	D	C	E	D	F	D	D	D
Approach Vol, veh/h		875			1036			544			979	
Approach Delay, s/veh		38.7			40.1			69.2			50.4	
Approach LOS		D			D			E			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	22.0	40.4	34.6	23.0	13.8	48.6	24.0	33.6				
Change Period (Y+Rc), s	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8				
Max Green Setting (Gmax), s	19.2	22.2	34.2	17.2	15.2	26.2	21.2	30.2				
Max Q Clear Time (g_c+I1), s	15.0	14.7	26.0	16.1	6.8	11.3	17.0	16.4				
Green Ext Time (p_c), s	0.2	2.9	1.8	0.2	0.2	3.3	0.2	0.9				

Intersection Summary

HCM 6th Ctrl Delay	47.3
HCM 6th LOS	D

Notes

User approved ignoring U-Turning movement.

Lanes, Volumes, Timings  
 3: I-95 NB Off-Ramp/I-95 NB On-Ramp & SW Becker Road

2023 Future Background Traffic Conditions w/Imp  
 Timing Plan: PM Peak Hour

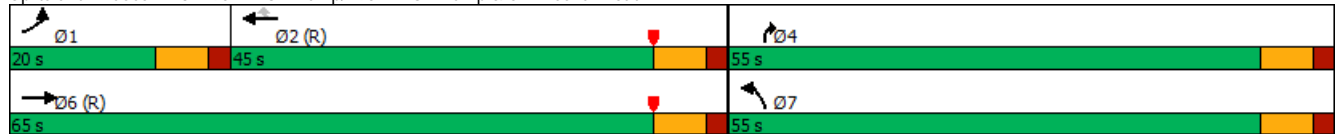


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔	↑↑↑			↑↑↑↑	↗	↘		↗↗			
Traffic Volume (vph)	307	1048	0	0	530	368	282	0	864	0	0	0
Future Volume (vph)	307	1048	0	0	530	368	282	0	864	0	0	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	2%	2%	7%	7%	7%	2%	2%	2%	2%	2%	2%
Adj. Flow (vph)	323	1103	0	0	558	387	297	0	909	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	323	1103	0	0	558	387	297	0	909	0	0	0
Turn Type	Prot	NA			NA	Perm	Prot		Prot			
Protected Phases	1	6			2		7		4			
Permitted Phases						2						
Detector Phase	1	6			2	2	7		4			
Switch Phase												
Minimum Initial (s)	7.0	7.0			7.0	7.0	7.0		7.0			
Minimum Split (s)	13.8	13.8			13.8	13.8	13.8		13.8			
Total Split (s)	20.0	65.0			45.0	45.0	55.0		55.0			
Total Split (%)	16.7%	54.2%			37.5%	37.5%	45.8%		45.8%			
Yellow Time (s)	4.8	4.8			4.8	4.8	4.8		4.8			
All-Red Time (s)	2.0	2.0			2.0	2.0	2.0		2.0			
Lost Time Adjust (s)	0.0	0.0			0.0	0.0	0.0		0.0			
Total Lost Time (s)	6.8	6.8			6.8	6.8	6.8		6.8			
Lead/Lag	Lead				Lag	Lag						
Lead-Lag Optimize?	Yes				Yes	Yes						
Recall Mode	None	C-Max			C-Max	C-Max	None		None			
v/c Ratio	0.77	0.40			0.22	0.49	0.48		0.88			
Control Delay	58.6	17.2			28.1	5.3	32.5		42.6			
Queue Delay	0.0	0.2			0.0	0.0	0.0		0.0			
Total Delay	58.6	17.4			28.1	5.3	32.5		42.6			
Queue Length 50th (ft)	125	191			77	0	176		335			
Queue Length 95th (ft)	#208	274			100	72	242		402			
Internal Link Dist (ft)		360			1273			780			740	
Turn Bay Length (ft)						340	610		610			
Base Capacity (vph)	423	2731			2571	788	710		1176			
Starvation Cap Reductn	0	773			0	0	0		0			
Spillback Cap Reductn	0	0			0	0	0		0			
Storage Cap Reductn	0	0			0	0	0		0			
Reduced v/c Ratio	0.76	0.56			0.22	0.49	0.42		0.77			

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 88 (73%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow  
 Natural Cycle: 60  
 Control Type: Actuated-Coordinated  
 # 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.

Splits and Phases: 3: I-95 NB Off-Ramp/I-95 NB On-Ramp & SW Becker Road





HCM 6th Signalized Intersection Summary  
 3: I-95 NB Off-Ramp/I-95 NB On-Ramp & SW Becker Road

2023 Future Background Traffic Conditions w/Imp  
 Timing Plan: PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔	↑↑↑			↑↑↑↑	↔	↔		↔↔			
Traffic Volume (veh/h)	307	1048	0	0	530	368	282	0	864	0	0	0
Future Volume (veh/h)	307	1048	0	0	530	368	282	0	864	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No		No					
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1796	1796	1870	0	1870			
Adj Flow Rate, veh/h	323	1103	0	0	558	0	297	0	900			
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95			
Percent Heavy Veh, %	2	2	0	0	7	7	2	0	2			
Cap, veh/h	376	2718	0	0	2669		631	0	989			
Arrive On Green	0.11	0.53	0.00	0.00	0.37	0.00	0.35	0.00	0.35			
Sat Flow, veh/h	3456	5274	0	0	7616	1522	1781	0	2790			
Grp Volume(v), veh/h	323	1103	0	0	558	0	297	0	900			
Grp Sat Flow(s),veh/h/ln	1728	1702	0	0	1455	1522	1781	0	1395			
Q Serve(g_s), s	11.0	15.5	0.0	0.0	6.3	0.0	15.5	0.0	36.9			
Cycle Q Clear(g_c), s	11.0	15.5	0.0	0.0	6.3	0.0	15.5	0.0	36.9			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	376	2718	0	0	2669		631	0	989			
V/C Ratio(X)	0.86	0.41	0.00	0.00	0.21		0.47	0.00	0.91			
Avail Cap(c_a), veh/h	380	2718	0	0	2669		715	0	1121			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.91	0.91	0.00	0.00	1.00	0.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	52.6	16.7	0.0	0.0	26.0	0.0	30.0	0.0	36.9			
Incr Delay (d2), s/veh	16.2	0.4	0.0	0.0	0.2	0.0	0.5	0.0	10.2			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	5.5	5.7	0.0	0.0	2.2	0.0	6.7	0.0	13.8			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	68.8	17.2	0.0	0.0	26.2	0.0	30.6	0.0	47.1			
LnGrp LOS	E	B	A	A	C		C	A	D			
Approach Vol, veh/h		1426			558	A		1197				
Approach Delay, s/veh		28.9			26.2			43.0				
Approach LOS		C			C			D				
Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	19.8	50.8		49.3		70.7						
Change Period (Y+Rc), s	6.8	6.8		6.8		6.8						
Max Green Setting (Gmax), s	13.2	38.2		48.2		58.2						
Max Q Clear Time (g_c+I1), s	13.0	8.3		38.9		17.5						
Green Ext Time (p_c), s	0.0	3.8		3.6		8.8						

Intersection Summary

HCM 6th Ctrl Delay	33.7
HCM 6th LOS	C

Notes

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

Lanes, Volumes, Timings  
4: SW Village Parkway & Paar Drive/Driveway 1

2023 Future Background Traffic Conditions w/Imp  
Timing Plan: PM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔	↑	↔	↔	↔↔		↔↔	↔↔	↔	↔↔	↔↔	↔
Traffic Volume (vph)	456	185	298	228	316	412	154	460	133	241	592	375
Future Volume (vph)	456	185	298	228	316	412	154	460	133	241	592	375
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	5%	5%	5%	5%	5%	5%
Adj. Flow (vph)	496	201	324	248	343	448	167	500	145	262	643	408
Shared Lane Traffic (%)												
Lane Group Flow (vph)	496	201	324	248	791	0	167	500	145	262	643	408
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		1	6		5	2	
Permitted Phases			4						6			2
Detector Phase	7	4	4	3	8		1	6	6	5	2	2
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)	9.5	22.5	22.5	22.5	22.5		9.5	22.5	22.5	9.5	22.5	22.5
Total Split (s)	27.0	32.3	32.3	31.7	37.0		15.4	38.0	38.0	18.0	40.6	40.6
Total Split (%)	22.5%	26.9%	26.9%	26.4%	30.8%		12.8%	31.7%	31.7%	15.0%	33.8%	33.8%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0
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)	4.5	4.5	4.5	4.5	4.5		4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None		None	Min	Min	None	Min	Min
v/c Ratio	0.75	0.43	0.52	0.72	0.79		0.51	0.60	0.30	0.64	0.70	0.58
Control Delay	48.0	37.4	9.3	52.0	31.2		52.1	37.6	7.3	52.2	38.3	6.7
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	48.0	37.4	9.3	52.0	31.2		52.1	37.6	7.3	52.2	38.3	6.7
Queue Length 50th (ft)	160	110	13	155	182		54	156	0	85	203	0
Queue Length 95th (ft)	251	211	99	264	286		102	227	49	148	289	76
Internal Link Dist (ft)		721			789			1288			990	
Turn Bay Length (ft)	400			415			490		360	500		320
Base Capacity (vph)	809	549	676	504	1260		380	1206	634	471	1300	835
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	0.61	0.37	0.48	0.49	0.63		0.44	0.41	0.23	0.56	0.49	0.49

Intersection Summary

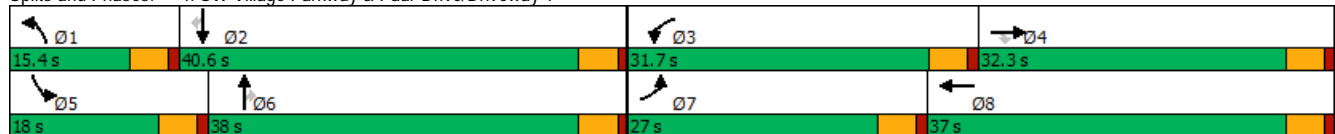
Cycle Length: 120

Actuated Cycle Length: 99.3

Natural Cycle: 80

Control Type: Actuated-Uncoordinated

Splits and Phases: 4: SW Village Parkway & Paar Drive/Driveway 1



HCM 6th Signalized Intersection Summary  
4: SW Village Parkway & Paar Drive/Driveway 1

2023 Future Background Traffic Conditions w/Imp  
Timing Plan: PM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	456	185	298	228	316	412	154	460	133	241	592	375
Future Volume (veh/h)	456	185	298	228	316	412	154	460	133	241	592	375
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1826	1826	1826	1826	1826	1826
Adj Flow Rate, veh/h	496	201	291	248	343	403	167	500	131	262	643	367
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	5	5	5	5	5	5
Cap, veh/h	588	558	473	288	515	460	236	890	397	336	993	443
Arrive On Green	0.17	0.30	0.30	0.16	0.29	0.29	0.07	0.26	0.26	0.10	0.29	0.29
Sat Flow, veh/h	3456	1870	1585	1781	1777	1585	3374	3469	1547	3374	3469	1547
Grp Volume(v), veh/h	496	201	291	248	343	403	167	500	131	262	643	367
Grp Sat Flow(s), veh/h/ln	1728	1870	1585	1781	1777	1585	1687	1735	1547	1687	1735	1547
Q Serve(g_s), s	13.6	8.3	15.5	13.3	16.6	23.7	4.7	12.3	6.7	7.4	15.9	21.7
Cycle Q Clear(g_c), s	13.6	8.3	15.5	13.3	16.6	23.7	4.7	12.3	6.7	7.4	15.9	21.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	588	558	473	288	515	460	236	890	397	336	993	443
V/C Ratio(X)	0.84	0.36	0.61	0.86	0.67	0.88	0.71	0.56	0.33	0.78	0.65	0.83
Avail Cap(c_a), veh/h	794	558	473	495	589	526	375	1186	529	465	1278	570
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	39.4	27.0	29.5	40.0	30.6	33.1	44.6	31.6	29.6	43.1	30.6	32.7
Incr Delay (d2), s/veh	6.2	0.4	2.4	7.5	2.4	14.1	3.9	0.6	0.5	5.7	0.7	7.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.0	3.6	6.1	6.3	7.3	10.7	2.0	4.9	2.5	3.2	6.4	8.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	45.6	27.4	31.9	47.5	33.0	47.2	48.5	32.2	30.1	48.8	31.4	40.6
LnGrp LOS	D	C	C	D	C	D	D	C	C	D	C	D
Approach Vol, veh/h		988			994			798			1272	
Approach Delay, s/veh		37.8			42.4			35.2			37.6	
Approach LOS		D			D			D			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	11.3	32.5	20.3	33.8	14.2	29.6	21.2	32.9				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	10.9	36.1	27.2	27.8	13.5	33.5	22.5	32.5				
Max Q Clear Time (g_c+I1), s	6.7	23.7	15.3	17.5	9.4	14.3	15.6	25.7				
Green Ext Time (p_c), s	0.2	4.3	0.6	1.5	0.3	3.3	1.1	2.7				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay			38.4									
HCM 6th LOS			D									

Lanes, Volumes, Timings  
7: SW Becker Road & Driveway 4

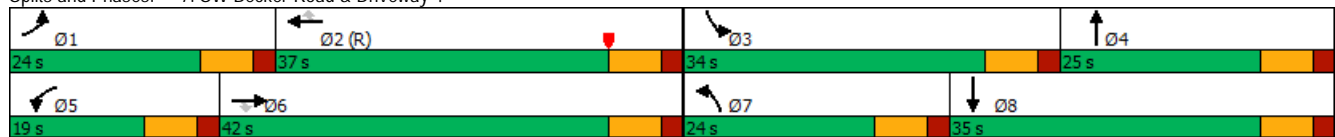


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔	↑↑↑	↔	↔↔	↑↑↑	↔	↔	↔	↔	↔↔	↔	
Traffic Volume (vph)	160	1017	103	103	744	160	175	51	175	579	88	274
Future Volume (vph)	160	1017	103	103	744	160	175	51	175	579	88	274
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	2%	2%	2%	2%	2%	2%
Adj. Flow (vph)	174	1105	112	112	809	174	190	55	190	629	96	298
Shared Lane Traffic (%)												
Lane Group Flow (vph)	174	1105	112	112	809	174	190	245	0	629	394	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases			6			2						
Detector Phase	1	6	6	5	2	2	7	4		3	8	
Switch Phase												
Minimum Initial (s)	7.0	10.0	10.0	7.0	10.0	10.0	7.0	10.0		7.0	10.0	
Minimum Split (s)	13.8	24.8	24.8	13.8	24.8	24.8	13.8	24.8		24.8	24.8	
Total Split (s)	24.0	42.0	42.0	19.0	37.0	37.0	24.0	25.0		34.0	35.0	
Total Split (%)	20.0%	35.0%	35.0%	15.8%	30.8%	30.8%	20.0%	20.8%		28.3%	29.2%	
Yellow Time (s)	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8		4.8	4.8	
All-Red Time (s)	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	
Total Lost Time (s)	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8		6.8	6.8	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Recall Mode	None	None	None	None	C-Max	C-Max	None	None		None	None	
v/c Ratio	0.54	0.64	0.16	0.43	0.49	0.26	0.81	0.77		0.86	0.89	
Control Delay	58.1	21.6	2.6	61.2	31.6	4.2	75.9	40.7		58.3	54.1	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	58.1	21.6	2.6	61.2	31.6	4.2	75.9	40.7		58.3	54.1	
Queue Length 50th (ft)	71	173	5	45	158	13	143	91		239	209	
Queue Length 95th (ft)	m93	260	m18	75	202	28	#252	183		308	#367	
Internal Link Dist (ft)		1122			1156			251				682
Turn Bay Length (ft)	450		350	450		320	400			460		
Base Capacity (vph)	478	1738	683	339	1650	660	253	353		778	481	
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	0.36	0.64	0.16	0.33	0.49	0.26	0.75	0.69		0.81	0.82	

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 119 (99%), Referenced to phase 2:WBT, Start of Yellow  
 Natural Cycle: 90  
 Control Type: Actuated-Coordinated  
 # 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: 7: SW Becker Road & Driveway 4



HCM 6th Signalized Intersection Summary  
7: SW Becker Road & Driveway 4

2023 Future Background Traffic Conditions w/Imp  
Timing Plan: PM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	160	1017	103	103	744	160	175	51	175	579	88	274
Future Volume (veh/h)	160	1017	103	103	744	160	175	51	175	579	88	274
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1826	1826	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	174	1105	101	112	809	157	190	55	170	629	96	268
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	5	5	5	5	5	5	2	2	2	2	2	2
Cap, veh/h	236	1796	558	192	1732	538	218	62	191	699	102	284
Arrive On Green	0.07	0.36	0.36	0.02	0.11	0.11	0.12	0.15	0.15	0.20	0.23	0.23
Sat Flow, veh/h	3374	4985	1547	3374	4985	1547	1781	402	1244	3456	436	1216
Grp Volume(v), veh/h	174	1105	101	112	809	157	190	0	225	629	0	364
Grp Sat Flow(s), veh/h/ln	1687	1662	1547	1687	1662	1547	1781	0	1646	1728	0	1651
Q Serve(g_s), s	6.1	21.9	5.4	4.0	18.2	11.2	12.6	0.0	16.1	21.3	0.0	26.0
Cycle Q Clear(g_c), s	6.1	21.9	5.4	4.0	18.2	11.2	12.6	0.0	16.1	21.3	0.0	26.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.76	1.00		0.74
Lane Grp Cap(c), veh/h	236	1796	558	192	1732	538	218	0	253	699	0	386
V/C Ratio(X)	0.74	0.62	0.18	0.58	0.47	0.29	0.87	0.00	0.89	0.90	0.00	0.94
Avail Cap(c_a), veh/h	484	1796	558	343	1732	538	255	0	253	783	0	388
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.76	0.76	0.76	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	54.7	31.5	26.3	57.5	42.7	39.6	51.7	0.0	49.8	46.7	0.0	45.2
Incr Delay (d2), s/veh	3.4	0.5	0.1	2.8	0.9	1.4	23.8	0.0	29.7	12.5	0.0	31.3
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	2.6	8.5	2.0	1.8	8.2	4.8	7.1	0.0	8.7	10.3	0.0	13.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	58.2	32.0	26.4	60.2	43.6	41.0	75.6	0.0	79.4	59.1	0.0	76.5
LnGrp LOS	E	C	C	E	D	D	E	A	E	E	A	E
Approach Vol, veh/h		1380			1078			415			993	
Approach Delay, s/veh		34.9			45.0			77.7			65.5	
Approach LOS		C			D			E			E	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	15.2	48.5	31.1	25.2	13.6	50.0	21.5	34.8				
Change Period (Y+Rc), s	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8				
Max Green Setting (Gmax), s	17.2	30.2	27.2	18.2	12.2	35.2	17.2	28.2				
Max Q Clear Time (g_c+I1), s	8.1	20.2	23.3	18.1	6.0	23.9	14.6	28.0				
Green Ext Time (p_c), s	0.3	4.0	1.0	0.0	0.1	5.6	0.1	0.1				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay			50.2									
HCM 6th LOS				D								

Lanes, Volumes, Timings  
1: SW Village Parkway & SW Becker Road

2023 Buildout Traffic Conditions  
Timing Plan: PM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↖↖↖	↖	↖↖	↖↖↖	↖↖	↖	↖↖	↖	↖↖	↖↖	↖
Traffic Volume (vph)	175	485	118	125	510	341	202	114	210	638	67	204
Future Volume (vph)	175	485	118	125	510	341	202	114	210	638	67	204
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	5%	5%	5%
Adj. Flow (vph)	197	545	133	140	573	383	227	128	236	717	75	229
Shared Lane Traffic (%)												
Lane Group Flow (vph)	197	545	133	140	573	383	227	128	236	717	75	229
Turn Type	Prot	NA	Perm	Prot	NA	pt+ov	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2	2 3	7	4		3	8	
Permitted Phases			6						4			8
Detector Phase	1	6	6	5	2	2 3	7	4	4	3	8	8
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0		7.0	7.0	7.0	10.0	7.0	7.0
Minimum Split (s)	13.8	16.8	16.8	13.8	16.8		13.8	16.8	16.8	26.8	16.8	16.8
Total Split (s)	26.0	33.0	33.0	22.0	29.0		28.0	24.0	24.0	41.0	37.0	37.0
Total Split (%)	21.7%	27.5%	27.5%	18.3%	24.2%		23.3%	20.0%	20.0%	34.2%	30.8%	30.8%
Yellow Time (s)	4.8	4.8	4.8	4.8	4.8		4.8	4.8	4.8	4.8	4.8	4.8
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.8	6.8	6.8	6.8	6.8		6.8	6.8	6.8	6.8	6.8	6.8
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Max	Max	None	C-Max		None	None	None	None	None	None
v/c Ratio	0.75	0.31	0.19	0.48	0.40	0.21	0.81	0.43	0.67	0.83	0.12	0.49
Control Delay	65.7	31.1	0.6	47.5	40.2	9.2	70.7	55.8	16.4	51.2	39.9	8.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	65.7	31.1	0.6	47.5	40.2	9.2	70.7	55.8	16.4	51.2	39.9	8.7
Queue Length 50th (ft)	147	113	0	57	146	34	168	50	0	267	25	0
Queue Length 95th (ft)	220	164	0	m81	m196	m81	#269	78	72	327	44	61
Internal Link Dist (ft)		413			1122			597			1192	
Turn Bay Length (ft)	320		320	400		400	300		300	570		340
Base Capacity (vph)	296	1752	689	434	1425	1878	312	507	429	950	865	558
Starvation Cap Reductn	0	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	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.67	0.31	0.19	0.32	0.40	0.20	0.73	0.25	0.55	0.75	0.09	0.41

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 69 (58%), Referenced to phase 2:WBT, Start of Yellow

Natural Cycle: 80

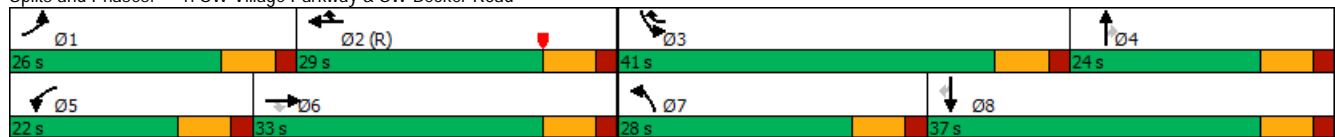
Control Type: Actuated-Coordinated

# 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: 1: SW Village Parkway & SW Becker Road



HCM 6th Signalized Intersection Summary  
 1: SW Village Parkway & SW Becker Road

2023 Buildout Traffic Conditions  
 Timing Plan: PM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	175	485	118	125	510	341	202	114	210	638	67	204
Future Volume (veh/h)	175	485	118	125	510	341	202	114	210	638	67	204
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1826	1826	1826
Adj Flow Rate, veh/h	197	545	133	140	573	349	227	128	189	717	75	207
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	5	5	5
Cap, veh/h	226	1751	544	202	1402	1427	256	480	214	800	793	354
Arrive On Green	0.13	0.34	0.34	0.02	0.09	0.09	0.14	0.14	0.14	0.24	0.23	0.23
Sat Flow, veh/h	1781	5106	1585	3456	5106	2790	1781	3554	1585	3374	3469	1547
Grp Volume(v), veh/h	197	545	133	140	573	349	227	128	189	717	75	207
Grp Sat Flow(s),veh/h/ln	1781	1702	1585	1728	1702	1395	1781	1777	1585	1687	1735	1547
Q Serve(g_s), s	13.0	9.4	7.2	4.8	12.7	9.6	15.0	3.9	14.1	24.7	2.0	14.3
Cycle Q Clear(g_c), s	13.0	9.4	7.2	4.8	12.7	9.6	15.0	3.9	14.1	24.7	2.0	14.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	226	1751	544	202	1402	1427	256	480	214	800	793	354
V/C Ratio(X)	0.87	0.31	0.24	0.69	0.41	0.24	0.89	0.27	0.88	0.90	0.09	0.59
Avail Cap(c_a), veh/h	285	1751	544	438	1402	1427	315	509	227	961	873	389
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.81	0.81	0.81	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.5	29.0	28.3	57.8	45.4	20.9	50.4	46.6	51.0	44.4	36.5	41.2
Incr Delay (d2), s/veh	20.8	0.5	1.1	3.5	0.7	0.3	21.8	0.3	29.8	9.7	0.1	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.0	3.8	2.8	2.2	5.8	3.4	8.1	1.7	7.2	11.0	0.9	5.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	72.2	29.5	29.3	61.3	46.1	21.2	72.2	46.9	80.7	54.1	36.6	43.1
LnGrp LOS	E	C	C	E	D	C	E	D	F	D	D	D
Approach Vol, veh/h		875			1062			544			999	
Approach Delay, s/veh		39.1			39.9			69.2			50.5	
Approach LOS		D			D			E			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	22.0	39.7	35.2	23.0	13.8	47.9	24.0	34.2				
Change Period (Y+Rc), s	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8				
Max Green Setting (Gmax), s	19.2	22.2	34.2	17.2	15.2	26.2	21.2	30.2				
Max Q Clear Time (g_c+I1), s	15.0	14.7	26.7	16.1	6.8	11.4	17.0	16.3				
Green Ext Time (p_c), s	0.2	3.0	1.7	0.2	0.2	3.3	0.2	0.9				

Intersection Summary												
HCM 6th Ctrl Delay			47.3									
HCM 6th LOS			D									

Notes  
 User approved ignoring U-Turning movement.

Lanes, Volumes, Timings  
 2: I-95 SB On-Ramp/I-95 SB Off-Ramp & SW Becker Road

2023 Buildout Traffic Conditions  
 Timing Plan: PM Peak Hour

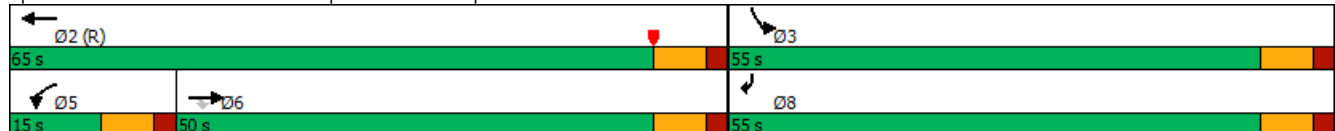


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑↑	↑	↑↓	↑↑↑					↑↓		↑
Traffic Volume (vph)	0	949	455	192	651	0	0	0	0	468	0	226
Future Volume (vph)	0	949	455	192	651	0	0	0	0	468	0	226
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	2%	2%	2%	2%	2%	2%
Adj. Flow (vph)	0	1020	489	206	700	0	0	0	0	503	0	243
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1020	489	206	700	0	0	0	0	503	0	243
Turn Type		NA	Perm	Prot	NA					Prot		Prot
Protected Phases		6		5	2					3		8
Permitted Phases			6									
Detector Phase		6	6	5	2					3		8
Switch Phase												
Minimum Initial (s)		10.0	10.0	7.0	10.0					7.0		7.0
Minimum Split (s)		16.8	16.8	13.8	16.8					13.8		13.8
Total Split (s)		50.0	50.0	15.0	65.0					55.0		55.0
Total Split (%)		41.7%	41.7%	12.5%	54.2%					45.8%		45.8%
Yellow Time (s)		4.8	4.8	4.8	4.8					4.8		4.8
All-Red Time (s)		2.0	2.0	2.0	2.0					2.0		2.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0					0.0		0.0
Total Lost Time (s)		6.8	6.8	6.8	6.8					6.8		6.8
Lead/Lag		Lag	Lag	Lead								
Lead-Lag Optimize?		Yes	Yes	Yes								
Recall Mode		Max	Max	None	C-Max					None		None
v/c Ratio		0.26	0.47	0.55	0.20					0.75		0.55
Control Delay		7.8	2.2	44.9	4.5					52.8		19.1
Queue Delay		0.0	0.0	0.0	0.0					0.0		0.0
Total Delay		7.8	2.2	44.9	4.5					52.8		19.1
Queue Length 50th (ft)		40	0	68	31					191		52
Queue Length 95th (ft)		89	m34	110	59					236		128
Internal Link Dist (ft)		1265			360		547				879	
Turn Bay Length (ft)			550							540		540
Base Capacity (vph)		3873	1045	376	3451					1378		733
Starvation Cap Reductn		0	0	0	0					0		0
Spillback Cap Reductn		0	0	0	0					0		0
Storage Cap Reductn		0	0	0	0					0		0
Reduced v/c Ratio		0.26	0.47	0.55	0.20					0.37		0.33

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 67 (56%), Referenced to phase 2:WBT, Start of Yellow  
 Natural Cycle: 55  
 Control Type: Actuated-Coordinated  
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: I-95 SB On-Ramp/I-95 SB Off-Ramp & SW Becker Road





HCM 6th Signalized Intersection Summary  
 2: I-95 SB On-Ramp/I-95 SB Off-Ramp & SW Becker Road

2023 Buildout Traffic Conditions  
 Timing Plan: PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑↑	↗	↘	↑↑↑					↘		↗
Traffic Volume (veh/h)	0	949	455	192	651	0	0	0	0	468	0	226
Future Volume (veh/h)	0	949	455	192	651	0	0	0	0	468	0	226
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1841	1841	1841	1841	0				1870	0	1870
Adj Flow Rate, veh/h	0	1020	0	206	700	0				503	0	243
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93				0.93	0.93	0.93
Percent Heavy Veh, %	0	4	4	4	4	0				2	0	2
Cap, veh/h	0	4281		232	3514	0				647	0	297
Arrive On Green	0.00	0.57	0.00	0.14	1.00	0.00				0.19	0.00	0.19
Sat Flow, veh/h	0	7805	1560	3401	5191	0				3456	0	1585
Grp Volume(v), veh/h	0	1020	0	206	700	0				503	0	243
Grp Sat Flow(s), veh/h/ln	0	1491	1560	1700	1675	0				1728	0	1585
Q Serve(g_s), s	0.0	8.1	0.0	7.1	0.0	0.0				16.6	0.0	17.7
Cycle Q Clear(g_c), s	0.0	8.1	0.0	7.1	0.0	0.0				16.6	0.0	17.7
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	4281		232	3514	0				647	0	297
V/C Ratio(X)	0.00	0.24		0.89	0.20	0.00				0.78	0.00	0.82
Avail Cap(c_a), veh/h	0	4281		232	3514	0				1388	0	637
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	0.95	0.95	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	12.6	0.0	51.3	0.0	0.0				46.4	0.0	46.8
Incr Delay (d2), s/veh	0.0	0.1	0.0	29.8	0.1	0.0				2.1	0.0	5.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	2.5	0.0	3.7	0.0	0.0				7.3	0.0	7.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	12.7	0.0	81.2	0.1	0.0				48.4	0.0	52.3
LnGrp LOS	A	B		F	A	A				D	A	D
Approach Vol, veh/h		1020	A		906						746	
Approach Delay, s/veh		12.7			18.5						49.7	
Approach LOS		B			B						D	
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		90.7			15.0	75.7		29.3				
Change Period (Y+Rc), s		6.8			6.8	6.8		6.8				
Max Green Setting (Gmax), s		58.2			8.2	43.2		48.2				
Max Q Clear Time (g_c+I1), s		2.0			9.1	10.1		19.7				
Green Ext Time (p_c), s		5.0			0.0	7.7		2.8				

Intersection Summary

HCM 6th Ctrl Delay	25.0
HCM 6th LOS	C

Notes

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

Lanes, Volumes, Timings  
 3: I-95 NB Off-Ramp/I-95 NB On-Ramp & SW Becker Road

2023 Buildout Traffic Conditions  
 Timing Plan: PM Peak Hour

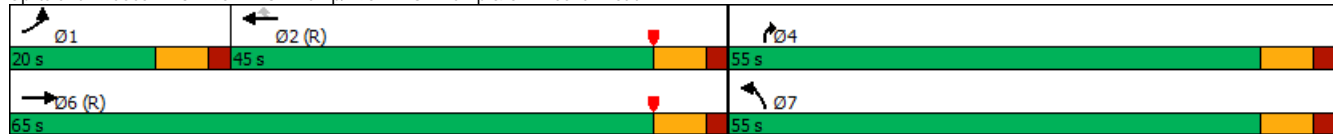


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔	↑↑↑			↑↑↑↑	↗	↘		↗↗			
Traffic Volume (vph)	321	1055	0	0	544	368	309	0	864	0	0	0
Future Volume (vph)	321	1055	0	0	544	368	309	0	864	0	0	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	2%	2%	7%	7%	7%	2%	2%	2%	2%	2%	2%
Adj. Flow (vph)	338	1111	0	0	573	387	325	0	909	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	338	1111	0	0	573	387	325	0	909	0	0	0
Turn Type	Prot	NA			NA	Perm	Prot		Prot			
Protected Phases	1	6			2		7		4			
Permitted Phases						2						
Detector Phase	1	6			2	2	7		4			
Switch Phase												
Minimum Initial (s)	7.0	7.0			7.0	7.0	7.0		7.0			
Minimum Split (s)	13.8	13.8			13.8	13.8	13.8		13.8			
Total Split (s)	20.0	65.0			45.0	45.0	55.0		55.0			
Total Split (%)	16.7%	54.2%			37.5%	37.5%	45.8%		45.8%			
Yellow Time (s)	4.8	4.8			4.8	4.8	4.8		4.8			
All-Red Time (s)	2.0	2.0			2.0	2.0	2.0		2.0			
Lost Time Adjust (s)	0.0	0.0			0.0	0.0	0.0		0.0			
Total Lost Time (s)	6.8	6.8			6.8	6.8	6.8		6.8			
Lead/Lag	Lead				Lag	Lag						
Lead-Lag Optimize?	Yes				Yes	Yes						
Recall Mode	None	C-Max			C-Max	C-Max	None		None			
v/c Ratio	0.78	0.41			0.23	0.49	0.53		0.88			
Control Delay	58.6	17.1			28.4	5.4	33.6		42.6			
Queue Delay	0.0	0.2			0.0	0.0	0.0		0.0			
Total Delay	58.6	17.3			28.4	5.4	33.6		42.6			
Queue Length 50th (ft)	130	192			80	0	197		335			
Queue Length 95th (ft)	#222	276			102	72	266		402			
Internal Link Dist (ft)		360			1273			780			740	
Turn Bay Length (ft)						340	610		610			
Base Capacity (vph)	436	2731			2541	783	710		1176			
Starvation Cap Reductn	0	768			0	0	0		0			
Spillback Cap Reductn	0	0			0	0	0		0			
Storage Cap Reductn	0	0			0	0	0		0			
Reduced v/c Ratio	0.78	0.57			0.23	0.49	0.46		0.77			

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 88 (73%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow  
 Natural Cycle: 50  
 Control Type: Actuated-Coordinated  
 # 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.

Splits and Phases: 3: I-95 NB Off-Ramp/I-95 NB On-Ramp & SW Becker Road



HCM 6th Signalized Intersection Summary  
 3: I-95 NB Off-Ramp/I-95 NB On-Ramp & SW Becker Road

2023 Buildout Traffic Conditions  
 Timing Plan: PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔	↑↑↑			↑↑↑↑	↔	↔		↔↔			
Traffic Volume (veh/h)	321	1055	0	0	544	368	309	0	864	0	0	0
Future Volume (veh/h)	321	1055	0	0	544	368	309	0	864	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1796	1796	1870	0	1870			
Adj Flow Rate, veh/h	338	1111	0	0	573	0	325	0	900			
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95			
Percent Heavy Veh, %	2	2	0	0	7	7	2	0	2			
Cap, veh/h	380	2716	0	0	2657		632	0	990			
Arrive On Green	0.11	0.53	0.00	0.00	0.37	0.00	0.35	0.00	0.35			
Sat Flow, veh/h	3456	5274	0	0	7616	1522	1781	0	2790			
Grp Volume(v), veh/h	338	1111	0	0	573	0	325	0	900			
Grp Sat Flow(s),veh/h/ln	1728	1702	0	0	1455	1522	1781	0	1395			
Q Serve(g_s), s	11.6	15.6	0.0	0.0	6.5	0.0	17.3	0.0	36.9			
Cycle Q Clear(g_c), s	11.6	15.6	0.0	0.0	6.5	0.0	17.3	0.0	36.9			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	380	2716	0	0	2657		632	0	990			
V/C Ratio(X)	0.89	0.41	0.00	0.00	0.22		0.51	0.00	0.91			
Avail Cap(c_a), veh/h	380	2716	0	0	2657		715	0	1121			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.91	0.91	0.00	0.00	1.00	0.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	52.7	16.8	0.0	0.0	26.2	0.0	30.5	0.0	36.9			
Incr Delay (d2), s/veh	20.3	0.4	0.0	0.0	0.2	0.0	0.6	0.0	10.1			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	6.0	5.8	0.0	0.0	2.2	0.0	7.5	0.0	13.8			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	73.0	17.2	0.0	0.0	26.4	0.0	31.2	0.0	47.0			
LnGrp LOS	E	B	A	A	C		C	A	D			
Approach Vol, veh/h		1449			573	A		1225				
Approach Delay, s/veh		30.2			26.4			42.8				
Approach LOS		C			C			D				
Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	20.0	50.6		49.4		70.6						
Change Period (Y+Rc), s	6.8	6.8		6.8		6.8						
Max Green Setting (Gmax), s	13.2	38.2		48.2		58.2						
Max Q Clear Time (g_c+I1), s	13.6	8.5		38.9		17.6						
Green Ext Time (p_c), s	0.0	4.0		3.7		8.9						

Intersection Summary

HCM 6th Ctrl Delay	34.3
HCM 6th LOS	C

Notes

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

Lanes, Volumes, Timings  
4: SW Village Parkway & Paar Drive/Driveway 1

2023 Buildout Traffic Conditions  
Timing Plan: PM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔	↑	↔	↔	↔↔		↔↔	↔↔	↔	↔↔	↔↔	↔
Traffic Volume (vph)	456	185	298	233	316	417	154	467	133	255	601	375
Future Volume (vph)	456	185	298	233	316	417	154	467	133	255	601	375
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	5%	5%	5%	5%	5%	5%
Adj. Flow (vph)	496	201	324	253	343	453	167	508	145	277	653	408
Shared Lane Traffic (%)												
Lane Group Flow (vph)	496	201	324	253	796	0	167	508	145	277	653	408
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		1	6		5	2	
Permitted Phases			4						6			2
Detector Phase	7	4	4	3	8		1	6	6	5	2	2
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)	9.5	22.5	22.5	22.5	22.5		9.5	22.5	22.5	9.5	22.5	22.5
Total Split (s)	27.0	32.3	32.3	31.7	37.0		15.4	38.0	38.0	18.0	40.6	40.6
Total Split (%)	22.5%	26.9%	26.9%	26.4%	30.8%		12.8%	31.7%	31.7%	15.0%	33.8%	33.8%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0
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)	4.5	4.5	4.5	4.5	4.5		4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None		None	Min	Min	None	Min	Min
v/c Ratio	0.76	0.44	0.53	0.73	0.80		0.51	0.60	0.30	0.67	0.70	0.57
Control Delay	48.8	37.9	9.7	52.8	31.8		52.8	37.9	7.3	53.6	38.3	6.6
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	48.8	37.9	9.7	52.8	31.8		52.8	37.9	7.3	53.6	38.3	6.6
Queue Length 50th (ft)	161	112	16	160	186		55	160	0	92	208	0
Queue Length 95th (ft)	251	211	102	269	291		102	231	49	#163	294	76
Internal Link Dist (ft)		721			789			1288			990	
Turn Bay Length (ft)	400			415			490		360	500		320
Base Capacity (vph)	799	543	668	498	1246		376	1192	628	466	1285	830
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	0.62	0.37	0.49	0.51	0.64		0.44	0.43	0.23	0.59	0.51	0.49

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 100.4

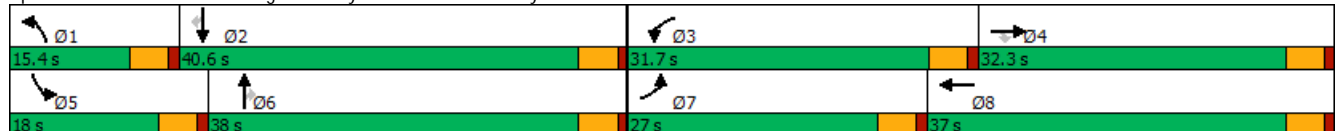
Natural Cycle: 80

Control Type: Actuated-Uncoordinated

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

Queue shown is maximum after two cycles.

Splits and Phases: 4: SW Village Parkway & Paar Drive/Driveway 1



HCM 6th Signalized Intersection Summary  
4: SW Village Parkway & Paar Drive/Driveway 1

2023 Buildout Traffic Conditions  
Timing Plan: PM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	456	185	298	233	316	417	154	467	133	255	601	375
Future Volume (veh/h)	456	185	298	233	316	417	154	467	133	255	601	375
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1826	1826	1826	1826	1826	1826
Adj Flow Rate, veh/h	496	201	291	253	343	408	167	508	131	277	653	367
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	5	5	5	5	5	5
Cap, veh/h	588	556	472	293	518	462	235	875	390	350	992	443
Arrive On Green	0.17	0.30	0.30	0.16	0.29	0.29	0.07	0.25	0.25	0.10	0.29	0.29
Sat Flow, veh/h	3456	1870	1585	1781	1777	1585	3374	3469	1547	3374	3469	1547
Grp Volume(v), veh/h	496	201	291	253	343	408	167	508	131	277	653	367
Grp Sat Flow(s), veh/h/ln	1728	1870	1585	1781	1777	1585	1687	1735	1547	1687	1735	1547
Q Serve(g_s), s	13.7	8.3	15.6	13.6	16.7	24.2	4.8	12.7	6.8	7.9	16.3	21.9
Cycle Q Clear(g_c), s	13.7	8.3	15.6	13.6	16.7	24.2	4.8	12.7	6.8	7.9	16.3	21.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	588	556	472	293	518	462	235	875	390	350	992	443
V/C Ratio(X)	0.84	0.36	0.62	0.86	0.66	0.88	0.71	0.58	0.34	0.79	0.66	0.83
Avail Cap(c_a), veh/h	788	556	472	491	585	522	373	1178	526	462	1270	566
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	39.7	27.3	29.8	40.1	30.7	33.3	44.9	32.3	30.1	43.2	31.0	33.0
Incr Delay (d2), s/veh	6.4	0.4	2.4	8.3	2.3	14.9	3.9	0.6	0.5	6.8	0.8	8.0
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	6.1	3.6	6.1	6.6	7.4	11.0	2.1	5.1	2.6	3.5	6.5	9.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	46.0	27.7	32.2	48.4	33.0	48.3	48.8	32.9	30.6	50.0	31.8	41.0
LnGrp LOS	D	C	C	D	C	D	D	C	C	D	C	D
Approach Vol, veh/h		988			1004			806			1297	
Approach Delay, s/veh		38.2			43.1			35.9			38.3	
Approach LOS		D			D			D			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	11.4	32.7	20.7	33.8	14.7	29.4	21.3	33.3				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	10.9	36.1	27.2	27.8	13.5	33.5	22.5	32.5				
Max Q Clear Time (g_c+I1), s	6.8	23.9	15.6	17.6	9.9	14.7	15.7	26.2				
Green Ext Time (p_c), s	0.2	4.3	0.6	1.5	0.3	3.3	1.1	2.6				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay			39.0									
HCM 6th LOS			D									

Lanes, Volumes, Timings  
 5: SW Village Parkway & Driveway 2

2023 Buildout Traffic Conditions  
 Timing Plan: PM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	31	5	31	195	9	180	18	600	126	112	714	18
Future Volume (vph)	31	5	31	195	9	180	18	600	126	112	714	18
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	5%	5%	5%	5%	5%	5%
Adj. Flow (vph)	34	5	34	212	10	196	20	652	137	122	776	20
Shared Lane Traffic (%)												
Lane Group Flow (vph)	34	39	0	212	206	0	20	789	0	122	796	0
Sign Control		Stop			Stop			Free			Free	

Intersection Summary

Control Type: Unsignalized

Intersection												
Int Delay, s/veh	6.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗		↖	↗		↖	↗	
Traffic Vol, veh/h	31	5	31	195	9	180	18	600	126	112	714	18
Future Vol, veh/h	31	5	31	195	9	180	18	600	126	112	714	18
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	145	-	-	145	-	-	340	-	-	330	-	-
Veh in Median Storage, #	-	0	-	-	2	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	5	5	5	5	5	5
Mvmt Flow	34	5	34	212	10	196	20	652	137	122	776	20
Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1401	1859	398	1396	1801	395	796	0	0	789	0	0
Stage 1	1030	1030	-	761	761	-	-	-	-	-	-	-
Stage 2	371	829	-	635	1040	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.2	-	-	4.2	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.25	-	-	2.25	-	-
Pot Cap-1 Maneuver	*166	89	601	~168	99	*848	802	-	-	1077	-	-
Stage 1	*250	309	-	663	610	-	-	-	-	-	-	-
Stage 2	*800	559	-	433	306	-	-	-	-	-	-	-
Platoon blocked, %	1	1	-	1	1	1	-	-	-	1	-	-
Mov Cap-1 Maneuver	*111	77	601	~134	85	*848	802	-	-	1077	-	-
Mov Cap-2 Maneuver	*111	77	-	299	227	-	-	-	-	-	-	-
Stage 1	*244	274	-	647	595	-	-	-	-	-	-	-
Stage 2	*590	545	-	355	271	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	33.4			26.9			0.2			1.2		
HCM LOS	D			D								
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR		
Capacity (veh/h)	802	-	-	111	309	299	750	1077	-	-		
HCM Lane V/C Ratio	0.024	-	-	0.304	0.127	0.709	0.274	0.113	-	-		
HCM Control Delay (s)	9.6	-	-	51	18.3	41.7	11.6	8.8	-	-		
HCM Lane LOS	A	-	-	F	C	E	B	A	-	-		
HCM 95th %tile Q(veh)	0.1	-	-	1.2	0.4	5	1.1	0.4	-	-		
Notes												
-: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    *: All major volume in platoon												



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	31	5	31	177	9	186	18	591	108	108	739	18
Future Volume (vph)	31	5	31	177	9	186	18	591	108	108	739	18
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	5%	5%	5%	5%	5%	5%
Adj. Flow (vph)	34	5	34	192	10	202	20	642	117	117	803	20
Shared Lane Traffic (%)												
Lane Group Flow (vph)	34	39	0	192	212	0	20	642	117	117	823	0
Sign Control		Stop			Stop			Free			Free	

**Intersection Summary**

Control Type: Unsignalized



Intersection												
Int Delay, s/veh	5.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗		↖	↕	↗	↖	↕	↗
Traffic Vol, veh/h	31	5	31	177	9	186	18	591	108	108	739	18
Future Vol, veh/h	31	5	31	177	9	186	18	591	108	108	739	18
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	170	-	-	370	-	-	340	-	185	320	-	-
Veh in Median Storage, #	-	2	-	-	2	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	5	5	5	5	5	5
Mvmt Flow	34	5	34	192	10	202	20	642	117	117	803	20

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	1413	1846	412	1320	1739	321	823	0	0	759	0	0
Stage 1	1047	1047	-	682	682	-	-	-	-	-	-	-
Stage 2	366	799	-	638	1057	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.2	-	-	4.2	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.25	-	-	2.25	-	-
Pot Cap-1 Maneuver	*161	92	589	197	110	*848	784	-	-	1113	-	-
Stage 1	*244	303	-	759	674	-	-	-	-	-	-	-
Stage 2	*800	581	-	431	300	-	-	-	-	-	-	-
Platoon blocked, %	1	1	-	1	1	1	-	-	-	1	-	-
Mov Cap-1 Maneuver	*107	80	589	~ 165	96	*848	784	-	-	1113	-	-
Mov Cap-2 Maneuver	*215	230	-	309	228	-	-	-	-	-	-	-
Stage 1	*238	271	-	739	657	-	-	-	-	-	-	-
Stage 2	*585	566	-	356	269	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	18.5	22.3	0.2	1.1
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	784	-	-	215	484	309	753	1113	-	-
HCM Lane V/C Ratio	0.025	-	-	0.157	0.081	0.623	0.281	0.105	-	-
HCM Control Delay (s)	9.7	-	-	24.8	13.1	34.1	11.6	8.6	-	-
HCM Lane LOS	A	-	-	C	B	D	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.5	0.3	3.9	1.2	0.4	-	-

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

Lanes, Volumes, Timings  
7: SW Becker Road & Driveway 4

2023 Buildout Traffic Conditions  
Timing Plan: PM Peak Hour

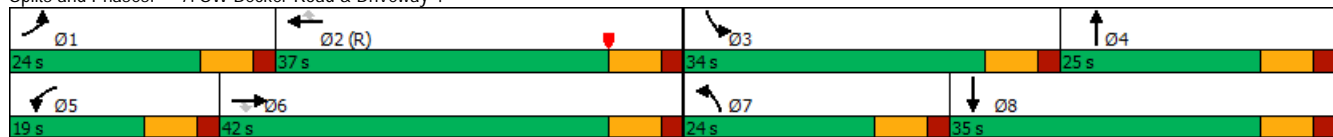


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔	↑↑↑	↔	↔↔	↑↑↑	↔	↔	↔	↔	↔↔	↔	
Traffic Volume (vph)	160	1035	103	103	767	187	175	51	175	588	88	274
Future Volume (vph)	160	1035	103	103	767	187	175	51	175	588	88	274
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	2%	2%	2%	2%	2%	2%
Adj. Flow (vph)	174	1125	112	112	834	203	190	55	190	639	96	298
Shared Lane Traffic (%)												
Lane Group Flow (vph)	174	1125	112	112	834	203	190	245	0	639	394	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases			6			2						
Detector Phase	1	6	6	5	2	2	7	4		3	8	
Switch Phase												
Minimum Initial (s)	7.0	10.0	10.0	7.0	10.0	10.0	7.0	10.0		7.0	10.0	
Minimum Split (s)	13.8	24.8	24.8	13.8	24.8	24.8	13.8	24.8		24.8	24.8	
Total Split (s)	24.0	42.0	42.0	19.0	37.0	37.0	24.0	25.0		34.0	35.0	
Total Split (%)	20.0%	35.0%	35.0%	15.8%	30.8%	30.8%	20.0%	20.8%		28.3%	29.2%	
Yellow Time (s)	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8		4.8	4.8	
All-Red Time (s)	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	
Total Lost Time (s)	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8		6.8	6.8	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Recall Mode	None	None	None	None	C-Max	C-Max	None	None		None	None	
v/c Ratio	0.54	0.65	0.16	0.43	0.51	0.31	0.81	0.77		0.87	0.89	
Control Delay	58.2	22.1	2.5	61.0	32.2	5.6	75.9	41.0		59.0	53.9	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	58.2	22.1	2.5	61.0	32.2	5.6	75.9	41.0		59.0	53.9	
Queue Length 50th (ft)	71	175	5	45	160	17	143	91		243	209	
Queue Length 95th (ft)	m92	270	m17	75	217	34	#252	183		#314	#367	
Internal Link Dist (ft)		1122			1156			251			682	
Turn Bay Length (ft)	450		350	450		320	400			460		
Base Capacity (vph)	478	1736	683	339	1648	659	253	353		778	481	
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	0.36	0.65	0.16	0.33	0.51	0.31	0.75	0.69		0.82	0.82	

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 119 (99%), Referenced to phase 2:WBT, Start of Yellow  
 Natural Cycle: 90  
 Control Type: Actuated-Coordinated  
 # 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.

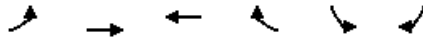
Splits and Phases: 7: SW Becker Road & Driveway 4



HCM 6th Signalized Intersection Summary  
7: SW Becker Road & Driveway 4

2023 Buildout Traffic Conditions  
Timing Plan: PM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	160	1035	103	103	767	187	175	51	175	588	88	274
Future Volume (veh/h)	160	1035	103	103	767	187	175	51	175	588	88	274
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1826	1826	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	174	1125	101	112	834	186	190	55	170	639	96	268
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	5	5	5	5	5	5	2	2	2	2	2	2
Cap, veh/h	236	1796	558	192	1732	538	218	61	188	708	102	284
Arrive On Green	0.07	0.36	0.36	0.02	0.11	0.11	0.12	0.15	0.15	0.20	0.23	0.23
Sat Flow, veh/h	3374	4985	1547	3374	4985	1547	1781	402	1244	3456	436	1216
Grp Volume(v), veh/h	174	1125	101	112	834	186	190	0	225	639	0	364
Grp Sat Flow(s),veh/h/ln	1687	1662	1547	1687	1662	1547	1781	0	1646	1728	0	1651
Q Serve(g_s), s	6.1	22.4	5.4	4.0	18.8	13.3	12.6	0.0	16.1	21.6	0.0	26.0
Cycle Q Clear(g_c), s	6.1	22.4	5.4	4.0	18.8	13.3	12.6	0.0	16.1	21.6	0.0	26.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.76	1.00		0.74
Lane Grp Cap(c), veh/h	236	1796	558	192	1732	538	218	0	249	708	0	386
V/C Ratio(X)	0.74	0.63	0.18	0.58	0.48	0.35	0.87	0.00	0.90	0.90	0.00	0.94
Avail Cap(c_a), veh/h	484	1796	558	343	1732	538	255	0	250	783	0	388
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.75	0.75	0.75	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	54.7	31.7	26.3	57.5	43.0	40.5	51.7	0.0	50.1	46.5	0.0	45.2
Incr Delay (d2), s/veh	3.4	0.5	0.1	2.8	1.0	1.8	23.8	0.0	32.7	12.9	0.0	31.3
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	2.6	8.7	2.0	1.8	8.5	5.8	7.1	0.0	8.9	10.5	0.0	13.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	58.1	32.2	26.4	60.2	44.0	42.3	75.6	0.0	82.8	59.5	0.0	76.5
LnGrp LOS	E	C	C	E	D	D	E	A	F	E	A	E
Approach Vol, veh/h		1400			1132			415			1003	
Approach Delay, s/veh		35.0			45.3			79.5			65.7	
Approach LOS		D			D			E			E	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	15.2	48.5	31.4	24.9	13.6	50.0	21.5	34.8				
Change Period (Y+Rc), s	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8				
Max Green Setting (Gmax), s	17.2	30.2	27.2	18.2	12.2	35.2	17.2	28.2				
Max Q Clear Time (g_c+I1), s	8.1	20.8	23.6	18.1	6.0	24.4	14.6	28.0				
Green Ext Time (p_c), s	0.3	4.0	0.9	0.0	0.1	5.5	0.1	0.1				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay			50.4									
HCM 6th LOS			D									



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑↑	↑↑↑↑	↑	↑	↑
Traffic Volume (vph)	0	1544	891	339	314	274
Future Volume (vph)	0	1544	891	339	314	274
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	5%	5%	5%	5%	2%	2%
Adj. Flow (vph)	0	1678	968	368	341	298
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1678	968	368	341	298
Sign Control		Free	Free		Stop	

**Intersection Summary**

Control Type: Unsignalized

Intersection						
Int Delay, s/veh	7.6					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑↑	↑↑↑↑	↑	↓	↑
Traffic Vol, veh/h	0	1544	891	339	314	274
Future Vol, veh/h	0	1544	891	339	314	274
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	260	370	0
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	5	5	5	5	2	2
Mvmt Flow	0	1678	968	368	341	298
Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	-	0	-	0	1639	484
Stage 1	-	-	-	-	968	-
Stage 2	-	-	-	-	671	-
Critical Hdwy	-	-	-	-	5.74	7.14
Critical Hdwy Stg 1	-	-	-	-	6.64	-
Critical Hdwy Stg 2	-	-	-	-	6.04	-
Follow-up Hdwy	-	-	-	-	3.82	3.92
Pot Cap-1 Maneuver	0	-	-	-	*~ 290	*718
Stage 1	0	-	-	-	*737	-
Stage 2	0	-	-	-	*427	-
Platoon blocked, %	-	-	-	-	1	1
Mov Cap-1 Maneuver	-	-	-	-	*~ 290	*718
Mov Cap-2 Maneuver	-	-	-	-	*360	-
Stage 1	-	-	-	-	*737	-
Stage 2	-	-	-	-	*427	-
Approach	EB	WB	SB			
HCM Control Delay, s	0	0	43.5			
HCM LOS	E					
Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1	SBLn2	
Capacity (veh/h)	-	-	-	360	718	
HCM Lane V/C Ratio	-	-	-	0.948	0.415	
HCM Control Delay (s)	-	-	-	69.7	13.5	
HCM Lane LOS	-	-	-	F	B	
HCM 95th %tile Q(veh)	-	-	-	10.2	2	
Notes	-: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    *: All major volume in platoon					

**APPENDIX G**  
Trip Generation Estimates

**DFH7 in Port St Lucie, FL - 2W6F DS**

Time	Autos			Trucks			Vans			Total		
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total
00:00	0	0	0	2	2	4	0	0	0	2	2	4
01:00	148	0	148	2	2	4	0	0	0	150	2	152
02:00	0	0	0	2	2	4	0	0	0	2	2	4
03:00	0	0	0	1	2	3	0	0	0	1	2	3
04:00	0	0	0	2	1	3	0	0	0	2	1	3
05:00	47	0	47	2	2	4	0	0	0	49	2	51
06:00	0	0	0	2	2	4	0	0	0	2	2	4
07:00	0	0	0	1	1	2	0	0	0	1	1	2
07:30	0	0	0	0	1	1	0	0	0	0	1	1
08:00	0	0	0	0	0	0	0	0	0	0	0	0
08:30	0	0	0	1	0	1	0	0	0	1	0	1
09:00	266	0	266	2	2	4	0	0	0	268	2	270
10:00	78	0	78	0	1	1	0	344	344	78	345	423
11:00	8	0	8	1	1	2	0	0	0	9	1	10
12:00	0	148	148	0	0	0	0	0	0	0	148	148
13:00	85	0	85	0	0	0	0	0	0	85	0	85
14:00	0	47	47	0	0	0	0	0	0	0	47	47
15:00	0	0	0	0	0	0	0	0	0	0	0	0
16:00	90	0	90	0	0	0	0	0	0	90	0	90
16:30	0	45	45	1	0	1	0	0	0	1	45	46
17:00	0	45	45	1	1	2	0	0	0	1	46	47
17:30	0	0	0	0	1	1	0	0	0	0	1	1
18:00	0	38	38	2	1	3	0	0	0	2	39	41
19:00	0	120	120	2	2	4	206	0	206	208	122	330
20:00	0	218	218	2	2	4	138	0	138	140	220	360
21:00	0	6	6	2	2	4	0	0	0	2	8	10
22:00	0	55	55	2	2	4	0	0	0	2	57	59
23:00	0	0	0	2	2	4	0	0	0	2	2	4
<b>Total</b>	<b>722</b>	<b>722</b>	<b>1,444</b>	<b>32</b>	<b>32</b>	<b>64</b>	<b>344</b>	<b>344</b>	<b>688</b>	<b>1,098</b>	<b>1,098</b>	<b>2,196</b>

1st Shift:	2:00 AM	12:30 PM	148	Assoc.
2nd Shift:	6:00 AM	2:30 PM	47	Assoc.
3rd Shift:	1:30 PM	10:00 PM	47	Assoc.
SD Shift:	2:00 PM	6:00 PM	38	Assoc.
RTS Shift:	12:00 PM	10:30 PM	8	Assoc.
Drivers:	9:20 AM	8:50 PM	344	Drivers

APPENDIX H  
Southern Grove DRI Phase 3 Vested Traffic  
Figures



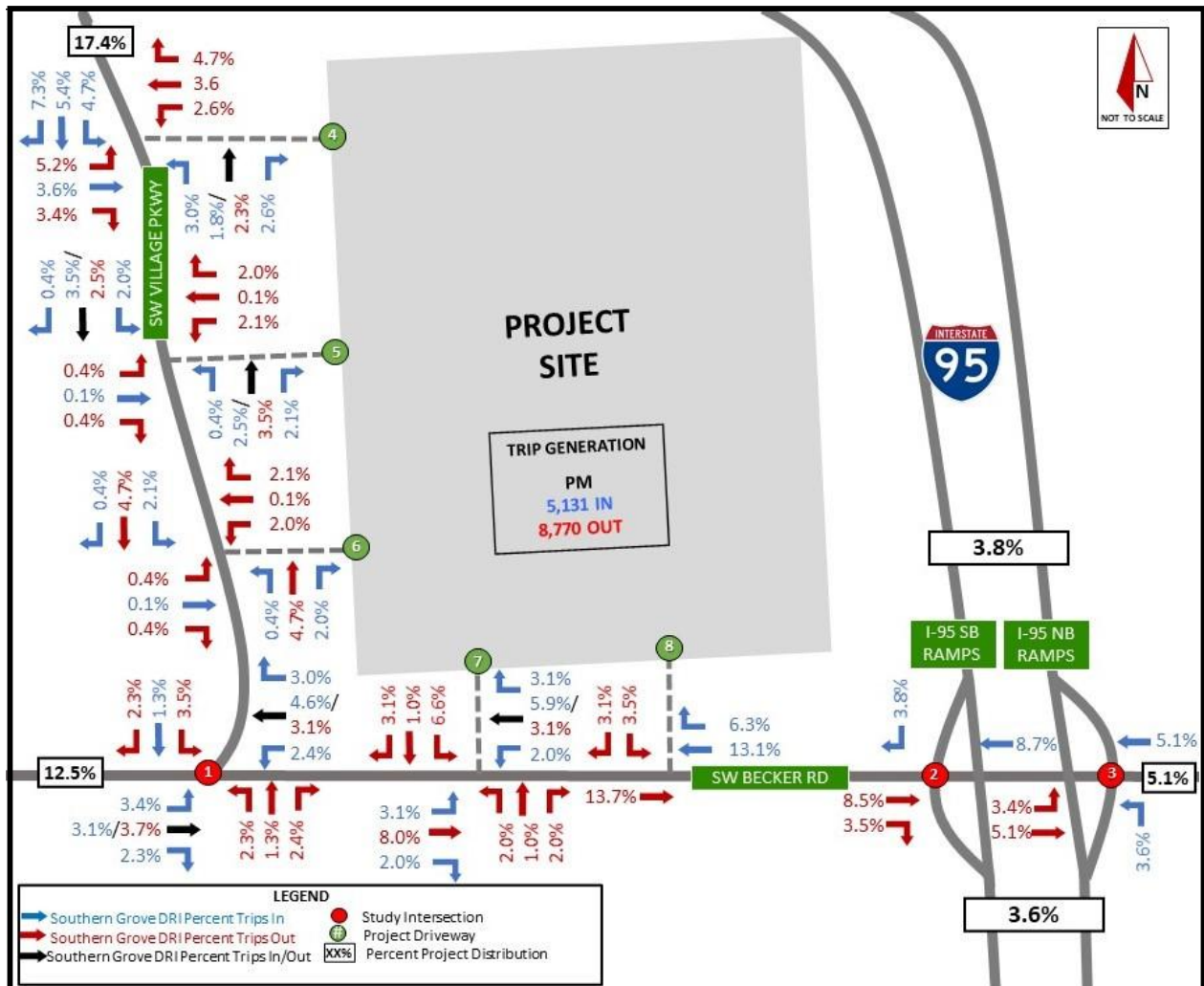


Figure 7: Southern Grove DRI Vested Project Trip Distribution



Figure 8: Southern Grove DRI PM Peak Hour Project Trip Assignment

**APPENDIX I**  
Historical Growth Information

## Projections of Florida Population by County, 2020–2045, with Estimates for 2019 (continued)

County and State	Estimates April 1, 2019	Projections, April 1					
		2020	2025	2030	2035	2040	2045
MIAMI-DADE	2,812,130						
Low		2,734,000	2,815,500	2,873,400	2,917,900	2,938,500	2,944,500
Medium		2,849,900	3,022,600	3,167,900	3,294,700	3,399,200	3,489,900
High		2,961,800	3,214,300	3,458,200	3,679,000	3,875,800	4,057,700
MONROE	76,212						
Low		73,200	71,500	69,800	68,100	66,400	64,700
Medium		76,300	76,500	76,800	77,100	77,400	77,700
High		79,300	81,900	84,500	87,000	89,200	91,400
NASSAU	85,070						
Low		81,600	86,200	89,400	91,200	92,100	92,500
Medium		86,900	95,800	103,100	109,100	114,300	118,900
High		92,100	104,300	116,100	127,200	137,500	148,000
OKALOOSA	201,514						
Low		195,500	199,600	202,500	203,600	203,900	203,900
Medium		203,800	214,300	223,300	230,400	236,600	242,300
High		211,800	227,900	243,700	256,800	269,000	280,900
OKEECHOBEE	41,808						
Low		40,400	40,600	40,400	40,200	39,800	39,400
Medium		42,100	43,400	44,400	45,300	46,000	46,700
High		43,800	46,500	48,900	51,300	53,500	55,700
ORANGE	1,386,080						
Low		1,346,300	1,439,500	1,504,600	1,548,500	1,584,300	1,610,900
Medium		1,418,900	1,573,000	1,696,800	1,797,400	1,888,700	1,972,200
High		1,488,000	1,686,200	1,869,600	2,029,700	2,188,600	2,344,100
OSCEOLA	370,552						
Low		361,000	406,300	442,500	469,700	491,000	508,900
Medium		384,800	452,100	510,200	558,900	602,200	642,600
High		407,000	488,400	568,000	640,700	711,600	783,900
PALM BEACH	1,447,857						
Low		1,406,300	1,441,300	1,465,900	1,483,700	1,494,900	1,497,500
Medium		1,465,800	1,547,200	1,616,500	1,676,600	1,729,500	1,775,200
High		1,523,500	1,645,400	1,764,200	1,870,700	1,971,800	2,063,600
PASCO	527,122						
Low		515,300	545,800	569,400	585,600	597,100	605,200
Medium		537,300	586,100	626,800	659,200	686,700	711,000
High		558,300	623,100	685,200	738,300	787,600	833,900
PINELLAS	978,045						
Low		955,000	962,400	962,500	957,600	953,600	948,200
Medium		984,900	1,014,400	1,035,600	1,051,300	1,066,600	1,080,600
High		1,014,100	1,069,900	1,120,200	1,158,700	1,197,400	1,233,300
POLK	690,606						
Low		668,200	701,500	723,800	737,600	745,000	748,800
Medium		704,100	766,400	817,000	858,000	893,100	924,700
High		738,500	821,700	899,500	966,700	1,029,200	1,089,600
PUTNAM	73,268						
Low		70,400	68,700	66,900	65,300	63,500	61,800
Medium		73,300	73,600	73,700	73,900	74,100	74,300
High		76,300	78,700	81,100	83,400	85,400	87,300
ST. JOHNS	254,412						
Low		247,500	278,000	301,300	318,500	332,400	343,900
Medium		263,900	309,300	347,600	379,400	408,100	434,900
High		279,200	334,200	386,800	434,500	481,800	529,700
ST. LUCIE	309,359						
Low		302,300	319,300	333,800	344,300	352,000	357,600
Medium		315,200	342,900	367,500	387,400	404,400	419,400
High		327,500	364,600	401,700	434,100	464,300	492,800

APPENDIX J  
Signal Warrant Analysis

# TRAFFIC SIGNAL WARRANT SUMMARY

City: City of Port St. Lucie  
County: St. Lucie

Engineer: KHA Analyst  
Date: March 23, 2021

Major Street: SW Village Parkway  
Minor Street: Paar Drive/Driveway 1

Lanes: 2 Critical Approach Speed: 45  
Lanes: 2

### Volume Level Criteria

1. Is the critical speed of major street traffic > 70 km/h (40 mph)?  Yes  No  
 2. Is the intersection in a built-up area of isolated community of <10,000 population?  Yes  No
- If Question 1 or 2 above is answered "Yes", then use "70%" volume level  70%  100%

### WARRANT 3 - PEAK HOUR

If all three criteria are fulfilled or the plotted point lies above the appropriate line, then the warrant is satisfied.

Applicable:  Yes  No  
Satisfied:  Yes  No

Unusual condition justifying use of warrant:

\_\_\_\_\_

\_\_\_\_\_

Record hour when criteria are fulfilled and the corresponding delay or volume in boxes provided.

Peak Hour	

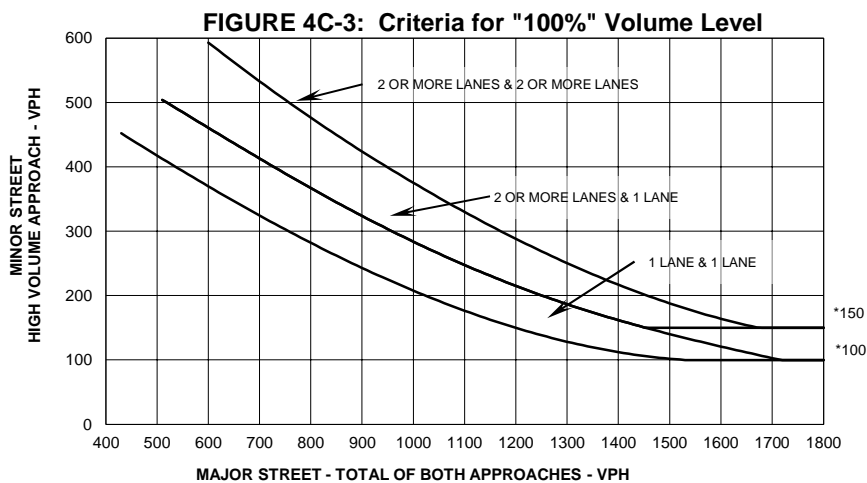
#### Criteria

1. Delay on Minor Approach *(vehicle-hours)		
Approach Lanes	1	2
Delay Criteria*	4.0	5.0
Delay*		
Fulfilled?:	<input type="checkbox"/> Yes	<input type="checkbox"/> No

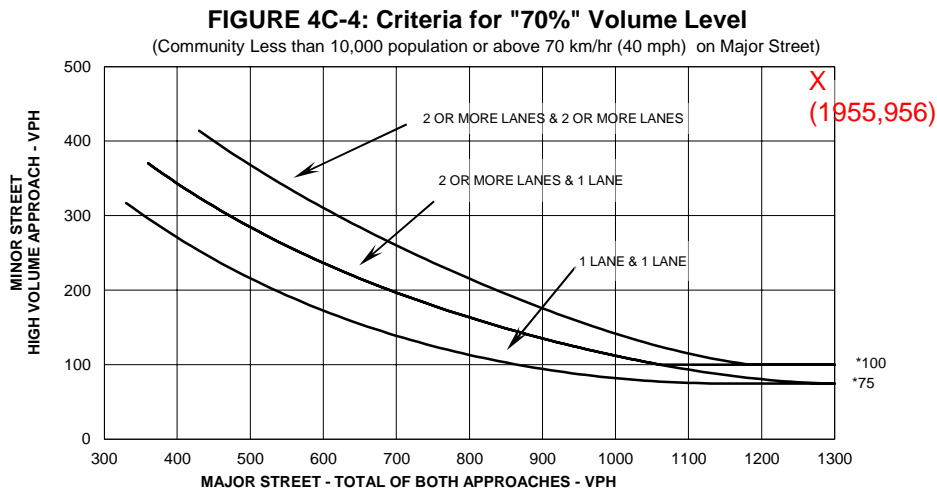
2. Volume on Minor Approach *(vehicles per hour)		
Approach Lanes	1	2
Volume Criteria*	100	150
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input type="checkbox"/> No

3. Total Entering Volume *(vehicles per hour)		
No. of Approaches	3	4
Volume Criteria*	650	800
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input type="checkbox"/> No

Plot volume combination on the applicable figure below.



\* Note: 150 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 100 vph applies as the lower threshold volume threshold for a minor street approach with one lane.



\* Note: 100 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 75 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

# TRAFFIC SIGNAL WARRANT SUMMARY

City: City of Port St. Lucie  
County: St. Lucie

Engineer: KHA Analyst  
Date: March 23, 2021

Major Street: SW Becker Road  
Minor Street: Driveway 4

Lanes: 2 Critical Approach Speed: 45  
Lanes: 2

### Volume Level Criteria

1. Is the critical speed of major street traffic > 70 km/h (40 mph) ?  Yes  No  
 2. Is the intersection in a built-up area of isolated community of <10,000 population?  Yes  No
- If Question 1 or 2 above is answered "Yes", then use "70%" volume level  70%  100%

### WARRANT 3 - PEAK HOUR

If all three criteria are fulfilled or the plotted point lies above the appropriate line, then the warrant is satisfied.

Applicable:  Yes  No  
Satisfied:  Yes  No

Unusual condition justifying use of warrant:

\_\_\_\_\_

\_\_\_\_\_

Record hour when criteria are fulfilled and the corresponding delay or volume in boxes provided.

Peak Hour	

#### Criteria

#### 1. Delay on Minor Approach \*(vehicle-hours)

Approach Lanes	1	2
Delay Criteria*	4.0	5.0
Delay*		
Fulfilled?:	<input type="checkbox"/> Yes	<input type="checkbox"/> No

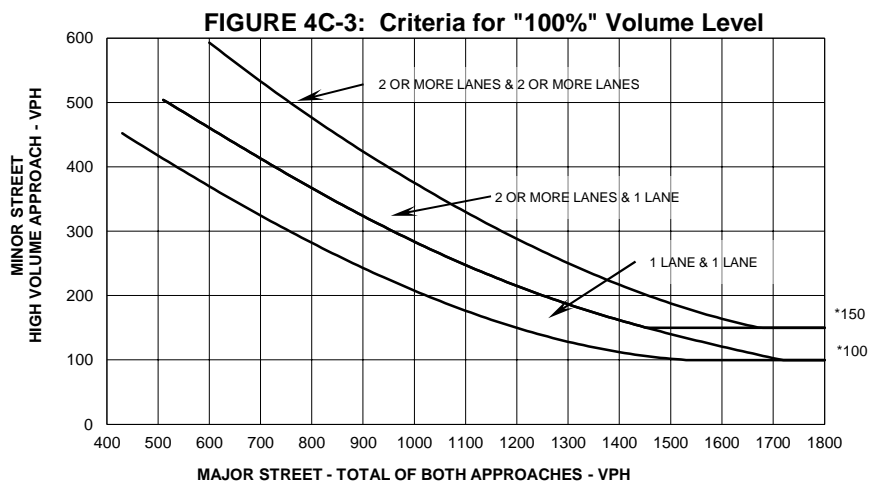
#### 2. Volume on Minor Approach \*(vehicles per hour)

Approach Lanes	1	2
Volume Criteria*	100	150
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input type="checkbox"/> No

#### 3. Total Entering Volume \*(vehicles per hour)

No. of Approaches	3	4
Volume Criteria*	650	800
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input type="checkbox"/> No

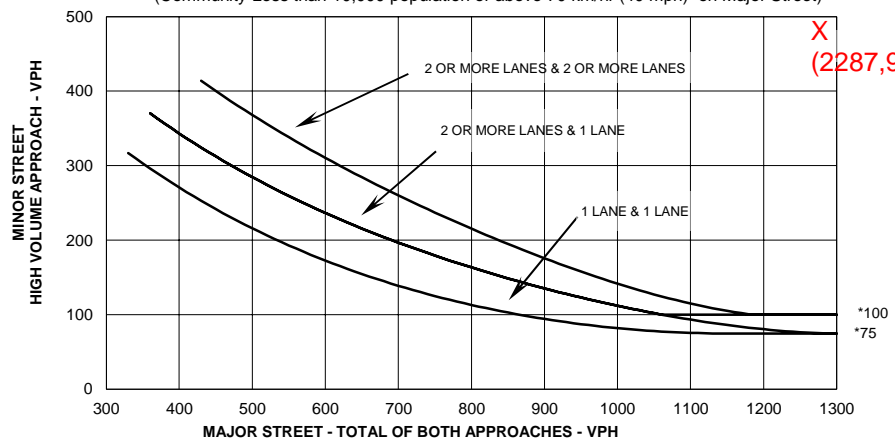
Plot volume combination on the applicable figure below.



\* Note: 150 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 100 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

#### FIGURE 4C-4: Criteria for "70%" Volume Level

(Community Less than 10,000 population or above 70 km/hr (40 mph) on Major Street)



\* Note: 100 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 75 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

**APPENDIX K**  
NCHRP Report 457 Output



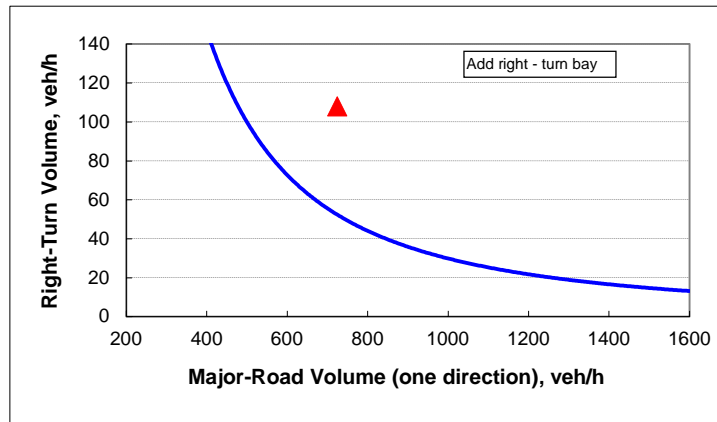
**Figure 2 - 6. Guideline for determining the need for a major-road right-turn bay at a two-way stop-controlled intersection.**

INPUT

Roadway geometry:	4-lane roadway
Variable	Value
Major-road speed, mph:	45
Major-road volume (one direction), veh/h:	724
Right-turn volume, veh/h:	108

OUTPUT

Variable	Value
Limiting right-turn volume, veh/h:	52
<b>Guidance for determining the need for a major-road right-turn bay for a 4-lane roadway:</b>	
<b>Add right-turn bay.</b>	



**Figure 2 - 6. Guideline for determining the need for a major-road right-turn bay at a two-way stop-controlled intersection.**

INPUT

Roadway geometry:	4-lane roadway
Variable	Value
Major-road speed, mph:	45
Major-road volume (one direction), veh/h:	694
Right-turn volume, veh/h:	103

OUTPUT

Variable	Value
Limiting right-turn volume, veh/h:	56
<b>Guidance for determining the need for a major-road right-turn bay for a 4-lane roadway:</b>	
<b>Add right-turn bay.</b>	

