Marion County
Board of County Commissioners

Office of the County Engineer

412 SE 25th Ave.
Ocala, FL 34471
Phone: 352-671-8686
Fax: 352-671-8687

August 15, 2024

ALFKA, LLC
ALFREDO CELY
400 N TAMPA ST, STE 1440
TAMPA, FL 33602

SUBJECT: **TRAFFIC STUDY APPROVAL LETTER**
PROJECT NAME: SPROUTS PLAZA OCALA
PROJECT #2024020083 APPLICATION: #31673 PARCEL #3501-200-023

Dear Alfredo,

The Traffic Study dated August 1, 2024 for the above referenced project was approved by Marion County on August 15, 2024.

Feel free to contact the Office of the County Engineer at (352) 671-8686 or DevelopmentReview@marionfl.org should you have questions.

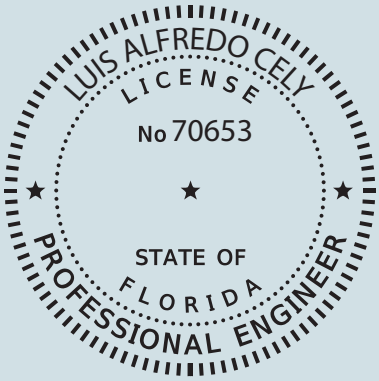
Sincerely,

Your Development Review Team
Office of the County Engineer

Innovative | Lean | Engineering

Traffic Impact Analysis

Sprouts Commercial Plaza
2024.08.01



THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY

ON THE DATE ADJACENT TO THE SEAL

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ALFKA, LLC
400 N. TAMPA ST. STE. 1440
TAMPA, FL 33602
LUIS ALFREDO CELY, P.E. NO. 70653

Prepared by:
ALFKA, LLC

Prepared for:
CORTA Ocala

Project Number:
FCD2403

Alfka, LLC
400 North Tampa Street. Ste. 1440
Tampa, FL 33602
Certificate of Authorization: 30389
Luis Alfredo Cely, P.E. No. 70653

Introduction

Alfka, LLC has been retained to provide a traffic impact analysis for the proposed Sprouts Commercial Plaza. In this study, traffic generated by the proposed development has been reviewed in comparison to projected background conditions to determine the impact of the development upon the surrounding roadway system. This study has been prepared in accordance with the Ocala & Marion County Traffic Impact Guidelines as well as the approved methodology statement for this project, as modified and provided to Marion County staff following PUD approval which was granted conditionally upon closure of a separate driveway from the multifamily component of the development onto SW 84th Ave Rd. A copy of that updated methodology accounting for the residential driveway closure is included as Appendix A.

Project Description

This development will consist of a commercial plaza anchored by a 23,256 SF Sprouts grocery store. 8,600 SF of mixed retail is anticipated adjacent to Sprouts. Additional development will consist of two outparcels. Outparcels are anticipated to consist of a Chipotle and either a 2,000 sf quick service restaurant or a 4,500 SF retail (the higher trip generation of the two potential uses for the second outparcel will be used in analysis). Up to 30 multifamily units are proposed at the southwest corner of the site.

This study constitutes an update of a previous traffic study that had been approved in 2023 for the same property. That development had proposed a 50,000 SF grocery with more than twice the retail square footage and a quick service restaurant.

Site access points are shown in Figure 1 and will consist of:

1. A new right in – right out connection on SR 200
2. The existing right in – right out driveway on SR 200 currently serving Wawa
3. The existing full access on SW 100th St currently serving Wawa

Note that a separate access onto SW 84th Ave had previously been proposed for the multifamily component of the development. The multifamily component will now be internally connected to the remainder of the development, and the development will not have access to SW 84th St as required by BOCC approval of the PUD for this project on May 22, 2024.

Cross connections will be constructed to the Wawa to allow shared use of the existing access points. The developer is attempting to obtain permission to install a cross access from the existing Wendy's restaurant to the south of the project along SR 200. However, the current owner is unwilling to allow the access point. This study will be performed with the conservative assumption that this cross access will not be allowed. Accounting for this additional cross access would result in a reduction of driveway trips elsewhere.

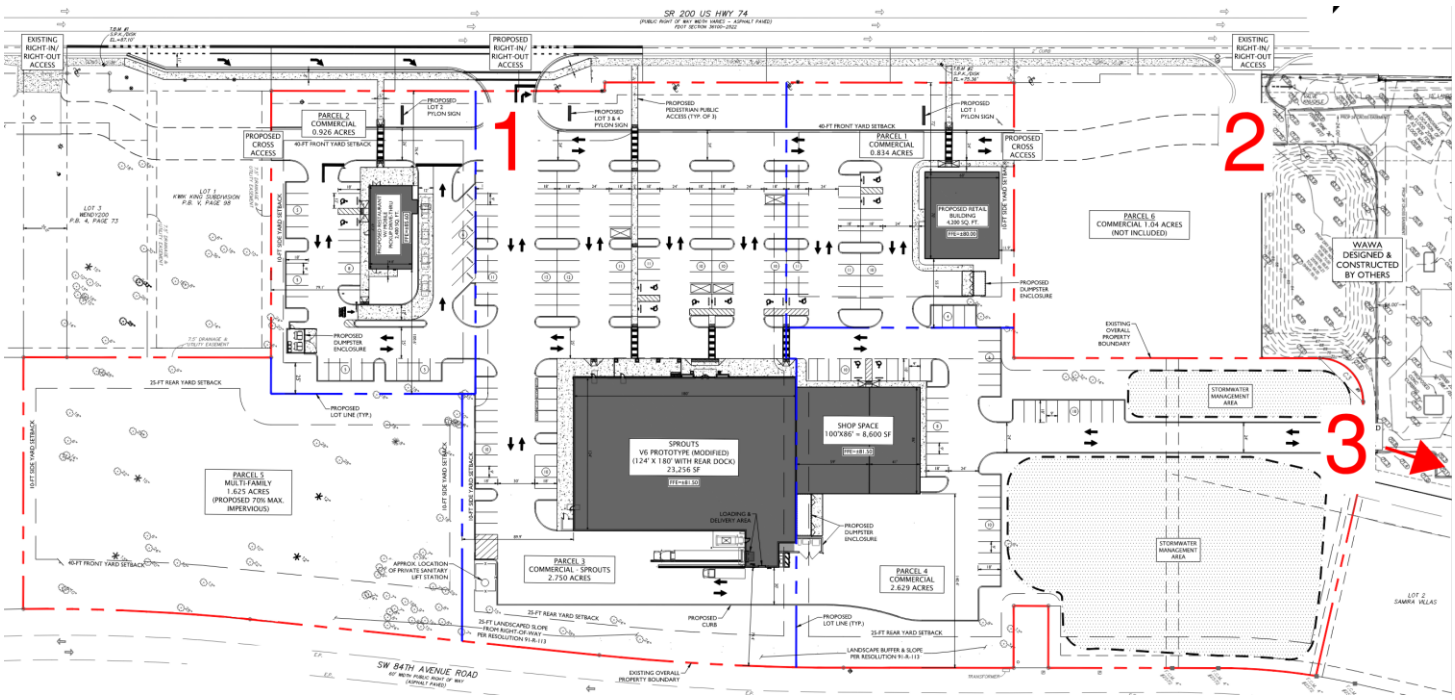

Figure 1 - Project Site and Access Points

The proposed development is anticipated to generate more than 100 peak hour trips. In accordance with Marion County's Traffic Impact Analysis Guidelines, a full Traffic Study has been prepared.

A buildout year of 2027 is anticipated. A three-year analysis timeframe is proposed (from the current year 2024 to 2027).

Proposed uses are predominantly retail and restaurant in nature; in accordance with the approved methodology, the weekday PM peak period has been used for analysis.

Study Area

The following intersections are included in this analysis (refer to exhibit on following page for corresponding locations):

- SR-200 & SW 103rd Street (A)
- SR-200 & Steeplechase Plaza (B)
- SR-200 & Friendship Center (C)
- SR-200 & SW 100th Street (D)
- SW 100th Street & SW 84th Avenue (E)
- SR 200 & SW 80th Ave (G)
- SW 80th Ave & SW 100th St (H)
- Project Driveway at SR-200 (1)
- Wawa Driveway at SR-200 (2)
- Wawa Driveway at SW 100th St (3)

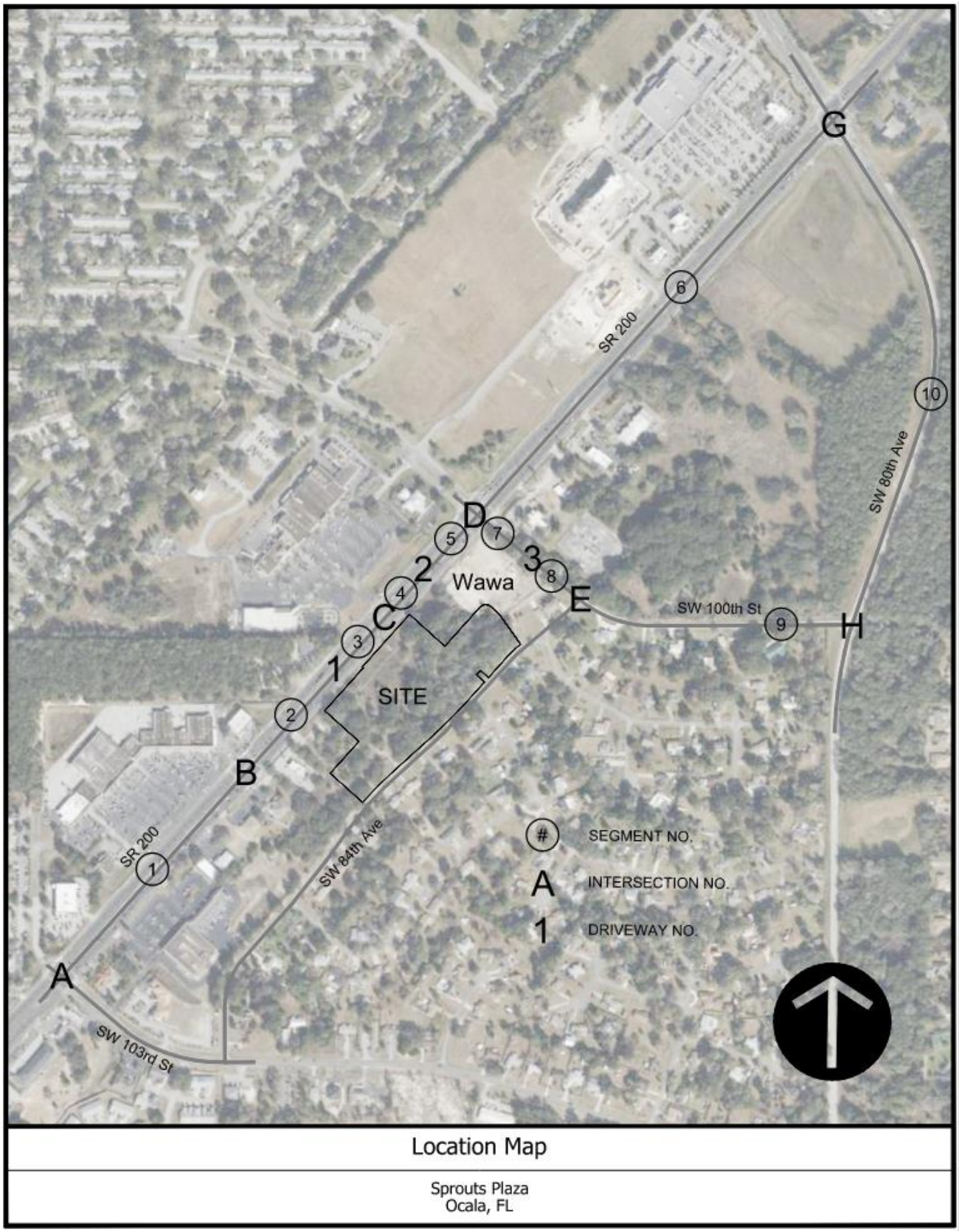

Figure 2 - Study Network

The following roadway segments have been reviewed in this analysis:

- SR 200 from SW 95th Circle to SW 80th Ave
- SW 100th Street from SW 80th Ave to SR 200
- SW 80th Ave from SR 200 to SW 100th St

Existing Conditions Analysis

Data Collection

Intersection turning movement counts were obtained for each of the studied intersections on April 4, 2024. Per the FDOT Peak Season Factor Category Report for Marion County, this time period represents the peak season, and a seasonal adjustment factor was not applied. Turning movement counts are included in Appendix B, and were used to generate a PM Peak Hour – Peak Season Traffic exhibit shown as Figure 3.

Existing Roadway Analysis

A detailed summary of each individual segment indicating the current adopted LOS standard, the adopted LOS peak hour directional volume, the existing peak hour directional volume, the existing LOS, and existing V/C ratio is shown in Table 1 below. Traffic volumes used to generate this table were obtained from the new traffic counts obtained for this study. All studied segments operate at the adopted LOS standard or better in the existing conditions.

PM Peak Hour Directional Generalized Link Analysis - Existing Conditions

No.	Roadway	From	To	Lanes	Adopted LOS Standard	Adopted LOS Peak Hour Directional Volume	Existing Peak Hour Directional Volume	Existing LOS	Existing V/C Ratio
1	SR 200	SW 103rd St	Steeplechase Plaza	6	D	3020	2159	C	0.71
2	SR 200	Steeplechase Plaza	Project Driveway 1	6	D	3020	2051	C	0.68
3	SR 200	Project Driveway 1	Friendship Center	6	D	3020	2085	C	0.69
4	SR 200	Friendship Center	Project Driveway 2	6	D	3020	2052	C	0.68
5	SR 200	Project Driveway 2	SW 100th St	6	D	3020	1990	C	0.66
6	SR 200	SW 100t St	SW 80th Ave	6	D	3020	1901	C	0.63
7	SW 100th St	SR 200	Project Driveway 3	2	D	675	132	C	0.20
8	SW 100th St	Project Driveway 3	SW 84th Ave Rd	2	D	675	56	C	0.08
9	SW 100th St	SW 84th Ave Rd	SW 80th Ave	2	D	675	45	C	0.07
10	SW 80th Ave	SW 100th St	SR 200	2	D	792	250	C	0.32

Table 1 – Existing Conditions PM Peak Hour Directional Generalized Link Analysis

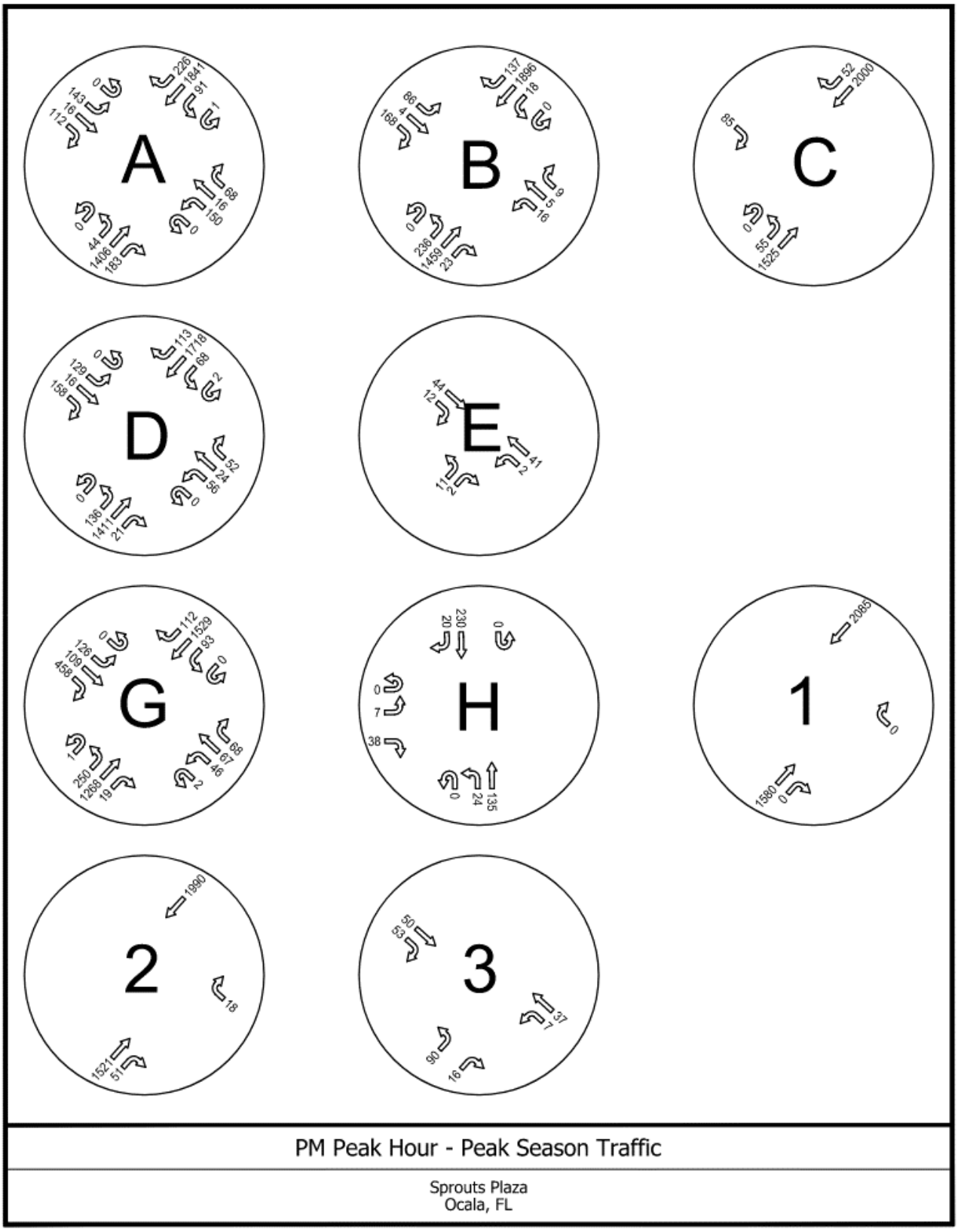

Figure 3 - Peak Season (Existing Condition) Turning Movements

Existing Intersection Analysis

Existing intersection turning movements were analyzed with the Synchro 12 software package utilizing HCM 7th Edition methodologies. Results of this analysis are included in Table 2 below, and full Synchro results are included in Appendix D. This analysis indicates that the intersections of SR 200 at SW 103rd St and at SW 80th Ave are currently failing, as are the following approaches:

- Southeast bound approach of SW 103rd St approaching SR 200
- Northwest bound approach of SW 103rd St approaching SR 200
- Southeast bound approach of Steeplechase Plaza approaching SR 200
- Northwest bound approach of SW 80th Ave approaching SR 200

Intersection	Performance Measure	PM Peak Period				
		Overall	SEB	NWB	NEB	SWB
A - SR 200 & SW 103rd St	Delay (s/veh)	129.7	896.1	1129.4	24.9	4.8
	LOS	F	F	F	C	A
	v/c ratio	-	4.02	4.2	0.7	0.83
B - SR 200 & Steeplechase Plaza	Delay (s/veh)	37.2	87.6	66.3	49	20.6
	LOS	D	F	E	D	C
	v/c ratio	-	0.43	0.14	1.59	0.44
C - SR 200 & Friendship Center (TWSC)	Delay (s/veh)	-	48.97	-	-	-
	LOS	-	E	-	-	-
	v/c ratio	-	-	-	-	-
D - SR 200 & SW 100th St	Delay (s/veh)	47.9	70.4	50.3	60.2	33.8
	LOS	D	E	D	E	C
	v/c ratio	-	0.55	0.31	0.87	0.17
E - SW 100th St & SW 84th Ave (TWSC)	Delay (s/veh)	-	-	-	9.02	-
	LOS	-	-	-	A	-
	v/c ratio	-	-	-	-	-
G - SR 200 & SW 80th Ave	Delay (s/veh)	109.6	69.8	455.4	32.6	44
	LOS	F	E	F	C	D
	v/c ratio	-	0.27	0.59	0.93	0.83
SR 200 & Driveway 1 (TWSC)	Delay (s/veh)	-	-	-	-	-
	LOS	-	-	-	-	-
	v/c ratio	-	-	-	-	-
SR 200& Driveway 2 (TWSC)	Delay (s/veh)	-	-	20.02	-	-
	LOS	-	-	C	-	-
	v/c ratio	-	-	-	-	-
SW 100th St & Driveway 3 (TWSC)	Delay (s/veh)	-	-	-	9.59	-
	LOS	-	-	-	A	-
	v/c ratio	-	-	-	-	-
		Overall	EB	WB	NB	SB
H - SW 80th Ave & SW 100th St (TWSC)	Delay (s/veh)	-	10.28	-	-	-
	LOS	-	B	-	-	-
	v/c ratio	-	-	-	-	-

* At two-way stop-controlled intersections, delays, LOS, and v/c ratio are reported for major street left-turn

Table 2 - Existing Intersection Analysis

Project Trip Generation – pass-by, internal capture, distribution, mode split and trip assignment

Trip generation has been based upon the ITE Trip Generation Manual (11th Edition). Trip generation tables showing proposed daily, AM, and PM peak hour trips along with pass-by and internal capture calculations are included below. Pass-by and internal capture have been calculated in accordance with the ITE Trip Generation Handbook (3rd Edition).

New traffic counts were obtained in April of 2024 in support of this study and are included as Appendix A. Project trips have been distributed based upon existing traffic counts per coordination with staff and as shown in Figure 4. Existing Traffic, Background Traffic, Project Traffic, Pass-By Trips, New Project Trips, and Background plus Project Trip turning movement exhibits are included as Appendix B to this report.

Land Use & Data Source	IV	Size	Average Daily			
			Rate/Equation	Enter	Exit	Total
850 - Supermarket	1000 Sq. Ft. GFA	23.3	Best Fit (LIN)	1241	1241	2482
Data Source: Trip Generation Manual, 11th			T = 83.39(X) + 539.33	50%	50%	
822 - Strip Retail Plaza (<40k)	1000 Sq. Ft. GLA	3.5	Best Fit (LIN)	189	189	378
Data Source: Trip Generation Manual, 11th			T = 42.20(X) + 229.68	50%	50%	
934 - Fast-Food Restaurant with Drive-	1000 Sq. Ft. GFA	1.7	Average	397	397	794
Data Source: Trip Generation Manual, 11th			467.48	50%	50%	
930 - Fast Casual Restaurant	1000 Sq. Ft. GFA	2.4	Average	117	116	233
Data Source: Trip Generation Manual, 11th			94.14	50%	50%	
220 - Multifamily Housing (Low-Rise) -	Dwelling Units	30	Best Fit (LIN)	134	134	268
Data Source: Trip Generation Manual, 11th			T = 6.41(X) + 75.31	50%	50%	
932 - High-Turnover (Sit-Down) Restaurant	1000 Sq. Ft. GFA	5.1	Average	273	273	546
Data Source: Trip Generation Manual, 11th			107.20	50%	50%	
Gross Trips				2351	2350	4701
Internal Capture				470	470	940
Driveway Trips				1881	1880	3761
Pass-By Trips (LUC 850)			24%	298	298	596
Pass-By Trips (LUC 822)			40%	76	76	151
Pass-By Trips (LUC 934)			55%	218	218	437
Pass-By Trips (LUC 930)			55%	64	64	128
Pass-By Trips (LUC 932)			43%	117	117	235
Total Passby	Original			773	773	1546
	Limited to 10% Background (31,000 * 10% = 3100)			773	773	1546
New External Trips				**1108**	**1107**	**2215**

Table 3 - Average Daily Trip Generation

Land Use & Data Source		IV	Size	AM Peak Hour			
				Rate/Equation	Enter	Exit	Total
850 - Supermarket		1000 Sq. Ft. GFA	23.3	Average	39	27	66
Data Source: Trip Generation Manual, 11th				2.86	59%	41%	
822 - Strip Retail Plaza (<40k)		1000 Sq. Ft. GLA	3.5	Best Fit (LOG)	9	6	15
Data Source: Trip Generation Manual, 11th				Ln(T) =0.66Ln(X) + 1.84	60%	40%	
934 - Fast-Food Restaurant with Drive-		1000 Sq. Ft. GFA	1.7	Average	39	37	76
Data Source: Trip Generation Manual, 11th				44.61	51%	49%	
930 - Fast Casual Restaurant		1000 Sq. Ft. GFA	2.4	Average	2	2	4
Data Source: Trip Generation Manual, 11th				1.43	50%	50%	
220 - Multifamily Housing (Low-Rise) -		Dwelling Units	30	Best Fit (LIN)	8	24	32
Data Source: Trip Generation Manual, 11th				T = 0.31(X) + 22.85	24%	76%	
932 - High-Turnover (Sit-Down) Restaurant		1000 Sq. Ft. GFA	5.1	Average	27	22	49
Data Source: Trip Generation Manual, 11th				9.57	55%	45%	
Gross Trips					124	118	242
Internal Capture					25	24	49
Driveway Trips					99	94	193
Pass-By Trips (LUC 850)				24%	9	6	15
Pass-By Trips (LUC 822)				40%	4	2	6
Pass-By Trips (LUC 934)				55%	19	18	37
Pass-By Trips (LUC 930)				55%	1	1	2
Pass-By Trips (LUC 932)				43%	11	9	20
Total Passby	Original				44	36	80
	Limited to 10% Background (2803 * 10% = 280)				44	36	80
New External Trips					**55**	**58**	**113**

Table 4 - AM Peak Hour Trip Generation

Land Use & Data Source		IV	Size	PM Peak Hour			
				Rate/Equation	Enter	Exit	Total
850 - Supermarket		1000 Sq. Ft. GFA	23.3	Best Fit (LOG)	119	119	238
Data Source: Trip Generation Manual, 11th				Ln(T) =0.81Ln(X) + 2.92	50%	50%	
822 - Strip Retail Plaza (<40k)		1000 Sq. Ft. GLA	3.5	Best Fit (LOG)	18	18	36
Data Source: Trip Generation Manual, 11th				Ln(T) =0.71Ln(X) + 2.72	50%	50%	
934 - Fast-Food Restaurant with Drive-		1000 Sq. Ft. GFA	1.7	Average	29	27	56
Data Source: Trip Generation Manual, 11th				33.03	52%	48%	
930 - Fast Casual Restaurant		1000 Sq. Ft. GFA	2.4	Best Fit (LIN)	15	12	27
Data Source: Trip Generation Manual, 11th				T = 17.96(X) - 15.94	55%	45%	
220 - Multifamily Housing (Low-Rise) -		Dwelling Units	30	Best Fit (LIN)	21	12	33
Data Source: Trip Generation Manual, 11th				T = 0.43(X) + 20.55	63%	37%	
932 - High-Turnover (Sit-Down) Restaurant		1000 Sq. Ft. GFA	5.1	Average	28	18	46
Data Source: Trip Generation Manual, 11th				9.05	61%	39%	
Gross Trips					230	206	436
Internal Capture					46	41	87
Driveway Trips					184	165	349
Pass-By Trips (LUC 850)				24%	29	29	57
Pass-By Trips (LUC 822)				40%	7	7	14
Pass-By Trips (LUC 934)				55%	16	15	31
Pass-By Trips (LUC 930)				55%	8	7	15
Pass-By Trips (LUC 932)				43%	12	8	20
Total Passby	Original				72	66	137
	Limited to 10% Background (3873 * 10% = 387)				72	66	137
New External Trips					**112**	**99**	**212**

Table 5 - PM Peak Hour Trip Generation

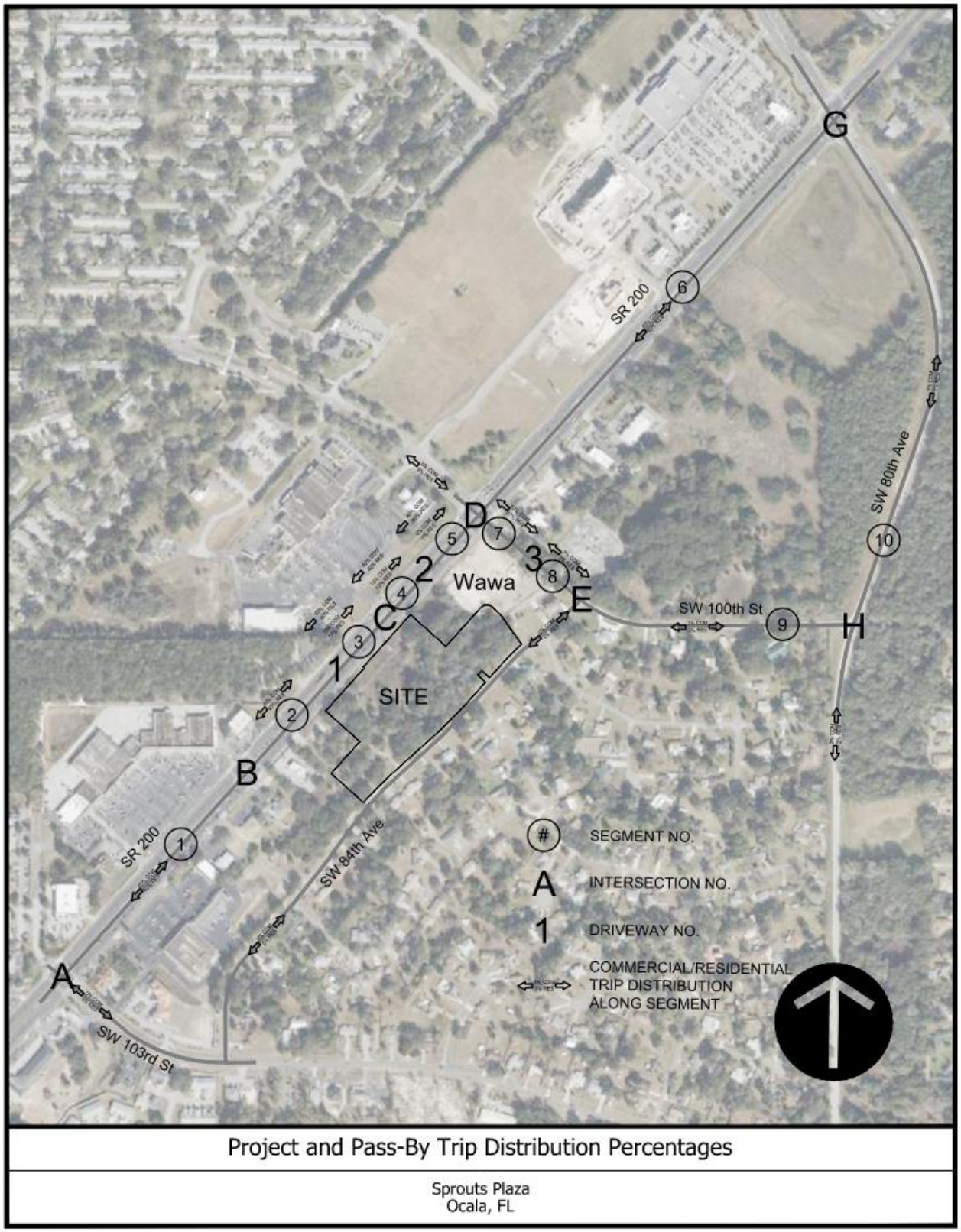

Figure 4 - Trip Distribution Percentages

Background Analysis

Background traffic was calculated by applying a growth rate determined from historical traffic count data for a 3 year horizon beyond the current date (from the current year 2024 to 2027). Committed traffic from nearby developments was included in this analysis.

Growth Rate

The 5-year historic average annual growth rates were calculated for the study roadway network as detailed in the approved methodology. Calculated average annual growth rates are as follows:

- SR 200: -2.62%
- SW 103rd St Rd: -3.00%
- 80th Ave: 1.35%

A 1.35% growth rate has been used along 80th Ave. A nominal 1% growth rate has been used for the remainder of the study network.

Committed Traffic

County staff have provided copies of the TIA's for Sable Pass and West Point Multifamily. Project traffic from both developments has been added to background traffic.

Background Roadway Analysis

A detailed summary of each individual segment indicating the current adopted LOS standard, the adopted LOS peak hour directional volume, the projected background peak hour directional volume, the projected background LOS, and projected background V/C ratio is shown in Table 6 below. All studied segments operate at the adopted LOS standard or better in the background conditions.

PM Peak Hour Directional Generalized Link Analysis - Background Conditions

No.	Roadway	From	To	Lanes	Adopted LOS Standard	Adopted LOS Peak Hour Directional Volume	Background Peak Hour Directional Volume	Background LOS	Background V/C Ratio
1	SR 200	SW 103rd St	Steeplechase Plaza	6	D	3020	2233	C	0.74
2	SR 200	Steeplechase Plaza	Project Driveway 1	6	D	3020	2121	C	0.70
3	SR 200	Project Driveway 1	Friendship Center	6	D	3020	2157	C	0.71
4	SR 200	Friendship Center	Project Driveway 2	6	D	3020	2123	C	0.70
5	SR 200	Project Driveway 2	SW 100th St	6	D	3020	1998	C	0.66
6	SR 200	SW 100t St	SW 80th Ave	6	D	3020	1961	C	0.65
7	SW 100th St	SR 200	Project Driveway 3	2	D	675	184	C	0.27
8	SW 100th St	Project Driveway 3	SW 84th Ave Rd	2	D	675	117	C	0.17
9	SW 100th St	SW 84th Ave Rd	SW 80th Ave	2	D	675	91	C	0.13
10	SW 80th Ave	SW 100th St	SR 200	2	D	792	508	C	0.64

Table 6 - Background Conditions PM Peak Hour Directional Generalized Link Analysis

Background Intersection Analysis

Background intersection turning movements were analyzed with the Synchro 12 software package utilizing HCM 7th Edition methodologies. Results of this analysis are included in Table 7 below, and detailed Synchro results are included in Appendix E. This analysis indicates that the intersections of SR 200 at SW 103rd St and at SW 80th Ave are currently failing, as are the following approaches:

- Southeast bound approach of SW 103rd St approaching SR 200
- Northwest bound approach of SW 103rd St approaching SR 200
- Southeast bound approach of Steeplechase Plaza approaching SR 200
- Southeast bound approach of Friendship Center approaching SR 200
- Southeast bound approach of SW 99th St Rd / SW 100th St approaching SR 200
- Southeast bound approach of SW 80th Ave approaching SR 200
- Northwest bound approach of SW 80th Ave approaching SR 200
- Southwest bound approach of SW 80th Ave approaching SR 200

Intersection	Performance Measure	PM Peak Period				
		Overall	SEB	NWB	NEB	SWB
A - SR 200 & SW 103rd St	Delay (s/veh)	191.6	926.6	1833.7	26.5	4.9
	LOS	F	F	F	C	A
	v/c ratio	-	44.13	5.95	0.71	0.84
B - SR 200 & Steeplechase Plaza	Delay (s/veh)	45.5	88	66	50.6	35.7
	LOS	D	F	E	D	D
	v/c ratio	-	0.44	0.14	1.64	0.44
C - SR 200 & Friendship Center (TWSC)	Delay (s/veh)	-	56.42	-	-	-
	LOS	-	F	-	-	-
	v/c ratio	-	-	-	-	-
D - SR 200 & SW 100th St	Delay (s/veh)	36.5	97.6	55	62.2	2
	LOS	D	F	E	E	A
	v/c ratio	-	0.93	0.58	0.86	0.18
E - SW 100th St & SW 84th Ave (TWSC)	Delay (s/veh)	-	-	-	9.66	-
	LOS	-	-	-	A	-
	v/c ratio	-	-	-	-	-
G - SR 200 & SW 80th Ave	Delay (s/veh)	156.6	457.6	349.9	13.3	114.3
	LOS	F	F	F	B	F
	v/c ratio	-	0.74	0.34	0.94	1.87
SR 200 & Driveway 1 (TWSC)	Delay (s/veh)	-	-	-	-	-
	LOS	-	-	-	-	-
	v/c ratio	-	-	-	-	-
SR 200& Driveway 2 (TWSC)	Delay (s/veh)	-	-	20.93	-	-
	LOS	-	-	C	-	-
	v/c ratio	-	-	-	-	-
SW 100th St & Driveway 3 (TWSC)	Delay (s/veh)	-	-	-	10.46	-
	LOS	-	-	-	B	-
	v/c ratio	-	-	-	-	-
		Overall	EB	WB	NB	SB
H - SW 80th Ave & SW 100th St (TWSC)	Delay (s/veh)	-	18.55	19.35	-	-
	LOS	-	C	C	-	-
	v/c ratio	-	-	-	-	-

* At two-way stop-controlled intersections, delays, LOS, and v/c ratio are reported for major street left-turn

Table 7 - Background Intersection Analysis

Post-Development Conditions Analysis

Project traffic was added to the study network, and roadway segments and intersections within the study area were analyzed the post-development condition scenario.

Post-Development Roadway Analysis

A detailed summary of each individual segment indicating the current adopted LOS standard, the adopted LOS peak hour directional volume, the projected background peak hour directional volume, the projected background LOS, and projected background V/C ratio is shown in Table 8 below. All studied segments operate at the adopted LOS standard or better in the background conditions.

PM Peak Hour Directional Generalized Link Analysis - Post-Development Conditions

No.	Roadway	From	To	Lanes	Adopted LOS Standard	Adopted LOS Peak Hour Directional Volume	Background Peak Hour Directional Volume	Background LOS	Background V/C Ratio
1	SR 200	SW 103rd St	Steeplechase Plaza	6	D	3020	2273	C	0.75
2	SR 200	Steeplechase Plaza	Project Driveway 1	6	D	3020	2161	C	0.72
3	SR 200	Project Driveway 1	Friendship Center	6	D	3020	2197	C	0.73
4	SR 200	Friendship Center	Project Driveway 2	6	D	3020	2163	C	0.72
5	SR 200	Project Driveway 2	SW 100th St	6	D	3020	2038	C	0.67
6	SR 200	SW 100t St	SW 80th Ave	6	D	3020	2016	C	0.67
7	SW 100th St	SR 200	Project Driveway 3	2	D	675	219	C	0.32
8	SW 100th St	Project Driveway 3	SW 84th Ave Rd	2	D	675	120	C	0.18
9	SW 100th St	SW 84th Ave Rd	SW 80th Ave	2	D	675	109	C	0.16
10	SW 80th Ave	SW 100th St	SR 200	2	D	792	509	C	0.64

Table 8 - Post-Development Conditions PM Peak Hour Directional Generalized Link Analysis

Post-Development Intersection Analysis

Background intersection turning movements were analyzed with the Synchro 12 software package utilizing HCM 7th Edition methodologies. Results of this analysis are included in Table 9 below, and detailed Synchro results are included in Appendix F. This analysis indicates that the intersections of SR 200 at SW 103rd St and at SW 80th Ave fall below adopted LOS, as do the following approaches:

- Southeast bound approach of SW 103rd St approaching SR 200
- Northwest bound approach of SW 103rd St approaching SR 200
- Southeast bound approach of Steeplechase Plaza approaching SR 200
- Southeast bound approach of Friendship Center approaching SR 200
- Southeast bound approach of SW 99th St Rd / SW 100th St approaching SR 200
- Southeast bound approach of SW 80th Ave approaching SR 200
- Northwest bound approach of SW 80th Ave approaching SR 200
- Southwest bound approach of SW 80th Ave approaching SR 200

All of the approaches and intersections which are shown to fail in the post-development conditions are already failing in the background condition, and all intersections and approaches maintain the background condition LOS.

Intersection	Performance Measure	PM Peak Period				
		Overall	SEB	NWB	NEB	SWB
A - SR 200 & SW 103rd St	Delay (s/veh)	188.6	926.6	1833.7	27	4.9
	LOS	F	F	F	C	A
	v/c ratio	-	4.13	5.95	0.71	0.84
B - SR 200 & Steeplechase Plaza	Delay (s/veh)	38.1	88	66	49.3	22
	LOS	D	F	E	D	C
	v/c ratio	-	0.44	0.14	1.64	0.44
C - SR 200 & Friendship Center (TWSC)	Delay (s/veh)	-	57.57	-	-	-
	LOS	-	F	-	-	-
	v/c ratio	-	-	-	-	-
D - SR 200 & SW 100th St	Delay (s/veh)	37.7	103.8	56.9	61.9	3.1
	LOS	D	F	E	E	A
	v/c ratio	-	0.97	0.66	0.88	0.34
E - SW 100th St & SW 84th Ave (TWSC)	Delay (s/veh)	-	-	-	9.7	-
	LOS	-	-	-	A	-
	v/c ratio	-	-	-	-	-
G - SR 200 & SW 80th Ave	Delay (s/veh)	159.7	480.9	352.2	12.7	115
	LOS	F	F	F	B	F
	v/c ratio	-	0.74	0.34	0.94	1.88
SR 200 & Driveway 1 (TWSC)	Delay (s/veh)	-	-	23.67	-	-
	LOS	-	-	C	-	-
	v/c ratio	-	-	-	-	-
SR 200& Driveway 2 (TWSC)	Delay (s/veh)	-	-	23.71	-	-
	LOS	-	-	C	-	-
	v/c ratio	-	-	-	-	-
SW 100th St & Driveway 3 (TWSC)	Delay (s/veh)	-	-	-	10.93	-
	LOS	-	-	-	B	-
	v/c ratio	-	-	-	-	-
		Overall	EB	WB	NB	SB
H - SW 80th Ave & SW 100th St (TWSC)	Delay (s/veh)	-	18.92	19.5	-	-
	LOS	-	C	C	-	-
	v/c ratio	-	-	-	-	-

* At two-way stop-controlled intersections, delays, LOS, and v/c ratio are reported for major street left-turn

Table 9 - Post-Development Intersection Analysis

Queue Analysis

The need for turn lanes was considered at project driveways in accordance with the FDOT Multimodal Access Management Guidebook as well as FDM 212 – Intersections and Standard Plans, Index 711-001. This analysis indicates that right turn lanes are warranted at all project driveways. The only driveway at which an inbound left turn movement will be allowed is at Driveway 3. Analysis indicates that a left turn lane is not warranted due to low turning and roadway volumes at that location. Turn lane needs and lengths are included in Table 10 below. It should be noted that per discussion with FDOT, the turn lane at Driveway 2 will not be constructed with this project; that turn lane will be constructed in conjunction with the remaining property to the east of the proposed Sprouts Commercial Plaza.

The northwest-bound approach of SW 100th St at SR 200 has been included per County request. Synchro queue results are included in Appendix F, indicating the need for 169 ft of queue storage for the combined through/right turn lane. Deceleration length would not apply to this approach due to the combined through/right turn lane configuration. *The current turn lane provides approximately 90 ft of storage. An 80 ft extension of the existing turn lane should be provided by the design engineer to result in no less than 170 ft of storage in the northwest-bound straight/right turn approach of SW 100th St at SR 200.*

The existing left turn lanes along SR 200 at SW 100th St were also evaluated in response to FDOT comments and are tabulated below. A total length of 473' is called for at the northeastbound left turn movement; the existing turn lane is approximately 520' in length and exceeds this requirement. Similarly, the southwestbound approach requires a 369' total length. The existing turn lane is approximately 605' in length and exceeds this requirement. Extensions of the existing turn lanes on SR 200 at SW 100th St are not warranted.

Intersection	Intersecting Rd	Movement	VR	VL	V	Turn Lane Warranted	Speed Limit	Queue Storage	Total Deceleration Length	Total Length
Driveway 1	SR 200	NEB Right Turn	30	N/A	1685	Yes	50	0	290	290
Driveway 2	SR 200	NEB Right Turn	68	N/A	1687	Yes (1)	50	0	290	290
Driveway 3	SW 100th St	SEB Right Turn	119	N/A	230	Yes	30	0	120	120
Driveway 4	SW 100th St	NWB Left Turn	N/A	10	111	No	30	N/A	N/A	N/A
SW 100th St	SR 200	NWB Right Turn	61	N/A	219	N/A (2)	30	169	N/A (2)	169
SR 200	SW 100th St	NEB Left Turn	Existing				50	233	240	473
SR 200	SW 100th St	SWB Left Turn	Existing				50	129	240	369
Notes:										
(1) Based on discussions with FDOT, due to ROW constraints, the right turn lane at Driveway 2 is not required at this time but will be rquired as a condition of approval of the development of the adjacent property to the east between this project and Wawa										
(2) See text discussion										

Table 10 - Turn Lane Warrants

Conclusions

Roadway segment analysis indicates that all studied roadway segments will both maintain the background LOS and meet their adopted LOS.

Intersection analysis indicates that all studied intersections are anticipated to maintain the LOS Grade from the background condition.

Turn lane analysis indicates that right turn lanes are warranted at each of the project access points. As discussed above, the right turn lane at Driveway 2 will be constructed together with future development between this project and the existing WaWa. The right turn lane at Driveway 3 has already been constructed. A new right turn lane will be constructed at Driveway 1 as part of this project.

Appendix A
Methodology Statement

AlfKa
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Traffic Methodology Statement

Sprouts Commercial Plaza
Revised 2024.05.22

Note: Methodology appendices omitted for brevity and to avoid confusion with exhibits included with TIS

Prepared by:
ALFKA, LLC

Prepared for:
CORTA Ocala

Project Number:
FCD2403

Alfka, LLC
400 North Tampa Street. Ste. 1440
Tampa, FL 33602
Certificate of Authorization: 30389
Luis Alfredo Cely, P.E. No. 70653

Description of the Proposed Development

This development will consist of a commercial plaza anchored by a 23,256 SF Sprouts grocery store. 8,600 SF of mixed retail is anticipated adjacent to Sprouts. Additional development will consist of two outparcels. Outparcels are anticipated to consist of a Chipotle and either a 2,000 sf quick service restaurant or a 4,500 SF retail (the higher trip generation of the two potential uses for the second outparcel will be used in analysis). Up to 30 multifamily units are proposed at the southwest corner of the site.

This study constitutes an update of a previous traffic study that had been approved in 2023 for the same property. That development had proposed a 50,000 SF grocery with more than twice the retail square footage and a quick service restaurant.

Site access points are shown in Figure 1 and will consist of:

1. A new right in – right out connection on SR 200
2. The existing right in – right out driveway on SR 200 currently serving Wawa
3. The existing full access on SW 100th St currently serving Wawa

Note that a separate access onto SW 84th Ave had previously been proposed for the multifamily component of the development. The multifamily component will now be internally connected to the remainder of the development, and the development will not have access to SW 84th St as required by BOCC approval of the PUD for this project on May 22, 2024.

Cross connections will be constructed to the Wawa to allow shared use of the existing access points. The developer is attempting to obtain permission to install a cross access from the existing Wendy's restaurant to the south of the project along SR 200. However, the current owner is unwilling to allow the access point. This study will be performed with the conservative assumption that this cross access will not be allowed. Accounting for this additional cross access would result in a reduction of driveway trips elsewhere.

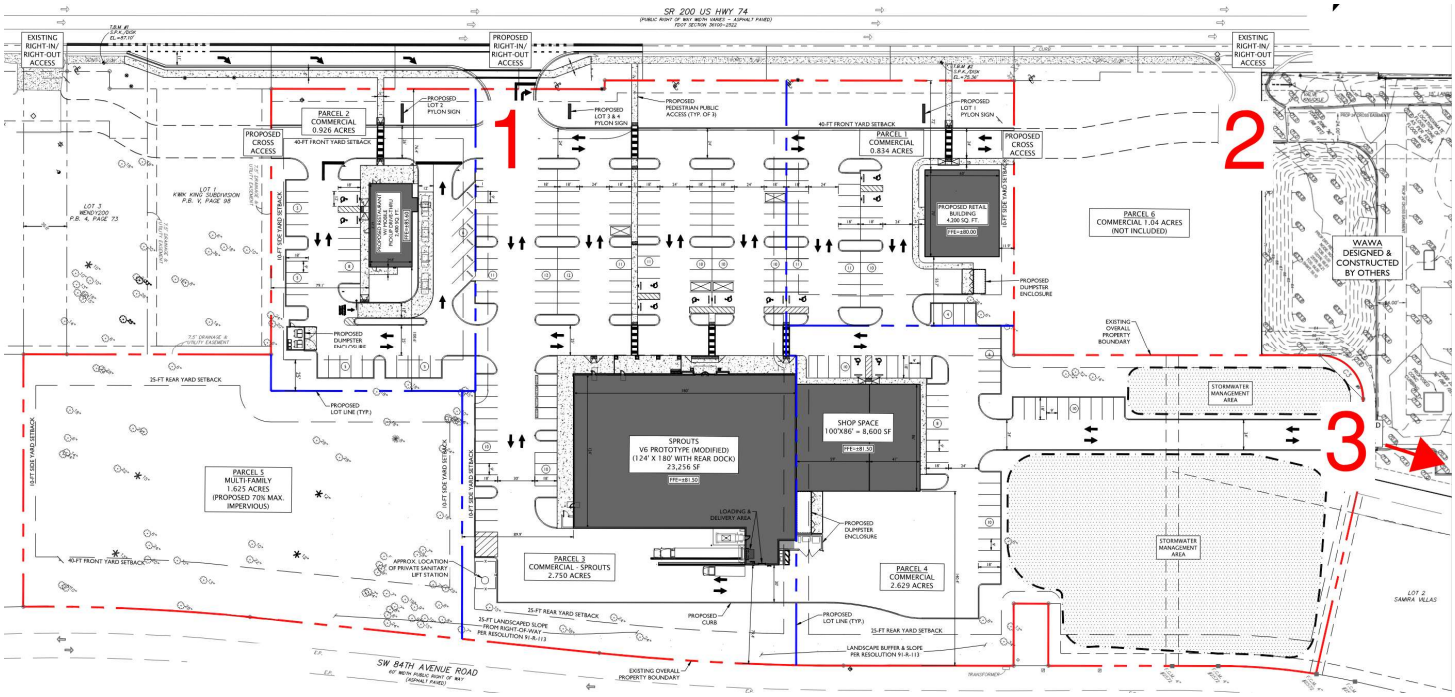


Figure 1 - Project Site and Access Points

Study Level

The proposed development is anticipated to generate more than 100 peak hour trips. In accordance with Marion County's Traffic Impact Analysis Guidelines, a full Traffic Study will be prepared.

Analysis Timeframe

A buildout year of 2027 is anticipated. A three-year analysis timeframe is proposed (from the current year 2024 to 2027).

Analysis Period

Proposed uses are predominantly retail and restaurant in nature; we propose to analyze the weekday PM peak period.

Assumptions for Trip Generation – pass-by, internal capture, distribution, mode split and trip assignment

Trip generation has been based upon the ITE Trip Generation Manual (11th Edition). Trip generation tables showing proposed daily, AM, and PM peak hour trips along with pass-by and internal capture calculations are included below. Pass-by and internal capture have been calculated in accordance with the ITE Trip Generation Handbook (3rd Edition).

New traffic counts were obtained in April of 2024 in support of this study and are included as Appendix A. Project trips have been distributed based upon existing traffic counts. Existing Traffic, Background Traffic, Project Traffic, Pass-By Trips, New Project Trips, and Background plus Project Trip exhibits are included as Appendix B to this report.

Land Use & Data Source		IV	Size	Average Daily			
				Rate/Equation	Enter	Exit	Total
850 - Supermarket		1000 Sq. Ft. GFA	23.3	Best Fit (LIN)	1241	1241	2482
Data Source: Trip Generation Manual, 11th				T = 83.39(X) + 539.33	50%	50%	
822 - Strip Retail Plaza (<40k)		1000 Sq. Ft. GLA	3.5	Best Fit (LIN)	189	189	378
Data Source: Trip Generation Manual, 11th				T = 42.20(X) + 229.68	50%	50%	
934 - Fast-Food Restaurant with Drive-		1000 Sq. Ft. GFA	1.7	Average	397	397	794
Data Source: Trip Generation Manual, 11th				467.48	50%	50%	
930 - Fast Casual Restaurant		1000 Sq. Ft. GFA	2.4	Average	117	116	233
Data Source: Trip Generation Manual, 11th				94.14	50%	50%	
220 - Multifamily Housing (Low-Rise) -		Dwelling Units	30	Best Fit (LIN)	134	134	268
Data Source: Trip Generation Manual, 11th				T = 6.41(X) + 75.31	50%	50%	
932 - High-Turnover (Sit-Down) Restaurant		1000 Sq. Ft. GFA	5.1	Average	273	273	546
Data Source: Trip Generation Manual, 11th				107.20	50%	50%	
Gross Trips					2351	2350	4701
Internal Capture					470	470	940
Driveway Trips					1881	1880	3761
Pass-By Trips (LUC 850)				24%	298	298	596
Pass-By Trips (LUC 822)				40%	76	76	151
Pass-By Trips (LUC 934)				55%	218	218	437
Pass-By Trips (LUC 930)				55%	64	64	128
Pass-By Trips (LUC 932)				43%	117	117	235
Total Passby	Original				773	773	1546
	Limited to 10% Background (31,000 * 10% = 3100)				773	773	1546
New External Trips					**1108**	**1107**	**2215**

Table 1 - Average Daily Trip Generation

Land Use & Data Source		IV	Size	AM Peak Hour			
				Rate/Equation	Enter	Exit	Total
850 - Supermarket		1000 Sq. Ft. GFA	23.3	Average	39	27	66
Data Source: Trip Generation Manual, 11th				2.86	59%	41%	
822 - Strip Retail Plaza (<40k)		1000 Sq. Ft. GLA	3.5	Best Fit (LOG)	9	6	15
Data Source: Trip Generation Manual, 11th				Ln(T) =0.66Ln(X) + 1.84	60%	40%	
934 - Fast-Food Restaurant with Drive-		1000 Sq. Ft. GFA	1.7	Average	39	37	76
Data Source: Trip Generation Manual, 11th				44.61	51%	49%	
930 - Fast Casual Restaurant		1000 Sq. Ft. GFA	2.4	Average	2	2	4
Data Source: Trip Generation Manual, 11th				1.43	50%	50%	
220 - Multifamily Housing (Low-Rise) -		Dwelling Units	30	Best Fit (LIN)	8	24	32
Data Source: Trip Generation Manual, 11th				T = 0.31(X) + 22.85	24%	76%	
932 - High-Turnover (Sit-Down) Restaurant		1000 Sq. Ft. GFA	5.1	Average	27	22	49
Data Source: Trip Generation Manual, 11th				9.57	55%	45%	
Gross Trips					124	118	242
Internal Capture					25	24	49
Driveway Trips					99	94	193
Pass-By Trips (LUC 850)				24%	9	6	15
Pass-By Trips (LUC 822)				40%	4	2	6
Pass-By Trips (LUC 934)				55%	19	18	37
Pass-By Trips (LUC 930)				55%	1	1	2
Pass-By Trips (LUC 932)				43%	11	9	20
Total Passby	Original				44	36	80
	Limited to 10% Background (2803 * 10% = 280)				44	36	80
New External Trips					**55**	**58**	**113**

Table 2 - AM Peak Hour Trip Generation

Land Use & Data Source		IV	Size	PM Peak Hour			
				Rate/Equation	Enter	Exit	Total
850 - Supermarket		1000 Sq. Ft. GFA	23.3	Best Fit (LOG)	119	119	238
Data Source: Trip Generation Manual, 11th				Ln(T) =0.81Ln(X) + 2.92	50%	50%	
822 - Strip Retail Plaza (<40k)		1000 Sq. Ft. GLA	3.5	Best Fit (LOG)	18	18	36
Data Source: Trip Generation Manual, 11th				Ln(T) =0.71Ln(X) + 2.72	50%	50%	
934 - Fast-Food Restaurant with Drive-		1000 Sq. Ft. GFA	1.7	Average	29	27	56
Data Source: Trip Generation Manual, 11th				33.03	52%	48%	
930 - Fast Casual Restaurant		1000 Sq. Ft. GFA	2.4	Best Fit (LIN)	15	12	27
Data Source: Trip Generation Manual, 11th				T = 17.96(X) - 15.94	55%	45%	
220 - Multifamily Housing (Low-Rise) -		Dwelling Units	30	Best Fit (LIN)	21	12	33
Data Source: Trip Generation Manual, 11th				T = 0.43(X) + 20.55	63%	37%	
932 - High-Turnover (Sit-Down) Restaurant		1000 Sq. Ft. GFA	5.1	Average	28	18	46
Data Source: Trip Generation Manual, 11th				9.05	61%	39%	
Gross Trips					230	206	436
Internal Capture					46	41	87
Driveway Trips					184	165	349
Pass-By Trips (LUC 850)				24%	29	29	57
Pass-By Trips (LUC 822)				40%	7	7	14
Pass-By Trips (LUC 934)				55%	16	15	31
Pass-By Trips (LUC 930)				55%	8	7	15
Pass-By Trips (LUC 932)				43%	12	8	20
Total Passby	Original				72	66	137
	Limited to 10% Background (3873 * 10% = 387)				72	66	137
New External Trips					**112**	**99**	**212**

Table 3 - PM Peak Hour Trip Generation

Study Area

The following intersections are proposed for inclusion in this analysis (refer to exhibit on following page for corresponding locations):

- SR-200 & SW 103rd Street (A)
- SR-200 & Steeplechase Plaza (B)
- SR-200 & Friendship Center (C)
- SR-200 & SW 100th Street (D)
- SW 100th Street & SW 84th Avenue (E)
- SR 200 & SW 80th Ave (G)
- SW 80th Ave & SW 100th St (H)
- Project Driveway at SR-200 (1)
- Wawa Driveway at SR-200 (2)
- Wawa Driveway at SW 100th St (3)

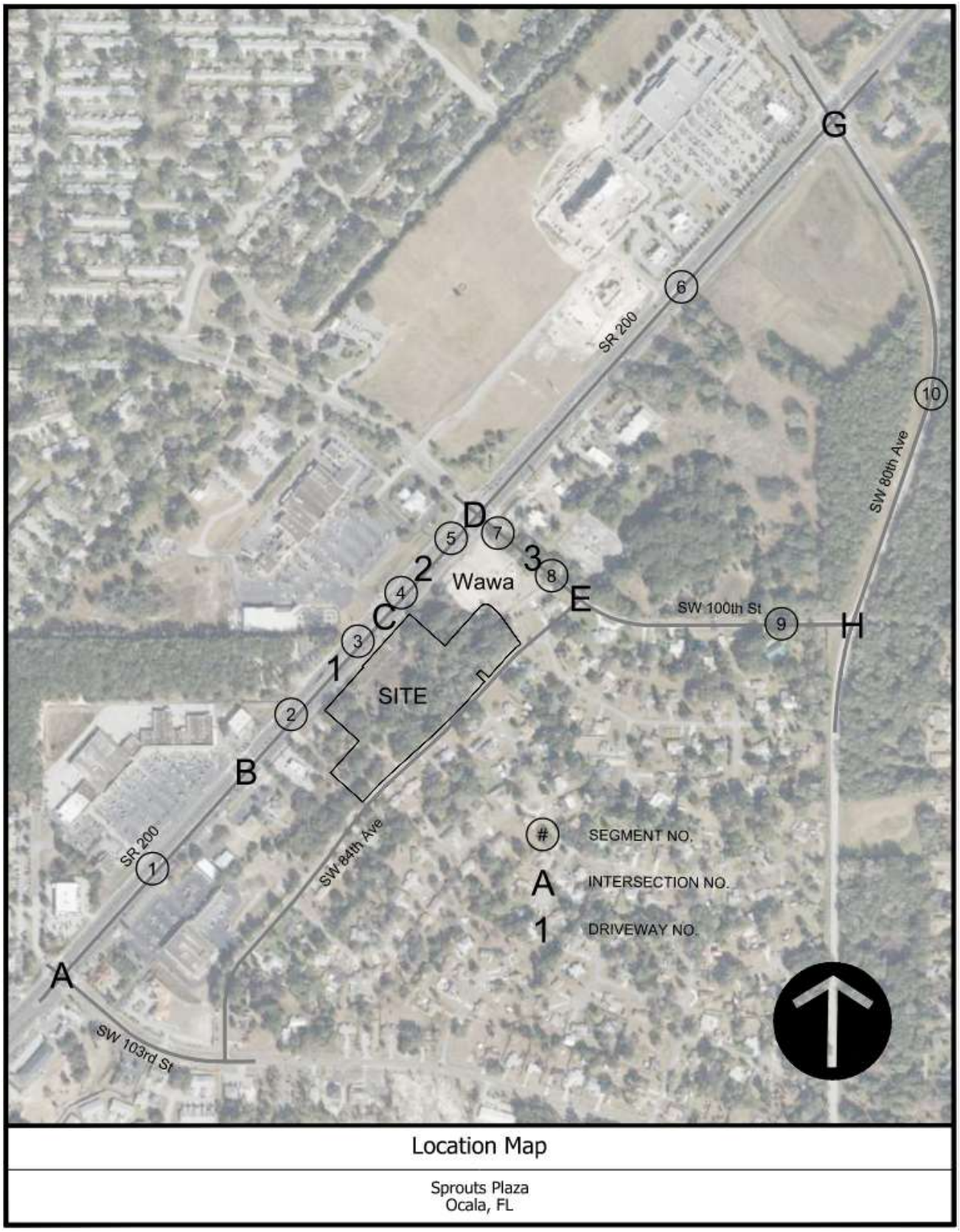


Figure 2 - Proposed Study Intersections

The following roadway segments are proposed for inclusion in this analysis:

- SR 200 from SW 95th Circle to SW 80th Ave
- SW 100th Street from SW 80th Ave to SR 200
- SW 80th Ave from SR 200 to SW 100th St

A detailed summary of each individual segment indicating significant impact percentage by segment along with the physical characteristics of each is below. The study area extends at least one segment beyond all segments exceeding 3% of the maximum service volume. Refer to Figure 4 for segment location. Refer to Appendix C for additional information.

PM Peak Hour Directional Generalized Link Analysis

No.	Roadway	From	To	Lanes	LOS Standard	Service Volume	Background Traffic	New Project Trips		Buildout Traffic		
								#	% of Service Volume	Total Volume	LOS	V/C
1	SR 200	SW 103rd St	Steeplechase Plaza	6	D	3020	2225	40	1%	2265	C	0.75
2	SR 200	Steeplechase Plaza	Project Driveway 1	6	D	3020	2113	40	1%	2153	C	0.71
3	SR 200	Project Driveway 1	Friendship Center	6	D	3020	2115	40	1%	2155	C	0.71
4	SR 200	Friendship Center	Project Driveway 2	6	D	3020	2149	40	1%	2189	C	0.72
5	SR 200	Project Driveway 2	SW 100th St	6	D	3020	1990	40	1%	2030	C	0.67
6	SR 200	SW 100t St	SW 80th Ave	6	D	3020	1958	55	2%	2013	C	0.67
7	SW 100th St	SR 200	Project Driveway 3	2	D	675	106	64	9%	170	C	0.25
8	SW 100th St	Project Driveway 3	SW 84th Ave Rd	2	D	675	57	3	0%	60	C	0.09
9	SW 100th St	SW 84th Ave Rd	SW 80th Ave	2	D	675	46	3	0%	49	C	0.07
10	SW 80th Ave	SW 100th St	SR 200	2	D	675	260	1	0%	261	C	0.39

Table 4 – PM Peak Hour Directional Generalized Link Analysis

Existing Conditions Inventory

An existing conditions inventory will be prepared, and will include the following for each studied roadway segment:

- Adopted LOS standard
- Adopted LOS capacity
- Existing LOS
- Current traffic counts
- Background traffic volumes
- Number of lanes
- FDOT group classification
- Existing v/c ratio

Existing Traffic

Per comments received on the initial methodology statement, we have obtained new traffic counts for the study intersections. Additional intersections requested via comments have been added to the counts. These counts were performed in April of 2024. FDOT's latest (2022) Peak Season Factor Category Report for Marion County (see Appendix D) indicates that this is within the peak season and will not require the application of a seasonal adjustment factor.

Background Traffic

Background traffic will be calculated by applying a growth rate determined from historical traffic count data for a 3 year horizon beyond the current date (from the current year 2024 to 2027).

The 5-year historic average annual growth rates were calculated for the study roadway network. Calculations are included in Appendix E. Calculated average annual growth rates are as follows:

- SR 200: -2.62%
- SW 103rd St Rd: -3.00%
- 80th Ave: 1.35%

We propose the use of a 1.35% growth rate to existing traffic along 80th Ave. A nominal 1% growth rate will be used for the remainder of the study network.

Committed Traffic

We have met with County staff and requested information on projects in the surrounding area that will contribute committed traffic volumes. This information will be added to the trip distributions shown herein once provided.

Planned Improvements

A review of the FDOT Current 5 year Adopted Work Program Web Map and the Ocala Marion Transportation Planning Organization Interactive TIP Map show no anticipated projects in the vicinity of the proposed development.

Unique Factors

Preliminary review of the proposed development and the existing surrounding area has not identified unique or anomalous factors to be addressed with this study.

Operational Analysis

The study will analyze the roadway segments and intersections for the following conditions:

1. Existing
2. Background
3. Background with Improvements (if needed)
4. Buildout
5. Buildout with Improvements (if needed)

The need for right turn lanes at the project driveways will be analyzed using guidance in Section 6.2 of FDOT's Access Management Guidebook.

Appendix B
Traffic Counts

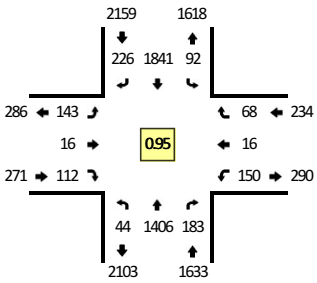
Type of peak hour being reported: Intersection Peak

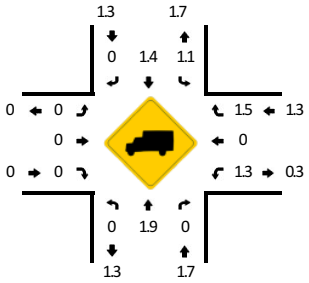
Method for determining peak hour: Total Entering Volume

LOCATION: State Rd 200 -- SW 103rd Street Rd
CITY/STATE: Liberty Triangle, FL

QC JOB #: 16546102
DATE: Thu, Apr 4 2024

Peak-Hour: 4:00 PM -- 5:00 PM
Peak 15-Min: 4:45 PM -- 5:00 PM





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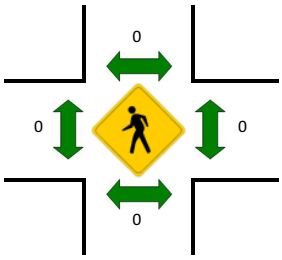
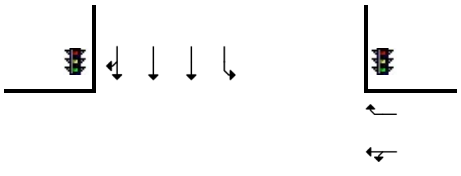
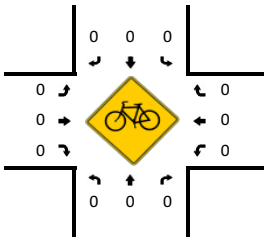
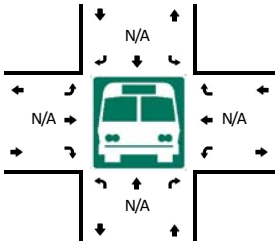
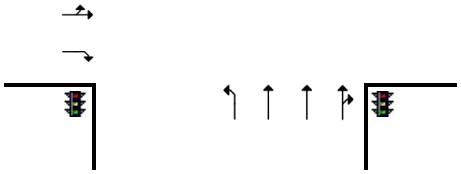
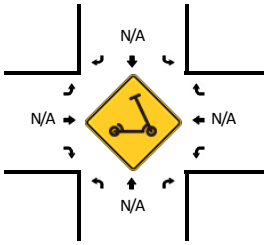












R* = RTOR

15-Min Count Period Beginning At	State Rd 200 (Northbound)					State Rd 200 (Southbound)					SW 103rd Street Rd (Eastbound)					SW 103rd Street 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	17	357	23	0	18	11	472	26	1	37	38	6	6	0	19	26	1	9	0	10	1077	
4:15 PM	13	330	34	0	10	22	437	24	0	6	28	4	7	0	22	37	6	7	0	16	1003	
4:30 PM	7	387	41	0	7	24	483	21	0	12	29	5	2	0	21	36	1	5	0	9	1090	
4:45 PM	7	332	18	0	32	34	449	37	0	63	48	1	5	0	30	51	8	5	0	7	1127	4297
5:00 PM	6	353	26	0	15	33	395	27	0	10	26	4	5	0	25	42	6	7	0	19	999	4219
5:15 PM	0	325	15	0	11	27	542	37	1	16	23	2	2	0	26	22	4	2	1	19	1075	4291
5:30 PM	6	245	26	0	4	22	433	21	1	9	8	7	2	0	10	34	2	5	0	11	846	4047
5:45 PM	1	289	17	0	3	11	366	7	1	1	8	4	3	0	7	26	5	5	0	19	773	3693

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	28	1328	200	0	128	136	1796	400	0	252	192	4	140	0	120	204	32	48	0	28	5036
Heavy Trucks	0	28	0			0	24	0			0	0	0			4	0	0			56
Buses																					
Pedestrians		0					0					0					0				0
Bicycles	0	0	0			0	0	0			0	0	0			0	0	0			0
Scooters																					

Comments: State Rd 200 - 50mph/SW 103rd Street Rd - 40mph

Report generated on 4/11/2024 7:29 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak

Method for determining peak hour: Total Entering Volume

LOCATION: State Rd 200 -- Steeplechase Plaza

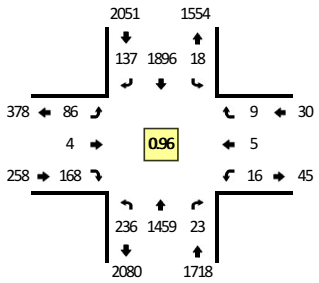
CITY/STATE: Liberty Triangle, FL

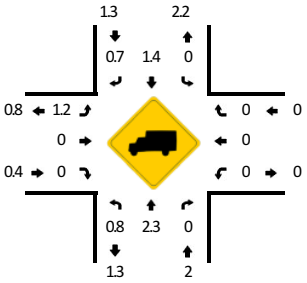
QC JOB #: 16546104

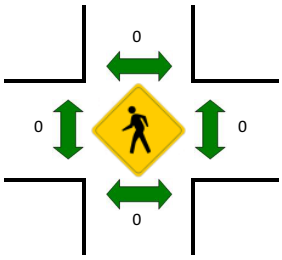
DATE: Thu, Apr 4 2024

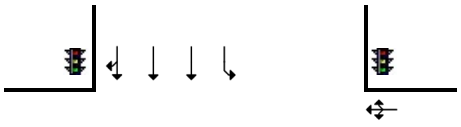
Peak-Hour: 4:00 PM -- 5:00 PM

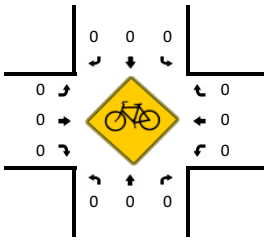
Peak 15-Min: 4:00 PM -- 4:15 PM

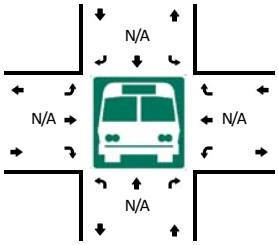


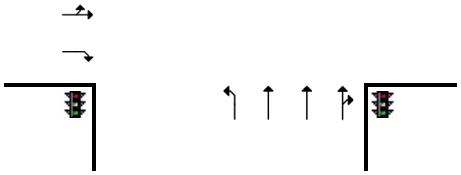


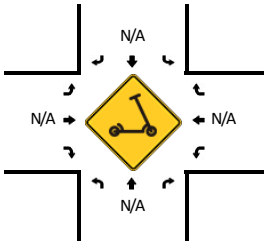












R* = RTOR

15-Min Count Period Beginning At	State Rd 200 (Northbound)					State Rd 200 (Southbound)					Steeplechase Plaza (Eastbound)					Steeplechase Plaza (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	95	375	5	0	0	3	487	29	0	3	18	2	1	0	34	2	2	2	0	1	1059	
4:15 PM	67	360	5	0	2	7	460	30	0	1	20	1	1	0	55	5	2	0	0	4	1020	
4:30 PM	40	390	8	0	0	3	470	31	0	3	20	1	2	0	40	5	1	0	0	2	1016	
4:45 PM	34	334	2	0	1	5	479	32	0	8	28	0	2	0	33	4	0	0	0	0	962	4057
5:00 PM	29	392	3	0	0	13	398	21	0	5	30	0	2	0	27	5	0	0	0	2	927	3925
5:15 PM	25	329	5	0	0	5	570	24	0	6	15	2	2	0	38	2	0	0	0	0	1023	3928
5:30 PM	23	264	2	0	1	6	439	22	0	3	17	0	1	0	25	5	0	0	0	0	808	3720
5:45 PM	6	300	8	0	0	5	375	21	0	2	16	2	1	0	14	9	0	0	0	0	759	3517

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	380	1500	20	0	0	12	1948	128	0	12	72	8	140	0	136	8	8	12	0	4	4388
Heavy Trucks	0	48	0			0	32	4			4	0	0			0	0	0			88
Buses																					
Pedestrians		0					0					0					0				0
Bicycles	0	0	0			0	0	0			0	0	0			0	0	0			0
Scooters																					

Comments: State Rd 200 - 50mph/Steeplechase Plaza - NP

Report generated on 4/11/2024 7:29 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak

Method for determining peak hour: Total Entering Volume

LOCATION: State Rd 200 -- Friendship Center Entrance

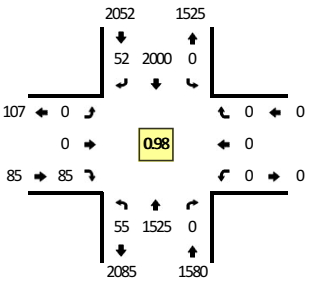
CITY/STATE: Liberty Triangle, FL

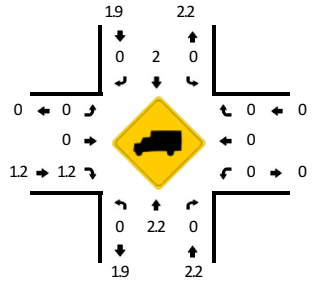
QC JOB #: 16546106

DATE: Thu, Apr 4 2024

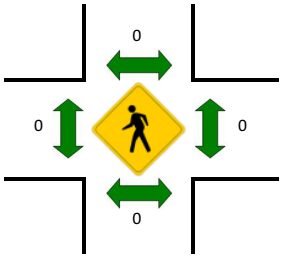
Peak-Hour: 4:00 PM -- 5:00 PM

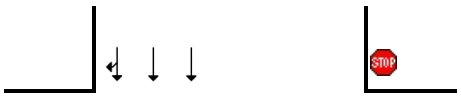
Peak 15-Min: 4:00 PM -- 4:15 PM

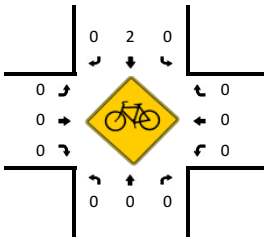


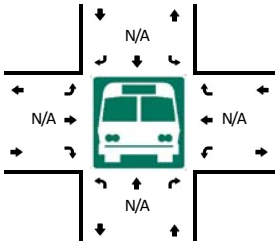


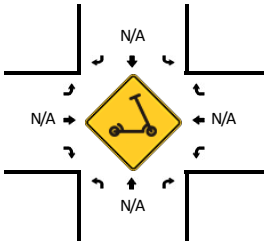
TRUE DATA TO IMPROVE MOBILITY











R* = RTOR

15-Min Count Period Beginning At	State Rd 200 (Northbound)					State Rd 200 (Southbound)					Friendship Center Entrance (Eastbound)					Friendship Center Entrance (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	15	388	0	0	0	0	507	16	0	0	0	0	20	0	0	0	0	0	0	0	946	
4:15 PM	10	393	0	0	0	0	503	12	0	0	0	0	17	0	0	0	0	0	0	0	935	
4:30 PM	17	402	0	0	0	0	479	11	0	0	0	0	23	0	0	0	0	0	0	0	932	
4:45 PM	13	342	0	0	0	0	511	13	0	0	0	0	25	0	0	0	0	0	0	0	904	3717
5:00 PM	12	433	0	0	0	0	463	7	0	0	0	0	17	0	0	0	0	0	0	0	932	3703
5:15 PM	6	340	0	0	0	0	565	11	0	0	0	0	18	0	0	0	0	0	0	0	940	3708
5:30 PM	7	281	0	0	0	0	472	9	0	0	0	0	11	0	0	0	0	0	0	0	780	3556
5:45 PM	10	312	0	0	0	0	393	9	0	0	0	0	19	0	0	0	0	0	0	0	743	3395

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	60	1552	0	0	0	0	2028	64	0	0	0	0	80	0	0	0	0	0	0	0	3784
Heavy Trucks	0	52	0			0	40	0			0	0	4			0	0	0			96
Buses																					
Pedestrians		0					0					0					0				0
Bicycles	0	0	0			0	0	0			0	0	0			0	0	0			0
Scooters																					

Comments: At entrance to Friendship CenterSW 84th Avenue Rd - 50mph/SW 100th Lane Rd - NP

Report generated on 4/11/2024 7:29 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

ATTACHMENT F - PUD Traffic Study and Approval_AR31673

Type of peak hour being reported: Intersection Peak

Method for determining peak hour: Total Entering Volume

LOCATION: State Rd 200 -- SW 99th Street Rd

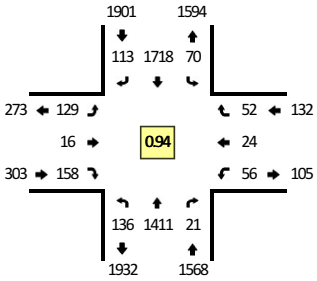
CITY/STATE: On Top of the World, FL

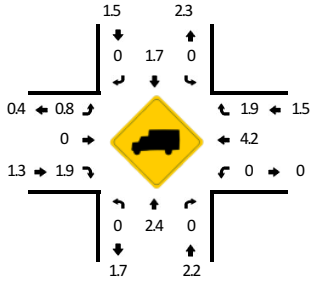
QC JOB #: 16546108

DATE: Thu, Apr 4 2024

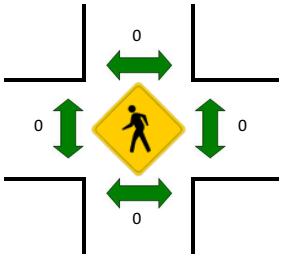
Peak-Hour: 4:15 PM -- 5:15 PM

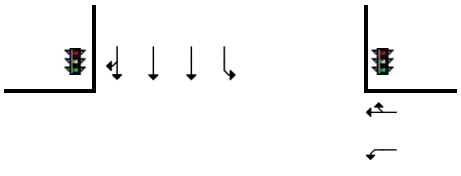
Peak 15-Min: 4:15 PM -- 4:30 PM

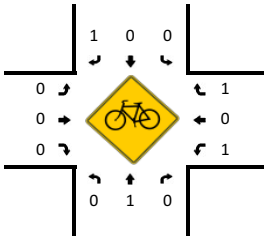


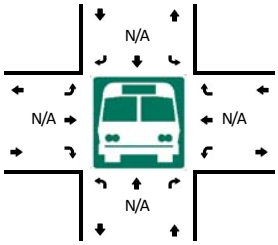


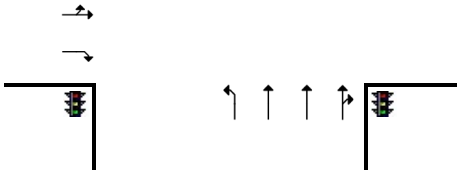
TRUE DATA TO IMPROVE MOBILITY

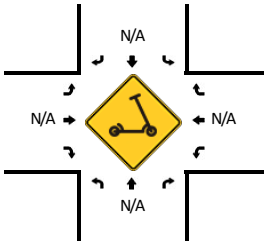












R* = RTOR

15-Min Count Period Beginning At	State Rd 200 (Northbound)					State Rd 200 (Southbound)					SW 99th Street Rd (Eastbound)					SW 99th Street 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	39	287	5	0	1	20	450	32	1	7	31	7	7	0	13	18	10	13	0	10	951	
4:15 PM	36	368	6	0	2	17	445	37	2	11	38	4	18	0	22	16	4	7	0	6	1039	
4:30 PM	40	353	4	0	1	23	429	15	0	4	30	4	14	0	16	14	7	7	0	2	963	
4:45 PM	31	287	1	0	2	12	444	19	0	7	30	4	17	0	29	11	8	5	0	4	911	3864
5:00 PM	29	403	4	0	1	16	400	11	0	9	31	4	14	0	28	15	5	13	0	8	991	3904
5:15 PM	33	294	3	0	1	13	508	22	0	3	29	5	17	0	31	24	3	5	0	11	1002	3867
5:30 PM	14	254	1	0	4	11	422	17	0	6	27	7	5	0	27	15	6	11	0	6	833	3737
5:45 PM	14	285	3	0	0	12	365	7	0	2	24	7	12	0	13	10	5	7	0	7	773	3599

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	144	1472	32	0	8	68	1780	192	8	44	152	16	160	0	88	64	16	52	0	24	4320
Heavy Trucks	0	36	0			0	24	0			0	0	4			0	0	4			68
Buses																					
Pedestrians		0					0					0					0				0
Bicycles	0	0	0			0	0	0			0	0	0			0	0	4			4
Scooters																					

Comments: State Rd 200 - 50mph/SW 99th Street Rd - 30mph

Report generated on 4/11/2024 7:29 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak

Method for determining peak hour: Total Entering Volume

LOCATION: SW 84th Avenue Rd -- SW 100th St

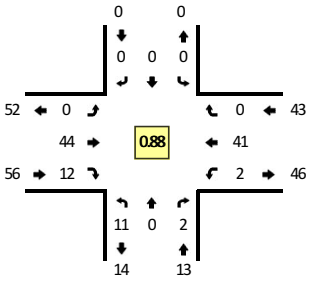
CITY/STATE: Liberty Triangle, FL

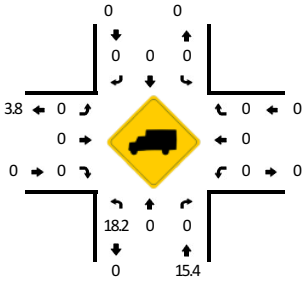
QC JOB #: 16546110

DATE: Thu, Apr 4 2024

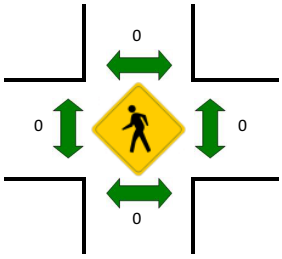
Peak-Hour: 4:45 PM -- 5:45 PM

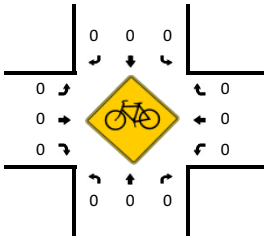
Peak 15-Min: 5:00 PM -- 5:15 PM

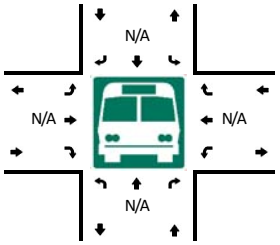


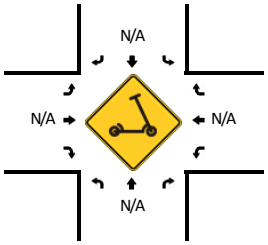


TRUE DATA TO IMPROVE MOBILITY









R* = RTOR

15-Min Count Period Beginning At	SW 84th Avenue Rd (Northbound)					SW 84th Avenue Rd (Southbound)					SW 100th St (Eastbound)					SW 100th St (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	2	0	0	0	0	0	0	0	0	0	0	16	6	0	0	2	8	0	0	0	34	
4:15 PM	3	0	0	0	0	0	0	0	0	0	0	6	9	0	0	0	5	0	0	0	23	
4:30 PM	1	0	0	0	0	0	0	0	0	0	0	16	5	0	0	1	4	0	0	0	27	
4:45 PM	4	0	1	0	0	0	0	0	0	0	0	9	2	0	0	1	9	0	0	0	26	110
5:00 PM	3	0	0	0	0	0	0	0	0	0	0	16	3	0	0	0	10	0	0	0	32	108
5:15 PM	3	0	1	0	0	0	0	0	0	0	0	7	5	0	0	0	8	0	0	0	24	109
5:30 PM	1	0	0	0	0	0	0	0	0	0	0	12	2	0	0	1	14	0	0	0	30	112
5:45 PM	1	0	1	0	0	0	0	0	0	0	0	14	5	0	0	0	5	0	0	0	26	112

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	12	0	0	0	0	0	0	0	0	0	0	64	12	0	0	0	40	0	0	0	128
Heavy Trucks	0	0	0			0	0	0			0	0	0			0	0	0			0
Buses																					
Pedestrians		0					0					0					0				0
Bicycles	0	0	0			0	0	0			0	0	0			0	0	0			0
Scooters																					

Comments: SW 84th Avenue Rd -50mph/SW 100th St - NP

Report generated on 4/11/2024 7:29 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak

Method for determining peak hour: Total Entering Volume

LOCATION: SW 84th Avenue Rd -- SW 103rd Street Rd

CITY/STATE: Liberty Triangle, FL

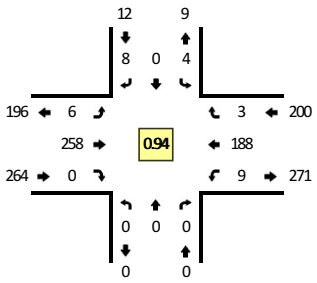
QC JOB #: 16546114

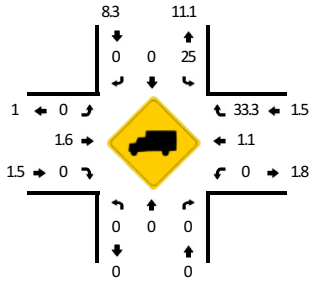
DATE: Thu, Apr 4 2024

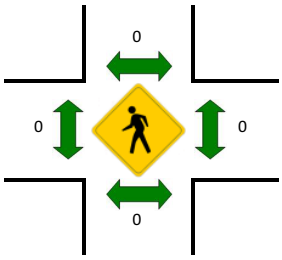
Peak-Hour: 4:15 PM -- 5:15 PM

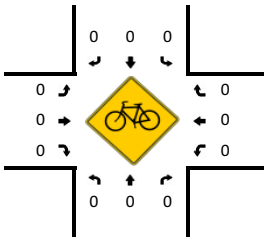
Peak 15-Min: 4:15 PM -- 4:30 PM

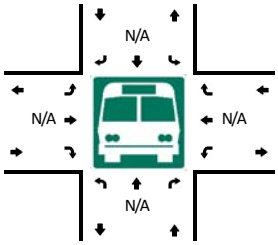
TRUE DATA TO IMPROVE MOBILITY

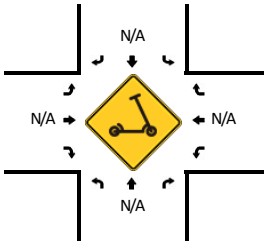












R* = RTOR

15-Min Count Period Beginning At	SW 84th Avenue Rd (Northbound)					SW 84th Avenue Rd (Southbound)					SW 103rd Street Rd (Eastbound)					SW 103rd Street 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	0	0	2	0	0	2	52	0	0	0	0	45	1	11	0	113	
4:15 PM	0	0	0	0	0	2	0	4	0	0	0	64	0	0	0	0	52	0	4	0	126	
4:30 PM	0	0	0	0	0	2	0	1	0	0	2	77	0	0	0	0	36	0	4	0	122	
4:45 PM	0	0	0	0	0	0	0	3	0	0	3	44	0	0	0	0	54	1	0	0	105	466
5:00 PM	0	0	0	0	0	0	0	0	0	0	1	73	0	0	0	0	46	2	1	0	123	476
5:15 PM	0	0	0	0	0	1	0	1	0	0	2	57	0	0	0	0	38	1	0	0	100	450
5:30 PM	0	0	0	0	0	0	0	3	0	0	2	59	0	0	0	0	40	0	1	0	105	433
5:45 PM	0	0	0	0	0	1	0	2	0	0	2	34	0	0	0	0	36	0	0	0	75	403

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	8	0	16	0	0	0	256	0	0	0	0	208	0	16	0	504
Heavy Trucks	0	0	0			4	0	0			0	4	0			0	0	0			8
Buses																					
Pedestrians		0					0					0					0				0
Bicycles	0	0	0			0	0	0			0	0	0			0	0	0			0
Scooters																					

Comments: SW 84th Avenue Rd - 30mph/SW 85th Ct - 40mph

Report generated on 4/11/2024 7:29 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak

Method for determining peak hour: Total Entering Volume

LOCATION: State Rd 200 -- Wawa Entrance

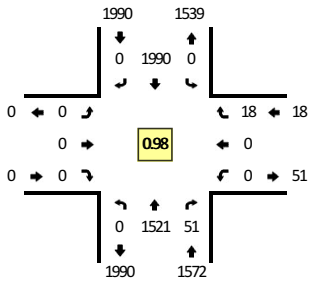
CITY/STATE: On Top of the World, FL

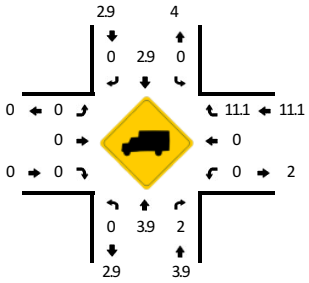
QC JOB #: 16546116

DATE: Thu, Apr 4 2024

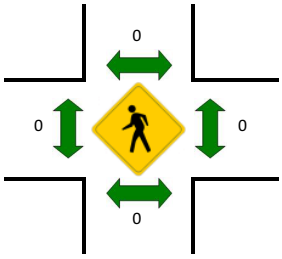
Peak-Hour: 4:15 PM -- 5:15 PM

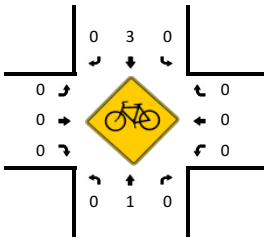
Peak 15-Min: 4:15 PM -- 4:30 PM

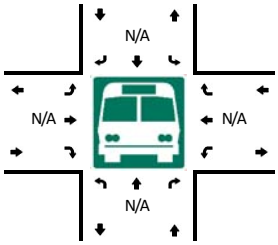


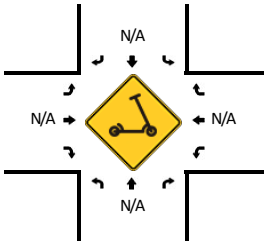


TRUE DATA TO IMPROVE MOBILITY









R* = RTOR

15-Min Count Period Beginning At	State Rd 200 (Northbound)					State Rd 200 (Southbound)					Wawa Entrance (Eastbound)					Wawa Entrance (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	351	14	0	0	0	518	0	0	0	0	0	0	0	0	0	0	3	0	0	886	
4:15 PM	0	386	13	0	0	0	512	0	0	0	0	0	0	0	0	0	0	4	0	0	915	
4:30 PM	0	393	12	0	0	0	490	0	0	0	0	0	0	0	0	0	0	5	0	0	900	
4:45 PM	0	323	15	0	0	0	519	0	0	0	0	0	0	0	0	0	0	3	0	0	860	3561
5:00 PM	0	419	11	0	0	0	469	0	0	0	0	0	0	0	0	0	0	6	0	0	905	3580
5:15 PM	0	326	12	0	0	0	567	0	0	0	0	0	0	0	0	0	0	6	0	0	911	3576
5:30 PM	0	271	13	0	0	0	480	0	0	0	0	0	0	0	0	0	0	4	0	0	768	3444
5:45 PM	0	296	16	0	0	0	402	0	0	0	0	0	0	0	0	0	0	0	0	0	714	3298

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	1544	52	0	0	0	2048	0	0	0	0	0	0	0	0	0	0	16	0	0	3660
Heavy Trucks	0	80	0			0	64	0			0	0	0			0	0	0			144
Buses																					
Pedestrians		0					0					0					0				0
Bicycles	0	0	0			0	0	0			0	0	0			0	0	0			0
Scooters																					

Comments: Entrance to Wawa off SR 200State Rd 200 - 50mph/SW 99th Street Rd - NP

Report generated on 4/11/2024 7:29 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

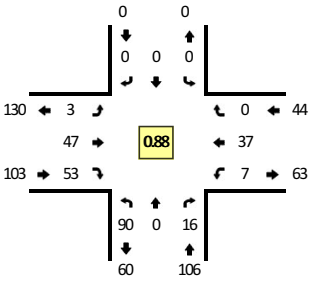
Type of peak hour being reported: Intersection Peak

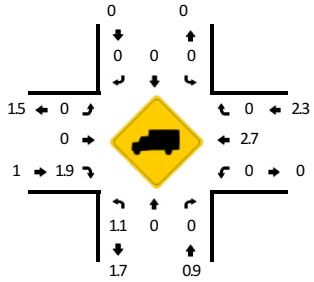
Method for determining peak hour: Total Entering Volume

LOCATION: Wawa Entrance -- SW 100th St
CITY/STATE: Liberty Triangle, FL

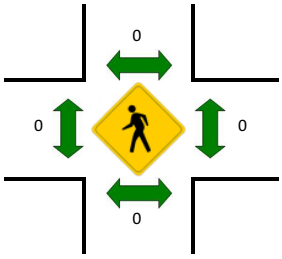
QC JOB #: 16546118
DATE: Thu, Apr 4 2024

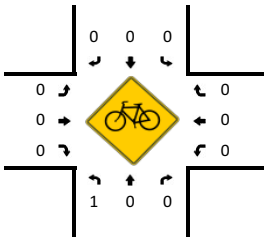
Peak-Hour: 5:00 PM -- 6:00 PM
Peak 15-Min: 5:00 PM -- 5:15 PM

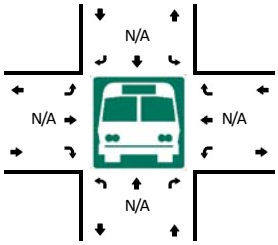


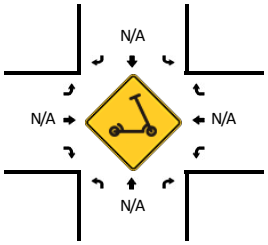


TRUE DATA TO IMPROVE MOBILITY









R* = RTOR

15-Min Count Period Beginning At	Wawa Entrance (Northbound)					Wawa Entrance (Southbound)					SW 100th St (Eastbound)					SW 100th St (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	24	0	6	0	0	0	0	0	0	0	0	16	16	3	0	2	9	0	0	0	76	
4:15 PM	21	0	4	0	0	0	0	0	0	0	0	12	10	3	0	3	7	0	0	0	60	
4:30 PM	18	0	4	0	0	0	0	0	0	0	0	17	15	1	0	1	4	0	0	0	60	
4:45 PM	17	0	2	0	0	0	0	0	0	0	0	9	11	0	0	3	10	0	0	0	52	248
5:00 PM	23	0	5	0	0	0	0	0	0	0	0	14	16	2	0	0	12	0	0	0	72	244
5:15 PM	25	0	1	0	0	0	0	0	0	0	0	11	15	0	0	0	12	0	0	0	64	248
5:30 PM	22	0	3	0	0	0	0	0	0	0	0	11	11	0	0	7	8	0	0	0	62	250
5:45 PM	20	0	7	0	0	0	0	0	0	0	0	11	11	1	0	0	5	0	0	0	55	253

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	92	0	20	0	0	0	0	0	0	0	0	56	64	8	0	0	48	0	0	0	288
Heavy Trucks	0	0	0			0	0	0			0	0	0			0	0	0			0
Buses																					
Pedestrians		0					0					0					0				0
Bicycles	0	0	0			0	0	0			0	0	0			0	0	0			0
Scooters																					

Comments: Entrance to Wawa off SW 100th StSW 84th Avenue Rd - NP/SW 100th St - 30mph

Report generated on 4/11/2024 7:29 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

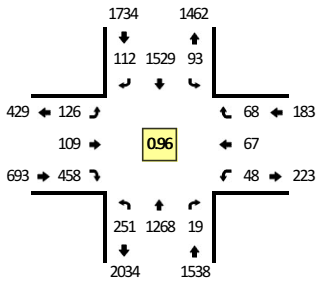
Type of peak hour being reported: Intersection Peak

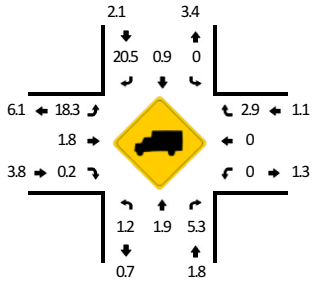
Method for determining peak hour: Total Entering Volume

LOCATION: State Rd 200 -- SW 80th Ave
CITY/STATE: Liberty Triangle, FL

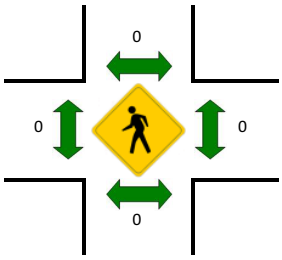
QC JOB #: 16546120
DATE: Thu, Apr 4 2024

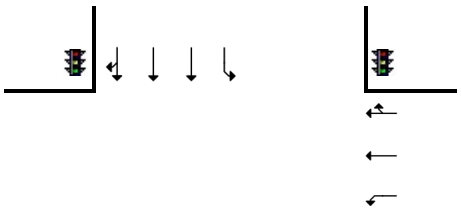
Peak-Hour: 4:15 PM -- 5:15 PM
Peak 15-Min: 4:15 PM -- 4:30 PM

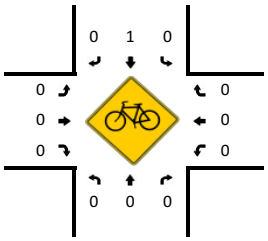


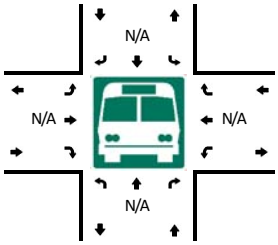


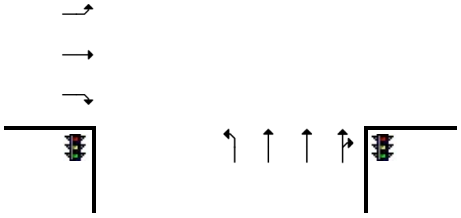
TRUE DATA TO IMPROVE MOBILITY

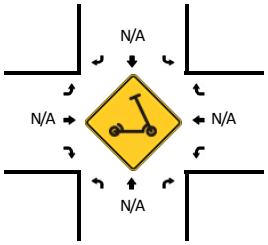












R* = RTOR

15-Min Count Period Beginning At	State Rd 200 (Northbound)					State Rd 200 (Southbound)					SW 80th Ave (Eastbound)					SW 80th Ave (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	61	259	6	0	2	23	365	18	0	12	47	39	50	0	93	13	12	1	0	9	1010	
4:15 PM	64	323	2	0	1	17	418	16	0	14	37	37	20	0	87	14	12	5	0	8	1075	
4:30 PM	69	295	3	1	2	37	339	22	0	8	29	26	38	0	101	14	27	10	2	5	1028	
4:45 PM	52	282	4	0	3	21	373	25	0	6	34	29	27	0	91	10	17	7	0	12	993	4106
5:00 PM	65	368	4	0	0	18	399	16	0	5	26	17	19	0	75	8	11	11	0	10	1052	4148
5:15 PM	57	263	2	0	1	26	390	27	0	5	39	32	58	0	80	4	16	5	0	8	1013	4086
5:30 PM	58	241	2	0	1	14	374	25	0	9	33	36	29	0	113	13	10	3	0	4	965	4023
5:45 PM	56	256	5	0	1	21	308	17	0	4	22	17	25	0	61	10	17	6	0	5	831	3861

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	256	1292	12	0	4	68	1672	120	0	56	148	148	428	0	348	56	48	52	0	32	4740
Heavy Trucks	0	36	0			0	4	4			32	4	0			0	0	0			80
Buses																					
Pedestrians		0					0					0					0				0
Bicycles	0	0	0			0	0	0			0	0	0			0	0	0			0
Scooters																					

Comments: State Rd 200 - 50mph/SW 80th Ave - 45mph

Report generated on 4/11/2024 7:29 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

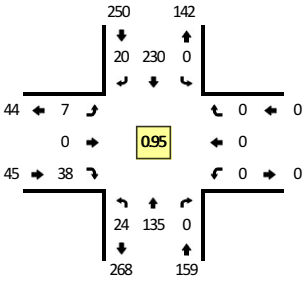
Type of peak hour being reported: Intersection Peak

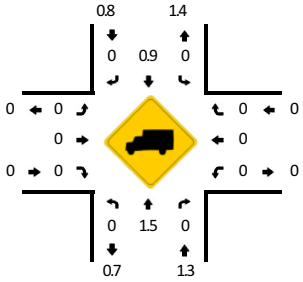
Method for determining peak hour: Total Entering Volume

LOCATION: SW 80th Ave -- SW 100 St
CITY/STATE: Liberty Triangle, FL

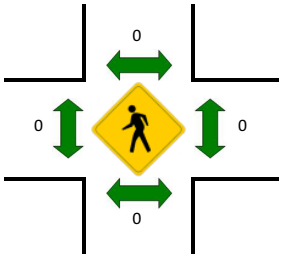
QC JOB #: 16546122
DATE: Thu, Apr 4 2024

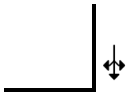
Peak-Hour: 4:00 PM -- 5:00 PM
Peak 15-Min: 4:30 PM -- 4:45 PM

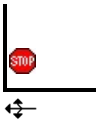


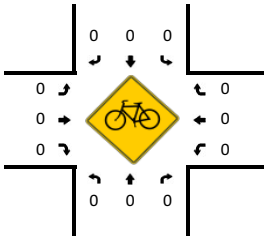


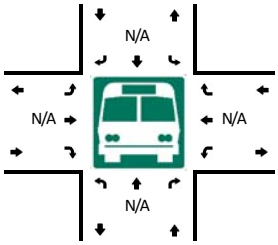
TRUE DATA TO IMPROVE MOBILITY

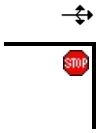


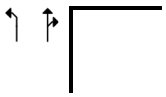


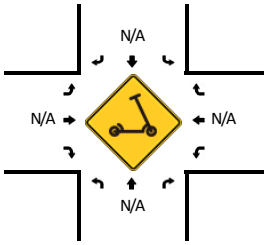












R* = RTOR

15-Min Count Period Beginning At	SW 80th Ave (Northbound)					SW 80th Ave (Southbound)					SW 100 St (Eastbound)					SW 100 St (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	8	25	0	0	0	0	59	6	0	0	1	0	12	0	0	0	0	0	0	0	111	
4:15 PM	6	35	0	0	0	0	57	5	0	0	2	0	2	0	0	0	0	0	0	0	107	
4:30 PM	3	33	0	0	0	0	64	4	0	0	1	0	14	0	0	0	0	0	0	0	119	
4:45 PM	7	42	0	0	0	0	50	5	0	0	3	0	10	0	0	0	0	0	0	0	117	454
5:00 PM	9	36	0	0	0	0	46	1	0	0	2	0	13	0	0	0	0	0	0	0	107	450
5:15 PM	6	27	0	0	0	0	49	5	0	0	1	0	6	0	0	0	0	0	0	0	94	437
5:30 PM	14	24	0	0	0	0	49	7	0	0	2	0	12	0	0	0	0	0	0	0	108	426
5:45 PM	4	25	0	0	0	0	42	5	0	0	4	0	10	0	0	0	0	0	0	0	90	399

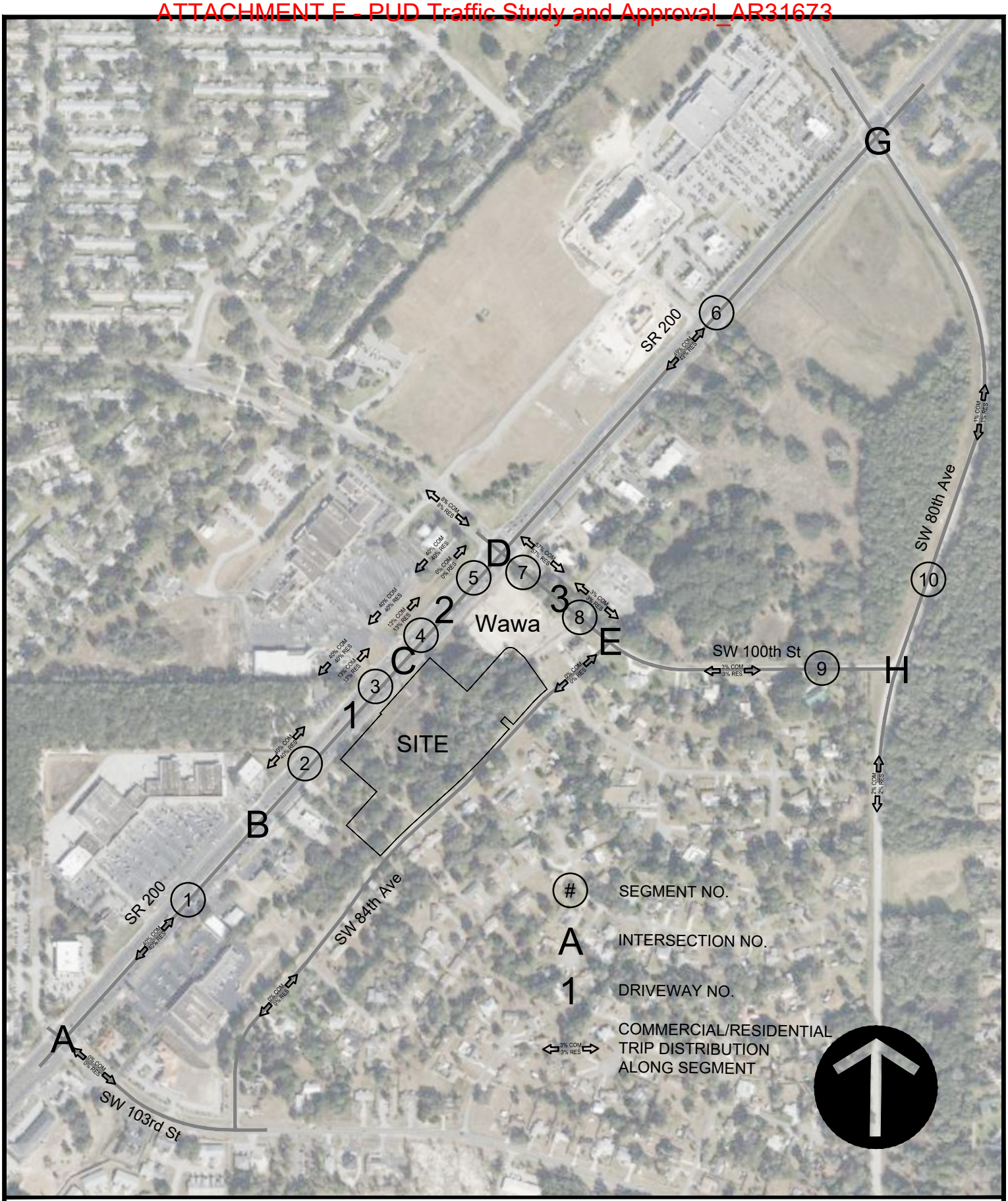
Peak 15-Min Flowrates	Northbound					Southbound					Eastbound					Westbound					Total
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	
All Vehicles	12	132	0	0	0	0	256	16	0	0	4	0	56	0	0	0	0	0	0	0	476
Heavy Trucks	0	4	0			0	0	0			0	0	0			0	0	0			4
Buses																					
Pedestrians		0					0					0					0				0
Bicycles	0	0	0			0	0	0			0	0	0			0	0	0			0
Scooters																					

Comments: SW 80th Ave - 45mph/SW 100 St - 30mph

Report generated on 4/11/2024 7:29 AM

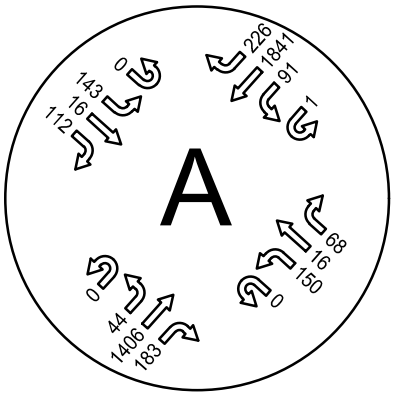
SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

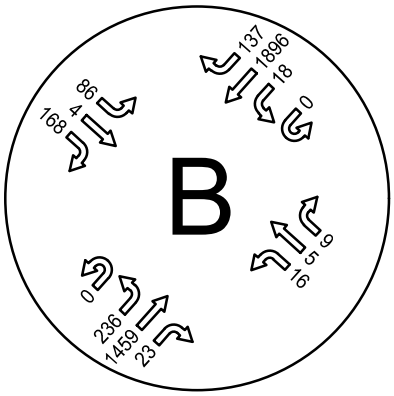
Appendix C
Trip Distribution Exhibits

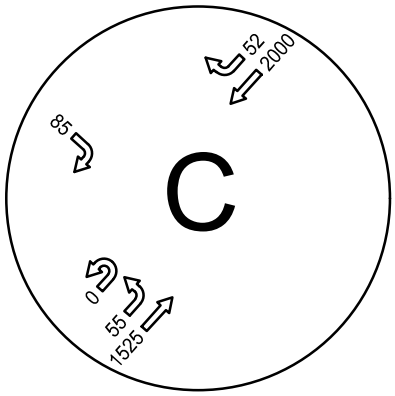


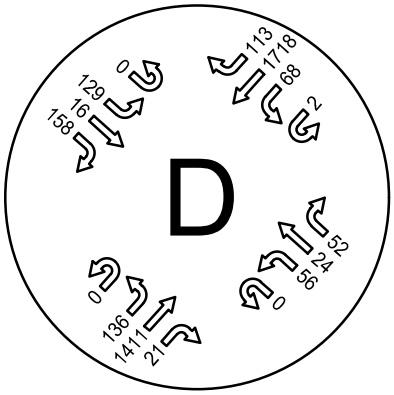
Project and Pass-By Trip Distribution Percentages

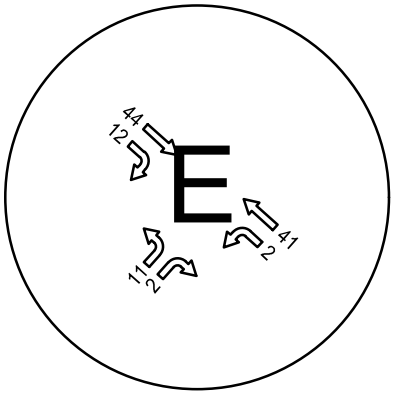
Sprouts Plaza
Ocala, FL

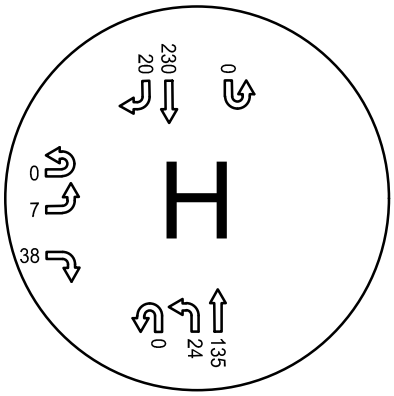


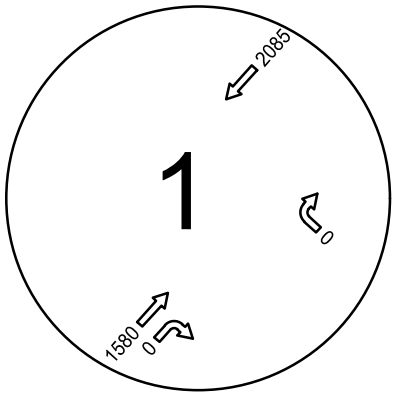


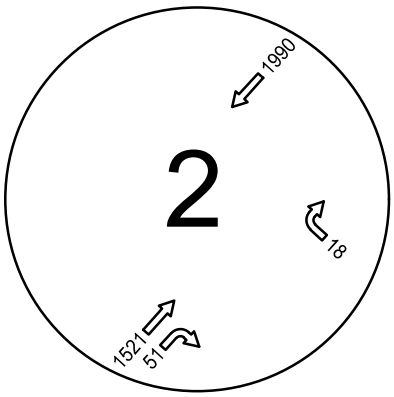


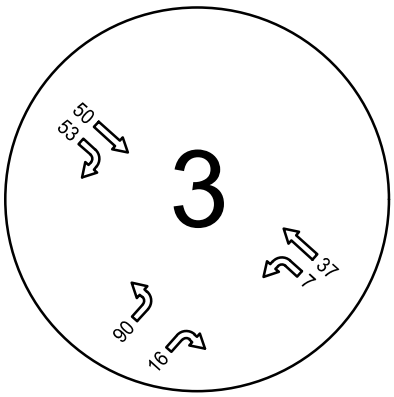






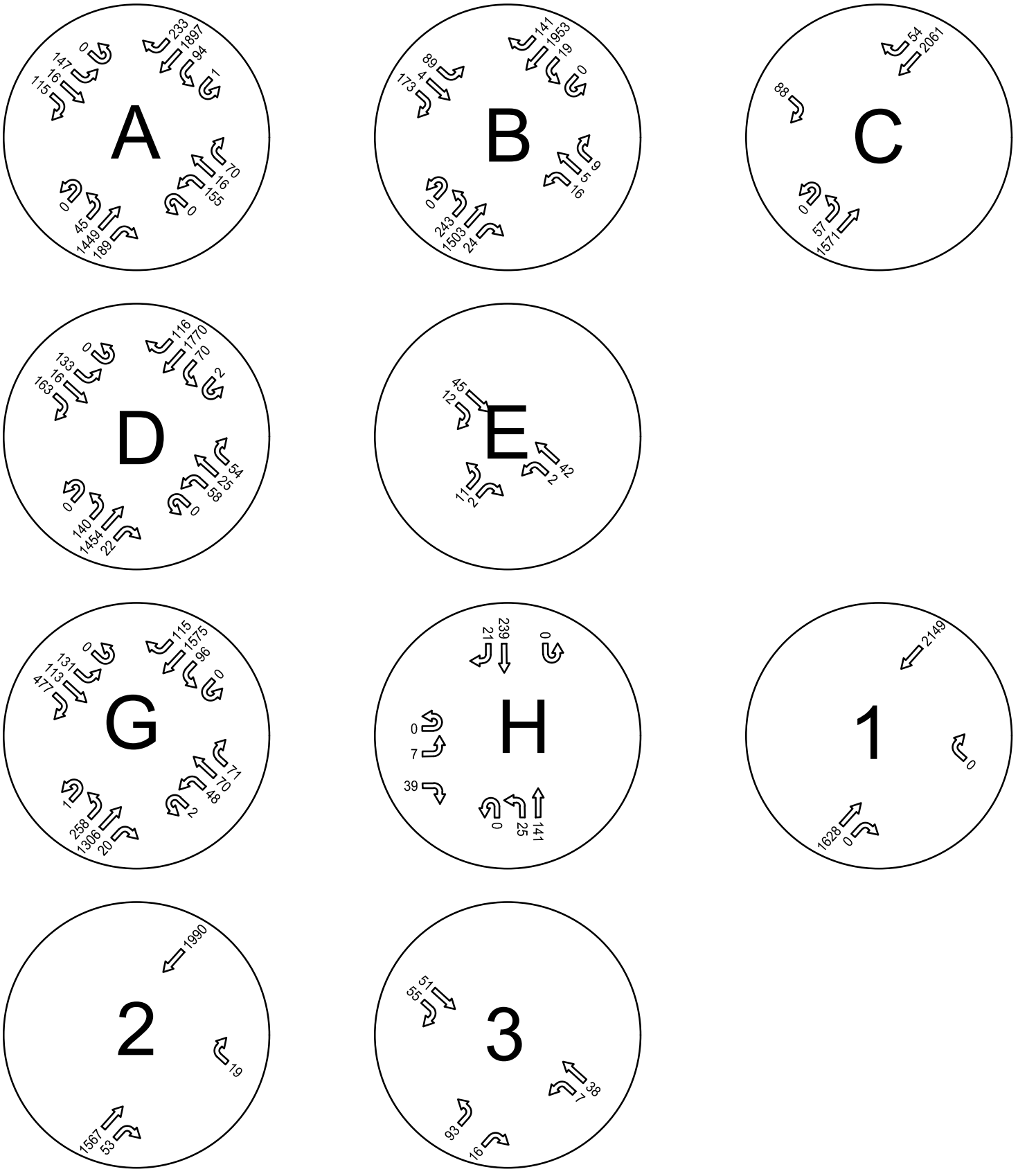






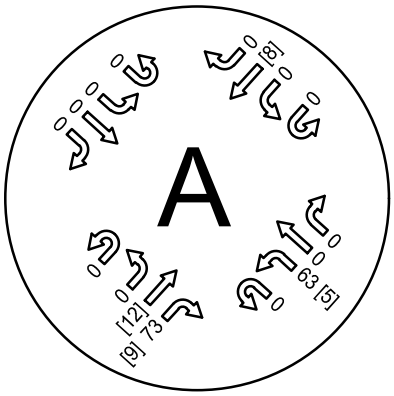
PM Peak Hour - Peak Season Traffic

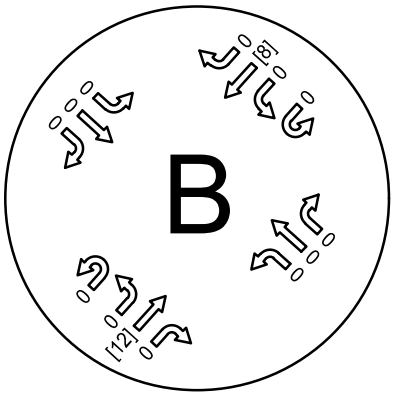
Sprouts Plaza
Ocala, FL

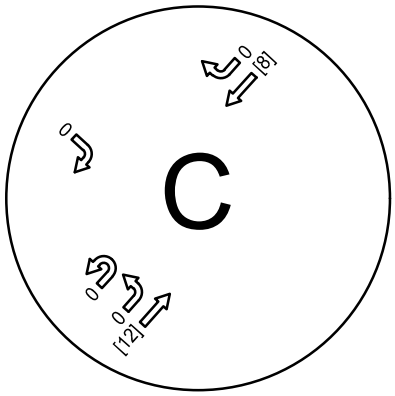


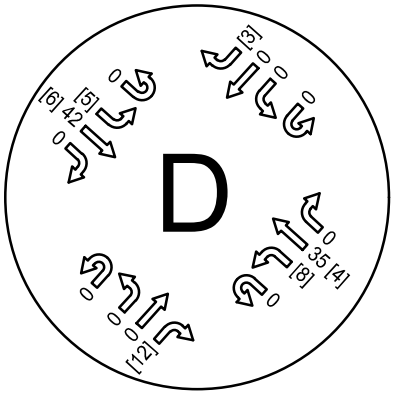
PM Peak Hour - Background Traffic

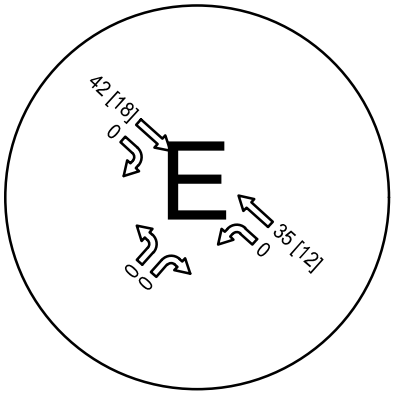
Sprouts Plaza
Ocala, FL

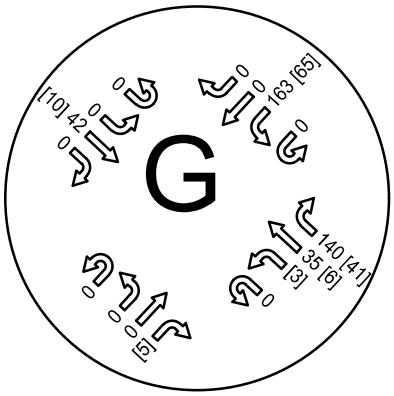


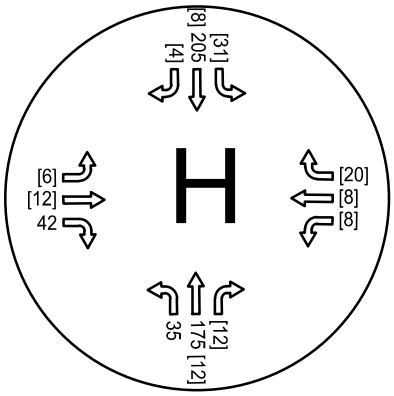


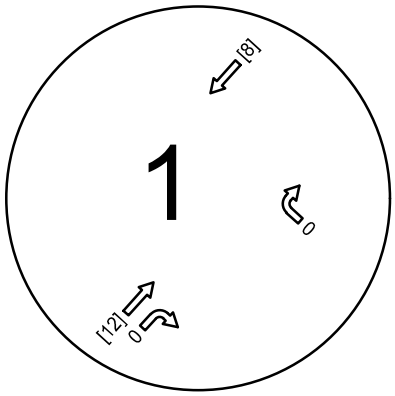


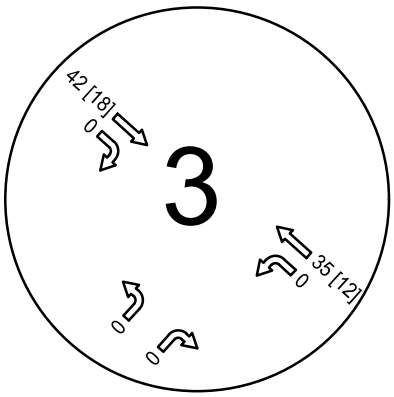








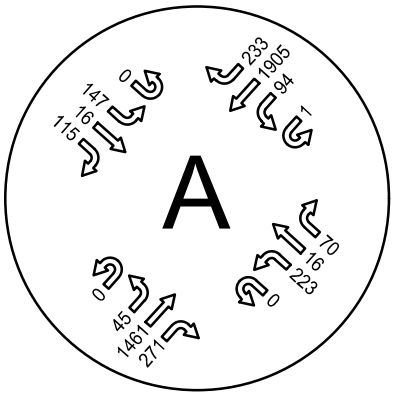


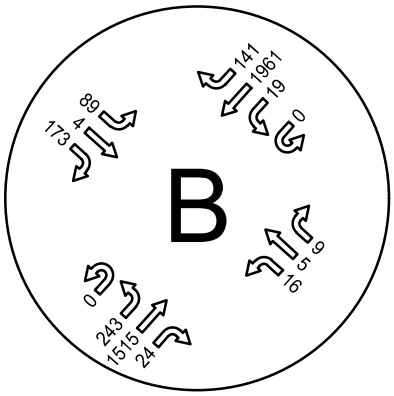


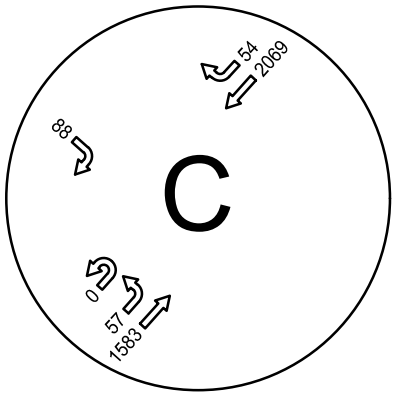
Sable Pass: ##
West Point: [##]

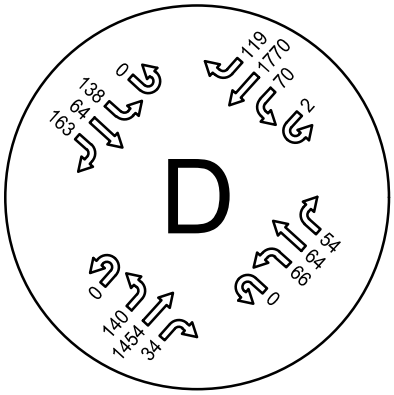
PM Peak Hour - Committed Traffic from Other Developments

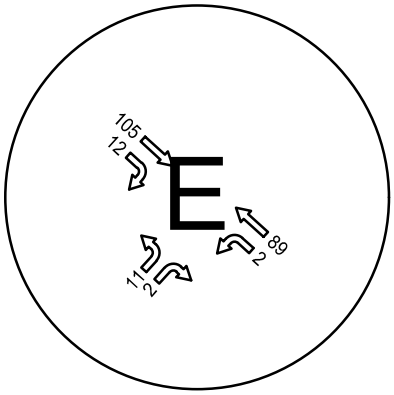
Sprouts Plaza
Ocala, FL

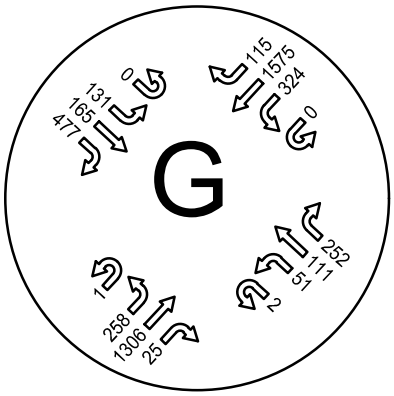


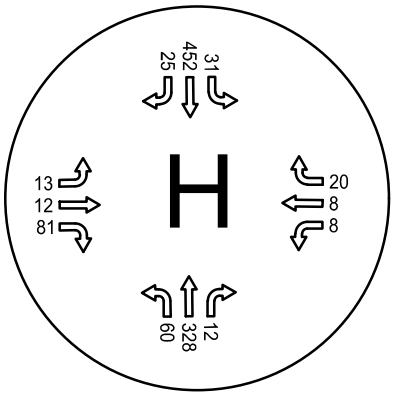


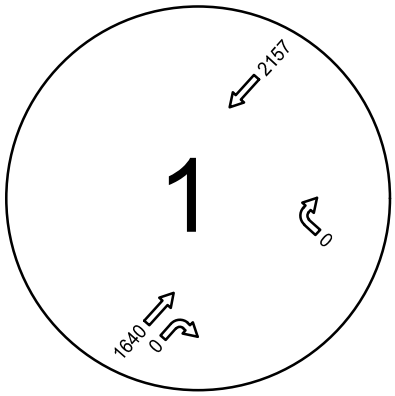






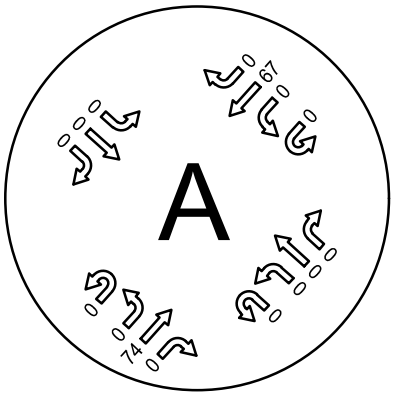


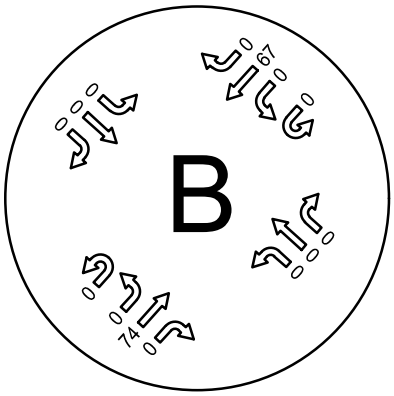


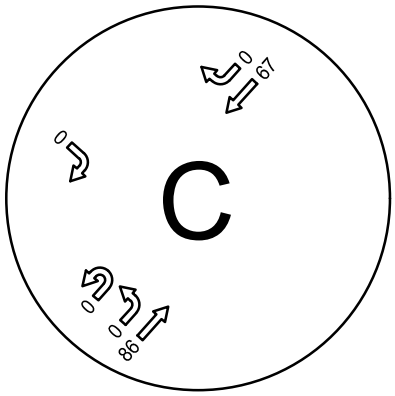


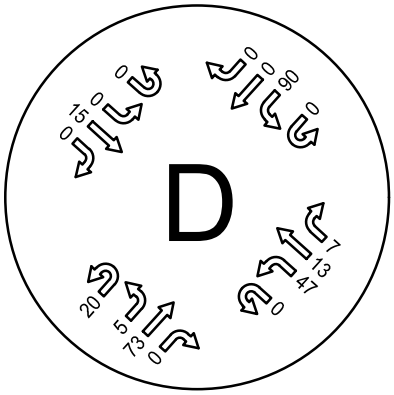
PM Peak Hour - Background + Committed

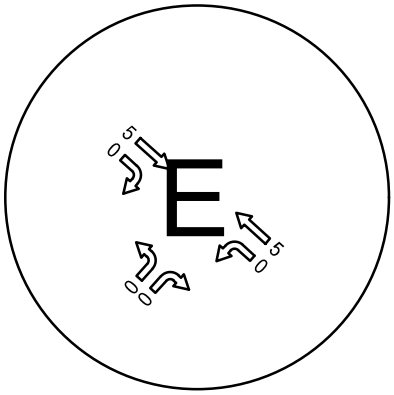
Sprouts Plaza
Ocala, FL

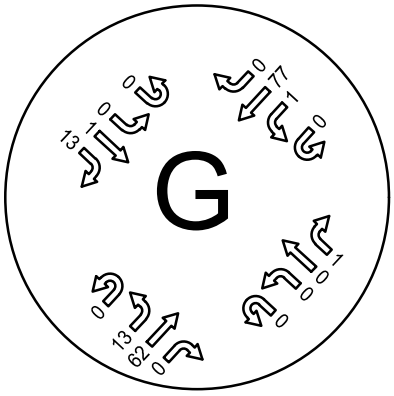


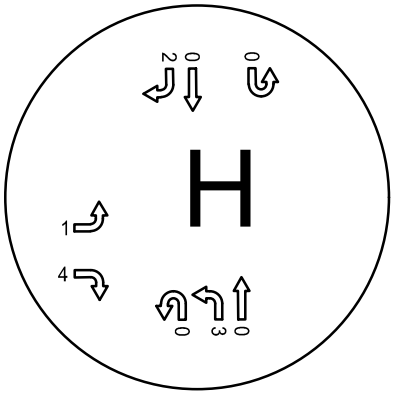


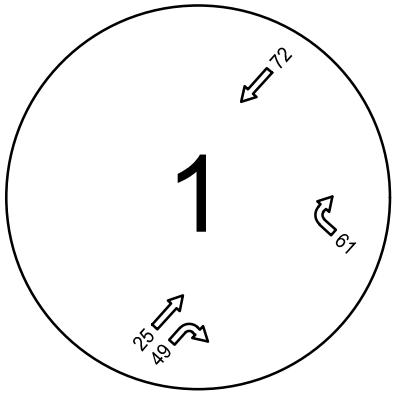


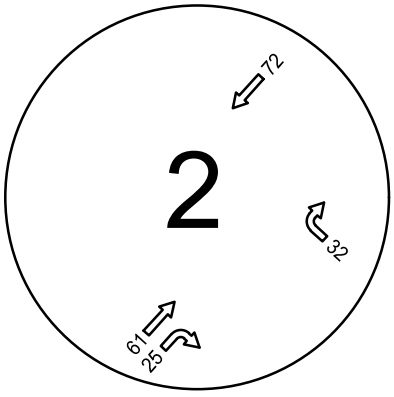


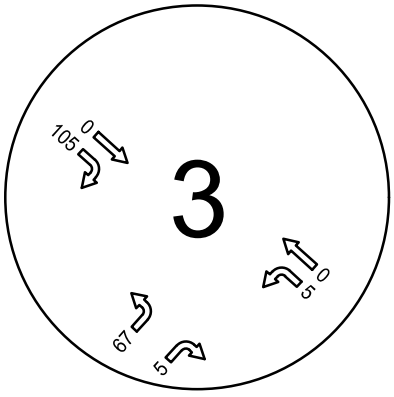






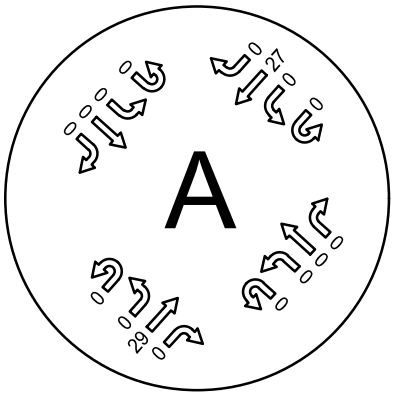


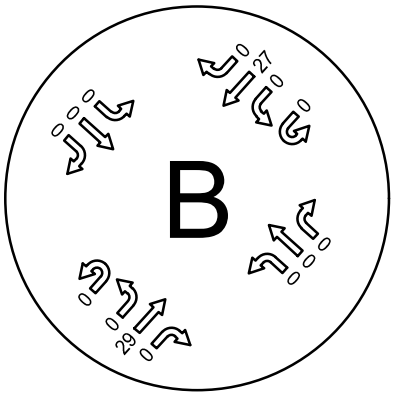


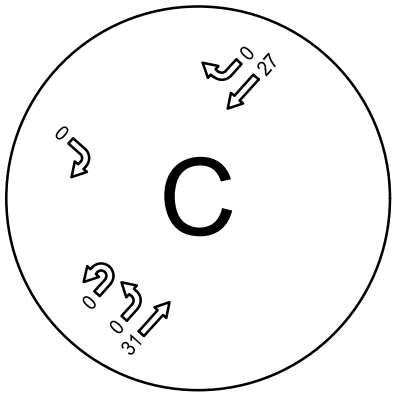


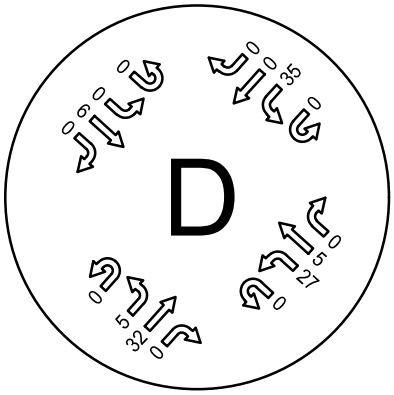
PM Peak Hour - Project Traffic (Including Pass-By)

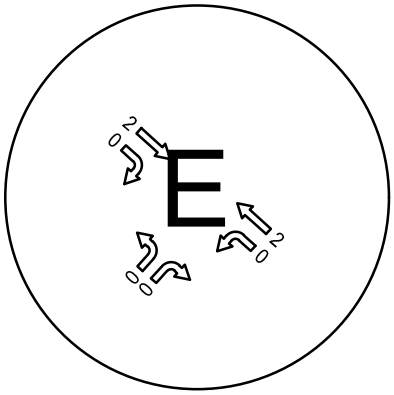
Sprouts Plaza
Ocala, FL

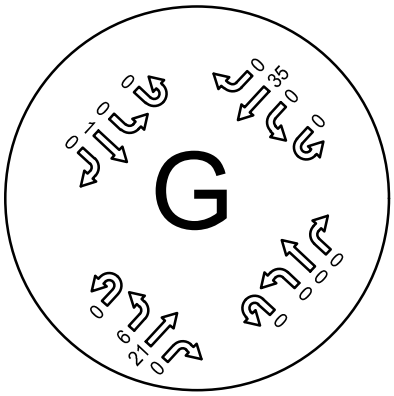


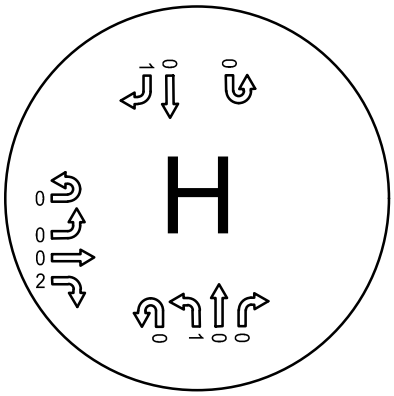


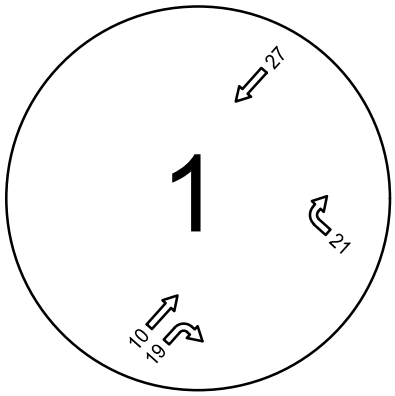


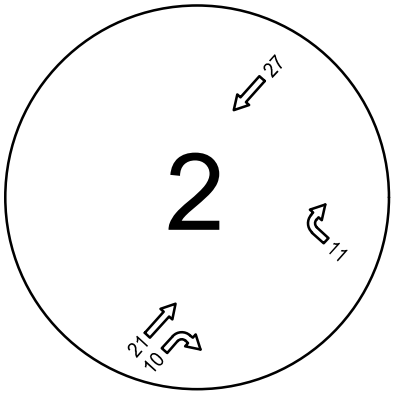






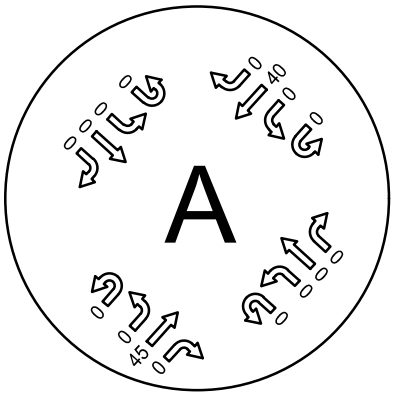


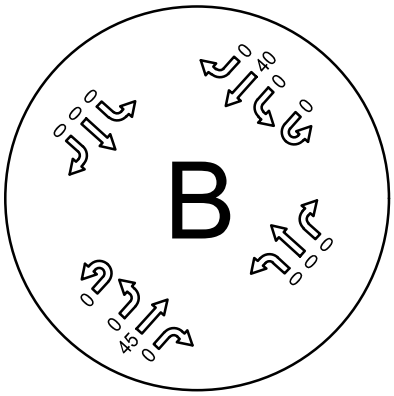


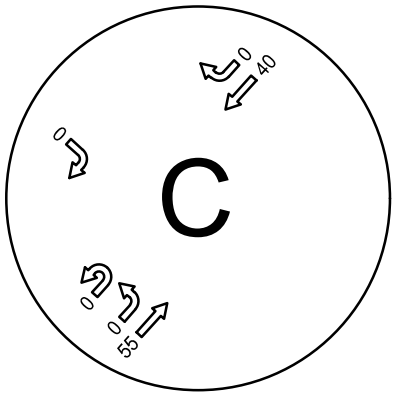


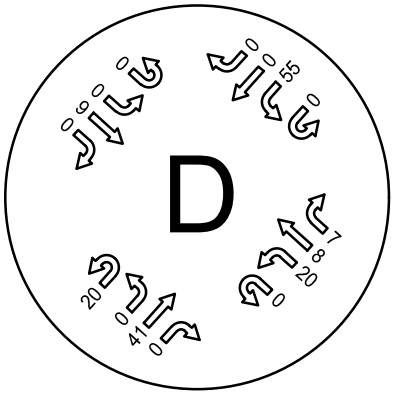
PM Peak Hour - Pass-By Trips

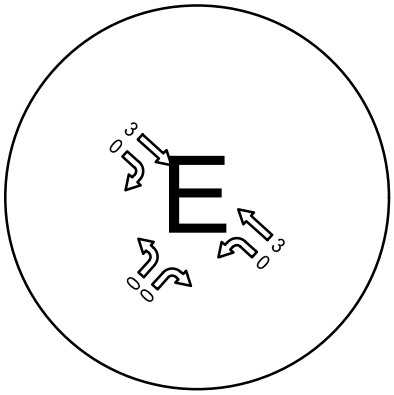
Sprouts Plaza
Ocala, FL

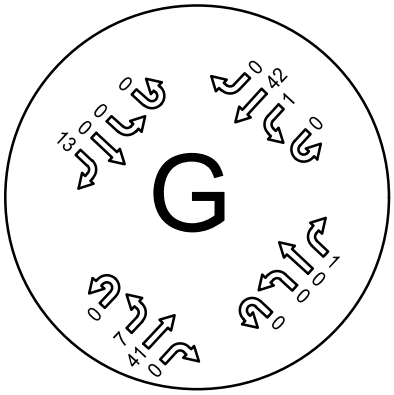


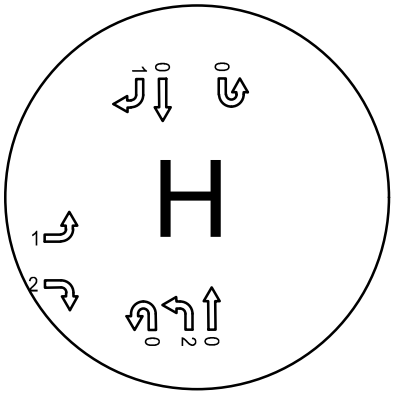


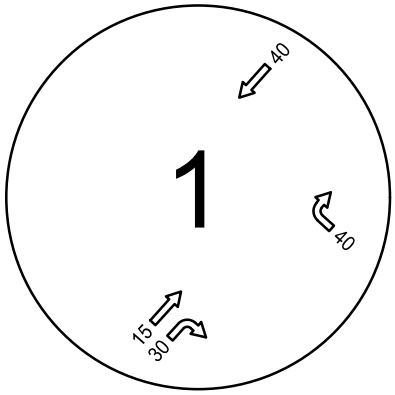






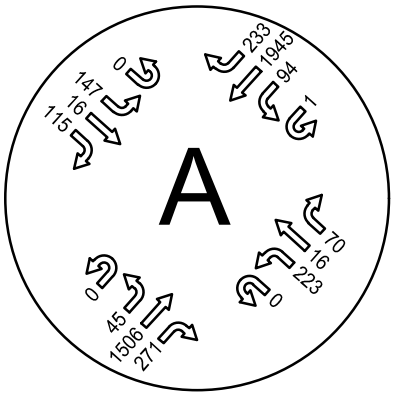


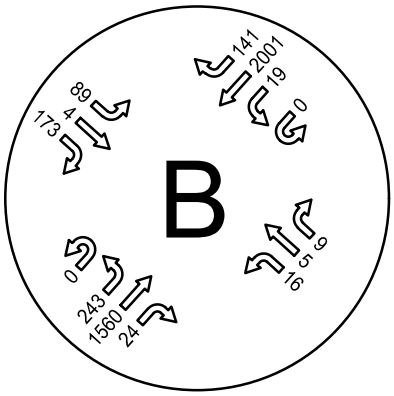


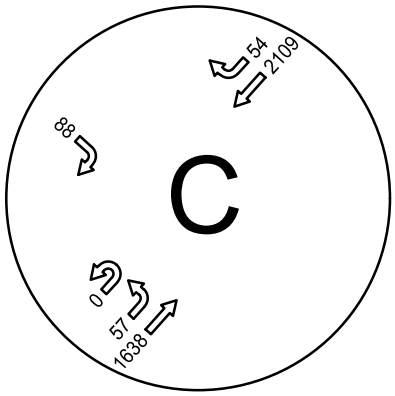


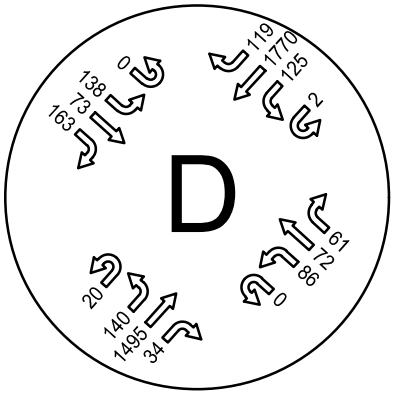
PM Peak Hour - New Project Trips (Project Trips - Pass-By)

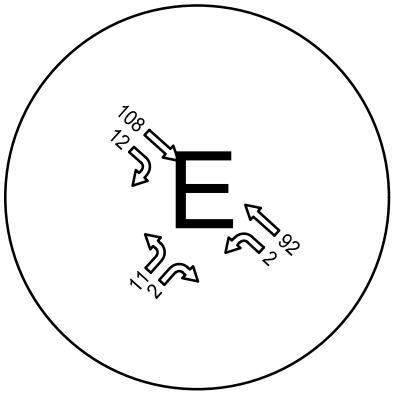
Sprouts Plaza
Ocala, FL

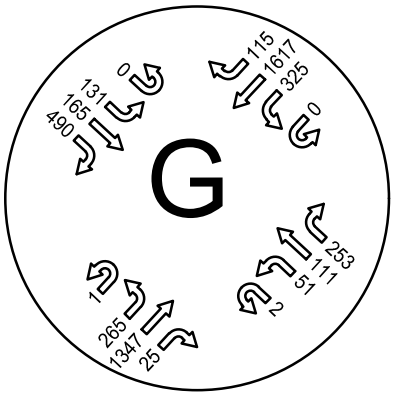


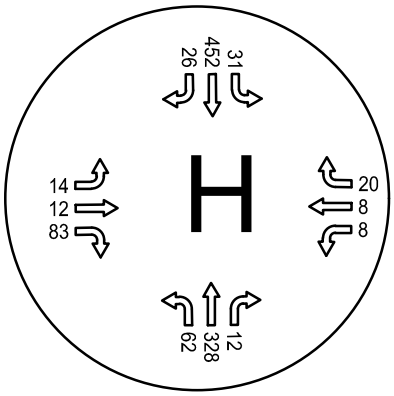


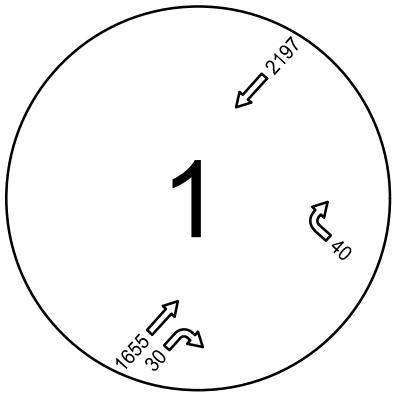


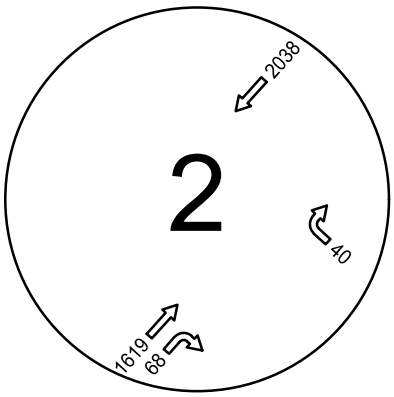


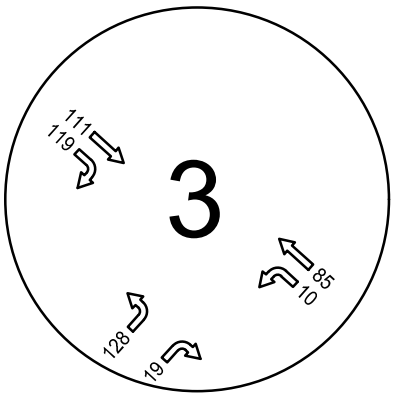












PM Peak Hour - Background and Committed + New Project Trips

Sprouts Plaza
Ocala, FL

Appendix D
Peak Season (Existing) Synchro Results

HCM 7th Signalized Intersection Summary

3: SR 200 & SW 103rd St Rd

06/10/2024

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	143	16	112	150	16	68	44	1406	183	92	1841	226
Future Volume (veh/h)	143	16	112	150	16	68	44	1406	183	92	1841	226
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1811	1870	1870	1870	1870	1870	1870	1856	1870	1870	1870	1856
Adj Flow Rate, veh/h	155	17	122	163	17	74	48	1528	199	100	2001	246
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, %	6	2	2	2	2	2	2	3	2	2	2	3
Cap, veh/h	43	0	341	43	0	341	69	2624	341	120	2800	340
Arrive On Green	0.22	0.22	0.22	0.22	0.22	0.22	0.04	0.58	0.58	0.13	1.00	1.00
Sat Flow, veh/h	0	0	1585	0	0	1585	1781	4536	590	1781	4613	561
Grp Volume(v), veh/h	172	0	122	180	0	74	48	1137	590	100	1470	777
Grp Sat Flow(s),veh/h/ln	0	0	1585	0	0	1585	1781	1689	1749	1781	1702	1769
Q Serve(g_s), s	0.0	0.0	10.5	0.0	0.0	6.2	4.3	34.2	34.3	8.8	0.0	0.0
Cycle Q Clear(g_c), s	34.4	0.0	10.5	34.4	0.0	6.2	4.3	34.2	34.3	8.8	0.0	0.0
Prop In Lane	0.90		1.00	0.91		1.00	1.00		0.34	1.00		0.32
Lane Grp Cap(c), veh/h	43	0	341	43	0	341	69	1953	1012	120	2066	1074
V/C Ratio(X)	4.02	0.00	0.36	4.20	0.00	0.22	0.70	0.58	0.58	0.83	0.71	0.72
Avail Cap(c_a), veh/h	43	0	341	43	0	341	138	1953	1012	227	2066	1074
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.55	0.55	0.55
Uniform Delay (d), s/veh	80.0	0.0	53.4	80.0	0.0	51.7	76.0	21.4	21.5	68.4	0.0	0.0
Incr Delay (d2), s/veh	1413.3	0.0	0.6	1492.4	0.0	0.3	12.1	1.3	2.5	8.1	1.2	2.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	18.6	0.0	4.2	19.5	0.0	2.5	2.2	13.2	14.0	4.0	0.3	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	1493.3	0.0	54.0	1572.4	0.0	52.0	88.1	22.7	23.9	76.5	1.2	2.4
LnGrp LOS	F		D	F		D	F	C	C	E	A	A
Approach Vol, veh/h		294			254			1775			2347	
Approach Delay, s/veh		896.1			1129.4			24.9			4.8	
Approach LOS		F			F			C			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	18.4	99.6		42.0	13.8	104.2		42.0				
Change Period (Y+Rc), s	7.6	7.1		7.6	7.6	7.1		7.6				
Max Green Setting (Gmax), s	20.4	82.9		34.4	12.4	90.9		34.4				
Max Q Clear Time (g_c+I1), s	10.8	36.3		36.4	6.3	2.0		36.4				
Green Ext Time (p_c), s	0.1	16.2		0.0	0.0	32.4		0.0				

Intersection Summary		
HCM 7th Control Delay, s/veh	129.7	
HCM 7th LOS	F	

Notes

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

HCM 7th Signalized Intersection Summary

6: SR 200 & Steeplechase Plaza

06/10/2024

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	86	4	168	16	5	9	236	1459	23	18	1896	137
Future Volume (veh/h)	86	4	168	16	5	9	236	1459	23	18	1896	137
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	0.96	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1753	1870	1870	1870	1870	1856	1870	1870	1870	1870
Adj Flow Rate, veh/h	93	4	183	17	5	10	257	1586	25	20	2061	149
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	5	2	2	2	2	3	2	2	2	2
Cap, veh/h	219	8	203	122	76	152	161	3626	57	46	3116	224
Arrive On Green	0.14	0.14	0.14	0.14	0.14	0.14	0.18	1.00	1.00	0.02	0.43	0.43
Sat Flow, veh/h	1277	55	1485	1196	557	1113	1781	5137	81	1781	4862	349
Grp Volume(v), veh/h	97	0	183	17	0	15	257	1043	568	20	1439	771
Grp Sat Flow(s),veh/h/ln	1332	0	1485	1196	0	1670	1781	1689	1841	1781	1702	1807
Q Serve(g_s), s	10.3	0.0	19.4	2.2	0.0	1.3	14.5	0.0	0.0	1.8	53.8	54.5
Cycle Q Clear(g_c), s	11.5	0.0	19.4	13.7	0.0	1.3	14.5	0.0	0.0	1.8	53.8	54.5
Prop In Lane	0.96		1.00	1.00		0.67	1.00		0.04	1.00		0.19
Lane Grp Cap(c), veh/h	226	0	203	122	0	228	161	2383	1299	46	2182	1158
V/C Ratio(X)	0.43	0.00	0.90	0.14	0.00	0.07	1.59	0.44	0.44	0.44	0.66	0.67
Avail Cap(c_a), veh/h	259	0	238	150	0	267	161	2383	1299	161	2182	1158
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	0.67	0.67	0.67
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.75	0.75	0.75	1.00	1.00	1.00
Uniform Delay (d), s/veh	65.2	0.0	68.0	71.0	0.0	60.2	65.5	0.0	0.0	77.5	31.8	31.9
Incr Delay (d2), s/veh	1.3	0.0	30.7	0.5	0.0	0.1	287.3	0.4	0.8	6.4	1.6	3.0
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	3.8	0.0	9.2	0.7	0.0	0.5	18.7	0.1	0.3	0.9	23.4	25.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	66.5	0.0	98.8	71.5	0.0	60.3	352.8	0.4	0.8	83.9	33.3	35.0
LnGrp LOS	E		F	E		E	F	A	A	F	C	C
Approach Vol, veh/h		280			32			1868			2230	
Approach Delay, s/veh		87.6			66.3			49.0			34.4	
Approach LOS		F			E			D			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.6	120.1		28.3	22.0	109.7		28.3				
Change Period (Y+Rc), s	7.5	7.2		6.4	7.5	7.2		6.4				
Max Green Setting (Gmax), s	14.5	98.8		25.6	14.5	98.8		25.6				
Max Q Clear Time (g_c+I1), s	3.8	2.0		21.4	16.5	56.5		15.7				
Green Ext Time (p_c), s	0.0	15.3		0.4	0.0	23.3		0.0				

Intersection Summary												
HCM 7th Control Delay, s/veh			44.2									
HCM 7th LOS			D									

Notes

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

HCM 7th Signalized Intersection Summary

15: SR 200 & SW 80th Ave

06/10/2024

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	48	67	68	126	109	458	251	1268	19	93	1529	112
Future Volume (veh/h)	48	67	68	126	109	458	251	1268	19	93	1529	112
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1574	1856	1870	1870	1856	1870	1870	1870	1856
Adj Flow Rate, veh/h	52	73	74	137	118	498	273	1378	21	101	1662	122
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	22	3	2	2	3	2	2	2	3
Cap, veh/h	194	158	141	232	256	219	291	2807	43	122	2198	161
Arrive On Green	0.04	0.09	0.09	0.09	0.14	0.14	0.33	1.00	1.00	0.07	0.45	0.45
Sat Flow, veh/h	1781	1777	1585	1499	1856	1585	1781	5140	78	1781	4854	356
Grp Volume(v), veh/h	52	73	74	137	118	498	273	905	494	101	1165	619
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1499	1856	1585	1781	1689	1841	1781	1702	1806
Q Serve(g_s), s	4.2	6.2	7.1	13.0	9.4	22.1	23.8	0.0	0.0	9.0	45.5	45.7
Cycle Q Clear(g_c), s	4.2	6.2	7.1	13.0	9.4	22.1	23.8	0.0	0.0	9.0	45.5	45.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.04	1.00		0.20
Lane Grp Cap(c), veh/h	194	158	141	232	256	219	291	1844	1006	122	1541	818
V/C Ratio(X)	0.27	0.46	0.53	0.59	0.46	2.27	0.94	0.49	0.49	0.83	0.76	0.76
Avail Cap(c_a), veh/h	236	158	141	295	256	219	347	1844	1006	188	1541	818
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.73	0.73	0.73	1.00	1.00	1.00
Uniform Delay (d), s/veh	61.9	69.3	69.7	57.4	63.5	68.9	53.0	0.0	0.0	73.6	36.4	36.4
Incr Delay (d2), s/veh	0.7	2.1	3.6	2.4	1.3	587.9	24.2	0.7	1.3	16.3	3.5	6.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	2.9	3.0	5.0	4.5	44.6	10.7	0.2	0.4	4.6	18.9	20.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	62.6	71.4	73.3	59.8	64.7	656.9	77.2	0.7	1.3	89.9	39.9	42.9
LnGrp LOS	E	E	E	E	E	F	E	A	A	F	D	D
Approach Vol, veh/h		199			753			1672			1885	
Approach Delay, s/veh		69.8			455.4			13.3			43.6	
Approach LOS		E			F			B			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.0	94.7	15.3	29.0	36.0	79.8	23.2	21.1
Change Period (Y+Rc), s	10.1	7.3	8.1	6.9	9.8	7.3	8.1	6.9
Max Green Setting (Gmax), s	16.9	77.7	10.9	22.1	31.2	63.7	21.9	11.1
Max Q Clear Time (g_c+I1), s	11.0	2.0	7.2	24.1	25.8	47.7	15.0	9.2
Green Ext Time (p_c), s	0.1	11.7	0.0	0.0	0.4	10.0	0.2	0.1

Intersection Summary	
HCM 7th Control Delay, s/veh	102.3
HCM 7th LOS	F

Notes

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

HCM 7th Signalized Intersection Summary
19: SR 200 & SW 100th St/SW 99th St Rd

06/10/2024

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	129	16	158	56	24	52	136	1441	21	68	1718	113
Future Volume (veh/h)	129	16	158	56	24	52	136	1441	21	68	1718	113
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1856	1870	1870	1781	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	140	17	172	61	26	57	148	1566	23	74	1867	123
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	3	2	2	8	2	2	2	2	2	2
Cap, veh/h	198	19	202	132	108	237	172	1963	29	490	2713	178
Arrive On Green	0.13	0.13	0.13	0.04	0.21	0.21	0.06	0.25	0.25	0.55	1.00	1.00
Sat Flow, veh/h	1212	147	1572	1781	521	1143	1781	5185	76	1781	4895	322
Grp Volume(v), veh/h	157	0	172	61	0	83	148	1028	561	74	1297	693
Grp Sat Flow(s),veh/h/ln	1359	0	1572	1781	0	1665	1781	1702	1857	1781	1702	1812
Q Serve(g_s), s	18.2	0.0	17.1	4.7	0.0	6.7	13.2	45.2	45.2	3.3	0.0	0.0
Cycle Q Clear(g_c), s	18.2	0.0	17.1	4.7	0.0	6.7	13.2	45.2	45.2	3.3	0.0	0.0
Prop In Lane	0.89		1.00	1.00		0.69	1.00		0.04	1.00		0.18
Lane Grp Cap(c), veh/h	217	0	202	132	0	344	172	1289	703	490	1886	1004
V/C Ratio(X)	0.72	0.00	0.85	0.46	0.00	0.24	0.86	0.80	0.80	0.15	0.69	0.69
Avail Cap(c_a), veh/h	235	0	223	160	0	392	317	1872	1021	490	1886	1004
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.67	0.67	0.67	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.32	0.32	0.32
Uniform Delay (d), s/veh	68.7	0.0	68.2	57.0	0.0	53.0	73.8	54.0	54.0	26.8	0.0	0.0
Incr Delay (d2), s/veh	9.6	0.0	23.9	2.5	0.0	0.4	11.9	5.2	9.2	0.0	0.7	1.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.9	0.0	8.3	2.2	0.0	2.9	6.7	20.7	23.3	1.3	0.2	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	78.2	0.0	92.1	59.5	0.0	53.3	85.6	59.2	63.1	26.9	0.7	1.3
LnGrp LOS	E		F	E		D	F	E	E	C	A	A
Approach Vol, veh/h		329			144			1737			2064	
Approach Delay, s/veh		85.5			55.9			62.7			1.8	
Approach LOS		F			E			E			A	

Timer - Assigned Phs	1	2	3	4	5	6		8				
Phs Duration (G+Y+Rc), s	52.0	68.6	12.5	26.9	23.9	96.7		39.4				
Change Period (Y+Rc), s	8.0	8.0	6.3	6.3	8.5	8.0		6.3				
Max Green Setting (Gmax), s	12.0	88.0	8.7	22.7	28.5	71.0		37.7				
Max Q Clear Time (g_c+I1), s	5.3	47.2	6.7	20.2	15.2	2.0		8.7				
Green Ext Time (p_c), s	0.1	13.4	0.0	0.4	0.3	23.1		0.4				

Intersection Summary	
HCM 7th Control Delay, s/veh	34.8
HCM 7th LOS	C

Notes

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

HCM 7th TWSC

10: SR 200 & Friendship Center 06/10/2024

Intersection	
Int Delay, s/veh	2.5

Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Vol, veh/h	0	85	55	1525	2000	52
Future Vol, veh/h	0	85	55	1525	2000	52
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	742	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	5	2	3	2	2
Mvmt Flow	0	92	60	1658	2174	57

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	1115	2230	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.2	5.34	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.95	3.12	-	-	-
Pot Cap-1 Maneuver	0	170	95	-	-	-
Stage 1	0	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	170	95	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	SE	NE	SW
HCM Control Delay, s/v	48.97	3.2	0
HCM LOS	E		

Minor Lane/Major Mvmt	NEL	NET	SELn1	SWT	SWR
Capacity (veh/h)	95	-	170	-	-
HCM Lane V/C Ratio	0.627	-	0.544	-	-
HCM Control Delay (s/veh)	91.8	-	49	-	-
HCM Lane LOS	F	-	E	-	-
HCM 95th %tile Q(veh)	3	-	2.8	-	-

Intersection	
Int Delay, s/veh	0

Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	0	0	1580	0	0	2085
Future Vol, veh/h	0	0	1580	0	0	2085
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	3	2	2	2
Mvmt Flow	0	0	1717	0	0	2266

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	859	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.14	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.92	-	-	-	-
Pot Cap-1 Maneuver	0	257	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	257	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	NW	NE	SW
HCM Control Delay, s/v	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NET	NER	NWLn1	SWT
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s/veh)	-	-	0	-
HCM Lane LOS	-	-	A	-
HCM 95th %tile Q(veh)	-	-	-	-

Intersection	
Int Delay, s/veh	0.1

Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	0	18	1521	51	0	1990
Future Vol, veh/h	0	18	1521	51	0	1990
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	5	2	2	3
Mvmt Flow	0	20	1653	55	0	2163

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	854	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.14	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.92	-	-	-	-
Pot Cap-1 Maneuver	0	259	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	259	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	NW	NE	SW
HCM Control Delay, s/v	20.02	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NET	NER	NWLn1	SWT
Capacity (veh/h)	-	-	259	-
HCM Lane V/C Ratio	-	-	0.075	-
HCM Control Delay (s/veh)	-	-	20	-
HCM Lane LOS	-	-	C	-
HCM 95th %tile Q(veh)	-	-	0.2	-

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	7	38	24	135	230	20
Future Vol, veh/h	7	38	24	135	230	20
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	377	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	3	2	2
Mvmt Flow	8	41	26	147	250	22

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	460	261	272	0	-	0
Stage 1	261	-	-	-	-	-
Stage 2	199	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	560	778	1292	-	-	-
Stage 1	783	-	-	-	-	-
Stage 2	835	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	548	778	1292	-	-	-
Mov Cap-2 Maneuver	548	-	-	-	-	-
Stage 1	767	-	-	-	-	-
Stage 2	835	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	10.28	1.18	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1292	-	730	-	-
HCM Lane V/C Ratio	0.02	-	0.067	-	-
HCM Control Delay (s/veh)	7.8	-	10.3	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.2	-	-

HCM 7th TWSC

22: SW 84th Ave Rd & SW 100th St 06/10/2024

Intersection	
Int Delay, s/veh	1.2

Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Vol, veh/h	44	12	2	41	11	2
Future Vol, veh/h	44	12	2	41	11	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	48	13	2	45	12	2

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	61	0	103	54
Stage 1	-	-	-	-	54	-
Stage 2	-	-	-	-	49	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1542	-	895	1013
Stage 1	-	-	-	-	968	-
Stage 2	-	-	-	-	974	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1542	-	894	1013
Mov Cap-2 Maneuver	-	-	-	-	894	-
Stage 1	-	-	-	-	968	-
Stage 2	-	-	-	-	972	-

Approach	SE	NW	NE
HCM Control Delay, s/v	0	0.34	9.02
HCM LOS			A

Minor Lane/Major Mvmt	NELn1	NWL	NWT	SET	SER
Capacity (veh/h)	910	84	-	-	-
HCM Lane V/C Ratio	0.016	0.001	-	-	-
HCM Control Delay (s/veh)	9	7.3	0	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	0	-	-	-

HCM 7th TWSC
24: DW 3 & SW 100th St

06/10/2024

Intersection	
Int Delay, s/veh	4.2

Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations	↑	↱		↰	↱	
Traffic Vol, veh/h	50	53	7	37	90	16
Future Vol, veh/h	50	53	7	37	90	16
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	97	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	54	58	8	40	98	17

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	112	0	110	54
Stage 1	-	-	-	-	54	-
Stage 2	-	-	-	-	55	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1478	-	887	1013
Stage 1	-	-	-	-	968	-
Stage 2	-	-	-	-	967	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1478	-	883	1013
Mov Cap-2 Maneuver	-	-	-	-	883	-
Stage 1	-	-	-	-	968	-
Stage 2	-	-	-	-	962	-

Approach	SE	NW	NE
HCM Control Delay, s/v	0	1.19	9.59
HCM LOS			A

Minor Lane/Major Mvmt	NELn1	NWL	NWT	SET	SER
Capacity (veh/h)	900	286	-	-	-
HCM Lane V/C Ratio	0.128	0.005	-	-	-
HCM Control Delay (s/veh)	9.6	7.4	0	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.4	0	-	-	-

Appendix E
Background plus Committed Synchro Results

HCM 7th Signalized Intersection Summary

3: SR 200 & SW 103rd St Rd

06/10/2024

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	147	16	115	223	16	70	45	1461	271	95	1905	233
Future Volume (veh/h)	147	16	115	223	16	70	45	1461	271	95	1905	233
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1811	1870	1870	1870	1870	1870	1870	1856	1870	1870	1870	1856
Adj Flow Rate, veh/h	160	17	125	242	17	76	49	1588	295	103	2071	253
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, %	6	2	2	2	2	2	2	3	2	2	2	3
Cap, veh/h	43	0	341	44	0	341	69	2477	458	123	2802	338
Arrive On Green	0.22	0.22	0.22	0.22	0.22	0.22	0.04	0.58	0.58	0.14	1.00	1.00
Sat Flow, veh/h	0	0	1585	0	0	1585	1781	4296	794	1781	4618	556
Grp Volume(v), veh/h	177	0	125	259	0	76	49	1247	636	103	1519	805
Grp Sat Flow(s),veh/h/ln	0	0	1585	0	0	1585	1781	1689	1713	1781	1702	1770
Q Serve(g_s), s	0.0	0.0	10.8	0.0	0.0	6.3	4.4	39.6	40.0	9.0	0.0	0.0
Cycle Q Clear(g_c), s	34.4	0.0	10.8	34.4	0.0	6.3	4.4	39.6	40.0	9.0	0.0	0.0
Prop In Lane	0.90		1.00	0.93		1.00	1.00		0.46	1.00		0.31
Lane Grp Cap(c), veh/h	43	0	341	44	0	341	69	1947	988	123	2066	1074
V/C Ratio(X)	4.13	0.00	0.37	5.95	0.00	0.22	0.71	0.64	0.64	0.84	0.74	0.75
Avail Cap(c_a), veh/h	43	0	341	44	0	341	138	1947	988	227	2066	1074
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.54	0.54	0.54
Uniform Delay (d), s/veh	80.0	0.0	53.5	80.0	0.0	51.8	76.0	22.7	22.8	68.1	0.0	0.0
Incr Delay (d2), s/veh	1462.7	0.0	0.7	2276.5	0.0	0.3	12.5	1.6	3.2	8.0	1.3	2.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	19.2	0.0	4.3	29.3	0.0	2.5	2.2	15.3	16.1	4.1	0.4	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	1542.7	0.0	54.2	2356.5	0.0	52.1	88.5	24.4	26.1	76.1	1.3	2.6
LnGrp LOS	F		D	F		D	F	C	C	E	A	A
Approach Vol, veh/h		302			335			1932			2427	
Approach Delay, s/veh		926.6			1833.7			26.5			4.9	
Approach LOS		F			F			C			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	18.6	99.4		42.0	13.8	104.2		42.0				
Change Period (Y+Rc), s	7.6	7.1		7.6	7.6	7.1		7.6				
Max Green Setting (Gmax), s	20.4	82.9		34.4	12.4	90.9		34.4				
Max Q Clear Time (g_c+I1), s	11.0	42.0		36.4	6.4	2.0		36.4				
Green Ext Time (p_c), s	0.1	18.0		0.0	0.0	35.1		0.0				

Intersection Summary												
HCM 7th Control Delay, s/veh			191.6									
HCM 7th LOS			F									

HCM 7th Signalized Intersection Summary

6: SR 200 & Steeplechase Plaza

06/10/2024

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	89	4	173	16	5	9	243	1515	24	19	1961	141
Future Volume (veh/h)	89	4	173	16	5	9	243	1515	24	19	1961	141
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	0.96	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1753	1870	1870	1870	1870	1856	1870	1870	1870	1870
Adj Flow Rate, veh/h	97	4	188	17	5	10	264	1647	26	21	2132	153
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	5	2	2	2	2	3	2	2	2	2
Cap, veh/h	223	7	208	123	78	156	161	3605	57	47	3103	221
Arrive On Green	0.14	0.14	0.14	0.14	0.14	0.14	0.18	1.00	1.00	0.02	0.43	0.43
Sat Flow, veh/h	1281	53	1485	1191	557	1113	1781	5137	81	1781	4865	347
Grp Volume(v), veh/h	101	0	188	17	0	15	264	1083	590	21	1487	798
Grp Sat Flow(s),veh/h/ln	1334	0	1485	1191	0	1670	1781	1689	1841	1781	1702	1808
Q Serve(g_s), s	10.7	0.0	19.9	2.2	0.0	1.2	14.5	0.0	0.0	1.9	56.6	57.4
Cycle Q Clear(g_c), s	11.9	0.0	19.9	14.1	0.0	1.2	14.5	0.0	0.0	1.9	56.6	57.4
Prop In Lane	0.96		1.00	1.00		0.67	1.00		0.04	1.00		0.19
Lane Grp Cap(c), veh/h	231	0	208	123	0	233	161	2370	1292	47	2171	1153
V/C Ratio(X)	0.44	0.00	0.91	0.14	0.00	0.06	1.64	0.46	0.46	0.44	0.68	0.69
Avail Cap(c_a), veh/h	259	0	238	147	0	267	161	2370	1292	161	2171	1153
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	0.67	0.67	0.67
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.61	0.61	0.61	1.00	1.00	1.00
Uniform Delay (d), s/veh	64.9	0.0	67.8	70.9	0.0	59.7	65.5	0.0	0.0	77.4	32.8	33.0
Incr Delay (d2), s/veh	1.3	0.0	31.9	0.5	0.0	0.1	302.5	0.4	0.7	6.4	1.8	3.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.0	0.0	9.5	0.7	0.0	0.5	19.4	0.1	0.3	0.9	24.6	27.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	66.2	0.0	99.7	71.4	0.0	59.9	368.0	0.4	0.7	83.8	34.6	36.5
LnGrp LOS	E		F	E		E	F	A	A	F	C	D
Approach Vol, veh/h		289			32			1937			2306	
Approach Delay, s/veh		88.0			66.0			50.6			35.7	
Approach LOS		F			E			D			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.7	119.5		28.8	22.0	109.2		28.8				
Change Period (Y+Rc), s	7.5	7.2		6.4	7.5	7.2		6.4				
Max Green Setting (Gmax), s	14.5	98.8		25.6	14.5	98.8		25.6				
Max Q Clear Time (g_c+I1), s	3.9	2.0		21.9	16.5	59.4		16.1				
Green Ext Time (p_c), s	0.0	16.5		0.4	0.0	23.5		0.0				

Intersection Summary			
HCM 7th Control Delay, s/veh		45.5	
HCM 7th LOS		D	

HCM 7th Signalized Intersection Summary

15: SR 200 & SW 80th Ave

06/10/2024

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	53	111	252	131	165	477	259	1306	25	324	1575	115
Future Volume (veh/h)	53	111	252	131	165	477	259	1306	25	324	1575	115
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1574	1856	1870	1870	1856	1870	1870	1870	1856
Adj Flow Rate, veh/h	58	121	274	142	179	518	282	1420	27	352	1712	125
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	22	3	2	2	3	2	2	2	3
Cap, veh/h	170	158	141	191	256	219	300	2589	49	188	2161	158
Arrive On Green	0.05	0.09	0.09	0.10	0.14	0.14	0.34	1.00	1.00	0.11	0.45	0.45
Sat Flow, veh/h	1781	1777	1585	1499	1856	1585	1781	5118	97	1781	4857	354
Grp Volume(v), veh/h	58	121	274	142	179	518	282	937	510	352	1199	638
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1499	1856	1585	1781	1689	1838	1781	1702	1807
Q Serve(g_s), s	4.6	10.7	14.2	13.4	14.7	22.1	24.6	0.0	0.0	16.9	48.3	48.5
Cycle Q Clear(g_c), s	4.6	10.7	14.2	13.4	14.7	22.1	24.6	0.0	0.0	16.9	48.3	48.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.05	1.00		0.20
Lane Grp Cap(c), veh/h	170	158	141	191	256	219	300	1708	930	188	1515	804
V/C Ratio(X)	0.34	0.77	1.95	0.74	0.70	2.37	0.94	0.55	0.55	1.87	0.79	0.79
Avail Cap(c_a), veh/h	206	158	141	250	256	219	347	1708	930	188	1515	804
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.67	0.67	0.67	1.00	1.00	1.00
Uniform Delay (d), s/veh	61.8	71.3	72.9	57.7	65.8	68.9	52.3	0.0	0.0	71.6	38.0	38.1
Incr Delay (d2), s/veh	1.2	20.1	451.9	8.2	8.1	628.6	23.8	0.9	1.6	411.5	4.3	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	2.1	5.7	23.3	5.5	7.5	47.1	11.0	0.2	0.4	29.1	20.2	22.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	62.9	91.4	524.8	65.9	73.9	697.6	76.1	0.9	1.6	483.0	42.4	46.0
LnGrp LOS	E	F	F	E	E	F	E	A	A	F	D	D
Approach Vol, veh/h		453			839			1729			2189	
Approach Delay, s/veh		349.9			457.6			13.3			114.3	
Approach LOS		F			F			B			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	27.0	88.2	15.8	29.0	36.7	78.5	23.7	21.1
Change Period (Y+Rc), s	10.1	7.3	8.1	6.9	9.8	7.3	8.1	6.9
Max Green Setting (Gmax), s	16.9	77.7	10.9	22.1	31.2	63.7	21.9	11.1
Max Q Clear Time (g_c+I1), s	18.9	2.0	7.6	24.1	26.6	50.5	15.4	16.2
Green Ext Time (p_c), s	0.0	12.4	0.0	0.0	0.3	8.9	0.2	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	156.6
HCM 7th LOS	F

Notes

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

HCM 7th Signalized Intersection Summary
19: SR 200 & SW 100th St/SW 99th St Rd

06/10/2024

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	138	64	163	66	64	54	140	1454	34	72	1770	119
Future Volume (veh/h)	138	64	163	66	64	54	140	1454	34	72	1770	119
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1856	1870	1870	1781	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	150	70	177	72	70	59	152	1580	37	78	1924	129
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	3	2	2	8	2	2	2	2	2	2
Cap, veh/h	174	64	223	124	212	178	176	1980	46	444	2606	174
Arrive On Green	0.14	0.14	0.14	0.04	0.23	0.23	0.07	0.26	0.26	0.50	1.00	1.00
Sat Flow, veh/h	959	448	1572	1781	938	790	1781	5133	120	1781	4889	327
Grp Volume(v), veh/h	220	0	177	72	0	129	152	1048	569	78	1337	716
Grp Sat Flow(s),veh/h/ln	1407	0	1572	1781	0	1728	1781	1702	1849	1781	1702	1812
Q Serve(g_s), s	22.7	0.0	17.4	5.4	0.0	10.0	13.5	46.0	46.0	3.9	0.0	0.0
Cycle Q Clear(g_c), s	22.7	0.0	17.4	5.4	0.0	10.0	13.5	46.0	46.0	3.9	0.0	0.0
Prop In Lane	0.68		1.00	1.00		0.46	1.00		0.07	1.00		0.18
Lane Grp Cap(c), veh/h	237	0	223	124	0	390	176	1313	713	444	1815	966
V/C Ratio(X)	0.93	0.00	0.79	0.58	0.00	0.33	0.86	0.80	0.80	0.18	0.74	0.74
Avail Cap(c_a), veh/h	237	0	223	142	0	407	317	1872	1017	444	1815	966
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.67	0.67	0.67	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.25	0.25	0.25
Uniform Delay (d), s/veh	69.7	0.0	66.4	55.4	0.0	51.8	73.7	53.5	53.5	31.1	0.0	0.0
Incr Delay (d2), s/veh	38.9	0.0	17.6	4.5	0.0	0.5	11.8	5.1	9.1	0.0	0.7	1.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.7	0.0	8.1	2.6	0.0	4.4	6.8	21.0	23.6	1.6	0.2	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	108.6	0.0	84.0	59.9	0.0	52.3	85.5	58.6	62.6	31.1	0.7	1.3
LnGrp LOS	F		F	E		D	F	E	E	C	A	A
Approach Vol, veh/h		397			201			1769			2131	
Approach Delay, s/veh		97.6			55.0			62.2			2.0	
Approach LOS		F			E			E			A	

Timer - Assigned Phs	1	2	3	4	5	6		8				
Phs Duration (G+Y+Rc), s	47.9	69.7	13.4	29.0	24.3	93.3		42.4				
Change Period (Y+Rc), s	8.0	8.0	6.3	6.3	8.5	8.0		6.3				
Max Green Setting (Gmax), s	12.0	88.0	8.7	22.7	28.5	71.0		37.7				
Max Q Clear Time (g_c+I1), s	5.9	48.0	7.4	24.7	15.5	2.0		12.0				
Green Ext Time (p_c), s	0.1	13.7	0.0	0.0	0.3	24.6		0.7				

Intersection Summary	
HCM 7th Control Delay, s/veh	36.5
HCM 7th LOS	D

HCM 7th TWSC

10: SR 200 & Friendship Center 06/10/2024

Intersection	
Int Delay, s/veh	3

Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Vol, veh/h	0	88	57	1583	2069	54
Future Vol, veh/h	0	88	57	1583	2069	54
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	742	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	5	2	2	2	2
Mvmt Flow	0	96	62	1721	2249	59

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	1154	2308	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.2	5.34	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.95	3.12	-	-	-
Pot Cap-1 Maneuver	0	160	87	-	-	-
Stage 1	0	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	160	87	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	SE	NE	SW
HCM Control Delay, s/v	56.42	3.95	0
HCM LOS	F		

Minor Lane/Major Mvmt	NEL	NET	SELn1	SWT	SWR
Capacity (veh/h)	87	-	160	-	-
HCM Lane V/C Ratio	0.712	-	0.598	-	-
HCM Control Delay (s/veh)	113.6	-	56.4	-	-
HCM Lane LOS	F	-	F	-	-
HCM 95th %tile Q(veh)	3.5	-	3.2	-	-

Intersection	
Int Delay, s/veh	0

Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	0	0	1640	0	0	2157
Future Vol, veh/h	0	0	1640	0	0	2157
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	3	2	2	2
Mvmt Flow	0	0	1783	0	0	2345

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	891	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.14	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.92	-	-	-	-
Pot Cap-1 Maneuver	0	245	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	245	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	NW	NE	SW
HCM Control Delay, s/v	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NET	NER	NWLn1	SWT
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s/veh)	-	-	0	-
HCM Lane LOS	-	-	A	-
HCM 95th %tile Q(veh)	-	-	-	-

Intersection	
Int Delay, s/veh	0.1

Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	0	19	1579	53	0	1998
Future Vol, veh/h	0	19	1579	53	0	1998
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	5	2	2	3
Mvmt Flow	0	21	1716	58	0	2172

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	887	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.14	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.92	-	-	-	-
Pot Cap-1 Maneuver	0	247	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	247	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	NW	NE	SW
HCM Control Delay, s/v	20.93	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NET	NER	NWLn1	SWT
Capacity (veh/h)	-	-	247	-
HCM Lane V/C Ratio	-	-	0.084	-
HCM Control Delay (s/veh)	-	-	20.9	-
HCM Lane LOS	-	-	C	-
HCM 95th %tile Q(veh)	-	-	0.3	-

HCM 7th TWSC

20: SW 80th Ave & SW 100th St

06/10/2024

Intersection	
Int Delay, s/veh	3.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	13	12	81	8	8	20	60	328	12	31	452	25
Future Vol, veh/h	13	12	81	8	8	20	60	328	12	31	452	25
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	-	-	-	-	-	-	377	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	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	2	3	2	2	2	2
Mvmt Flow	14	13	88	9	9	22	65	357	13	34	491	27

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1064	1072	505	1059	1079	363	518	0	0	370	0	0
Stage 1	572	572	-	493	493	-	-	-	-	-	-	-
Stage 2	491	500	-	565	586	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	201	220	567	202	218	682	1048	-	-	1189	-	-
Stage 1	505	504	-	557	547	-	-	-	-	-	-	-
Stage 2	559	543	-	509	497	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	170	201	567	146	199	682	1048	-	-	1189	-	-
Mov Cap-2 Maneuver	170	201	-	146	199	-	-	-	-	-	-	-
Stage 1	491	490	-	523	513	-	-	-	-	-	-	-
Stage 2	499	509	-	407	483	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	18.55	19.35	1.3	0.5
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1048	-	-	380	290	1189	-	-
HCM Lane V/C Ratio	0.062	-	-	0.303	0.135	0.028	-	-
HCM Control Delay (s/veh)	8.7	-	-	18.5	19.3	8.1	-	-
HCM Lane LOS	A	-	-	C	C	A	-	-
HCM 95th %tile Q(veh)	0.2	-	-	1.3	0.5	0.1	-	-

HCM 7th TWSC

22: SW 84th Ave Rd & SW 100th St 06/10/2024

Intersection	
Int Delay, s/veh	0.6

Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Vol, veh/h	105	12	2	89	11	2
Future Vol, veh/h	105	12	2	89	11	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	114	13	2	97	12	2

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	127	0	222	121
Stage 1	-	-	-	-	121	-
Stage 2	-	-	-	-	101	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1459	-	766	931
Stage 1	-	-	-	-	905	-
Stage 2	-	-	-	-	923	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1459	-	765	931
Mov Cap-2 Maneuver	-	-	-	-	765	-
Stage 1	-	-	-	-	905	-
Stage 2	-	-	-	-	922	-

Approach	SE	NW	NE
HCM Control Delay, s/v	0	0.16	9.66
HCM LOS			A

Minor Lane/Major Mvmt	NELn1	NWL	NWT	SET	SER
Capacity (veh/h)	787	40	-	-	-
HCM Lane V/C Ratio	0.018	0.001	-	-	-
HCM Control Delay (s/veh)	9.7	7.5	0	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	0	-	-	-

Intersection	
Int Delay, s/veh	3.3

Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations	↑	↱		↰	↱	
Traffic Vol, veh/h	111	55	7	85	93	16
Future Vol, veh/h	111	55	7	85	93	16
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	97	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	121	60	8	92	101	17

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	180	0	228	121
Stage 1	-	-	-	-	121	-
Stage 2	-	-	-	-	108	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1395	-	760	931
Stage 1	-	-	-	-	905	-
Stage 2	-	-	-	-	917	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1395	-	756	931
Mov Cap-2 Maneuver	-	-	-	-	756	-
Stage 1	-	-	-	-	905	-
Stage 2	-	-	-	-	912	-

Approach	SE	NW	NE
HCM Control Delay, s/v	0	0.58	10.46
HCM LOS			B

Minor Lane/Major Mvmt	NELn1	NWL	NWT	SET	SER
Capacity (veh/h)	777	137	-	-	-
HCM Lane V/C Ratio	0.152	0.005	-	-	-
HCM Control Delay (s/veh)	10.5	7.6	0	-	-
HCM Lane LOS	B	A	A	-	-
HCM 95th %tile Q(veh)	0.5	0	-	-	-

Appendix F
Post-Development Synchro Results

HCM 7th Signalized Intersection Summary

3: SR 200 & SW 103rd St Rd

06/10/2024

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	147	16	115	223	16	70	45	1506	271	95	1945	233
Future Volume (veh/h)	147	16	115	223	16	70	45	1506	271	95	1945	233
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1811	1870	1870	1870	1870	1870	1870	1856	1870	1870	1870	1856
Adj Flow Rate, veh/h	160	17	125	242	17	76	49	1637	295	103	2114	253
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, %	6	2	2	2	2	2	2	3	2	2	2	3
Cap, veh/h	43	0	341	44	0	341	69	2491	446	123	2810	331
Arrive On Green	0.22	0.22	0.22	0.22	0.22	0.22	0.04	0.58	0.58	0.14	1.00	1.00
Sat Flow, veh/h	0	0	1585	0	0	1585	1781	4320	774	1781	4630	546
Grp Volume(v), veh/h	177	0	125	259	0	76	49	1278	654	103	1546	821
Grp Sat Flow(s),veh/h/ln	0	0	1585	0	0	1585	1781	1689	1716	1781	1702	1772
Q Serve(g_s), s	0.0	0.0	10.8	0.0	0.0	6.3	4.4	41.2	41.7	9.0	0.0	0.0
Cycle Q Clear(g_c), s	34.4	0.0	10.8	34.4	0.0	6.3	4.4	41.2	41.7	9.0	0.0	0.0
Prop In Lane	0.90		1.00	0.93		1.00	1.00		0.45	1.00		0.31
Lane Grp Cap(c), veh/h	43	0	341	44	0	341	69	1947	990	123	2066	1075
V/C Ratio(X)	4.13	0.00	0.37	5.95	0.00	0.22	0.71	0.66	0.66	0.84	0.75	0.76
Avail Cap(c_a), veh/h	43	0	341	44	0	341	138	1947	990	227	2066	1075
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.53	0.53	0.53
Uniform Delay (d), s/veh	80.0	0.0	53.5	80.0	0.0	51.8	76.0	23.1	23.2	68.1	0.0	0.0
Incr Delay (d2), s/veh	1462.7	0.0	0.7	2276.5	0.0	0.3	12.5	1.7	3.5	7.8	1.4	2.8
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	19.2	0.0	4.3	29.3	0.0	2.5	2.2	15.9	16.9	4.1	0.4	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	1542.7	0.0	54.2	2356.5	0.0	52.1	88.5	24.8	26.6	75.9	1.4	2.8
LnGrp LOS	F		D	F		D	F	C	C	E	A	A
Approach Vol, veh/h		302			335			1981			2470	
Approach Delay, s/veh		926.6			1833.7			27.0			4.9	
Approach LOS		F			F			C			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	18.6	99.4		42.0	13.8	104.2		42.0				
Change Period (Y+Rc), s	7.6	7.1		7.6	7.6	7.1		7.6				
Max Green Setting (Gmax), s	20.4	82.9		34.4	12.4	90.9		34.4				
Max Q Clear Time (g_c+I1), s	11.0	43.7		36.4	6.4	2.0		36.4				
Green Ext Time (p_c), s	0.1	18.4		0.0	0.0	36.6		0.0				

Intersection Summary			
HCM 7th Control Delay, s/veh		188.6	
HCM 7th LOS		F	

HCM 7th Signalized Intersection Summary

6: SR 200 & Steeplechase Plaza

06/10/2024

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	89	4	173	16	5	9	243	1560	24	19	2001	141
Future Volume (veh/h)	89	4	173	16	5	9	243	1560	24	19	2001	141
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	0.96	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1753	1870	1870	1870	1870	1856	1870	1870	1870	1870
Adj Flow Rate, veh/h	97	4	188	17	5	10	264	1696	26	21	2175	153
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	5	2	2	2	2	3	2	2	2	2
Cap, veh/h	223	7	208	123	78	156	161	3607	55	47	3108	217
Arrive On Green	0.14	0.14	0.14	0.14	0.14	0.14	0.18	1.00	1.00	0.03	0.64	0.64
Sat Flow, veh/h	1281	53	1485	1191	557	1113	1781	5140	79	1781	4873	340
Grp Volume(v), veh/h	101	0	188	17	0	15	264	1114	608	21	1514	814
Grp Sat Flow(s),veh/h/ln	1334	0	1485	1191	0	1670	1781	1689	1841	1781	1702	1809
Q Serve(g_s), s	10.7	0.0	19.9	2.2	0.0	1.2	14.5	0.0	0.0	1.9	46.4	47.4
Cycle Q Clear(g_c), s	11.9	0.0	19.9	14.1	0.0	1.2	14.5	0.0	0.0	1.9	46.4	47.4
Prop In Lane	0.96		1.00	1.00		0.67	1.00		0.04	1.00		0.19
Lane Grp Cap(c), veh/h	231	0	208	123	0	233	161	2370	1292	47	2171	1154
V/C Ratio(X)	0.44	0.00	0.91	0.14	0.00	0.06	1.64	0.47	0.47	0.44	0.70	0.71
Avail Cap(c_a), veh/h	259	0	238	147	0	267	161	2370	1292	161	2171	1154
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.59	0.59	0.59	1.00	1.00	1.00
Uniform Delay (d), s/veh	64.9	0.0	67.8	70.9	0.0	59.7	65.5	0.0	0.0	76.7	18.9	19.1
Incr Delay (d2), s/veh	1.3	0.0	31.9	0.5	0.0	0.1	302.0	0.4	0.7	6.4	1.9	3.6
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	4.0	0.0	9.5	0.7	0.0	0.5	19.3	0.1	0.3	0.9	17.3	19.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	66.2	0.0	99.7	71.4	0.0	59.9	367.5	0.4	0.7	83.1	20.8	22.7
LnGrp LOS	E		F	E		E	F	A	A	F	C	C
Approach Vol, veh/h		289			32			1986			2349	
Approach Delay, s/veh		88.0			66.0			49.3			22.0	
Approach LOS		F			E			D			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.7	119.5		28.8	22.0	109.2		28.8				
Change Period (Y+Rc), s	7.5	7.2		6.4	7.5	7.2		6.4				
Max Green Setting (Gmax), s	14.5	98.8		25.6	14.5	98.8		25.6				
Max Q Clear Time (g_c+I1), s	3.9	2.0		21.9	16.5	49.4		16.1				
Green Ext Time (p_c), s	0.0	17.5		0.4	0.0	27.4		0.0				

Intersection Summary			
HCM 7th Control Delay, s/veh		38.1	
HCM 7th LOS		D	

HCM 7th Signalized Intersection Summary

15: SR 200 & SW 80th Ave

06/10/2024

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	53	111	253	131	165	490	266	1347	25	325	1617	115
Future Volume (veh/h)	53	111	253	131	165	490	266	1347	25	325	1617	115
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1574	1856	1870	1870	1856	1870	1870	1870	1856
Adj Flow Rate, veh/h	58	121	275	142	179	533	289	1464	27	353	1758	125
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	22	3	2	2	3	2	2	2	3
Cap, veh/h	169	158	141	191	256	219	306	2590	48	188	2148	152
Arrive On Green	0.05	0.09	0.09	0.10	0.14	0.14	0.34	1.00	1.00	0.11	0.44	0.44
Sat Flow, veh/h	1781	1777	1585	1499	1856	1585	1781	5121	94	1781	4867	345
Grp Volume(v), veh/h	58	121	275	142	179	533	289	965	526	353	1229	654
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1499	1856	1585	1781	1689	1839	1781	1702	1808
Q Serve(g_s), s	4.6	10.7	14.2	13.4	14.7	22.1	25.2	0.0	0.0	16.9	50.5	50.7
Cycle Q Clear(g_c), s	4.6	10.7	14.2	13.4	14.7	22.1	25.2	0.0	0.0	16.9	50.5	50.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.05	1.00		0.19
Lane Grp Cap(c), veh/h	169	158	141	191	256	219	306	1708	930	188	1502	798
V/C Ratio(X)	0.34	0.77	1.96	0.74	0.70	2.43	0.94	0.57	0.57	1.88	0.82	0.82
Avail Cap(c_a), veh/h	205	158	141	250	256	219	347	1708	930	188	1502	798
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.55	0.55	0.55	1.00	1.00	1.00
Uniform Delay (d), s/veh	61.8	71.3	72.9	57.7	65.8	68.9	51.7	0.0	0.0	71.6	39.1	39.1
Incr Delay (d2), s/veh	1.2	20.1	455.0	8.2	8.1	659.2	21.5	0.8	1.4	413.8	5.1	9.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	5.7	23.5	5.5	7.5	48.9	11.1	0.2	0.4	29.2	21.3	23.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	62.9	91.4	527.9	65.9	73.9	728.1	73.2	0.8	1.4	485.3	44.1	48.4
LnGrp LOS	E	F	F	E	E	F	E	A	A	F	D	D
Approach Vol, veh/h		454			854			1780			2236	
Approach Delay, s/veh		352.2			480.9			12.7			115.0	
Approach LOS		F			F			B			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	27.0	88.2	15.8	29.0	37.3	77.9	23.7	21.1
Change Period (Y+Rc), s	10.1	7.3	8.1	6.9	9.8	7.3	8.1	6.9
Max Green Setting (Gmax), s	16.9	77.7	10.9	22.1	31.2	63.7	21.9	11.1
Max Q Clear Time (g_c+I1), s	18.9	2.0	7.6	24.1	27.2	52.7	15.4	16.2
Green Ext Time (p_c), s	0.0	13.1	0.0	0.0	0.3	7.9	0.2	0.0

Intersection Summary		
HCM 7th Control Delay, s/veh		159.7
HCM 7th LOS		F

Notes

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

HCM 7th Signalized Intersection Summary
19: SR 200 & SW 100th St/SW 99th St Rd

06/10/2024

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	138	73	163	86	72	61	160	1495	34	127	1770	119
Future Volume (veh/h)	138	73	163	86	72	61	160	1495	34	127	1770	119
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1856	1870	1870	1796	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	150	79	177	93	78	66	174	1625	37	138	1924	129
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	3	2	2	7	2	2	2	2	2	2
Cap, veh/h	168	69	223	142	221	187	198	2034	46	408	2497	167
Arrive On Green	0.14	0.14	0.14	0.05	0.24	0.24	0.07	0.27	0.27	0.46	1.00	1.00
Sat Flow, veh/h	921	485	1572	1781	936	792	1781	5136	117	1781	4889	327
Grp Volume(v), veh/h	229	0	177	93	0	144	174	1077	585	138	1337	716
Grp Sat Flow(s),veh/h/ln	1407	0	1572	1781	0	1728	1781	1702	1849	1781	1702	1812
Q Serve(g_s), s	22.7	0.0	17.4	7.0	0.0	11.1	15.5	47.2	47.2	8.0	0.0	0.0
Cycle Q Clear(g_c), s	22.7	0.0	17.4	7.0	0.0	11.1	15.5	47.2	47.2	8.0	0.0	0.0
Prop In Lane	0.66		1.00	1.00		0.46	1.00		0.06	1.00		0.18
Lane Grp Cap(c), veh/h	237	0	223	142	0	407	198	1348	732	408	1739	925
V/C Ratio(X)	0.97	0.00	0.79	0.66	0.00	0.35	0.88	0.80	0.80	0.34	0.77	0.77
Avail Cap(c_a), veh/h	237	0	223	142	0	407	317	1872	1017	408	1739	925
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.67	0.67	0.67	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.20	0.20	0.20
Uniform Delay (d), s/veh	70.1	0.0	66.4	54.8	0.0	51.0	73.0	52.8	52.8	35.6	0.0	0.0
Incr Delay (d2), s/veh	49.1	0.0	17.6	10.4	0.0	0.5	15.1	5.0	8.9	0.1	0.7	1.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.7	0.0	8.1	3.6	0.0	4.9	8.0	21.5	24.2	3.1	0.2	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	119.2	0.0	84.0	65.2	0.0	51.5	88.1	57.8	61.7	35.7	0.7	1.3
LnGrp LOS	F		F	E		D	F	E	E	D	A	A
Approach Vol, veh/h		406			237			1836			2191	
Approach Delay, s/veh		103.8			56.9			61.9			3.1	
Approach LOS		F			E			E			A	

Timer - Assigned Phs	1	2	3	4	5	6		8				
Phs Duration (G+Y+Rc), s	44.6	71.4	15.0	29.0	26.3	89.7		44.0				
Change Period (Y+Rc), s	8.0	8.0	6.3	6.3	8.5	8.0		6.3				
Max Green Setting (Gmax), s	12.0	88.0	8.7	22.7	28.5	71.0		37.7				
Max Q Clear Time (g_c+I1), s	10.0	49.2	9.0	24.7	17.5	2.0		13.1				
Green Ext Time (p_c), s	0.1	14.2	0.0	0.0	0.3	24.6		0.8				

Intersection Summary	
HCM 7th Control Delay, s/veh	37.7
HCM 7th LOS	D

Queues

19: SR 200 & SW 100th St/SW 99th St Rd

07/11/2024

Lane Group	SET	SER	NWL	NWT	NEL	NET	SWL	SWT
Lane Group Flow (vph)	229	177	93	144	174	1662	138	2053
v/c Ratio	1.16	0.45	0.53	0.33	0.75	0.77	0.45	0.88
Control Delay (s/veh)	168.9	9.8	60.1	42.7	83.5	26.4	46.0	24.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	168.9	9.8	60.1	42.7	83.5	26.4	46.0	24.5
Queue Length 50th (ft)	~298	0	82	107	161	577	99	301
Queue Length 95th (ft)	#478	60	m131	m169	233	438	m129	m330
Internal Link Dist (ft)	278			296		280		2435
Turn Bay Length (ft)			97				549	
Base Capacity (vph)	198	393	175	435	315	2696	307	2345
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.16	0.45	0.53	0.33	0.55	0.62	0.45	0.88

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

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

HCM 7th TWSC

10: SR 200 & Friendship Center 06/10/2024

Intersection	
Int Delay, s/veh	3.1

Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Vol, veh/h	0	88	57	1638	2109	54
Future Vol, veh/h	0	88	57	1638	2109	54
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	742	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	96	62	1780	2292	59

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	1176	2351	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.14	5.34	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.92	3.12	-	-	-
Pot Cap-1 Maneuver	0	158	83	-	-	-
Stage 1	0	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	158	83	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	SE	NE	SW
HCM Control Delay, s/v	57.57	4.23	0
HCM LOS	F		

Minor Lane/Major Mvmt	NEL	NET	SELn1	SWT	SWR
Capacity (veh/h)	83	-	158	-	-
HCM Lane V/C Ratio	0.749	-	0.605	-	-
HCM Control Delay (s/veh)	125.8	-	57.6	-	-
HCM Lane LOS	F	-	F	-	-
HCM 95th %tile Q(veh)	3.7	-	3.2	-	-

Intersection	
Int Delay, s/veh	0.2

Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	0	40	1655	30	0	2197
Future Vol, veh/h	0	40	1655	30	0	2197
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	3	2	2	2
Mvmt Flow	0	43	1799	33	0	2388

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	916	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.14	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.92	-	-	-	-
Pot Cap-1 Maneuver	0	236	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	236	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	NW	NE	SW
HCM Control Delay, s/v	23.67	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NET	NER	NWLn1	SWT
Capacity (veh/h)	-	-	236	-
HCM Lane V/C Ratio	-	-	0.184	-
HCM Control Delay (s/veh)	-	-	23.7	-
HCM Lane LOS	-	-	C	-
HCM 95th %tile Q(veh)	-	-	0.7	-

Intersection	
Int Delay, s/veh	0.3

Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	0	40	1619	68	0	2038
Future Vol, veh/h	0	40	1619	68	0	2038
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	5	2	2	3
Mvmt Flow	0	43	1760	74	0	2215

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	917	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.14	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.92	-	-	-	-
Pot Cap-1 Maneuver	0	236	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	236	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	NW	NE	SW
HCM Control Delay, s/v	23.7	1	0
HCM LOS	C		

Minor Lane/Major Mvmt	NET	NER	NWLn1	SWT
Capacity (veh/h)	-	-	236	-
HCM Lane V/C Ratio	-	-	0.185	-
HCM Control Delay (s/veh)	-	-	23.7	-
HCM Lane LOS	-	-	C	-
HCM 95th %tile Q(veh)	-	-	0.7	-

HCM 7th TWSC

20: SW 80th Ave & SW 100th St

06/10/2024

Intersection	
Int Delay, s/veh	3.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	14	12	83	8	8	20	62	328	12	31	452	26
Future Vol, veh/h	14	12	83	8	8	20	62	328	12	31	452	26
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	-	-	-	-	-	-	377	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	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	2	3	2	2	2	2
Mvmt Flow	15	13	90	9	9	22	67	357	13	34	491	28

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1068	1077	505	1063	1085	363	520	0	0	370	0	0
Stage 1	573	573	-	498	498	-	-	-	-	-	-	-
Stage 2	496	504	-	565	587	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	199	219	567	201	217	682	1047	-	-	1189	-	-
Stage 1	505	504	-	554	544	-	-	-	-	-	-	-
Stage 2	556	541	-	509	497	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	168	199	567	144	197	682	1047	-	-	1189	-	-
Mov Cap-2 Maneuver	168	199	-	144	197	-	-	-	-	-	-	-
Stage 1	490	490	-	519	509	-	-	-	-	-	-	-
Stage 2	495	506	-	405	482	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	18.92	19.5	1.34	0.49
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1047	-	-	376	287	1189	-	-
HCM Lane V/C Ratio	0.064	-	-	0.315	0.136	0.028	-	-
HCM Control Delay (s/veh)	8.7	-	-	18.9	19.5	8.1	-	-
HCM Lane LOS	A	-	-	C	C	A	-	-
HCM 95th %tile Q(veh)	0.2	-	-	1.3	0.5	0.1	-	-

Intersection	
Int Delay, s/veh	0.6

Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Vol, veh/h	108	12	2	92	11	2
Future Vol, veh/h	108	12	2	92	11	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	117	13	2	100	12	2

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	130	0	228	124
Stage 1	-	-	-	-	124	-
Stage 2	-	-	-	-	104	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1455	-	760	927
Stage 1	-	-	-	-	902	-
Stage 2	-	-	-	-	920	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1455	-	759	927
Mov Cap-2 Maneuver	-	-	-	-	759	-
Stage 1	-	-	-	-	902	-
Stage 2	-	-	-	-	918	-

Approach	SE	NW	NE
HCM Control Delay, s/v	0	0.16	9.7
HCM LOS			A

Minor Lane/Major Mvmt	NELn1	NWL	NWT	SET	SER
Capacity (veh/h)	780	38	-	-	-
HCM Lane V/C Ratio	0.018	0.001	-	-	-
HCM Control Delay (s/veh)	9.7	7.5	0	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	0	-	-	-

Intersection	
Int Delay, s/veh	3.6

Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Vol, veh/h	111	119	10	85	128	19
Future Vol, veh/h	111	119	10	85	128	19
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	97	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	121	129	11	92	139	21

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	250	0	235	121
Stage 1	-	-	-	-	121	-
Stage 2	-	-	-	-	114	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1316	-	753	931
Stage 1	-	-	-	-	905	-
Stage 2	-	-	-	-	911	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1316	-	747	931
Mov Cap-2 Maneuver	-	-	-	-	747	-
Stage 1	-	-	-	-	905	-
Stage 2	-	-	-	-	903	-

Approach	SE	NW	NE
HCM Control Delay, s/v	0	0.82	10.93
HCM LOS			B

Minor Lane/Major Mvmt	NELn1	NWL	NWT	SET	SER
Capacity (veh/h)	766	189	-	-	-
HCM Lane V/C Ratio	0.208	0.008	-	-	-
HCM Control Delay (s/veh)	10.9	7.8	0	-	-
HCM Lane LOS	B	A	A	-	-
HCM 95th %tile Q(veh)	0.8	0	-	-	-